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Replies to initial written questions raised by Finance Committee Members in examining the Estimates of Expenditure 2018-19

Director of Bureau : Secretary for Innovation and Technology

Session No. : 15

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CONTROLLING OFFICER'S REPLY

ITB001

(Question Serial No. 3627)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

Last December, Cyberport completed a study on the promotion of e-sports in Hong Kong and made a number of recommendations. Has the Government compiled any statistics on the existing number of e-sports practitioners? What business opportunities are generated by related industries? Will the Bureau invite Cyberport to provide support for the promotion of e-sports and industry development? What are the details in this regard? What is the estimated expenditure for this year for promoting the industry?

To promote the development of e-sports, the Government will allocate \$100 million to Cyberport. The Cyberport Arcade will become a local e-sports and digital entertainment node providing a competition venue for e-sports. Support will also be provided for the e-sports sector in areas such as technological development and talent nurturing. In this connection, what are the estimated manpower, expenditure and details of providing the venues?

Asked by: Hon CHAN Chi-chuen (Member Question No. (LegCo use): 66)

Reply:

Hong Kong has the capability to develop e-sports, such as possession of advanced information and communications technology infrastructure, free movement of information, experience in hosting large-scale international competitions and many of our local players have won prizes in international competitions.

It has been announced in this year's Budget that \$100 million will be allocated to Cyberport to promote the development of e-sports, of which \$50 million will be for supporting development of the industry in the next 5 years, including organisation of local and regional competitions and mega events, training programmes and public promotion activities. Cyberport will also improve its start-ups and talents development programmes, identify and equip the start-ups and talents relating to e-sports technologies and game development, and

launch seminars, small-scale e-sports competitions and exhibitions on game history and products.

The remaining \$50 million will be used for developing the Cyberport Arcade into a local e-sports and digital entertainment node. The node will provide a dedicated e-sports venue equipped with advanced computers, audio-visual equipment and other peripherals as well as high-speed and stable network connection, for the industry to host regular small to medium-scale e-sports competitions, activities and training. Cyberport will set up an experience corner in the Arcade and invite e-sports and digital entertainment industry to showcase related new technologies and e-sports products, raising the public understanding and interest in e-sports, game development and related technologies.

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CONTROLLING OFFICER'S REPLY

ITB002

(Question Serial No. 3671)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned under the Programme that the Innovation and Technology Bureau is responsible for devising and publication of the Smart City Blueprint for Hong Kong. In this connection, please explain the following:

One of the initiatives to realise Smart Mobility is the establishment of the Internet of Thing (IoT). A large number of detectors are installed on roads to scan traffic and pedestrian flows and effect an automatic change of traffic signals. However, according to a recent media report, the effectiveness of the pilot smart traffic lights installed at the intersection of Hoi Bun Road and Lai Yip Street junction in Kwun Tong is questionable as it is the same as that of traditional traffic lights. Even when a pedestrian has entered and waited in the detection zone, it still takes as long as 2 minutes for the traffic lights to change. It is understood that the Government is conducting tests on various types of smart traffic lights on different locations. What are the results so far and which type of smart traffic lights is more effective in improving traffic and pedestrian flows?

Another initiative of Smart Mobility is the installation of a large number of closed-circuit televisions (CCTVs) to monitor the overcrowding situation of pedestrian ways and to allow different departments to facilitate the pedestrian flow when the same becomes heavy in major events. However, we are worried that the presence of so many CCTVs will pose risks to the privacy of individuals and place Hong Kong under excessive surveillance. It is learned that Korea has a similar plan of installing a number of CCTVs but there will be measures to safeguard personal privacy. For instance, access to video images is limited to designated law enforcement officers and the video images recorded will be retained for 30 days before automatic deletion. As such, will the Government make reference to these safeguard measures when installing the IoT made up of CCTVs to strike a balance between such need and the privacy of the public?

It is important for private car drivers and goods vehicle drivers in general to have early knowledge of unoccupied parking space. However, one of the initiatives of the Smart Mobility only deals with the provision of real-time parking vacancy information of new

public car parks. Nevertheless, only a small number of existing public car parks participate in the sharing of parking vacancy information and they only provide the number of available parking space. This cannot be regarded as Smart Mobility. In fact, in overseas countries there are already car parks with detectors provided at every parking space, making it very easy for drivers to have knowledge of the availability of car parks and the whereabouts of such parking spaces by floor and location. The Innovation and Technology Fund for Better Living established by the Government earlier on to fund innovation and technology projects that will make people's daily living more convenient is too passive as it requires car park operators to apply on their own volition. It may not be attractive enough for more private car parks to take part in Smart Mobility. Does the Government have more proactive measures to support pilot initiatives related to innovation and technology?

Asked by: Hon CHAN Chi-chuen (Member Question No. (LegCo use): 164)

Reply:

In consultation with the Transport and Housing Bureau, the Development Bureau (DEVB) and the Home Affairs Bureau (HAB), a consolidated reply is as follows:

To improve the road and pedestrian environment at signal-controlled junctions, the Transport Department (TD) has launched a pilot scheme on video pedestrian detection devices by installing video pedestrian detection devices at selected signal-controlled junctions. Once detecting the presence of pedestrians in the waiting zone, the devices will activate the pedestrian green phase without the need for pedestrians pressing any button. If the pedestrians leave the waiting zone before the activation of the green phase, the scheduled pedestrian green signal will be cancelled automatically.

The TD conducted earlier a preliminary review on the effectiveness of the video pedestrian detection devices and the results showed that the devices could effectively reduce the waiting time for pedestrians to cross the junctions. The TD will continue to study the data and information obtained from the preliminary review. Taking into account the experience in the use of video pedestrian detection devices for improving pedestrian and traffic flows, it will further develop smart traffic light systems, conduct studies and trials on the intelligent traffic signal systems under the Smart City Blueprint for Hong Kong.

The Energizing Kowloon East Office under the DEVB has launched a number of proof-of-concept trials in Kowloon East to demonstrate the benefits of smart city development and to explore the feasibility of wider application. Among them, 3 trials (i.e. Smart Crowd Management System, Kerbside Loading/Unloading Bay Monitoring System and Illegal Parking Monitoring System) involve collection of images by CCTVs for analysis. To protect personal privacy, the images collected by CCTVs will be deleted upon completion of the trials.

Moreover, HAB has advised that a set of CCTVs will be installed in the Kai Tak Sports Park for analysing road situation to facilitate the monitoring and management of pedestrian and traffic flows during major events. The system will have measures to protect the privacy of the residents. For example, only designated officers are allowed to access and review the video images recorded, and the video images will be deleted automatically at specified periods.

On provision of parking information, the TD has been encouraging operators to provide real-time parking vacancy information of their car parks to the public through the Hong Kong eRouting mobile application and the Government's public sector information portal "data.gov.hk". Such information helps motorists find parking spaces more easily and alleviates traffic congestion caused by motorists driving around on roads in search of parking spaces available. Currently, Hong Kong eRouting provides real-time parking vacancy information of about 70 government and commercial public car parks. The TD will explore practicable measures to require operators of new public car parks or fee-paying public car parks operating under short term tenancy to provide real-time parking vacancy information, and brief car park operators on the feasible technology solutions relating to the provision of real-time parking vacancy information to help them collect and disseminate the relevant information.

- End -

CONTROLLING OFFICER'S REPLY**ITB003****(Question Serial No. 3677)**

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is said that the progress of opening up traffic data in Hong Kong is slow. Even bus companies do not disclose their real-time data to the public, saying that such data is their company's asset and they are unwilling to release it the public, which causes great inconvenience to mobile app developers. Does the Innovation and Technology Bureau have any measures to facilitate and persuade public service providers, in particular transport operators and car park, tunnel and bridge operators, to take the initiative to open up data? At present, Taiwan has become the place where the opening up of data is unmatched and Hong Kong is obviously lagging behind. How will the Government expedite the conversion of information into mobile application development language by departments and increase the amount of open data?

Asked by: Hon CHAN Chi-chuen (Member Question No. (LegCo use): 170)

Reply:

Data of business companies is their assets with commercial values. Whether to open up such data is thus a commercial decision. According to the information provided by the Transport and Housing Bureau, as far as public transport operators are concerned, some franchised bus companies, the MTR Corporation and the Hong Kong Tramways are currently providing free real-time arrival information through their webpages, mobile applications and display panels installed at respective bus stops/platforms for passengers to check suitable routes. Franchised bus companies are also working with the Transport Department (TD) in providing real-time arrival information through TD's "Hong Kong eTransport" mobile application and website. Franchised and licensed ferry operators also disseminate their service information at piers and through their websites or mobile applications. Regarding carparks, the Energizing Kowloon East Office of the Development Bureau provides real-time information on the number of vacant parking spaces in Kowloon East. Furthermore, TD is working with carpark operators in making available real-time their vacant parking spaces and basic carpark information. The Government will continue to explain to operators on how open data can add value to their

companies and businesses, and actively encourage them to support the Government's open data policy by making their data available at the "data.gov.hk" to facilitate more innovative applications.

The Office of the Government Chief Information Officer (OGCIO) has issued guidelines to assist bureaux and departments (B/Ds) in releasing data in the most suitable formats and ways (e.g. through Application Programming Interfaces (APIs)) according to the nature of different data, in order to make it convenient for public use. In addition, the OGCIO conduct reviews with B/Ds concerned from time to time on ways and formats of releasing data, and offer them with technical support and other assistance. B/Ds will also conduct timely reviews of their various data to ensure data usability. The "data.gov.hk" portal also provides about 1 200 APIs for software developers to extract the information required from the large amount of information therein.

- End -

CONTROLLING OFFICER'S REPLY**ITB004****(Question Serial No. 3688)**

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Government has set aside sizable sites, including one of over 50 hectares near the Liantang/Heung Yuen Wai Boundary Control Point, for use by the innovation and technology (I&T) sector and other emerging or traditional industries. According to the Budget, the Government will earmark \$20 billion for the first phase of the Hong Kong-Shenzhen Innovation and Technology Park in the Lok Ma Chau Loop. A provision of \$10 billion will be allocated to the Hong Kong Science and Technology Parks Corporation. Of that, about \$3 billion will be used to construct research-related infrastructure and facilities. A funding of \$8.2 billion was also provided earlier by the Government for building an Advanced Manufacturing Centre and a Data Technology Hub. In this connection, please advise this Committee of the following:

- (1) Please list in tabular form the details of various development plans of I&T sites, including the expected construction and completion time, land area, construction fees and the estimated number of jobs to be created upon completion.
- (2) Please list in tabular form the location, area involved and expected direction of development of the new sites that have been planned for I&T uses at present.
- (3) What are the details of the project of Hong Kong-Shenzhen Innovation and Technology Park at the Liantang/Heung Yuen Wai Boundary Control Point? Please set out the expected construction and completion time, land area, construction fees and the estimated number of jobs to be created upon completion.
- (4) Will the Government's setting aside of a large amount of land for I&T uses fail to tie in with the development pace of the industry, resulting in a wastage owing to excessive reserve of sizable sites for single use in Hong Kong?

Asked by: Hon CHAN Chi-chuen (Member Question No. (LegCo use): 184)

Reply:

A consolidated reply to the various parts of the question is as follow:-

The Government actively identifies land to dovetail with the development of innovation and technology (I&T) and to provide the necessary operating space for the development of the sector. Presently, land reserved for I&T uses include sites for short, medium and long-term development. The Innovation and Technology Bureau will review the sites reserved for I&T uses with the Development Bureau taking into account the latest position as and when appropriate. In fact, a total of 84.8 hectares of reserved land, including 74 hectares in Lung Kwu Tan and 10.8 hectares in Tuen Mun Area 38, was released last year in the light of the development of the Lok Ma Chau Loop.

Details of sites currently reserved for I&T uses are as follows:-

	Site	Approximate site area planned for I&T uses	Latest position
Sites already granted to the Hong Kong Science and Technology Parks Corporation (HKSTPC), or to be granted to HKSTPC with development concepts (about 97.8 hectares in total)			
1.	Remaining sites within the Industrial Estates in Tseung Kwan O, Yuen Long and Tai Po	10.5 hectares	The sites will be developed by the HKSTPC according to the re-industrialisation policy. Employment opportunities to be created are yet to be assessed.
2.	Government land at the junction of Chong San Road and Science Park Road, Pak Shek Kok, Tai Po	0.28 hectares	HKSTPC will construct an InnoCell to provide residential units with flexible design and ancillary facilities for leasing to the tenants and incubatees of Hong Kong Science Park for their principals, employees or visiting researchers from the Mainland or overseas. The development is expected to be completed in 2021 and will create about 300 direct or indirect employment opportunities.

	Site	Approximate site area planned for I&T uses	Latest position
3.	Lok Ma Chau Loop	87 hectares	<p>Subject to funding approval of the Legislative Council in the first half of 2018, the advance works and detailed design of the main works package 1 will commence in mid-2018. If the works progress smoothly, it is expected that the first batch of land parcels can be made available to the Hong Kong-Shenzhen Innovation and Technology Park Limited by 2021 for the construction of the superstructure and related facilities.</p> <p>The gross floor area of the Hong Kong and Shenzhen Innovation and Technology Park (the Park) is approximately 3 times that of the Hong Kong Science Park. Other factors being set aside, it is roughly estimated that about 50 000 positions will be created in the Park.</p>
Sites approved for I&T uses under Outline Zoning Plans (about 26.5 hectares in total)			
4.	Kwu Tung North New Development Area	17.5 hectares	The site has been zoned as “Other Specified Uses” on the Outline Zoning Plan (annotated “research and development”) (5.8 hectares) and “business and technology park” (11.7 hectares). The mode of development and employment opportunities to be created are yet to be assessed.
5.	Hung Shui Kiu New Development Area	9 hectares	The site has been reserved for I&T related development on the Outline Zoning Plan. The mode of development and employment opportunities to be created are yet to be assessed.
Sites subject to further study (about 105 hectares in total)			
6.	Yuen Long Industrial Estate Extension at Wang Chau	15 hectares	According to the planning and engineering study completed by HKSTPC in February 2014, the site was technically feasible for developing the industrial estate extension. The mode of development and employment opportunities to be created are yet to be assessed.

	Site	Approximate site area planned for I&T uses	Latest position
7.	Site near Liantang / Heung Yuen Wai Boundary Control Point	56 hectares	According to the preliminary planning study commissioned by HKSTPC, the site is technically feasible for the development of science park and industrial estates. The mode of development and employment opportunities to be created are subject to further study.
8.	New Territories North (NTN)	34 hectares	Several sites located in the Potential Development Areas in the NTN have been identified as having potential for I&T-related development in the Preliminary Feasibility Study on Developing the NTN. Detailed development plans for the identified sites are to be further studied.

- End -

CONTROLLING OFFICER'S REPLY**ITB005****(Question Serial No. 3738)**Head: (135) Government Secretariat: Innovation and Technology BureauSubhead (No. & title): (001) SalariesProgramme: (1) Director of Bureau's OfficeControlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)Director of Bureau: Secretary for Innovation and TechnologyQuestion:

Please tabulate the actual expenditure on the pay and gratuity of each politically accountable official of the Innovation and Technology Bureau (ITB), including the Secretary for Innovation and Technology (S for IT), the Under Secretary for Innovation and Technology and the Political Assistant to S for IT for the past year.

	Pay	Gratuity
S for IT		
Under Secretary for Innovation and Technology		
Political Assistant to S for IT		

Please tabulate the estimated expenditure on the pay and gratuity of each politically accountable official of the ITB, including the S for IT, the Under Secretary for Innovation and Technology and the Political Assistant to S for IT for the coming year.

	Pay	Gratuity
S for IT		
Under Secretary for Innovation and Technology		
Political Assistant to S for IT		

Asked by: Hon CHAN Chi-chuen (Member Question No. (LegCo use): 236)

Reply:

The required information is provided as follows:

Actual expenditure in 2017-18

Innovation and Technology Bureau	Salary
Secretary for Innovation and Technology (S for IT)	\$3.90 million
Under Secretary for Innovation and Technology	\$2.31 million
Political Assistant to S for IT	\$0.88 million

Estimated expenditure in 2018-19

Innovation and Technology Bureau	Salary
S for IT	\$4.01 million
Under Secretary for Innovation and Technology	\$2.60 million
Political Assistant to S for IT	\$1.00 million

According to the remuneration package for politically-appointed officials serving in the Hong Kong Special Administrative Region Government, politically-appointed officials are entitled to Mandatory Provident Fund contributions by the Government but there are no end-of-contract gratuity for them.

- End -

CONTROLLING OFFICER'S REPLY

ITB006

(Question Serial No. 3763)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

What are the estimated manpower and expenditure for the implementation of the Smart Lampposts scheme in the coming year? What locations are selected and what is the number of smart lampposts to be installed under the scheme? What are the functions of these smart lampposts?

Asked by: Hon CHAN Chi-chuen (Member Question No. (LegCo use): 261)

Reply:

To promote smart city development, the Government plans to implement the "Multi-functional Smart Lampposts" pilot scheme. About 400 new lampposts with smart devices will be installed in 4 selected districts, including Causeway Bay/Wan Chai, Central/Admiralty, Tsim Sha Tsui and Kwun Tong/ Kai Tak Development Area to strengthen city and traffic management. Equipped with sensors, the "Multi-functional Smart Lampposts" can strengthen meteorological monitoring/forecasting and collect air quality data at district level. Installing traffic sensors can also assist in collecting traffic data, monitoring traffic conditions and handling traffic incidents. "Multi-functional Smart Lampposts" are suitable street furniture for mobile network operators to install small cell stations to provide public mobile communications services (including the future 5G services) and free Wi-Fi services for the convenience of the public and tourists.

The pilot scheme will be implemented in phases. We plan to install some 50 smart lampposts with smart devices in Kwun Tong and the Kai Tak Development Area in the first phase. The exact locations for lamppost installation will be determined subject to the consultation with the relevant District Councils. The estimated expenditure of the "Multi-functional Smart Lampposts" pilot scheme is about \$272 million (at money-of-the-day prices) and the annual operating cost is about \$32 million.

- End -

CONTROLLING OFFICER'S REPLY

ITB007

(Question Serial No. 0607)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (3) Efficiency Office

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

Among Matters Requiring Special Attention in 2018-19 of Programme (3) Efficiency Office, the office will “participate in the Government’s review of procurement arrangements to include innovation and technology as tender requirements to encourage local technological innovation”. Would the Government please advise on the following:

1. the details of including innovation and technology as tender requirements and the estimated manpower involved in the above work; and
2. the work schedule of the review and the estimated expenditure involved?

Asked by: Hon CHAN Chun-ying (Member Question No. (LegCo use): 43)

Reply:

The Efficiency Office is taking part in the Government’s review of procurement arrangements and explore enhancement of the arrangements by including the relevant requirements on innovation and technology to promote local technological innovation, on the premise of complying with the Government Procurement Agreement of the World Trade Organization. The review is expected to be completed in the second quarter of 2018. As the review is undertaken by the Efficiency Office with existing manpower, no additional expenditure will be involved.

- End -

CONTROLLING OFFICER'S REPLY

ITB008

(Question Serial No. 5334)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): (000) Operational expenses

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

Please advise the numbers of applications received and approved since the launch of the Innovation and Technology Fund for Better Living (FBL). What is the amount of FBL grant awarded to each funded project?

Has the Government considered extending the eligibility to cover secondary schools and higher education institutions? If yes, what are the details and expenditure involved? If no, what are the reasons?

Asked by: Hon CHAN Pierre (Member Question No. (LegCo use): 98)

Reply:

Since the launch of the Innovation and Technology Fund for Better Living ("FBL") on 31 May 2017, 38 applications have been received as at 16 March 2018. Among them, 14 have been assessed by the FBL Assessment Panel (the "Panel"), 11 are being processed by the FBL Secretariat while 13 applications which do not meet the eligibility criteria have been returned (mainly because the applicants are private companies).

Of the 14 assessed applications, the Panel supported funding for 9 of them, with a total grant of about \$25 million. The average grant for each project is about \$2.7 million. Approved projects include: mobile app providing elderly/the general public with fitness exercise guidance, service platforms for people with rehabilitation needs, devices for people with disabilities and teaching tools for specific community groups, etc.

The FBL generally accepts applications from the following organisations, including: non-governmental organisations subvented by the Social Welfare Department, public bodies, professional bodies and trade associations.

The 8 local universities funded by the University Grants Committee and some higher education institutions are public bodies specified in Schedule 1 to the Prevention of Bribery

Ordinance (Cap. 201) and thus meet the eligibility criteria of the FBL. The funding scope of the FBL does not cover secondary schools. Nevertheless, flexibility is allowed under the FBL. If an applicant can prove that its objective and business meet the requirements of the FBL, the application will be considered by the FBL Secretariat.

- End -

CONTROLLING OFFICER'S REPLY**ITB009****(Question Serial No. 2655)**

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology (Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned in paragraph 65 of the Budget Speech that \$20 billion will be used on the first phase of the Hong Kong-Shenzhen Innovation and Technology Park in the Lok Ma Chau Loop for, inter alia, site formation, infrastructure, superstructure and initial operation. Please provide the specific timetable for the above 4 aspects of work and the expenditure and number of staff involved. Please also advise whether the Government will conduct a public consultation on the entire Loop project.

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 43)

Reply:

The \$20 billion earmarked for the development of the Hong Kong-Shenzhen Innovation and Technology Park (the Park) in the Lok Ma Chau Loop (the Loop) will be partly used by the Civil Engineering and Development Department to fund site formation and infrastructure works under the Main Works Package 1 (MPW1), and partly used to support the Hong Kong-Shenzhen Innovation and Technology Park Limited (HSITPL) in the first stage of superstructure construction as well as the initial operation of the Park. As the Loop is a sizeable undeveloped land without any infrastructure, we expect the funding required for the Loop development as a whole will far exceed \$20 billion. The HSITPL is conducting Master Planning Study and Business Model and Business Planning Study for the Park's development. Both studies are expected to be completed in early 2019. Upon the completion of the studies, we will make reference to their findings and further estimate the development cost of the Loop.

As for the development timeframe, we are now seeking the Legislative Council (LegCo)'s funding approval for about \$780 million for the Advance Works and the detailed design of the MPW1. Subject to the LegCo's funding approval in the first half of 2018, the Advance Works are expected to commence in mid-2018 the earliest. If the works progress smoothly, it is envisaged that the first batch of land parcels can be handed over to HSITPL for construction of superstructure and associated facilities as early as by 2021 or before.

The Innovation and Technology Bureau created 1 permanent Administrative Officer Staff Grade C post and 5 supporting non-directorate posts in 2018-19. They are responsible for the coordination work for the development of the Park as well as matters on innovation and technology cooperation with the Mainland. The relevant salaries and expenditure involved are about \$6.92 million.

The Government has consulted the relevant stakeholders, including the LegCo, District Councils and Rural Committees in a timely manner in different phases of the Loop development, for example, during the conduct of the Planning and Engineering Study on Development of Lok Ma Chau Loop in 2014, after the signing of the Memorandum of Understanding on Jointly Developing the Lok Ma Chau Loop in 2017, during the formulation of the draft Lok Ma Chau Loop Outline Zoning Plan in 2017, and the gazettal of the proposed road works of the advance works, etc.. The Loop development is a huge and long-term project. The Government and HSITPL will continue to listen to the views of the relevant stakeholders on the development of the Loop and the Park in the future.

- End -

CONTROLLING OFFICER'S REPLY

ITB010

(Question Serial No. 5534)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

1. It is mentioned in paragraph 70 of the Budget Speech that the Financial Secretary will allocate \$100 million to Cyberport to promote the development of e-sports. The Cyberport Arcade will become a local e-sports and digital entertainment node providing a competition venue for e-sports. Support will also be provided for the e-sports sector in areas such as technological development and talent nurturing. Please set out the details and breakdown of expenditure of the above project in 2018-19.
2. In 2018-19, will the Government conduct consultations with stakeholders, including e-sports players, game manufacturers and computer hardware manufacturers, on the promotion of e-sports and how to choose e-sports programmes for promotion, with a view to understanding their actual needs and providing corresponding financial concessions?
3. How will the Government provide support to e-sports players in areas such as computer hardware equipment, travelling expenses and subsistence allowance for participating in overseas competitions, etc.?
4. Will the Government strive to organise world-class e-sports competitions in Hong Kong in 2018-19? If yes, what are the details and the estimated expenditure?

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 57)

Reply:

The consolidated reply to the various parts of the question is as follows:

It is announced in this year's Budget that \$100 million will be allocated to Cyberport to promote the development of e-sports, of which \$50 million will be used for developing the

Cyberport Arcade into a local e-sports and digital entertainment node. The node will provide a dedicated e-sports venue equipped with advanced computers, audio-visual equipment and other peripherals as well as high-speed and stable network connection for the industry to host regular small to medium-scale e-sports competitions, activities and training. Cyberport will set up an experience corner in the Arcade and invite e-sports and digital entertainment industry to showcase related new technologies and e-sports products, raising the public understanding and interest in e-sports, game development and related technologies. The remaining \$50 million will be used for supporting development of the industry in the next 5 years, including organisation of local and regional competitions and mega events, training programmes and public promotion activities. Cyberport will also improve its start-ups and talents development programmes, identify and equip the start-ups and talents relating to e-sports technologies and game development.

Cyberport is now consulting the industry on the measures. We plan to consult the Legislative Council Panel on Information Technology and Broadcasting in May 2018.

- End -

CONTROLLING OFFICER'S REPLY

ITB011

(Question Serial No. 5656)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

1. Please set out in detail the achievements of the Bureau in promoting innovation and technology since its establishment, the expenditure and number of staff involved.
2. What are the anticipated progress and achievements of the work on developing local innovation and technology industries in 2018-2019? What are the estimated expenditure and manpower involved?
3. What are the anticipated progress and achievements of the work on promoting research and development (R&D) collaboration with the world's top-notch science and research institutes in 2018-2019? What are the estimated expenditure and manpower involved?
4. What are the anticipated progress and achievements of the work on promoting "re-industrialisation" through the development of smart production and high value-added industries in 2018-2019? What are the estimated expenditure and manpower involved?
5. What are the anticipated progress and achievements of the work on encouraging private sector investments in technology start-ups and R&D activities in 2018-2019? What are the estimated expenditure and manpower involved?
6. What are the anticipated progress and achievements of the work on supporting the formulation of digital framework and technical standards for smart city development in 2018-2019? What are the estimated expenditure and manpower involved?
7. What are the anticipated progress and achievements of the work on promoting the development of Hong Kong into a Wi-Fi connected city and facilitating open data applications in 2018-2019? What are the estimated expenditure and manpower involved?

8. What are the anticipated progress and achievements of the work on promoting the application of innovative technologies in addressing social issues in 2018-2019? What are the estimated expenditure and manpower involved?
9. What are the anticipated progress and achievements of the work on formulating policies to support the use of local technology products and services in 2018-2019? What are the estimated expenditure and manpower involved?
10. What are the anticipated progress and achievements of the work on formulating policies to augment the pool of innovation and technology talents in 2018-2019? What are the estimated expenditure and manpower involved?
11. What are the estimated expenditure and manpower involved for encouraging collaboration among institutions in developing innovation and technology in 2018-2019?

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 187)

Reply:

The requested information is provided below:

1. Since the establishment of the Innovation and Technology Bureau (“ITB”) in November 2015, the Government has injected a sum of over \$18 billion to introduce a series of initiatives, with a view to promoting the development of innovation and technology (“I&T”) in Hong Kong from multiple aspects. These initiatives include: the \$2 billion Midstream Research Programme for Universities; Stage 1 of the Science Park Expansion Programme, with a cost of some \$4.4 billion; developing an Advanced Manufacturing Centre and a Data Technology Hub, at a cost of some \$8.2 billion; the \$2 billion Innovation and Technology Venture Fund; the \$500 million Technology Voucher Programme; the \$500 million Innovation and Technology Fund for Better Living; the \$500 million project of Wi-Fi Connected City; and enhancement measures under the Research and Development Cash Rebate Scheme, Public Sector Trial Scheme and Internship Programme, involving a total expenditure of \$360 million.
- 2, 3 and 4. The Government is committed to developing I&T industry in Hong Kong and promoting “re-industrialisation”, with a view to identifying a new area of economic growth for Hong Kong and creating more quality and diversified employment opportunities.

To promote the development of I&T in Hong Kong, the Government is working on the establishment of two research clusters on healthcare technologies and on artificial intelligence and robotics technologies to attract the world’s top scientific research institutions and technology enterprises to Hong Kong for conducting more R&D projects in collaboration with local universities and scientific research institutions. Such clusters will pool and nurture more technology talent in Hong Kong. To this end, we have

earmarked \$10 billion for providing financial support for non-profit-making scientific research institutions that will establish their presence in these two clusters.

Moreover, we will allocate \$10 billion to the Hong Kong Science and Technology Parks Corporation (HKSTPC). Of this, about \$3 billion will be used to support HKSTPC to construct research-related infrastructure and facilities, so as to further reinforce and develop Hong Kong's R&D capabilities. Such works include converting one of the buildings in the Science Park to provide more laboratories, as well as constructing small batch experimental production facility, animal research facility, robot testing facility and other related scientific research facilities. The remaining \$7 billion will be used for HKSTPC to enhance support services for its tenants and incubatees, including expanding HKSTPC's Corporate Venture Fund and Incubation Programme, attracting international technology enterprises to set up bases in the Science Park, setting up a Smart Campus and improving the facilities in the Science Park. The Government is discussing the work details with the HKSTPC.

Through the Innovation and Technology Fund (ITF), the Government finances projects that can contribute to technology upgrading in manufacturing and services industries and promotion of innovation. As at the end of January 2018, ITF has funded over 7 000 projects with some \$13.6 billion. There are various funding programmes under ITF including the Innovation and Technology Support Programme, the University-Industry Collaboration Programme, the Enterprise Support Scheme and the Patent Application Grant, etc. One of the aims of these funding programmes is to encourage more R&D work and promote re-industrialisation. In addition, we have set aside \$500 million under ITF to launch a "Technology Talent Scheme" in the third quarter of 2018. One of the initiatives under the Scheme is the "Re-industrialisation and Technology Training Programme", which will subsidise local companies on a matching basis for staff training in advanced technologies, especially those related to "Industry 4.0", with a view to giving impetus to the promotion of re-industrialisation.

In line with the Government's re-industrialisation policy, HKSTPC is building a Data Technology Hub and an Advanced Manufacturing Centre in the Tseung Kwan O Industrial Estate, which are expected to be completed by 2020 and 2022 respectively. The Finance Committee (FC) of the Legislative Council approved in May 2016 an injection of \$6,598 million and a government loan of \$1,650 million to HKSTPC for the development of these 2 projects.

The Hong Kong Productivity Council (HKPC) has been dedicating efforts to promoting re-industrialisation to facilitate enterprises in moving towards high value-added production and gradually upgrading to Industry 4.0. Relevant work of the HKPC in 2018-19 includes: launching the Smart Industry One Consortium exchange platform to enable the industry to keep abreast of the latest information on smart industry, setting up jointly with the Fraunhofer Institute for Production Technology of Germany an Invention Centre for accelerating the adoption of Industry 4.0 technologies by the industry, and setting up the Shenzhen Innovation and Technology Center of the HKPC in

Shenzhen with a view to providing solutions for Hong Kong enterprises in the Bay Area in respect of smart manufacturing, artificial intelligence, big data and environmental technology etc. The operation of HKPC is supported by government funding and HKPC's own income. Promoting re-industrialisation is only part of its work, so no separate breakdown is available.

The 5 R&D Centres established by the Government (i.e. the Hong Kong Applied Science and Technology Research Institute, the Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies, the Nano and Advanced Materials Institute, the Hong Kong Research Institute of Textiles and Apparel, and the Automotive Parts and Accessory Systems R&D Centre) have been actively engaging in R&D related to re-industrialisation in recent year, covering various areas such as big data, Internet of Things, robotics, new materials, smart mobility and environmental technology etc., thereby assisting the industry to ride the trend and capture business opportunities.

5. In July 2016, the FC approved a funding of \$2 billion for setting up the Innovation and Technology Venture Fund ("ITVF") for the Government to co-invest with partner venture capital (VC) funds in local I&T start-ups, thereby encouraging the private sector to engage in technology start-ups and R&D activities, and engendering a thriving I&T ecosystem. Between September 2017 and January 2018, the ITVF scheme was open for VC funds to apply to become co-investment partner, and 14 applications were received. The Innovation and Technology Commission (ITC) is in the process of the selection work. It is expected that co-investment in local I&T start-ups with partner VC funds will commence in the second half of the year.

To encourage private enterprises to conduct more local R&D activities, we propose to introduce enhanced tax deduction for "qualifying R&D expenditure". The first \$2 million of the total "qualifying R&D expenditure" will be eligible for a 300% tax deduction, and a 200% tax deduction will be provided for the remaining balance. There is no cap on the amount of the enhanced tax deduction. We are now in the process of the relevant legislative amendment work. Should the legislative process go smoothly, the "enhanced tax deduction" will be applicable to the "qualifying R&D expenditure" incurred by enterprises on or after 1 April 2018.

To encourage the private sector to invest in R&D activities, we raised the level of cash rebate to 40% under the R&D Cash Rebate Scheme in 2016. As at end of January 2018, cash rebates were approved for 1 084 companies, involving a total of about \$331 million. In 2018-19, the estimated expenditure under the scheme is \$110 million.

6. The Government published the Smart City Blueprint for Hong Kong (Blueprint) in December 2017, outlining the vision and mission to build Hong Kong into a world-class smart city. The Blueprint maps out development plans in the next five years, providing a clear and specific direction for smart city development in Hong Kong. Different areas of work are involved in smart city development. The relevant policy bureaux and departments will set

implementation timetables and draw up estimates for financial resources and manpower requirements for the measures involved.

The ITB will implement 3 smart city key infrastructure projects. Among them, the estimated non-recurring expenditure involved in the new eID system is \$112 million, and we plan to seek funding approval of the FC in mid-2018. The estimated total expenditure of the “Multi-functional Smart Lampposts pilot scheme” project is about \$272 million. The scheme will be implemented in phases, and if the implementation goes smoothly, we expect about 50 smart lampposts under the first phase of the pilot scheme will come into operation progressively by mid-2019, and the relevant expenditure will be paid under the block vote under Head 706. As for the \$533.30 million non-recurrent expenditure of the “Next Generation Government Cloud and Big Data Analytics Platform”, we will seek funding approval of the FC in mid-2018.

7. In 2018-19, we will continue to expand the coverage of the free “Wi-Fi.HK” service in a multi-pronged approach under the “Wi-Fi Connected City” programme. The initiatives include encouraging public and private organisations to join the programme, providing Wi-Fi service at government venues through public-private collaboration model, as well as subsidising youth service centres and study rooms to provide free Wi-Fi service, etc.

Regarding the public-private collaboration model, the Government has been implementing since July 2017 a pilot project providing free Wi-Fi service in some 20 venues progressively. We are reviewing the results of the pilot project and drawing up implementation details for the next phase, with the aim of fully implementing the collaboration programme in 2018 to further increase the number of “Wi-Fi.HK” hotspots.

In 2018-19, the estimated expenditure of the “Wi-Fi Connected City” programme is \$67.2 million and the manpower requirements will be met by internal redeployment.

The Office of the Government Chief Information Officer (OGCIO) will continue to promote and support bureaux/departments (B/Ds) to release more data in digital format through the Government’s “data.gov.hk” portal to boost scientific research and innovation. In 2018, the Government will release more data related to medical services, transport and education etc.. The datasets to be released in 2018-19 include figures related to excavation permits issued by the Highways Department, a list of local kindergartens participating in the Free Quality Kindergarten Education Scheme compiled by the Education Bureau, locations of electric vehicle charging facilities in public carparks provided by the Environmental Protection Department, locations of water dispensers managed by the Leisure and Cultural Services Department, etc.

The Government will continue to liaise with public and private organisations, advising them of the benefits brought by opening data to the organisation as well as their business. We will also encourage them to support the Government’s overall policy on open data and release their data on the

Government's "data.gov.hk" portal coordinated by OGCI0 to promote a wider application.

To take forward and accelerate the work on open data and data analytics more effectively, additional resources have been earmarked for 2018-19. A permanent Chief Systems Manager (D1) and 9 non-directorate permanent posts will be created in OGCI0 for advocating and supporting B/Ds on open data and data analytics, as well as promulgating government-wide practices and guidelines in these respects. The manpower expenditure is around \$7 million.

8. ITB launched a \$500 million Innovation and Technology Fund for Better Living (FBL) on 31 May last year to finance I&T projects which make life more convenient, more comfortable and safer, or cater for the needs of specific groups. To date, 9 projects have gained the Assessment Panel's funding support, involving around \$25 million in total. It is hoped that the first batch of I&T projects can be implemented in early 2019 to benefit the public.
9. The Efficiency Office is reviewing jointly with the Financial Services and the Treasury Bureau the existing government procurement arrangements. On the premise of abiding to the Government Procurement Agreement of the World Trade Organisation, we are studying the incorporation of I&T to optimise the procurement arrangements in order to encourage potential tenderers to invest in R&D as a way to promote innovation in local technology. The review is expected to complete in the second quarter of 2018.

Furthermore, to encourage more local SMEs to bid for government IT projects, OGCI0 has raised the contract value limit of minor works items from \$1.43 million to \$3 million, which is more than double the existing level, for the "Standing Offer Agreement for Quality Professional Services (SOA-QPS)" ("the Agreement") effective from the end of July 2017. A total of 49 companies are engaged under the existing Agreement, with 16 of them (33%) being SMEs, 6 more than the previous Agreement. The related work is absorbed by existing resources and manpower with no separate expenditure breakdown.

10. Regarding nurturing I&T talent, we have set aside \$500 million under the ITF for a five-year pilot Technology Talent Scheme. The Scheme comprises:
 - (a) Postdoctoral Hub programme. It provides funding support to ITF recipients as well as incubatees and I&T tenants of HKSTPC and Cyberport to recruit postdoctoral talent for R&D work; and
 - (b) Reindustrialisation and Technology Training Programme. It subsidises local companies on a 2:1 matching basis to train their staff in advanced technologies, especially those related to "Industry 4.0".

We aim to launch the Technology Talent Scheme in the third quarter of 2018. The estimated expenditure is about \$100 million per annum.

In addition, we increased the monthly allowance of the Internship Programme in October 2017 and extended the Programme to cover all the I&T tenants of HKSTPC and Cyberport, with a view to encouraging university students to pursue a career in the I&T field.

11. ITB will continue to encourage the collaboration and co-operation among various I&T institutions. ITB will proactively strengthen the ties with various stakeholders, including the relevant Government departments, R&D Centres, universities, HKSTPC, Cyberport, HKPC, etc. We will revisit the work priorities and interactions of the various institutions from time to time, so as to ensure that the institutions can make good use of their resources, complement each other and create synergy, with a view to developing the I&T industry of Hong Kong in unison.

The overall estimated expenditure of ITB for 2018-19 is about \$ 590.2 million. ITB is taking forward the above-mentioned work in collaboration with its departments using existing manpower and resources. We do not have a breakdown of the expenditure involved for each work item.

- End -

CONTROLLING OFFICER'S REPLY

ITB012

(Question Serial No. 0466)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): (000) Operational expenses

Programme: (1) Director of Bureau's Office

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

What is the estimated expenditure on the full year emoluments of the Secretary for Innovation and Technology in 2018-2019?

Asked by: Hon CHENG Chung-tai (Member Question No. (LegCo use): 11)

Reply:

We have set aside \$4.01 million as salary provision for the Secretary for Innovation and Technology in the Estimate for 2018-19.

- End -

CONTROLLING OFFICER'S REPLY**ITB013****(Question Serial No. 4511)**Head: (135) Government Secretariat: Innovation and Technology BureauSubhead (No. & title): (000) Operational expensesProgramme: (3) Efficiency OfficeControlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)Director of Bureau: Secretary for Innovation and TechnologyQuestion:

1. Regarding the cases handled by the "1823" 24-hour one-stop service, please tabulate the respective number and percentage of cases concerning each department.
2. Please set out the staffing establishment and remuneration of the "1823" 24-hour one-stop service.

Asked by: Hon CHEUNG Chiu-hung, Fernando (Member Question No. (LegCo use): 642)Reply:

The information required is provided as follows:

1. In 2017, 1823 handled a total of 2.42 million cases, including enquiries and complaints, for the departments set out in the table below:

Departments	Number of cases (and respective percentage of the total caseload)	
Labour Department	397 972	16.43%
Hong Kong Housing Authority and Housing Department	366 041	15.11%
Transport Department	254 033	10.49%
Working Family and Student Financial Assistance Agency	195 359	8.07%
Food and Environmental Hygiene Department	184 206	7.61%
Rating and Valuation Department	165 853	6.85%

Departments	Number of cases (and respective percentage of the total caseload)	
Hongkong Post	103 643	4.28%
Buildings Department	73 503	3.03%
Highways Department	65 205	2.69%
Leisure and Cultural Services Department	48 962	2.02%
Companies Registry	48 636	2.01%
Lands Department	44 202	1.82%
Agriculture, Fisheries and Conservation Department	43 025	1.78%
Social Welfare Department	30 591	1.26%
Tobacco Control Office, Department of Health	20 090	0.83%
Drainage Services Department	18 452	0.76%
Electrical and Mechanical Services Department	15 716	0.65%
Office of the Government Chief Information Officer	15 442	0.64%
Land Registry	4 776	0.20%
Architectural Services Department	2 069	0.09%
Civil Engineering and Development Department	1 287	0.05%
Marine Department	997	0.04%
1823 and non-participating departments	321 924	13.29%
Total	2 421 984	100%

2. As at the end of February 2018, 1823 had 427 full-time staff (including 6 civil servants and 421 contract staff) and 98 part-time staff. The salary expenditure in 2017-18 was \$124 million.

- End -

CONTROLLING OFFICER'S REPLY

ITB014

(Question Serial No. 4874)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the records management work of your Bureau and the departments under your purview over the past year:

1. Please provide information on the number and rank of officers designated to perform such work. If there is no officer so designated, please provide information on the number of officers and the hours of work involved in records management duties, and the other duties they have to undertake.

2. Please list in table form information on programme and administrative records which have been closed pending transfer to the Government Records Service (GRS) for appraisal, including:

- category of records;
- years covered by the records;
- number and linear metres of records;
- retention period approved by GRS;
- whether they are confidential documents; and
- reasons for not having been transferred.

3. Please list in table form information on programme and administrative records which have been transferred to GRS for retention, including:

- category of records;
- years covered by the records;
- number and linear metres of records;
- years that the records were transferred to GRS;
- retention period approved by GRS; and
- whether they are confidential documents;

4. Please list in table form information on records which have been approved for destruction by GRS, including:

- category of records;
- years covered by the records;
- number and linear metres of records;
- years that the records were transferred to GRS;
- retention period approved by GRS; and
- whether they are confidential documents.

Asked by: Hon CHEUNG Chiu-hung, Fernando (Member Question No. (LegCo use): 5545)

Reply:

The information sought is provided below:

Innovation and Technology Bureau

1. In accordance with the Government's records management policy, the Innovation and Technology Bureau (ITB) has designated staff of different ranks to perform records management duties as follows:

- (a) 1 Chief Executive Officer (CEO) serving as Departmental Records Manager (DRM) to devise, carry out and document departmental records management practices and procedures according to the guidelines and advice of the Government Records Service (GRS);
- (b) 1 Executive Officer (EO) II serving as Assistant Departmental Records Manager (ADRM) to assist the DRM in the execution of the duties concerned;
- (c) 4 EOs I, 2 EOs II and 1 Senior Information Officer being responsible for supervising records management work in different divisions/sections; and
- (d) 3 Clerical Officers (COs), 8 Assistant Clerical Officers (ACOs) and 2 Clerical Assistants (CAs) being responsible for the execution of certain records management duties.

In the course of performing daily duties, staff of different ranks in the ITB take part in related records management work to meet operational needs.

2, 3 & 4. The ITB does not have any programme and administrative records which have been closed pending transfer to the GRS for appraisal, transferred to the GRS for retention or approved for destruction by the GRS.

Efficiency Office

1. In accordance with the Government's records management policy, the Efficiency Office (EffO) has designated staff of different ranks to perform records management duties as follows:

- (a) 1 Principal Executive Officer serving as DRM to devise, carry out and document departmental records management practices and procedures according to the guidelines and advice of the GRS;
- (b) 2 CEOs serving as ADRM to assist the DRM in the execution of the duties concerned;
- (c) 1 Senior Executive Officer (SEO) and 2 EOs I serving as Records Managers to supervise records management in different divisions/sections; and
- (d) 1 EO II, 4 ACOs, 3CAs, 1 Assistant Manager, 1 Assistant Customer Service Supervisor and 1 Operation Assistant being responsible for the execution of certain records management duties.

In the course of performing daily duties, staff of different ranks in the EffO take part in related records management work to meet operational needs.

- 2 & 3. The EffO does not have any programme and administrative records which have been closed pending transfer to the GRS for appraisal or transferred to the GRS for retention.
- 4. Information on records which have been approved for destruction by the GRS is as follows:

Category	Years covered	Quantity and linear metres	Year of transfer to the GRS	Retention period approved by the GRS	Are they confidential documents
Administrative records	1999-2015	3 360 records/ 62.99 linear metres	2016-2017	2-5 years; or 12 months after the officer has left the service	No

Office of the Government Chief Information Officer

- 1. In accordance with the Government's records management policy, the Office of the Government Chief Information Officer (OGCIO) has designated staff of different ranks to perform records management duties as follows:
 - (a) 1 CEO serving as DRM to devise, carry out and document departmental records management practices and procedures according to the guidelines and advice of the GRS;

- (b) 1 SEO serving as ADRM to assist the DRM in the execution of the duties concerned;
- (c) 3 EOs I, 1 EO II, 3 Senior Clerical Officers (SCOs), 1 Accounting Officer I, 1 Chief Training Officer, 1 Computer Operation Manager and 1 Senior Supplies Officer being responsible for supervising records management in different divisions/sections; and
- (d) 4 COs, 8 ACOs, 1 Personal Secretary II and 1 Computer Operator I being responsible for the execution of certain records management duties.

In the course of performing daily duties, staff of different ranks in the OGCIO take part in related records management work to meet operational needs.

2. Information on programme and administrative records which have been closed pending transfer to the GRS for appraisal is as follows:

Category	Years covered	Quantity and linear metres	Retention period approved by the GRS	Are they confidential documents	Reasons for non-transfer
Administrative records	1991-2017	108 records/ 5.43 linear metres	3-13 years	Yes: 7 No: 101	The retention period approved by the GRS is not yet expired
Programme records	1991-2017	275 records/ 13.75 linear metres	14 years	Yes: 12 No: 263	

3. The OGCIO does not have any programme and administrative records which have been transferred to the GRS for retention.
4. Information on records which have been approved for destruction by the GRS is as follows:

Category	Years covered	Quantity and linear metres	Year of transfer to the GRS	Retention period approved by the GRS	Are they confidential documents
Administrative records	1987-2007	553 records/ 27.65 linear metres	2015-2017	2-7 years	Yes: 7 No: 546

Innovation and Technology Commission

1. In accordance with the Government's internal guidelines and codes, the Innovation and Technology Commission (ITC) has designated staff of different ranks to undertake different duties on departmental records management as part of their overall duties and report to a directorate officer responsible for overseeing such work:
 - (a) 1 CEO serving as the DRM to assist in establishing and implementing the departmental records management programme;
 - (b) 2 EOs I serving as ADRMs to assist the DRM in the execution of the duties concerned; and
 - (c) 8 officers not below the rank of EO II serving as the Records Managers to monitor the records management of various divisions.

In addition, each division has its own general registry with clerical grade staff responsible for filing and records management routines. In this regard, the ITC has 1 SCO, 11 COs, 37 ACOs and 13 CAs.

2. Information on programme and administrative records which have been closed pending transfer to GRS for appraisal is as follows:

Category	Years covered	Quantity and linear metres	Retention period approved by GRS	Are they confidential documents	Reasons for non-transfer
Programme records	2000-2017	486 records/ 24.29 linear metres	1-25 years	No	The retention period approved by GRS is not yet expired
Programme records	2002-2017	197 records/ 9.83 linear metres	8-25 years	Yes	
Administrative records	2010-2017	62 records/ 3.1 linear metres	2-7 years	No	
Administrative records	2012-2017	13 records/ 0.65 linear metres	3-5 years	Yes	

3. Information on programme and administrative records which have been transferred to GRS for retention is as follows:

Category	Years covered	Quantity and linear metres	Year of transfer to GRS	Retention period approved by GRS	Are they confidential documents
Administrative records	1984-2012	8 records/ 0.29 linear metres	2015	Permanent retention	No

4. Information on records which have been approved for destruction by GRS is as follows:

Category	Years covered	Quantity and linear metres	Year of transfer to GRS	Retention period approved by GRS	Are they confidential documents
Programme records	1994- 2015	2 060 records/ 48.74 linear metres	2017	1-7 years	No
Administrative records	1984- 2012	106 records/ 4.03 linear metres	2015	Retained according to the General	No
Administrative records	1992- 2012	5 records/ 0.14 linear metres	2015	Administrative Records Disposal Schedules of GRS, generally for 0-7 years after closure of the files	Yes

- End -

CONTROLLING OFFICER'S REPLY**ITB015****(Question Serial No. 4875)**Head: (135) Government Secretariat: Innovation and Technology BureauSubhead (No. & title): ()Programme: (2) Innovation and TechnologyControlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)Director of Bureau: Secretary for Innovation and TechnologyQuestion:

Please provide information in the following format regarding studies (if any) commissioned by the Innovation and Technology Bureau and departments under its purview for the purpose of formulating and assessing policies.

(a) Please provide information in the table below on the studies on public policy and strategic public policy for which funds were allocated over the past two financial years:

Name of consultant

Mode of award (public bidding/tender/others (please specify))

Title, content and objectives of project

Consultancy fee (\$)

Start date

Progress of study (under planning/in progress/completed)

Follow-ups taken by the Government on the study reports and their progress (if any)

If completed, have they been made public? If yes, through what channel(s)? If not, what were the reasons?

(b) Are there any projects for which funds have been reserved for conducting internal studies this year? If yes, please provide the following information:

Title, content and objectives of project

Start date

Progress of study (under planning/in progress/completed)

Follow-ups taken by the Government on the study reports and their progress (if any)

For the projects that are expected to be completed this year, is there any plan to make them public? If yes, through what channel(s)? If not, what are the reasons?

(c) Are there any projects for which funds have been reserved for conducting consultancy studies this year? If yes, please provide the following information:

Name of consultant

Mode of award (public bidding/tender/others (please specify))

Title, content and objectives of project

Consultancy fee (\$)

Start date

Progress of study (under planning/in progress/completed)

Follow-ups taken by the Government on the study reports and their progress (if any)

For the projects that are expected to be completed this year, is there any plan to make them public? If yes, through what channel(s)? If not, what are the reasons?

(d) What are the criteria for considering the award of consultancy projects to the research institutions concerned?

Asked by: Hon CHEUNG Chiu-hung, Fernando (Member Question No. (LegCo use): 5546)

Reply:

The information sought is provided below:

- (a) The studies on public policy and strategic public policy for which funds were allocated by the Innovation and Technology Bureau and departments under its purview in 2016-17 and 2017-18 include:

Name of consultant	Mode of award (public bidding/ tender/ others (please specify))	Title, content and objectives of project	Consultancy fee (\$)	Start date	Progress of study (under planning/ in progress/ completed)	Follow-ups taken by the Government on the study reports and their progress (if any)	If completed, have they been made public? If yes, through what channel(s)? If not, what were the reasons?
PricewaterhouseCoopers Advisory Services Limited	Tender	<p><u>Title of the project</u> Study on the Development of Hong Kong as a Smart City</p> <p><u>Content</u> To study the information technology infrastructure required for smart city development in Hong Kong and formulate the digital framework and technical standards, and initiatives/ proposals.</p> <p><u>Objective</u> To formulate a blueprint for smart city development in Hong Kong.</p>	5 million	Sep 2016	Completed	The Government released the Smart City Blueprint for Hong Kong in mid-December 2017 and briefed the Legislative Council Panel on Information Technology and Broadcasting in January 2018.	<p>The study report was uploaded onto the smart city's dedicated website (www.smartcity.gov.hk) for public information at the end of June 2017.</p> <p>The Government briefed the Legislative Council Panel on Information Technology and Broadcasting on the findings and recommendations of the study in July 2017.</p>
KPMG Advisory (Hong Kong) Limited	Tender	<p><u>Title of the project</u> Study on Promoting the Use of Digital Certificates and Institutional Arrangements for Public Certification Authority Service</p> <p><u>Content</u> To explore ways to promote use of digital certificates in e-commerce and e-government and review the institutional arrangements for public certification authority service, including use of mobile technologies to enhance the use of digital certificates.</p> <p><u>Objective</u> To create a secure and reliable infrastructure for the development of e-commerce and smart city.</p>	4.117 million	Dec 2016	Completed	The Legislative Council Panel on Information Technology and Broadcasting was briefed in March 2018 on the proposed implementation of the eID project as recommended in the Consultancy Report. The Panel supported the proposal. Preparation work for seeking funding approval of the Finance Committee in mid-2018 to carry out the project is underway.	The Government briefed the Legislative Council Panel on Information Technology and Broadcasting in March 2018 on the proposed implementation of the eID project, which would enable each and every member of the public to use a single digital identity and authentication to conduct government and commercial transactions online, as recommended in the Consultancy Report. While the report is mainly for internal reference, it can be made available for public reference, if necessary.

(b) and (c) In 2018-19, no funding has been or will be set aside for conducting internal studies and consultancy studies.

- (d) We assess the consultancy proposals received in accordance with the contents of the tender document and the established procedures. The areas of assessment include the consultant's understanding of the study, relevant expertise and experiences, the proposed research methodology, work plan and timetable, and the price quotations.

- End -

CONTROLLING OFFICER'S REPLY

ITB016

(Question Serial No. 4876)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (1) Director of Bureau's Office

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

Please provide the following details of each of the meetings, visits and exchange activities with relevant Mainland authorities made in the past year in chronological order: (a) purpose and destination, (b) post titles of the officials met, (c) number and post titles of Hong Kong officials in entourage, (d) number of days of the visit, and (e) total expenditure incurred, including expenses on (i) transportation (air tickets and local transportation), (ii) accommodation, (iii) meals, (iv) banquets or entertainment and (v) gifts.

Date

- (a)
- (b)
- (c)
- (d)
- (e)
- (i)
- (ii)
- (iii)
- (iv)

Asked by: Hon CHEUNG Chiu-hung, Fernando (Member Question No. (LegCo use): 5547)

Reply:

Details of duty visits to the Mainland conducted by staff of the Innovation and Technology Bureau in 2017-18 (as at the end of February 2018) are as follows:

Date of Visit (number of visits and duration)	Place of Visit	Number of Participants	Purposes of Visit	Passage Expenses HK\$	Hotel Expenses HK\$	Other Expenses^{Note} HK\$	Total Expenditure HK\$
2017-18 (as at the end of February 2018) (17 visits) (Total: 36 days)	Guangzhou, Foshan, Zhaoqing, Jiangmen, Zhongshan, Zhuhai, Shenzhen, Beijing, Changsha and Zhejiang	1-4 for each visit	To attend meetings and events, and conduct exchanges (e.g. attending the Guangdong-Hong Kong-Macao Cooperation Forum and technology seminars, and meeting with government officials, local bodies, and personnel of innovation and technology organisations).	About 81,000	About 19,000	About 37,000	About 137,000

Note: Other expenses included subsistence allowance. During the visits stated above, no entertainment expenses were incurred.

- End -

CONTROLLING OFFICER'S REPLY

ITB017

(Question Serial No. 2513)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

Q1. The Budget allocates \$100 million for the development of e-sports activities. What are the development blueprint and strategy of the HKSAR Government for e-sports? If there is no such blueprint and strategy, please advise whether and when will the Government formulate one.

Q2. Many parents or members of public are not clear about the difference between “e-sports” and “gaming”. Will the Government provide detailed explanations to clear any doubt?

Asked by: Hon CHEUNG Kwok-kwan (Member Question No. (LegCo use): 12)

Reply:

The required information is provided below:

1. Hong Kong has the capability to develop e-sports, such as possession of advanced information and communications technology infrastructure, free movement of information, experience in hosting large-scale international competitions and many of our local players have won prizes in international competitions. It has been announced in this year's Budget that \$100 million will be allocated to Cyberport to promote the development of e-sports, including developing the Cyberport Arcade into a local e-sports and digital entertainment node and supporting the industry in areas such as technological development and nurturing talents.
2. Except for duels, e-sports competitions are conducted mostly on a team basis (each team usually has 5 players). Team competition emphasises on systematic training and requires team members to receive prolonged training and build rapport among themselves, co-operate and communicate with one another, as well as align with the

professional analysis and tactics of the coach and the team. E-sports is a group activity, which is different from the recreational pastime of “playing video games” that centred around the player only .

- End -

CONTROLLING OFFICER'S REPLY

ITB018

(Question Serial No. 5071)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Government has indicated that it will support the development of the Guangdong-Hong Kong-Macao Bay Area (Bay Area) into an international innovation and technology hub. Please inform this Committee of the following:

1. Has the Government conducted any public consultation on the development of the Bay Area into an international innovation and technology hub? If yes, what are the details? If no, what are the reasons?
2. What is the estimated expenditure involved?
3. There are views in the community that if the plan to support the development of the Bay Area into an international innovation and technology hub fails to win public support, the Government should withdraw its investment to avoid wasting public money. Will the Government accept the suggestion? If not, what are the reasons?

Asked by: Hon CHU Hoi-dick (Member Question No. (LegCo use): 200)

Reply:

A consolidated reply to the various parts of the question is as follow:-

The Development Plan for the Guangdong-Hong Kong-Macao Bay Area to be promulgated by the country will present major opportunities for the development of innovation and technology ("I&T") in Hong Kong. The Innovation and Technology Bureau ("ITB") has been actively involved in promoting the development of the Bay Area into an international I&T hub, including participating in drawing up the "Implementation Plan for Developing

the Bay Area into an International Innovation and Technology Hub” (“Implementation Plan”). We consulted the industry and stakeholders in August 2017, and the respondents in general supported developing the Bay Area into an international I&T hub. Their views were relayed to the National Development and Reform Commission for consideration through the Constitutional and Mainland Affairs Bureau.

In February 2018, we obtained the approval of the Finance Committee of the Legislative Council for the creation of 1 permanent Administrative Officer Staff Grade C (AOSGC) (D2) post in the ITB, supported by 5 non-directorate officers, for handling issues including the development of an international I&T hub in the Bay Area, the Hong Kong-Shenzhen Innovation and Technology Park in the Lok Ma Chau Loop and other I&T collaboration matters with the Mainland. In 2018-19, the estimate for the relevant salaries and expenses is about \$6.92 million.

- End -

CONTROLLING OFFICER'S REPLY

ITB019

(Question Serial No. 5072)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the Government's effort to co-ordinate the development of the Hong Kong Shenzhen Innovation and Technology Park in the Lok Ma Chau Loop, what was the estimated expenditure in the past and what are the detailed plans and estimated expenditure in 2018-19?

Asked by: Hon CHU Hoi-dick (Member Question No. (LegCo use): 201)

Reply:

The Government is seeking the Legislative Council (LegCo)'s funding approval for about \$780 million for the construction of the Advance Works and the detailed design and site investigation of the Main Works Package 1 in the Lok Ma Chau Loop. Subject to the LegCo's funding approval in the first half of 2018, the Advance Works are expected to commence in mid-2018 the earliest. If the works progress smoothly, it is envisaged that the first batch of land parcels for development of superstructure and associated facilities can be made available as early as by 2021 or before.

The Hong Kong-Shenzhen Innovation and Technology Park Limited (HSITPL) was set up in October last year to take charge of the construction of superstructure, operation, maintenance and management of the Hong Kong-Shenzhen Innovation and Technology Park (the Park). The HSITPL is conducting Master Planning Study and Business Model and Business Planning Study for the Park's development. Both studies are expected to be completed in early 2019. Findings of the studies will provide important references for working out the development strategy and time-table for the Park,

The Innovation and Technology Bureau created 1 permanent Administrative Officer Staff Grade C post and 5 supporting non-directorate posts in 2018-19. They are responsible for the coordination work for the development of the Park, as well as matters on innovation and technology cooperation with the Mainland. The relevant salaries and expenditure involved are about \$6.92 million.

- End -

CONTROLLING OFFICER'S REPLY

ITB020

(Question Serial No. 5074)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Government reserved \$10 billion in the Budget of 2017-18 for supporting innovation and technology (I&T) development. Together with the additional \$50 billion earmarked for 2018-19, the Government will inject a total of \$60 billion into I&T initiatives. Please advise whether the Government will allocate \$10 billion or \$20 billion to promote I&T literacy in local universities or primary and secondary schools to nurture a new generation of talent? If yes, what are the details? If no, what are the reasons?

Asked by: Hon CHU Hoi-dick (Member Question No. (LegCo use): 206)

Reply:

It was announced in the Budget of 2017-18 that an additional \$10 billion would be earmarked for promoting innovation and technology (I&T) development. The Steering Committee on Innovation and Technology chaired by the Chief Executive will examine the various I&T initiatives and smart city projects for timely allocation of relevant resources.

An additional provision of \$50.3 billion is proposed in the Budget of 2018-19 for supporting the first stage development of the Hong Kong-Shenzhen Innovation and Technology Park in the Lok Ma Chau Loop (\$20 billion); injecting into the Innovation and Technology Fund (ITF) (\$10 billion); establishing research clusters on healthcare technologies and on artificial intelligence and robotics technologies in the Science Park (\$10 billion); supporting the Hong Kong Science and Technology Parks Corporation (HKSTPC) in constructing research-related infrastructure and facilities, as well as enhancing support for its tenants and incubatees (\$10 billion); and supporting the Cyberport in enhancing support for start-ups and promoting the development of e-sports (\$0.3 billion).

To enhance public awareness and understanding of the importance of I&T, the Innovation and Technology Commission (ITC) from time to time collaborates with the HKSTPC, youth groups, social service agencies, the academic and business sectors, as well as government

departments etc. to organise promotional activities including competitions, talks, scholarship award schemes, seminars, etc., and supporting various bodies through the General Support Programme of the ITF to organise events that help foster an I&T culture. As at the end of January 2018, the Programme subsidised 184 events with a total funding of some \$260 million.

In October 2017, the Hong Kong Productivity Council established an Inno Space to provide start-ups, students and graduates with working space and technical support to help them develop their innovative ideas into industrial design, which may subsequently be turned into products through prototyping, thereby fostering a start-up culture and supporting re-industrialisation in Hong Kong.

In 2018-19, the ITC will continue to organise and support various promotional and educational activities to promote an I&T culture among the public and nurture more young innovative talents in Hong Kong. The major initiatives and activities include:

- (a) organising the InnoTech Month, including the 9-day InnoCarnival;
- (b) supporting the Hong Kong Student Science Project Competition;
- (c) supporting the Innovation and Technology Scholarship Award Scheme; and
- (d) supporting the Joint School Science Exhibition.

- End -

CONTROLLING OFFICER'S REPLY

ITB021

(Question Serial No. 0616)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

Under this Programme, one of the main responsibilities of the Innovation and Technology Bureau is to promote “re-industrialisation” through the development of smart production and high value-added industries. Please inform this Committee of the work done in this regard in 2017-18, the expenditure incurred and the effectiveness. In 2018-19, how will the Bureau promote “re-industrialisation” in Hong Kong through the development of smart production and high value-added industries? Please advise on the specific measures to be taken, the expenditure incurred and the anticipated effectiveness in the coming year.

Asked by: Hon CHUNG Kwok-pan (Member Question No. (LegCo use): 63)

Reply:

The Government is committed to promoting re-industrialisation and developing a high-end manufacturing industry which leverages new technologies and smart production while requiring less amount of land, so as to identify new growth point for Hong Kong's economic development and create quality and diversified employment opportunities.

In this connection, the Hong Kong Science and Technology Parks Corporation (HKSTPC) is building a Data Technology Hub and an Advanced Manufacturing Centre in the Tseung Kwan O Industrial Estate. The Finance Committee of the Legislative Council approved in May 2016 an injection of \$6,598 million and a government loan of \$1,650 million to HKSTPC for the development of these 2 projects.

Quality research and development (R&D) capabilities are necessary to support re-industrialisation. The Innovation and Technology Fund (ITF) finances projects that can contribute to technology upgrading in manufacturing and services industries and promotion of innovation. As at the end of January 2018, ITF has funded over 7 000 projects with some \$13.6 billion. There are various funding programmes under the ITF, including the Innovation and Technology Support Programme, the University-Industry Collaboration

Programme, the Enterprise Support Scheme and the Patent Application Grant, etc. One of the aims of these funding programmes is to encourage more R&D work and promote re-industrialisation. We will inject \$10 billion into ITF to continue to support applied R&D work and innovation and technology projects in Hong Kong. In addition, we have set aside \$500 million under ITF to launch a “Technology Talent Scheme” in the third quarter of 2018. One of the initiatives under the Scheme is the “Re-industrialisation and Technology Training Programme”, which will subsidise local companies on a matching basis for staff training in advanced technologies, especially those related to “Industry 4.0”, with a view to giving impetus to the promotion of re-industrialisation.

Furthermore, the Hong Kong Productivity Council (HKPC) has been dedicating efforts to promoting re-industrialisation to facilitate enterprises in moving towards high value-added production and gradually upgrading to Industry 4.0. The HKPC established the “Smart Industry One” in August 2017 to showcase the concept and smart features of Industry 4.0 so as to promote the adoption of the Industry 4.0 technologies by the industry. It also established an “Inno Space” in October 2017 to provide working space and technical support for start-ups, students and graduates so as to help them develop their innovative ideas into industrial design, which may subsequently be translated into products through prototyping, with a view to fostering a start-up culture in Hong Kong and supporting re-industrialisation. Relevant work of the HKPC in 2018-19 includes launching the Smart Industry One Consortium exchange platform to enable the industry to keep abreast of the latest information on smart industry, setting up jointly with the Fraunhofer Institute for Production Technology of Germany an Invention Centre for accelerating the adoption of Industry 4.0 technologies by the industry, and setting up the Shenzhen Innovation and Technology Center of the HKPC in Shenzhen with a view to providing solutions for Hong Kong enterprises in the Bay Area in respect of smart manufacturing, artificial intelligence, big data and environmental technology etc. Expenses incurred from the work will be supported through government fundings and HKPC’s revenue.

The 5 R&D Centres established by the Government (i.e. the Hong Kong Applied Science and Technology Research Institute, the Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies, the Nano and Advanced Materials Institute, the Hong Kong Research Institute of Textiles and Apparel, and the Automotive Parts and Accessory Systems R&D Centre), have also been actively engaging in R&D related to re-industrialisation in recent years, covering various areas such as big data, Internet of Things, robotics, new materials, smart mobility and environmental technology etc., thereby assisting the industry to ride the trend and capture business opportunities.

We will closely monitor the progress and effectiveness (such as the number of participating enterprises) of the various measures mentioned above.

- End -

CONTROLLING OFFICER'S REPLY

ITB022

(Question Serial No. 0338)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

- (1) Please advise (a) the specific support for Cyberport's "easy landing" programme; and (b) the estimated expenditure in the 2018/19 financial year;
- (2) As the Government will offer financial assistance up to \$200,000 for each eligible start-up, please advise this Committee of (a) the form of disbursement of the financial assistance (i.e. one-off or instalments); and (b) the quota limit of the financial assistance scheme.

Asked by: Hon IP LAU Suk-yee, Regina (Member Question No. (LegCo use): 11)

Reply:

The required information is as follows:

- (1) The Easy Landing Scheme aims at attracting multi-national companies (including overseas and Mainland leading internet enterprises and Fintech companies) to set up offices and research and development units in Cyberport. The Government has earmarked \$50 million for Cyberport to provide financial assistance to participating companies of the Easy Landing Scheme in renting offices in Cyberport. At the present stage, it is that each eligible company will receive rental concession of up to \$1 million per annum or 50% rental discount, whichever is less. Depending on the space needed and the relevant terms of the tenancy agreements, the programme is expected to benefit at least 10 multi-national companies. These companies will become Cyberport's anchor tenants and create synergies, contributing to the ecosystem of Cyberport and attracting more innovative digital tech companies to operate in Hong Kong.

(2) Cyberport will roll out a new support scheme to help start-ups explore overseas and Mainland markets. Eligible start-ups will receive financial assistance up to \$200,000 to conduct market research and promotion, as well as participate in business missions, trade fairs and exhibitions, etc. outside Hong Kong. The financial assistance is provided on a reimbursement basis. Companies eligible for the scheme include alumni of the Cyberport Incubation Programme and the Cyberport Creative Micro Fund. The scheme is expected to benefit at least 250 start-ups.

- End -

CONTROLLING OFFICER'S REPLY

ITB023

(Question Serial No. 2176)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

1. What are the talent visa systems and tax concessions implemented in the Lok Ma Chau Loop to attract Mainland and foreign enterprises and talents?
2. What are the respective numbers of Mainland innovation and technology talents and enterprises in Hong Kong in each of the past 5 years respectively?
3. It is stated in the Budget that \$20 billion is earmarked for the development of the Lok Ma Chau Loop. Please give a breakdown of the estimated expenditure.
4. For the past 5 years, what are the respective numbers of people who have stayed in Hong Kong (i) for less than 2 years; (ii) for 2 to 4 years; (iii) for 4 to 7 years; and (iv) over 7 years under the Admission of Mainland Professionals Scheme?

Asked by: Hon KWOK Ka-ki (Member Question No. (LegCo use): 15)

Reply:

After consulting the relevant policy bureaux, the requested information is provided below:-

1. A key base for cooperation in scientific research will be established in the Hong Kong-Shenzhen Innovation and Technology Park (the Park) in the Lok Ma Chau Loop (the Loop) through pooling together top-tier enterprises, research and development institutions as well as higher education institutions in the Mainland and overseas to facilitate exchange and cooperation with excellent quality research talents from all over the world. The Special Administrative Region (SAR) Government will explore in a timely manner measures to attract innovation and technology (I&T) enterprises and talents from Hong Kong, the Mainland and overseas, including offering tax and financial concessions, making arrangements to import I&T talents and implementing other policy support measures, for enhancing Hong Kong's overall attractiveness.

According to the “Memorandum of Understanding on Jointly Developing the Lok Ma Chau Loop” signed by the SAR Government and the Shenzhen Municipal People’s Government, the Hong Kong side has agreed to take effective measures to facilitate the exit and entry of mutually approved personnel of the Shenzhen side. Details of the arrangements will be studied and discussed by the relevant departments of the two governments through the “Joint Task Force on the Development of the Hong Kong-Shenzhen Innovation and Technology Park in the Loop”. There is no concrete idea at this stage.

2. We do not maintain statistics on Mainland I&T talents and enterprises in Hong Kong.
3. \$20 billion have been earmarked in the 2018-19 Budget for the development of Park. The earmarked funding will be partly used by the Civil Engineering and Development Department to fund site formation and infrastructure works under the Main Works Package 1 (MPW1), and partly used to support the Hong Kong-Shenzhen Innovation and Technology Park Limited (HSITPL) in the first stage of superstructure construction as well as the initial operation of the Park. As the Loop is a sizeable undeveloped land without any infrastructure, we expect the funding required for the Loop development as a whole will far exceed \$20 billion. The HSITPL is conducting Master Planning Study and Business Model and Business Planning Study for the Park’s development. Both studies are expected to be completed in early 2019. Upon the completion of the studies, we will make reference to the findings of the studies and further estimate the development cost of the Loop.
4. According to the information provided by the Immigration Department, the breakdowns on persons admitted under the Admission Scheme for Mainland Talents and Professionals to work in Hong Kong with valid limit of stay by duration of stay in Hong Kong are as follows:

	Duration of Stay in Hong Kong			
	Less than 2 years	2-4 years	4-7 years	More than 7 years
As at 31.12.2015	7 161	3 881	3 745	1 447
As at 31.12.2016	7 660	3 992	4 482	1 928
As at 31.12.2017	8 542	4 497	4 597	2 714

Note: The above figures exclude those who had obtained right of abode in Hong Kong

The Immigration Department does not maintain the relevant statistics on or before 2014.

- End -

CONTROLLING OFFICER'S REPLY

ITB024

(Question Serial No. 0264)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (1) Director of Bureau's Office, (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

Further to the \$10 billion reserved for supporting innovation and technology (I&T) development last year, the Financial Secretary sets aside an additional \$50 billion this year and will create 13 new directorate posts and 107 non-directorate posts in the year. In this connection, please advise this Committee of:

- (1) the function and distribution of the additional manpower, as well as the recurrent expenditure involved; the manpower establishment and expenditure for the development of Lok Ma Chau Loop;
- (2) the monitoring mechanism and performance indicators regarding the \$50 billion to be injected into the Innovation and Technology Fund and allocated to the Hong Kong Science and Technology Parks Corporation;
- (3) the numbers of start-ups, their respective business and scale over the past 3 years; and
- (4) the respective numbers of newly created high-value-added I&T positions and overseas venture capital funds having investment in Hong Kong over the past 3 years.

Asked by: Hon LAU Ip-keung, Kenneth (Member Question No. (LegCo use): 5)

Reply:

The required information is provided as follows:-

- (1) The Innovation and Technology Bureau (ITB) will create an additional 11 civil service posts in 2018-19 to take forward the Hong Kong-Shenzhen Innovation and Technology Park (the Park) in the Lok Ma Chau Loop and smart city development, as well as to enhance administrative support. There will be a transfer of 99 and 10 civil service posts from the Efficiency Office and the Office of the Government Chief Information Officer to the ITB. In 2018-19, the salaries and expenditure involved are about \$109 million.

The ITB created 1 permanent Administrative Officer Staff Grade C post and 5 supporting non-directorate posts in 2018-19. They are responsible for the coordination work for the development of the Park, as well as matters on innovation and technology cooperation with the Mainland. The relevant salaries and expenditure involved are about \$6.92 million.

(2) As regards the Innovation and Technology Fund (ITF), to ensure its proper and efficient use, the Innovation and Technology Commission (ITC) has put in place robust control measures which include:

- All applications are vetted by professional panels according to the assessment framework of the relevant funding programme;
- Each programme has its own guidelines on, inter alia, the usage of ITF funding, procurement arrangements, reporting and auditing requirements, disbursement of grants and return of residual funds, etc;
- ITC conducts progress meetings/site inspections with project teams to verify the project progress and usage of funds are in line with those as set out in the project reports;
- Funding will be disbursed only if the project is able to meet pre-set milestones; and
- In case of non-compliance with the funding guidelines or where project progress is unsatisfactory, the ITC may withhold the disbursement of funds.

As programmes under the ITF have their own objectives and targeted areas, their effectiveness is evaluated differently. As regards Technology Start-up Support Scheme for Universities, for example, the start-ups receiving funding are required to submit annual reports to the ITC on their business development, including details of their commercialisation of research and development (R&D) outcomes, as well as information on the number of patent applications and income of the R&D projects. The universities concerned are also required to report to the ITC on their observation and assessment of the performance of their start-ups. Furthermore, we will also collect data on the patents successfully obtained under the Patent Application Grant. However, it is quite difficult to evaluate the effectiveness of some programmes under the ITF. For instance, platform research projects under the Innovation and Technology Support Programme benefit the sector or a large segment of that sector. It generally takes much longer time and further downstream R&D efforts for commercialisation. Indicators like quantity of product and turnover are thus not effective tools to evaluate the effectiveness of these projects. We will continue to explore with applicants such as the universities on ways to collect more information for evaluating the effectiveness of different programmes.

Of the \$10 billion allocated by the Government to the Hong Kong Science and Technology Parks Corporation (HKSTPC), \$3 billion will be used to provide and construct scientific research infrastructure, including biotechnology laboratories, pilot test and production facilities as well as robotics test facilities for the use of the I&T sector. The remaining \$7 billion will be spent on enhancing support of HKSTPC for its tenants and incubatees. With the above measures, we hope to

attract renowned scientific research enterprises and institutions from overseas or the mainland to Hong Kong, provide more hardware and software support for local I&T sectors and start-ups and encourage more R&D activities, thereby progressively increasing the Gross Expenditure on R&D, creating employment opportunities and nurturing I&T talents. We will continue to monitor the progress of various aspects of work and ensure proper use of resources by participating in the board of directors of HKSTPC.

- (3) To track the growth of the start-up ecosystem, Invest Hong Kong (InvestHK) has conducted an annual survey since 2014 with major operators of co-work spaces, incubators and accelerators in Hong Kong. InvestHK do not have information on start-ups other than those operating in the premises of these operators.

Since respondents of the annual survey are only asked to provide the number of start-ups under their programmes and operating on their premises, the major sectors involved and total number of staff employed, the survey results do not include information on the business scale of individual start-ups. The numbers of start-ups recorded and major sectors involved in the past 3 years are set out below –

Number of start-ups

Year	Number of start-ups
2015	1 558
2016	1 926
2017	2 229

Breakdown by major sectors (based on the top 3 major sectors in the 2016 survey)

	2014	2015	2016
	Number of start-ups (percentage of total)		
Information, Computer & Technology	273 (25.6%)	273 (17.5%)	401 (20.8%)
E-commerce, Supply Chain Management and Logistics Technology	106 (10%)	142 (9.1%)	249 (12.9%)
Professional or Consultancy Services	77 (7.2%)	137 (8.8%)	180 (9.3%)

Note:

1. Some start-ups were engaged in more than one sector.
2. As some operators could not provide relevant breakdown by sectors, the survey results in 2017 therefore did not include information on sector distribution.

- (4) The ITC launched the Innovation and Technology Venture Fund (ITVF) in September 2017 for venture capital (VC) funds to apply for becoming its co-investment partners. We are in the process of the selection work and expect to co-invest in local I&T start-ups with the partners in the second half of the year.

The performance indicators of the ITVF will include the number of high value-added I&T positions and the number of inbound investment made by VC funds. Statistics on additional high value-added I&T positions and inbound investment made by VC funds in the past are not available.

- End -

CONTROLLING OFFICER'S REPLY

ITB025

(Question Serial No. 0638)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

1. How will the Government encourage departments to open up more datasets in the future? What are the staffing and funding required?
2. Regarding open data, has the Government requested the departments to provide data “in a machine-readable format”, such as JSON, CSV or XML? If yes, what are the guidelines? If not, what are the reasons?
3. In 2017-18, the Innovation and Technology Bureau (ITB) “launched a \$500 million scheme to support government departments to enhance service quality with the use of technology”. Please provide detailed information on how the \$500 million was used, including the departments involved, equipment employed and expenditure incurred.

Asked by: Hon LAU Ip-keung, Kenneth (Member Question No. (LegCo use): 51)

Reply:

The required information is provided as follows:

- (1) The Office of the Government Chief Information Officer (“OGCIO”) is responsible for encouraging and supporting bureaux and departments to open more data in digital format on the “data.gov.hk” portal (the “Portal”) so as to facilitate research and development as well as innovation. In 2018, it will step up efforts to promote opening up of more data in areas of health, transportation and education, etc. In 2018-19, the OGCI O will create a permanent post of Chief Systems Manager (D1) and 9 permanent non-directorate posts dedicated to promoting and supporting the work of

bureaux and departments in relation to opening and analysing data. The annual manpower expenditure is about \$7 million.

- (2) The OGCI O has issued guidelines to assist bureaux and departments in releasing data in the most suitable formats and ways (e.g. through Application Programming Interfaces (“APIs”)) according to the nature of different data, in order to make it convenient for public use. Pursuant to relevant guidelines, bureaux and departments have generally been releasing data in machine-readable formats. As at end February 2018, there are over 3 200 different datasets of different contents on the Portal, of which around 2 400 datasets are in machine-readable formats (including JSON, XML, CSV, etc.) and all remaining information is image data. The Portal also provides about 1 200 APIs to facilitate software developers to extract information required from a large amount of information therein. The OGCI O will continue to provide technical support and assistance to relevant bureaux and departments in respect of the ways and formats of releasing data so as to ensure usability of such data.
- (3) In mid-2017, the Innovation and Technology Bureau launched the \$500 million TechConnect (block vote) to assist Government departments in implementing technology projects, with a view to enhancing operation efficiency and improving public services. The internal committee responsible for vetting applications has supported funding for 24 technology project applications, involving an amount of over \$150 million. The departments receiving of funding support include the Agricultural, Fisheries and Conservation Department, Buildings Department, Customs and Excise Department, Civil Engineering and Development Department, Department of Health, Drainage Services Department, Energizing Kowloon East Office of the Development Bureau, Environmental Protection Department, Housing Department, Hong Kong Observatory, Hong Kong Police Force, Leisure and Cultural Services Department, OGCI O and Water Supplies Department. Technologies involved include Internet of Things, big data, artificial intelligence, radio-frequency identification, augmented reality and 3D scanning.

- End -

CONTROLLING OFFICER'S REPLY

ITB026

(Question Serial No. 1560)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology,

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

Recently, blockchain technology has become an international hot topic. It is currently the technology behind the transactions of virtual currencies. In trade financing, blockchain can also be used to prevent duplicate financing of the same invoice by different banks. Regarding the Government's efforts in promoting financial technologies (Fintech), will the Government advise this Committee of the following:

1. Given the 2 hearings recently held by the United States Congress within 10 days in February, blockchain has been established as a "disruptive technology" and the use of blockchain to enhance the efficiency of the government has also become an agenda item. In this connection, how much resources has been allocated by the Government to blockchain-related research projects and what are the details?
2. What is the current usage and penetration of blockchain among private enterprises and in the government sector in Hong Kong?
3. Will the Government plan to conduct blockchain survey and research as a means to enhance the current operational efficiency of the Government? If yes, what are the details?
4. Has the Government assessed the cyber security and monitoring of the use of blockchain? If yes, what are the details? If no, what are the reasons?

Asked by: Hon LEUNG Mei-fun, Priscilla (Member Question No. (LegCo use): 55)

Reply:

Having consulted the Financial Services and the Treasury Bureau ("FSTB"), our consolidated reply to the question is as follows:

The Government has been closely monitoring technology development worldwide, including the application of new technologies in different industries. Regarding distributed ledger technology (“DLT”) (e.g. blockchain technology), FSTB will encourage the financial industry to develop and apply DLT, and promote Hong Kong as a hub for the setting and application of standards of the technology. In October 2017, the Hong Kong Monetary Authority (“HKMA”) published the second “Whitepaper on Distributed Ledger Technology”, confirming the development potential of DLT. The whitepaper, however, also pointed out that DLT cannot be applied to all financial operations. HKMA will draw up practical guidelines based on the study findings and recommendations of the whitepaper to assist the banking sector in applying the technology in the future. Moreover, seven banks in Hong Kong are developing the Hong Kong Trade Finance Platform, which will enable them to automate financing processes and reduce fraud risks through sharing digitised trade documents. HKMA has earlier led and completed a study on DLT. The banks concerned will develop an official platform by making reference to trade financing proof-of-concept trial results from the study and the relevant prototype platform.

The Office of the Government Chief Information Officer (“OGCIO”) has all along been keeping a close watch on the latest development of emerging technologies (e.g. blockchain technology) and various information and communications technology solutions, including the related cyber security issues. Apart from providing relevant information, OGCIO will put forward application proposals and offer technological support to various bureaux and departments to assist them in making use of the relevant technologies for enhancing public services and their operational efficiency.

- End -

CONTROLLING OFFICER'S REPLY

ITB027

(Question Serial No. 4141)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: Not Specified

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the provision of sign language interpretation services in the past 5 years, will the Government inform this Committee of the following:

1. whether sign language interpretation services are provided? If yes, the frequency, occasions and causes for providing such services in each year;
2. further to the above question, the number of sign language interpreters involved in each year, their pay and the organisations to which they belong; the total expenditure involved in each year; and
3. whether the Government will consider allocating more resources to improve the services for communicating with the deaf and/or persons with hearing impairment in future? If yes, what are the details (including measures, manpower and expenditure involved and timetable, etc.)? If not, what are the reasons?

Asked by: Hon LEUNG Yiu-chung (Member Question No. (LegCo use): 79)

Reply:

The information required is consolidated and provided as follows:

Our officers do not provide sign language interpretation services direct. Since the establishment in November 2015, the Bureau has hired sign language interpretation services from the Hong Kong Society for the Deaf and Hong Kong Association of the Deaf by quotations on five occasions in total, involving one or two interpreters on each occasion. The total expenditure was about \$600. We will continue to provide such services through the relevant organisations if needed.

- End -

CONTROLLING OFFICER'S REPLY

ITB028

(Question Serial No. 2557)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (3) Efficiency Office

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

According to the Doing Business 2018 Report released by the World Bank, Hong Kong was ranked fifth, slipping one place compared to last year and getting rather low scores in Getting Credit, Resolving Insolvency and Registering Property. Starting from 1 April 2018, the Business Facilitation Division currently under the Financial Secretary's Office will be transferred to the Innovation and Technology Bureau. What will the Administration do to cut red tape and enhance regulatory efficiency for improving the three aforesaid areas where Hong Kong's scores are rather low and in turn enhancing the business environment of Hong Kong?

Asked by: Hon LIAO Cheung-kong, Martin (Member Question No. (LegCo use): 53)

Reply:

The Business Facilitation Team is responsible for coordinating government efforts in relation to the World Bank's Doing Business Report. Registering Property is under the policy purview of the Development Bureau, while Resolving Insolvency and Getting Credit are under the policy purview of the Financial Services and the Treasury Bureau. Having consulted the relevant policy bureaux, our consolidated reply to the question is as follows:

On Registering Property, the World Bank conducted overall assessment on the ease of registering property and the quality of land administration of world economies. According to the Report, registering a property in Hong Kong took 27.5 days in which the procedures directly carried out by government departments only required 1 day. Hong Kong actually compared favourably with other economies in terms of the simplicity, efficiency and costs of the services provided. The remaining time was attributable to the time required by solicitors in handling property transfer procedures, including preparation of sale and purchase documents and title checking of deeds, etc.

In addition, the Government has been actively working to put in place a land titles registration system (LTRS) to replace the current deeds registration system. The Government is also actively pursuing the introduction of LTRS to new land first with a view to forging consensus for an earlier implementation of LTRS in Hong Kong.

On Resolving Insolvency, the Government will strive to ensure that the corporate insolvency regime keeps up with international standards and development trends, and review related policy, legislation and practice from time to time for more effective processing of winding-up cases and better protection of creditors. The Government is also preparing a Bill for the introduction of a statutory corporate rescue procedure with the aim to facilitate companies in short-term financial difficulty to turnaround and revive their businesses. This will help strengthen the relevant regime.

On Getting Credit, Hong Kong scored the same in 2018 as in 2017. We will keep in view the World Bank's assessment and take follow-up actions to improve the business environment where necessary.

- End -

CONTROLLING OFFICER'S REPLY

ITB029

(Question Serial No. 2559)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

The achievements of innovation and technology (I&T) should be shared and enjoyed by every stratum of society. Since 31 May 2017, the Innovation and Technology Bureau has launched the \$500 million Innovation and Technology Fund for Better Living to fund the use of I&T to improve people's daily living or address the needs of specific community groups. What are the number of approved projects and details of their effectiveness in taking care of specific community groups? Are there additional initiatives to benefit the elderly and specific groups in a more proactively manner?

Asked by: Hon LIAO Cheung-kong, Martin (Member Question No. (LegCo use): 55)

Reply:

Since the launch of the Innovation and Technology Fund for Better Living ("FBL") on 31 May 2017, a total of 9 applications have been approved. These projects all aim at addressing the needs of specific community groups, including: mobile apps providing elderly with fitness exercise guidance, service platforms for persons with rehabilitation needs, devices for people with disabilities, teaching tools for specific community groups, etc. The total amount of grant involved is about \$25 million. It is anticipated that the projects will gradually roll out starting from early 2019.

As announced in the Policy Address in October 2017, \$1 billion will be earmarked for setting up the Innovation and Technology Fund for Application in Elderly and Rehabilitation Care under the administration of the Social Welfare Department to subsidise elderly and rehabilitation service units to try and procure / rent technology products, so as to improve the quality of life of elderly persons and persons with disabilities as well as reduce the burden and pressure of care staff and carers.

- End -

CONTROLLING OFFICER'S REPLY

ITB030

(Question Serial No. 2560)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): (000) Operational expenses

Programme: Not Specified

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

The provision for Plants, Equipment and Works under the capital account of the Innovation and Technology Bureau (ITB) in 2018-19 is 105,821,000, which is a substantial increase of 2794.4% over the revised estimate for 2017-18. Will the Bureau inform this Committee of the detailed breakdown of the provision?

Asked by: Hon LIAO Cheung-kong, Martin (Member Question No. (LegCo use): 56)

Reply:

The provision is for funding the approved projects under Subhead 697 TechConnect (block vote). The Innovation and Technology Bureau launched the scheme in mid-2017 to assist Government departments in implementing technology projects to enhance operational efficiency and improve public services. The internal committee responsible for vetting applications has supported funding applications of 24 technology projects proposed by 14 departments. Technologies involved cover Internet of Things, big data, artificial intelligence, radio frequency identification, augmented reality and 3D scanning. The total funding for the above 24 technology projects exceeds \$150 million. The estimated cash flow for 2018-19 is around \$105 million.

- End -

CONTROLLING OFFICER'S REPLY**ITB031****(Question Serial No. 2561)**Head: (135) Government Secretariat: Innovation and Technology BureauSubhead (No. & title): (000) Operational expensesProgramme: (2) Innovation and Technology, (3) Efficiency OfficeControlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)Director of Bureau: Secretary for Innovation and TechnologyQuestion:

The establishment changes in the Innovation and Technology Bureau (ITB) in 2018-19 will involve 120 posts, the majority of which are transferred from other departments arising out of re-organisation. There will be an increase of 13 posts only, including 11 posts under Programme (2) Innovation and Technology and 2 posts under Programme (3). Please inform this Committee of the specific division of work of the posts to be created in detail.

Asked by: Hon LIAO Cheung-kong, Martin (Member Question No. (LegCo use): 57)Reply:

Details of the posts to be created under the ITB in 2018-19 are as follows:-

Rank	Number	Job Nature
Administrative Officer Staff Grade C	1	To coordinate various smart city development projects, as well as to serve as the secretariat to the "Steering Committee on Innovation and Technology".
Senior Systems Manager	1	
Analyst/Programmer I	1	
Executive Officer I	1	
Personal Secretary I	1	
Assistant Clerical Officer	1	

Rank	Number	Job Nature
Administrative Officer Staff Grade C	1	To promote the development of the “Hong Kong-Shenzhen Innovation and Technology Park” in the Lok Ma Chau Loop, the development of an international innovation and technology hub in the Guangdong-Hong Kong-Macao Bay Area, as well as manage the TechConnect (block vote).
Administrative Officer	1	
Personal Secretary I	1	
Executive Officer I	1	To enhance administrative support.
Assistant Clerical Officer	1	
Senior Management Services Officer	1	To enhance promotional efforts under the Social Innovation and Entrepreneurship Development Fund.
Management Services Officer II	1	
Total	13	

- End -

CONTROLLING OFFICER'S REPLY

ITB032

(Question Serial No. 3156)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned in paragraph 70 of the Budget that the Government will allocate \$100 million to Cyberport. The Cyberport Arcade will become a local e-sports and digital entertainment node providing a competition venue for e-sports. Support will also be provided for the e-sports sector in areas such as technological development and talent nurturing. In this connection, will the Government inform this Committee:

1. When will the e-sports and digital entertainment node in Cyberport be commissioned? Will there be any complementary measures or promotional activities to attract and facilitate participation in these activities or career development in Cyberport by the public, in particular young people?
2. What are the details concerning talent nurturing support to be provided by Cyberport for the sector? Has the Government assessed the type and number of talent required in the light of the future development of the sector? If yes, what are the details? If no, what are the reasons?
3. In addition to the above funding to Cyberport, will the Government introduce other policy initiatives to facilitate the development of the e-sports sector in the coming year? If yes, please provide the project details and expenditure involved.

Asked by: Hon LIAO Cheung-kong, Martin (Member Question No. (LegCo use): 34)

Reply:

The consolidated reply to various parts of the question is as follows:

It has been announced in this year's Budget that \$100 million will be allocated to Cyberport to promote the development of e-sports. This includes developing the Cyberport Arcade

into a local e-sports and digital entertainment node, as well as supporting the industry in technological development and nurturing talents.

Cyberport is now working on the details of the construction works and measures. The Government plans to seek funding approval from the Finance Committee (FC) of the Legislative Council in mid-2018. Subject to the FC's approval, Cyberport will immediately commence the construction works and the facilities concerned will be commissioned by phases. The dedicated e-sports venue, its transportation as well as food and beverage provisions in Cyberport can meet the needs of organising small to medium-scale e-sports events. Cyberport will also proactively assist the organisers in making suitable arrangements for transportation and facility management during the events, and launch a range of public promotion and engagement activities, including seminars, small-scale e-sports competitions and exhibitions on game history and products.

The e-sports industry involves research and development and application of a wide variety of skills and technologies, including e-sports hardware, digital audio/video, webcast, game design and development, Virtual Reality/Augmented Reality, holographic display, social media marketing, etc. The Cyberport will nurture talents for the e-sports industry, enhance their skills and knowledge and encourage innovation through its current incubation and internship programmes, various competitions and hackathons.

The measures will be implemented by Cyberport and no staff cost from the Government is involved.

- End -

CONTROLLING OFFICER'S REPLY**ITB033****(Question Serial No. 0151)**

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

The remarks of the Financial Secretary that an additional \$50 billion will be set aside this year for supporting innovation and technology (I&T) development following the \$10 billion reserved in last year's Budget indicate that the SAR Government is determined to break away from the previous stagnation of I&T development in Hong Kong. However, while ensuring the availability of adequate resources, the Innovation and Technology Bureau is also tasked to formulate holistic I&T policies. In this connection, please advise whether the Bureau has taken specific measures and drawn up a timetable for the formulation of a long-term strategy of I&T development in Hong Kong to tie in with the international trend of I&T development and our country's initiatives such as the development of the Guangdong-Hong Kong-Macao Bay Area, with a view to promoting "the commercialisation of technological achievements, industrialisation of products and internationalisation of industries". If yes, what are the details; if no, what are the reasons?

Asked by: Hon LO Wai-kwok (Member Question No. (LegCo use): 9)

Reply:

To promote sustained and diversified socio-economic development, the SAR Government is determined to develop the local innovation and technology (I&T) industries, in order to drive the upgrading and transformation of our overall economic structure, thereby enhancing Hong Kong's competitiveness and improving people's quality of life. The Innovation and Technology Bureau (ITB) is tasked to formulate holistic I&T policies and boost I&T development along the 8 major areas set forth in the Policy Address announced in October 2017. The ITB promotes the development of I&T industries in Hong Kong to tie in with the international trend of I&T development and our country's initiatives like the development of the Guangdong-Hong Kong-Macao Bay Area into an international innovation and technology hub.

There are various funding programmes to support the development of the I&T sector under the “Innovation and Technology Fund”, including the “Midstream Research Programme”, the “Public Sector Trial Scheme” and the “Technology Start-up Support Scheme for Universities”. All these are conducive to promoting commercialisation and industrialisation of research and development (R&D) deliverables. Moreover, we are actively developing the “Hong Kong-Shenzhen Innovation and Technology Park” (the Park) in the Lok Ma Chau Loop. The key base for cooperation in scientific research in the Park, coupled with the industries that Shenzhen possesses an edge, will further facilitate the commercialisation and industrialisation of R&D deliverables.

- End -

CONTROLLING OFFICER'S REPLY**ITB034****(Question Serial No. 0152)**

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Financial Secretary said that \$20 billion would be used on the first phase of the Hong Kong-Shenzhen Innovation and Technology Park (the Park) in the Lok Ma Chau Loop and additional resources would be provided in a timely manner so that the Park could come into operation as early as possible. The Innovation and Technology Bureau (ITB) is responsible for coordinating the work of the Park. In this connection, please advise whether the ITB has already started working out development strategies and timetable for the Park in consultation with local and mainland parties concerned with a view to transforming the Loop into a “Silicon Valley of Hong Kong and Shenzhen”, including attracting internationally renowned technology enterprises to the Park, fostering the inflow of technology talent and perfecting the hardware and software technology infrastructure. If yes, what are the details; if no, what are reasons?

Asked by: Hon LO Wai-kwok (Member Question No. (LegCo use): 10)

Reply:

After signing the “Memorandum of Understanding on Jointly Developing the Lok Ma Chau Loop (the Loop) by Hong Kong and Shenzhen” with the Shenzhen Municipal People’s Government in January 2017, the Hong Kong Special Administrative Region Government has been actively developing the Lok Ma Chau Loop into “Hong Kong-Shenzhen Innovation and Technology Park” (the Park) as a key base for cooperation in scientific research. To take forward the relevant work, the “Joint Task Force on the Development of the Hong Kong-Shenzhen Innovation and Technology Park” established by both sides have held 3 meetings to discuss important issues on the Park’s development and how both sides can strengthen innovation and technology cooperation for mutual benefits through the development of the Park. The “Hong Kong-Shenzhen Innovation and Technology Park Limited” (HSITPL) responsible for the construction of superstructure, operation,

maintenance and management of the Park was incorporated in October 2017 and passed resolutions on its governance, finance, manpower and work plans in January this year.

As the land in the Loop has not been developed, it is necessary to carry out the Advance Works and the design of Main Works Package 1 (MWP1). The Government is seeking the Legislative Council's funding approval for about \$780 million for the construction of the Advance Works and the detailed design and site investigation work of the MWP1. Subject to the Legislative Council's funding approval in the first half of 2018, the advance works are expected to commence in mid-2018 the earliest. If the works progress smoothly, the first batch of land parcels for development of superstructure and associated facilities will be available as early as by 2021 or before.

The HSITPL is conducting Master Planning study and Business Model and Business Planning Study on the Park's development. Both studies are expected to be completed in early 2019. Findings of the studies will provide important references for working out the development strategy and time-table for the Park.

- End -

CONTROLLING OFFICER'S REPLY**ITB035****(Question Serial No. 0153)**

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Financial Secretary has pointed out that smart city is one of the 4 major areas for development that Hong Kong must focus on. The Government released in December 2017 the Smart City Blueprint for Hong Kong. The Blueprint maps out the strategies and initiatives to be launched in 6 major areas, namely “Smart Mobility”, “Smart Living”, “Smart Environment”, “Smart People”, “Smart Government” and “Smart Economy”. The Innovation and Technology Bureau is responsible for the co-ordination and implementation of the relevant work. In this connection, please advise whether the Government has determined the priority of and timetable for implementing the relevant major strategies and initiatives, and set out the total estimated expenditure for the relevant initiatives; if yes, what are the details; if not, what are the reasons?

Asked by: Hon LO Wai-kwok (Member Question No. (LegCo use): 11)

Reply:

The Government released the Smart City Blueprint in December 2017, outlining the vision and mission to build Hong Kong into a world-class smart city. The Blueprint maps out development plans in the next 5 years, providing a clear and concrete direction for smart city development in Hong Kong. As smart city involves different areas of work, relevant bureaux/departments will work out implementation schedules and estimated expenditures for various initiatives.

Regarding the projects under the Innovation and Technology Bureau, we briefed the Panel on Information Technology and Broadcasting of the Legislative Council in March this year on the proposals for three key infrastructure projects for smart city development, including the timetable for implementation of the projects and the relevant financial requirements. Among them, the “electronic identity” project involves an estimated non-recurrent

expenditure of \$112 million, for which we plan to seek funding approval of the Finance Committee (“FC”) in mid-2018. The estimated expenditure for the pilot “Multifunctional smart lampposts Scheme” is about \$272 million. The scheme will be rolled out in phases and if it goes smoothly, we expect that about 50 smart lampposts will be in service progressively in mid-2019 or before. The relevant expenditure will be funded by a block allocation under Head 706. For the “Next Generation Government Cloud Infrastructure and Big Data Analytics Platform” which requires a non-recurrent expenditure of \$533.3 million, we will seek funding approval of FC in mid-2018.

- End -

CONTROLLING OFFICER'S REPLY

ITB036

(Question Serial No. 0325)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Financial Secretary has announced that the Government will earmark \$500 million under the Innovation and Technology Fund to implement, in the second half of the year, the Technology Talent Scheme. One of the initiatives is to provide funding support for all eligible institutions to recruit innovation and technology (I&T) postdoctoral talent. The Scheme will also provide funding to subsidise local enterprises on a matching basis for training staff on high-end technologies. As such, please advise whether the Government will work with local universities, research institutions and technology industries in making a checklist of the areas of expertise of and manpower requirement for I&T talent, and ensure proper planning for manpower training, job matching and employment counselling to enable our I&T talent to apply their knowledge in their jobs. If yes, what are the details; if no, what are the reasons?

Asked by: Hon LO Wai-kwok (Member Question No. (LegCo use): 23)

Reply:

The Innovation and Technology Bureau (ITB) attaches great importance to the nurturing of technology talents to support the innovation and technology (I&T) development in Hong Kong.

The University Grants Committee (UGC) maintains two-way communication with the UGC-funded universities on strategic development and funding requirements of the higher education sector in Hong Kong. In determining the number of places in various programmes for the next triennium, the Government and the UGC will consider the manpower demand of relevant professions and those of Hong Kong as a whole, the Planning Exercise Proposals submitted by the universities and the balance in the distribution of places among various disciplines. When inviting the UGC-funded universities to submit Planning Exercise Proposals for the 2019-2022 triennium, the UGC has highlighted the importance of I&T. The UGC-funded universities' proposals for the 2019-2022 triennium are now being examined by the UGC.

Moreover, the Education Bureau launched the Study Subsidy Scheme for Designated Professions/Sectors (SSSDP) on a pilot basis in the 2015/16 academic year to subsidise about 1 000 students per cohort to pursue designated full-time locally-accredited self-financing local undergraduate programmes in selected disciplines to nurture talent in support of specific industries with keen manpower demand. SSSDP will be regularised starting from the 2018/19 academic year, with the number of subsidised places increased to about 3 000 per cohort. Current students of the designated programmes will also receive the subsidy from the 2018/19 academic year. In the 2018/19 academic year, testing and certification programmes and computer science programmes are two of the selected programmes under SSSDP with 100 and 306 subsidised first-year intake places respectively.

Furthermore, in order to nurture and pool together more technology talent and to encourage them to pursue a career in I&T and scientific research, ITB will launch in the third quarter of 2018 a 5-year “Technology Talent Scheme”, comprising a “Postdoctoral Hub” which will provide funding support to recipients of the “Innovation and Technology Fund” and incubatees/I&T tenants of the Hong Kong Science and Technology Parks Corporation (HKSTPC) /Cyberport to recruit up to two postdoctoral talent for research and development work; and a “Reindustrialisation and Technology Training Programme” which will subsidise local companies on a matching basis to train their staff in advanced technologies, especially those related to “Industry 4.0”. In addition, we have enhanced the “Internship Programme” through increasing the monthly allowance for interns and further expanding the Programme to cover all I&T tenants of HKSTPC and Cyberport to benefit more enterprises and STEM (Science, Technology, Engineering and Mathematics) graduates, with a view to encouraging more university graduates to pursue a career in the I&T field and allowing technology talent to apply what they have learnt.

- End -

CONTROLLING OFFICER'S REPLY

ITB037

(Question Serial No. 2231)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: Not Specified

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

As regards the allocation of \$100 million to Cyberport as mentioned in paragraph 70 of the Budget speech, please inform this Committee of:

1. the specific plan and implementation timetable of the redevelopment of the Cyberport Arcade into an e-sports venue;
2. whether the said allocation has any purposes other than redeveloping the Cyberport Arcade into an e-sports venue? If yes, please provide the details.

Asked by: Hon MA Fung-kwok (Member Question No. (LegCo use): 110)

Reply:

The consolidated reply to the two parts of the question is as follows:

This year's Budget has announced the funding allocation of \$100 million to Cyberport to promote the development of e-sports, of which \$50 million will be used for developing the Cyberport Arcade into a local e-sports and digital entertainment node. The node will provide a dedicated e-sports venue equipped with advanced computers, audio-visual equipment and other peripherals and high-speed and stable network connection for the industry to host regular small to medium-scale e-sports competitions, activities and training. The Cyberport Arcade will also set up an experience corner and invite e-sports and digital entertainment industry to showcase related new technologies and e-sports products, raising the public understanding and interest in e-sports, game development and related technologies. The remaining \$50 million is for supporting the development of the industry in the next 5 years, including organisation of local and regional competitions and mega events, training programmes and public promotion activities. Cyberport will also improve its start-ups and talents development programmes, discover and equip the start-ups and talents in areas relating to e-sports technologies and game development, and launch

seminars, small-scale e-sports competitions and exhibitions on game history and products. Cyberport is now formulating the details of the construction works and measures. The Government plans to seek funding approval from the Finance Committee (FC) of the Legislative Council in mid-2018. Subject to the FC's approval, Cyberport will immediately commence the construction works and the facilities concerned will be commissioned by phases.

- End -

CONTROLLING OFFICER'S REPLY

ITB038

(Question Serial No. 5422)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (1) Director of Bureau's Office

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

Will the Bureau please provide the annual balance, government injection amount, investment or other income and total expenditure of the following funds in 2016-17 and 2017-18? If there are other funds within the purview of the Bureau (including communications and innovative technology) but are not listed below, please also provide the information as stated above.

- a. Innovation and Technology Fund for Better Living
- b. Applied Research Fund
- c. Innovation and Technology Fund

Asked by: Hon MA Fung-kwok (Member Question No. (LegCo use): 80)

Reply:

The required information is provided as follows:-

- a. Innovation and Technology Fund for Better Living (FBL)
The FBL was launched on 31 May 2017 to finance innovation and technology projects that bring more convenience, comfort and safety to daily living, or address the needs of specific community groups. So far, the Assessment Panel has approved funding for 9 applications, involving a total grant of about \$25 million. The grant will be disbursed to applicants according to the progress of the projects. The balance, amount of Government injection, investment or other income and total amount of expenditure of the FBL in 2016-17 and 2017-18 are as follows:-

Year	Balance (\$ million)	Government injection (\$ million)	Investment or other income (\$ million)	Expenditure (\$ million)
2016-17	500	-	-	-
2017-18 (As at 15 March 2018)	499.4	-	-	0.6

b. Applied Research Fund (ARF)

The ARF is a Government venture capital fund of \$750 million set up in 1993. The Government reviewed the operation of the ARF and reported the relevant result to the Legislative Council Panel on Commerce and Industry (the Panel) in 2005. With the consent of the Panel, we decided to gradually wind down the ARF and cease making new investments. The balance, amount of Government injection, investment or other income and total amount of expenditure of the ARF in 2016-17 and 2017-18 are as follows:

Year	Balance (\$ million)	Government injection (\$ million)	Investment or other income (\$ million)	Expenditure (\$ million)
2016-17	95	-	0.7	0.6
2017-18 (As at 31 December 2017)	95	-	0.5	0.3

c. Innovation and Technology Fund (ITF)

The Government established the \$5 billion ITF in 1999 to finance projects that contribute to technology upgrading in manufacturing and services industries and promote innovation. The Legislative Council Finance Committee approved an additional injection of \$5 billion to the ITF in February 2015, and a further injection of \$2 billion in June and July 2016 respectively to the ITF to implement the “Midstream Research Programme” for Universities and the “Innovation and Technology Venture Fund”. A total of \$9 billion was transferred into the ITF in 2016-17. The cash balance, amount of Government injection, investment or other income and total amount of expenditure of the ITF from 2016-17 to 2017-18 are as follows:

Year	Balance (\$ million)	Government injection (\$ million)	Investment or other income (\$ million)	Expenditure (\$ million)
2016-17	7,991	9,000	207	1,258
2017-18 (Revised estimate)	6,776 ^{Note}	-	269	1,484

Note: Having deducted the amount designated for the “Midstream Research Programme for Universities” and the “Innovation and Technology Venture Fund”, the cash balance of the ITF has mostly been committed to unfinished projects. It is expected that the remaining commitment of the ITF will be used up in the 4th quarter of 2018.

- End -

CONTROLLING OFFICER'S REPLY

ITB039

(Question Serial No. 5888)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Innovation and Technology Bureau (ITB) considers smart city development as a key area of its work on promoting innovation and technology. ITB plans to install multi-functional smart lampposts in 4 busy districts to promote the development of a smart city.

Will the Government inform this Committee whether the Multi-functional Smart Lampposts Scheme will be extended to other districts? If yes, has a timetable been set? Will the Government consider installing such lampposts in old urban areas to allow for installation of radio base stations for wi-fi and 5G network services to help residents of Chinese tenements access internet service? If yes, what are the details? If no, what are the reasons?

Asked by: Hon MO Claudia (Member Question No. (LegCo use): 46)

Reply:

To promote the development of smart city, the Government plans to implement a pilot scheme of “Multi-functional Smart Lampposts” by installing about 400 new lampposts with smart devices in four selected districts, namely Central/Admiralty, Causeway Bay/Wan Chai, Tsim Sha Tsui and Kwun Tong/ Kai Tak Development Area, with a view to strengthening the collection of various types of city data at district level and promoting the use of big data analytics in government departments and the public/private sectors, developing innovative smart city services and implementing better real-time city management. In respect of telecommunications services, it is envisaged that the fifth generation (5G) mobile communications network will require the installation of higher density small cells on the streets and high traffic areas to provide 5G services. “Multi-functional Smart Lampposts” are suitable street furniture for mobile network

operators to install related cell stations, and to provide free Wi-Fi services for the convenience of the public and tourists. The design of lampposts would make provision for these uses.

The pilot scheme will be implemented in phases. We expect the first phase of pilot with some 50 smart lampposts to come into operation progressively before mid-2019. We plan to complete the installation of the remaining 350 smart lampposts before 2021-22. After the “Multi-functional Smart Lampposts” pilot scheme has been in operation for a year, we will conduct a review on the effectiveness and implementation experience, including the management, operation and maintenance of the lampposts, smart devices and systems, with a view to formulating the long-term arrangement.

- End -

CONTROLLING OFFICER'S REPLY

ITB040

(Question Serial No. 2276)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

In 2017-18, the Government earmarked \$500 million for the Innovation and Technology Bureau (ITB) to assist government departments in using technology to enhance the quality of public services in the next 5 years. Please provide the followings:

Relevant information of technology project proposals submitted by departments for funding in 2017-18, including content of the proposal, name of the department, project title, proposed application of technology and expenditure in tabulated form;

The number of pilot projects approved by ITB in 2017-18, departments having their proposals approved, project title, proposed application of technology, expenditure, expected completion time, as well as the vetting criteria in tabulated form;

The annual expenditure on salaries of the time-limited non-directorate posts created in 2017-18 and to be created in 2018-19 for implementation of the above initiative;

The posts and the annual expenditure on salaries of the non-civil service contract staff created in 2017-18 and to be created in 2018-19 for implementation of the above initiatives;

The plan to encourage departments to cooperate with local small and medium enterprises (SMEs) and start-ups in 2018-19.

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 5)

Reply:

Since the establishment of the TechConnect (block vote) by the Innovation and Technology Bureau ("ITB") in mid-2017, the internal committee responsible for vetting applications has supported funding for 24 technology projects. Details are as follows:

Bureau/ Department	Project Title	Technology Adopted	Estimated Amount (\$ million)
Agriculture, Fisheries and Conservation Department	Pilot Project of Real-time Phytoplankton Taxa Monitoring System	Internet of Things/Sensors	5.4
Buildings Department	The use of advanced technological testing methods to assist water seepage investigation in buildings	Microwave tomography/ Infrared Scanning & Imaging	5.0
Customs and Excise Department	“Smart Crossing” - deployment of Radio-frequency Identification (RFID) technology on the recognition of licence plate numbers of cross-boundary private cars	Radio-frequency Identification	9.0
	A study on the development of a “Cargo Big Data System”	Big Data / Artificial Intelligence	9.8
Civil Engineering and Development Department	Provision of mobile applications to promote smart mobility, sustainable leisure and recreation information of Lantau	Geographic Information System/Global Positioning System/ Augmented Reality	0.5
Department of Health	Feasibility Study for the Implementation of a Digitalised Chinese Medicines Herbarium	3D Scanning & Modelling	1.9
Drainage Services Department	Provision of ultrasonic sludge pre-treatment facilities at the Tai Po Sewage Treatment Works	Advanced Environmental Technology	9.7
	Smart Sewerage Monitoring System	Internet of Things/ Sensors/ Geographic Information System/Global Positioning System	5.5
	Retrofitting the SANI small scale plant at the Shatin Sewage Treatment Works	Advanced Environmental Technology	9.6
	Pilot Study to Investigate Rainfall Infiltration in existing Sewerage Systems in Urban Area	Internet of Things/ Sensors/ Geographic Information System/Global	2.0

Bureau/ Department	Project Title	Technology Adopted	Estimated Amount (\$ million)
		Positioning System	
Energizing Kowloon East Office, Development Bureau	To conduct a feasibility study to monitor illegal parking / stopping by utilising video analytics and to conduct a pilot trial at Kowloon East	Artificial Intelligence/ Machine Learning/ Video Analysis	8.0
Environmental Protection Department	Air pollution Sensor Practicality Trial	Internet of Things/ Sensors	7.6
Housing Department	Develop the Technology to Produce Plans for Statutory Submission from the Building Information Modelling	Building Information Modelling	8.0
Hong Kong Observatory	Integrated urban weather monitoring and data-sharing platform for smart cities	Internet of Things/ Sensors	8.2
Hong Kong Police Force	E-statement (Speech Recognition) and Data Mining System (EDMS)	Big Data/Speech Recognition	9.5
	Radio-frequency Identification (RFID) System for management of affected people during major incidents	Internet of Things/ Radio-frequency Identification	3.4
	Video Explorer	Video Analysis	9.9
	Automation of Cybercrime Capturing, Categorization and Correlation (AC4)	Big Data/Artificial Intelligence	6.8
	Advanced Image Processing System	Video Analysis	6.7
Leisure and Cultural Services Department	Non-invasive conservation studies of art and antiquities with innovative imaging technologies	X-Ray Scanning & Imaging	6.5
	Non-invasive conservation studies of cultural heritage with X-ray computed tomography	X-Ray Scanning & Imaging	9.0
Office of the Government Chief Information Officer	Pilot Cyber Security Information Sharing Partnership Programme	Big Data/Artificial Intelligence	8.5
Water Supplies Department	Provision of In-line Hydropower Harnessing Device for Water Intelligent Network	Advanced Engineering Technology	2.0
	Study on Anti-corrosion and Anti-biofouling Coating for Enhancing Water Pump Efficiency	Advanced Engineering Technology	1.1

To implement the TechConnect (block vote), the ITB created 8 non-directorate time-limited posts in 2017-18. As some of the posts were yet to be filled, the annual salary expenditure in 2017-18 of relevant posts was about \$1.19 million. In 2018-19, the estimated expenditure is about \$3.64 million. The ITB has not employed non-civil service contract staff for handling relevant work.

To encourage the public sector (including Government bureaux and departments) to make use of the research and development (“R&D”) results of start-ups and small and medium enterprises, starting from December 2016, the Public Sector Trial Scheme (“the Scheme”) has been extended to include incubatees of the Hong Kong Science and Technology Parks Corporation and Cyberport as well as tenants graduated from their incubation programmes. The Scheme provides funding to completed R&D projects for the production of tools/prototypes/samples and the conduct of trials in public organisations, with a view to promoting the commercialisation of R&D results.

- End -

CONTROLLING OFFICER'S REPLY

ITB041

(Question Serial No. 2280)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

As regards the provision of an electronic identity (eID) for all Hong Kong residents free of charge in 2020 so that they could use a single digital identity authentication to conduct government and commercial transactions online, please provide in table form the estimated expenditure for the stages of design, development and testing; the timetable for tendering exercise and development, as well as the manpower required; whether additional non-civil service contract staff will be recruited or other staff be hired through contract service providers for system development and, if yes, what are the number of such staff, the posts, estimated expenditure and duration; in table form the future online transactions and Government e-services available for the use of e-ID, the service providers, the average number of transactions/uses each year; the target utilisation rate; whether additional resources have been earmarked for 2018-19 for carrying out an independent risk assessment on privacy and information security by a third party and, if yes, what are the estimated expenditure, timetable and manpower required?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 9)

Reply:

We plan to seeking funding approval of the Finance Committee in mid-2018 for the implementation of the "Electronic Identity" ("eID") project. Subject to funding approval, the Office of the Government Chief Information Officer ("OGCIO") will invite tender in the second half of 2018 and commence system design and development in early 2019. The new system is expected to come into operation in mid-2020. The estimated non-recurrent expenditure of the project is \$112 million, detailed as below:-

Item	(\$ million)
(a) Hardware	19.1
(b) Software	30.6
(c) System implementation and support	34.0
(d) Contract staff	16.6
(e) Venue preparation	0.5
Sub-total:	100.8
(f) Contingency (about 10%)	11.2
Grand total:	112

The estimated expenditure includes \$16.6 million earmarked for the recruitment of 12 contract staff to support system development and related work. The actual number of staff to be employed, posts and years of service will be confirmed upon completion of the tender exercise.

eID can be applied to all electronic services for individual residents that required identity authentication. We will take active measures to facilitate the use of an eID authentication platform by Government departments. Our long-term objective is to require all Government departments and public bodies to support the use of eID for the development of more innovative e-Government services.

A risk assessment on privacy and information security will be conducted in parallel with system development. The funding application will include the necessary expenses. Details will be confirmed upon completion of the tender exercise.

- End -

CONTROLLING OFFICER'S REPLY

ITB042

(Question Serial No. 2284)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

When the Innovation and Technology Bureau (ITB) was established in November 2015, the Government put forward 9 major objectives. The seventh objective is to promote the procurement of local innovation and technology products and services, in a way that complies with the World Trade Organization's procurement agreement for governments. It is stated in the 2017 Policy Address that efforts will be stepped up to develop innovation and technology in 8 major areas, which include leading changes to procurement arrangements by the Government. However, significant changes are yet to be seen.

Regarding the work of ITB in formulating policies to support the use of local technology products and services, please inform this Committee of the following:

the respective numbers of Government tenders with application of innovation and technology or adoption of local technology products and services included or highlighted in the assessment criteria or terms of contracts in the past 2 financial years, their respective percentages out of the total number of Government tenders, details of such tenders, the names and tender prices of successful tenderers;

the progress and achievements of the ITB in formulation of policies to support the use of local technology products and services in the 2017-18; and

the policies, plans and specific objectives regarding the Government's efforts to lead changes to procurement arrangements, and to support innovation and technology and local start-ups in the 2018-19, and the expenditure and manpower involved.

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 13)

Reply:

To promote commercialisation of local research and development (“R&D”) outcomes, the Innovation and Technology Bureau (“ITB”) has been providing funding for R&D projects under the Innovation and Technology Fund and incubatees/graduate tenants of the Hong Kong Science and Technology Parks Corporation and Cyberport through the Public Sector Trial Scheme for the production of prototypes/samples of their R&D outcomes or products/services and conduct trials in the public sector. As at end January 2018, we have supported 165 projects with funding of over \$270 million and the participation of up to 240 organisations in the trials. Government departments have been individually inviting tenders for the products and services they need. ITB does not have the relevant statistics.

As regards the review of procurement arrangements, the Efficiency Office is studying jointly with the Financial Services and the Treasury Bureau on improvements to the procurement arrangements in compliance with the Agreement on Government Procurement of the World Trade Organization by including innovation and technology requirements, thereby encouraging R&D investments of businesses interested in submitting tenders and promoting local technological innovation. The review is expected to be completed in the second quarter of 2018. The review is undertaken by existing manpower and no additional expenditure is involved.

- End -

CONTROLLING OFFICER'S REPLY

ITB043

(Question Serial No. 2285)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the multi-functional smart lampposts pilot scheme to be implemented by the Government, some 400 traditional lampposts will be replaced with smart lampposts in Central/Admiralty, Wan Chai/Causeway Bay, Tsim Sha Tsui and Kwun Tong. Will the Government advise this Committee of the following:

- (1) The details of the pilot scheme, including the work progress, timetable, tenders, relevant expenditure and manpower;
- (2) For the collection and instant sharing of city data in the pilot scheme, the details and types of data collected;
- (3) For the data collected as mentioned in (2), the details of the use of such data by the Government;
- (4) For the sharing of the data collected, whether such data will be made available to the use of the public; if yes, what are the details; if no, what are the reasons;
- (5) Whether there are evaluations of the personal privacy risk posed to members of the public as a result of the collection of data as mentioned in (2); if yes, what are the details; if no, what are the reasons;
- (6) For the collection of data as mentioned in (2), the duration of data retention by the Government; and
- (7) Whether there are guidelines on handling requests for data made by law enforcement agencies; if yes, what are the details; if no, what are the reasons?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 15)

Reply:

The information required is provided as follows:

- (1) To promote smart city development, the Government plans to launch the “Multi-functional Smart Lampposts” Pilot Scheme at four selected urban locations, including Wan Chai/Causeway Bay, Central/Admiralty, Tsim Sha Tsui and Kwun Tong/ Kai Tak Development Area, by installing about 400 modern lampposts with smart devices to enhance city and traffic management. We expect that about 50 smart lampposts in first phase of the pilot scheme will progressively come into operation by mid-2019. We also plan to complete the installation of the remaining some 350 smart lampposts by 2021-22. The estimated expenditure of the entire project is about \$272 million at money-of-the-day prices and the annual operating cost is about \$32 million.
- (2) to (4) Multi-functional smart lampposts can assist relevant departments in collecting various data of the city and disseminating more real-time information to the public. On transport, the Transport Department will collect real-time traffic data, including traffic speed, types of vehicles and traffic flow for the public, tourists and the transport sector to make use of the relevant information, and facilitate the handling of traffic incidents. On meteorology, the Hong Kong Observatory will collect meteorological and related data at district level, including temperature, humidity, wind speed and direction, amount of rainfall, UV index, etc., in order to strengthen meteorological monitoring/forecasting at district level. On environmental protection, the Environmental Protection Department will collect data on air quality and illegal dumping monitoring at district level to strengthen city management. The Government plans to provide the city’s data collected from smart lampposts free of charge on the “data.gov.hk” portal for the public to use such data to develop more innovative applications.
- (5) and (6) The data collected from smart lampposts should be mainly environmental and integrated data (such as meteorological data and traffic flows). Relevant departments will strictly comply with the Personal Data (Privacy) Ordinance when collecting data, and conduct privacy impact assessments to ensure that the privacy of personal data of the public can be safeguarded in the development of smart city. Besides, we will seek advice from the Privacy Commissioner for Personal Data on data collection and access of information at the appropriate juncture. Relevant departments will draw up guidelines and procedures on data collection and access, and adopt technologies and measures as appropriate to remove personal data from the information collected. We will decide on the duration of data retention, having regard to the types and usage of different data.
- (7) The Government will handle requests for data made by law enforcement agencies in accordance with the existing guidelines and procedures.

- End -

CONTROLLING OFFICER'S REPLY

ITB044

(Question Serial No. 2301)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the work of Cyberport, please advise on the following:

(1) What are the number, company name, business type, staff number, financing stage and the investment amount secured of Cyberport information and communications technology start-ups with investment from the Cyberport Macro Fund in 2017-18 (please list out in tabular form), as well as the number of start-ups with planned investment in 2018-19 and the related details?

(2) What are the numbers of applications, accepted applications and applications with financing secured together with the total financing amount of various Cyberport incubation programmes in 2017-18, as well as the survival rate (of incubatees) in 3 years after graduation (please list out in tabular form)? Will more support be given to incubatees in 2018-19? If yes, what are the details, targets as well as the manpower and expenditure involved?

(3) What are the details, targets as well as the manpower and expenditure involved for Cyberport's projects in promoting financial technology (Fintech) and e-commerce in 2017-18? Will more resources be allocated for studying and developing the application of blockchain, facilitating collaboration between local Fintech start-ups and financial institutions, and promoting e-commerce to various sectors and small and medium enterprises in 2018-19? If yes, what are the details, targets as well as the manpower and expenditure involved?

(4) What are the take-up rate and operating expenditure of the Smart-Space small offices and working space in 2017-18 (please list out in tabular form by type)? What is the take-up rate of the dedicated space for supporting Fintech start-ups? Is there any plan to increase the take-up rate in 2018-19?

(5) It is mentioned in the Budget that \$100 million will be allocated to promote e-sports. What are Cyberport's strategies and plans in this regard? What are the estimated expenditure, targets and methods of promoting e-sports in areas of technological development and talent nurturing in 2018-19?

(6) The Cyberport intends to offer more financial assistance for start-ups to conduct market research and promotion, what are the areas covered? What are the additional manpower required and the expenditure in 2018-19?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 31)

Reply:

The required information is provided as follows:

- (1) The "Cyberport Macro Fund" (CMF) was launched in August 2016. It provides start-ups in Cyberport with seed to Series A funding, thereby fostering the development of venture capital and angel investments in Hong Kong. As at February 2018, Cyberport received over 160 enquiries and applications and approved 4 investment deals, the transaction of 3 of which had completed. These deals include LYNK, an information network on global experts; TravelFlan, a chatting machine for travelers supported by artificial intelligence; and Snapask, an education platform which matches students with teachers for instant problem solving. The above projects are in Series A and Series A+ rounds of funding. Cyberport has invested a total of US\$2.3 million on these 3 projects. In 2018-19, the number of start-ups that CMF will invest in will depend on Cyberport start-ups financing situation, market condition and the actual approval situation.
- (2) In 2017-18, the Cyberport incubation programme received a total of 754 applications and admitted 106 start-ups. Since its inception, incubatees have attracted about \$3.14 billion of investment funding from 165 deals, and 71% of the start-ups have survived for 3 or more years after graduation. It is announced in this year's Budget that \$200 million will be allocated to Cyberport to enhance the support for start-ups and promote the development of digital technology ecosystem. The financial subsidy provided by Cyberport to each incubatee in 2018-19 will increase from \$330,000 to \$500,000. Cyberport will continue to review the support for start-ups and optimise various measures.
- (3) Cyberport endeavours to promote the development of financial technology (FinTech). It launched a designated incubation programme in 2016-17 to support 150 FinTech start-ups in 5 years. It also sponsors 300 university students to join FinTech training camps in overseas universities. As at end-February 2018, a total of 160 university students had participated in the Entrepreneurship Boot Camp in Silicon Valley organised by the Stanford Graduate School of Business and 77 FinTech start-ups had joined the FinTech incubation programme. Many of these start-ups are successful start-ups, such as TNG, bondIT, HeyCoins and Clare.AI. In addition, Cyberport provides over 47 300 square feet of Smart-Space designated for FinTech companies.

Cyberport and the Hong Kong Monetary Authority (HKMA) brought a FinTech delegation of over 70 members to London in September 2017 to expand the FinTech cooperation network between the two cities, explore more business opportunities for the sector and promote Hong Kong as a leading FinTech hub in Asia.

Cyberport, the Hong Kong Applied Science and Technology Research Institute, Science Park and the HKMA signed a Memorandum of Understanding on FinTech collaboration in November 2016 to strengthen collaboration on the FinTech front. This includes collaboration between the HKMA and Cyberport to establish the Haccelerator and to provide a platform for the banks to host Hackathon and Accelerator competitions so as to encourage more youngsters to familiarize themselves with FinTech and assist banks in exploring innovative solutions, and identify talents and partners.

On e-commerce, Cyberport established the e-commerce cluster under the incubation programme in 2016-17. As at end-February 2018, 94 e-commerce start-ups in Cyberport had joined the incubation programme. There are more than 180 e-commerce companies in the Cyberport community, including some successful start-ups such as GoGoVan, Shoptline and Yeechoo which have attracted investment by Alibaba as well as Klook which has attracted investment by Sequoia Capital. Cyberport will continue to work closely with the industry to promote e-commerce through different channels.

Cyberport implemented the above with its own resources which does not involve government manpower and expenditure.

- (4) In 2017-18 (end-February 2018), the overall utilisation rate of Smart Space was 96% and the utilisation rate of Smart Space designated for FinTech start-ups was 94%.

In addition, Cyberport has participated in the Space Sharing Scheme for Youth announced in the Policy Address in October 2017. It plans to operate a Smart-Space of around 20 000 square feet in an industrial building in Tsuen Wan for renting to start-ups at a concessionary rate of no higher than half of market rent. The Smart-Space is expected to house around 140 start-ups and start operation in the second quarter of 2018.

Cyberport will promote Smart-Space to more target clusters through organising different events and programmes such as accelerator programme, seminars and talks.

- (5) This year's Budget has announced the funding allocation of \$100 million to Cyberport to promote the development of e-sports, including developing the Cyberport Arcade into a local e-sports and digital entertainment node and supporting the industry in areas such as technological development and nurturing talents. \$50 million of the funding will be used for developing the Cyberport Arcade into a local e-sports and digital entertainment node. The node will provide a dedicated e-sports venue equipped with advanced computers, audio-visual equipment and other peripherals as well as high-speed and stable network connection for the industry to host regular small to medium-scale e-sports competitions, activities and training. Cyberport will set up an experience corner and invite e-sports and digital entertainment industry to showcase related new technologies and e-sports products, raising the public understanding and interest in

e-sports, game development and related technologies. The remaining \$50 million will be used for supporting development of the industry in the next 5 years, including organisation of local and regional competitions and mega events, training programmes and public promotion activities. Cyberport will also improve its start-ups and talents development programmes, identify and equip the start-ups and talents relating to e-sports technologies and game development, and conduct seminars, small-scale e-sports competitions and exhibitions on game history and products.

- (6) Cyberport will roll out a new support scheme to help start-ups explore overseas and Mainland markets. Eligible start-ups will receive financial support of up to \$200,000 to conduct market research and promotion, as well as participate in business missions, trade fairs and exhibitions etc. outside Hong Kong. The financial support is provided on a reimbursement basis. Companies eligible for the scheme include alumni of Cyberport Incubation Programme and the Cyberport Creative Micro Fund. The scheme is expected to benefit at least 250 start-ups. The relevant expenditure will be met by the \$200 million funding allocated to Cyberport in this year's Budget.

- End -

CONTROLLING OFFICER'S REPLY

ITB045

(Question Serial No. 2316)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the Innovation and Technology Fund for Better Living (FBL), will the Government inform this Committee:

- (1) of the respective numbers of applications received, vetted, approved or rejected by the Government so far; the contents and modes of the innovation and technology (I&T) projects involved in these applications, with the number of applications by category; the total and average amounts of funds granted to the approved applications; and if there were applications rejected, of the main reasons for that;
- (2) whether the Government will consider relaxing the eligibility criteria to include small and medium-sized social welfare organisations not subvented by the Social Welfare Department, so that more ideas containing I&T elements beneficial to the community can be introduced in the market;
- (3) of the manpower involved in the work and the estimated operational expenses of the FBL in 2018-19; and
- (4) of the expenditure on promoting the FBL and the details of the publicity activities in 2017-18; the number of participants; and the estimated expenditure on promoting the FBL and the planned publicity activities in the coming year.

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 60)

Reply:

The required information is provided below:

- (1) The Innovation and Technology Fund for Better Living (“FBL”) was launched on 31 May 2017. As at 16 March 2018, we have received a total of 38 applications. Among them, 14 applications have been assessed by the FBL Assessment Panel (“the Panel”), 11 applications are being processed by the FBL Secretariat while 13 applications which do not meet the eligibility criteria have been returned (mainly because the applications are from private companies).

Of the 14 assessed applications, the Panel supported funding for 9 of them with a total grant of about \$25 million. The average grant for each project is about \$2.7 million. Approved projects include: mobile apps providing elderly/the general public with fitness exercise guidance, rehabilitation service platforms for people with disabilities, devices for people with disabilities and teaching tools for specific community group(s).

The remaining 5 applications which did not meet the assessment criteria were not supported by the Panel. The assessment criteria include: benefits brought to the public or specific community group(s), innovation and technology content, feasibility and sustainability, financial considerations, and technical and management capability of the applicant.

- (2) We allow flexibility on application eligibility of the FBL. For social welfare organisations not subvented by the Social Welfare Department, their applications will be considered by the FBL Secretariat if they can prove that their objectives and businesses meet the requirements of the FBL. In fact, the Panel has supported and approved grants to individual projects proposed by these organisations.
- (3) In 2018-19, the salary provision for the FBL Secretariat is \$3.97 million. Other operating expenditure will be met by internal resources of the Innovation and Technology Bureau. We do not have a separate breakdown for the relevant expenditure.
- (4) In 2017-18, the FBL Secretariat organised a series of publicity and promotional activities, including distributing publicity pamphlets to eligible organisations and promoting the FBL through social media to encourage applications. The FBL Secretariat also held 4 briefing sessions, attended various public talks and seminars, and met with a number of interested organisations or groups to explain details of the FBL. The activities attracted over 1 000 participants. The expenditure was met by internal resources. We do not have a separate breakdown for the relevant expenditure.

The FBL Secretariat plans to hold further briefing sessions in mid-2018 to introduce the FBL to eligible organisations and social welfare organisations not subvented by the Social Welfare Department and invite their applications. The FBL Secretariat will continue to pro-actively promote the FBL through various channels to stakeholders.

- End -

CONTROLLING OFFICER'S REPLY

ITB046

(Question Serial No. 2317)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned in the Budget that the Government will allocate \$100 million to Cyberport to provide a competition venue for e-sports for promoting the development of e-sports, and support will also be provided for the e-sports sector in areas such as technological development and talent nurturing. Will the Government advise this Committee of the following:

- (1) How will the Government set the direction for e-sports development in Hong Kong?
- (2) Regarding the provision of venue, technological development and local talent nurturing, what are the specific measures, the timetable, manpower expenses and estimates involved?
- (3) What are the estimated expenditure, manpower and resources involved in the promotion and publicity work for e-sports in 2018-19?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 62)

Reply:

The consolidated reply to the various parts of the question is as follows:

Hong Kong has the capability to develop e-sports, such as possession of advanced information and communications technology infrastructure, free movement of information, experience in hosting large-scale international competitions and many of our local players have won prizes in international competitions.

It has been announced in this year's Budget that \$100 million will be allocated to Cyberport to promote the development of e-sports, of which \$50 million will be used for developing the Cyberport Arcade into a local e-sports and digital entertainment node. The node will provide a dedicated e-sports venue equipped with advanced computers, audio-visual equipment and other peripherals as well as high-speed and stable network connection for the industry to host regular small to medium-scale e-sports competitions, activities and training. Cyberport will set up an experience corner in the Arcade and invite e-sports and digital entertainment industry to showcase related new technologies and e-sports products, raising public understanding and interest in e-sports, game development and related technologies. The remaining \$50 million will be used for supporting development of the industry in the next 5 years, including organisation of local and regional competitions and mega events, training programmes and public promotion activities. Cyberport will also improve its start-ups and talents development programmes, identify and equip the start-ups and talents relating to e-sports technologies and game development. Cyberport is now working on the details of the construction works and initiatives. The Government plans to obtain funding approval from the Finance Committee (FC) of the Legislative Council in mid-2018. Subject to the FC's approval, Cyberport will commence the construction works and the facilities will be commissioned by phases.

The initiatives will be implemented by Cyberport and no staffing resource from the Government is involved.

- End -

CONTROLLING OFFICER'S REPLY

ITB047

(Question Serial No. 5760)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (1) Director of Bureau's Office

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

Please provide in table form details of the overseas duty visits made by the Secretary for Innovation and Technology in 2017-18, including the date of visit, place of visit, purpose and major itinerary, number of officials from the Office of the Secretary for Innovation and Technology in the entourage, hotel accommodation expenses, transportation expenses, other expenses and total expenditure.

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 150)

Reply:

Details of overseas duty visits made by the Secretary for Innovation and Technology in 2017-18 (as at the end of February 2018) are as follows:

Date of Visit (number of visits)	Place of Visit	Purposes of Visit	Number of Entourage Members	Passage Expenses HK\$ (A)	Hotel Expenses HK\$ (B)	Other Expenses ^{Note} HK\$ (C)	Total Expenditure HK\$ (A)+(B)+(C)
2017-18 (as at the end of February 2018) (10 visits)	Guangzhou, Foshan, Zhaoqing, Jiangmen, Zhongshan, Zhuhai, Shenzhen, Beijing and Sydney	To attend meetings and events, and conduct exchanges (e.g. attending the Guangdong-Hong Kong-Macao Cooperation Forum and technology seminars, and meeting with government officials, local bodies, and personnel of innovation and technology organisations).	0-2 for each visit	About 173,000	About 34,000	About 33,000	About 240,000

Note: Other expenses included subsistence allowance.

- End -

CONTROLLING OFFICER'S REPLY

ITB048

(Question Serial No. 5761)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

The report published by the Advisory Committee on Innovation and Technology in March 2017 detailed 13 consolidated recommendations and 9 key performance indicators (KPIs), along with the targets set for 2020. Please set out, in table form, the latest figures on various KPIs for 2017-18, their respective changes in percentage over a year earlier, and the specific plan for meeting the above KPIs in 2018-19 together with an estimated expenditure.

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 151)

Reply:

The Advisory Committee on Innovation and Technology published the Report of the Advisory Committee on Innovation and Technology (the Report) in March 2017, setting out a series of recommendations and key performance indicators (KPIs) to spearhead innovation and technology (I&T) development in Hong Kong. The Government has adopted the KPIs proposed in the Report and drawn up measures to further promote I&T development in Hong Kong.

We will monitor the progress towards the I&T targets concerned. For example, regarding the gross domestic expenditure on research and development (GERD), according to the Hong Kong Innovative Activities Statistics 2016 published by the Census and Statistics Department in December 2017, the GERD of Hong Kong in 2016 amounted to \$19.713 billion, representing an increase of 8% when compared with 2015. Its percentage to the Gross Domestic Product (GDP) also increased from 0.76% in 2015 to 0.79% in 2016. As regards other I&T targets, we are unable to provide relevant latest figures due to a lack of up-to-date data. We will review the I&T targets concerned as and when appropriate with a view to meeting the development needs of Hong Kong.

In the Policy Address delivered in October 2017, the Chief Executive (CE) undertook to step up efforts to develop I&T in 8 major areas, mapping out a clear direction for the Government's work. The CE also further raised the target of GERD as a percentage of GDP to 1.5%. More than \$50 billion has been set aside in the latest Budget for providing essential and significant resources for accelerating I&T development for purposes of subsidising research and development (R&D), developing research infrastructure, establishing technology clusters and nurturing technology start-ups and technology talents, etc. The Innovation and Technology Bureau will actively follow up and implement the measures announced in the Policy Address and 2018-19 Budget as soon as possible, including: implementing the provision of enhanced tax deduction for R&D expenditure, launching a \$500 million "Technology Talent Scheme", injecting \$10 billion into the "Innovation and Technology Fund" to keep up the support for applied R&D work in Hong Kong, establishing research clusters on healthcare technologies and on artificial intelligence and robotics technologies, etc. These measures will facilitate the collaboration of stakeholders from different sectors to engender a more thriving I&T ecosystem for Hong Kong in the long run.

- End -

CONTROLLING OFFICER'S REPLY**ITB049****(Question Serial No. 5762)**Head: (135) Government Secretariat: Innovation and Technology BureauSubhead (No. & title): ()Programme: (2) Innovation and TechnologyControlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)Director of Bureau: Secretary for Innovation and TechnologyQuestion:

Regarding studies conducted by consultancy firms or research institutes commissioned by the Innovation and Technology Bureau and the departments under its purview for the purpose of formulating and assessing policies in 2017-18 and 2018-19 (Estimates), please set out the details and estimated provision in the following format.

Commencement date of the study	Title of the study	Content and objective	Progress (under planning/in progress/completed)	Name of consultant	Mode of award (tender/quotation/others) (please specify)	Expenditure (\$)	Have reports been made public? If not, what are the reasons?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 152)Reply:

The studies conducted by consultancy firms and research institutes, which are commissioned by the Innovation and Technology Bureau and departments under its purview, for formulating and assessing policies in 2017-18 and 2018-19, and their estimated provision are as follows:

Commence ment date of the study	Title of the study	Content and objective	Progress (under planning/i n progress/ completed)	Name of consultant	Mode of award (tender/ quotatio n/others) (please specify)	Expenditure (\$)	Have reports been made public? If not, what are the reasons?
September 2016	Study on the Development of Hong Kong as a Smart City	<p><u>Content</u> To study the information technology infrastructure required for smart city development in Hong Kong and formulate the digital framework and technical standards, and initiatives/ proposals.</p> <p><u>Objective</u> To formulate a blueprint for smart city development in Hong Kong.</p>	Completed	Pricewater- houseCoopers Advisory Services Limited	Tender	5 million	<p>The study report was uploaded onto the smart city's dedicated website (www.smartcity.gov.hk) for public information at the end of June 2017.</p> <p>The Government briefed the Legislative Council Panel on Information Technology and Broadcasting on the findings and recommendations of the study in July 2017.</p>
December 2016	Study on Promoting the Use of Digital Certificates and Institutional Arrangement s for Public Certification Authority Service	<p><u>Content</u> To explore ways to promote use of digital certificates in e-commerce and e-government and review the institutional arrangements for public certification authority service, including use of mobile technologies to enhance the use of digital certificates.</p> <p><u>Objective</u> To create a secure and reliable infrastructure for the development of e-commerce and smart city.</p>	Completed	KPMG Advisory (Hong Kong) Limited	Tender	4.117 million	The Government briefed the Legislative Council Panel on Information Technology and Broadcasting in March 2018 on the proposed implementation of the eID project, which would enable each and every member of the public to use a single digital identity and authentication to conduct government and commercial transactions online, as recommended in the Consultancy Report. While the report is mainly for internal reference, it can be made available for public reference, if necessary.

- End -

CONTROLLING OFFICER'S REPLY

ITB050

(Question Serial No. 5764)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Chief Executive has mentioned in the 2017 Policy Address that the Space Sharing Scheme for Youth will be implemented by inviting owners of revitalised industrial buildings and commercial buildings to contribute floor areas for the operation of co-working space or studios. Under the Scheme, Cyberport has provided co-working spaces named Smart-Space. Please list in table form the following information (as at 28 February 2018):

Regarding the participants of the first phase of the scheme, names of the properties, owners, locations, floor areas provided (in square feet), percentage of floor areas provided to total gross floor area, market rent, whether they are involved in the first round of the revitalisation of industrial building exercise;

Operator of each property, rent payable by the operator to the property owner, average rent receivable from young occupants by the operator, occupancy rate of each property, number of applicants, business distribution of applicants;

Cyberport has set up an approximately 20 000-square feet co-working space, Smart-Space, in an industrial building in Tsuen Wan. What are the rent payable to the property owner, the works expenditure (if any) and estimated operation cost?

Will the Government invite more innovation and technology institutions to participate in the second phase of the Space Sharing Scheme for Youth in 2018-19? What are the estimated expenditure and manpower requirement?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 154)

Reply:

Cyberport has participated in the Space Sharing Scheme for Youth announced in the Policy Address in October 2017 to provide a Smart Space of around 20 000 square feet in an industrial building in Tsuen Wan for leasing to start-ups engaging in digital technology at a concessionary rate of no more than half of the market rental. In determining the rental level, Cyberport has made reference to the level of charges levied for Smart-Space in Cyberport campus and that for other similar co-working space in the market. Apart from providing well-equipped working space and a flexible leasing scheme, Cyberport will offer a series of entrepreneurial training and support services to facilitate young entrepreneurs in raising funds, expanding business and continuing to innovate. The renovation and operating costs of the Smart-Space are borne by Cyberport. No government manpower or expenditure is involved.

At present, the Government has no plans to invite more innovation and technology institutions to participate in the Space Sharing Scheme for Youth.

- End -

CONTROLLING OFFICER'S REPLY

ITB051

(Question Serial No. 5766)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (3) Efficiency Office

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding managing for results to support delivery of policy objectives by the Efficiency Office, please inform this Committee of the policies, measures and progress concerned, as well as the financial resources and manpower involved, in 2018-19.

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 156)

Reply:

On managing for results, the Efficiency Unit (EU) has, since 2009, commissioned an independent organisation to conduct surveys on the Service Excellence Index for the top 10 government departments with services most often used. The annual survey collects and assesses citizen's views on their experience with public service delivery to gauge their satisfaction level towards public service performance and establishes a service excellence index. The index acts as a benchmark in 2009 and a trend indicator since then. The survey and index provide reference for relevant departments to enhance the quality of public services through more targeted and effective use of resources. For the past 8 years, the index has remained steady ranging from 63.2 to 64.9 (on a scale of 0 to 100), which is also in line with the overall index for private sector services compiled on a similar basis. The index score, which is higher than 50, reflects that the public are satisfied with the public services on the whole.

After the transfer of EU to the Innovation and Technology Bureau (ITB) on 1 April 2018, the Efficiency Office under the ITB will continue to conduct this annual survey. The estimated expenditure for commissioning an independent organisation to conduct the survey in 2018-19 is \$398,000. The manpower and relevant expenditure involved have already been included in the establishment and provision for the ITB.

- End -

CONTROLLING OFFICER'S REPLY

ITB052

(Question Serial No. 5770)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

On setting up a dedicated Smart City Office to monitor the implementation progress and effectiveness of projects under the smart city blueprint, please advise on the projects which will undergo conceptualisation, feasibility assessment and proof of concept through pilot projects in 2018-19, as well as the expenditure and manpower involved. What are the number of additional posts, duties and estimated expenditure for setting up the Smart City Office?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 160)

Reply:

The Government published the Smart City Blueprint for Hong Kong in December 2017, outlining the vision and mission to build Hong Kong as a world-class smart city. The blueprint also maps out development plans in the next 5 years, providing a clear and specific direction for smart city development in Hong Kong. As smart city involves different areas of work, bureaux and departments will draw up their timetables for the implementation of various initiatives and draw up relevant cost estimates.

According to the Development Bureau, the consultancy study on smart city development commissioned by the Energizing Kowloon East Office (EKEO) has proposed the implementation of proof of concept trials. EKEO will deploy existing manpower resources to deal with the relevant work. The respective expenditures of the 6 trials to be implemented in 2018-19 are as follows:

	Proof of Concept (PoC) Trials in Kowloon East	Expenditure (HK\$ million)
Undergoing		
1	Energy Efficiency Data Management System	1.63 (estimate)
2	Kerbside Loading/Unloading Bay Monitoring System	1.50 (estimate)
PoC trials under Preparation		
3	Multi-purpose Lamp Post	To be finalised
4	Smart Waste Bin System	
5	Real-time Road Works Information	
6	Illegal Parking Monitoring System	

The relevant details have been uploaded to the web pages of EKEO.

In February 2018, we obtained the approval of the Finance Committee of the Legislative Council for the creation of 1 permanent Administrative Officer Staff Grade C (D2) post in the Innovation and Technology Bureau to lead the Smart City Office comprising a team of 5 non-directorate staff for coordinating various smart city development projects. In 2018-19, the estimated cost for the relevant salaries and departmental expenses is about \$ 8.43 million.

- End -

CONTROLLING OFFICER'S REPLY

ITB053

(Question Serial No. 0681)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): (000) Operational expenses

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

As stated in the Budget, a series of initiatives have been introduced to promote re-industrialisation, including the setting up of the Committee on Innovation, Technology and Re-industrialisation, the construction of the Data Technology Hub and the Advanced Manufacturing Centre, and the provision of extra space for start-ups. In this connection, please advise on the following:

What are the details of the operation of the Committee on Innovation, Technology and Re-industrialisation, the manpower and expenditure involved? How much usable office space was provided to start-ups in the innovation and technology sector in the past 3 years? How much newly created space is expected to be provided to these start-ups in the future? How much of the space will be used for the development of data technology and advanced manufacturing industries? Please set out the respective details and indicate the locations.

Asked by: Hon NG Wing-ka, Jimmy (Member Question No. (LegCo use): 95)

Reply:

The requested information is provided below:

Committee on Innovation, Technology and Re-industrialisation

Since its establishment in April 2017, the Committee on Innovation, Technology and Re-industrialisation (Committee) has held a total of 4 meetings in May, August and October 2017 and January 2018 to discuss the latest scene of innovation and technology (I&T) development in Hong Kong, its work focuses and a range of I&T-related topics, including: enhanced tax deduction for expenditure on research and development (R&D), education of I&T talent, attracting overseas R&D institutions to Hong Kong, supporting development of local start-ups, electronic payment, promotion of e-sports and the smart city blueprint of Hong Kong.

The Innovation and Technology Commission provides secretariat support to the Committee with existing manpower and resources. This is part of the work under Programme (4) Planning for Innovation and Technology Development. The estimated expenditure of this programme for 2018-19 is \$67.1 million, which is mainly for salaries and general departmental expenses. We do not have the breakdown of estimated expenditure incurred in providing secretariat support for the Committee.

Space provided for I&T start-ups

The Hong Kong Science Park provides infrastructure and services in a bid to establish and nurture a world-class technology community dedicated to applied R&D, and help develop Hong Kong as an I&T hub. At present, the Hong Kong Science and Technology Parks Corporation (HKSTPC) provides an office space of about 13 800 m² for I&T start-ups.

In addition, Cyberport has been supporting digital start-ups through its Smart-Space co-working space with well-equipped office facilities. Currently, Cyberport Smart-Space is accommodating nearly 400 on-site tenants from various business disciplines, such as FinTech, e-commerce, e-marketing and IT consulting service, in a gross floor area of 12 000 m². Besides, Cyberport will participate in the Space Sharing Scheme for Youth, through which a Smart-Space co-working space of around 2 000 m² in an industrial building in Tsuen Wan will be provided for digital start-ups and young entrepreneurs at a concessionary rate of no higher than half of the market rental. This Smart-Space co-working space is expected to start operation in the second quarter of 2018, housing a maximum of around 140 start-ups.

The Hong Kong Productivity Council set up “3D Printing One” in August 2015 to provide different industries with all-round 3D printing support services and information. The Council also established “Inno Space” in October 2017 to provide working space and technical support for start-ups, students and graduates to help them develop their innovative ideas into industrial design, which may subsequently be translated into products through prototyping.

Data Technology Hub and Advance Manufacturing Centre

The HKSTPC is developing a Data Technology Hub (DT Hub) and an Advance Manufacturing Centre (AMC) in Tseung Kwan O Industrial Estate for completion in 2020 and 2022 respectively. The DT Hub, with a gross floor area of about 27 000 m², is a purpose-designed infrastructure for data technology and telecommunications services. It will also provide general supporting facilities including a business centre, showcase arena and offices. The AMC, with a gross floor area of about 108 600 m², will focus on five major areas including: (i) medical, healthcare and hospital devices and apparatus; (ii) biomedical engineering devices, implants and apparatus; (iii) intelligent electronic and optical apparatus; (iv) intelligent sensors and advanced assembly of semiconductors; and (v) robot electronics and intelligent power devices that dovetail with smart city development. Space will be reserved as appropriate for small and medium enterprises, including start-ups that fall into the above areas.

- End -

CONTROLLING OFFICER'S REPLY

ITB054

(Question Serial No. 0683)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): (000) Operational expenses

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned in the 2018-19 Budget that the Innovation and Technology Bureau will have an additional \$50 billion for supporting innovation and technology (I&T) development. Every year, the Government conducts value for money audit to examine the economy, efficiency and effectiveness with which any bureau of the Government Secretariat, department, agency or other public body has discharged its functions. As such, will the Government consider conducting a value for money audit on the Innovation and Technology Bureau, with one or more of the items listed below as performance indicators? If yes, what are the details? If not, what are the reasons?

- 1) the contribution of the I&T industry as a percentage of Hong Kong's Gross Domestic Product;
- 2) the total amount of capital input by private enterprises for I&T research;
- 3) the number of I&T enterprises in Hong Kong and their total capital;
- 4) the number of employees in the I&T sector in Hong Kong; and
- 5) the quantity of I&T products or services developed in Hong Kong.

Asked by: Hon NG Wing-ka, Jimmy (Member Question No. (LegCo use): 97)

Reply:

The economic contribution of innovation and technology activities, and the performance of the industry (including the number of enterprises and employees, their products and services, etc.) are all possible indicators for gauging the development of innovation and technology. We will continue to communicate with stakeholders and take into account the views of different sectors with a view to adopting the above and other indicators as appropriate.

- End -

CONTROLLING OFFICER'S REPLY**ITB055****(Question Serial No. 0684)**Head: (135) Government Secretariat: Innovation and Technology BureauSubhead (No. & title): (001) SalariesProgramme: (2) Innovation and TechnologyControlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)Director of Bureau: Secretary for Innovation and TechnologyQuestion:

According to Programme (2), the provision for 2018-19, which includes the salaries and allowances of 21 new posts, is \$270.1 million (675.3%) higher than the revised estimate for 2017-18. In this connection, please inform this Committee of the following:

1. the type, rank, salary, allowance and job nature of the 21 new posts;
2. details of other operating expenses, apart from the salaries and allowances of the new posts; and
3. whether the increase in the provision involves the operation of the established Committee on Innovation, Technology and Re-industrialisation? If yes, what are the manpower and expenditures involved? If not, what are the reasons?

Asked by: Hon NG Wing-ka, Jimmy (Member Question No. (LegCo use): 98)Reply:

The required information is provided below:-

1) The Innovation and Technology Bureau (ITB) will have an increase of 21 posts under Programme (2) in 2018-19. Details are as follows:

Rank	Number	Salary for respective rank (HK\$)	Allowances	Work nature
Administrative Officer Staff Grade B	1	\$191,300-\$208,800	Determined in accordance with the relevant officer's	To provide policy support on the overall development of information and communications technology and the Office of the Government Chief
Administrative Officer Staff Grade C	2	\$164,500-\$179,850		

Rank	Number	Salary for respective rank (HK\$)	Allowances	Work nature
Senior Administrative Officer	1	\$107,870-\$124,280	employment terms, application criteria and the existing civil service mechanism.	Information Officer's operation; to monitor the operation of Cyberport; to coordinate various smart city development projects, as well as to serve as the secretariat to the "Steering Committee on Innovation and Technology".
Senior Systems Manager	1	\$107,870-\$124,280		
Administrative Officer	2	\$50,900-\$101,070		
Executive Officer I	2	\$53,300-\$67,065		
Analyst/Programmer I	1	\$53,300-\$67,065		
Personal Secretary I	3	\$30,320-\$38,675		
Personal Secretary II	1	\$15,055-\$28,865		
Assistant Clerical Officer	2	\$14,140-\$28,865		
Administrative Officer Staff Grade C	1	\$164,500-\$179,850		To promote the development of the "Hong Kong-Shenzhen Innovation and Technology Park" in the Lok Ma Chau Loop, the development of an international innovation and technology hub in the Guangdong-Hong Kong-Macao Bay Area, as well as manage the TechConnect (block vote).
Administrative Officer	1	\$50,900-\$101,070		
Personal Secretary I	1	\$30,320-\$38,675		
Executive Officer I	1	\$53,300-\$67,065		To enhance administrative support.
Assistant Clerical Officer	1	\$14,140-\$28,865		
Total	21			

2) Besides salaries and allowances for the newly created posts, the estimated expenditure for 2018-19 also includes provision of about \$110 million as the cash flow requirement of the Innovation and Technology Fund for Better Living to finance projects which improve Hong Kong people's daily life through adoption of innovation and technology, as well as provision of about \$110 million as the cash flow requirement of the TechConnect (block vote) to provide funding support to bureaux/departments for implementing projects which improve public service delivery or enhance operation efficiency by the adoption of technology.

3) The ITB will support the work of the Committee on Innovation, Technology and Re-industrialisation with existing manpower and resources. No breakdown of expenditure is available.

- End -

CONTROLLING OFFICER'S REPLY

ITB056

(Question Serial No. 1025)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

In recent years, e-sports have been developing rapidly with tremendous potential. In paragraph 70 of the Budget Speech, it is mentioned that the Government will allocate \$100 million to Cyberport to promote the development of e-sports. What is the average estimated expenditure on supporting the e-sports sector in areas such as technological development and talent nurturing in the coming 5 years? Has the Government considered any new measures to encourage firms to develop and produce e-sports related products? If yes, what are the details? If no, what are the reasons?

Asked by: Hon NG Wing-ka, Jimmy (Member Question No. (LegCo use): 87)

Reply:

It has been announced in this year's Budget that \$100 million will be allocated to Cyberport to promote the development of e-sports, of which \$50 million will be used for developing the Cyberport Arcade into a local e-sports and digital entertainment node. The remaining \$50 million will be used for supporting the development of the industry in the next 5 years, including organisation of local and regional competitions and mega events, training programmes and public promotion activities. Cyberport will also improve its start-ups and talents development programmes, identify and equip the start-ups and talents relating to e-sports technologies and game development.

At the present stage, the Government will first focus on promoting the development of e-sports and supporting the industry in technological development and nurturing talents. We will timely explore whether it is necessary to encourage manufacturers to engage in the research and development and production of e-sports related products.

- End -

CONTROLLING OFFICER'S REPLY

ITB057

(Question Serial No. 5283)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): (000) Operational expenses

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Budget mentions little about the promotion of “re-industrialisation” and is silent about new initiative. The Government should continue to listen to the views of the sector, including:

(1) whether the Government will conduct a timely review and elevate the positioning of the “re-industrialization” policy, with a view to upgrading the existing industrial policy regime led by innovation and technology (I & T) to a comprehensive industrial policy regime which is more independent, forward-looking and systematic. If yes, what are the details; if no, what are the reasons?

(2) whether the Government will put forward initiatives to enhance the I & T standard of traditional industries and assist Hong Kong businesses operating in the Pearl River Delta Region in upgrading and restructuring. If yes, what are the details; if no, what are the reasons?

(3) whether the Government will extend the coverage of existing I & T funding schemes and the tax concession policy to include research and development activities of Hong Kong businesses outside Hong Kong, and carry out an early review of Sections 39E and 16EC of the Inland Revenue Ordinance so as to provide greater support to their production operations and “outward development” beyond the territory. If yes, what are the details; if no, what are the reasons?

Asked by: Hon NG Wing-ka, Jimmy (Member Question No. (LegCo use): 12)

Reply:

The requested information is provided below:-

- (1) and (2) The Government is committed to promoting re-industrialisation and developing a high-end manufacturing industry which leverages new technologies and smart production while requiring less amount of land, so as to identify new growth point for Hong Kong's economic development and create quality and diversified employment opportunities.

The Innovation and Technology Commission and relevant organisations have implemented various measures to support enterprises (including traditional manufacturing industries) to move towards high value-added production or develop emerging industries.

On the hardware side, the Hong Kong Science and Technology Parks Corporation is building a Data Technology Hub and an Advanced Manufacturing Centre in the Tseung Kwan O Industrial Estate to promote smart production. Stage 1 of the Hong Kong Science Park Expansion Programme has also been commenced to provide additional scientific research infrastructure to the industry.

The Government also provides financial support to projects that contribute to technology upgrading in manufacturing and services industries and promotion of innovation through the Innovation and Technology Fund (ITF). As at January 2018, ITF has funded over 7 000 projects with some \$13.6 billion. There are various funding programmes under the ITF, including the Innovation and Technology Support Programme, the University-Industry Collaboration Programme, the Enterprise Support Scheme and the Patent Application Grant, etc. One of the aims of these funding programmes is to encourage more research and development and promote re-industrialisation. In addition, the Government is planning to launch a "Re-industrialisation and Technology Training Programme" under ITF in the third quarter of 2018 to subsidise local companies on a matching basis for staff training in advanced technologies, especially those related to "Industry 4.0".

The Hong Kong Productivity Council (HKPC) has been dedicating efforts to promoting re-industrialisation to facilitate enterprises in moving towards high value-added production and gradually upgrading to Industry 4.0. Relevant work of the HKPC in 2018-19 includes launching the Smart Industry One Consortium exchange platform to enable the industry to keep abreast of the latest information on smart industry, setting up jointly with the Fraunhofer Institute for Production Technology of Germany an Invention Centre for accelerating the adoption of Industry 4.0 technologies by the industry, and setting up the Shenzhen Innovation and Technology Center of the HKPC in Shenzhen with a view to providing solutions for Hong Kong enterprises in the Bay Area in respect of smart manufacturing, artificial intelligence, big data and environmental technology etc.

The 5 R&D Centres established by the Government (i.e. the Hong Kong Applied Science and Technology Research Institute, the Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies, the Nano and Advanced Materials Institute, the Hong Kong Research Institute of Textiles and

Apparel, and the Automotive Parts and Accessory Systems R&D Centre) have been actively engaging in R&D related to re-industrialisation in recent years, covering various areas such as big data, Internet of Things, robotics, new materials, smart mobility and environmental technology etc., thereby assisting the industry to ride the trend and capture business opportunities and facilitating I&T upgrading for traditional industries.

The Government established the Committee on Innovation, Technology and Re-industrialisation (Committee) in April 2017. The Committee comprises members from the I&T and industrial sectors. It advises the Government on matters relating to the promotion of I&T development and re-industrialisation , promoting the long-term I&T development of Hong Kong.

- (3) According to the information of the Financial Services and the Treasury Bureau, the HKSAR Government is re-examining sections 16EC and 39E of the Inland Revenue Ordinance regarding tax deductions for capital expenditure incurred by Hong Kong enterprises in using intellectual property rights, machinery and equipment outside Hong Kong. We will explore feasible options that comply with the principles of “tax symmetry” and transfer pricing.

- End -

CONTROLLING OFFICER'S REPLY

ITB058

(Question Serial No. 1980)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

What are the numbers of orders and value of government procurement under information technology category in the last 3 years? How many of these orders were undertaken by local small and medium enterprises (SMEs) and start-ups and what was the value of these orders? The Government is studying on how to adjust the evaluation criteria to incorporate requirements in relation to innovation and technology and research and development in addition to the price factor, in order to promote local technological innovation. The study is expected to be completed in the second quarter of 2018. Will the Government announce details of the relevant initiatives and work plans by then? What is the implementation timetable of the initiatives? Besides, will other initiatives be available to encourage local SMEs and start-ups to bid for the Government's information technology projects? Is there any target ratio of participation for the bidding by such enterprises? What are the financial resources and manpower involved?

Asked by: Hon QUAT Elizabeth (Member Question No. (LegCo use): 18)

Reply:

In the last 3 years (from April 2015 to end of February 2018), the total number of procurement orders issued by bureaux and departments (B/Ds) on information technology (IT) products and services through the standing offer agreements administered by the Office of the Government Chief Information Officer (OGCIO) was 19 507 at a total value of \$2.645 billion, of which 1 008 orders at a total value of \$231 million were undertaken by small and medium enterprises (SMEs) (including start-ups).

In compliance with the obligations under the Agreement on Government Procurement of the World Trade Organization, the Efficiency Office is reviewing and studying jointly with the

Financial Services and Treasury Bureau on improvements to the procurement arrangements by including innovation and technology requirements to encourage investments in research and development by businesses interested in submitting tenders and to promote local technological innovation. The review is expected to be completed in the second quarter of 2018. The Efficiency Office will publish the relevant details in a timely manner.

Moreover, to encourage more SMEs (including start-ups) to bid for government IT projects, OGCIO has, in the new Standing Offer Agreement for Quality Professional Services 4 (SOA-QPS4) introduced in end July 2017, raised the contract value limit of the minor project group for SMEs to \$3 million, which has more than doubled the original limit of \$1.43 million, to enable SMEs to participate in government projects of higher contract values. In the current SOA-QPS4, 49 companies participated, of which 16 are SMEs. The number of participating SMEs has increased by 6 as compared to the last agreement. The Government will continue to actively examine and implement practical measures to facilitate SMEs in bidding for government IT projects. The related work is absorbed by existing resources and manpower and there is no separate expenditure breakdown.

- End -

CONTROLLING OFFICER'S REPLY

ITB059

(Question Serial No. 1983)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: Not Specified

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

Please list the measures currently adopted by the Government to promote co-operation between Hong Kong and the Mainland and overseas countries in the area of innovation and technology. What are the financial and manpower resources involved, and how is the co-operation going? Moreover, what policies and measures are adopted for the study and adoption of information and communications technology-related standards applicable to both places, and what is the progress? What are the financial and manpower resources involved?

Asked by: Hon QUAT Elizabeth (Member Question No. (LegCo use): 21)

Reply:

The Innovation and Technology Bureau (ITB) is committed to promoting innovation and technology (I&T) co-operation between Hong Kong and the Mainland. Initiatives for promoting cooperation in scientific research include:

- (a) Strengthening communication with the Mainland through the “Mainland/Hong Kong Science and Technology Co-operation Committee” and the “Hong Kong/Guangdong Expert Group on Co-operation in Innovation and Technology”;
- (b) Providing an annual funding of \$110 million to support the work of 16 Partner State Key Laboratories and 6 Hong Kong Branches of Chinese National Engineering Research Centres; and
- (c) Encouraging Hong Kong’s science and research institutions, such as universities and research and development (R&D) centres, as well as I&T enterprises to enhance co-operation with the Mainland in different areas of scientific research through the “Guangdong-Hong Kong Technology Co-operation Funding Scheme”.

The ITB also actively participates in the work related to the development of an international technology and innovation hub in the “Development Plan for the Guangdong-Hong Kong-Macao Bay Area” (Development Plan) and takes forward the development of the “Hong Kong-Shenzhen Innovation and Technology Park” in the Lok Ma Chau Loop.

We also maintain close communication with various overseas science and research institutions to explore collaboration opportunities with top-tier global science and research institutions. For example, in September 2017, the Massachusetts Institute of Technology set up its Hong Kong Innovation Node at the Hong Kong Productivity Council Building.

Our work priorities in the coming year are as follows:

- (a) Launching the “Mainland-Hong Kong Joint Funding Scheme” under the “Innovation and Technology Fund” to enhance cooperation between the Mainland and Hong Kong in the area of R&D projects;
- (b) Commencing the construction of the Advanced Works and the design of the Main Works Package 1 of the “Hong Kong-Shenzhen Innovation and Technology Park”;
- (c) Continuing to actively participate in the Development Plan to develop the Bay Area into an international technology and innovation hub; and
- (d) Taking forward the establishment of research clusters on healthcare technologies and on artificial intelligence/robotics technologies to attract world class Mainland and overseas science and research institutions and technology enterprises to Hong Kong to join forces with our science and research teams in conducting R&D projects.

On information and communications technology (ICT) standards, the Office of the Government Chief Information Officer (OGCIO) and the Economic and Information Commission of Guangdong Province established the “Hong Kong/Guangdong ICT Expert Committee” in January 2016 to promote the development and application of technologies such as cloud computing, big data, Internet of Things and smart city, and to formulate standards and guidelines in these technical areas, so as to facilitate the industries of both places in participating in the formulation of ICT standards in international organisations.

Besides, Hong Kong has been working closely with Guangdong Province to drive the development and adoption of cloud computing. Cloud computing experts of both places jointly formulated standards and practices on cloud computing and published the “Hong Kong/Guangdong Practice Guide for Procuring Cloud Services” (Practice Guide) in 2014 to assist enterprises (especially SMEs) in both Hong Kong and Guangdong to appreciate the benefits brought about by cloud computing and the points to note on the adoption of cloud computing in business operations. In 2015, approval was sought from the China National Information Technology Standardization Committee to make the Practice Guide as a reference in formulating related national standards on cloud computing. In September 2016, OGCIO joined the “Cloud Computing Working Group of the National Information Technology Standardization Committee” to prepare the “Cloud Service Purchase Guideline” and the Practice Guide prepared by the Hong Kong and Mainland experts was one of the reference documents. The “Cloud Service Purchase Guideline” is expected to apply for inclusion as national standard in 2018.

The overall estimated expenditure of ITB for 2018-19 is about \$590.2 million. The work on promoting I&T co-operation between Hong Kong and the Mainland and overseas countries as well as co-operation between Hong Kong and the Mainland on ICT standards will be carried out jointly with the departments under our purview with existing manpower and resources. A breakdown of the expenditure on such work is not available.

- End -

CONTROLLING OFFICER'S REPLY

ITB060

(Question Serial No. 1984)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

With regard to enterprises that have completed the Cyberport Incubation Programme and the Incubation Programmes of Hong Kong Science Park, please provide the respective percentages of those that remained in operation for 3 years or above and those that closed during their first 3 years of operation in the past 5 years.

Asked by: Hon QUAT Elizabeth (Member Question No. (LegCo use): 22)

Reply:

In the past 5 years (i.e. 2013-14 to 2017-18), among the companies which have completed the Cyberport Incubation Programme, 55%, 62%, 60%, 63% and 71% respectively have survived for 3 or more years after graduation. During the same period, the companies that have continued to operate after completing the Incubation Programme of the Hong Kong Science Park, irrespective of their duration of operation, amounted to 75%, 79%, 75%, 74% and 76% respectively.

- End -

CONTROLLING OFFICER'S REPLY**ITB061****(Question Serial No. 5147)**

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Innovation and Technology Bureau attracts the world's top scientific research institutions and technology enterprises to Hong Kong for conducting more midstream and downstream research and development (R&D) projects in collaboration with local universities and scientific research institutions. Will the Government provide the respective numbers of world's top scientific research institutions and technology enterprises to Hong Kong in each of the past 5 years? Please list the respective projects on which these institutions and enterprises collaborated with local universities and scientific research institutions.

Asked by: Hon TAM Man-ho, Jeremy (Member Question No. (LegCo use): 541)

Reply:

The Innovation and Technology Bureau (ITB) is committed to promoting co-operation between Hong Kong and the Mainland and overseas countries in the area of innovation and technology (I&T). Through the joint efforts of different stakeholders since the establishment of the ITB, top-tier global research and development (R&D) institutes established their presence one by one in Hong Kong last year. These include the first overseas Innovation Node set up by the Massachusetts Institute of Technology, the first overseas Centre for Reproductive Medicine by the Karolinska Institutet from Sweden, and the Guangzhou Institutes of Biomedicine and Health Hong Kong Centre by the Guangzhou Institutes of Biomedicine and Health under the Chinese Academy of Sciences.

At present, there are various programmes under the Innovation and Technology Fund (ITF) to provide funding for R&D activities. The applicants and partner applicants for the programmes are mainly local universities, public research institutions and private companies registered or incorporated in Hong Kong. We do not have statistical data on the country of origin for these private companies. On the other hand, non-local research institutions and technology companies can participate in R&D projects under the ITF in collaboration with

local universities and research institutions through sponsorship or acting as R&D partners. Over the past 5 years, non-local research institutions and technology companies participated in a total of 436 R&D projects under the ITF. Among these non-local institutions are world-renowned universities or companies, such as the Massachusetts Institute of Technology, University of California (Berkeley), University of Oxford, The Imperial College of Science, Technology and Medicine (University of London), Shenzhen Graduate School of Tsinghua University, Shenzhen Graduate School of Peking University, Shanghai Jiaotong University, Deutsche Telekom AG, Tencent Holdings Limited and Huawei Technologies Company Limited, etc. Information on the R&D partners or sponsors of particular projects is available on the ITF's website at http://www.itf.gov.hk/l-eng/prj_search_index.asp.

- End -

CONTROLLING OFFICER'S REPLY**ITB062****(Question Serial No. 5264)**Head: (135) Government Secretariat: Innovation and Technology BureauSubhead (No. & title): ()Programme: (1) Director of Bureau's Office,(2) Innovation and Technology,
(3) Efficiency OfficeControlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)Director of Bureau: Secretary for Innovation and TechnologyQuestion:

The "Efficiency Office" will be put under the Innovation and Technology Bureau (ITB) from 1 April 2018. Please tabulate the details of the human resource costs (including the number of staff, their ranks and salaries) of the Efficiency Unit (EU) and Business Facilitation Division (BFD), as well as their estimated non-recurrent expenditure and estimated expenditure on outsourcing projects in the coming 3 years.

Asked by: Hon TAM Man-ho, Jeremy (Member Question No. (LegCo use): 720)Reply:

Upon the transfer of the Efficiency Unit and Business Facilitation Division to the Innovation and Technology Bureau (ITB) on 1 April 2018, the number and ranks of the civil servants in the Efficiency Office are as follows:

Civil Service Rank	Number
Commissioner for Efficiency	1
Deputy Commissioner for Efficiency	1
Assistant Commissioner for Efficiency	4
Principal Management Services Officer	2
Chief Management Services Officer	13
Senior Management Services Officer	27
Management Services Officer I	15
Management Services Officer II	10
Principal Executive Officer	1

Civil Service Rank	Number
Chief Executive Officer	3
Senior Executive Officer	2
Executive Officer I	2
Executive Officer II	1
Senior Treasury Accountant	1
Accounting Officer I	1
Senior Personal Secretary	1
Personal Secretary I	3
Personal Secretary II	1
Clerical Officer	1
Assistant Clerical Officer	5
Clerical Assistant	3
Workman II	1
Total:	99

The total estimated expenditure on salaries for the above posts in 2018-19 is approximately \$79.10 million. In addition, the total estimated expenditure on salaries for some 400 non-civil service contract staff (mainly to support the 1823 service) is approximately \$130 million.

The balance of non-recurrent expenditure is approximately \$1.5 million. As the Efficiency Office currently has no outsourcing projects, there is no relevant estimated expenditure in this regard.

- End -

CONTROLLING OFFICER'S REPLY**ITB063****(Question Serial No. 5276)**

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (1) Director of Bureau's Office, (2) Innovation and Technology,
(3) Efficiency Office

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

Please set out in tabular form the amounts of expenditures of the Innovation and Technology Bureau in the next 3 years in the 8 areas (please specify the respective costs of human resources and outsourcing), namely support for the Government's objectives for public service transformation, particular attention to effective deployment of new technologies, data analytics and open data, stakeholder engagement, human resources management and transformation, procurement reform, social impact investment, shared services and value for money analysis; the policy objectives, implementation methods and target Return On Investment during the 3-year period.

Asked by: Hon TAM Man-ho, Jeremy (Member Question No. (LegCo use): 721)

Reply:

In 2017-18, the Efficiency Office launched a two-year programme to promote public sector innovation. The programme aims at engaging civil service colleagues through building awareness, consolidating knowledge and acquiring skills in deployment of new technologies, data analytics and open data, stakeholder engagement, human resources management and transformation, procurement reform, social impact investment, shared services and value for money analysis, with a view to enhancing the quality and efficiency of public services. We have deployed \$2.8 million from existing resources to commission an external consultancy in drawing reference from the approaches adopted by overseas governments and their experience in promoting public sector innovation in the said areas, as well as exploring how best the relevant experience may help address similar issues in the local context. The consultancy contract is managed by existing staff. No additional manpower or expenditure are involved.

- End -

CONTROLLING OFFICER'S REPLY

ITB064

(Question Serial No. 5278)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (1) Director of Bureau's Office, (2) Innovation and Technology,
(3) Efficiency Office

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the Innovation and Technology Bureau's (ITB) work in deployment of new technologies, data analytics and open data, stakeholder engagement, human resources management and transformation, procurement reform, social impact investment, shared services and value for money analysis, will the Government inform this Committee, in table form, of the titles of pilot projects to be implemented in collaboration with other bureaux and departments in the next 3 years, as well as the policy objectives, recurrent and/or outsourcing expenditures involved, return on investment (ROI) and the expected types and numbers of beneficiaries.

Asked by: Hon TAM Man-ho, Jeremy (Member Question No. (LegCo use): 722)

Reply:

In 2017-18, the Efficiency Office launched a two-year programme to promote public sector innovation. The programme aims at engaging civil service colleagues through building awareness, consolidating knowledge and acquiring skills in deployment of new technologies, data analytics and open data, stakeholder engagement, human resources management and transformation, procurement reform, social impact investment, shared services and value for money analysis, with a view to enhancing the quality and efficiency of public services. We have commissioned an external consultancy in drawing reference from the approaches adopted by overseas governments and their experience in promoting public sector innovation in the said areas, as well as exploring how best the relevant experience may help address similar issues in the local context. In the coming year, we will discuss the consultancy findings and identify potential pilot projects with the bureaux and departments concerned. No funding has been earmarked for pilot projects at this stage.

- End -

CONTROLLING OFFICER'S REPLY

ITB065

(Question Serial No. 5307)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (1) Director of Bureau's Office , (2) Innovation and Technology,
(3) Efficiency Office

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

Please advise this Committee in table form of the specific recommendations, projects, and one-off and recurrent expenditures incurred by these projects for supporting the Commerce and Economic Development Bureau "in developing the use of design thinking as a tool to spur innovation in policy making and improvement of public service" since the establishment of the Innovation and Technology Bureau.

Asked by: Hon TAM Man-ho, Jeremy (Member Question No. (LegCo use): 724)

Reply:

The Commerce and Economic Development Bureau (CEDB), in partnership with the Civil Service Training and Development Institute of the Civil Service Bureau and the Efficiency Unit (EU) (the EU was transferred to the Innovation and Technology Bureau and renamed as the "Efficiency Office" on 1 April) and mainly through training and promotion, facilitates civil servants of different departments and grades to understand and make use of design thinking to re-design their workflow and communication channels with the public. The CEDB and Efficiency Office are exploring with some departments to identify appropriate projects to incorporate and apply design thinking to provide "people-centred" and improved services to the public. The work involved is absorbed by existing resources and manpower.

- End -

CONTROLLING OFFICER'S REPLY

ITB066

(Question Serial No. 5319)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (1) Director of Bureau's Office, (2) Innovation and Technology,
(3) Efficiency Office

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Innovation and Technology Bureau will work with the Social Innovation and Entrepreneurship Development Fund Task Force to promote ideas and collaborations that can test new approaches to meeting social needs in the coming 3 years. Please advise this Committee of the details and set out in table form the policy bureau(x) involved, recurrent and one-off expenditures, policy objectives and return on investment (ROI) of these projects.

Asked by: Hon TAM Man-ho, Jeremy (Member Question No. (LegCo use): 725)

Reply:

Established in September 2013 with an allocation of \$500 million from the Lotteries Fund, the Social Innovation and Entrepreneurship Development Fund (SIE Fund) was overseen by the SIE Fund Task Force under the Commission on Poverty. The Efficiency Unit (EU) has served as the Task Force Secretariat. With the transfer of the EU to the Innovation and Technology Bureau (ITB) on 1 April 2018 and its renaming as the Efficiency Office, it will continue to serve as the Secretariat.

The SIE Fund seeks to alleviate poverty and social exclusion in Hong Kong by promoting social innovation and nurturing social entrepreneurship. To this end, the SIE Fund has identified 3 areas of work, namely Capacity Building, Innovative Programmes and Research, and accorded priority to funding initiatives that support these areas of work. The details of the 3 priority areas and the related provision are summarised as follows:

Area of Work	Details	Provision (\$ million)
Capacity Building	To foster the development of the social innovation ecosystem by nurturing social entrepreneurs, enhancing the capacity of the sector, and facilitating cross-sector collaboration.	57.98
Innovative Programmes	To provide funding and other support for social entrepreneurs and innovative projects of various stages, from idea generation, prototyping, seed funding for startups to eventual scale-up.	49.3
Research	To identify areas of needs and corresponding solutions in the social innovation space.	9.19
Note: Provision for the SIE Fund is not reflected in Head 135.		Total: 116.47 (around \$120 million)

The 3 priority work areas of the SIE Fund have a very extensive coverage. As at end March 2018, the SIE Fund has funded 133 projects of diverse service nature including healthcare, food, living, transport, education and learning, job training, job opportunities, and community participation, etc. The projects of different service nature relate to the policy areas of various government bureaux, including the Education Bureau, the Food and Health Bureau, the Home Affairs Bureau, the Labour and Welfare Bureau, the Transport and Housing Bureau, etc. For example, the SIE Fund has engaged an intermediary to launch the first all-round food support collaborative platform in Hong Kong to enhance the efficiency and effectiveness of the overall food support service in Hong Kong through better sectoral coordination. The SIE Fund has also funded the establishment of a collaboration platform known as the Community Housing Movement to provide transitional and affordable accommodation for grass-root families which have transitional housing needs pending public housing support. The Fund will continue to pursue its work in the 3 priority areas.

As the management of the SIE Fund does not involve any external investment, return on investment is not applicable in this case.

- End -

CONTROLLING OFFICER'S REPLY**ITB067****(Question Serial No. 5328)**

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (1) Director of Bureau's Office, (2) Innovation and Technology, (3) Efficiency Office

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding open data for achieving the policy objective of making available quality data, please advise this Committee of the following:

- (a) the number of machine-readable datasets updated on every hour (or less than an hour) on “data.gov.hk” portal (the Portal) as at March 2018 and its percentage of the total number of datasets on the Portal, the bureaux and departments providing such datasets and the contents and file formats of the datasets involved;
- (b) the respective development costs, recurrent expenses, numbers of updates, numbers of downloads and numbers of monthly active users as at February 2018 of all the smartphone applications of various government departments (set out in table form);
- (c) the aggregate amount of datasets in 7 machine-readable formats (API, Batch API, JSON, XML, CSV, GTFS, Realtime GTFS) by the Government as at February 2018, its percentage of the total number of datasets on the Portal and the bureaux and departments providing such datasets (set out in table form);
- (d) the respective numbers of staff with professional background of data science, quantitative finance as well as information and technology infrastructure in the Innovation and Technology Bureau (ITB), their salaries and specific projects for which they are responsible as at February 2018 (set out in table form);
- (e) the number of collaborations between the ITB and local enterprises on improving open data as at February 2018 since its establishment, the names of projects and the expenditure and departments involved (set out in table form);

(f) the number of collaborations between the ITB and Mainland enterprises on improving open data as at February 2018 since its establishment, the names of projects and the expenditure and departments involved (set out in table form); and

(g) the number of collaborations between the ITB and overseas enterprises on improving open data as at February 2018 since its establishment, the names of projects and the expenditure and departments involved (set out in table form).

Asked by: Hon TAM Man-ho, Jeremy (Member Question No. (LegCo use): 726)

Reply:

The requested information is as follows:-

- (a) Bureaux/departments/organisations update their data at different intervals, depending on the nature of the data. As at end-February 2018, under the “data.gov.hk” portal, 273 datasets were updated on an hourly (or shorter) basis, accounting for about 8.5% of the total number of datasets therein. Examples of the popular ones and their respective formats are set out at Annex A. As regards the types of information provided in the datasets, we are not able to provide a full list due to the large number of datasets involved.
- (b) Information of the mobile applications (apps) launched by government bureaux and departments up to end-February 2018 is set out at Annex B. The Office of the Government Chief Information Officer (OGCIO) does not maintain information on the ‘monthly active users’ of these mobile apps.
- (c) As at end-February 2018, the “data.gov.hk” portal provided about 2 400 datasets ¹ in machine readable formats such as CSV (263), JSON (122), XLS/XLSX (1 751), XML (119) and others (144), including GML, KML and RSS. It also provided some 1 200 application programming interfaces (APIs) to facilitate content extraction from various datasets, accounting for about 75% of the total number of datasets on the “data.gov.hk” portal. The numbers of the datasets and APIs mentioned above are listed in Annex C.
- (d) Staff of the Innovation and Technology Bureau (ITB) and the OGCIO, the Innovation and Technology Commission and the Efficiency Office under its purview possess different professional qualifications and skills. For example, individual OGCIO staff possess professional knowledge and skills in big data analytics, data science and IT infrastructure. The departments will employ additional professional staff and procure professional services as needed. We do not keep statistics on the professional background of our staff.

¹ Datasets in different languages or of different years/months are excluded.

- (e) The OGCIO has been encouraging public and private organisations to open up their data by getting an understanding of how this can add value to their organisation and businesses. Since the establishment of the ITB (up to end-February 2018), the OGCIO has collaborated with the Hong Kong Tramways Limited to release information on tram stops and routes. The workload was absorbed by the existing manpower of the OGCIO and no additional resources were involved. Moreover, the OGCIO has enhanced the “data.gov.hk” portal in collaboration with the HK Systems Limited and the Arcotect Limited at an expenditure of \$9.2 million, which is funded under the Capital Works Reserve Fund Head 710.
- (f) and (g) Since the establishment of the ITB (up to end-February 2018), no collaboration project has been conducted by the OGCIO in this regard.

**Examples of datasets on the “data.gov.hk” portal updated on an hourly basis
(or at shorter intervals) (As at end-February 2018)**

B/D or Organisation	Example of Datasets & their Formats
Development Bureau	✧ Real-time parking vacancy data and basic carpark information in Kowloon East and nearby areas provided by the Energizing Kowloon East Office (JSON)
Environmental Protection Department	<ul style="list-style-type: none"> ✧ Current air quality health index range and forecast (RSS) ✧ Current Air Quality Health Index of individual Air Quality Monitoring stations (RSS) ✧ Past 24-hour Air Quality Health Index of individual Air Quality Monitoring stations (XML) ✧ Past 24-hour Pollutant Concentration of individual Air Quality Monitoring stations (XML)
Hong Kong Observatory	<ul style="list-style-type: none"> ✧ Current weather report (RSS) ✧ Local weather forecast (RSS)
Lands Department	✧ Conversion data between HK 1980 Grid Coordinates and WGS84 Geodetic Coordinates (JSON; via API)
Marine Department	<ul style="list-style-type: none"> ✧ Arrival and departure information of vessels (XML) ✧ Seafarers' Examination Schedule (XML)
Office of the Government Chief Information Officer	<ul style="list-style-type: none"> ✧ List of EventHK information and its details (ICS & JSON; via API) ✧ List of GovHK Notifications and its details (JSON; via API)
Trade and Industry Department	<ul style="list-style-type: none"> ✧ Information related to Trade and Industry Department (XML) ✧ Information related to the Strategic Commodities Control of Trade and Industry Department (XML)
Transport Department	<ul style="list-style-type: none"> ✧ Traffic snapshot images (JPG) ✧ Journey time indicators (XML) ✧ Traffic speed map (XML) ✧ Speed map panels (PNG)
CLP Power Hong Kong Limited	✧ Electric vehicle charging station locations (XML)

Information of the mobile apps launched by bureaux/departments

No.	B/D	App Name	(Approximate) Development Cost	(Approximate) Annual Maintenance Cost	Number of Updates to Date Note	Total Number of Downloads (As at end-Feb 2018)
1.	Agriculture, Fisheries and Conservation Department	Country Parks Tree Walks	\$615,000 (Including system maintenance cost for the first year)	\$108,000 (Including maintenance cost of Country Parks Tree Walks and Enjoy Hiking mobile apps)	7	47 000
2.	Agriculture, Fisheries and Conservation Department	Enjoy Hiking	\$50,000	(Included in item 1)	21	370 000
3.	Agriculture, Fisheries and Conservation Department	Red Tide Information Network	\$128,000	\$30,000	8	1 800
4.	Agriculture, Fisheries and Conservation Department	Reef Check Hong Kong	\$95,000	\$39,000	5	7 800
5.	Architectural Services Department	Architour	\$546,000	Maintained by deploying internal resources. No additional cost is incurred.	9	6 900
6.	Buildings Department	Quick Guide for Mandatory Building Inspection Scheme/ Mandatory Window Inspection Scheme	\$299,000	\$55,000	5	10 000
7.	Buildings Department	Quick Guide for Minor Works	\$290,000	\$42,000	5	27 000
8.	Civil Engineering and Development Department	Bowen Road Slope Study Trail	\$150,000	Maintained by deploying internal resources. No additional cost is incurred.	0	1 200
9.	Civil Engineering and Development Department	HK Geology	Developed internally. No additional cost is incurred.	Maintained by deploying internal resources. No additional cost is incurred	1	15 000
10.	Civil Engineering and Development Department	HK Landslides	Developed internally. No additional cost is incurred.	Maintained by deploying internal resources. No additional cost is incurred	2	2 300
11.	Civil Engineering and Development Department	HK Slope Safety	Developed internally. No additional cost is incurred.	Maintained by deploying internal resources. No additional cost is incurred	4	4 000

No.	B/D	App Name	(Approximate) Development Cost	(Approximate) Annual Maintenance Cost	Number of Updates to Date Note	Total Number of Downloads (As at end-Feb 2018)
12.	Civil Service Bureau	Government Vacancies	\$980,000	Included in maintenance cost of other systems. As it is not a stand-alone project, no separate cost breakdown is available.	3	440 000
13.	Companies Registry	CR eFiling	Included in the enhancements of the core system of Companies Registry	Maintained by deploying internal resources. No additional cost is incurred	11	7 100
14.	Constitutional and Mainland Affairs Bureau	A Basic Law Quiz A Day	\$296,000	Included in the development cost	3	55 000
15.	Correctional Services Department	Hong Kong Correctional Services Department Mobile App	\$308,000	Maintained by deploying internal resources. No additional cost is incurred	11	16 000
16.	Customs and Excise Department	HK Car First Registration Tax	\$230,000	\$40,000	8	16 000
17.	Department of Health (Special Preventive Programme)	Anti-HIV Med	\$86,000 (Including Anti-HIV Med and HIV Manual Third Edition.)	\$14,000 (Including Anti-HIV Med and HIV Manual Third Edition.)	13	3 900
18.	Department of Health (Special Preventive Programme)	HIV Manual Third Edition	(Included in item 17)	(Included in item 17)	13	10 000
19.	Department of Health (Central Health Education Unit)	CookSmart: EatSmart Recipes	\$258,000	\$35,000	3	44 000
20.	Department of Health (Central Health Education Unit)	EatSmart Restaurant	\$76,000	\$16,000	7	36 000
21.	Department of Health (Central Health Education Unit)	Snack Check	\$282,000	Maintained by deploying internal resources. No additional cost is incurred	7	46 000
22.	Department of Health (Family Health Service)	Info for Nursing Mum	Developed internally. No additional cost is incurred	Maintained by deploying internal resources. No additional cost is incurred	3	22 000
23.	Department of Health (Infection Control Branch)	HKeIC	\$150,000	\$30,000	4	6 200

No.	B/D	App Name	(Approximate) Development Cost	(Approximate) Annual Maintenance Cost	Number of Updates to Date Note	Total Number of Downloads (As at end-Feb 2018)
24.	Department of Health (Infection Control Branch)	IMPACT (English version only)	\$296,000	\$16,000	More than 25	17 000
25.	Department of Health (Primary Care Office)	Framework@PC (English version only)	\$196,000	\$90,000	8	11 000
26.	Department of Health (Special Preventive Programme)	1069 Test Finder	\$298,000	\$50,000	9	32 000
27.	Department of Health (Student Health Service)	Student Weight for Height Check	\$286,000	\$50,000	7	23 000
28.	Department of Health (Tobacco Control Office)	Quit Smoking App	\$295,000	\$119,000	13	54 000
29.	Development Bureau	My Kowloon East (MyKE)	Developed internally. No additional cost is incurred	Maintained by deploying internal resources. No additional cost is incurred.	13	7 100
30.	Development Bureau	Tree & Landscape Map	\$414,000	Maintained by deploying internal resources. No additional cost is incurred	5	6 600
31.	Development Bureau (In collaboration with Construction Industry Council)	Construction Safety App	\$883,000 (Including maintenance cost for the first two years)	Maintained by deploying internal resources. No additional cost is incurred	11	12 000
32.	Drainage Services Department (DSD)	DSD Connect	\$170,000	Maintained by deploying internal resources. No additional cost is incurred	5	6 000
33.	Education Bureau (Applied Learning Section)	ApL	\$217,000	\$42,000	8	18 000
34.	Education Bureau (Assessment and HKEAA Section)	說話加油站 (Chinese name only)	Developed with the related website. As it is not a stand-alone project, no separate cost breakdown is available.	Maintained with the related website. As it is not a stand-alone project, no separate cost breakdown is available.	2	3 800
35.	Education Bureau (Curriculum Resources Section)	ETV App	\$49,000	Maintained with the related website. As it is not a stand-alone project, no separate cost breakdown is available.	6	64 000

No.	B/D	App Name	(Approximate) Development Cost	(Approximate) Annual Maintenance Cost	Number of Updates to Date Note	Total Number of Downloads (As at end-Feb 2018)
36.	Education Bureau (Kindergarten Administration Section)	Profile of Kindergartens and Kindergarten-cum-Child Care Centres 2017	Included in the cost of the whole project of the Profile of Kindergartens. As it is not a stand-alone project, no separate cost breakdown is available.	Included in the cost of the whole project of the Profile of Kindergartens. As it is not a stand-alone project, no separate cost breakdown is available.	3	27 000
37.	Education Bureau (Native-speaking English Teacher (NET) Section)	Reading Town 1	\$395,000	Maintained by deploying internal resources. No additional cost is incurred	3	83 000
38.	Education Bureau (Native-speaking English Teacher (NET) Section)	Reading Town 2	\$920,000 (For both Reading Town 2 and Reading Town 3)	Maintained by deploying internal resources. No additional cost is incurred.	2	59 000
39.	Education Bureau (Native-speaking English Teacher (NET) Section)	Reading Town 3	(Included in item 38)	Maintained by deploying internal resources. No additional cost is incurred.	1	72 000
40.	Education Bureau (New Senior Secondary Section)	e-Navigator	Developed with the related website. As it is not a stand-alone project, no separate cost breakdown is available.	Maintained with the related website. As it is not a stand-alone project, no separate cost breakdown is available.	11	170 000
41.	Education Bureau (Personal, Social and Humanities Education Section)	E-book of Understanding the Law, Access to Justice – Basic Law Learning Package (Junior Secondary)	Developed as a part of the e-book and e-portal project. As it is not a stand-alone project, no separate cost breakdown is available.	Developed as a part of the e-book and e-portal project. As it is not a stand-alone project, no separate cost breakdown is available.	4	12 000
42.	Education Bureau (Personal, Social and Humanities Education Section)	History Trip Go Easy: Cheung Chau Jiao Festival	Developed as a part of the e-book and e-portal project. As it is not a stand-alone project, no separate cost breakdown is available.	Developed as a part of the e-book and e-portal project. As it is not a stand-alone project, no separate cost breakdown is available.	5	5 200

No.	B/D	App Name	(Approximate) Development Cost	(Approximate) Annual Maintenance Cost	Number of Updates to Date Note	Total Number of Downloads (As at end-Feb 2018)
43.	Efficiency Unit	1823 Online mobile app	\$700,000	Maintained by deploying internal resources. No additional cost is incurred.	2	16 000
44.	Efficiency Unit	Tell me@1823 mobile app	Developed internally. No additional expenditure is incurred.	Maintained by deploying internal resources. No additional expenditure is incurred.	20	140 000
45.	Environmental Protection Department	Hong Kong Air Quality Health Index (AQHI)	\$205,000	\$36,000	7	83 000
46.	Environmental Protection Department	Hong Kong T • PARK	\$713,000	\$80,000	5	15 000
47.	Environmental Protection Department	Waste Less	\$753,000 (Including maintenance cost for the first year)	\$125,000	11	25 000
48.	Fire Services Department	Catch time, save life	\$105,000	\$96,000 (Including 4 mobile apps: items 48, 49, 50 and 51)	2	24 000
49.	Fire Services Department	Hong Kong Fire Services Mobile Application	\$900,000	(Included in item 48)	4	45 000
50.	Fire Services Department	Live safe, be watchful	\$250,000	(Included in item 48)	2	40 000
51.	Fire Services Department	Stay Calm & Collected	\$310,000	(Included in item 48)	7	49 000
52.	Food and Environmental Hygiene Department	Food Safety	\$264,000	Maintained by deploying internal resources. No additional cost is incurred.	4	17 000
53.	Food and Environmental Hygiene Department	Nutrition Calculator	\$150,000	Maintained by deploying internal resources. No additional cost is incurred	7	90 000
54.	Home Affairs Bureau	"M" Mark Events App	\$70,000	\$6,000	9	6 600
55.	Home Affairs Bureau	18 Handy Tips for Family Education	\$49,000	\$3,000	1	6 700
56.	Home Affairs Bureau	Family Education Package for Families with Newborn Babies	\$40,000	\$3,000	1	22 000
57.	Home Affairs Department	Hong Kong Licensed Hotels and Guesthouses	\$178,000	\$38,000	5	11 000
58.	Home Affairs Department	Yuen Long District-led Actions Scheme Mobile Application	\$80,000	Maintained by deploying internal resources. No additional cost is incurred	4	3 400

No.	B/D	App Name	(Approximate) Development Cost	(Approximate) Annual Maintenance Cost	Number of Updates to Date Note	Total Number of Downloads (As at end-Feb 2018)
59.	Hong Kong Observatory	iCWeatherOS	Developed internally. No additional cost is incurred.	Maintained by deploying internal resources. No additional cost is incurred.	4	6 700
60.	Hong Kong Observatory	MyObservatory	Developed internally. No additional cost is incurred	Maintained by deploying internal resources. No additional cost is incurred	More than 25	7 100 000
61.	Hong Kong Observatory	MyWorldWeather	Developed internally. No additional cost is incurred.	Maintained by deploying internal resources. No additional cost is incurred.	10	260 000
62.	Hong Kong Police Force	Hong Kong Police Mobile Application	\$750,000	Maintained by deploying internal resources. No additional cost is incurred	17	150 000
63.	Hongkong Post	HKPostStamps	\$150,000	Maintained by deploying internal resources. No additional cost is incurred	3	11 000
64.	Hongkong Post	Hongkong Post	\$328,000	Maintained by deploying internal resources. No additional cost is incurred	22	340 000
65.	Hongkong Post	ShopThruPost	\$310,000	\$31,000	1	3 300
66.	Immigration Department	Hong Kong ImmD Mobile Application	\$130,000	Maintained by deploying internal resources. No additional cost is incurred	More than 25	170 000
67.	Independent Commission Against Corruption	ICAC Smartphone App	\$1,048,000	Maintained by deploying internal resources. No additional cost is incurred	4	10 000
68.	Information Services Department	news.gov.hk	\$270,000	\$40,000	16	84 000
69.	Intellectual Property Department	"No Fakes Pledge" Shop Search	\$580,000	\$54,000	15	41 000
70.	Labour Department	iES	\$125,000	\$97,000	21	870 000
71.	Labour Department	Work Safety Alert	\$75,000	\$45,000	6	22 000
72.	Labour Department	Youth Employment Start	\$149,000 (Including maintenance cost for the first year)	Maintained by deploying internal resources. No additional cost is incurred	4	19 000
73.	Lands Department	MyMapHK	Developed internally. No additional cost is incurred	Maintained by deploying internal resources. No additional cost is incurred	More than 25	200 000

No.	B/D	App Name	(Approximate) Development Cost	(Approximate) Annual Maintenance Cost	Number of Updates to Date Note	Total Number of Downloads (As at end-Feb 2018)
74.	Lands Department	VoiceMapHK	Developed internally. No additional cost is incurred	Maintained by deploying internal resources. No additional cost is incurred	1	6 300
75.	Leisure and Cultural Services Department	Bruce Lee: Kung Fu • Art • Life	\$128,000 (Including maintenance cost for the first year)	Included in the cost of application enhancements. No separate cost breakdown is available	4	49 000
76.	Leisure and Cultural Services Department	Fitness Walking	\$250,000	Maintained by deploying internal resources. No additional cost is incurred	3	60 000
77.	Leisure and Cultural Services Department	Multimedia Information Guide System (MMGS)	Included in the implementation cost of the MMGS Major Upgrade Project. As it is not a stand-alone project, no separate cost breakdown is available.	Included in the maintenance cost of the MMGS. As it is not a stand-alone project, no separate cost breakdown is available.	4	34 000
78.	Leisure and Cultural Services Department	My Culture	Included in the cost of the My Culture project. As it is not a stand-alone project, no separate cost breakdown is available.	\$52,000	17	53 000
79.	Leisure and Cultural Services Department	My Library	Included in the cost of the whole project. As it is not a stand-alone project, no separate cost breakdown is available.	\$142,000	15	340 000
80.	Leisure and Cultural Services Department	My URB TIX	Included in the service contract of My URB TIX. As it is not a stand-alone project, no separate cost breakdown is available.	Included in the service contract of My URB TIX. As it is not a stand-alone project, no separate cost breakdown is available.	6	550 000

No.	B/D	App Name	(Approximate) Development Cost	(Approximate) Annual Maintenance Cost	Number of Updates to Date Note	Total Number of Downloads (As at end-Feb 2018)
81.	Leisure and Cultural Services Department	Star Hoppers	\$700,000	Maintained by deploying internal resources. No additional cost is incurred	2	170 000
82.	Office of the Communications Authority (OFCA)	OFCA Broadband Performance Test	Developed by deploying internal resources. No additional cost is incurred	Maintained by deploying internal resources. No additional cost is incurred	6	The department is unable to provide the information.
83.	Office of the Government Chief Information Officer	EventHK	Developed internally. No additional cost is incurred	Maintained by deploying internal resources. No additional cost is incurred	10	67 000
84.	Office of the Government Chief Information Officer	GovHK Apps	\$600,000	Maintained by deploying internal resources. No additional cost is incurred	11	220 000
85.	Office of the Government Chief Information Officer	GovHK Notifications	Developed internally. No additional cost is incurred	Maintained by deploying internal resources. No additional cost is incurred	21	750 000
86.	Office of the Government Chief Information Officer	HK GovWiFi	\$295,000	\$78,000	0	51 000
87.	Office of the Government Chief Information Officer	iStartup@HK	\$182,000	Maintained by deploying internal resources. No additional cost is incurred	3	4 300
88.	Office of the Government Chief Information Officer	Wi-Fi.HK	\$640,000	\$67,000	8	260 000
89.	Planning Department	City Gallery	\$263,000	\$98,000	10	9 000
90.	Radio Television Hong Kong	Chinese History – the Flourishing Age	\$450,000	Maintained by deploying internal resources. No additional cost is incurred	5	100 000
91.	Radio Television Hong Kong	RTHK Memory	\$280,000	Maintained by deploying internal resources. No additional cost is incurred	1	32 000
92.	Radio Television Hong Kong	RTHK Mine	\$409,000	Maintained by deploying internal resources. No additional cost is incurred	9	290 000

No.	B/D	App Name	(Approximate) Development Cost	(Approximate) Annual Maintenance Cost	Number of Updates to Date Note	Total Number of Downloads (As at end-Feb 2018)
93.	Radio Television Hong Kong	RTHK News	\$336,000	Maintained by deploying internal resources. No additional cost is incurred	10	120 000
94.	Radio Television Hong Kong	RTHK On The Go	\$200,000	Maintained by deploying internal resources. No additional cost is incurred	More than 25	1 900 000
95.	Radio Television Hong Kong	RTHK Screen	\$250,000	Maintained by deploying internal resources. No additional cost is incurred	7	370 000
96.	Radio Television Hong Kong	RTHK Vox	\$380,000	Maintained by deploying internal resources. No additional cost is incurred	3	13 000
97.	Security Bureau	Safeguard HK	\$610,000	Maintained by deploying internal resources. No additional cost is incurred	9	120 000
98.	Social Welfare Department	3E Mobile App	\$47,000	\$10,000	3	4 800
99.	Social Welfare Department	Senior Citizen Card Scheme	\$147,000	\$25,000	13	58 000
100.	Tourism Commission	A Symphony of Lights	\$537,000	\$42,000	2	4 000
101.	Tourism Commission	HK Food Truck	\$212,000	\$30,000	3	36 000
102.	Transport Department	eTraffic News	\$337,000	\$41,000	3	77 000
103.	Transport Department	Hong Kong eRouting	\$1,930,000	\$128,000	13	180 000
104.	Transport Department	Hong Kong eTransport	\$1,100,000	\$180,000	21	1 800 000
105.	Water Supplies Department (WSD)	WSD GA Product Directory	\$175,000	Maintained by deploying internal resources. No additional cost is incurred	1	4 900
106.	Water Supplies Department	WSD Mobile App	\$1,573,000	\$290,000	13	28 000

Note (1): The number of updates was obtained from the Apple App Store.

**Number of Datasets released in machine readable formats and
Number of APIs on the “data.gov.hk” portal (As at end-February 2018)**

B/D or Organisation	Number of Datasets in Machine-readable Formats ^{Note}					API
	CSV	JSON	XLS/ XLSX	XML	Others (e.g. GML/KML/R SS)	
Agriculture, Fisheries and Conservation Department	5	0	2	0	0	5
Buildings Department	0	0	50	0	0	44
Census and Statistics Department	128	0	1 145	33	1	460
Centaline Property Agency Limited	1	0	0	0	0	1
Civil Aviation Department	3	0	0	0	0	3
Civil Engineering and Development Department	0	0	3	0	0	2
CLP Power Hong Kong Limited	0	0	0	1	0	2
Companies Registry	0	0	21	0	0	36
Correctional Services Department	0	0	12	0	0	15
Customs and Excise Department	0	0	5	0	0	0
Department of Health	35	0	139	7	0	145
Development Bureau	0	4	0	0	0	4
Education Bureau	1	1	14	3	0	5
Efficiency Unit	0	0	0	2	0	0
Electrical and Mechanical Services Department	0	0	27	0	0	26
Environmental Protection Department	3	0	0	2	3	3
Financial Secretary's Office	0	0	0	1	0	0
Financial Services and the Treasury Bureau	1	0	0	0	1	0
Food and Environmental Hygiene Department	0	0	3	9	0	1
Food and Health Bureau	0	0	8	0	0	0
Government Laboratory	2	1	0	0	0	12
Government Logistics Department	0	0	0	1	0	0
Government Property Agency	0	0	11	0	0	21
Hong Kong Housing Authority	0	4	0	0	0	0
Hong Kong Observatory	0	0	0	0	7	0
Hong Kong Police Force	0	1	6	3	0	3
Hong Kong Tramways, Limited	2	0	0	0	0	6
Hospital Authority	0	20	20	0	0	0

B/D or Organisation	Number of Datasets in Machine-readable Formats ^{Note}					API
	CSV	JSON	XLS/ XLSX	XML	Others (e.g. GML/KML/R SS)	
Information Services Department	0	0	0	0	1	0
Inland Revenue Department	0	0	13	0	0	4
Innovation and Technology Commission	0	0	3	0	0	0
Insurance Authority	0	0	50	0	0	63
Intellectual Property Department	10	0	0	0	0	10
Land Registry	0	2	2	0	0	27
Lands Department	1	1	42	4	10	103
Leisure and Cultural Services Department	0	42	2	4	2	2
Marine Department	2	0	0	19	0	0
MTR Corporation Limited	11	0	0	0	0	11
Office for Film, Newspaper and Article Administration	0	0	1	0	0	1
Office of the Communications Authority	0	0	27	0	0	25
Office of the Government Chief Information Officer	1	10	12	5	1	40
Official Receiver's Office	0	0	6	0	0	9
Planning Department	0	0	8	0	0	0
Radio Television Hong Kong	0	0	0	5	0	0
Rating and Valuation Department	0	0	30	0	0	24
Registration and Electoral Office	7	0	74	0	0	55
Social Welfare Department	10	0	0	1	0	0
The Hong Kong Society for Rehabilitation	0	0	0	4	0	0
The Hongkong Electric Company, Limited	3	0	0	0	0	5
Trade and Industry Department	0	0	1	2	0	3
Transport Department	32	36	3	13	118	19
Treasury	2	0	0	0	0	0
University Grants Committee Secretariat	3	0	0	0	0	5
Working Family and Student Financial Assistance Agency	0	0	11	0	0	3
TOTAL	263	122	1 751	119	144	1 203

Note: Datasets in different languages or of different years/months are excluded.

- End -

CONTROLLING OFFICER'S REPLY**ITB068****(Question Serial No. 5354)**

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (1) Director of Bureau's Office,(2) Innovation and Technology,(3) Efficiency Office

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding smart city development, would the Government advise this Committee of:

(a) the number, rank and salary of additional staff with professional background in Data Science, Quantitative Finance and IT Infrastructure to be employed by the Innovation and Technology Bureau (ITB) in the next 3 years, as well as the projects they will handle and the timetable for such projects (set out in table form);

(b) the number, rank, salary cost of additional civil servants and short-term contract staff to be employed by the ITB and the Efficiency Unit for providing administrative support for smart city development in the next 3 years, as well as the projects they will handle (set out in table form);

(c) whether various government bureaus and departments will employ additional staff for smart city development? If yes, please set out in table form the number, rank, salary and responsibilities of these additional staff to be employed by various bureaus and departments in the next 3 years;

(d) the number of government projects that will make use of artificial intelligence in the next 3 years to support smart governance of the smart city. Please set out in table form the project name/service provided, department involved, commencement date, commissioning date, the department or service provider responsible for implementation and the estimated expenditure in each year (please state whether the provision comes from Capital Works Reserve Fund Head 710, the ITB's TechConnect (block vote) or other sources);

(e) the legislative amendments/legislation to be made by the Government in the next 3 years for promoting smart city development. Please inform this Committee the timetable, details, commencement date, effective date of the amendments and the responsible departments.

Asked by: Hon TAM Man-ho, Jeremy (Member Question No. (LegCo use): 728)

Reply:

The requested information is as follows:

- (a) Staff of the Innovation and Technology Bureau (ITB) and the Office of the Government Chief Information Officer (OGCIO), the Innovation and Technology Commission and the Efficiency Office under its purview possess different professional qualifications and skills. For example, individual OGCIO staff possess professional knowledge and skills in big data analytics, data science and information technology (IT) infrastructure. The departments will employ additional professional staff and procure professional services as needed. We do not keep statistics on the professional background of our staff.
- (b) Details of the additional posts to be created by the ITB in 2018-19 for smart city development are as follows:

Rank	Number	Salary for respective rank (HK\$)	Work nature
Administrative Officer Staff Grade C	1	\$164,500-\$179,850	To coordinate various smart city development projects and serve as the secretariat to the “Steering Committee on Innovation and Technology”.
Senior Systems Manager	1	\$107,870-\$124,280	
Analyst/Programmer I	1	\$53,300-\$67,065	
Executive Officer I	1	\$53,300-\$67,065	
Personal Secretary I	1	\$30,320-\$38,675	
Assistant Clerical Officer	1	\$14,140-\$28,865	

- (c) & (e) Promoting smart city development involves different areas of work. Relevant bureaux and departments will, in accordance with their own needs, consider timely whether there is a need to recruit additional manpower or review their respective legislation. The ITB does not have information in this regard.
- (d) The artificial intelligence (AI)-related projects to be implemented by the Government in the next 3 years with funding approved under the TechConnect (block vote) and Capital Works Reserve Fund Head 710 are tabulated at **Annex**.

AI-related Projects to be Implemented by the Government in the Next 3 Years**TechConnect (block vote)**

Project Name / Service Description	Department	Start Date	Rollout Date (Tentative)	Responsible Department or Service Provider	Estimated Expenditure (\$ Million)
1. Pilot Partnership Programme for Cyber Security Information Sharing, to analyse cyber security information with AI and big data technologies and to share with various sectors cyber security threats so as to enhance the overall capability of Hong Kong in defending against and recovering from cyber attacks	OGCIO	Q4 2017	Q3 2018	To be implemented through outsourcing	8.5
2. Illegal parking monitoring system - to study the feasibility of monitoring illegal parking by applying image analysis technology for trial run in Kowloon East	Development Bureau - Energizing Kowloon East Office	Q2 2018	To commence field test in Q3 2018 and to complete the project in Q1 2020	To be implemented through outsourcing	8.0
3. Study on the development of a Cargo Big Data System to enhance the risk management capability of the Customs and Excise Department in cargo clearance	Customs and Excise Department	Q4 2017	Q1 2020	To be implemented through outsourcing	9.8
4. Feasibility study on an automation system for the collection, classification and association of cyber crime data	Hong Kong Police Force	Q4 2017	Q1 2020	To be implemented through outsourcing	6.8

Capital Works Reserve Fund Head 710

Project Name / Service Description	Department	Start Date	Rollout Date (Tentative)	Responsible Department or Service Provider	Estimated Expenditure (\$ Million)
5. Pilot Chatbot Service for Provision of Weather Information to facilitate the public to obtain weather information (including regional weather conditions, weather forecasts and weather warnings) on messaging applications and to answer simple queries	Hong Kong Observatory (HKO)	Q1 2018	Q4 2018	Part of the project to be implemented through outsourcing and the remaining to be undertaken by the HKO staff	2.9
6. Pilot Cloud Development Platform for Big Data Analytics Model to provide data analytics tools, assist bureaux/departments in implementing pilot projects using big data analytics, establish big data analytics models, and compile implementation guidelines on big data application drawing on the experience of bureaux/departments	OGCIO	Q4 2016	Q4 2019	Part of the project to be implemented through outsourcing and the remaining to be undertaken by OGCIO staff	9.6
7. Revamp of 1823 Website and Implementation of Chatbot Service to facilitate the public to use 1823 service conveniently, access government information more directly and answer simple enquiries	Efficiency Office	Q2 2018	Q4 2019	To be implemented through outsourcing	7.3
8. Implementation of the second phase of the	OGCIO	Q3 2018	Q4 2019	Part of the project to be	5.5

Project Name / Service Description	Department	Start Date	Rollout Date (Tentative)	Responsible Department or Service Provider	Estimated Expenditure (\$ Million)
Cyber Risk Information Sharing Platform, in which real-time information from different sources is collected and potential cyber attacks against government Information Technology systems are identified with a dynamic threat data analysis model so as to issue early security advice to the departments concerned				implemented through outsourcing and the remaining to be undertaken by OGCI staff	
9. Development of Air Quality Forecasting Information and Data Analysis System to collect and analyse air quality data from different sources, conduct air quality forecasts and provide timely warnings	Environmental Protection Department	Q2 2018	Q2 2020	To be implemented through outsourcing	9.5

- End -

CONTROLLING OFFICER'S REPLY**ITB069****(Question Serial No. 5513)**

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (1) Director of Bureau's Office, (2) Innovation and Technology,
(3) Efficiency Office

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

As regards supporting the Government in the development of smart city with particular attention to effective deployment of new technologies, please advise this Committee of the following:

- (a) It is mentioned in the "Adoption of Technology" under the Government's Hong Kong Smart City Blueprint that "Common Spatial Data Infrastructure (CSDI) will be developed by 2023 to facilitate sharing of geo-spatial data across government departments and government-to-business (G2B) applications, including the launch of CSDI portal, 3D digital map, electronic submission hub for building plans". Will the Government advise this Committee of the respective expenditure involved in constructing and managing CSDI; the format of the 3D digital map and the government departments involved; and the enterprises involved in the development of G2B applications in the next 3 years;
- (b) Regarding the promotion of "re-industrialisation", please provide in table form the titles/service contents of the relevant projects, the departments concerned, commencement dates, commissioning dates, departments or service providers responsible for implementation and the estimated expenditure involved in each of the next 3 years; as well as the number of in-house staff of the Innovation and Technology Bureau (ITB) designated to support this area of work;
- (c) Regarding the promotion of "Fintech", please provide in table form the titles/service contents of the relevant projects, the departments concerned, commencement dates, commissioning dates, departments or service providers responsible for implementation and the estimated expenditure involved in each of the next 3 years; as well as the number of in-house ITB staff designated to support this area of work;

- (d) Regarding facilitating the achievement of technology advancement, industry development in and application of vehicle-to-everything (V2X) and autonomous vehicles, does the Government have any plans to:
- i) amend the legislation and enforcement matters? If yes, what are the details? If no, what are the reasons?
 - ii) launch a trial scheme in the next 3 years? If yes, what are the details? If no, what are the reasons?
 - iii) put in place a review mechanism to keep pace with the development? If yes, what are the details? If no, what are the reasons?
- (e) Regarding support for public healthcare service, it is very time-consuming to trace useful information in the existing Electronic Health Record Sharing System since data submitted by users across the territory are not in standardised format. Meanwhile, the existing patient medical record systems adopted by the Department of Health and the Hospital Authority are not compatible and do not allow sharing of information. Frontline healthcare professionals (particularly those in the Accident and Emergency Department) therefore have to rely solely on phone and fax machine for tracing the medical records of patients and sharing of such information. Does the Government have any plans to standardise the format, system and platform to address the problem and enhance efficiency? If yes, what are the details? If no, what are the reasons?
- (f) Regarding the adoption of more technology applications to support the elderly, the Personal Emergency Link service and the Safety Phone service for positioning of the elderly, which are most popular among the elderly in Hong Kong, have not been upgraded for many years. The mobile positioning device is bulky and faulty, often giving out false alarms due to wrong positioning. Does the Government have any plans to support the upgrading and enhancement of this elderly service? If yes, what are the details? If no, what are the reasons?
- (g) Regarding smart mobility, the smart phone app “My KLE” developed under the Government’s key development project “Energising Kowloon East” is a disappointment in both positioning and route searching. For example, searching for a walking path “from Wai Yip Street to Tai Yip Street, Kwun Tong” gives the result of “not in Kowloon East”. Will the Government advise of the total expenditure on developing this app? What are the number of updates and when did these updates take place? Which are the departments and service providers responsible for implementation and the estimated expenditure involved?
- (h) Further to the above question, it is mentioned in the Government’s Hong Kong Smart City Blueprint that it will “progressively expand walking path information on Causeway Bay and Kowloon East on government mobile apps to other districts”. Will the Government advise this Committee of the implementation schedules of the above policy objectives in the next 3 years, the specific return on investment (ROI), the departments and service providers responsible for implementation and the estimated expenditure involved?

Asked by: Hon TAM Man-ho, Jeremy (Member Question No. (LegCo use): 729)

Reply:

In consultation with relevant bureaux, the requested information is as follows -

- (a) In March 2017, the Development Bureau (DEVB) commissioned PricewaterhouseCoopers Advisory Services Limited to conduct a consultancy study on the overall strategy for the development of a Common Spatial Data Infrastructure (CSDI), with a view to providing information technology (IT) infrastructure for promoting spatial data sharing among government departments and the public and private sectors to support various applied technologies as well as the Smart City Blueprint for Hong Kong (the Blueprint). The consultancy study covers a number of aspects such as proposed governance structure, implementation roadmap and engagement with major stakeholders (including data developers and users within the Government and the private sector). The DEVB will consider the implementation approach and work plan upon completion of the study and targets to establish the CSDI in phases by the end of 2023. The consultancy study is expected to complete by mid-2018 at an estimated expenditure of \$5 million.

Separately, the Lands Department (LandsD) will commission another consultancy study on the development of data standards for spatial data to facilitate IT application and integration of spatial data. With an estimated expenditure of about \$4.5 million, the study is targeted to complete in 2020. Meanwhile, the LandsD will continue to enhance 3D spatial data and formulate work plan for the development of 3D digital maps.

- (b) On the hardware side, Stage 1 of the Science Park Expansion Programme is expected to complete by 2020 to provide more scientific research infrastructure for the industry. Regarding this item, the Finance Committee (FC) of the Legislative Council approved an injection of \$2.878 billion and a guarantee for a commercial loan of \$1.17 billion to the Hong Kong Science and Technology Parks Corporation (HKSTPC) in May 2016. The HKSTPC is also building a Data Technology Hub and an Advanced Manufacturing Centre in the Tseung Kwan O Industrial Estate, which are expected to be completed in 2020 and 2022 respectively. As for these 2 facilities, the FC approved an injection of \$6.598 billion and a government loan of \$1.65 billion to the HKSTPC in May 2016.

Quality research and development (R&D) capabilities are necessary to support re-industrialisation. Through the Innovation and Technology Fund (ITF), the Government provides support to R&D projects that contribute to technology upgrading in manufacturing and services industries and promotion of innovation. As at end January 2018, the ITF has funded a total of over 7 000 projects with some \$13.6 billion. There are various funding programmes under the ITF, including the Innovation and Technology Support Programme, the University-Industry Collaboration Programme, the Enterprise Support Scheme and the Patent Application Grant, etc. One of the aims of these funding programmes is to encourage more R&D work and promote re-industrialisation. Furthermore, the Government has set aside \$500 million under the ITF to launch in the third quarter of 2018 the Technology Talent Scheme, which will include the Re-industrialisation and Technology Training Programme to subsidise local companies on a matching basis to train their staff in

advanced technologies, especially those related to “Industry 4.0”, with a view to giving impetus to the promotion of re-industrialisation.

The Hong Kong Productivity Council (HKPC) has been dedicating efforts to promoting re-industrialisation to facilitate enterprises in moving towards high value-added production and gradually upgrade to “Industry 4.0”. The initiatives in the next 3 years include:

- operating the Inno Space and Smart City One and other technical support centres;
- promoting the “Industry 4.0 Upgrade and Recognition Programme” established with the Fraunhofer Institute for Production Technology (Fraunhofer IPT), and providing enterprises with “Industry 4.0” professional training recognised by the Fraunhofer IPT to help the industry gradually upgrade its operation towards “Industry 4.0”;
- setting up the Smart Industry Consortium exchange platform in 2018 to enable the industry to keep abreast of the latest information on smart industry and further assisting enterprises to upgrade into smart enterprises;
- setting up jointly with the Fraunhofer IPT an Invention Centre in 2018 to introduce “Industry 4.0” related technologies, accelerate the adoption of Industry 4.0 technologies by the industry, and promote earlier adoption of innovative industrial skills for further development of smart industry;
- establishing the Shenzhen Innovation & Technology Centre of the HKPC in Shenzhen with a view to providing solutions for Hong Kong enterprises in the Bay Area in respect of smart manufacturing, artificial intelligence, big data and environmental technology, etc.; and
- developing production and treatment methods of advanced materials such as 3D printing material, degradable polymer, smart fabric and recyclable plastic, etc.

The operation of the HKPC is supported by government subventions and HKPC’s own income. Promoting re-industrialisation is only part of its work, so no separate breakdown is available.

The 5 R&D Centres established by the Government (i.e. the Hong Kong Applied Science and Technology Research Institute, the Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies, the Nano and Advanced Materials Institute, the Hong Kong Research Institute of Textiles and Apparel and the Automotive Parts and Accessory Systems R&D Centre) have also been actively engaging in R&D related to re-industrialisation in recent years, covering various areas such as big data, Internet of Things, robotics, new materials, smart mobility and environmental technology, etc., thereby assisting the industry to ride the trend and capture business opportunities.

The work of promoting re-industrialisation will be carried out by the Innovation and Technology Bureau with its existing manpower and resources in collaboration with the Innovation and Technology Commission. A breakdown of the expenditure is not available.

- (c) The measures announced by the Financial Secretary in his 2018-19 Budget for the development of financial technologies (Fintech) include:

- (i) the Hong Kong Monetary Authority (HKMA) plans to launch a Faster Payment System offering 24-hour real-time payment function this September. This will allow banks and Stored Value Facility service providers to provide real-time, round-the-clock, cross institution payment and fund transfer service to their business and personal customers;
 - (ii) having regard to overseas experiences, HKMA considers virtual banks will be commercially and technically viable and is consulting the industry on reviewing and amending the relevant guidelines with a view to issuing licences within this year; and
 - (iii) to reserve a sum of \$500 million dedicated for promoting the development of the financial services industry in the coming 5 years, providing the necessary support for Fintech, bond market development, green finance, manpower training and other aspects of financial services.
- (d) The Transport and Housing Bureau and the Transport Department (TD) strive to promote Smart Mobility, and will continue to study in detail the development of autonomous driving and vehicle-to-everything (V2X) technologies. Preliminary findings should be available by end 2018. At present, autonomous driving and V2X technologies are still at trial and research stage around the world and a uniform international technical standard is yet to be developed. The Government will continue to keep in close view the latest global developments in relevant technologies such as vehicle design, road infrastructure design as well as rules and regulations. Upon making reference to the relevant experience, the TD will review existing legislation and propose amendments in a timely manner to tie in with the development of the relevant technologies in Hong Kong.

Upon receipt of enquiries on or applications for trials of autonomous vehicles or V2X technologies on roads in Hong Kong, the TD will actively offer assistance and scrutinise the applications to ensure that the trials will be conducted under a safe and controllable environment. The TD has been issuing movement permits under the Road Traffic (Registration and Licensing of Vehicles) Regulations (Cap. 374E) since 2017 to allow trials of different models of autonomous vehicles on specified routes at various locations such as the West Kowloon Cultural District (WKCD), the Zero Carbon Building and the Science Park subject to certain conditions (including speed limit, specified trial route and trial time, etc.). The Blueprint has also stated that the Government will facilitate trials of autonomous vehicles in the WKCD and other areas as appropriate. The Government will review the progress of the initiatives in due course.

- (e) According to Food and Health Bureau, since the design stage of the Electronic Health Record Sharing System (eHRSS), the views of patients, healthcare providers and healthcare professionals have been taken into account to cater for their clinical needs and work processes in the course of developing the system. Officially launched in March 2016, the settings of eHRSS such as structure, format, data types and scope of data sharing had been standardised. With patients' express and informed consent, registered healthcare providers may access and share their electronic health records to

facilitate data sharing between the public and private sectors. To assist private healthcare providers in using the eHRSS, the Government has also developed the Clinical Management System (CMS) Adaptation Modules and the CMS On-ramp application to enable their access to the sharing platform and uploading of patients' electronic health records. The CMS of the Hospital Authority is now fully interoperable with the eHRSS. With most of its clinics connected to the eHRSS as well, the Department of Health is making preparations to upgrade its Clinical Information Management System for interfacing with the eHRSS.

- (f) According to the Labour and Welfare Bureau, the Emergency Alarm System services are not provided by the Government.
- (g) According to the Development Bureau, the launch of the “My Kowloon East” (MyKE) mobile application aims at promoting the smart city initiatives and the concept of “Walkable Kowloon East”. As the pedestrian network datasets used by the “easy walking” function cover only Kowloon East and part of Wai Yip Street is outside Kowloon East, it is possible for the application to give the result of “not in Kowloon East”. As the application uses a point-to-point pedestrian route search proposal, users may input names of buildings, addresses, map locations or GPS positionings as the origin and destination to increase the accuracy of the search. The MyKE mobile application was jointly developed by the Energizing Kowloon East Office and the LandsD by redeploying internal resources, and involves no additional expenditure so far. Since the launch of its trial version in December 2016, the application has been updated 8 times on the following dates:

4 January 2017

5 April 2017

9 May 2017

14 June 2017

15 August 2017

13 September 2017

19 March 2018

12 April 2018

- (h) The TD launched a new function under HKeTransport in October 2017 to enable members of the public to use the free application to plan and search for the best walking routes around major shopping areas in Causeway Bay. The TD will extend the walking route search function of HKeTransport to Yau Tsim Mong district in 2018, with an estimated expenditure of about \$1 million. The TD also plans to extend the walking route information of HKeTransport to other districts in the coming 2 to 3 years.

- End -

CONTROLLING OFFICER'S REPLY

ITB070

(Question Serial No. 5786)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (1) Director of Bureau's Office, (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Government will allocate \$200 million to Cyberport to enhance the support for start-ups and promote the development of digital technology ecosystem. What is the target number of enterprises to be supported? What are the eligibility criteria for the support? What is the additional administrative expenditure involved in supporting this initiative and the timetable for its full implementation?

Asked by: Hon TAM Man-ho, Jeremy (Member Question No. (LegCo use): 733)

Reply:

It is announced in this year's Budget that the Government will allocate \$200 million to Cyberport to enhance the support for start-ups and promote the development of digital technology ecosystem. Cyberport will establish an Easy Landing Scheme to attract multi-national companies (including overseas and Mainland leading internet enterprises and Fintech companies) to set up offices and research and development (R&D) units in Cyberport. Cyberport will provide financial assistance to participating companies of the Easy Landing Scheme in renting offices in Cyberport. At the present stage, it is planned that each eligible company will receive rental concession of up to \$1 million per annum or 50% rental discount, whichever is less. The programme is expected to benefit at least 10 multi-national companies which will become Cyberport's anchor tenants and create synergies, contributing to the ecosystem of Cyberport and attracting more innovative digital tech companies to operate in Hong Kong.

In addition, Cyberport will roll out a new support scheme to help start-ups explore overseas and Mainland markets. Eligible start-ups will receive financial assistance up to \$200,000 to conduct market research and promotion, as well as participate in business missions, trade fairs and exhibitions etc. outside Hong Kong. The financial assistance is provided on a reimbursement basis. Companies eligible for the scheme include alumni of the Cyberport

Incubation Programme and the Cyberport Creative Micro Fund. The scheme is expected to benefit at least 250 start-ups.

To further facilitate the development of start-ups, Cyberport will increase the financial subsidy under the Cyberport Incubation Programme from \$330,000 to \$500,000 to assist start-ups in meeting the rising operating costs, strengthening manpower resources and marketing as well as enhancing R&D. In addition, to tie in with the launch of the new Smart-Space in Tsuen Wan, Cyberport will earmark sufficient resources for its 140 tenants to apply for funding under the Cyberport Creative Micro Fund so as to turn their innovative ideas into prototype as proof of their original concept.

The above initiatives are implemented by Cyberport and no Government administrative expenses are involved.

- End -

CONTROLLING OFFICER'S REPLY

ITB071

(Question Serial No. 5855)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (1) Director of Bureau's Office, (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

On promoting the development of e-sports, will the Government please advise the specific policies and programmes to be implemented to support the development of the e-sport sector apart from the allocation of \$100 million to Cyberport as well as the implementation timetables, the returns on investment (ROI), the responsible departments and service providers and the expenditures to be incurred in furtherance of the above policy objective in the coming 3 years?

Asked by: Hon TAM Man-ho, Jeremy (Member Question No. (LegCo use): 736)

Reply:

Hong Kong has the capability to develop e-sports, such as possession of advanced information and communications technology infrastructure, free movement of information, experience in hosting large-scale international competitions and many of our local players have won prizes in international competitions.

It has been announced in this year's Budget that \$100 million will be allocated to Cyberport to promote the development of e-sports, of which \$50 million will be used for developing the Cyberport Arcade into a local e-sports and digital entertainment node. The node will provide a dedicated e-sports venue equipped with advanced computers, audio-visual equipment and other peripherals as well as high-speed and stable network connection for the industry to host regular small to medium-scale e-sports competitions, activities and training. Cyberport will set up an experience corner in the Arcade and invite e-sports and digital entertainment industry to showcase related new technologies and e-sports products, raising the public understanding and interest in e-sports, game development and related technologies. The remaining \$50 million will be used for supporting development of the industry in the next 5 years, including organisation of local and regional competitions and

mega events, training programmes and public promotion activities. Cyberport will also improve its start-ups and talents development programmes, identify and equip the start-ups and talents relating to e-sports technologies and game development, and launch seminars, small-scale e-sports competitions and exhibitions on game history and products.

- End -

CONTROLLING OFFICER'S REPLY

ITB072

(Question Serial No. 6079)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (1) Director of Bureau's Office, (2) Innovation and Technology,
(3) Efficiency Office

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

On the Innovation and Technology Bureau's participation in the Government's review of procurement arrangements to include innovation and technology as tender requirements, what are the details of the requirements? Will priority be accorded to local innovation and technology small and medium start-ups? If yes, what are the criteria? If no, what are the reasons?

Asked by: Hon TAM Man-ho, Jeremy (Member Question No. (LegCo use): 730)

Reply:

The Efficiency Office is working with the Financial Services and the Treasury Bureau to review the procurement arrangements by including relevant requirements on innovation and technology to promote local technological innovation, on the premise of complying with the Government Procurement Agreement of the World Trade Organization. One of the study areas is how to facilitate greater participation of small and medium enterprises, including start-ups, in government procurement. The review is expected to be completed in the second quarter of 2018.

- End -

CONTROLLING OFFICER'S REPLY**ITB073****(Question Serial No. 6080)**Head: (135) Government Secretariat: Innovation and Technology BureauSubhead (No. & title): ()Programme: (1) Director of Bureau's Office, (2) Innovation and Technology,
(3) Efficiency OfficeControlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)Director of Bureau: Secretary for Innovation and TechnologyQuestion:

On the manpower of the Innovation and Technology Bureau, will the Government inform this Committee of the following:

- (a) Regarding the 11 posts to be created in 2018–19 under Programme (2) Innovation and Technology, what are their respective ranks, post titles, salaries and main duties?
(b) Regarding the increase of 2 posts in 2018–19 under Programme (3) Efficiency Office, what are their respective ranks, post titles, salaries and main duties?

Asked by: Hon TAM Man-ho, Jeremy (Member Question No. (LegCo use): 731)Reply:

The required information is provided below:

- (a) Details of the 11 posts to be created by the Innovation and Technology Bureau (ITB) under Programme (2) in 2018-19 are as follows:

Rank	No.	Salary of the respective rank (HK\$)	Work nature
Administrative Officer Staff Grade C (AOSGC)	1	\$164,500-\$179,850	To coordinate various smart city development projects and serve as the secretariat to the “Steering Committee on Innovation and Technology”.
Senior Systems Manager	1	\$107,870-\$124,280	

Rank	No.	Salary of the respective rank (HK\$)	Work nature
Analyst/Programmer I	1	\$53,300-\$67,065	
Executive Officer I	1	\$53,300-\$67,065	
Personal Secretary I	1	\$30,320-\$38,675	
Assistant Clerical Officer	1	\$14,140-\$28,865	
AOSGC	1	\$164,500-\$179,850	To promote the development of the “Hong Kong-Shenzhen Innovation and Technology Park” in the Lok Ma Chau Loop, the development of an international innovation and technology hub in the Guangdong-Hong Kong-Macao Bay Area, as well as manage the TechConnect (block vote).
Administrative Officer	1	\$50,900-\$101,070	
Personal Secretary I	1	\$30,320-\$38,675	
Executive Officer I	1	\$53,300-\$67,065	To strengthen administrative support.
Assistant Clerical Officer	1	\$14,140-\$28,865	
Total	11		

- (b) Details of the 2 posts to be created by the ITB under Programme (3) in 2018-19 are as follows:

Rank	No.	Salary of the respective rank (HK\$)	Work nature
Senior Management Services Officer	1	\$67,270-\$101,070	To strengthen the implementation of the Social Innovation and Entrepreneurship Development Fund.
Management Services Officer II	1	\$27,485-50,900	
Total	2		

- End -

CONTROLLING OFFICER'S REPLY**ITB074****(Question Serial No. 6125)**Head: (135) Government Secretariat: Innovation and Technology BureauSubhead (No. & title): ()Programme: Not SpecifiedControlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)Director of Bureau: Secretary for Innovation and TechnologyQuestion:

Please provide in table form (a) the respective types of computers, operating systems and antivirus softwares used by the all staff members each year; (b) the average number of computers replaced for each person and the percentage of recycling electronic waste since the establishment of the Innovation and Technology Bureau.

Asked by: Hon TAM Man-ho, Jeremy (Member Question No. (LegCo use): 739)Reply:

The requested information is provided as follows:

- (a) Information on the computers used by staff members of the Innovation and Technology Bureau (ITB) since its establishment is set out below:

Year	Type of Personal Computer	Operating System	Antivirus Software
2015-16	Desktop computer, laptop computer and tablet.	Microsoft Windows and iOS Mobile Operating System	Antivirus softwares procured through the Government's Standing Offer Agreements

Year	Type of Personal Computer	Operating System	Antivirus Software
2016-17	Desktop computer, laptop computer and tablet.	Microsoft Windows and iOS Mobile Operating System	Antivirus softwares procured through the Government's Standing Offer Agreements
2017-18	Desktop computer, laptop computer and tablet.	Microsoft Windows and iOS Mobile Operating System	Antivirus softwares procured through the Government's Standing Offer Agreements

- (b) The various types of computers set up since the establishment of the ITB are still in use. There is no need for replacement yet. All malfunctioning printers have been taken back by suppliers.

- End -

CONTROLLING OFFICER'S REPLY

ITB075

(Question Serial No. 1115)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): (000) Operational expenses

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

The provision under Programme (2): Innovation and Technology has increased by 675%. Will the Bureau advise this Committee of:

- (a) The expenditure on monitoring the implementation of the Hong Kong Science Park expansion and new Industrial Estate policy by the Hong Kong Science and Technology Parks Corporation to promote “re-industrialisation”. Please provide information.
- (b) The estimated expenditure on continuing to support the development of the Guangdong-Hong Kong-Macao Bay Area into an international innovation and technology hub in 2018-2019.
- (c) The estimated expenditure on co-ordinating the implementation of the initiatives in the Smart City Blueprint for Hong Kong.
- (d) The details of the plan and estimated expenditure on promoting and supporting bureaux and departments to open up more datasets.

Asked by: Hon TIEN Puk-sun, Michael (Member Question No. (LegCo use): 34)

Reply:

The information required is provided as follows:

- (a) The Government has been working closely with the Hong Kong Science and Technology Parks Corporation (“HKSTPC”) in promoting “re-industrialisation” and has revised the policy on Industrial Estates (“IEs”) in order to encourage smart production, attract high value-added technology industries, as well as high value-added manufacturing processes. HKSTPC is building a Data Technology Hub and an Advanced Manufacturing Centre in the Tseung Kwan O IE, which are expected to be

completed in 2020 and 2022 respectively. Stage 1 of the Hong Kong Science Park Expansion Programme has also been commenced to provide additional scientific research infrastructure to the industry, and is expected to be completed in 2020.

In 2018-2019, the overall estimated expenditure of the Innovation and Technology Bureau (“ITB”) is about \$590.2 million. ITB and the Innovation and Technology Commission will oversee HKSTPC’s work in promoting “re-industrialisation” with existing manpower and resources. A breakdown of the expenditure is not available.

- (b) In February 2018, we obtained the approval of the Finance Committee (“FC”) of the Legislative Council for the creation of 1 permanent Administrative Officer Staff Grade C (“AOSGC”) (D2) post in ITB, supported by 5 non-directorate officers, for handling issues including the development of an international innovation and technology (“I&T”) hub in the Bay Area, the Hong Kong-Shenzhen Innovation and Technology Park in the Loop and other I&T collaboration matters with the Mainland. In 2018-19, the estimate for the relevant salaries and expenses is about \$6.92 million.
- (c) In February 2018, we obtained the approval of FC to create a permanent AOSGC (D2) post in ITB, supported by 5 non-directorate officers, to head the Smart City Office and co-ordinate smart city development projects. In 2018-19, the estimate for the relevant salaries and expenses is about \$8.43 million.
- (d) The Office of the Government Chief Information Officer (“OGCIO”) is responsible for advocating and supporting bureaux and departments (“B/Ds”) to open up more data in digital forms via the government one-stop Public Sector Information Portal (data.gov.hk) to facilitate research and innovation. In 2018, OGCIO will first take forward the work in the areas of health, transport and education.

To take forward the work on open data and data analytics more effectively and at a quicker pace, we obtained FC’s approval in February 2018 for creating a permanent post of Chief Systems Manager (D1) in OGCIO, supported by 9 non-directorate officers, who is responsible for advocating and supporting B/Ds to open up and analyse data, as well as promulgating relevant government-wide practices and guidelines. In 2018-19, the relevant salaries and expenses are about \$8.8 million.

- End -

CONTROLLING OFFICER'S REPLY**ITB076****(Question Serial No. 5827)**

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: Not Specified

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Not Specified

Question:

In recent years, governments across the globe are opening up their data. For example, the Taiwan Government Open Data Portal makes available data, such as capacity of the metro systems, consumption of water and electricity, to the public for the research and development of useful mobile applications, which in turn helps the government reduce substantial manpower and expenditure. It is reported that Taiwan ranked 21st while Hong Kong ranked 24th in the Global Open Data Index 2017. Would the Government consider making more data available for public access gradually in a bid to encourage innovation and the production of more convenient mobile applications? If so, what are the details, the types of data to be released, and the measures to be adopted to encourage the opening up of more datasets by bureaux and departments? If not, what are the reasons?

Asked by: Hon TSE Wai-chun, Paul (Member Question No. (LegCo use): 87)

Reply:

The Office of the Government Chief Information Officer has been promoting and supporting various bureaux and departments to make available more data in digital form under the “data.gov.hk” portal so as to facilitate research and innovation. In 2018, we will take step to work in the areas of health, transportation and education. The data planned to be made available in 2018-19 include the list of local kindergartens participating in the Free Quality Kindergarten Education Scheme (Education Bureau), electric vehicles charging station locations in government car parks (Environmental Protection Department), water dispenser location (Leisure and Cultural Services Department), and excavation permits (Highways Department), etc.

The Government will continue to explain to public and private organisations that opening up of data can add value to their organisations and services/businesses, and actively encourage them to support the Government’s open data policy by making available data via the “data.gov.hk” portal for promoting wider innovative applications.

- End -

CONTROLLING OFFICER'S REPLY

ITB077

(Question Serial No. 5499)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (3) Efficiency Office

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding data analytics and open data, will the Government inform this Committee of any specific annual plan to facilitate the opening and sharing of real-time data through public-private collaboration for better service delivery to the public? Examples of such data include service frequencies and arrival times of bus companies, metered parking spaces and vacant parking spaces in public and private car parks, consolidated waiting times for accident and emergency departments in public and private hospitals, etc. If there is such a plan, what are the details? If not, will the Government formulate relevant policies and implementation schedules?

Asked by: Hon WONG Kwok-kin (Member Question No. (LegCo use): 45)

Reply:

In consultation with the Transport and Housing Bureau (THB) and the Food and Health Bureau (FHB), our consolidated reply is as follows:

The data owned by private organisations are their assets with commercial or business value. Whether to open up such data or not is entirely their commercial decision. According to the THB, as for public transport operators, currently some franchised bus companies, the MTR Corporation and the Hongkong Tramways have already been providing passengers with free real-time arrival information through their websites, smartphone applications and display panels installed at bus stops / platforms. Franchised bus companies and the Transport Department (TD) also join hands in providing real-time bus arrival information through the Department's "Hong Kong eTransport" smartphone application and website. Furthermore, franchised and licensed ferry operators are providing basic service information at the piers and through websites or smartphone applications. The Government will continue to liaise with the operators and encourage them to support the Government's overall policy on open

data by opening up their data under the “data.gov.hk” portal to facilitate more innovative use.

For public car parks, the TD has all along been encouraging operators to provide real-time information on parking vacancies of their car parks to the public through the TD’s “Hong Kong eRouting” mobile application and the “data.gov.hk”. Such information will help motorists find parking spaces more easily and alleviate the traffic congestion caused by vehicles circulating on roads in search of available parking spaces. At present, the “Hong Kong eRouting” provides real-time parking vacancy information of some 70 government and commercial public car parks. The TD will examine practicable measures to require newly built public car parks or fee paying public car parks under short term tenancies to make available real-time parking vacancy information, and will introduce to car park operators practical technology solutions for providing real-time information on parking vacancies, so as to help them adopt suitable solutions in collecting and disseminating relevant data.

As for on-street parking space, the TD is planning to progressively install a new generation of parking meters starting from 2019-20. The new meters not only allow motorists to pay their parking fees through multiple means, including remote payment through mobile applications, but are also equipped with vehicle sensors to detect whether a parking space is occupied. The relevant real-time information will be disseminated via TD’s mobile application and website, facilitating motorists in finding vacant parking spaces. In addition, relevant information will be uploaded to “data.gov.hk” for use and reference by the public and the technology industry.

FHB has advised that the Hospital Authority (HA) has been publishing various platforms (such as HA’s website and smartphone application, as well as the display monitors at A&E registries) the waiting time at all public hospitals’ accident and emergency (A&E) departments since December 2016. The information is updated every 15 minutes. In doing so, the public can have an idea of the situation of the A&E departments before they go there or register. Moreover, the HA will continue to develop its Application Programming Interface regarding waiting time, so as to provide the public with a further channel to obtain such information.

- End -

CONTROLLING OFFICER'S REPLY

ITB078

(Question Serial No. 0991)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

The revised expenditure for Innovation and Technology (I&T) for 2017-18 is \$40 million. It is far lower than the original estimate of \$162.7 million, with a decrease of 75.4%. What are the reasons for such a decrease?

Meanwhile, the estimated expenditure for I&T for 2018-19 is \$310.1 million. It is 675.3% higher than the revised expenditure for 2017-18. What is the specific breakdown of the additional expenditure? Will the revised actual expenditure for 2017-18 be far lower than the estimated expenditure again?

Asked by: Hon WONG Ting-kwong (Member Question No. (LegCo use): 9)

Reply:

The revised estimate of the Innovation and Technology Bureau under Programme (2) for 2017-18 is lower than the original estimate. The main reasons include:

- (a) the cash flow requirement of the Innovation and Technology Fund for Better Living is lower than expected; and
- (b) the staff related expenses are lower than expected because some of the posts created have not been filled.

The estimated expenditure for 2018-19 is \$270.1 million higher than the revised estimate for 2017-18. The main reasons include:

- (a) Provision of \$110 million being the cash flow requirement of the Innovation and Technology Fund for Better Living to finance projects which improve Hong Kong

people's daily life through adoption of innovation and technology;

- (b) Provision of \$110 million being the cash flow requirement of the TechConnect (block vote) to provide funding support to bureaux/departments for implementing projects which improve public service or enhance operation efficiency by the adoption of technology; and
- (c) An increase of about \$33 million in salaries and general departmental expenses for the creation of 11 new posts and the transfer of 10 posts from the Office of the Government Chief Information Officer.

The actual expenditure for 2018-19 will be depend upon the operation and progress of the above fund and block vote, as well as the progress of filling created post concerned.

- End -

CONTROLLING OFFICER'S REPLY

ITB079

(Question Serial No. 0408)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

The matters requiring special attention include “supporting the work of the Steering Committee on Innovation and Technology, and the Committee on Innovation Technology and Re-industrialisation”.

1. Since the establishment of the Committee on Innovation Technology and Re-industrialisation, how many meetings have been convened beside the one held on May 2017? Are there any development strategies or work priorities regarding “innovation technology and re-industrialisation” put forward at these meetings?

2. How many meetings will be convened by the Committee on Innovation Technology and Re-industrialisation in 2018? Will there be any work objectives or plans?

3. Given the establishment of the Steering Committee on Innovation and Technology as announced by the Chief Executive in the Policy Address, what is the division of work between the Committee on Innovation Technology and Re-industrialisation and the Steering Committee?

4. What is the specific work of the Innovation and Technology Bureau (ITB) in supporting the Steering Committee? For example, will it become the secretariat of the Steering Committee? Does the ITB know whether the Steering Committee has any work schedule or specific policy objectives at the moment?

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 16)

Reply:

The requested information is provided below:

1 and 2. The Committee on Innovation, Technology and Re-industrialisation (CITR) was established in April 2017. It convened 4 meetings in total in May, August and October 2017 and in January 2018 to discuss the latest scene of innovation and technology (I&T) development in Hong Kong, its work focuses and various I&T topics including enhanced tax deductions for research and development (R&D) expenditure, education of I&T talent, attracting outside R&D institutions to Hong Kong, supporting local start-up development, electronic payment, development of e-sports and the smart city blueprint. The agenda and frequency of meeting depend upon the actual situation and needs. It is anticipated that 4 meetings will be convened in 2018 to continue to advise the Government on matters pertaining to the promotion of I&T development in Hong Kong and re-industrialisation.

3. The Steering Committee on Innovation and Technology (SCIT) is an internal government committee chaired by the Chief Executive with membership comprising the majority of the Government Secretaries as well as the relevant department heads. The CITR is an advisory body with membership comprising government representatives and stakeholders in the I&T and industrial sectors. The CITR will continue to listen to views of its members from different sectors on taking forward I&T development.

4. The SCIT was established at the end of 2017 with secretariat support provided by the Innovation and Technology Bureau. The SCIT convened meetings in December 2017 and March 2018 respectively. It is anticipated that it will meet on a quarterly basis to examine and steer I&T measures and smart city projects, as well as to allocate relevant resources.

- End -

CONTROLLING OFFICER'S REPLY

ITB080

(Question Serial No. 0415)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding “continuing to monitor the implementation of initiatives of the Hong Kong Science and Technology Parks Corporation (HKSTPC) in promoting research and development (R&D) and ‘re-industrialisation’ ”,

1. what are the respective letting rates of the Science Park and Industrial Estates under HKSTPC? How many tenants do the Science Park and Industrial Estates have? Please provide the number of tenants by industry sector and place of origin;
2. has HKSTPC or the Government conducted surveys on the funding activities of companies in the Science Park? How many companies have completed series A, B, C and D rounds of funding in each of the past 5 years?
3. have surveys on the estimated market value of companies in the Science Park been conducted? How many unicorns, companies with an estimated value of over US\$1 billion, are there in the Science Park? Please provide particulars by the value of these companies;
4. apart from disclosing the above funding activities and market value of their tenants, many high-tech industrial parks in the Mainland also provide information such as the net profit and output of their tenants. Has HKSTPC or the Government conducted surveys on activities carried out by companies in the Science Park? For example, the number of patents registered, the number of products put on the market, as well as the gross output of the entire Science Park?
5. what indicators are used by the Government and ITB to monitor the performance of HKSTPC and gauge the effectiveness of the Science Park? In view of the significant increase of funding allocation to the HKSTPC as announced in the Budget, will new indicators be put in place to gauge its effectiveness? If yes, what are the details?

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 17)

Reply:

The required information is provided as follows:

1. As at end February 2018, the letting rates of Science Park Phases 1, 2 and 3 are 90.7%, 82.7% and 78.8% respectively and the overall letting rate is 84.6%. The land leasing rates of Tai Po, Yuen Long and Tseung Kwan O Industrial Estates are 100%, 96% and 89% respectively and the overall leasing rate is 95%.

As at end February 2018, there are 659 tenants and incubatees in the Hong Kong Science and Technology Parks Corporation (HKSTPC). The breakdown by 5 key clusters is as follows:

5 key clusters	Tenant	Incubatees	Total
Information and communications technology	123	150	273
Electronics	101	67	168
Biomedical technology	81	18	99
Material and precision engineering	47	14	61
Green technology	42	9	51
Others (professional services companies)	7	0	7
Total	401	258	659

Operators in the Industrial Estates, by industry, are as follows:

Industry	Number
Food and beverages	31
Others (e.g. building materials, chemical and gases, electronics parts and paper packaging)	29
Biotechnology and pharmaceutical	23
Support services	15
Information and telecommunication	14
Machinery and Parts	12
Printing and publishing	11
Metal parts and products	8
Plastic resins and plastics products	7
Green technology	5
Broadcasting	4
Total	159

Tenants and incubatees of the HKSTPC are mainly Hong Kong companies. The 484 Hong Kong companies account for about 73% of all tenants. There are 69 companies

from the Mainland and Taiwan, which account for about 11% of the total. There are 106 overseas companies, which account for about 16% of the total.

Operators of the Industrial Estates are mainly Hong Kong companies. The 99 Hong Kong companies account for about 62% of all tenants. There are 13 Mainland companies, which account for about 8% of the total. There are 47 overseas companies, which account for about 30% of the total.

2. According to the statistics provided by the HKSTPC, the respective numbers of financing transactions in the past 5 years are as follows:

Year	Number of financing transactions
2013-14	7
2014-15	20
2015-16	26
2016-17	22
2017-18 (as at end-December 2017)	19

The HKSTPC does not have a breakdown on series A to D rounds of funding.

3. Presently, there is 1 unicorn company with a valuation exceeding US\$1 billion in the Science Park. The HKSTPC is not in a position to disclose the market valuation of individual companies.
4. In 2017-18, tenants of the HKSTPC registered about 33 patents on intellectual property right and launched about 132 products to the market with a total production value of about \$100 million. Moreover, the HKSTPC incubated 258 start-ups which registered 27 patents on intellectual property right, obtained 58 awards and over \$221 million of angel investments and venture capital in the past year.
5. The Science Park is the flagship technology infrastructure in Hong Kong which contributes to the development of innovation and technology (I&T) in Hong Kong by providing facilities and supporting services to I&T enterprises and for science and research. The Government has not set any quantitative targets for the performance of the HKSTPC. However, we will continue to monitor the progress of its various aspects of work through participation in its board of directors.

- End -

CONTROLLING OFFICER'S REPLY

ITB081

(Question Serial No. 0490)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Secretary for Innovation and Technology (S for IT) put forth 9 work priorities upon the establishment of the Innovation and Technology Bureau (ITB). Subsequently, in early 2017, the Innovation and Technology Advisory Committee published a report, setting out a number of objectives related to innovation and technology work, such as raising the domestic expenditure on research and development (R&D) as a percentage of the Gross Domestic Product to 1%. Later on, the Chief Executive proposed a new goal on domestic expenditure on R&D in the Policy Address.

1. What is the progress of the 9 work priorities put forth by S for IT since the establishment of ITB?
2. As the S for IT and the Chief Executive keep renewing the work objectives, what are the changes in the work objectives set out in the report of the Innovation and Technology Advisory Committee?
3. What are the latest work objectives of ITB? Please provide the details by project, such as the subject matters involved, details of the objectives and current progress.

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 95)

Reply:

A consolidated reply to the various parts of the question is given as follows:

The Innovation and Technology Bureau (ITB) put forth 9 work priorities after its establishment in November 2015. Since then, we have been actively taking forward the related work and promoting innovation and technology (I&T) development in Hong Kong by drawing reference to the recommendations of the Advisory Committee on Innovation and Technology.

In the past 2 years, we implemented a number of new initiatives in promoting research and development (R&D), investing in I&T infrastructures, promoting “re-industrialisation”, supporting technology start-ups, advocating the application of technology, taking forward the development of smart city and fostering an I&T culture. Examples include:

- Launching a \$2 billion “Midstream Research Programme” to encourage universities to collaborate with leading research institutions worldwide to conduct more midstream researches;
- Signing a Memorandum of Understanding with the Shenzhen Municipal People’s Government to jointly develop the Lok Ma Chau Loop into “Hong Kong-Shenzhen I&T Park” with a key base for cooperation in scientific research;
- Taking forward the InnoCell project for the provision of residential units adjacent to the Science Park to attract technology talents;
- Implementing the Hong Kong Science Park expansion, devising new Industrial Estate policy and constructing the Advanced Manufacturing Centre and the Data Technology Hub to promote “re-industrialisation”;
- Establishing Inno Space through Hong Kong Productivity Council to nurture a start-up culture in Hong Kong and support “re-industrialisation”;
- Setting up a \$2 billion “Innovation and Technology Venture Fund” to stimulate private investment in local I&T start-ups;
- Introducing a \$500 million “Technology Voucher Programme” to subsidise local small and medium enterprises in using technological services and solutions to improve productivity, and upgrade or transform their business processes ;
- Launching the \$500 million “Innovation and Technology Fund for Better Living” to support projects applying I&T to improve people’s daily life or address the needs of specific community groups;
- Kicking start a \$500 million TechConnect (block vote) to support government departments to enhance service quality with the use of technology; and
- Devising and publishing the Smart City Blueprint for Hong Kong to outline the development plan of smart city in the coming 5 years.

The Chief Executive proposed in the Policy Address in October 2017 that the Government would step up its efforts to develop I&T in 8 major areas, outlining clear directions for our work. The Chief Executive also set a goal to double the Gross Domestic Expenditure on R&D as a percentage of the Gross Domestic Product to 1.5%. The ITB will actively follow up and implement as soon as possible the initiatives announced in the Policy Address and the Budget 2018-19, including the provision of enhanced tax deduction for R&D expenditure; launching a \$500 million “Technology Talent Scheme”; injection of \$10 billion into the “Innovation and Technology Fund” to continue to support applied R&D work in Hong Kong; and supporting the establishment of two research clusters on healthcare technologies and on artificial intelligence and robotics technologies to further promote I&T development.

- End -

CONTROLLING OFFICER'S REPLY

ITB082

(Question Serial No. 0668)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

Please advise on the following regarding “oversee[ing] the setting up of key technology clusters to foster collaboration with Mainland and overseas science and research institutions”:

1. What are the details of the plan to set up two technology clusters? For example, how will the funding of \$10 billion be utilised? When will the plan be officially launched? What are the incentives to encourage science and research institutions to set up offices in Hong Kong? What are the details of the vetting mechanism?
2. What does the Government expect to achieve with the funding of \$10 billion? Will there be any measuring indicators, such as the number of overseas top-notch technology companies attracted to Hong Kong, the amount invested in Hong Kong by them, or the number of science and research talent employed?
3. Are there any companies showing interest in joining the clusters? If yes, what are the details?
4. It is noted that the Science Park has been taking up tasks related to “foster[ing] collaboration with Mainland and overseas science and research institutions”. What are the manpower and ranks of officers deployed to carry out relevant tasks in the Government and the expenditure involved?

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 35)

Reply:

A consolidated reply to various parts of the question is as follows:

To promote innovation and technology development in Hong Kong, the Government is working on the establishment of two research clusters on healthcare technologies and on artificial intelligence and robotics technologies, in order to attract the world's top scientific research institutions and technology enterprises to Hong Kong for conducting more research

and development (R&D) projects in collaboration with local universities and scientific research institutions. Such clusters will pool and nurture more technology talent in Hong Kong. To this end, we have earmarked \$10 billion to provide financial support for non-profit-making scientific research institutions that will establish their presence in these two clusters. These clusters are expected to be established in 2019-20, with 5 to 6 scientific research institutions at the initial stage.

The overall estimated expenditure of the Innovation and Technology Bureau for 2018-19 is about \$590.2 million. The work on promoting co-operation with the Mainland and overseas R&D institutions will be carried out jointly with the Innovation and Technology Commission with existing manpower and resources. No breakdown of expenditure on such work is available.

- End -

CONTROLLING OFFICER'S REPLY

ITB083

(Question Serial No. 0669)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding “continuing to promote the adoption of innovation and technology within the Government to improve the provision of public services”, please provide the following information:

1. the new technologies adopted by Government departments to improve the provision of public services since the establishment of the Innovation and Technology Bureau (ITB) with a breakdown by department, the public services provided, the technology adopted and the number of members of the public who have benefited from this;
2. details of the application of technologies expected to be promoted within the Government in the coming year; and
3. the staffing establishment, ranks and staff cost involved in the above-mentioned work since the establishment of the ITB, and the changes (if any) in the estimates for 2018-19.

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 36)

Reply:

The information required is provided below:

- (1) and (2) The Innovation and Technology Bureau (“ITB”) established the TechConnect (block vote) in mid-2017 to assist different Government departments in implementing technology projects, with a view to enhancing operational efficiency and improving public services. The internal committee responsible for vetting applications has supported funding for 24 technology projects with details as follows:

Department	Project Title	Technology(ies) Adopted	Target group
Agriculture, Fisheries and Conservation Department	Pilot Project of Real-time Phytoplankton Taxa Monitoring System	Internet of Things /Sensors	Mariculturists and general public
Buildings Department	The use of advanced technological testing methods to assist water seepage investigation in buildings	Microwave tomography/ Infrared Scanning & Imaging	General public
Customs and Excise Department	“Smart Crossing” - deployment of Radio-frequency Identification (RFID) technology on the recognition of licence plate numbers of cross-boundary private cars	Radio-frequency Identification	Organisations and individuals using cross-boundary private cars
	A study on the development of a “Cargo Big Data System”	Big Data/Artificial Intelligence	General public
Civil Engineering and Development Department	Provision of mobile applications to promote smart mobility, sustainable leisure and recreation information of Lantau	Geographic Information System /Global Positioning System /Augmented Reality	General public and visitors
Department of Health	Feasibility Study for the Implementation of a Digitalised Chinese Medicines Herbarium	3D Scanning & Modelling	General public
Drainage Services Department	Provision of ultrasonic sludge pre-treatment facilities at the Tai Po Sewage Treatment Works	Advanced Environmental Technology	General public
	Smart Sewerage Monitoring System	Internet of Things/Sensors/Geographic Information System/ Global Positioning System	
	Retrofitting the SANI small scale plant at the Shatin Sewage Treatment Works	Advanced Environmental Technology	
	Pilot Study to Investigate Rainfall Infiltration in existing Sewerage Systems in Urban Area	Internet of Things/Sensors/Geographic Information System/ Global Positioning System	

Department	Project Title	Technology(ies) Adopted	Target group
Energizing Kowloon East Office, Development Bureau	To conduct a feasibility study to monitor illegal parking / stopping by utilising video analytics and to conduct a pilot trial at Kowloon East	Artificial Intelligence/Machine Learning/Video Analysis	General public
Environmental Protection Department	Air pollution Sensor Practicality Trial	Internet of Things /Sensors	Academia, professional associations and general public
Housing Department	Develop the Technology to Produce Plans for Statutory Submission from the Building Information Modelling	Building Information Modelling	Professional consultants and construction sector
Hong Kong Observatory	Integrated urban weather monitoring and data-sharing platform for smart cities	Internet of Things /Sensors	Academia, professional associations, public utility companies and general public
Hong Kong Police Force	E-statement (Speech Recognition) and Data Mining System (EDMS)	Big Data/Speech Recognition	General public
	Radio-frequency Identification (RFID) System for management of affected people during major incidents	Internet of Things/Radio-frequency Identification	
	Video Explorer	Video Analysis	
	Automation of Cybercrime Capturing, Categorization and Correlation (AC4)	Big Data/Artificial Intelligence	
	Advanced Image Processing System	Video Analysis	
Leisure and Cultural Services Department	Non-invasive conservation studies of art and antiquities with innovative imaging technologies	X-Ray Scanning & Imaging	Academia, researchers, general public and visitors
	Non-invasive conservation studies of cultural heritage with X-ray computed tomography	X-Ray Scanning & Imaging	
Office of the Government	Pilot Cyber Security Information Sharing	Big Data/Artificial Intelligence	Information technology

Department	Project Title	Technology(ies) Adopted	Target group
Chief Information Officer	Partnership Programme		sector, organisations and general public
Water Supplies Department	Provision of In-line Hydropower Harnessing Device for Water Intelligent Network	Advanced Engineering Technology	General public
	Study on Anti-corrosion and Anti-biofouling Coating for Enhancing Water Pump Efficiency	Advanced Engineering Technology	

Some of the above projects have commenced in the 2017-18 financial year, while the remaining will be launched in the 2018-19 financial year. Meanwhile, the ITB plans to invite a new round of applications from departments in mid-2018.

- (3) To implement the TechConnect (block vote), the ITB created 8 non-directorate time-limited posts in 2017-18 (including 1 Senior Executive Officer, 1 Executive Officer I, 1 Executive Officer II, 1 Treasury Accountant, and 1 Personal Secretary I, as well as 3 Assistant Clerical Officers. As some of the posts were yet to be filled, the 2017-18 annual salary expenditure of relevant posts was about \$1.19 million. In 2018-19, the estimated expenditure is about \$3.64 million.

- End -

CONTROLLING OFFICER'S REPLY

ITB084

(Question Serial No. 3575)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding “promoting collaboration with Mainland and overseas science and research institutions” as well as attracting Mainland and overseas innovation and technology (I&T) companies to invest in Hong Kong:

1. What are the manpower and estimated expenditure required by the Hong Kong Science and Technology Parks Corporation (HKSTPC) and the Innovation and Technology Bureau (ITB) for the above work each year? In each of the past 3 years, how many Mainland and overseas companies have been successfully attracted to invest in Hong Kong?
2. At present, Invest Hong Kong under the Commerce and Economic Development Bureau, the Hong Kong Trade Development Council and other organisations are also responsible for investment promotion. How does the ITB co-operate with them? For example, did the ITB invite specific sector or enterprise to put forward recommendations?
3. Apart from “setting up key technology clusters”, what other strategies or measures will be put in place by the HKSTPC or the ITB in the coming year to attract Mainland and overseas I&T companies to Hong Kong?

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 123)

Reply:

The consolidated reply to the various parts of the question is as follows:

The Innovation and Technology Bureau (ITB) is committed to promoting co-operation between Hong Kong and the Mainland and overseas countries in the area of innovation and technology (I&T). Through the joint efforts of different stakeholders, several scientific research institutions from the Mainland and overseas established their presence in Hong Kong one by one in the past three years. These include the first overseas Innovation

Node set up by the Massachusetts Institute of Technology, the first overseas Centre for Reparative Medicine by the Karolinska Institutet from Sweden, and the Guangzhou Institutes of Biomedicine and Health Hong Kong Centre by the Guangzhou Institutes of Biomedicine and Health under the Chinese Academy of Sciences.

As at February 2018, there were a total of 175 Mainland and overseas tenants and incubatees in the Hong Kong Science and Technology Parks Corporation (HKSTPC), representing an increase of 14 compared with 3 years ago. The details of the statistics are set out below:-

	2015	2016	2017	2018
Number of Mainland and overseas tenants and incubatees in HKSTPC	161	178	172	175

To promote I&T development in Hong Kong, the Government has earmarked \$10 billion to support the establishment of two research clusters, one focusing on healthcare technologies and the other on artificial intelligence and robotics technologies, so as to attract top-tier scientific research institutions and technological enterprises to Hong Kong. We will provide financial support to non-profit-making scientific research institutions that will establish their presence in these two clusters. To further reinforce and develop our research and development (R&D) capabilities, the Government will also allocate \$10 billion to HKSTPC. Of this, \$3 billion will be used to construct research-related infrastructure and facilities which include: converting a building at HKSTPC to provide laboratories as well as constructing small batch experimental production facility and robot test facility. The remaining \$7 billion will be spent on enhancing support services such as expanding HKSTPC's Corporate Venture Fund and incubation programmes, attracting international technological enterprises to establish their presence in Hong Kong, setting up a Smart Campus and improving the facilities in the Science Park.

Furthermore, Hong Kong and Shenzhen has signed the "Memorandum of Understanding on Jointly Developing the Lok Ma Chau Loop by Hong Kong and Shenzhen" to jointly develop the Lok Ma Chau Loop into "Hong Kong-Shenzhen Innovation and Technology Park". With I&T as the main focus, a key base for collaboration in scientific research, and relevant higher education, cultural and creative and other complementary facilities will be set up in the Park. The afore-mentioned measures will help attract top enterprises and scientific research institutions from the Mainland and overseas.

With the above measures, we hope to attract renowned R&D enterprises and institutions from overseas or the Mainland to Hong Kong, provide more software and hardware support for the local I&T sectors and start-ups and encourage more R&D activities, thereby progressively increasing the ratio of gross expenditure on R&D as a ratio of the Gross Domestic Product, creating employment opportunities and nurturing I&T talents.

In addition, HKSTPC has actively engaged institutions from the Mainland and overseas to expand its technology ecosystem. It will also host and participate in technology seminars and exhibitions in other places to showcase the I&T results of the companies in the Park and promote its facilities and support services.

The ITB will collaborate with Invest Hong Kong and the Economic and Trade Offices in the Mainland and overseas to promote Hong Kong's latest I&T situation and opportunities, including making use of their networks to provide related scientific research institutions, universities and enterprises with updated information on Hong Kong's I&T policies, thereby encouraging these establishments to develop in Hong Kong.

The overall estimated expenditure of the ITB for 2018-19 is about \$590.2 million. On promoting the collaboration between Hong Kong and top global scientific research institutions, the ITB will take forward the work with its departments using existing manpower and resources. A breakdown of the expenditure in these work is not available.

- End -

CONTROLLING OFFICER'S REPLY

ITB085

(Question Serial No. 3577)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): (700) General non-recurrent

Programme: Not Specified

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

What are the details of Item 033 “Managing for results at departmental level to support delivery of policy objectives” under Subhead 700 General non-recurrent? The approved commitment is \$5 million, while the accumulated expenditure as at 31 March 2017 is about \$4 million. What is the breakdown of the said \$4 million? How will the Government deal with the balance of \$876,000?

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 127)

Reply:

The \$5 million commitment for Item 033 under Subhead 700 was approved in 1999-2000 to assist departments in studying the use of target-based management for results to improve the quality of public services and support the delivery of policy objectives. The accumulated expenditure of Item 033 is \$4.124 million with no new expenditure incurred over the past 5 years. Following the principle of applying design thinking on improving public services and enhancing effectiveness as mentioned in the Policy Address, the Efficiency Office will spend the remaining \$0.876 million on projects related to design thinking in 2018-19.

- End -

CONTROLLING OFFICER'S REPLY

ITB086

(Question Serial No. 3606)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

As regards land use for innovation and technology (I&T) and re-industrialisation, Hong Kong 2030+ projects that land requirement for industrial-related uses is 248 hectares whereas the estimated land supply is only 81 hectares. By 2030, there will be a shortfall of land supply of 167 hectares.

1. How much land, including those for such projects as industrial estates, Cyberport and Science Park, are currently used for I&T and re-industrialisation? Please provide details by land location;
2. What are the short and long-term land requirements for I&T development and re-industrialisation as assessed by the Innovation and Technology Bureau,?
3. Taking into account new development projects such as the Lok Ma Chau Loop, what is the Bureau's estimated land supply for I&T and re-industrialisation by 2030? Can the need be met?
4. Are there changes in the details of land earmarked for I&T and re-industrialisation purposes previously provided to committees of the Legislative Council by the Bureau? Please provide updated information by land location, area and expected date of development.

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 154)

Reply:

A consolidated reply to the various parts of the question is given below:

The Government actively identifies land to dovetail with the development of innovation and technology (I&T) and to provide the necessary operating space for the development of the sector. Presently, land reserved for I&T uses include sites for short, medium and long-term

development. The Innovation and Technology Bureau will review the sites reserved for I&T uses with the Development Bureau taking into account the latest position as and when appropriate. In fact, a total of 84.8 hectares of reserved land, including 74 hectares in Lung Kwu Tan and 10.8 hectares in Tuen Mun Area 38, was released last year in the light of the development of the Lok Ma Chau Loop.

Details of sites currently reserved for I&T uses are as follows:-

	Site	Approximate site area planned for I&T uses	Latest position
Sites already granted to the Hong Kong Science and Technology Parks Corporation (HKSTPC), or to be granted to HKSTPC with development concepts (about 97.8 hectares in total)			
1.	Remaining sites within the Industrial Estates in Tseung Kwan O, Yuen Long and Tai Po	10.5 hectares	The sites will be developed by the HKSTPC according to the re-industrialisation policy.
2.	Government land at the junction of Chong San Road and Science Park Road, Pak Shek Kok, Tai Po	0.28 hectares	HKSTPC will construct an InnoCell to provide residential units with flexible design and ancillary facilities for leasing to the tenants and incubatees of Hong Kong Science Park for their principals, employees or visiting researchers from the Mainland or overseas. The development is expected to be completed in 2021.
3.	Lok Ma Chau Loop	87 hectares	Subject to funding approval of the Legislative Council in the first half of 2018, the advance works and detailed design of the main works package 1 will commence in mid-2018. If the works progress smoothly, it is expected that the first batch of land parcels can be made available to the Hong Kong-Shenzhen Innovation and Technology Park Limited by 2021 for the construction of the superstructure and related facilities.
Sites approved for I&T uses under Outline Zoning Plans (about 26.5 hectares in total)			
4.	Kwu Tung North New Development Area	17.5 hectares	The site has been zoned as “Other Specified Uses” on the Outline Zoning Plan (annotated “research and development”) (5.8 hectares) and “business and technology park” (11.7 hectares).

	Site	Approximate site area planned for I&T uses	Latest position
5.	Hung Shui Kiu New Development Area	9 hectares	The site has been reserved for I&T related development on the Outline Zoning Plan.
Sites subject to further study (about 105 hectares in total)			
6.	Yuen Long Industrial Estate Extension at Wang Chau	15 hectares	According to the planning and engineering study completed by HKSTPC in February 2014, the site was technically feasible for developing the industrial estate extension.
7.	Site near Liantang / Heung Yuen Wai Boundary Control Point	56 hectares	According to the preliminary planning study commissioned by HKSTPC, the site is technically feasible for the development of science park and industrial estates.
8.	New Territories North (NTN)	34 hectares	Several sites located in the Potential Development Areas in the NTN have been identified as having potential for I&T-related development in the Preliminary Feasibility Study on Developing the NTN. Detailed development plans for the identified sites are to be further studied.

- End -

CONTROLLING OFFICER'S REPLY

ITB087

(Question Serial No. 3620)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

As regards “formulating policies to support the use of local technology products and service”:

1. What are the details of the above work? What relevant policies are expected to be introduced this year?
2. How will the Bureau encourage other government departments to incorporate technology elements in policy formulation given the widely use of technology overseas to replace human in street management or elderly services, or for strengthening of monitoring or improving work efficiency? Will it, for example, join with the departments concerned to review the existing government procurement guidelines?
3. What policy will the Bureau formulate to achieve its objectives as far as the private market is concerned?
4. Will the Bureau provide indicators for the above work to evaluate the effectiveness of the work?

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 168)

Reply:

Our consolidated reply to the various parts of the question is as follows:

The Efficiency Office and the Financial Services and the Treasury Bureau are now working together to conduct a joint review on the existing Government procurement arrangements to see how the procurement processes can be further improved in compliance with the Agreement on Government Procurement of the World Trade Organisation. The inclusion of innovation and technology as a tender requirement will be explored to encourage

potential corporate tenderers to invest in R&D, so as to promote local technological innovation.

As far as the private market is concerned, the Innovation and Technology Commission provides funding support to R&D projects through the Public Sector Trial Scheme (“PSTS”) under the Innovation and Technology Fund. The funding scope of the PSTS also covers incubatees and graduate tenants of the Hong Kong Science and Technology Parks Corporation and Cyberport, enabling them to produce prototypes/samples of their R&D results or products/services and conduct trials in the public sector, so as to facilitate the commercialisation of local R&D results. As at the end of January 2018, PSTS has provided funding support to 165 projects, involving a total funding of over \$270 million and over 240 participating organisations in the trials.

- End -

CONTROLLING OFFICER'S REPLY

ITB088

(Question Serial No. 5298)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned in the Budget that \$20 billion will be used on the first phase of the Hong Kong-Shenzhen Innovation and Technology Park in the Lok Ma Chau Loop. Please advise this Committee of the project estimates, commencement dates, completion dates and anticipated overrun amounts for the 4 areas, i.e. site formation, infrastructure, superstructure and initial operation.

Asked by: Hon YEUNG Alvin (Member Question No. (LegCo use): 59)

Reply:

The \$20 billion earmarked for the development of the Hong Kong-Shenzhen Innovation and Technology Park (the Park) in the Lok Ma Chau Loop (the Loop) will be partly used by the Civil Engineering and Development Department to fund site formation and infrastructure works under the Main Works Package 1 (MWP1), and partly used to support the Hong Kong-Shenzhen Innovation and Technology Park Limited (HSITPL) in the first stage of superstructure construction as well as the initial operation of the Park. As the Loop is a sizable undeveloped land without any infrastructure, we expect the funding required for the Loop development as a whole will far exceed \$20 billion. The HSITPL is conducting Master Planning Study and Business Model and Business Planning Study for the Park's development. Both studies are expected to be completed in early 2019. Upon the completion of the studies, we will make reference to the findings of the studies and further estimate the development cost of the Loop.

As for the development timeframe, we are seeking the Legislative Council (LegCo)'s funding approval for about \$780 million for the Advance Works and the detailed design of the MPW 1. Subject to the LegCo's funding approval in the first half of 2018, the Advance Works are expected to commence in mid-2018 the earliest. If the works progress smoothly, it is envisaged that the first batch of land parcels can be handed over to HSITPL for development of superstructure and associated facilities as early as by 2021 or before.

- End -

CONTROLLING OFFICER'S REPLY

ITB089

(Question Serial No. 1773)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Government is committed to establish Hong Kong as a smart city by carrying out the smart city consultancy and proof-of-concept trials, and using Kowloon East as a test bed to explore the feasibility of developing a smart city. As such, will the Government inform this Committee of:

- (a) The smart city initiatives implemented in Hong Kong, their effectiveness and expenditure involved;
- (b) The specific initiatives, manpower arrangement and estimated expenditure regarding the “proof-of-concept trials”;
- (c) The short, medium and long-term smart city initiatives as planned by the Government and the estimated expenditures involved.

Asked by: Hon YICK Chi-ming, Frankie (Member Question No. (LegCo use): 33)

Reply:

The requested information is provided below:

- (a)&(c) The Government published the Smart City Blueprint for Hong Kong in December 2017, outlining the vision and mission to build Hong Kong as a world-class smart city. The blueprint also maps out development plans in the next 5 years, providing a clear and specific direction for smart city development in Hong Kong. As smart city involves different areas of work, bureaux and

departments will draw up their timetables for implementing various initiatives and draw up their estimates for the financial resources and manpower required.

Regarding the projects under the Innovation and Technology Bureau (ITB), we consulted the Panel on Information Technology and Broadcasting of the Legislative Council in March this year about the 3 key infrastructure projects for smart city development. The estimated non-recurrent cost of the eID project is \$112 million. The estimated expenditure of the “Multi-functional Smart Lampposts” Pilot Scheme is about \$272 million. The “Next Generation GovCloud and the Big Data Analytics Platform” project incurs a non-recurrent cost of \$533.3 million.

- (b) According to the Development Bureau, the consultancy study on smart city development commissioned by the Energizing Kowloon East Office (EKEO) has proposed 8 proof of concept trials for implementation. EKEO will deploy existing manpower resources to manage the relevant trials. The respective expenditures involved are as follows:

	Proof of Concept (PoC) Trials in Kowloon East	Expenditure (HK\$ million)
Completed		
1	Smart Crowd Management System	0.35 (actual)
2	Persona and Preference-based Way-finding for Pedestrians	1.26 (actual)
Undergoing		
3	Energy Efficiency Data Management System	1.63 (estimate)
4	Kerbside Loading/Unloading Bay Monitoring System	1.50 (estimate)
PoC trials under Preparation		
5	Multi-purpose Lamp Post	To be finalised
6	Smart Waste Bin System	
7	Real-time Road Works Information	
8	Illegal Parking Monitoring System	

Details have been uploaded to the web pages of EKEO.

- End -

CONTROLLING OFFICER'S REPLY

ITB090

(Question Serial No. 1374)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

Smart tourism was mentioned in The Smart City Blueprint for Hong Kong released in January this year. Please advise the projects to be implemented in 2018-19 as well as the estimated expenditure and implementation timetable of each project.

Asked by: Hon YIU Si-wing (Member Question No. (LegCo use): 28)

Reply:

In consultation with the Commerce and Economic Development Bureau and the Transport and Housing Bureau, our reply to the question is as follows:

The Government will launch a new smart travel landing page in 2018 to provide information for visitors using Wi-Fi services at the Hong Kong International Airport (HKIA), the West Kowloon Station of the Guangzhou-Shenzhen-Hong Kong Express Rail Link and the Hong Kong-Zhuhai-Macau Bridge Boundary Crossing Facilities, such as facilities on site, transportation to and from tourist spots, hotel and retail facilities, so as to help tourists plan their itineraries and activities in Hong Kong. The estimated project expenditure in 2018-19 is \$1.4 million.

The Government, in collaboration with creative media institutions, will make use of augmented reality (AR) technology and creative media art to recreate the historical landscape of individual landmarks through mobile application so that visitors can better understand the historical landscape and community culture of places with a rich historical culture amidst the modern urban setting of these places today. The project will last for 3 years and the first phase is tentatively scheduled for implementation in Tsim Sha Tsui and Central in late 2018. The project will then be rolled out in Shamshuipo and other districts. The estimated project expenditure in 2018-19 is about \$15 million.

In 2016-17, the Government allocated \$10 million for setting up the Pilot Information Technology Development Matching Fund Scheme for Travel Agents under which small- and medium-sized travel agents would be subsidised, through the Travel Industry Council of Hong Kong (TIC), on a matching basis, to make use of information technology (IT) to enhance the industry's competitiveness. In view of the positive response from the industry, the Government will allocate an additional funding of \$30 million to the TIC in 2018-19 for enhancing the scheme, so as to encourage more small- and medium-sized travel agents to make use of IT to enhance service quality, strengthen information system security and improve crowd management of inbound tour groups.

The Airport Authority (AA) is committed to developing a smart airport to enhance the operational efficiency of the airport through application of new technologies in different areas, such as facilitating the use of driverless vehicles in designated locations, and actively exploring the feasibility of using facial biometrics technology at departure and boarding gates to simplify boarding procedures to provide visitors with seamless travel experience. The AA also plans to expand mobile check-in services to cover off-airport locations, to be supplemented by advance baggage check-in service, with a view to providing hassle-free travel experience for passengers.

In addition, the Office of the Government Chief Information Officer is taking forward the "Wi-Fi Connected City" programme to provide free Wi-Fi services at various locations across the territory. At present, free Wi-Fi services are available at certain tourist attractions such as the HKIA, Ocean Park Hong Kong, Ngong Ping 360, West Kowloon Cultural District's M+ Pavilion and "Crystal Bus", Hong Kong Cultural Centre Piazza, Tsim Sha Tsui Promenade, major museums, as well as land and marine boundary control points.

In 2018-19, we will continue to implement the programme, including opening up more government venues at tourist attractions for private service providers to offer free Wi-Fi services under the public-private collaboration model. We will also continue to encourage more Wi-Fi service providers at tourist attractions to join the Wi-Fi.HK brand, thereby expanding the coverage of "Wi-Fi.HK" hotspots to facilitate the use of public Wi-Fi services by the public and tourists. The estimated expenditure of the "Wi-Fi Connected City" programme in 2018-19 is about \$67.2 million.

- End -

CONTROLLING OFFICER'S REPLY

ITB091

(Question Serial No. 0867)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Government announced earlier the establishment of a high-level, inter-departmental Steering Committee on Innovation and Technology to be led by the Chief Executive and supported by the Innovation and Technology Bureau. In this connection, will the Government inform this Committee of the number of meetings held since the establishment of the Steering Committee and details of its specific agreed work plan, including the timetable and estimated expenditure involved?

Asked by: Hon YUNG Hoi-yan (Member Question No. (LegCo use): 17)

Reply:

The Steering Committee on Innovation and Technology (Steering Committee) was established at the end of 2017 to examine and steer initiatives of innovation and technology (I&T) development and smart city projects as well as allocation of the relevant resources so as to more effectively take forward the I&T development in Hong Kong. It is expected that meetings will be held on a quarterly basis. The Steering Committee held two meetings in December 2017 and in March 2018 respectively to discuss initiatives and projects under the purview of different bureaux and departments. The relevant details will be announced in due course.

- End -

CONTROLLING OFFICER'S REPLY

ITB092

(Question Serial No. 0925)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Government launched a \$500 million scheme last year for the Innovation and Technology Bureau (ITB) to assist government departments in using innovation and technology to enhance the quality of public services in the coming 5 years. The Government has made a provision of \$105,821,000 under Subhead 697 TechConnect (block vote) to provide funding support to bureaux or departments for implementing projects which improve the quality, efficiency or effectiveness of public services by the adoption of technology or to make use of technology to improve operations. In this regard, would the Government advise this Committee of:

- (1) the details of the relevant technology projects and pilot programmes conceived and taken forward by bureaux or departments since 2017, including the estimated time for the implementation and completion of the projects, their contents and expenditure estimates involved;
- (2) the operation details of the provision, including application procedures, vetting criteria, project supervision and targets.

Asked by: Hon YUNG Hoi-yan (Member Question No. (LegCo use): 18)

Reply:

The information required is provided below:

- (1) Since the establishment of the TechConnect (block vote) by the Innovation and Technology Bureau ("ITB") in mid-2017, the internal committee responsible for vetting application has supported funding for 24 technology projects. Some projects have been commenced in the 2017-18 financial year, while the remaining will be launched in the 2018-19 financial year. Details are as follows:

Department	Project Title	Estimated Amount (\$ million)
Agriculture, Fisheries and Conservation Department	Pilot Project of Real-time Phytoplankton Taxa Monitoring System	5.4
Buildings Department	The use of advanced technological testing methods to assist water seepage investigation in buildings	5.0
Customs and Excise Department	Smart Crossing - deployment of Radio-frequency Identification (RFID) technology on the recognition of licence plate numbers of cross-boundary private cars	9.0
	A study on the development of a Cargo Big Data System	9.8
Civil Engineering and Development Department	Provision of mobile applications to promote smart mobility, sustainable leisure and recreation information of Lantau	0.5
Department of Health	Feasibility Study for the Implementation of a Digitalised Chinese Medicines Herbarium	1.9
Drainage Services Department	Provision of ultrasonic sludge pre-treatment facilities at the Tai Po Sewage Treatment Works	9.7
	Smart Sewerage Monitoring System	5.5
	Retrofitting the SANI small scale plant at the Shatin Sewage Treatment Works	9.6
	Pilot Study to Investigate Rainfall Infiltration in existing Sewerage Systems in Urban Area	2.0
Energizing Kowloon East Office, Development Bureau	To conduct a feasibility study to monitor illegal parking/stopping by utilising video analytics and to conduct a pilot trial at Kowloon East	8.0
Environmental Protection Department	Air pollution Sensor Practicality Trial	7.6
Housing Department	Develop the Technology to Produce Plans for Statutory Submission from the Building Information Modelling	8.0
Hong Kong Observatory	Integrated urban weather monitoring and data-sharing platform for smart cities	8.2
Hong Kong Police Force	E-statement (Speech Recognition) and Data Mining System (EDMS)	9.5
	Radio-frequency Identification (RFID) System for management of affected people during major incidents	3.4
	Video Explorer	9.9
	Automation of Cybercrime Capturing,	6.8

Department	Project Title	Estimated Amount (\$ million)
	Categorization and Correlation (AC4)	
	Advanced Image Processing System	6.7
Leisure and Cultural Services Department	Non-invasive conservation studies of art and antiquities with innovative imaging technologies	6.5
	Non-invasive conservation studies of cultural heritage with X-ray computed tomography	9.0
Office of the Government Chief Information Officer	Pilot Cyber Security Information Sharing Partnership Programme	8.5
Water Supplies Department	Provision of In-line Hydropower Harnessing Device for Water Intelligent Network	2.0
	Study on Anti-corrosion and Anti-biofouling Coating for Enhancing Water Pump Efficiency	1.1

- (2) The scheme accepts applications from all Government departments (except those operating under the Trading Fund mode and subvented bodies) . The amount of funding provided for each project is capped at \$10 million, with a funding period up to 3 years. Applications submitted by departments are considered and approved by the internal committee chaired by the Permanent Secretary for Innovation and Technology. Assessment criteria include the benefits of public services improvement or operational efficiency enhancement of departments, projects' technical viability, etc. The departments concerned are required to, among others, submit reports regularly on the progress and the expenditure of approved projects.

- End -

CONTROLLING OFFICER'S REPLY

ITB093

(Question Serial No. 0926)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

As mentioned in the Matters Requiring Special Attention under this programme, the Bureau will continue to support the development of the Guangdong-Hong Kong-Macao Bay Area into an international innovation and technology hub in 2018-19. In this connection, will the Government advise this Committee on the concrete work plan and timetable for the tripartite co-operation in developing the Bay Area, the financial resources involved, and the staffing establishment for the co-ordination work?

Asked by: Hon YUNG Hoi-yan (Member Question No. (LegCo use): 19)

Reply:

The country will soon promulgate the Development Plan for the Guangdong-Hong Kong-Macao Bay Area, which will present major opportunities for the development of innovation and technology ("I&T") in Hong Kong. The Innovation and Technology Bureau ("ITB") has all along been actively involved in promoting the development of the Bay Area into an international I&T hub, including participation in drawing up the "Implementation Plan for Developing the Bay Area into an International Innovation and Technology Hub" ("Implementation Plan"). As the Implementation Plan is still being drawn up, we do not have the finalised concrete work plan and timetable at the present stage.

In February 2018, we obtained approval from the Finance Committee of the Legislative Council to create a permanent Administrative Officer Staff Grade C (AOSGC) (D2) post in the ITB. With the support of 5 non-directorate posts, the AOSGC post will be responsible for, inter alia, the development of the Guangdong-Hong Kong-Macao Bay Area into an international I&T hub, the development of the Hong Kong-Shenzhen Innovation and Technology Park at the Lok Ma Chau Loop, as well as collaboration between Hong Kong and the Mainland in I&T. The estimated expenditure on salary and departmental expenses in 2018-19 is about \$6.92 million.

- End -

CONTROLLING OFFICER'S REPLY

ITB094

(Question Serial No. 0928)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned in the Budget that to promote the development of e-sports, the Government will allocate \$100 million to Cyberport for providing a competition venue for e-sports. Support will also be provided for the e-sports sector in areas such as technological development and talent nurturing. In this connection, will the Government inform this Committee of the following?

- (1) What are the specific plan and work details for promoting the development of e-sports in 2018-19, including the specific details, allocation of resources and expenditure and manpower involved in various items?
- (2) Some members of the industry have indicated that Cyberport is rather remote for a competition venue of e-sports and lacks sufficient transport support to accommodate major events. As such, will the Government consider offering rental concessions and enhancing transport support?
- (3) On talent nurturing, e-sports has become a post-secondary programme in the Mainland since 2016. Will the Government consider offering subsidised training programmes that are recognised under the Qualifications Framework, or making reference to practices in Korea by subsidising top-notch local e-sports players to compete in international events, so as to enhance the overall level of e-sports and upgrade the quality of talents in Hong Kong?
- (4) Promotion of e-sports development involves a number of policy areas, such as education, sports, trade and tourism. Will the Government consider fostering inter-departmental collaboration? If yes, what are the details? If no, what are the reasons?

Asked by: Hon YUNG Hoi-yan (Member Question No. (LegCo use): 21)

Reply:

The information required is provided below:

- (1) It has been announced in this year's Budget that \$100 million will be allocated to Cyberport to promote the development of e-sports, of which \$50 million will be used for developing the Cyberport Arcade into a local e-sports and digital entertainment node. The node will provide a dedicated e-sports venue equipped with advanced computers, audio-visual equipment and other peripherals as well as high-speed and stable network connection for the industry to host regular small to medium-scale e-sports competitions, activities and training. Cyberport will set up an experience corner in the Arcade and invite e-sports and digital entertainment industry to showcase related new technologies and e-sports products, raising the public understanding and interest in e-sports, game development and related technologies. The remaining \$50 million will be used for supporting the development of the industry in the next 5 years, including organisation of local and regional competitions and mega events, training programmes and public promotion activities. Cyberport will also improve its start-ups and talents development programmes, identify and equip the start-ups and talents relating to e-sports technologies and game development, and launch seminars, small-scale e-sports competitions and exhibitions on game history and products, etc.
- (2) The Report on Promotion of E-sports Development in Hong Kong (the Report) submitted to the Government by Cyberport in December 2017 highlights that well-located, affordable and dedicated venues help reduce organisers' preparation time and save manpower, thereby allowing more regular e-sports events to be held. The dedicated e-sports venue and its transportation as well as food and beverage provisions in Cyberport can meet the needs of organising small to medium-scale e-sports events. The venue facilities will be tailor-made for staging e-sports competitions, enabling organisers to achieve savings in renting venues and audio-visual equipment, and significantly streamline the preparatory work. Cyberport will also proactively assist the organisers in making suitable arrangements for transportation and facility management during the events.
- (3) According to the Report, the e-sports industry involves research and development as well as application of a wide variety of technologies, including e-sports hardware, digital audio/video, broadcasting, game design and development, Virtual Reality/Augmented Reality and online marketing, etc. In respect of professional development of e-sports, Cyberport is currently exploring with the local tertiary institutions to utilise its venue and facilities as well as the funding allocation announced in the Budget for nurturing talents.

Besides, the universities and tertiary institutions in Hong Kong also offer academic programmes for e-sports related professions. In the 2016/17 academic year, 3 526 students enrolled in - computer science, and information technology related undergraduate programmes funded by the University Grants Committee. In

developing the curricula, the universities would work closely with relevant stakeholders (including the industry) to keep track of the latest manpower trend and industry needs.

Through the Study Subsidy Scheme for Designated Professions/Sectors, the Education Bureau also encourages the self-financing tertiary education sector to offer designated programmes in selected disciplines, including creative industries, to nurture talent in support of specific industries with keen manpower demand. In the 2018/19 academic year, a total of 37 programmes has been admitted into the subsidy scheme, including three programmes related to digital entertainment, animation and visual effects, as well as innovation and multimedia technology.

The higher diploma programmes in information and technology offered by the Vocational Training Council (VTC) cover areas which include game software development, mobile applications development, multimedia, games and animation, and involve e-sports components. In addition, VTC is studying the skills needs of the e-sports industry and will explore if it should offer module(s), a new higher diploma programme, or on-the-job training programmes.

- (4) At the present stage, the Innovation and Technology Bureau focus on promoting the development of e-sports, supporting the sector in technological advancement and nurturing talents.

- End -

CONTROLLING OFFICER'S REPLY

ITB095

(Question Serial No. 0930)

Head: (135) Government Secretariat: Innovation and Technology Bureau

Subhead (No. & title): ()

Programme: (2) Innovation and Technology

Controlling Officer: Permanent Secretary for Innovation and Technology
(Cheuk Wing Hing)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Innovation and Technology Bureau released the Smart City Blueprint for Hong Kong on 15 December 2017, putting forward short-, medium- and long-term measures in 6 areas, namely “Smart Mobility”, “Smart Living”, “Smart Environment”, “Smart People”, “Smart Government” and “Smart Economy”. Please advise on the work plans, timetable, as well as financial resources and manpower required in 2018-19 for building Hong Kong into a smart city.

Asked by: Hon YUNG Hoi-yan (Member Question No. (LegCo use): 23)

Reply:

The Government published the Smart City Blueprint (“the Blueprint”) in December 2017, outlining the vision and mission to build Hong Kong into a world-class smart city. The Blueprint maps out development plans in the next five years, providing a clear and specific direction for smart city development in Hong Kong. Smart city development involves different areas of work, and the bureaux and departments concerned will draw up a timetable for implementing various measures and prepare an estimate on the expenditure required.

Regarding the projects undertaken by the Innovation and Technology Bureau (“ITB”), we briefed Members of the Legislative Council Panel on Information Technology and Broadcasting this March on the three proposed key infrastructure projects for smart city development, including the timetable for implementing the projects and the relevant financial requirements. The estimated non-recurrent cost of the “electronic identity” project is \$112 million and we plan to seek the Finance Committee’s (“FC”) funding approval in mid-2018. The estimated expenditure of the “Multi-functional Smart Lampposts” pilot scheme is about \$272 million. The scheme will be implemented in

phases. If everything goes smoothly, we expect the first phase with some 50 smart lampposts to come into operation progressively before mid-2019. The cost incurred will be funded by the block allocation under Head 706. As for the non-recurrent cost of \$533.3 million required for the “Next Generation Government Cloud Infrastructure and Big Data Analytics Platform” project, we will seek the FC’s funding approval in mid-2018.

As regards manpower, we obtained approval from FC in February 2018 to create a permanent Administrative Officer Staff Grade C (D2) post in the ITB to lead the Smart City Office with the support of 5 non-directorates, which is responsible for coordinating various smart city development projects.

- End -

CONTROLLING OFFICER'S REPLY**ITB096****(Question Serial No. 3647)**

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is stated in the Budget that the Government will relax the eligibility criteria for the Technology Voucher Programme (TVP). All local enterprises, irrespective of size and duration of operation, may apply. This will enable more medium enterprises and start-ups to benefit from the TVP. In this connection, what is the estimated expenditure for the relaxation of the TVP?

Please list out in a tabular form the number of local enterprises that applied for technology vouchers, the number of medium enterprises and start-ups involved, the success rate and failure rate of application, as well as the total amount of funding so far approved under the TVP since its launch.

Asked by: Hon CHAN Chi-chuen (Member Question No. (LegCo use): 86)

Reply:

As at 28 February 2018, the Innovation and Technology Commission (ITC) received applications for the Technology Voucher Programme (TVP) from a total of 889 enterprises. Of the 403 applications assessed by the TVP Committee (the Committee), 377 were approved for funding, representing a success rate of 94% and involving a total funding of about \$49.7 million. 26 applications (6%) were not supported by the Committee because the projects were largely for purchasing off-the-shelf software and hardware or involved only little or no technological elements, and therefore failed to meet the objectives and terms of the TVP. Among the remaining applications, 348 are still awaiting supplementary information from the applicant enterprises or are currently under assessment by the TVP Secretariat; 138 could not be processed and had to be returned, mainly because the applicant enterprises failed to submit all the supporting documents required.

We initially estimated that the total amount of funding for the projects to be approved would be about \$43 million in 2018. With the relaxation of the eligibility criteria, we expect that

the number of projects to be approved and the relevant funding expenditure will further increase.

- End -

CONTROLLING OFFICER'S REPLY

ITB097

(Question Serial No. 0579)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (1) Support for Research and Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

Under Programme (1), the Innovation and Technology Support Programme (ITSP) has been set up under the Innovation and Technology Fund (ITF). For the Midstream Research Programme for Universities, the estimated number of projects funded and being monitored for 2018 is more than double the actual number for 2017, while the number of applications received and processed remains unchanged. What are the reasons for allocating additional resources?

Asked by: Hon CHAN Chun-ying (Member Question No. (LegCo use): 8)

Reply:

The aim of Programme (1) is to promote and support applied research and development (R&D) activities which can contribute to innovation and technology (I&T) upgrading in industry. The Midstream Research Programme for Universities (MRP) is one of the funding programmes. Major work under this Programme in 2018-19 includes:

- (a) pursuing legislative amendment to provide enhanced tax deduction for qualified R&D activities carried out by companies;
- (b) administering the various funding programmes including the MRP, and monitoring progress of the funded projects;
- (c) supporting the activities of the R&D Centres with particular emphasis on technology transfer of funded projects; and
- (d) administering the R&D Cash Rebate Scheme to reinforce the research culture among private companies and encourage them to establish stronger partnership with designated local public research institutions.

The provision under this Programme is mainly for salary and departmental expenses.

The estimate for 2018-19 is 11.8% (or \$6.6 million) higher than the revised estimate for 2017-18. This is mainly due to:

- (a) increased salary and departmental expenses arising from the creation of 3 civil service posts in 2018-19; and
- (b) increased expenses on contract gratuities for non-civil service contract staff.

The duration of the project under the MRP should normally not exceed 36 months. The Innovation and Technology Commission will monitor the project progress and funding disbursement throughout the project period. The 21 projects to be funded and monitored in 2018 comprise 8 on-going projects already commenced in 2017 and 13 new projects that are expected to be funded this year.

- End -

CONTROLLING OFFICER'S REPLY

ITB098

(Question Serial No. 0580)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (1) Support for Research and Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

The number of applications received and processed under the Guangdong-Hong Kong Technology Co-operation Funding Scheme (TCFS) in 2017 was "0". This was due to the postponement of the solicitation exercise tentatively to early 2018.

1. Please advise whether the decision on postponement was due to difficulties in evaluating the effectiveness of TCFS or other reasons.
2. The actual number of projects funded and being monitored in 2017 was 66. Does the figure include projects approved in 2016? If yes, as the estimated number for 2018 is 70, does it mean that there will be 4 new quotas for funding? If not, what is the basis for coming up with the estimated number?
3. What is the actual amount of new provision available for TCFS in 2018?

Asked by: Hon CHAN Chun-ying (Member Question No. (LegCo use): 7)

Reply:

The requested information is provided below:

1. The Guangdong-Hong Kong Technology Co-operation Funding Scheme (TCFS) aims to promote the work on advanced technology and technological transfer in Guangdong and Hong Kong, so as to enhance the productivity and competitiveness of enterprises in both places. The Innovation and Technology Commission (ITC) will work out a schedule for TCFS every year together with the Department of Science and Technology of Guangdong Province and the Science, Technology and Innovation Commission of Shenzhen Municipality and jointly launch a solicitation exercise at an appropriate time frame. As the schedule for the 2018 TCFS was still under deliberation, no solicitation exercise for the 2018 TCFS was carried out in 2017. As

for the 2017 TCFS, we completed the solicitation exercise in end-2016 and were processing the 88 applications received in 2017 successively.

2. The project duration of TCFS generally does not exceed 24 months. During the project period, ITC will keep monitoring its progress and funding disbursement until its completion. The number of projects funded and being monitored in 2017 was 66, of which 15 were completed within the year. As such, it is estimated that the 70 projects to be funded and monitored in 2018 include 51 on-going projects and 19 new projects expected to be funded within this year.
3. The actual amount of funding in 2018 depends on the number of applications to be received and the actual amount of funding for the to-be-approved applications. As the 2018 TCFS has yet to be commenced, no relevant information is available.

- End -

CONTROLLING OFFICER'S REPLY

ITB099

(Question Serial No. 0581)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (1) Support for Research and Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

Matters requiring special attention in 2018-19 under Programme (1) include pursuing legislative amendment to provide enhanced tax deduction for qualifying research and development activities carried out by companies.

1. What are the human resources and expenditure involved in the above work?
2. Is there a timetable for the legislative amendment work? If yes, what are the details; if not, what are the reasons?

Asked by: Hon CHAN Chun-ying (Member Question No. (LegCo use): 10)

Reply:

A consolidated reply to various parts of the question is as follows:

To encourage enterprises to conduct more local research and development (R&D) activities, we propose to provide enhanced tax deduction for expenditure on employees and consumable items directly incurred by an enterprise in carrying out “qualifying R&D activities” (i.e. “qualifying expenditure”) as well as payments made to “designated local research institutions” for conducting “qualifying R&D activities”. The deduction will be 300% for the first \$2 million of the above aggregate amount and 200% for the remaining amount.

Work on the relevant amendment bill is underway, which is met by existing manpower and resources of the Innovation and Technology Commission (ITC). No breakdown of expenditure is available.

If the legislative work goes smoothly, the aforementioned enhanced tax deduction can be implemented in the third quarter of 2018 the earliest, and will be applicable to qualifying R&D expenditure incurred by enterprises on 1 April 2018 and thereafter.

Upon implementation of the amended Inland Revenue Ordinance, the Commissioner for Innovation and Technology will have to advise the Commissioner of Inland Revenue in ascertaining whether any particular activity constitutes an “R&D” or a “qualifying R&D”, and whether the payment or expenditure was made or incurred in carrying out the relevant “R&D” or “qualifying R&D”. In addition, CIT will have to process the applications submitted by local private organisations as “designated local research institutions” and follow up on the subsequent monitoring work. To handle the above additional work, ITC will need to create 3 civil service posts, including 1 Senior Scientific Officer and 2 Engineers. The annual recurrent expenditure is about \$3.2 million.

- End -

CONTROLLING OFFICER'S REPLY

ITB100

(Question Serial No. 0582)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (2) Fostering University-Industry Collaboration

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned under Programme (2) that there are 3 schemes under the University-Industry Collaboration Programme (UICP), namely Teaching Company Scheme, Matching Grant for Joint Research, and Industrial Research Chair Scheme. In 2017, the UICP received a total of 26 applications involving \$45.6 million. Will the Government advise on the following:

1. What are the details of distribution of the 26 applications among the 3 schemes, namely Teaching Company Scheme, Matching Grant for Joint Research, and Industrial Research Chair Scheme under the UICP in 2017, and what is the amount of funds for each application?
2. The actual number of UICP projects funded and being monitored in 2017 is 87. Please provide the details of distribution among the 3 schemes, namely Teaching Company Scheme, Matching Grant for Joint Research, and Industrial Research Chair Scheme. What is the amount of funds for each application?
3. The number of government staff under Programme (2) is 6. What is their respective scope of work? Are any staff responsible for analysing the business scope and size of the companies participating in the UICP? If yes, what are the results; if not, what are the reasons?

Asked by: Hon CHAN Chun-ying (Member Question No. (LegCo use): 24)

Reply:

The requested information is provided below:

1. Of the 26 applications received under the University-Industry Collaboration Programme (UICP) in 2017, 25 were for the Matching Grant for Joint Research, while

the remaining 1 was for the Teaching Company Scheme. Once the applicant organisation has signed an agreement for the approved project, the project summary (including the title and amount of funds approved) will be available on the Innovation and Technology Fund (ITF) website: https://www.itf.gov.hk/l-eng/prj_search_index.asp. The reference numbers of the 14 projects for which agreements have been signed are set out in Annex 1.

2. Of the 87 research and development projects funded and being monitored under the UICP in 2017, 73 were under the Matching Grant for Joint Research, while the remaining 14 were under the Teaching Company Scheme. The project summary (including the project title and amount of funds approved) is available on the ITF website: https://www.itf.gov.hk/l-eng/prj_search_index.asp. The reference numbers of the projects concerned are set out in Annex 2.
3. The staff involved under this Programme are mainly responsible for vetting and monitoring the relevant applications, and also for duties under other Programmes. Distribution of approved projects among different industrial sectors under major ITF funding schemes (including the UICP) are available on the ITF website: <https://www.itf.gov.hk/l-eng/statistic.asp>.

- End -

University-Industry Collaboration Programme

(Approved Projects for which Applicant Organisations Have Signed Project Agreements in 2017)

No.	Project No.
1	UIM/318
2	UIM/320
3	UIM/321
4	UIM/322
5	UIM/323
6	UIM/324
7	UIM/325
8	UIM/326
9	UIM/327
10	UIM/328
11	UIM/329
12	UIM/330
13	UIM/331
14	UIM/332

University-Industry Collaboration Programme
(Projects Funded and Being Monitored in 2017)

No.	Project No.	No.	Project No.	No.	Project No.
1	UIM/191	31	UIM/287	61	UIM/320
2	UIM/200	32	UIM/288	62	UIM/321
3	UIM/216	33	UIM/289	63	UIM/322
4	UIM/221	34	UIM/290	64	UIM/323
5	UIM/223	35	UIM/291	65	UIM/324
6	UIM/228	36	UIM/292	66	UIM/325
7	UIM/234	37	UIM/293	67	UIM/326
8	UIM/253	38	UIM/295	68	UIM/327
9	UIM/256	39	UIM/296	69	UIM/328
10	UIM/257	40	UIM/297	70	UIM/331
11	UIM/258	41	UIM/298	71	UIM/332
12	UIM/262	42	UIM/299	72	UIM/334
13	UIM/263	43	UIM/300	73	UIM/336
14	UIM/264	44	UIM/301	74	UIT/110
15	UIM/265	45	UIM/302	75	UIT/123
16	UIM/268	46	UIM/303	76	UIT/124
17	UIM/269	47	UIM/304	77	UIT/125
18	UIM/270	48	UIM/305	78	UIT/126
19	UIM/271	49	UIM/306	79	UIT/128
20	UIM/273	50	UIM/307	80	UIT/130
21	UIM/274	51	UIM/308	81	UIT/131
22	UIM/275	52	UIM/309	82	UIT/132
23	UIM/276	53	UIM/310	83	UIT/133
24	UIM/277	54	UIM/311	84	UIT/134
25	UIM/278	55	UIM/312	85	UIT/135
26	UIM/279	56	UIM/313	86	UIT/137
27	UIM/280	57	UIM/315	87	UIT/138
28	UIM/283	58	UIM/316		
29	UIM/285	59	UIM/317		
30	UIM/286	60	UIM/318		

CONTROLLING OFFICER'S REPLY

ITB101

(Question Serial No. 0583)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

Matters requiring special attention in 2018-19 under Programme (4) Planning for Innovation and Technology Development include “implementing a Technology Talent Scheme and rolling out a pilot fast-track admission scheme for technology talents (pilot scheme)”. Will the Government advise on:

1. the details of the pilot scheme, as well as the estimated manpower and expenditures involved;
2. whether the pilot scheme will provide or subsidise accommodation for the talents? If yes, what are the details and the expenditures involved; if not, what are the reasons?

Asked by: Hon CHAN Chun-ying (Member Question No. (LegCo use): 25)

Reply:

A consolidated reply to the 2 parts of the question is as follows:

Technology companies are facing intense competition from the world on the front of recruiting scientific research talents in recent years. To ease the difficulties encountered by technology companies in this aspect and pool together technology talents in Hong Kong for strengthening the development of innovation and technology, the Government is considering viable means, targeting at the technology areas with acute talent shortage, to facilitate admission of relevant talents for meeting the demand. Details will be announced in due course.

- End -

CONTROLLING OFFICER'S REPLY

ITB102

(Question Serial No. 0584)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned under Programme (5) that the Innovation and Technology Commission will set up 2 research clusters on healthcare technologies and artificial intelligence/robotics technologies respectively. The estimated expenditure for 2018-19 is \$57.3 million, representing an increase of 306.4% over the revised expenditure last year. Will the Government advise on the following:

1. What are the details of the 2 research clusters and the amount of provision for each of them?
2. Will the research cluster on healthcare technologies collaborate with existing faculties of medicine of the universities? If yes, what is the manpower involved; if not, what are the reasons?
3. Will the research cluster on artificial intelligence/robotics technologies collaborate with existing universities? If yes, what is the manpower involved; if not, what are the reasons?

Asked by: Hon CHAN Chun-ying (Member Question No. (LegCo use): 27)

Reply:

A consolidated reply to various parts of the question is as follows:

The aim of Programme (5) is to develop world-class support infrastructure to facilitate technological upgrading and development of the industry and to promote innovation and technology (I&T). The major work in 2018-19 includes setting up 2 research clusters; continuing to work closely with the Hong Kong Science and Technology Parks Corporation on the implementation of its various new developments of the Hong Kong Science Park and the Industrial Estates; and developing the Hong Kong-Shenzhen Innovation and Technology

Park in the Lok Ma Chau Loop, etc. The estimate for 2018-19 is 306.4% (or \$43.2 million) higher than that for 2017-18. This is mainly due to:

- (a) increased provision for salary arising from the 29 civil service posts to be created in the Innovation and Technology Commission (ITC) to strengthen support for various infrastructure related to scientific research; and
- (b) increased departmental expenses for ITC to enhance the efforts in promoting I&T.

To promote I&T development in Hong Kong, the Government is working on the establishment of the 2 research clusters on healthcare technologies and on artificial intelligence and robotics technologies, to attract the world's top research institutions and technology enterprises to Hong Kong for conducting more research and development projects in collaboration with local universities and research institutions. Such clusters will pool and nurture more technology talent in Hong Kong. In this connection, we have earmarked \$10 billion to provide financial support for non-profit-making research institutions that will establish their presence in the 2 clusters.

- End -

CONTROLLING OFFICER'S REPLY

ITB103

(Question Serial No. 0585)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title): (661) Minor plant, vehicles and equipment (block vote)

Programme: Not Specified

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

Compared with the revised estimate of the previous year, the estimated expenditure for minor plant, vehicles and equipment (block vote) for 2018-19 increases by 131.1% for replacement of minor plant and equipment. Will the Government provide a breakdown on the expenditure?

Asked by: Hon CHAN Chun-ying (Member Question No. (LegCo use): 28)

Reply:

The estimated expenditure of Capital Account Subhead 661 "Minor plant, vehicles and equipment (block vote)" for 2018-19 mainly involves the provision for the Standards and Calibration Laboratory (SCL) of the Innovation and Technology Commission, which will be used for routine replacement and acquisition of SCL's instruments as well as special acquisitions to be made in response to changes in the "International System of Units" (SI).

SCL is responsible for establishing and maintaining the reference standards of physical measurements for Hong Kong. Continued replacement and acquisition of instruments for use by SCL is necessary so as to ensure and improve accuracy. In addition, SCL's reference standards of measurements must be set up in strict accordance with the definitions of SI established by the General Conference on Weights and Measures. There will be major changes to the SI next year, with 4 of the 7 base units be redefined. In order to keep Hong Kong's weights and measures system in line with international standards, SCL must update its reference standards of measurements for compliance with the revised SI.

- End -

CONTROLLING OFFICER'S REPLY

ITB104

(Question Serial No. 0595)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Innovation and Technology Commission (ITC) will “implement a Technology Talent Scheme and roll out a pilot fast-track admission scheme for technology talents” in the coming year. Please advise on:

1. how the Immigration Department (ImmD) and ITC will work together to introduce the Technology Talent Scheme; and the human resources and expenditures involved as estimated by ImmD;
2. whether ImmD and ITC will consider providing accommodation facilities or assistance for the talents; if yes, what the details and the expenditures involved are; if not, what the reasons are.

Asked by: Hon CHAN Chun-ying (Member Question No. (LegCo use): 31)

Reply:

Technology companies are facing intense competition from the world on the front of recruiting scientific research talents in recent years. To ease the difficulties encountered by technology companies in this aspect and pool together technology talents in Hong Kong for strengthening the development of innovation and technology, the Government is considering viable means, targeting at the technology areas with acute talent shortage, to facilitate admission of relevant talents for meeting the demand. Details will be announced in due course.

- End -

CONTROLLING OFFICER'S REPLY

ITB105

(Question Serial No. 2635)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: Not Specified

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

As stated in paragraph 72 of the Budget Speech, the Financial Secretary set up the Committee on Innovation, Technology and Re-industrialisation last April; the Data Technology Hub and the Advanced Manufacturing Centre under construction are expected to be completed in 2020 and 2022 respectively; the Science Park under expansion is expected to provide extra space for start-ups and other technology companies in 2 years; and the Hong Kong Productivity Council established an Inno Space last October to provide working space and technical support for start-ups, students and graduates to help them develop their innovative ideas into industrial design, which may subsequently be translated into products through prototyping. Please provide the details and expenditure items of the various projects above for 2018-19.

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 48)

Reply:

The requested information is provided below:

Committee on Innovation, Technology and Re-industrialisation (the Committee)

Established in April last year, the Committee plans to convene 4 meetings in 2018 to continue advising the Government on matters relating to the promotion of innovation and technology (I&T) development and re-industrialisation in Hong Kong. The Innovation and Technology Commission provides secretariat support to the Committee with existing manpower and resources. No breakdown of relevant expenditure is available.

Stage 1 of the Science Park Expansion Programme (SPX1)

SPX1 involves the construction of 2 scientific research buildings of 14 and 15 storeys respectively. The main construction works of the project are underway. It is expected that the gross floor area (GFA) of the Science Park will increase to approximately 400 000 square metres upon completion in 2020. The total development cost of the project

is estimated at \$4.428 billion. The Legislative Council Finance Committee (FC) approved in May 2016 the Government's injection of \$2.878 billion to the Hong Kong Science and Technology Parks Corporation (HKSTPC) and guarantee for HKSTPC a commercial loan amounting to \$1.107 billion. HKSTPC will also finance \$443 million.

Data Technology (DT) Hub and Advanced Manufacturing Centre (AMC)

The DT Hub has a GFA of about 27 000 square metres. The Hub, which is mainly a purpose-designed infrastructure for data technology and telecommunications services, will provide general supporting facilities, including business centre, showcase arena and offices, etc. The foundation works of the DT Hub have been commenced, and the project is expected to be completed in 2020.

With a GFA of about 108 600 square metres, the AMC will focus on the development of selected high value-added manufacturing industries with extended activities such as research and development, logistics support, prototyping and design, etc. The detailed design work of the AMC is underway. The foundation works are expected to commence in mid-2018, and the entire project is expected to be completed in 2022.

The total development cost of the DT Hub and AMC is \$8.248 billion. The FC approved in May 2016 the Government's injection of \$6.598 billion and provision of a loan of \$1.65 billion to HKSTPC.

Inno Space

In 2018-19, the Inno Space will provide users with technical guidance and training in the course of developing product prototypes, assisting start-ups in connecting with partners, exchanging and collaborating with other start-up spaces, and organising I&T activities for young people (e.g. the robotics workshops, open 3D design competitions, etc.). The Government will provide an additional funding of about \$3.75 million to the Hong Kong Productivity Council in 2018-19 for operating the Inno Space, which includes staff remuneration of \$2.5 million and other operating expenditure of \$1.25 million.

- End -

CONTROLLING OFFICER'S REPLY

ITB106

(Question Serial No. 3139)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: Not Specified

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is stated in paragraph 66 of the Budget Speech that \$10 billion will be injected into the Innovation and Technology Fund (ITF), which will continue to support applied research and development (R&D) work in Hong Kong with the additional resources. Please list all projects in support of applied R&D work in Hong Kong and the breakdown of expenditure, as well as the implementation progress of all the projects since the establishment of ITF in 2013-14. Please provide the details of all new projects to be supported under the ITF and the breakdown of expenditure in 2018-19.

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 51)

Reply:

The Innovation and Technology Fund (ITF) was established in 1999 to finance projects that contribute to innovation and technology upgrading and development in manufacturing and services industries in Hong Kong. From April 2013 to January 2018, a total of 1 253 projects in support of applied research and development in Hong Kong were approved under the ITF, with a total funding of around \$3.8 billion. Once the approved applicant organisation has duly signed the project agreement, the project summary (including the title and funding amount, etc.) will be available on the ITF website (https://www.itf.gov.hk/1-eng/prj_search_index.asp). References of 1 221 projects with agreements duly signed are set out in the Annex.

The number of new projects to be funded under the ITF and the funding amount in 2018-19 are subject to the number of applications received and the vetting results. Summaries of the new projects will be uploaded to the ITF website once the approved applicant organisations have duly signed the project agreements.

- End -

Research and Development Funding Programmes
under the Innovation and Technology Fund

(Projects with agreements duly signed by the applicant organisations
from April 2013 to January 2018)

Note:

1. Projects with “*” indicate on-going projects, while others are completed projects.
2. Including projects from the Innovation and Technology Support Programme (ITSP), University-Industry Collaboration Programme (UICP), Small Entrepreneur Research Assistance Programme (SERAP), Enterprise Support Scheme (ESS) and Midstream Research Programme for Universities (MRP) under the Innovation and Technology Fund.
3. Excluding partnership projects under the Research and Development (R&D) Cash Rebate Scheme. As the projects with cash rebate approved involved commercial information of private companies, it is not appropriate for us to make public the project details.

ITSP – supports R&D projects undertaken by local universities and public research institutions.

No.	Project Reference	No.	Project Reference	No.	Project Reference
1	ARD/123	23	ARD/145	45	ARD/167
2	ARD/124	24	ARD/146	46	ARD/168
3	ARD/125	25	ARD/147	47	ARD/169
4	ARD/126	26	ARD/148CL	48	ARD/170
5	ARD/127	27	ARD/149	49	ARD/171CL
6	ARD/128	28	ARD/150CL	50	ARD/172CL
7	ARD/129	29	ARD/151CL	51	ARD/173CL
8	ARD/130	30	ARD/152CL	52	ARD/174CL
9	ARD/131	31	ARD/153	53	ARD/175CL
10	ARD/132	32	ARD/154CL	54	ARD/176CL
11	ARD/133CL	33	ARD/155CL	55	ARD/177CL
12	ARD/134CL	34	ARD/156CL	56	ARD/178CL
13	ARD/135CL	35	ARD/157CL	57	ARD/179CL
14	ARD/136	36	ARD/158CL	58	ARD/180CL
15	ARD/137CL	37	ARD/159	59	ARD/181
16	ARD/138CL	38	ARD/160	60	ARD/182
17	ARD/139CL	39	ARD/161CL	61	ARD/183
18	ARD/140CL	40	ARD/162	62	ARD/184
19	ARD/141CL	41	ARD/163	63	ARD/185
20	ARD/142CL	42	ARD/164	64	ARD/186 *
21	ARD/143CL	43	ARD/165	65	ARD/187
22	ARD/144	44	ARD/166	66	ARD/188

No.	Project Reference	No.	Project Reference	No.	Project Reference
67	ARD/189	107	ART/176CP	147	ART/218CP *
68	ARD/190	108	ART/177CP	148	ART/219CP *
69	ARD/191CL *	109	ART/178CP	149	ART/220CP *
70	ARD/192	110	ART/179CP	150	ART/221CP *
71	ARD/193CL *	111	ART/180CP	151	ART/222CP *
72	ARD/194	112	ART/181CP	152	ART/223CP *
73	ARD/195CL *	113	ART/182CP	153	ART/224CP *
74	ARD/196CL *	114	ART/183CP	154	ART/225CP *
75	ARD/197CL *	115	ART/184CP	155	ART/226CI *
76	ARD/198CL *	116	ART/185CP	156	ART/227CP *
77	ARD/199CL *	117	ART/186CP	157	ART/228CP *
78	ARD/200 *	118	ART/187CP	158	ART/229CP *
79	ARD/201CL *	119	ART/188CP	159	ART/230CI *
80	ARD/202CL *	120	ART/189CP	160	ART/231CP *
81	ARD/203CL *	121	ART/190CP	161	ART/232CP *
82	ARD/204	122	ART/191CP	162	ART/233CP *
83	ARD/205 *	123	ART/192CP	163	ART/234CP *
84	ARD/206 *	124	ART/193CP	164	ART/235CI *
85	ARD/207 *	125	ART/194CP	165	ART/236CP *
86	ARD/208 *	126	ART/195CI	166	ART/237CP *
87	ARD/209 *	127	ART/196CP	167	ART/238CP *
88	ART/155CP	128	ART/197CI	168	ART/239CP *
89	ART/157CP	129	ART/198CI	169	ART/240CP *
90	ART/158CP	130	ART/200CI	170	ART/241CP *
91	ART/159CP	131	ART/201CP	171	ART/242CP *
92	ART/161CP	132	ART/202CP	172	ART/243CP *
93	ART/162CP	133	ART/203CP	173	ART/244CP *
94	ART/163CP	134	ART/204CP	174	GHP/015/11SZ
95	ART/164CP	135	ART/205CP	175	GHP/004/12SZ
96	ART/165CP	136	ART/206CI	176	GHP/005/12SZ
97	ART/166CP	137	ART/207CP	177	GHP/007/12SZ
98	ART/167CP	138	ART/208CP	178	GHP/014/12SZ
99	ART/168CP	139	ART/209CP *	179	GHP/015/12SZ
100	ART/169CI	140	ART/210CP	180	GHP/017/12SZ
101	ART/170CP	141	ART/211CI	181	GHP/022/12
102	ART/171CP	142	ART/212CP	182	GHP/026/12
103	ART/172CP	143	ART/213CP	183	GHP/034/12SZ
104	ART/173CP	144	ART/214CP	184	GHP/039/12
105	ART/174CP	145	ART/216CP *	185	GHP/044/12SZ
106	ART/175CP	146	ART/217CI	186	GHP/052/12SZ

No.	Project Reference	No.	Project Reference	No.	Project Reference
187	GHP/057/12	227	GHP/021/17SZ *	267	ITP/027/13TI
188	GHP/059/12SZ	228	GHP/022/17GD *	268	ITP/028/13TP
189	GHP/001/13AZ	229	GHP/025/17SZ *	269	ITP/029/13LI
190	GHP/002/13SZ	230	GHP/036/17SZ *	270	ITP/030/13TP
191	GHP/007/13SZ	231	GHP/042/17GD *	271	ITP/031/13NP
192	GHP/012/13SZ	232	GHP/055/17 *	272	ITP/032/13NP
193	GHP/014/13SZ	233	GHP/057/17SZ *	273	ITP/033/13AP
194	GHP/018/13SZ	234	GHP/071/17SZ *	274	ITP/034/13NP
195	GHP/020/13	235	GHP/076/17GD *	275	ITP/035/13NI
196	GHP/022/13SZ	236	GHP/079/17SZ *	276	ITP/036/13AI
197	GHP/025/13SZ	237	GHX/005/11SZ	277	ITP/037/13AP
198	GHP/030/13	238	GHX/002/12SZ	278	ITP/038/13TP
199	GHP/031/13SZ	239	GHX/005/12	279	ITP/039/13NP
200	GHP/038/13SZ	240	GHX/011/12NI	280	ITP/040/13AI
201	GHP/006/14SZ	241	GHX/003/13SZ	281	ITP/041/13AI
202	GHP/007/14SZ	242	GHX/002/14SZ *	282	ITP/042/13LP
203	GHP/009/14SZ *	243	GHX/001/16GD *	283	ITP/045/13LP
204	GHP/010/14SZ *	244	GHX/002/17GD *	284	ITP/046/13TI
205	GHP/015/14SZ	245	GHX/004/17 *	285	ITP/047/13TP
206	GHP/016/14SZ	246	GHX/005/17SZ *	286	ITP/048/13TP
207	GHP/017/14SZ	247	ITP/047/12AP	287	ITP/049/13TP
208	GHP/028/14SZ *	248	ITP/048/12AP	288	ITP/050/13TP
209	GHP/029/14SZ *	249	ITP/003/13NP	289	ITP/051/13TP
210	GHP/041/14 *	250	ITP/004/13NP	290	ITP/052/13TI
211	GHP/043/14SZ *	251	ITP/005/13NP	291	ITP/053/13TI
212	GHP/048/14	252	ITP/006/13NP	292	ITP/001/14TP
213	GHP/050/14GD *	253	ITP/007/13NP	293	ITP/002/14TP
214	GHP/053/14 *	254	ITP/008/13NP	294	ITP/003/14TI
215	GHP/055/14SZ	255	ITP/009/13NI	295	ITP/004/14LI
216	GHP/057/14AP	256	ITP/010/13NI	296	ITP/005/14TI
217	GHP/003/16GD *	257	ITP/015/13AI	297	ITP/006/14LI
218	GHP/004/16GD *	258	ITP/016/13AI	298	ITP/007/14NI
219	GHP/012/16GD *	259	ITP/017/13AI	299	ITP/008/14NI
220	GHP/024/16GD *	260	ITP/018/13LP	300	ITP/009/14NI
221	GHP/025/16GD *	261	ITP/020/13TI	301	ITP/010/14NI
222	GHP/030/16GD *	262	ITP/021/13TI	302	ITP/011/14NP
223	GHP/034/16GD *	263	ITP/023/13TI	303	ITP/012/14NP
224	GHP/007/17GD *	264	ITP/024/13AI	304	ITP/014/14NP
225	GHP/008/17GD *	265	ITP/025/13AI	305	ITP/015/14NI
226	GHP/011/17SZ *	266	ITP/026/13AI	306	ITP/016/14NP

No.	Project Reference	No.	Project Reference	No.	Project Reference
307	ITP/017/14NP	347	ITP/071/14NP	387	ITP/047/15LP
308	ITP/018/14NP	348	ITP/072/14NI	388	ITP/048/15LP
309	ITP/019/14AP	349	ITP/075/14AP	389	ITP/049/15LP *
310	ITP/020/14AP	350	ITP/001/15NP	390	ITP/050/15NP
311	ITP/024/14TI	351	ITP/002/15NP	391	ITP/051/15NP
312	ITP/025/14TP	352	ITP/003/15NP	392	ITP/052/15NI
313	ITP/026/14NP	353	ITP/004/15NP	393	ITP/053/15NI
314	ITP/029/14NP	354	ITP/005/15NP	394	ITP/054/15NI
315	ITP/031/14NP	355	ITP/006/15NI	395	ITP/055/15NI
316	ITP/032/14TP	356	ITP/007/15NI	396	ITP/056/15NI
317	ITP/034/14NI	357	ITP/008/15NI	397	ITP/058/15NI
318	ITP/035/14NP	358	ITP/010/15NI	398	ITP/059/15NI
319	ITP/036/14NP	359	ITP/011/15NI	399	ITP/061/15NI
320	ITP/037/14NP	360	ITP/012/15NP	400	ITP/063/15NI
321	ITP/038/14NI	361	ITP/013/15AI	401	ITP/064/15AI *
322	ITP/039/14NI	362	ITP/014/15TI	402	ITP/066/15AI
323	ITP/040/14NI	363	ITP/015/15LP	403	ITP/071/15NI
324	ITP/041/14NP	364	ITP/016/15LP	404	ITP/073/15NI
325	ITP/042/14NI	365	ITP/017/15NP	405	ITP/075/15NI
326	ITP/045/14LP	366	ITP/018/15TP	406	ITP/076/15NP
327	ITP/046/14TP	367	ITP/019/15NP	407	ITP/077/15NP
328	ITP/047/14TP	368	ITP/021/15NI	408	ITP/078/15NP
329	ITP/048/14LP	369	ITP/023/15NP	409	ITP/079/15NI
330	ITP/049/14TI	370	ITP/024/15AI	410	ITP/080/15NI
331	ITP/051/14AP	371	ITP/027/15AI *	411	ITP/081/15NI *
332	ITP/054/14AI	372	ITP/028/15AP	412	ITP/082/15LP
333	ITP/055/14LP	373	ITP/029/15NI	413	ITP/083/15LP
334	ITP/056/14TI	374	ITP/030/15NI	414	ITP/084/15TP
335	ITP/058/14NI	375	ITP/031/15NI	415	ITP/085/15TI
336	ITP/059/14LI	376	ITP/033/15NP	416	ITP/086/15AP
337	ITP/060/14NI	377	ITP/035/15AP	417	ITP/090/15AP *
338	ITP/062/14NI	378	ITP/037/15TP	418	ITP/091/15AP *
339	ITP/063/14NI	379	ITP/038/15NP	419	ITP/094/15AP
340	ITP/064/14TP	380	ITP/039/15NP	420	ITP/097/15TI *
341	ITP/065/14TP	381	ITP/040/15NI	421	ITP/098/15NI
342	ITP/066/14LP	382	ITP/041/15NP	422	ITP/099/15NI
343	ITP/067/14TP	383	ITP/042/15NI	423	ITP/100/15NI
344	ITP/068/14TI	384	ITP/044/15LP	424	ITP/101/15NI
345	ITP/069/14NP	385	ITP/045/15TP *	425	ITP/102/15TP *
346	ITP/070/14NP	386	ITP/046/15LP	426	ITP/103/15TP *

No.	Project Reference	No.	Project Reference	No.	Project Reference
427	ITP/104/15TP *	467	ITP/042/16NI *	507	ITP/088/16NI *
428	ITP/105/15TP *	468	ITP/043/16NP *	508	ITP/089/16TP *
429	ITP/106/15TI *	469	ITP/044/16NI	509	ITP/090/16TP *
430	ITP/107/15TI *	470	ITP/045/16NI	510	ITP/091/16TI *
431	ITP/108/15TI *	471	ITP/047/16NP	511	ITP/092/16TP *
432	ITP/109/15TP *	472	ITP/048/16NI *	512	ITP/002/17TI *
433	ITP/110/15LI	473	ITP/049/16NP *	513	ITP/003/17LP *
434	ITP/111/15TP *	474	ITP/050/16NI	514	ITP/006/17NP *
435	ITP/112/15TP *	475	ITP/051/16LI *	515	ITP/007/17NP *
436	ITP/001/16LI	476	ITP/052/16TP *	516	ITP/008/17NI *
437	ITP/002/16LP *	477	ITP/053/16LP *	517	ITP/009/17NP *
438	ITP/003/16LP *	478	ITP/054/16TP *	518	ITP/010/17NP *
439	ITP/004/16LP *	479	ITP/055/16AI *	519	ITP/011/17LI *
440	ITP/005/16NI *	480	ITP/057/16NI *	520	ITP/014/17NP *
441	ITP/007/16NP *	481	ITP/058/16NP *	521	ITP/016/17NI *
442	ITP/008/16NI *	482	ITP/059/16NI *	522	ITP/017/17NP *
443	ITP/010/16NP	483	ITP/060/16NP *	523	ITP/018/17LP *
444	ITP/011/16NI	484	ITP/061/16LP	524	ITP/019/17LP *
445	ITP/013/16AI	485	ITP/062/16LP	525	ITP/020/17TP *
446	ITP/015/16AI	486	ITP/063/16NI *	526	ITP/021/17TI *
447	ITP/016/16NP *	487	ITP/064/16NI *	527	ITP/022/17LP *
448	ITP/017/16NI	488	ITP/065/16NI *	528	ITP/023/17AP *
449	ITP/018/16NI	489	ITP/066/16NP *	529	ITP/024/17LP *
450	ITP/019/16NI	490	ITP/067/16TP *	530	ITP/025/17TP *
451	ITP/020/16NI *	491	ITP/068/16NI *	531	ITP/026/17TP *
452	ITP/021/16NI	492	ITP/069/16AP *	532	ITP/027/17NI *
453	ITP/022/16NI *	493	ITP/071/16AP *	533	ITP/028/17NI *
454	ITP/023/16TI *	494	ITP/072/16AP *	534	ITP/029/17LP *
455	ITP/024/16LP	495	ITP/076/16LP *	535	ITP/030/17LP *
456	ITP/026/16AP *	496	ITP/077/16TP *	536	ITP/031/17NI *
457	ITP/030/16AP *	497	ITP/078/16NI *	537	ITP/032/17NI *
458	ITP/033/16NI *	498	ITP/079/16LP *	538	ITP/033/17NP *
459	ITP/034/16TP *	499	ITP/080/16NI	539	ITP/037/17AP *
460	ITP/035/16NI	500	ITP/081/16NI *	540	ITP/038/17LI *
461	ITP/036/16NI	501	ITP/082/16NI *	541	ITP/039/17NI *
462	ITP/037/16NI *	502	ITP/083/16LI	542	ITP/040/17NP *
463	ITP/038/16NP	503	ITP/084/16NP *	543	ITP/041/17NI *
464	ITP/039/16TP *	504	ITP/085/16NP *	544	ITP/042/17LI *
465	ITP/040/16NI	505	ITP/086/16NI *	545	ITP/043/17NI *
466	ITP/041/16NI *	506	ITP/087/16NI *	546	ITP/044/17NP *

No.	Project Reference	No.	Project Reference	No.	Project Reference
547	ITP/046/17NI *	587	ITS/052/13FP	627	ITS/186/13
548	ITP/047/17NI *	588	ITS/060/13	628	ITS/187/13
549	ITP/048/17NI *	589	ITS/070/13	629	ITS/189/13
550	ITP/049/17NI *	590	ITS/071/13	630	ITS/191/13FX
551	ITP/050/17NI *	591	ITS/075/13	631	ITS/193/13
552	ITP/051/17NP *	592	ITS/079/13	632	ITS/194/13
553	ITP/053/17TI *	593	ITS/080/13FP	633	ITS/196/13
554	ITP/054/17LP *	594	ITS/082/13	634	ITS/201/13
555	ITP/055/17LP *	595	ITS/087/13	635	ITS/205/13FP
556	ITP/056/17TP *	596	ITS/089/13	636	ITS/218/13
557	ITP/057/17LP *	597	ITS/090/13	637	ITS/221/13FP
558	ITP/059/17NP *	598	ITS/094/13FP	638	ITS/223/13
559	ITP/060/17NI *	599	ITS/095/13FP	639	ITS/224/13
560	ITP/061/17NI *	600	ITS/098/13FP	640	ITS/226/13
561	ITP/062/17NI *	601	ITS/099/13	641	ITS/231/13FX
562	ITP/070/17LP *	602	ITS/104/13	642	ITS/232/13
563	ITP/072/17NI *	603	ITS/105/13	643	ITS/235/13
564	ITP/073/17NI *	604	ITS/114/13FX	644	ITS/237/13
565	ITP/079/17NP *	605	ITS/115/13FP	645	ITS/249/13
566	ITP/081/17NP *	606	ITS/117/13	646	ITS/251/13FX
567	ITS/209/12	607	ITS/119/13FP	647	ITS/252/13FP
568	ITS/212/12	608	ITS/123/13FP	648	ITS/275/13
569	ITS/225/12	609	ITS/124/13FP	649	ITS/276/13
570	ITS/227/12	610	ITS/125/13FP	650	ITS/283/13
571	ITS/247/12	611	ITS/131/13FX	651	ITS/285/13
572	ITS/268/12	612	ITS/136/13FP	652	ITS/289/13
573	ITS/274/12	613	ITS/138/13FX	653	ITS/293/13FX
574	ITS/317/12	614	ITS/142/13	654	ITS/300/13
575	ITS/325/12	615	ITS/143/13	655	ITS/304/13
576	ITS/011/13	616	ITS/144/13FP	656	ITS/306/13FX
577	ITS/015/13	617	ITS/149/13FX	657	ITS/319/13
578	ITS/018/13	618	ITS/152/13	658	ITS/321/13
579	ITS/029/13	619	ITS/155/13FP	659	ITS/324/13FP
580	ITS/030/13	620	ITS/161/13FX	660	ITS/329/13
581	ITS/032/13	621	ITS/166/13FP	661	ITS/331/13FX
582	ITS/035/13	622	ITS/168/13	662	ITS/339/13FX
583	ITS/042/13	623	ITS/171/13	663	ITS/350/13
584	ITS/045/13	624	ITS/174/13	664	ITS/360/13FX
585	ITS/046/13	625	ITS/178/13	665	ITS/363/13
586	ITS/049/13	626	ITS/185/13FX	666	ITS/376/13

No.	Project Reference	No.	Project Reference	No.	Project Reference
667	ITS/378/13	707	ITS/130/14FP	747	ITS/291/14
668	ITS/004/14	708	ITS/139/14FX	748	ITS/293/14FP
669	ITS/015/14	709	ITS/141/14FX	749	ITS/296/14
670	ITS/023/14	710	ITS/143/14FP	750	ITS/300/14
671	ITS/026/14FP	711	ITS/149/14FP	751	ITS/312/14
672	ITS/029/14	712	ITS/160/14FP	752	ITS/315/14
673	ITS/032/14	713	ITS/164/14FX	753	ITS/318/14
674	ITS/036/14	714	ITS/174/14FX *	754	ITS/319/14
675	ITS/037/14	715	ITS/177/14	755	ITS/320/14
676	ITS/041/14	716	ITS/181/14	756	ITS/321/14
677	ITS/043/14	717	ITS/182/14FP	757	ITS/323/14
678	ITS/044/14	718	ITS/186/14FX	758	ITS/324/14
679	ITS/048/14	719	ITS/187/14	759	ITS/328/14
680	ITS/050/14	720	ITS/192/14FP	760	ITS/329/14
681	ITS/056/14	721	ITS/195/14FP	761	ITS/331/14FX
682	ITS/058/14	722	ITS/203/14	762	ITS/337/14FX
683	ITS/061/14FP	723	ITS/208/14	763	ITS/342/14
684	ITS/063/14FX	724	ITS/214/14	764	ITS/343/14
685	ITS/065/14	725	ITS/216/14	765	ITS/344/14
686	ITS/068/14	726	ITS/217/14	766	ITS/346/14
687	ITS/072/14	727	ITS/240/14	767	ITS/348/14
688	ITS/079/14	728	ITS/246/14	768	ITS/352/14
689	ITS/081/14FP	729	ITS/248/14FP	769	ITS/356/14
690	ITS/084/14	730	ITS/250/14	770	ITS/357/14
691	ITS/085/14	731	ITS/253/14 *	771	ITS/359/14
692	ITS/087/14	732	ITS/254/14FX	772	ITS/362/14FP
693	ITS/088/14	733	ITS/255/14	773	ITS/363/14FX *
694	ITS/089/14	734	ITS/257/14	774	ITS/365/14FP
695	ITS/090/14	735	ITS/258/14	775	ITS/366/14FP
696	ITS/095/14	736	ITS/261/14	776	ITS/368/14
697	ITS/096/14	737	ITS/263/14	777	ITS/369/14FP
698	ITS/097/14	738	ITS/268/14FX	778	ITS/370/14
699	ITS/100/14FP	739	ITS/271/14FX	779	ITS/380/14
700	ITS/104/14	740	ITS/277/14	780	ITS/381/14
701	ITS/107/14	741	ITS/280/14	781	ITS/007/15FP
702	ITS/111/14	742	ITS/284/14FP	782	ITS/014/15
703	ITS/113/14	743	ITS/285/14FX	783	ITS/017/15
704	ITS/117/14	744	ITS/288/14	784	ITS/018/15
705	ITS/123/14	745	ITS/289/14FX	785	ITS/019/15
706	ITS/129/14	746	ITS/290/14FP	786	ITS/021/15

No.	Project Reference	No.	Project Reference	No.	Project Reference
787	ITS/022/15	827	ITS/210/15FX *	867	ITS/371/15 *
788	ITS/028/15	828	ITS/214/15 *	868	ITS/376/15FX *
789	ITS/036/15FX	829	ITS/216/15 *	869	ITS/377/15FX
790	ITS/038/15FP *	830	ITS/227/15	870	ITS/380/15FP *
791	ITS/039/15	831	ITS/231/15	871	ITS/381/15 *
792	ITS/042/15	832	ITS/236/15 *	872	ITS/382/15
793	ITS/050/15	833	ITS/252/15 *	873	ITS/383/15FX *
794	ITS/051/15	834	ITS/253/15 *	874	ITS/384/15FP *
795	ITS/052/15	835	ITS/255/15	875	ITS/388/15
796	ITS/057/15	836	ITS/257/15 *	876	ITS/389/15
797	ITS/059/15	837	ITS/258/15FX *	877	ITS/391/15FX *
798	ITS/066/15	838	ITS/265/15FX *	878	ITS/393/15FP *
799	ITS/070/15	839	ITS/267/15 *	879	ITS/394/15 *
800	ITS/073/15FP	840	ITS/271/15	880	ITS/011/16 *
801	ITS/078/15FX *	841	ITS/275/15FP *	881	ITS/013/16 *
802	ITS/083/15	842	ITS/276/15 *	882	ITS/014/16 *
803	ITS/087/15FP	843	ITS/280/15 *	883	ITS/015/16FX *
804	ITS/103/15FX *	844	ITS/286/15 *	884	ITS/020/16FP *
805	ITS/112/15FP *	845	ITS/287/15FX	885	ITS/022/16FP *
806	ITS/113/15FP *	846	ITS/288/15FX *	886	ITS/024/16 *
807	ITS/116/15	847	ITS/290/15	887	ITS/025/16 *
808	ITS/121/15FX	848	ITS/292/15FP *	888	ITS/029/16FX *
809	ITS/131/15	849	ITS/295/15 *	889	ITS/041/16 *
810	ITS/132/15	850	ITS/296/15	890	ITS/047/16 *
811	ITS/147/15	851	ITS/300/15 *	891	ITS/048/16 *
812	ITS/150/15	852	ITS/306/15FP *	892	ITS/050/16FP *
813	ITS/154/15	853	ITS/307/15	893	ITS/053/16 *
814	ITS/155/15FP	854	ITS/308/15	894	ITS/055/16 *
815	ITS/157/15	855	ITS/316/15FX *	895	ITS/057/16 *
816	ITS/164/15 *	856	ITS/321/15	896	ITS/059/16FP *
817	ITS/170/15FP *	857	ITS/334/15FP *	897	ITS/069/16 *
818	ITS/171/15FP	858	ITS/338/15 *	898	ITS/070/16FP *
819	ITS/173/15FX	859	ITS/343/15 *	899	ITS/071/16 *
820	ITS/180/15	860	ITS/344/15 *	900	ITS/072/16 *
821	ITS/181/15FP	861	ITS/350/15FX *	901	ITS/073/16 *
822	ITS/188/15FP *	862	ITS/360/15	902	ITS/091/16FX *
823	ITS/195/15FP *	863	ITS/361/15FX	903	ITS/099/16FX *
824	ITS/203/15	864	ITS/363/15FX *	904	ITS/105/16FP *
825	ITS/205/15FP *	865	ITS/366/15	905	ITS/107/16 *
826	ITS/208/15FP *	866	ITS/369/15 *	906	ITS/126/16 *

No.	Project Reference	No.	Project Reference	No.	Project Reference
907	ITS/133/16FP *	947	ITS/273/16FP *	987	ITS/469/16 *
908	ITS/137/16 *	948	ITS/274/16FX *	988	ITS/470/16 *
909	ITS/140/16 *	949	ITS/275/16FX *	989	ITS/001/17 *
910	ITS/141/16 *	950	ITS/279/16 *	990	ITS/002/17FP *
911	ITS/149/16 *	951	ITS/297/16 *	991	ITS/009/17 *
912	ITS/151/16 *	952	ITS/304/16 *	992	ITS/018/17FP *
913	ITS/157/16 *	953	ITS/305/16 *	993	ITS/026/17 *
914	ITS/161/16FP *	954	ITS/306/16FX *	994	ITS/029/17 *
915	ITS/162/16FP *	955	ITS/319/16FP *	995	ITS/031/17 *
916	ITS/163/16 *	956	ITS/337/16FP *	996	ITS/044/17 *
917	ITS/164/16FX *	957	ITS/345/16 *	997	ITS/051/17 *
918	ITS/165/16FX *	958	ITS/350/16 *	998	ITS/053/17FX *
919	ITS/171/16FX *	959	ITS/353/16 *	999	ITS/055/17 *
920	ITS/172/16 *	960	ITS/357/16 *	1000	ITS/056/17 *
921	ITS/175/16 *	961	ITS/360/16 *	1001	ITS/066/17FP *
922	ITS/179/16FP *	962	ITS/367/16 *	1002	ITS/067/17 *
923	ITS/180/16 *	963	ITS/369/16FP *	1003	ITS/074/17 *
924	ITS/183/16FP *	964	ITS/370/16 *	1004	ITS/076/17 *
925	ITS/186/16 *	965	ITS/371/16 *	1005	ITS/077/17FP *
926	ITS/191/16 *	966	ITS/373/16FP *	1006	ITS/079/17FX *
927	ITS/208/16FX *	967	ITS/376/16FP *	1007	ITS/082/17 *
928	ITS/209/16FX *	968	ITS/387/16 *	1008	ITS/088/17 *
929	ITS/210/16FX *	969	ITS/391/16 *	1009	ITS/089/17 *
930	ITS/211/16FP *	970	ITS/394/16FX *	1010	ITS/092/17 *
931	ITS/212/16FP *	971	ITS/397/16FX *	1011	ITS/106/17FX *
932	ITS/215/16FP *	972	ITS/406/16FP *	1012	ITS/124/17 *
933	ITS/219/16 *	973	ITS/410/16FP *	1013	ITS/131/17 *
934	ITS/222/16 *	974	ITS/415/16 *	1014	ITS/133/17FX *
935	ITS/224/16 *	975	ITS/417/16 *	1015	ITS/136/17 *
936	ITS/226/16 *	976	ITS/422/16 *	1016	ITS/138/17 *
937	ITS/227/16FX *	977	ITS/423/16FX *	1017	ITS/143/17 *
938	ITS/234/16 *	978	ITS/425/16FX *	1018	ITS/148/17 *
939	ITS/243/16 *	979	ITS/428/16 *	1019	ITS/151/17 *
940	ITS/248/16 *	980	ITS/429/16FX *	1020	ITS/168/17 *
941	ITS/251/16FX *	981	ITS/432/16 *	1021	ITS/170/17 *
942	ITS/254/16 *	982	ITS/443/16FX *	1022	ITS/177/17FP *
943	ITS/260/16FX *	983	ITS/445/16FP *	1023	ITS/191/17FP *
944	ITS/261/16FX *	984	ITS/447/16FP *	1024	ITS/193/17 *
945	ITS/264/16FX *	985	ITS/448/16FP *	1025	ITS/197/17FP *
946	ITS/265/16FX *	986	ITS/459/16FP *	1026	ITS/198/17FX *

No.	Project Reference	No.	Project Reference
1027	ITS/209/17FX *	1029	ITS/217/17FP *
1028	ITS/214/17FP *	1030	ITS/224/17FP *

UICP – provides dollar-for-dollar matching fund for R&D jointly undertaken by private companies and local universities.

No.	Project Reference
1	UIM/234
2	UIM/236
3	UIM/237
4	UIM/238
5	UIM/241
6	UIM/242
7	UIM/243
8	UIM/245
9	UIM/246
10	UIM/247
11	UIM/250
12	UIM/251
13	UIM/253
14	UIM/254
15	UIM/256
16	UIM/257
17	UIM/258
18	UIM/260
19	UIM/262
20	UIM/263
21	UIM/264
22	UIM/265
23	UIM/268
24	UIM/269
25	UIM/270
26	UIM/271
27	UIM/272
28	UIM/273
29	UIM/274
30	UIM/275
31	UIM/276

No.	Project Reference
32	UIM/277
33	UIM/278
34	UIM/279
35	UIM/280 *
36	UIM/283 *
37	UIM/285
38	UIM/286
39	UIM/287 *
40	UIM/288 *
41	UIM/289 *
42	UIM/290 *
43	UIM/291 *
44	UIM/292 *
45	UIM/293 *
46	UIM/295 *
47	UIM/296 *
48	UIM/297 *
49	UIM/298 *
50	UIM/299 *
51	UIM/300 *
52	UIM/301 *
53	UIM/302 *
54	UIM/303 *
55	UIM/304 *
56	UIM/305 *
57	UIM/306 *
58	UIM/307 *
59	UIM/308 *
60	UIM/309 *
61	UIM/310 *
62	UIM/311 *

No.	Project Reference
63	UIM/312 *
64	UIM/313 *
65	UIM/314 *
66	UIM/315 *
67	UIM/316 *
68	UIM/317 *
69	UIM/318 *
70	UIM/320 *
71	UIM/321 *
72	UIM/322 *
73	UIM/323 *
74	UIM/324 *
75	UIM/325 *
76	UIM/326 *
77	UIM/327 *
78	UIM/328 *
79	UIM/329 *
80	UIM/330 *
81	UIM/331 *

No.	Project Reference
82	UIM/332 *
83	UIT/119
84	UIT/120
85	UIT/121
86	UIT/122
87	UIT/123
88	UIT/124
89	UIT/125
90	UIT/126
91	UIT/128
92	UIT/130
93	UIT/131
94	UIT/132 *
95	UIT/133 *
96	UIT/134
97	UIT/135 *
98	UIT/137 *
99	UIT/138 *

SERAP – operates as a matching grant for SMEs. SERAP has been replaced by ESS since April 2015.

ESS – provides dollar-for-dollar matching fund for private companies to carry out R&D projects.

SERAP

No.	Project Reference
1	E/P048/12
2	E/P082/12
3	E/P083/12
4	E/P084/12
5	E/P086/12
6	E/P002/13
7	E/P006/13
8	E/P008/13
9	E/P010/13
10	E/P019/13
11	E/P021/13
12	E/P040/13
13	E/P041/13
14	E/P045/13
15	E/P047/13
16	E/P083/13
17	E/P096/13
18	E/P097/13
19	E/P100/13
20	E/P103/13
21	E/P106/13
22	E/P108/13
23	E/P111/13
24	E/P003/14
25	E/P004/14
26	E/P007/14
27	E/P015/14
28	E/P021/14
29	E/P024/14
30	E/P029/14
31	E/P031/14
32	E/P046/14
33	E/P047/14

No.	Project Reference
34	E/P051/14
35	E/P055/14
36	E/P064/14
37	E/P067/14
38	E/P069/14
39	E/P071/14
40	E/P081/14
41	E/P082/14
42	E/P087/14
43	E/P003/15
44	E/P021/15
45	E/P030/15

ESS

No.	Project Reference
1	B/E001/15 *
2	B/E007/15 *
3	B/E011/15 *
4	B/E019/15
5	B/E038/15 *
6	B/E008/16
7	B/E017/16 *
8	B/E032/16 *
9	B/E033/16 *
10	B/E034/16 *
11	B/E040/16 *
12	B/E042/16 *
13	B/E051/16 *
14	B/E053/16 *
15	B/E006/17 *
16	S/E035/15 *
17	S/E039/15

No.	Project Reference
18	S/E040/15 *
19	S/E043/15
20	S/E049/15 *
21	S/E052/15 *
22	S/E056/15 *
23	S/E068/15 *
24	S/E085/15
25	S/E087/15
26	S/E096/15 *
27	S/E102/15
28	S/E005/16
29	S/E009/16 *
30	S/E012/16
31	S/E014/16 *
32	S/E017/16 *
33	S/E026/16 *
34	S/E050/16
35	S/E054/16 *
36	S/E062/16 *
37	S/E068/16 *
38	S/E084/16 *
39	S/E102/16 *
40	S/E103/16 *
41	S/E018/17 *

MRP – supports midstream research projects undertaken by the University Grants Committee-funded institutions.

No.	Project Reference
1	MRP/011/17X *
2	MRP/020/17 *
3	MRP/056/17X *
4	MRP/066/17X *
5	MRP/072/17X *
6	MRP/092/17X *

CONTROLLING OFFICER'S REPLY

ITB107

(Question Serial No. 5535)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (1) Support for Research and Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is stated in paragraph 71 of the Budget Speech that to encourage research and development (R&D), enterprises will enjoy a 300% tax deduction for the first \$2 million qualifying R&D expenditure, and a 200% deduction for the remainder. Please list the specific qualifying criteria for the tax deduction, as well as the details and breakdown of expenditure on the above item for 2018-19.

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 58)

Reply:

To encourage enterprises to conduct more local research and development (R&D) activities, we propose to provide enhanced tax deduction for expenditure on employees and consumable items directly incurred by an enterprise in carrying out “qualifying R&D activities” (i.e. “qualifying expenditure”) as well as payments made to “designated local research institutions” for conducting “qualifying R&D activities”. The deduction will be 300% for the first \$2 million of the above aggregate amount and 200% for the remaining amount.

The definition of “qualifying R&D activities” is primarily built on the definition of “R&D” in the existing Inland Revenue Ordinance (IRO), but excludes certain activities not regarding as involvement in scientific and technological advancement. In order to attract enterprises to invest more in R&D in Hong Kong, promote local R&D activities and groom local R&D talents, the “R&D activities” concerned have to be carried out in Hong Kong for compliance with the definition of “qualifying R&D activities”.

The expenditure incurred by an enterprise in carrying out other “R&D activities” falling outside the definition of “qualifying R&D activities”, other R&D expenditure falling outside the definition of “qualifying expenditure”, and payments made to overseas universities or colleges for conducting “qualifying R&D activities” may still be eligible for 100% tax deduction under the existing IRO.

Work on the relevant amendment bill is underway. If the legislative work goes smoothly, the aforementioned enhanced tax deduction can be implemented in the third quarter of 2018 the earliest, and be applicable to qualifying R&D expenditure incurred by enterprises on 1 April 2018 and thereafter.

Upon implementation of the amended IRO, the Commissioner for Innovation and Technology (CIT) will have to advise the Commissioner of Inland Revenue in ascertaining whether any particular activity constitutes an “R&D activity” or a “qualifying R&D activity”, and whether the payment or expenditure was made or incurred in carrying out the relevant “R&D activities” or “qualifying R&D activities”. In addition, CIT will have to process the applications submitted by local private organisations as “designated local research institutions” and follow up on the subsequent monitoring work. To handle the above additional work, the Innovation and Technology Commission will need to create 3 civil service posts, including 1 Senior Scientific Officer and 2 Engineers. The annual recurrent expenditure is about \$3.2 million.

- End -

CONTROLLING OFFICER'S REPLY

ITB108

(Question Serial No. 5580)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned in paragraph 74 of the Budget Speech that the Government will earmark \$500 million under the Innovation and Technology Fund to implement, in the second half of the year, the Technology Talent Scheme as announced in the Policy Address. One of the initiatives is to establish a Postdoctoral Hub programme to provide funding support for all eligible institutions to recruit postdoctoral talent. The Scheme will also provide funding to subsidise local enterprises on a matching basis for training staff in advanced technologies. What are the estimated expenditure on implementing the above programmes, the timetable, and the number of staff involved?

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 105)

Reply:

We will set aside \$500 million under the Innovation and Technology Fund (ITF) to launch a 5-year pilot Technology Talent Scheme to nurture and bring together more technology talents. The Scheme comprises:

(a) a Postdoctoral Hub programme to provide funding support to ITF recipients as well as incubatees and innovation and technology tenants of the Hong Kong Science and Technology Parks Corporation/the Cyberport to recruit up to 2 postdoctoral talents for research and development work. The ITF will provide a monthly allowance of \$32,000 for each postdoctoral researcher for up to 24 months. The concerned researcher must possess a doctoral degree in a science, technology, engineering or mathematics ("STEM")-related discipline from either a local university or a well-recognised non-local institution. The Innovation and Technology Commission will administer this programme with its existing manpower; and

(b) a Reindustrialisation and Technology Training Programme (RTTP) to subsidise local enterprises on a 2:1 matching basis for training staff in advanced technologies, especially

those related to “Industry 4.0”. The RTTP will be administered by the Vocational Training Council (VTC) and overseen by VTC’s Innovation and Technology Training Board.

We aim to launch the Technology Talent Scheme in the third quarter of 2018. The estimated annual expenditure is about \$100 million.

- End -

CONTROLLING OFFICER'S REPLY

ITB109

(Question Serial No. 0105)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is stated in the Budget that the Government will relax the eligibility criteria for the Technology Voucher Programme (TVP). All local enterprises, irrespective of size and duration of operation, may apply. This will enable more medium enterprises and start-ups to benefit from the TVP. Please provide the following details:

1. What are the specific details of the relaxation of the eligibility criteria for the TVP?
2. Please list, by industry, the number of applications received, the number of applications approved and the amount of funding involved since the launch of the TVP in November 2016. In addition, what is the average time required for completion of vetting? What are the manpower and expenditure involved?
3. Please list, by industry, the estimated number of applications to be received, the estimated number of applications to be approved and the estimated amount of funding involved in 2018. What are the manpower and expenditure involved?
4. What are the measures for improving and expediting the vetting procedures?

Asked by: Hon CHEUNG Yu-yan, Tommy (Member Question No. (LegCo use): 37)

Reply:

The required information is provided below:

1. Since 28 February 2018, the eligibility criteria for the Technology Voucher Programme (TVP) have been relaxed as follows:

- (a) an applicant enterprise is required to have substantive business operation in Hong Kong only at the time of application instead of for a year as previously required; and

- (b) enterprises of all sizes (except listed enterprises) may apply, instead of just small and medium enterprises.

2 and 3. As at end February 2018, the Innovation and Technology Commission (ITC) received applications from a total of 889 enterprises. Of the 403 applications assessed by the TVP Committee (the Committee), 377 were approved for funding, representing a success rate of 94% and involving a total funding of about \$49.7 million. Among the remaining applications, 348 are still awaiting supplementary information from the applicant enterprises or are currently under assessment by the TVP Secretariat; 138 could not be processed and had to be returned, mainly because the applicant enterprises failed to submit all the supporting documents required.

The major types of business engaged in by the applicant enterprises and the number of applications already approved are as follows –

Type of business	Number of applications ^{Note}	Number of applications already approved ^{Note}
Wholesale and retail	172	75
Import and export trade	139	70
Professional services	63	28
Information technology	61	24
Engineering	50	27

^{Note} Applicant enterprises may engage in more than one type of business.

From receipt of applications to completion of vetting by the Committee, the shortest processing time is 14 working days while the average processing time is about 80 working days.

We initially expected to receive and finish processing applications from about 360 enterprises in 2018 (no breakdown of estimates by industry is available), and that around 330 applications would be approved, with a total funding of about \$43 million. With the relaxation of the eligibility criteria since this year's Budget Day, we expect that the numbers of applications and projects to be approved will further increase.

At present, 12 staff are deployed for the implementation of the TVP. The estimated total salary costs for 2018-19 is about \$6.6 million.

4. Since the launch of the TVP in November 2016, ITC has implemented a series of measures to streamline the application procedures based on the previous experience gained. These measures include optimising the online application system, providing a checklist of documents for submission of application on the TVP's website to remind applicant enterprises of documents required for submission, and reducing the number of the relevant documents. In addition to the detailed guidance notes for applications, ITC also prepared a pamphlet to introduce the features of the TVP, including the application and vetting procedures, and provided samples of a completed application form (together with the required documents) on the website for enterprises' reference. ITC also organises briefing sessions from time to time to share the successful cases with the industry. Furthermore, applications fulfilling specified conditions will be submitted to the Committee for assessment by circulation or meeting as soon as possible, so as to complete the vetting as

soon as practicable. ITC will continue to monitor the operation of the TVP and introduce enhancement measures in a timely manner.

- End -

CONTROLLING OFFICER'S REPLY

ITB110

(Question Serial No. 1489)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

This year's Budget mentioned the policy on promoting re-industrialisation in Hong Kong. Will the Government advise on the estimated amount of resources to be allocated to the policy on promoting re-industrialisation? Which areas will the resources be mainly allocated to?

Asked by: Hon CHIANG Lai-wan (Member Question No. (LegCo use): 6)

Reply:

The Government is committed to promoting re-industrialisation with a view to developing high-end manufacturing that is based on new technologies and smart production but does not occupy much land, thereby seeking a new growing point for Hong Kong's economy and creating quality and diversified employment opportunities.

In terms of hardware, Stage 1 of the Hong Kong Science Park Expansion Programme is expected to be completed in 2020 to provide more research infrastructure for the industry. With regard to this project, the Legislative Council Finance Committee (FC) approved in May 2016 the Government's injection of \$2.878 billion and guarantee for a commercial loan amounting to \$1.107 billion to the Hong Kong Science and Technology Parks Corporation (HKSTPC). Meanwhile, HKSTPC is constructing a Data Technology Hub and an Advanced Manufacturing Centre in Tseung Kwan O Industrial Estate, which are expected to be completed in 2020 and 2022 respectively. For these two facilities, the FC approved in May 2016 the Government's injection of \$6.598 billion and the provision of a \$1.65 billion government loan to HKSTPC.

Quality research and development (R&D) capabilities are necessary to support re-industrialisation. The Government provides funding support through the Innovation and Technology Fund (ITF) for projects that contribute to technology upgrading in manufacturing and services industries and promotion of innovation. As at January 2018,

over 7 000 projects were funded by the ITF, with a funding of about \$13.6 billion. There are various funding programmes under the ITF, including the Innovation and Technology Support Programme, the University-Industry Collaboration Programme, the Enterprise Support Scheme, the Patent Application Grant, etc. One of the aims of these funding programmes is to encourage more R&D work and promote re-industrialisation. In addition, the Government will set aside \$500 million under the ITF to launch a Technology Talent Scheme in the third quarter of 2018, which includes a Reindustrialisation and Technology Training Programme to subsidise local enterprises on a matching basis for training staff in advanced technologies, especially those related to “Industry 4.0”, with a view to driving re-industrialisation.

Meanwhile, the Hong Kong Productivity Council (HKPC) has been dedicating efforts to promoting re-industrialisation to facilitate enterprises in moving towards high value-added production and gradually upgrading towards Industry 4.0. In 2018-19, the relevant work of HKPC includes setting up the Smart Industry One Consortium as a platform to facilitate the industry to exchange information on smart industry; establishing an Invention Centre jointly with the Fraunhofer Institute for Production Technology of Germany to assist the industry in accelerating adoption of Industry 4.0-related technologies; and setting up a HKPC Institute of Innovation & Technology (Shenzhen) to provide Hong Kong entrepreneurs in the Bay Area with solutions based on intelligent manufacturing, artificial intelligence, big data, environmental technology, etc. The operation of HKPC is supported by the government subvention and HKPC’s revenue. The promotion of re-industrialisation is one of the many tasks of HKPC, and no breakdown of the expenditure is available.

In recent years, the 5 R&D Centres established by the Government (i.e. the Hong Kong Applied Science and Technology Research Institute, the Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies, the Nano and Advanced Materials Institute, the Hong Kong Research Institute of Textiles and Apparel and the Automotive Parts and Accessory Systems R&D Centre) have also been actively engaging in R&D efforts related to re-industrialisation, covering various areas such as big data, Internet of Things, robotics, new materials, smart mobility, environmental technology, etc., thereby assisting the industry to capture and capitalise on business opportunities.

- End -

CONTROLLING OFFICER'S REPLY

ITB111

(Question Serial No. 1491)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned in paragraph 67 of the Budget Speech that the Government will earmark \$10 billion to support the establishment of 2 research clusters on healthcare technologies and on artificial intelligence and robotics technologies, to attract the world's top research institutions and technology enterprises to Hong Kong for conducting more midstream and downstream research and development (R&D) projects in collaboration with local universities and research institutions. Such clusters will pool and nurture more technology talent in Hong Kong. In this connection, please advise this Committee of:

1. the specific measures to attract the world's top research institutions and technology enterprises to Hong Kong;
2. the specific amount out of the earmarked \$10 billion for conducting more midstream and downstream R&D projects in collaboration with local universities and research institutions; and
3. the additional manpower arrangement required and the expenditure for the establishment of the 2 clusters.

Asked by: Hon CHIANG Lai-wan (Member Question No. (LegCo use): 8)

Reply:

A consolidated reply to various parts of the question is as follows:

To promote the development of innovation and technology in Hong Kong, the Government is working on the establishment of the 2 research clusters on healthcare technologies and on artificial intelligence and robotics technologies. \$10 billion has been earmarked to provide financial support (such as the capital/operation costs of setting up research laboratories) for non-profit-making research institutions that will establish their presence in the 2 clusters.

In addition, the Innovation and Technology Fund will fund research and development projects carried out in these 2 clusters in accordance with the existing mechanism adopted in local public research institutions.

We will, where necessary, seek additional manpower in accordance with established mechanism to implement the relevant measures.

- End -

CONTROLLING OFFICER'S REPLY

ITB112

(Question Serial No. 1506)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Government puts emphasis on expediting the process of re-industrialisation. Many start-ups involved in such process are small and medium enterprises (SMEs). Will the Government advise on:

- (1) the amount of resources to be earmarked for assisting SMEs in the process of re-industrialisation;
- (2) the amount of funds to be spent on the Data Hub and the Advanced Manufacturing Centre; and
- (3) how the system for assessing the effectiveness of re-industrialisation will be set up?

Asked by: Hon CHIANG Lai-wan (Member Question No. (LegCo use): 23)

Reply:

The requested information is provided below:

- (1) The Government is committed to promoting re-industrialisation with a view to developing high-end manufacturing that is based on new technologies and smart production but does not occupy much land, thereby seeking a new growing point for Hong Kong's economy and creating quality and diversified employment opportunities.

In terms of infrastructure, the Hong Kong Science and Technology Parks Corporation (HKSTPC) is constructing a Data Technology Hub (DT Hub) and an Advanced Manufacturing Centre (AMC) in Tseung Kwan O Industrial Estate to complement the Government's policy on "re-industrialisation". These facilities will provide small and medium enterprises with more room for development and encourage smart production.

On technological support, the Hong Kong Productivity Council (HKPC) has been dedicating efforts to promoting re-industrialisation to facilitate enterprises in moving towards high value-added production and gradually upgrading towards Industry 4.0. In 2018-19, the relevant work of HKPC includes setting up the Smart Industry One Consortium as a platform to facilitate the industry to exchange information on smart industry; establishing an Invention Centre jointly with the Fraunhofer Institute for Production Technology of Germany to assist the industry in accelerating adoption of Industry 4.0-related technologies; and setting up a HKPC Institute of Innovation & Technology (Shenzhen) to provide Hong Kong entrepreneurs in the Bay Area with solutions based on intelligent manufacturing, artificial intelligence, big data, environmental technology, etc. The operation of HKPC is supported by government subvention and HKPC's revenue. The promotion of re-industrialisation is one of the many tasks of HKPC, and no breakdown of the expenditure is available.

On nurturing talent, the Government will set aside \$500 million under the Innovation and Technology Fund to launch a Technology Talent Scheme in the third quarter of 2018, which includes a Reindustrialisation and Technology Training Programme (RTTP) to subsidise local enterprises on a matching basis for training staff in advanced technologies, especially those related to "Industry 4.0", with a view to driving re-industrialisation.

- (2) The respective project costs for the DT Hub and AMC are \$1.615 billion and \$6.633 billion. The Legislative Council Finance Committee approved in May 2016 the Government's injection of \$6.598 billion and the provision of a \$1.65 billion government loan to HKSTPC for the implementation of the relevant projects.
- (3) We will maintain communication with stakeholders and make reference to the views from various sectors in the hope that the declining trend of manufacturing sector as a percentage of the Gross Domestic Product can be gradually reversed. Meanwhile, we will closely monitor the progress and effectiveness of the above work, such as the number of enterprises participating in the activities and programmes.

- End -

CONTROLLING OFFICER'S REPLY

ITB113

(Question Serial No. 2089)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Government will invest \$50 billion in innovation and technology, with focuses on Lok Ma Chau and the Hong Kong Science Park (HKSP).

- 1) What is the proportion of funding to be spent on site formation and construction of infrastructure?
- 2) What is the difference in the objectives between Lok Ma Chau development and HKSP?
- 3) How many local registered companies are expected to benefit?

Asked by: Hon CHU Hoi-dick (Member Question No. (LegCo use): 23)

Reply:

The requested information is provided below:

1. The Government has earmarked \$20 billion to support the first phase development of the Hong Kong-Shenzhen Innovation and Technology Park (the Park) in the Lok Ma Chau Loop (the Loop) for, inter alia, site formation, infrastructure, superstructure and initial operation. A detailed estimate on the cost of site formation and infrastructure concerned will be available only when the design of the Main Works Package 1 is completed. Should funding approval be obtained from the Legislative Council in the first half of 2018, we plan to commence the construction of the Advance Works as well as the detailed design and site investigation of Main Works Package 1 in mid-2018. Meanwhile, the Hong Kong-Shenzhen Innovation and Technology Park Limited (HSITP) is carrying out a Master Layout Plan Study on the development of the Park and recommendations on the development plan and cost estimate of the Park will be made. Since the Loop, which covers a huge area, is a piece of undeveloped

land without any infrastructure, it is estimated that the development cost of the whole area will be far more than \$20 billion.

2. The Hong Kong Science Park at Pak Shek Kok provides various facilities and services for applied research and development (R&D) activities, connecting stakeholders, driving knowledge transfer and nurturing talents to accelerate technological innovation and industrialisation in building a dynamic innovation and technology (I&T) ecosystem, thereby creating social and economic benefits for Hong Kong and the entire region.

Geographically located at the Loop and adjacent to Shenzhen, the Park enjoys strategic advantages that facilitate complementary co-operation with Shenzhen, and will provide a total gross floor area of approximately 1.2 million square metres, which will be the largest I&T platform ever established in the history of Hong Kong. With I&T as the main focus, the Park will set up a key base for cooperation in scientific research, as well as relevant higher education, cultural and creative industries and other complementary facilities, so as to attract top enterprises, R&D organisations and higher education institutions from Hong Kong, Shenzhen, the Mainland and overseas to establish their presence there, which will contribute to elevating the co-operation among the industry, academia and research sectors to a higher level, making it the most important infrastructure for driving R&D and “re-industrialisation” in Hong Kong.

3. HSITP is carrying out a Business Model and Business Planning Study on the development of the Park. Recommendations on the development direction of the Park will be made. When the relevant planning study is completed, we will make reference to the findings and further plan for the development scale of the Loop, so as to attract local, overseas and Mainland enterprises and organisations to establish their presence in the Park.

- End -

CONTROLLING OFFICER'S REPLY

ITB114

(Question Serial No. 2958)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: Not Specified

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

- 1) What are the criteria and directions for funding support of the Innovation and Technology Fund (ITF)?
- 2) What are the percentages of the research and development work in the categories of healthcare, big data, artificial intelligence and communications technology supported under the ITF?

Asked by: Hon CHU Hoi-dick (Member Question No. (LegCo use): 21)

Reply:

The requested information is provided below:

- 1) The Innovation and Technology Fund (ITF) aims to finance projects that contribute to innovation and technology (I&T) upgrading and development in manufacturing and services industries in Hong Kong with a view to enhancing Hong Kong's economic development. The vetting criteria for different funding schemes under the ITF varies. For research and development (R&D) projects, vetting of applications is carried out by assessment panels comprising experts from the academia and industry in accordance with established frameworks of the programmes, covering areas including the I&T component of the proposed project, technical and management capability of the research team, financial considerations and so on. There are no specific themes or technology areas for other programmes except the Midstream Research Programme for Universities (MRP) under which themes will be set for each round of application.

- 2) As at end January 2018, R&D projects funded under different programmes of the ITF^{Note} categorised by technology area are as follows:

Technology Area	Total	
	Number	\$ million
Biotechnology	361	750.8
Chinese Medicine	81	131.4
Electrical and Electronics	671	2,635.4
Environmental Technology	127	247.9
Information Technology	897	3,225.8
Manufacturing Technology	588	1,461.5
Materials Science	206	504
Nanotechnology	255	565.7
Others	29	63.6
Total:	3215	9,586.1

Note: These programmes include the Innovation and Technology Support Programme, MRP, University-Industry Collaboration Programme, Small Entrepreneur Research Assistance Programme and Enterprise Support Scheme.

- End -

CONTROLLING OFFICER'S REPLY

ITB115

(Question Serial No. 5069)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Government stated that it would promote re-industrialisation through the development of smart production and high value-added industries. Please advise on:

1. the detailed plan and budget for the above work;
2. whether relevant contents on re-industrialisation will be incorporated in the primary, secondary and tertiary school curricula; if yes, the details; if not, the reasons.

Asked by: Hon CHU Hoi-dick (Member Question No. (LegCo use): 66)

Reply:

The requested information is provided below:

- (1) The Government is committed to promoting re-industrialisation with a view to developing high-end manufacturing that is based on new technologies and smart production but does not occupy much land, thereby seeking a new growing point for Hong Kong's economy and creating quality and diversified employment opportunities.

In terms of hardware, the Government has been working closely with the Hong Kong Science and Technology Parks Corporation (HKSTPC), and has adjusted the industrial estate (IE) policy to facilitate smart production and attract high value-added technology industries and high value-added manufacturing processes. HKSTPC will build and manage specialised multi-storey industrial buildings in the IEs for rent to multi-users in the future. In addition, HKSTPC is constructing a Data Technology Hub and an Advanced Manufacturing Centre in Tseung Kwan O IE, which are expected to be completed in 2020 and 2022 respectively. For these two facilities, the Legislative Council Finance Committee approved in May 2016 the Government's

injection of \$6.598 billion and the provision of a \$1.65 billion government loan to HKSTPC.

Quality research and development (R&D) capabilities are necessary to support re-industrialisation. The Government provides funding support through the Innovation and Technology Fund (ITF) for applied R&D projects that contribute to technology upgrading in manufacturing and services industries and promotion of innovation. As at January 2018, over 7 000 projects were funded by the ITF, with a funding of about \$13.6 billion. There are various funding programmes under the ITF, including the Innovation and Technology Support Programme, the University-Industry Collaboration Programme, the Enterprise Support Scheme, the Patent Application Grant, etc. One of the aims of these funding programmes is to encourage more R&D work and promote re-industrialisation. In addition, the Government will set aside \$500 million under the ITF to launch a Technology Talent Scheme in the third quarter of 2018, which includes a Reindustrialisation and Technology Training Programme to subsidise local enterprises on a matching basis for training staff in advanced technologies, especially those related to “Industry 4.0”, with a view to driving re-industrialisation.

Meanwhile, the Hong Kong Productivity Council (HKPC) has been dedicating efforts to promoting re-industrialisation to facilitate enterprises in moving towards high value-added production and gradually upgrading towards Industry 4.0. In 2018-19, the relevant work of HKPC includes setting up the Smart Industry One Consortium as a platform to facilitate the industry to exchange information on smart industry; establishing an Invention Centre jointly with the Fraunhofer Institute for Production Technology of Germany to assist the industry in accelerating adoption of Industry 4.0-related technologies; and setting up a HKPC Institute of Innovation & Technology (Shenzhen) to provide Hong Kong entrepreneurs in the Bay Area with solutions and services based on intelligent manufacturing, artificial intelligence, big data, environmental technology, etc. The operation of HKPC is supported by the government subvention and HKPC’s revenue. The promotion of re-industrialisation is one of the many tasks of HKPC, and no breakdown of the expenditure is available.

In recent years, the 5 R&D Centres established by the Government (i.e. the Hong Kong Applied Science and Technology Research Institute, the Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies, the Nano and Advanced Materials Institute, the Hong Kong Research Institute of Textiles and Apparel and the Automotive Parts and Accessory Systems R&D Centre) have also been actively engaging in R&D efforts related to re-industrialisation, covering various areas such as big data, Internet of Things, robotics, new materials, smart mobility, environmental technology, etc., thereby assisting the industry to capture and capitalise on business opportunities.

- (2) The Education Bureau (EDB) pointed out that the school curricula will be renewed in a timely manner in response to continuous developments on social, economic, scientific, technological and other fronts. In 2017, EDB renewed the primary and secondary school curricula, which comprise learning elements in science, technology and mathematics education, providing opportunities for students to update themselves on the development of innovation and technology as well as related industries through

the promotion of science, technology, engineering and mathematics (STEM) education and life-wide learning activities. EDB will continue to promote a paradigm shift in the mode of teaching through various teacher professional development programmes and school-based professional support services, etc., and encourage the adoption of student-centred teaching designs to equip students with the skills to create, collaborate and solve problems.

The Vocational Training Council (VTC) launched the Higher Diploma in Data Science and Analytics in 2017 and will launch a new Higher Diploma in Financial Technology in September 2018. The programmes concerned will feature an artificial intelligence (AI) and machine learning module in their curricula. Where resources permit, the VTC plans to set up a Robotics and AI Laboratory and a Big Data Laboratory to help introduce and apply the technology of AI and machine learning through new learning modules in higher diploma programmes, and facilitate students' participation in cross-disciplinary projects in collaboration with the industries, with an aim to nurture talents with the relevant vocational and professional skills.

In terms of post-secondary education, the Government launched the Study Subsidy Scheme for Designated Professions/Sectors (SSSDP) in 2015/16 academic year on a pilot basis to subsidise about 1 000 students per cohort to pursue designated full-time locally accredited self-financing undergraduate programmes in selected disciplines, with a view to nurturing talents in support of specific industries with keen manpower demand. The SSSDP will be regularised in the 2018/19 academic year with the number of subsidised places increased to about 3 000 per cohort. Current students of the designated programmes will also receive the subsidy from the 2018/19 academic year. The selected disciplines of the SSSDP include those related to re-industrialisation, covering computer science, financial technology and logistics.

Overall speaking, post-secondary institutions enjoy academic freedom and a high degree of autonomy in curriculum development. Meanwhile, in addition to assuring the quality and academic standards of the programmes offered, the post-secondary institutions have to ensure that the programmes suit the needs of society. As such, the institutions will continue to work closely with relevant stakeholders (including the industry) to keep track of the latest manpower trend and industry needs.

- End -

CONTROLLING OFFICER'S REPLY

ITB116

(Question Serial No. 5070)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned in the Budget that \$10 billion will be allocated to the Hong Kong Science and Technology Parks Corporation. Of this, \$3 billion will be used to construct research-related facilities, including an additional “animal research facility”. Please inform this Committee of the specific details of the animal research facility, and whether animals will be used and harmed for experimental purposes.

Asked by: Hon CHU Hoi-dick (Member Question No. (LegCo use): 75)

Reply:

The development of the animal research facility proposed by the Hong Kong Science and Technology Parks Corporation (HKSTPC) aims at providing healthcare technology researchers with infrastructure, with a view to complementing Hong Kong's research activities in the field of biotechnology. The animal research facility will conduct experiments necessary for healthcare research (such as drugs efficacy tests and toxicology studies), so as to explore new biological or medical knowledge or develop new medicines. HKSTPC is discussing with the Government the detailed arrangements, including the scale of the animal research facility, operation model, and the types of experiment animals, etc. HKSTPC anticipates that only small-sized animals will be used in the animal research facility for fundamental research experiments related to scientific research. They will also strictly follow the relevant legislations and the Code of Practice for Care and Use of Animals for Experimental Purposes published by the Agriculture, Fisheries and Conservation Department, where the animals involved will be treated humanely and the number of animals used will be minimised.

- End -

CONTROLLING OFFICER'S REPLY

ITB117

(Question Serial No. 5073)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Government plans to earmark \$20 billion for developing the first phase of the Hong Kong-Shenzhen Innovation and Technology Park (the Park) in the Lok Ma Chau Loop (the Loop). Some members of the community do not see the point of the project, criticising it as a waste of public funds and that it is not supported by the public. Will the Government organise discussion meetings in 18 districts on the first phase of the Park in the Loop to enhance public awareness of the project? If yes, what are the details; if not, what are the reasons?

Asked by: Hon CHU Hoi-dick (Member Question No. (LegCo use): 202)

Reply:

The Government has been consulting relevant parties including the Legislative Council, District Councils and Rural Committees in a timely manner at different stages of the Lok Ma Chau Loop (the Loop) development, say when the Planning and Engineering Study on Development of Lok Ma Chau Loop was conducted in 2014; after signing of the Memorandum of Understanding in 2017; during the compilation of the draft Lok Ma Chau Loop Outline Zoning Plan in 2017; and the gazettal of the proposed road works of the Advance Works, etc. The Loop development is a large-scale and long-term project. In future, the Government and the Hong Kong-Shenzhen Innovation and Technology Park Limited will continue to carry out consultations and listen to views from various sectors on the development of the Loop and the Hong Kong-Shenzhen Innovation and Technology Park as appropriate.

- End -

CONTROLLING OFFICER'S REPLY

ITB118

(Question Serial No. 0180)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Financial Secretary mentioned in paragraph 73 under the section of “Diversified Economy” in his speech that: The Government will relax the eligibility criteria for the Technology Voucher Programme (TVP). All local enterprises, irrespective of size and duration of operation, may apply. This will enable more medium enterprises and start-ups to benefit from the TVP. Please inform this Committee of the following: Since the launch of the TVP in November 2016, how much of the \$500 million fund has been used? What is the total number of applications received by the Government? How many of them were approved or rejected? What are the respective percentages and the application details? What kinds of projects and sectors are involved? What are the reasons for rejecting the applications? Please provide a breakdown. What are the details of relaxing the eligibility criteria for the TVP by the Government, and the estimated expenditure for the TVP in 2018-19? Will the Government raise the funding amount? If yes, what are the details; if not, what are the reasons?

Asked by: Hon CHUNG Kwok-pan (Member Question No. (LegCo use): 11)

Reply:

As at end February 2018, the Innovation and Technology Commission (ITC) received applications for the Technology Voucher Programme (TVP) from a total of 889 enterprises. Of the 403 applications assessed by the TVP Committee (the Committee), 377 were approved for funding, representing a success rate of 94% and involving a total funding of about \$49.7 million. 26 applications (6%) were not supported by the Committee because the projects were largely for purchasing off-the-shelf software and hardware or involved only little or no technological elements, and therefore failed to meet the objectives and terms of the TVP. Among the remaining applications, 348 are still awaiting supplementary information from the applicant enterprises or are currently under assessment by the TVP Secretariat; 138 could not be processed and had to be returned, mainly because the applicant enterprises failed to submit all the supporting documents required.

The major types of business engaged in by the applicant enterprises and the number of applications already approved are as follows –

Type of business	Number of applications ^{Note 1}	Number of applications already approved ^{Note 1}
Wholesale and retail	172	75
Import and export trade	139	70
Professional services	63	28
Information technology	61	24
Engineering	50	27

^{Note 1} Applicant enterprises may engage in more than one type of business.

The major types of technological services or solutions involved in the proposed projects and the number of applications already approved are as follows –

Technological service/solution	Number of applications ^{Note 2}	Number of applications already approved ^{Note 2}
Enterprise resource planning solution	411	213
Document management and mobile access system	220	96
Electronic inventory management system	209	91
Point-of-sales system	129	51
Electronic procurement management system	113	44

^{Note 2} Proposed projects may involve more than one technological service or solution.

Basic information of the approved projects which have already commenced, including the project title, the technological services or solutions adopted, funding amount and project period etc., have been uploaded to the website of the Innovation and Technology Fund for public inspection.

In order to benefit more local enterprises, since 28 February 2018, the eligibility criteria for the TVP have been relaxed as follows:

- (a) an applicant enterprise is required to have substantive business operation in Hong Kong only at the time of application instead of for a year as previously required; and
- (b) enterprises of all sizes (except listed enterprises) may apply, instead of just small and medium enterprises.

We initially estimated that the total amount of funding for the applications to be approved would be about \$43 million in 2018. With the relaxation of the eligibility criteria, we expect that the amount of funding to be approved will further increase.

Currently, the average funding amount for the projects approved is about \$130,000, which has not yet reached the cumulative funding ceiling of \$200,000 for each eligible enterprise. As such, there is no urgent need to raise the funding ceiling, which, however, will be

re-examined in a comprehensive review on the effectiveness and modus operandi of the TVP to be conducted in the second half of 2018.

- End -

CONTROLLING OFFICER'S REPLY

ITB119

(Question Serial No. 0751)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Financial Secretary mentioned in paragraph 74 on page 19 of the Budget Speech that \$500 million will be earmarked under the Innovation and Technology Fund (ITF) to implement, in the second half of the year, the Technology Talent Scheme as announced in the Policy Address. One of the initiatives is to establish a Postdoctoral Hub programme to provide funding support for all eligible institutions to recruit postdoctoral talent. The Scheme will also provide funding to subsidise local enterprises on a matching basis for training staff on high-end technologies. Please inform this Committee of the details of the Scheme, including the eligibility criteria, funding amount, implementation schedule and so on, and of the estimated expenditures for various measures as well as the expected number of beneficiary enterprises.

Asked by: Hon CHUNG Kwok-pan (Member Question No. (LegCo use): 64)

Reply:

We will set aside \$500 million under the Innovation and Technology Fund (ITF) to launch a 5-year pilot Technology Talent Scheme to nurture and bring together more technology talents. The Scheme comprises:

(a) a Postdoctoral Hub programme to provide funding support to ITF recipients as well as incubatees and innovation and technology tenants of the Hong Kong Science and Technology Parks Corporation/the Cyberport to recruit up to 2 postdoctoral talents for research and development work. The ITF will provide a monthly allowance of \$32,000 for each postdoctoral researcher for up to 24 months. The concerned researcher must possess a doctoral degree in a science, technology, engineering or mathematics ("STEM")-related discipline from either a local university or a well-recognised non-local institution. We are finalising the programme details. It is expected that there will be some 200 applications per year; and

(b) a Reindustrialisation and Technology Training Programme (RTTP) to subsidise local enterprises on a 2:1 matching basis for training staff in advanced technologies, especially those related to “Industry 4.0”. Eligible trainee must be a Hong Kong permanent resident, as well as employed by a local enterprise or non-government subvented organisation. The RTTP will be administered by the Vocational Training Council (VTC) and overseen by VTC’s Innovation and Technology Training Board. We are finalising the programme details (including the funding ceiling) with VTC. It is expected that there will be about 1 000 applications per year.

We aim to launch the Technology Talent Scheme in the third quarter of 2018. The estimated annual expenditure is about \$100 million.

- End -

CONTROLLING OFFICER'S REPLY

ITB120

(Question Serial No. 1998)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

As stated in the Budget, the Government will allocate \$20 billion for the construction of the Hong Kong-Shenzhen Innovation and Technology Park (the Park) in the Loop. Is the infrastructural project concerned fully financed by the Government, or will it be jointly developed with the private sector by adopting a public-private partnership model (such as the “build-operate-transfer” approach) where the rental revenue from the properties will be shared eventually and used for covering the operating expenditure? In the latest planning for the Park in the Loop, what is the area of land that will be used for residential, commercial, and educational purposes?

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 58)

Reply:

The infrastructural works of the Lok Ma Chau Loop (the Loop) are financed by the Government. According to the Memorandum of Understanding on Jointly Developing the Lok Ma Chau Loop by Hong Kong and Shenzhen (MOU) signed between the Hong Kong Special Administrative Region (SAR) Government and the Shenzhen Municipal People's Government on 3 January 2017, the SAR Government will be responsible for constructing the necessary infrastructure within the Loop and its surrounding area (including site formation and infrastructural facilities), and will lease the formed land within the Loop to the Hong Kong Science and Technology Parks Corporation (HKSTPC) by appropriate land disposal means for the development of the Hong Kong-Shenzhen Innovation and Technology Park (the Park). The Hong Kong-Shenzhen Innovation and Technology Park Limited (HSITP), a wholly-owned subsidiary company set up by HKSTPC, is responsible for implementing the construction of the superstructure of the Park, as well as to operate, maintain and manage the same. In addition, according to the MOU, the Loop is to be developed under the non-profit making principle, with all income from HSITP to be used in the construction and operations of the Park. The \$20 billion earmarked by the Government for the Loop development will be used partly for site formation and infrastructure in the

Loop, as well as for supporting HSITP to construct the superstructure of the Park and its initial operation.

According to the approved Lok Ma Chau Loop Outline Zoning Plan, of the approximate 87 hectares of land in the Loop, 38.6 hectares are zoned “Research and Development, Education and Cultural and Creative Industries”, with a planning intention to develop the Loop into the Park, while another approximately 1.23 hectares are zoned “Commercial”, functioning mainly as commercial/retail facilities. The above area also allows for provision of complementary/ancillary facilities needed by the Park, such as offices and residential facilities, etc.

HSITP is carrying out a Master Layout Plan Study as well as a Business Model and Business Plan Study on the development of the Park. Both studies are expected to be completed in early 2019. The findings of the studies will provide important reference for developing operational and development strategies of the Park.

- End -

CONTROLLING OFFICER'S REPLY

ITB121

(Question Serial No. 6033)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Government will inject \$10 billion into the Hong Kong Science and Technology Parks Corporation, stating that it will set up a committee comprising members from the industry and the Legislative Council (LegCo) to monitor the use of public funds. Will the committee concerned be established in the form of a LegCo committee or under a framework outside the LegCo? What are the members' background and the composition of the committee?

Asked by: Hon HUI Chi-fung (Member Question No. (LegCo use): 64)

Reply:

The Government is discussing the implementation details of the \$10 billion injection with the Hong Kong Science and Technology Parks Corporation (HKSTPC). We will continue to monitor the progress of various tasks of HKSTPC and ensure effective use of resources through participation in its Board of Directors. Meanwhile, HKSTPC has set up a governing committee for the establishment of the Smart Campus, which comprises members from the industry and the Legislative Council to advise on the development of the Smart Campus.

- End -

CONTROLLING OFFICER'S REPLY

ITB122

(Question Serial No. 0336)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Government will earmark \$20 billion for the first phase of the Hong Kong-Shenzhen Innovation and Technology Park (the Park) in the Lok Ma Chau Loop. In this connection, will the Government inform this Committee of the following:

- (1) What are the (1) mode of operation and (2) long-term financial arrangements of the Park upon its completion?
- (2) The Government estimates that the whole project of the Park will cost far more than \$20 billion, and will “provide additional resources in a timely manner” when the planning studies are completed. Has the Government made reference to overseas innovation and technology bases of similar scale so as to provide a preliminary estimate on the final construction and operating costs of the Park? If yes, what is the preliminary estimate; if not, what are the reasons?

Asked by: Hon IP LAU Suk-ye, Regina (Member Question No. (LegCo use): 9)

Reply:

A consolidated reply to the 2 parts of the question is as follows:

Established in October 2017 under the Companies Ordinance (Cap. 622), the Hong Kong-Shenzhen Innovation and Technology Park Limited (HSITP) is a wholly-owned subsidiary company of the Hong Kong Science and Technology Parks Corporation. HSITP is responsible for building the superstructure of the Hong Kong-Shenzhen Innovation and Technology Park (the Park) in the Lok Ma Chau Loop (the Loop), as well as to operate, maintain and manage the same. The \$20 billion earmarked by the Government for the Loop development will be used partly for supporting HSITP to construct the superstructure for the first phase of the Park and its initial operation.

As the total expenditure on the development of the Loop will depend on various factors such as the specific planning of the Park, site formation and detailed design of the infrastructure, etc., no accurate estimate is available at this stage. HSITP is carrying out a Master Layout Plan Study as well as a Business Model and Business Plan Study on the development of the Park. Both studies are expected to be completed in early 2019. The relevant studies will provide important reference for determining the specific planning, mode of operation and financial arrangements, etc. of the Park. When the relevant planning studies are completed, we will make reference to the findings and further estimate the cost of the Loop development. Since the Loop, which covers a large area, is a piece of undeveloped land without any infrastructure, it is estimated that the development of the whole area will cost far more than \$20 billion.

- End -

CONTROLLING OFFICER'S REPLY

ITB123

(Question Serial No. 0337)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Government has proposed to earmark \$10 billion to support the establishment of 2 research clusters on healthcare and artificial intelligence technologies. In this connection, will the Government inform this Committee of:

- (1) which year these research clusters are expected to officially commence operation and their direct managing departments;
- (2) the target number of the world's top research institutions and technology enterprises that can be attracted in the financial year 2018-19; and
- (3) the details and the estimated budget of the financial support to be provided to the non-profit-making research institutions that will establish their presence in the clusters?

Asked by: Hon IP LAU Suk-ye, Regina (Member Question No. (LegCo use): 10)

Reply:

A consolidated reply to the various parts of the question is set out below:

To promote the development of innovation and technology in Hong Kong, this year's Budget proposes to earmark \$10 billion for the establishment of the 2 research clusters on healthcare technologies and on artificial intelligence and robotics technologies, to attract the world's top research institutions and technology enterprises to Hong Kong for conducting more research and development projects in collaboration with local universities and research institutions. Such clusters will pool and nurture more technology talent in Hong Kong. We will provide financial support for non-profit-making research institutions that will establish their presence in the 2 clusters. The clusters, which are expected to be officially established at the Hong Kong Science Park in 2019-20, will be under the purview of the

Innovation and Technology Commission. We hope to have 5 to 6 research institutions establishing their presence in the clusters at the initial stage of their establishment.

- End -

CONTROLLING OFFICER'S REPLY

ITB124

(Question Serial No. 4355)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title): (001) Salaries

Programme: (7) Subvention: Hong Kong Productivity Council, Hong Kong Applied Science and Technology Research Institute Company Limited

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

Will the Government advise on the titles, annual salaries and scope of work of the 10 highest paid individuals in the Hong Kong Productivity Council in the past 3 years?

Asked by: Hon KWOK Ka-ki (Member Question No. (LegCo use): 354)

Reply:

The 10 highest paid individuals of the Hong Kong Productivity Council (HKPC) in the past 3 years were staff at the Executive Director (1), Director (3) and General Manager (6) ranks respectively. Their remuneration ranges are as follows:

Rank	Remuneration range
Executive Director	\$3.67 to \$4.30 million
Director	\$2.62 to \$3.29 million
General Manager	\$1.79 to \$2.53million

The scope of work of various posts are set out in the annual reports of HKPC, which are available on its website (<https://www.hkpc.org/en/corporate-info/hkpc-publication/annual-report>).

- End -

CONTROLLING OFFICER'S REPLY

ITB125

(Question Serial No. 0917)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: Not Specified

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Budget has proposed to inject \$10 billion into the Innovation and Technology Fund to support the work on innovation and technology in Hong Kong. How is the relevant provision calculated? For how many years can the \$10 billion injection sustain? What kind of projects will be the main target of support?

Asked by: Hon LAM Kin-fung, Jeffrey (Member Question No. (LegCo use): 9)

Reply:

At present, there are 12 funding schemes covering different scopes under the Innovation and Technology Fund (ITF), such as the Innovation and Technology Support Programme, the University-Industry Collaboration Programme and the Enterprise Support Scheme which promote research and development; the Internship Programme which nurtures technology talents; the Technology Start-up Support Scheme for Universities which supports technology start-ups; and the General Support Programme which fosters an innovation and technology culture, etc. As at January 2018, the uncommitted balance of the ITF was \$1.4 billion, which is expected to be depleted by end of 2018.

We propose to inject \$10 billion into the ITF to support the continued operation of the existing funding schemes and introduce new measures. Based on current expenditure pattern, the proposed injection of \$10 billion is projected to be adequate for the operation of the ITF for 5 years, i.e. until 2022-23. However, the actual cash flow may be different from the estimate subject to the number of applications and amount of funding to be approved under different programmes, and new programmes which might be introduced in the future.

- End -

CONTROLLING OFFICER'S REPLY

ITB126

(Question Serial No. 0263)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (3) Promotion of Technological Entrepreneurship

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

In last year's Budget, the Government earmarked \$2 billion for the setting up of the Innovation and Technology Venture Fund (ITVF), which will co-invest in local innovation and technology enterprises with private venture capital (VC) funds on a matching basis, thereby injecting new capital and energy into technology start-ups in Hong Kong. In this connection, please inform this Committee of:

- (1) the number of applications for selection as a co-investment partner with the Innovation and Technology Venture Fund Corporation;
- (2) whether the Government has embarked on any investment project with the co-investment partners; if yes, the details; if not, when investment will be made;
- (3) the establishment of the ITVF Secretariat and the expenditures on each staff member; and
- (4) the timetable for pursuing legislative amendment to avoid off-shore funds from losing their profits tax exemption status when they co-invest with the ITVF.

Asked by: Hon LAU Ip-keung, Kenneth (Member Question No. (LegCo use): 4)

Reply:

The required information is provided below:

(1) and (2)

The Innovation and Technology Venture Fund (ITVF) was open for application for selection as co-investment partners (CP) from venture capital (VC) funds between September 2017 and January 2018, during which a total of 14 applications were received. Selection of CP by the Innovation and Technology Commission (ITC) is now underway and the results will be announced shortly. Following signing of master agreements with the selected CP, it is expected that co-investment in local innovation and technology start-ups will be made starting from the second half of the year.

(3)

ITC has set up a Secretariat to handle the work related to the ITVF. The Secretariat comprises the following 5 civil service posts and 1 contract post: 1 Senior Treasury Accountant, 1 Senior Executive Officer, 1 Treasury Accountant, 1 Executive Officer I, 1 Assistant Clerical Officer and 1 contract Investment Advisor. The estimated annual recurrent expenditure for the Secretariat is about \$9.1 million, which includes salary expenses and other administrative and promotional fees.

(4)

We are now drafting the relevant legislative amendments to Schedule 16 to the Inland Revenue Ordinance, which are scheduled to be published in the Gazette in April 2018, to grant profit tax exemption to off-shore VC funds participating in the ITVF. The amendments are expected to take effect in the second quarter of 2018.

- End -

CONTROLLING OFFICER'S REPLY

ITB127

(Question Serial No. 5118)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Government has stated that \$10 billion will be allocated to the Hong Kong Science and Technology Parks Corporation (HKSTPC) to reinforce the role of the Science Park as Hong Kong's flagship technology infrastructure. Of this, about \$3 billion will be used to construct hardware facilities such as research-related infrastructure, whereas the remaining \$7 billion will be used for the HKSTPC to enhance support for its tenants and incubatees, etc. In this connection, please advise on the following:

- (1) What are the respective details of the software and hardware facilities in the plan?
- (2) What is the expected long, medium and short-term effectiveness of this plan in promoting local innovation and technology development in the future?
- (3) How will the Government monitor the proper use of funds by the HKSTPC?

Asked by: Hon LAU Kwok-fan (Member Question No. (LegCo use): 31)

Reply:

The requested information is provided below:

- (1) The Government plans to allocate \$10 billion to the Hong Kong Science and Technology Parks Corporation (HKSTPC). Of this, to further reinforce and develop Hong Kong's capabilities in technological research and development (R&D), \$3 billion will be used for supporting HKSTPC to construct research-related infrastructure and facilities, including conversion of one of the buildings in the Hong Kong Science Park (HKSP) to provide more laboratory space, and construction of small batch experimental production facility, animal research facility, robot testing facility, as well as other related scientific research facilities for use by the innovation and technology (I&T) industry. The remaining \$7 billion will be used for HKSTPC

to enhance support for its tenants and incubatees, such as expanding HKSTPC's Corporate Venture Fund and Incubation Programmes, attracting international technology enterprises to establish their presence, setting up a Smart Campus, and enhancing the facilities in the HKSP. The Government is discussing with HKSTPC on the implementation details.

- (2) These infrastructure facilities and initiatives will further reinforce Hong Kong's capabilities in I&T R&D, which on one hand provide more software and hardware support for local I&T industry and start-ups to assist them in expanding businesses, and attract Mainland or overseas R&D enterprises and organisations to set up branches in Hong Kong on the other. In the long run, we hope that the above measures can help encourage more R&D activities, increase Hong Kong's Gross Domestic Expenditure on R&D as a percentage of the Gross Domestic Product, create job opportunities, and nurture I&T talents.
- (3) We will continue to monitor the progress of various tasks of HKSTPC and ensure effective use of resources through participation in its Board of Directors.

- End -

CONTROLLING OFFICER'S REPLY

ITB128

(Question Serial No. 1901)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (3) Promotion of Technological Entrepreneurship

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Government provides a number of funding schemes for entrepreneurs lacking in capital, including Cyberport Creative Micro Fund, Microfinance Scheme, Innovation and Technology Fund, CreateSmart Initiative, “Enhancing Employment of People with Disabilities through Small Enterprise” Project, Youth Development Fund, Innovation and Technology Fund for Better Living, DesignSmart Initiative, Patent Application Grant, New Technology Training Scheme, and Professional Services Development Assistance Scheme. What are the number of applications received, the number of applications approved and the average funding amount for each approved application under each of the funding schemes (if applicable) in the past 3 years? Are the approved projects sustainable? What is the average age of the applicants? What is the ratio of applicants with past entrepreneurial experience to the total number of applicants?

Asked by: Hon LEE Wai-king, Starry (Member Question No. (LegCo use): 41)

Reply:

Programmes funded by the Innovation and Technology Fund (ITF) include the Enterprise Support Scheme (ESS), the Small Entrepreneur Research Assistance Programme (SERAP), the Technology Start-up Support Scheme for Universities (TSSSU), the Innovation and Technology Venture Fund (ITVF), the Internship Programme, the Patent Application Grant (PAG) and the Public Sector Trial Scheme (PSTS). Other funding schemes mentioned in the question, including the Cyberport Creative Micro Fund, the Microfinance Scheme, the CreateSmart Initiative, the “Enhancing Employment of People with Disabilities through Small Enterprise” Project, the Youth Development Fund, the Innovation and Technology Fund for Better Living, the DesignSmart Initiative, the New Technology Training Scheme, and the Professional Services Development Assistance Scheme, are not under the purview of Head (155) Government Secretariat: Innovation and Technology Commission.

ESS, SERAP, TSSSU and ITVF are part of the major work under Programme (3) “Promotion of Technological Entrepreneurship”, PAG and PSTS are funding schemes under Programme (1) “Support for Research and Development”, while the Internship Programme is a funding programme under Programme (4) “Planning for Innovation and Technology Development”.

Launched in April 2015, ESS aims to provide funding support to local companies to carry out research and development (R&D). As at end-February 2018, a total of 391 applications were processed. Among these processed applications, 68 were supported, involving a funding of about \$208 million. The average funding amount for each successful application was about \$3 million.

Applications for SERAP were no longer accepted since 28 April 2015. A total of 10 applications were received in 2015, 1 of which was approved, involving a funding of about \$1.4 million.

TSSSU was launched in September 2014 to provide funding to the research teams of the 6 local universities in starting technology businesses and commercialising their R&D results. An annual funding of up to \$4 million is provided to each of the 6 local universities. Each funded start-up may receive up to \$1.2 million each year for no more than 3 years. In the past 3 years, a total of 554 applications were received, 191 of which were approved, involving 145 start-ups with a total funding of about \$70.6 million. The average amount of funding for each approved application was about \$370,000.

The ITVF was launched in September 2017 for venture capital (VC) funds to apply for becoming co-investment partners (CPs). As at the application deadline in mid-January 2018, a total of 14 applications were received. We expect to announce the selection result in the second quarter of 2018 and, following signing of master agreement with the selected VC funds, begin receiving CPs’ invitations for co-investment in local innovation and technology (I&T) start-ups in the second half of this year.

PAG aims to encourage local companies and individual inventors who are first-time patent-seekers to protect and capitalise their R&D outcomes through patent registration. The maximum amount of grant for each approved application is \$250,000. In the past 3 years, a total of 888 applications were received and 474 applications were approved.

PSTS was launched in 2011 whereby additional funding is provided to completed R&D projects funded by the ITF to cover production of prototypes/samples and the conducting of trials in the public sector, with a view to driving the commercialisation of R&D results. In December 2016, PSTS was extended to cover incubatees and graduate tenants of the Hong Kong Science and Technology Parks Corporation (HKSTPC) and the Cyberport. As at end-January 2018, a total of 6 applications were received from companies at HKSTPC and Cyberport, 3 of which were approved, involving a total funding amount of about \$2.4 million. The average amount of funding for each approved application was about \$800,000.

Launched in 2004, the Internship Programme provides additional funding to ITF-funded R&D projects for employment of local university graduates as interns, so as to nurture I&T talents. The Internship Programme was extended to cover incubatees and small and

medium enterprise tenants of HKSTPC and Cyberport in December 2016, and further extended to all I&T tenants of HKSTPC and Cyberport in December 2017. As at end-January 2018, a total of 362 applications were received from companies at HKSTPC and Cyberport, 301 of which were approved, involving a total funding amount of about \$90.1 million. The average amount of funding for each approved application was about \$300,000.

Information on the age and past entrepreneurial experience of the applicants for the above schemes is not available.

- End -

CONTROLLING OFFICER'S REPLY

ITB129

(Question Serial No. 1565)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (3) Promotion of Technological Entrepreneurship

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned in the Estimates under Head 135 that the Government has launched the \$2 billion Innovation and Technology Venture Fund (ITVF) to stimulate private investment in local innovation and technology (I&T) start-ups. In this connection, will the Government inform this Committee of:

1. the current share of expenditure on I&T in the Gross Domestic Product of Hong Kong, and its comparison with that of the neighbouring regions such as Shenzhen, Guangzhou and Zhuhai;
2. the expenditure spent on promoting I&T culture by the Government in the past 2 years;
3. the total number of ITVF applications from start-ups received by the Government as at February 2018, and the number of successful applications; and
4. the number of applicants who are interested in becoming a co-investment partner under the ITVF, and the current number of eligible funds.

Asked by: Hon LEUNG Mei-fun, Priscilla (Member Question No. (LegCo use): 32)

Reply:

The requested information is provided below:

1. According to the Hong Kong Innovation Activities Statistics 2016 published by the Census and Statistics Department in December 2017, the gross domestic expenditure on research and development (GERD) of Hong Kong in 2016 amounted to HK\$19.713 billion, representing an increase of 8% when compared with 2015. Meanwhile, the GERD as a ratio to the Gross Domestic Product increased from 0.76% in 2015 to 0.79% in 2016.

2. The Innovation and Technology Commission (ITC) supports various bodies through the General Support Programme under the Innovation and Technology Fund to organise events which help foster an innovation and technology (I&T) culture. Promoting I&T culture is one of the major work under Programme (4): Planning for Innovation and Technology Development. The expenditure for 2016-2017 under Programme (4) is \$42.8 million and the revised estimated expenditure for 2017-18 is \$55.1 million. We do not keep a breakdown of the expenditure on the work of promoting I&T culture.
- 3 and 4. The Innovation and Technology Venture Fund was open for application for selection as co-investment partners (CPs) from venture capital funds between September 2017 and January 2018, during which 14 applications were received. ITC's selection work is now underway and the results will be announced shortly. Following signing of the master agreement with selected CPs, we expect that co-investment in local I&T start-ups will be made starting from the second half of the year.

- End -

CONTROLLING OFFICER'S REPLY

ITB130

(Question Serial No. 1573)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

As stated by the Financial Secretary in paragraph 72 of the Budget, to promote re-industrialisation, the Government is expanding the Hong Kong Science Park (HKSP), which is expected to provide extra space for start-ups and other technology companies in 2 years. In this connection, will the Government inform this Committee of:

1. the expenditure currently incurred by the Government on the HKSP Expansion Programme;
2. the number of scientific research personnel currently admitted to HKSP;
3. whether the departments concerned have assessed the working space and technical support to be provided to students and start-ups upon completion of the Expansion Programme;
4. whether any activities on promoting re-industrialisation and an innovation and technology (I&T) culture were organised by HKSP in the past year; if yes, the details; and
5. how employment in the I&T sector will be promoted in the community upon expansion of HKSP?

Asked by: Hon LEUNG Mei-fun, Priscilla (Member Question No. (LegCo use): 43)

Reply:

The requested information is provided below:

- 1, 3 & 5. The Legislative Council Finance Committee approved in May 2016 the Government's injection of \$2.878 billion as equity and guarantee for a

commercial loan amounting to \$1.107 billion and the interest arising therefrom to the Hong Kong Science and Technology Parks Corporation (HKSTPC) to develop Stage 1 of the Science Park Expansion Programme (SPX1). The equity was injected in full to HKSTPC in 2016-17.

SPX1 involves the construction of 2 scientific research buildings of 14 and 15 storeys respectively, which are expected to provide an additional 73 760 m² of research office space in the Hong Kong Science Park (HKSP) upon completion in 2020 for accommodating more innovation and technology (I&T) enterprises of different sizes. HKSTPC will continue to administer the existing Incubation Programmes and Corporate Venture Fund to provide its incubatees or start-ups with financial, business development and technical support, etc. With a growing presence of technology enterprises upon completion of the expansion, it is expected that more start-ups will benefit and more technology-related jobs will be created.

2. As at end-February 2018, over 650 technology enterprises were admitted to HKSP, providing more than 13 800 technology-related jobs, of which about 9 800 were scientific researchers.
4. HKSTPC has been organising different activities, such as seminars, exhibitions, visits and business matching, etc., to facilitate the industry to upgrade and transform by adopting I&T, so as to promote re-industrialisation and I&T culture. The major activities organised by HKSTPC in 2017 include:
 - (a) organising with the industry and academia the ‘Robo Workshop’ integrating knowledge of mechanical engineering, physics, programming and mathematics, which attracted more than 10 000 participating students, teachers and parents;
 - (b) setting up the ‘Vibrant Science Academy’ of various themes, which provided workshops, scientific experiments and games for students and teenagers to learn through playing and apply their knowledge of science and technology;
 - (c) facilitating exchange activities between local secondary schools and technology enterprises from HKSP, where students shared their learning outcomes in science, technology, engineering and mathematics (STEM) at school, while I&T personnel from HKSP talked about their work experience and prospects; and
 - (d) co-organising the InnoCarnival which featured various types of activities in HKSP, such as exhibitions, workshops, seminars, science competitions and interactive games, etc. for the public to experience the convenience and fun brought by I&T to their daily life.

- End -

CONTROLLING OFFICER'S REPLY

ITB131

(Question Serial No. 2555)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (1) Support for Research and Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Innovation and Technology Commission launched the Midstream Research Programme for Universities (MRP) in 23 December 2016 in order to lead to further downstream research and development (R&D) work or product development. R&D projects that may enhance the well-being of the elderly are the focal point of the Programme, which may contribute to the capability of Hong Kong in addressing the challenges of ageing population. Figures show that the number of applications received and processed in 2017 is 111, while the number of projects funded and being monitored is only 8. The approval rate is significantly lower than that of other projects supporting R&D. Will the Commission advise on the reasons for the low approval rate of the MRP and whether there are measures for enhancing the quality and quantity of MRP projects?

Asked by: Hon LIAO Cheung-kong, Martin (Member Question No. (LegCo use): 51)

Reply:

Assessment under the Midstream Research Programme for Universities (MRP) is conducted in accordance with the established criteria by an assessment panel comprising experts from the academia and industry. The assessment areas include the innovation and technology component of the proposed project, technical and management capability of the research team, financial considerations, etc. Of the applications received in 2017, 8 were recommended for funding by the assessment panel. All of them were approved for funding support by the Innovation and Technology Commission.

To enhance the quality of proposed projects, we have revised the MRP application form to remind applicants of providing relevant technical details, so that the assessment panel can better understand the merit of the proposed projects, and thus more of them will be recommended.

- End -

CONTROLLING OFFICER'S REPLY

ITB132

(Question Serial No. 2556)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is stated in the Budget that the Government will earmark \$10 billion to support the establishment of 2 research clusters on healthcare technologies and on artificial intelligence and robotics technologies, which is a long-term investment by the Government in seizing the opportunities of the era and striving to create new economic growth points. Will the Commission advise on the manpower involved in establishing the 2 new technology research clusters among the 29 posts to be created under Programme (5) in 2018-19? What is the specific work on the establishment of the 2 clusters?

Asked by: Hon LIAO Cheung-kong, Martin (Member Question No. (LegCo use): 52)

Reply:

The major work under Programme (5) in 2018-19 includes setting up 2 research clusters; continuing to work closely with the Hong Kong Science and Technology Parks Corporation on the implementation of its various new developments of the Hong Kong Science Park and the Industrial Estates; and developing the Hong Kong-Shenzhen Innovation and Technology Park in the Lok Ma Chau Loop, etc. The 29 civil service posts planned to be created are mainly responsible for implementing the work mentioned under the Programme. We do not have a breakdown of manpower required for the establishment of the 2 research clusters.

To promote the development of innovation and technology in Hong Kong, the Government is working on the establishment of the 2 research clusters on healthcare technologies and on artificial intelligence and robotics technologies, to attract the world's top research institutions and technology enterprises to Hong Kong for conducting more research and development projects in collaboration with local universities and research institutions. Such clusters will pool and nurture more technology talent in Hong Kong. We are working out the concrete operational details of the clusters.

- End -

CONTROLLING OFFICER'S REPLY

ITB133

(Question Serial No. 2558)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

\$500 million will be earmarked under the Innovation and Technology Fund to implement the Technology Talent Scheme as announced in the Policy Address, under which the “Postdoctoral Hub” programme will provide a maximum monthly allowance of \$32,000 for each person up to 24 months. While enhancement to remuneration package can only serve as a stopgap measure, the long-term success hinges on the prospect of scientific research. Will the Government advise on whether there are any measures for enhancing the stability and leading edge of the prospect of scientific research in Hong Kong, so as to attract and retain innovation and technology talents?

Asked by: Hon LIAO Cheung-kong (Member Question No. (LegCo use): 54)

Reply:

In order to promote sustained and diversified social and economic development, the Government of the Hong Kong Special Administrative Region is dedicated to developing innovation and technology (I&T) industries in Hong Kong to drive the upgrading and transformation of the overall economic structure, enhance the city's competitiveness and improve the quality of life of the people. Since the establishment of the Innovation and Technology Bureau (ITB) in November 2015, the Government has devoted substantial resources in I&T development on multiple fronts, including promoting research and development (R&D), investing in I&T infrastructure, driving re-industrialisation, supporting technology start-ups, nurturing talents, helping small and medium enterprises upgrade and transform, encouraging the use of technology in improving daily living, facilitating smart city development, promoting I&T culture, etc.

The Chief Executive announced in the Policy Address in October 2017 that the Government will step up its efforts to develop I&T in eight major areas, mapping out a clear direction for its work. In addition, the 2018-19 Budget has earmarked \$50 billion for the purposes of promoting R&D, developing research infrastructure and clusters, nurturing technology

talent and so on. These measures will create a more thriving I&T ecosystem in Hong Kong, thereby providing I&T talents in Hong Kong with broader room for development in the long run.

- End -

CONTROLLING OFFICER'S REPLY

ITB134

(Question Serial No. 0154)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Innovation and Technology Commission will work on the setting up of 2 research clusters, one on healthcare technologies and another on artificial intelligence/robotics technologies, in Hong Kong. In this connection, please advise whether the Government has a specific forecast on the expenditure budget and manpower requirement involved in the relevant work, and whether work performance indicators have been set? If yes, what are the details; if not, what are the reasons?

Asked by: Hon LO Wai-kwok (Member Question No. (LegCo use): 12)

Reply:

To promote the development of innovation and technology in Hong Kong, the Government is working on the establishment of the 2 research clusters on healthcare technologies and on artificial intelligence and robotics technologies, to attract the world's top research institutions and technology enterprises to Hong Kong for conducting more midstream and downstream research and development projects in collaboration with local universities and research institutions. Such clusters will pool and nurture more technology talent in Hong Kong. In this connection, we have earmarked \$10 billion to provide financial support for non-profit-making research institutions that will establish their presence in the 2 clusters. We hope to have 5 to 6 research institutions establishing their presence in the clusters at the initial stage of their establishment.

We will, where necessary, seek additional manpower in accordance with established mechanism to implement the relevant measures.

- End -

CONTROLLING OFFICER'S REPLY

ITB135

(Question Serial No. 0289)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (7) Subvention: Hong Kong Productivity Council, Hong Kong Applied Science and Technology Research Institute Company Limited

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

The work of the Hong Kong Productivity Council (HKPC) includes promoting re-industrialisation and assisting the relevant enterprises in moving towards high value-added production. In this regard, please advise on the amount of resources put into such work and the major achievements in the past 3 years, and the amount of resources to be allocated and the major projects to be launched this year?

Asked by: Hon LO Wai-kwok (Member Question No. (LegCo use): 13)

Reply:

The Hong Kong Productivity Council (HKPC) has been dedicating efforts to promoting re-industrialisation to facilitate enterprises in moving towards high value-added production and gradually upgrading towards Industry 4.0. Major work in the past 3 years is as follows:

- (a) 3D Printing One and RoboticsOne were established in August and November 2015 respectively to support the industry to develop high value-added and innovative new products and services;
- (b) HKPC was officially accredited as an "Industry 4.0 Expert" by the Fraunhofer Institute for Production Technology, Germany (Fraunhofer IPT) in 2016, and proceeded to organise a series of value-added activities such as international conferences and seminars on industrial innovation strategy for enhancing the industry's understanding of Industry 4.0. These activities attracted over 3 700 industry participants. In addition, the HKPC established the "Industry 4.0 Upgrade and Recognition Programme" with Fraunhofer IPT in 2016 to help the industry gradually upgrade its operation towards Industry 4.0. Currently, a total of 30

enterprises have participated in the Programme and implemented Industry 4.0 at different levels;

- (c) Smart Industry One was established in August 2017 to demonstrate the concepts and smart features of Industry 4.0 with a view to promoting adoption of Industry 4.0-related technologies by the industry; and
- (d) An Inno Space was established in October 2017 to provide workspace and technical support to start-up entrepreneurs, students and graduates and assist them in developing innovative ideas into industrial design, which may subsequently be translated into products through prototyping, so as to nurture a start-up culture in Hong Kong and support re-industrialisation.

In 2018-19, the HKPC will continue the above efforts to promote re-industrialisation and implement the following measures:

- (a) Setting up the Smart Industry One Consortium as a platform to facilitate information exchange on smart industry, assisting enterprises in upgrading and transforming into smart enterprises;
- (b) Establishing an Invention Centre jointly with Fraunhofer IPT to introduce Industry 4.0-related technologies, assisting the industry in accelerating adoption of innovative industrial technologies, and promoting the development of smart industry; and
- (c) Setting up a HKPC Institute of Innovation & Technology (Shenzhen) in Shenzhen to provide Hong Kong enterprises in the Bay Area with solutions and services based on intelligent manufacturing, artificial intelligence, big data, environmental technology, etc.

The expenditures on promoting re-industrialisation by HKPC will be met by government subvention and HKPC's revenue. No breakdown of the expenditures is available.

- End -

CONTROLLING OFFICER'S REPLY

ITB136

(Question Serial No. 0323)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (1) Support for Research and Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

In order to provide a more stable and longer-term financial support to sustain the efforts in the promotion of private sector investment in research and development (R&D), the R&D Cash Rebate Scheme (CRS) was subsumed under the Innovation and Technology Fund (ITF) with effect from April 2016. Companies may receive a cash rebate of 40% on their expenditure in qualifying applied R&D projects. However, the estimated number of applications to be received and processed and the estimated number of applications to be approved in 2018 are the same as the actual numbers in 2017. In this connection, please advise on the following:

- (1) Are the above estimates too conservative, having underestimated the increase in the number of cash rebate applications for expenditure in applied R&D projects from the private sector given the improvement in the innovation and technology environment in Hong Kong? If yes, what are the details; if not, what are the reasons?
- (2) With the Financial Secretary's announcement of the \$10 billion injection into the ITF this year, will the Government re-consider the call from the technology industry over the years to expand the scope of the CRS, no longer limiting it to "companies conducting applied R&D projects with the support of the ITF or in partnership with designated local public research institutions", and enhance the implementation of the CRS? If yes, what are the details; if not, what are the reasons?

Asked by: Hon LO Wai-kwok (Member Question No. (LegCo use): 20)

Reply:

The requested information is provided below:

- (1) We expect that the number of applications to be received and approved under the Research and Development Cash Rebate Scheme (CRS) in 2018 will remain stable, as

the numbers in 2017 have already reflected the impact of the increased level of cash rebate. However, we expect that the estimated expenditure of the CRS for 2018-19 will continue to rise to about \$110 million, representing an increase of about \$10 million over 2017-18.

- (2) We review the implementation and effectiveness of the CRS and introduce enhancement measures from time to time. For example, we extended the scope of the CRS to cover private companies participating in the Enterprise Support Scheme and the Midstream Research Programme for Universities respectively in April 2015 and December 2016, so as to benefit more companies (including small and medium enterprises).

The promotion of innovation and technology development requires co-operation on various fronts. We plan to roll out a new initiative in the third quarter of 2018 to provide enhanced tax deduction for qualifying research and development expenditure incurred by enterprises, so as to encourage more enterprises to conduct research activities in Hong Kong.

- End -

CONTROLLING OFFICER'S REPLY

ITB137

(Question Serial No. 0324)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Technology Voucher Programme (TVP) was launched in November 2016 with HK\$500 million from the Innovation and Technology Fund to subsidise local small and medium enterprises in using technological services and solutions. The Financial Secretary has announced to relax the eligibility criteria for the TVP this year, which will enable more medium enterprises and start-ups to benefit from the TVP. Currently, up to 3 projects from an enterprise may be approved, subject to the cumulative funding ceiling of HK\$200,000. In this regard, please advise whether the Government will address the calls from the industrial and commercial sectors by taking the opportunity to review the various restrictions of the TVP, such as raising the number of projects to be approved and the cumulative funding ceiling. If yes, what are the details; if not, what are the reasons?

Asked by: Hon LO Wai-kwok (Member Question No. (LegCo use): 21)

Reply:

The Technology Voucher Programme (TVP) has been implemented for over 1 year. The average funding amount for approved applications is about \$130,000. 96 enterprises have completed the first project. No enterprise has commenced a second project for the moment. Given the above circumstances, we do not consider there is an urgent need at this stage to raise the ceiling of the funding amount or the number of projects to be approved, which, however, will be re-examined in a comprehensive review on the effectiveness and modus operandi of the TVP to be conducted in the second half of 2018.

- End -

CONTROLLING OFFICER'S REPLY

ITB138

(Question Serial No. 2699)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

a. In the Budget for the 2018-19 financial year, the Government will earmark \$3 billion for the Hong Kong Science and Technology Parks Corporation (HKSTPC) to construct scientific research-related infrastructure and facilities. It has been reported that the facilities to be constructed by HKSTPC include an animal laboratory. In this connection, does the Government know the types and purposes of the experiments on animals to be conducted in the laboratory?

b. What measures will the Government put in place to ensure that the staff of that laboratory comply with the requirements of the Animals (Control of Experiments) Ordinance (the Ordinance) when they conduct experiments on animals? What are the work details and estimated expenditure?

c. Some animal groups have pointed out that the European Union, India, Israel, Norway and Taiwan have legislated against animal testing for cosmetic products. With the advancement of technology, the technology regarding alternatives to animal experimentation has become increasingly mature and reliable. In this connection, will the Government consider requesting HKSTPC to drop the plan to construct the animal laboratory? Will it introduce legislation to ban the conduct of experiments on animals? If yes, what is the legislative timetable; if not, what are the justifications for that?

d. Some animal rights groups have criticised that some provisions of the Ordinance, which was enacted as early as in 1963, have become very outdated, uncivilised and unnecessary. Will the Government consider amending the Ordinance, such as extending the scope of animal experimentation under control, so that it will no longer be limited only to those experiments "performed on an animal and calculated to give pain"?

e. Please list out the number of persons convicted in the past 5 years for contravening the Ordinance, with a breakdown by provisions that they had contravened and the sentence imposed on them.

f. Does the Government know the species and number of animals used in experiments on animals in the past 5 years?

Asked by: Hon MO Claudia (Member Question No. (LegCo use): 30)

Reply:

A consolidated reply to various parts of the question is as follows:

The development of the animal research facility proposed by the Hong Kong Science and Technology Parks Corporation (HKSTPC) aims at providing healthcare technology researchers with infrastructure, with a view to complementing Hong Kong's research activities in the field of healthcare technology. The animal research facility will conduct experiments necessary for healthcare research (such as drugs efficacy tests and toxicology studies), so as to explore new biological or medical knowledge or develop new medicines. HKSTPC is discussing with the Government the detailed arrangements, including the scale of the research facility, operation model, and the types of experiment animals, etc. HKSTPC anticipates that only small-sized animals will be used in the facility for scientific research, while the Animals (Control of Experiments) Ordinance (Cap. 340) (the Ordinance) as well as relevant legislations and codes of practice will be strictly followed. The Government has no plan to request HKSTPC to drop the development of the animal research facility.

According to the record of the Food and Health Bureau, no person was convicted or sentenced for breach of the Ordinance in the past five years.

According to information provided in the returns submitted by licensees to the Department of Health, the types and numbers of animals used in experiments performed between 2013 and 2016 are as follows (information for 2017 is still under process):

	2013	2014	2015	2016
Rat	13 101	27 801	25 686	29 423
Mouse	39 284	97 145	98 831	118 066
Guinea pig	37	193	322	236
Hamster	374	724	563	862
Shrew	220	227	97	231
Gerbil	0	109	141	0
Other rodents	259	0	240	196
Rabbit	602	786	1 155	1 101
Pig	219	629	497	573
Cattle	71	45	112	183
Horse	0	6	62	69
Sheep	0	13	38	0
Dog	432	230	460	554
Cat	277	240	414	348
Ferret	21	127	113	153
Bat	501	449	586	475

	2013	2014	2015	2016
Chicken	5 555	3 418	3 582	7 141
Duck	2	0	0	0
Swan	0	1	0	0
Reptiles	0	0	35	0
Amphibians	615	1 512	31	119
Fish	42 587	34 180	54 418	28 294

- End -

CONTROLLING OFFICER'S REPLY

ITB139

(Question Serial No. 2272)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (3) Promotion of Technological Entrepreneurship

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Innovation and Technology Venture Fund (ITVF) was launched in 15 September 2017. Please advise on:

- (1) the number of applications received from venture capital (VC) funds for selection as co-investment partners as at 28 February 2018;
- (2) the expenditures and details on the setting up and operation of the Innovation and Technology Venture Fund Corporation in 2017-18;
- (3) the specific work schedule for adding a new type of "Specified Transaction" in Schedule 16 to the Inland Revenue Ordinance to cover the transactions in relation to the ITVF in 2018-19; and
- (4) whether the industry will be consulted on the additional type of "Specified Transaction" aiming to encourage VC funds to invest in local start-ups; if yes, the details.

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 1)

Reply:

The required information is provided below:

- (1) The Innovation and Technology Venture Fund (ITVF) was open for application for selection as co-investment partners (CPs) from venture capital (VC) funds between September 2017 and January 2018, during which a total of 14 applications were received. Selection of CPs by the Innovation and Technology Commission (ITC) is now underway and the results will be announced shortly.
- (2) The set-up costs and operating expenditure of the Innovation and Technology Venture Fund Corporation will be covered in ITC's annual recurrent expenditure, which is about \$9.1 million per year.

- (3) and (4) In respect of the amendments to Schedule 16 to the Inland Revenue Ordinance (IRO), we consulted the major VC sector associations and professional bodies in accountancy/tax in late 2017. The proposal was generally welcomed. We are now drafting the relevant legislative amendments to Schedule 16 to the IRO, which are scheduled to be published in the Gazette in April 2018, to grant profit tax exemption to off-shore VC funds participating in the ITVF. The amendments are expected to take effect in the second quarter of 2018.

- End -

CONTROLLING OFFICER'S REPLY

ITB140

(Question Serial No. 2274)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is stated in paragraph 65 of the Budget Speech that "...\$20 billion will be used on the first phase of the Hong Kong-Shenzhen Innovation and Technology Park (the Park) in the Lok Ma Chau Loop (the Loop) for, inter alia, site formation, infrastructure, superstructure and initial operation. Given the scale of the development, it is estimated that the whole project will eventually cost far more than \$20 billion". Regarding the development of the Park in the Loop, please advise on:

1. the expenditure on consultant's fees, the total estimated expenditure on infrastructural works, the deployment of human resources and the timetable at various phases of the entire project of the Park in the Loop in tabular form;
2. the estimated expenditure on superstructure construction and commencement of operation, and the timetable for land delivery;
3. the proportion of construction costs borne by the Hong Kong Special Administrative Region Government and the Shenzhen Government respectively, and whether it is necessary to pay the Shenzhen Government the costs of operating the Park in future; if yes, what the details are;
4. the business model for recovering the overall construction costs (including complementary works on transport and roads) of the Park in the Loop, and whether a mechanism on sharing of profit from the Park has been established with the Shenzhen Government; if yes, what the details are; and
5. the details and expenditures of the incentives to be provided for enterprises to establish their presence in the Park; the estimated number of jobs to be created by and the estimated number of enterprises to be admitted to the Park, their respective industries, and the basis for the above estimations.

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 3)

Reply:

The requested information is provided below:

- 1 & 2. The Government has earmarked \$20 billion to support the first phase development of the Hong Kong-Shenzhen Innovation and Technology Park (the Park) in the Lok Ma Chau Loop (the Loop) for, inter alia, site formation, infrastructure, superstructure and initial operation. We hope that funding approval of approximately \$780 million can be obtained from the Legislative Council (LegCo) in mid-2018 for commencement of the Advance Works and the design of Main Works Package 1. A detailed estimate on the cost of site formation and infrastructure of the first phase will be available only when the design of the Main Works Package 1 is completed. Should funding approval be obtained from the LegCo in the first half of 2018, we plan to commence the construction of the Advance Works as well as the detailed design and site investigation of Main Works Package 1 in mid-2018. If the relevant works are in good progress, it is expected that the first batch of land will be handed over for construction of superstructure and associated facilities by the Hong Kong-Shenzhen Innovation and Technology Park Limited (HSITP) in or before 2021 at the earliest.

Meanwhile, HSITP is carrying out a Master Layout Plan Study on the development of the Park. Recommendations and cost estimate on the development plan of the Park will be made. When the relevant studies are completed, we will make reference to the findings and further estimate the cost of superstructure construction and the expenditure on commencement of operation.

Since the Loop, which covers a large area, is a piece of undeveloped land without any infrastructure, it is estimated that the development of the whole area will cost far more than \$20 billion.

3. According to the Memorandum of Understanding on Jointly Developing the Lok Ma Chau Loop by Hong Kong and Shenzhen (MOU), the Hong Kong Special Administrative Region (SAR) Government will be responsible for constructing the necessary infrastructure within the Loop and its surrounding area (including site formation and infrastructural facilities), and will lease the formed land within the Loop to the Hong Kong Science and Technology Parks Corporation (HKSTPC) by appropriate land disposal means for the development of the Park. HKSTPC's wholly-owned subsidiary (i.e. HSITP) is vested with the responsibility to build the superstructure of the Park, as well as to operate, maintain and manage the same. As the Loop is located within the SAR territory, the construction thereat is the sole responsibility of the SAR Government and the Shenzhen Municipal People's Government will not be responsible for the relevant expenditures.

4. HSITP is carrying out a consultancy study on the business model and business plan of the Park. The findings and recommendations of the studies will provide important reference to the master layout plan of the Park.

As stipulated in the MOU, the development project in the Loop will primarily be used for benefit of the public, with all income from the project to be used in the construction, operations, maintenance and management of the Loop. No profit will be disbursed to either Hong Kong or Shenzhen.

5. The Park will set up a key base for co-operation in scientific research. The preliminary idea is to encourage enterprises, universities and scientific research institutions in the relevant fields from Hong Kong, Mainland and overseas to station and set up branches for carrying out research projects, particularly in collaboration with local institutions and research and development institutions. The Park will, at the same time, drive small and medium start-ups to develop new industries and provide young people in both Hong Kong and Shenzhen with more opportunities for development and high-quality jobs. This will help nurture talents and strengthen competitiveness.

The geographical location of the Park enjoys strategic advantages which can facilitate complementary co-operation with Shenzhen. With the development of innovation and technology (I&T) in Shenzhen, as well as Hong Kong's innovation abilities, international connection, branding effect, etc., the joint co-operation in I&T development by both cities will certainly generate huge synergy effects. When the Business Model and Business Plan Study is completed, HSITP will make reference to the findings and recommendations in formulating leasing plans to attract relevant enterprises and talents to station in the Park.

In terms of economic benefits, upon completion of Stage 1 of the Science Park Expansion Programme, the total gross floor area (GFA) of the Hong Kong Science Park (HKSP) will reach 400 000 square metres and the number of jobs to be created is estimated at about 17 000. The total GFA of the Park will be about 3 times that of the HKSP. It is estimated on a proportional basis that around 50 000 jobs can be created.

- End -

CONTROLLING OFFICER'S REPLY

ITB141

(Question Serial No. 2275)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (1) Support for Research and Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

As stated in the Budget Speech, to encourage research and development (R&D), the Government will provide enhanced tax deduction for domestic expenditure on R&D incurred by enterprises. In this connection, please inform this Committee of the following:

- (1) The Government has set a goal to double the Gross Domestic Expenditure on R&D as a percentage of the Gross Domestic Product to 1.5% by 2022. How was the goal set? Have any industry or professional persons and organisations been consulted? If yes, what are the details; if not, what are the reasons?
- (2) R&D activities must fall within the definition under Section 16B(4)(a) of the Inland Revenue Ordinance (Cap. 112). Has the Government assessed whether it is necessary to update the definition concerned in order to facilitate the development of innovation and technology in Hong Kong, such as including “outsourced R&D” as a tax-deductible “R&D expenditure”? If yes, what are the details; if not, what are the reasons?
- (3) At present, enterprises can apply for tax deduction only for the expenditure on R&D work which has been outsourced to the Hong Kong Productivity Council and the 5 designated companies and organisations under the Hong Kong Applied Science and Technology Research Institute. Has the Government assessed whether this policy can be applied to other private organisations so that enterprises can apply for tax deduction for the expenditure on R&D work outsourced to them? If yes, what are the details; if not, what are the reasons?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 4)

Reply:

A consolidated reply to various parts of the question is as follows:

In her Policy Address of October 2017, the Chief Executive has set a goal to double the Gross Domestic Expenditure on Research and Development as a percentage of the Gross Domestic Product to 1.5% by 2022. We have been dedicated to studying and implementing various measures to achieve the goal.

We propose to provide enhanced tax deduction for expenditure on employees and consumable items directly incurred by an enterprise in carrying out “qualifying research and development (R&D) activities” (i.e. “qualifying expenditure”) as well as payments made to “designated local research institutions” for conducting “qualifying R&D activities”. The deduction will be 300% for the first \$2 million of the above aggregate amount and 200% for the remaining amount.

The definition of “qualifying R&D activities” is primarily based on the definition of “R&D” in the existing Inland Revenue Ordinance (IRO), but excludes certain activities not regarding as involvement in scientific and technological advancement. In order to attract enterprises to invest more in R&D in Hong Kong, promote local R&D activities and groom local R&D talents, the “R&D activities” concerned have to be carried out in Hong Kong for compliance with the definition of “qualifying R&D activities”.

The expenditure incurred by an enterprise in carrying out other “R&D activities” falling outside the definition of “qualifying R&D activities”, other R&D expenditure falling outside the definition of “qualifying expenditure”, and payments made to overseas universities or colleges for conducting “qualifying R&D activities” may still be eligible for 100% tax deduction under the existing IRO.

Work on the relevant amendment bill is underway. If the legislative work goes smoothly, the aforementioned enhanced tax deduction can be implemented in the third quarter of 2018 the earliest, and will be applicable to qualifying R&D expenditure incurred by enterprises on 1 April 2018 and thereafter.

Upon implementation of the amended bill, private organisations meeting the criteria may apply to the Commissioner for Innovation and Technology as “designated local research institutions”.

- End -

CONTROLLING OFFICER'S REPLY

ITB142

(Question Serial No. 2278)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is stated in paragraph 67 of the Budget Speech that the Government will earmark \$10 billion to support the establishment of 2 research clusters on healthcare technologies and on artificial intelligence and robotics technologies. Please advise on the expenditure required, application and vetting methods, preparation and implementation schedule, and the human resources required for the establishment of the 2 clusters in 2018-19; the definition of “non-profit-making research institutions”, the proposed mode of provision of financial support, the funding scope (research projects, daily operation, employment of technology talents, etc.), the mechanism for determining funding levels, and the procedures and criteria for vetting; the estimated number of “non-profit-making research institutions” for which their operations are supported under the earmarked \$10 billion and the duration of support, and whether requirements on the number of local research personnel and graduates to be employed will be set; the provision set aside for promoting the 2 research clusters on healthcare technologies and on artificial intelligence and robotics technologies as well as the overseas publicity plans in 2018-19.

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 7)

Reply:

To promote the development of innovation and technology in Hong Kong, the Government is working on the establishment of the 2 research clusters on healthcare technologies and on artificial intelligence and robotics technologies, to attract the world's top research institutions and technology enterprises to Hong Kong for conducting more research and development projects in collaboration with local universities and research institutions. Such clusters will pool and nurture more technology talent in Hong Kong. The earmarked \$10 billion will provide financial support (such as the capital/operation costs of setting up research laboratories) for non-profit-making research institutions that will establish their presence in the 2 clusters. We are working out the details of the vetting and funding mechanisms, including the definition of “non-profit-making institutions”.

- End -

CONTROLLING OFFICER'S REPLY

ITB143

(Question Serial No. 2282)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

With regard to the Technology Talent Scheme and the fast-track innovation and technology (I&T) talent admission scheme, please advise on the estimated expenditure of the Postdoctoral Hub in assisting scientific research institutions to recruit doctoral talents for 2018-19; professional fields, academic/professional qualifications required for doctoral talents to be admitted; organisations eligible for funding application, amount and duration of funding; whether application for extension of employment is allowed upon expiry of the funding period; and the criteria and timetable for vetting of applications; the academic and professional qualifications required for talents to be admitted under the fast-track I&T talent admission scheme; scientific research institutions eligible for application; validity period of entry visa; and the implementation timetable, expenditure and human resources required for 2018-19; the academic/professional qualifications, years of experience, remuneration requirements and related details of local technology talents to be employed under the matching requirement of the fast-track I&T talent admission scheme; the estimated expenditure and details on promoting the above 2 programmes to top overseas institutions and scientific research institutions to attract quality applicants to work in Hong Kong.

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 11)

Reply:

Postdoctoral Hub

The Government plans to launch the Postdoctoral Hub programme in the third quarter of 2018. The programme provides funding support to recipients of the Innovation and Technology Fund (ITF) as well as incubatees and innovation and technology (I&T) tenants of the Hong Kong Science and Technology Parks Corporation/the Cyberport to recruit up to 2 postdoctoral talents for research and development work. The ITF will provide a monthly allowance of \$32,000 for each postdoctoral researcher for up to 24 months. The concerned researcher must possess a doctoral degree in a science, technology, engineering or

mathematics (“STEM”)-related discipline from either a local university or a well-recognised non-local institution. The non-local institutions refer to those that are among the top 100 in the related subjects in major world university rankings such as the Quacquarelli Symonds World University Rankings, Shanghai Jiao Tong University (Academic Ranking of World Universities) and Times Higher Education World University Rankings. We are currently working on the specific details of the programme, including its vetting criteria. The estimated annual expenditure of the programme is around \$85 million.

Technology companies are facing intense competition from the world on the front of recruiting scientific research talents in recent years. To ease the difficulties encountered by technology companies in this aspect and pool together technology talents in Hong Kong for strengthening I&T development, the Government is considering viable means, targeting at the technology areas with acute talent shortage, to facilitate admission of relevant talents for meeting the demand. Details will be announced in due course.

We do not have a breakdown of estimated expenditure on the promotional work of the two measures mentioned above.

- End -

CONTROLLING OFFICER'S REPLY

ITB144

(Question Serial No. 2310)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned in the Budget Speech that the Government will relax the eligibility criteria for the Technology Voucher Programme (TVP). All local enterprises, irrespective of size and duration of operation, may apply. This will enable more medium enterprises and start-ups to benefit from the TVP. The Government will continue to administer the TVP and monitor progress of the funded projects. Will the Government advise of:

- (1) the respective numbers of applications received so far, the number of applications approved, and the average and total amount of funding approved by the major types of business engaged in by the applicant enterprises and the technological services/solutions under application;
- (2) the number of applications yet to be approved by reasons (such as missing key documents, awaiting supplementary documents, or information being verified, etc.)
- (3) the average number of working days required for approval of applications upon submission;
- (4) the specific details in respect of relaxing the eligibility criteria for the TVP and monitoring the funded projects, the estimated manpower and resources required, and the timetable;
- (5) when the \$500 million funding is expected to be exhausted based on current conditions; the expected number of applications and disbursement pattern upon the relaxation; and whether the TVP will be reviewed earlier;
- (6) whether it will consider introducing measures such as a white list of advanced service providers to expedite the approval procedures?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 50)

Reply:

The requested information is provided below:

(1) and (2) As at 28 February 2018, the Innovation and Technology Commission (ITC) received applications for the Technology Voucher Programme (TVP) from a total of 889 enterprises. Of the 403 applications assessed by the TVP Committee (the Committee), 377 were approved for funding, involving a total funding of about \$49.7 million and an average funding amount of about \$130,000. 26 applications were not supported by the Committee because the projects were largely for purchasing off-the-shelf software and hardware or involved only little or no technological elements, and therefore were not consistent with the objectives and terms of the TVP. Among the remaining applications, 348 are still awaiting supplementary information from the applicant enterprises or are now under assessment by the TVP Secretariat; 138 could not be processed and had to be returned, mainly because the applicant enterprises had not submitted all the supporting documents required.

The major types of business engaged in by the applicant enterprises and the number of applications approved are as follows –

Type of business	Number of applications ^{Note 1}	Number of applications approved ^{Note 1}
Wholesale and retail	172	75
Import and export trade	139	70
Professional services	63	28
Information technology	61	24
Engineering	50	27

^{Note 1} Applicant enterprises may engage in more than one type of business.

The major types of technological services or solutions involved in the proposed projects and the number of applications approved are as follows –

Technological service/solution	Number of applications ^{Note 2}	Number of applications approved ^{Note 2}
Enterprise resource planning solution	411	213
Document management and mobile access system	220	96
Electronic inventory management system	209	91
Point-of-sales system	129	51
Electronic procurement management system	113	44

^{Note 2} Proposed projects may involve more than one technological service or solution.

(3) From receipt of applications to completion of vetting by the Committee, the shortest processing time is 14 working days while the average processing time is about 80 working days.

(4) Since 28 February 2018, the eligibility criteria for the TVP have been relaxed as follows:
(a) an applicant enterprise is required to have substantive business operation in Hong Kong only at the time of application instead of for a year; and

- (b) enterprises of all sizes (except listed enterprises) may apply, instead of just small and medium enterprises.

ITC will continue to administer the TVP and monitor progress of the funded projects, including supporting the Committee to process the applications and vet the final project reports, processing the requests from applicant enterprises for changing the contents of approved projects, arranging the disbursement of funds for completed projects, and continuing to organise briefing sessions on a need basis. The relevant work is currently taken up by 12 staff. The estimated total salary costs involved for 2018-19 is about \$6.6 million.

- (5) Of the \$500 million funding earmarked for the TVP, around \$450 million is still available for application.

We initially expected to receive and finish processing applications from about 360 enterprises in 2018. Among them, it is expected that around 330 applications will be approved, involving an estimated funding of about \$43 million. With the relaxation of the eligibility criteria since this year's Budget Day, we expect that the numbers of applications and projects to be approved will further increase.

We will monitor the implementation of the TVP and conduct a comprehensive review on its effectiveness and modus operandi, including the scope and amount of funding, vetting procedures etc, in the second half of this year.

- (6) Since the launch of the TVP in November 2016, ITC has implemented a series of measures to streamline the application procedures, including optimising the online application system, providing a checklist of documents for submission of application on the TVP website, and minimising the number of documents required for submission. In addition to the detailed guidance notes for applications, ITC also prepared a pamphlet to introduce the features of the TVP, including the application and vetting procedures, and uploaded samples of a completed application form and the required documents on the website for enterprises' reference. ITC also organises briefing sessions from time to time to share the successful cases with the industry. Furthermore, applications fulfilling specified conditions will be submitted to the Committee for assessment by circulation or meeting as soon as possible, so as to expedite the approval procedures.

- End -

CONTROLLING OFFICER'S REPLY

ITB145

(Question Serial No. 2311)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is stated in the Budget Speech that the Government will earmark \$10 billion to support the establishment of 2 research clusters on healthcare technologies and on artificial intelligence and robotics technologies, to attract the world's top research institutions and technology enterprises to Hong Kong. In this connection, will the Government advise on:

- (1) the operational details of the initiative, the work plan, implementation schedule and the manpower and resources required for 2018-19;
- (2) whether it has consulted the industry on the initiative or make reference to examples in other regions; if yes, of the details; if not, of the reasons;
- (3) whether it has set targets for the initiative, such as the annual number of overseas research institutions and technology enterprises to be attracted; if yes, of the details; if not, of the reasons;
- (4) whether it has connected with or invited overseas research institutions and technology enterprises on the initiative; if yes, of the list of organisations and enterprises and the contents of discussions; and
- (5) whether there is a list of research institutions and technology enterprises to which the Government would like to invite; if yes, of the list of organisations and enterprises?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 51)

Reply:

A consolidated reply to the various parts of the question is set out below:

To promote the development of innovation and technology in Hong Kong, the Government is working on the establishment of the 2 research clusters on healthcare technologies and on artificial intelligence and robotics technologies, to attract the world's top research institutions and technology enterprises to Hong Kong for conducting more research and development projects in collaboration with local universities and research institutions. Such clusters will pool and nurture more technology talent in Hong Kong. In this connection, we have earmarked \$10 billion to provide financial support for non-profit-making research institutions that will establish their presence in the 2 clusters. The clusters are expected to be officially established at the Hong Kong Science Park in 2019-20, with 5 to 6 research institutions establishing their presence at the initial stage.

- End -

CONTROLLING OFFICER'S REPLY

ITB146

(Question Serial No. 2312)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned in the Budget Speech that \$10 billion will be allocated to the Hong Kong Science and Technology Parks Corporation (HKSTPC). Of this, about \$3 billion will be used to construct research-related infrastructure and facilities. Will the Government advise of:

- (1) the research-related infrastructure and facilities to be constructed, including the details of those for testing and pilot production; the details of the expected economic benefits, including the expected number of job opportunities to be brought about;
- (2) the details of the work completed by the Government for the above project, whether any reference plans are available, the scientific research equipment and facilities to be included, the estimated number of companies that can be accommodated to carry out research and development, design and production, as well as the usable floor area to be added;
- (3) the work plan, schedule, and manpower and resources required for the project in 2018-19; and
- (4) the financial arrangement and distribution of expenditure, such as the estimated consultation expenses, design and construction fees; and the expected completion time.

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 52)

Reply:

A consolidated reply to various parts of the question is as follows:

To further reinforce and develop the research capability, the \$3 billion provision will be used for supporting the Hong Kong Science and Technology Parks Corporation (HKSTPC) to construct research-related infrastructure and facilities, including conversion of a building in the Hong Kong Science Park to provide biotechnology laboratory, construction of small batch experimental production facility, animal research facility, robot testing facility, as well as other related scientific research facilities. Additional laboratories are tentatively scheduled to be completed by batches starting from 2019-20. As for the scale and details

of other research facilities, the Government is conducting an in-depth study with HKSTPC, and will formulate specific work plans after soliciting and taking into account professional views. We will consult relevant Panel(s) of the Legislative Council (LegCo) on the details concerned in due course, and then seek approval from the LegCo Finance Committee for the funding required.

- End -

CONTROLLING OFFICER'S REPLY

ITB147

(Question Serial No. 2313)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (3) Promotion of Technological Entrepreneurship

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned in the Budget Speech that \$10 billion will be allocated to the Hong Kong Science and Technology Parks Corporation (HKSTPC). Of this, about \$7 billion will be used for the HKSTPC to enhance support for its tenants and incubatees, and set up a Smart Campus in the Hong Kong Science Park (HKSP), etc. Will the Government advise on the following:

- (1) What are the details of the proposed plan of the HKSTPC to enhance support for its tenants and incubatees, the financial arrangement and distribution of expenditure, the timetable, as well as the manpower and resources required? In addition to office space and cash subsidy, is there any additional support provided for their research and business development, such as marketing programmes?
- (2) What are the planned financial arrangement and distribution of expenditure for setting up the Smart Campus in HKSP, including the estimated consultation expenses, design and construction fees? What is the expected completion date? Are there any reference drawings available? What equipment and facilities will be included? How many companies can be accommodated to carry out research and development, design and production? Is there any new usable floor area? If yes, what is the area?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 54)

Reply:

The required information is provided below:

- (1) The Government plans to allocate \$10 billion to the Hong Kong Science and Technology Parks Corporation (HKSTPC), of which \$7 billion will be used for setting up a Smart Campus, enhancing the facilities in the Hong Kong Science Park (HKSP), strengthening HKSTPC's support measures such as the Corporate Venture Fund and the Incubation Programmes, as well as attracting international technology enterprises to

establish their presence in HKSP. The Government is discussing with HKSTPC on the implementation details. We will consult the relevant Panel of the Legislative Council (LegCo) on the plans, and seek approval from the LegCo Finance Committee for the funding required in due course.

- (2) By setting up the Smart Campus, HKSTPC aims to create a living laboratory to allow trials of innovative and technological projects of HKSP companies under the themes of “Smart Mobility”, “Smart Environment”, “Smart Living” and “Smart People”, etc. This will showcase local research technologies on one hand, and enable the public to understand and experience the results of smart solutions on the other. HKSTPC has set up a governing committee to give recommendations on the development of the Smart Campus. We are discussing with HKSTPC on the relevant details.

- End -

CONTROLLING OFFICER'S REPLY

ITB148

(Question Serial No. 2314)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned in the Budget Speech that \$500 million will be earmarked under the Innovation and Technology Fund to implement, in the second half of the year, the Technology Talent Scheme. One of the initiatives is to establish a Postdoctoral Hub programme to provide funding support for all eligible institutions to recruit postdoctoral talent. The Scheme will also provide funding to subsidise local enterprises on a matching basis for training staff in advanced technologies. Please advise on the following:

- (1) the eligibility of organisations to be subsidised by the Postdoctoral Hub programme, including the technology areas; the estimated number of applicant organisations; the application procedures and time required; the details of funding amount, quotas and duration of funding; the estimated number of beneficiary organisations; and the total amount of funding earmarked under the Postdoctoral Hub programme;
- (2) the eligibility of enterprises to be subsidised on a matching basis for training staff on high-end technologies, including the technology areas of training; the estimated number of applicants; the application procedures and time required; the details of funding amount, quotas and duration of funding; the estimated number of beneficiary organisations; and the number of staff to be trained in advanced technologies in local enterprises;
- (3) other proposed programmes under the Technology Talent Scheme; if any, the work plan, timetable, and manpower and resources required;
- (4) whether it will introduce training courses under the Technology Talent Scheme to help enhance the skills of technology practitioners, and consider supporting other types of professional development, given that there are more diversified training opportunities for technology talents.

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 56)

Reply:

A consolidated reply to various parts of the question is as follows:

We will set aside \$500 million under the Innovation and Technology Fund (ITF) to launch a 5-year pilot Technology Talent Scheme to nurture and bring together more technology talents. The Scheme comprises:

- (1) a Postdoctoral Hub programme to provide funding support to ITF recipients as well as incubatees and innovation and technology tenants of the Hong Kong Science and Technology Parks Corporation/Cyberport to recruit up to 2 postdoctoral talents for research and development work. The ITF will provide a monthly allowance of \$32,000 for each postdoctoral researcher for up to 24 months. The concerned researcher must possess a doctoral degree in a science, technology, engineering or mathematics (“STEM”)-related discipline from either a local university or a well-recognised non-local institution. The Innovation and Technology Commission will implement the Postdoctoral Hub programme with its existing manpower and resources. We are working on the programme details (including the application procedures). It is expected that there will be some 200 applications per year; and
- (2) a Reindustrialisation and Technology Training Programme (RTTP) to subsidise local enterprises on a 2:1 matching basis for training staff in advanced technologies, especially those related to “Industry 4.0”. Eligible trainee must be a Hong Kong permanent resident, as well as employed by a local enterprises or non-government subvented organisation. The RTTP will be administered by the Vocational Training Council (VTC), while the types of technology training eligible for funding will be determined and the RTTP itself will be overseen by VTC’s Innovation and Technology Training Board, which comprises members from various industry and trade organisations, public bodies as well as Government departments. We are working on the programme details (including the application procedures, quotas and forms of training) with VTC. It is expected that there will be about 1 000 applications per year.

- End -

CONTROLLING OFFICER'S REPLY

ITB149

(Question Serial No. 2315)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (1) Support for Research and Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is stated in paragraph 66 of the Budget Speech that \$10 billion will be injected into the Innovation and Technology Fund (ITF). Will the Government advise on:

- (1) how long the ITF is expected to operate before and after the injection based on the past spending pattern;
- (2) the cash flow of the ITF in the past 3 years and its cash flow projection for the coming 5 years;
- (3) the projected percentage increase in the funding provision for the coming 5 years, the major reasons for the anticipated continued increase in the demand for funding, and whether a new round of focused research and development (R&D) themes has been drawn up for the injection this time; and
- (4) the investment returns of the past funding, and whether targets of estimated investment returns have been set for the injection this time?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 58)

Reply:

The requested information is provided below:

- (1) As at January 2018, the uncommitted balance of the Innovation and Technology Fund (ITF) was \$1.4 billion, which is expected to be depleted by end of 2018. The proposed injection of \$10 billion is projected to be adequate for the operation of the ITF for 5 years, i.e. until 2022-23. However, the actual cash flow may be different from the estimate subject to the number of applications and amount of funding to be

approved under different programmes, and new programmes which might be introduced in the future.

(2) and (3)

The cash flow of expenditure of the ITF in the past 3 years and for the next 5 years is tabulated as follows:

	2015-16 Actual	2016-17 Actual	2017-18 Revised estimate	2018-19 Estimate	2019-20 Forecast	2020-21 Forecast	2021-22 Forecast	2022-23 Forecast
\$ million	1,014	1,258	1,484	2,085	2,313	2,422	2,109	2,099

The overall expenditure of the ITF is expected to decrease in 2021-22 and 2022-23 mainly due to the gradual depletion of the \$20 billion provision for the Innovation and Technology Venture Fund (ITVF) by that time. If excluding both the ITVF and Midstream Research Programme for Universities, which are allocated with dedicated provisions and not affected by funding injection, the cash flow of expenditure of the ITF for the next 5 years is tabulated as follows:

	2018-19 Estimate	2019-20 Forecast	2020-21 Forecast	2021-22 Forecast	2022-23 Forecast
\$ million	1,563	1,676 (+7%)	1,771 (+6%)	1,853 (+5%)	1,943 (+5%)

We plan to implement various new measures under the ITF, such as launching the Technology Talent Scheme, as well as funding the R&D projects of the 2 research clusters. Those new initiatives and enhancement measures will expedite spending of the ITF funding. We have not drawn up focused R&D themes for the injection.

- (4) ITF's investment income mainly comes from the investment income placed with the Exchange Fund. The annual investment return rates were 3.3%, 2.8% and 4.6% in 2016, 2017 and 2018 respectively, and are estimated to range between 3.7% and 4.9% from 2019 to 2022.

- End -

CONTROLLING OFFICER'S REPLY

ITB150

(Question Serial No. 2437)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (3) Promotion of Technological Entrepreneurship

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Enterprise Support Scheme (ESS) provides funding support for research and development activities of private sector companies, irrespective of size. In this connection, will the Government advise this Committee on:

- (1) the details of the designated track introduced for applicant companies which have less than 100 employees and are seeking funding support of no more than \$2.8 million per project, the streamlined procedures, and whether the vetting process has been expedited; the average number of working days needed from submission of revised application by an enterprise to signing of funding agreement and disbursement of funds under the designated track;
- (2) the average time needed for the Government to handle applications not submitted under the designated track in the implementation of the ESS over the past 2 years based on the following processes:
 - (i) from receipt of application to submission of revised application by an enterprise;
 - (ii) from submission of revised application by the enterprise to the applicant being invited for interview;
 - (iii) from issue of interview result notification to signing of funding agreement;

the average number of working days needed from submission of revised application by the enterprise to signing of funding agreement and disbursement of funds; the average number of revisions made to an application by the enterprise before issue of interview result notification and signing of funding agreement; the performance indicators for handling the applications;

- (3) the number of applications received, the percentage of the number of applications approved in the number of applications received, the total amount of funding approved, and the average amount of funding approved for each company in the past year;

- (4) the measures for monitoring the implementation of the ESS; whether the Government has conducted any review and considered introducing enhancement measures for the ESS; if yes, the relevant details; if not, the timetable, manpower and resources involved for conducting review and study, given that some members of the industries have pointed out that the ESS application procedures, which take over a year, are complicated;
- (5) the specific work on monitoring the progress of funded projects under the ESS; and
- (6) the timetable, manpower and resources involved for promoting the ESS through talks and seminars in the past year, and the format, timetable, manpower and resources involved for promoting the ESS in the coming year.

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 76)

Reply:

The requested information is provided below:

- (1) & (2) A “designated track” has been introduced under the Enterprise Support Scheme (ESS) for applicant companies having less than 100 employees and seeking funding support of no more than \$2.8 million per project, with a view to handling applications from small and medium enterprises more effectively. Other applications are processed under the “non-designated track”. For the “designated track”, the requirements in the application form for specific project details are simpler than those under the “non-designated track”, thereby facilitating completion by the applicant enterprises. Applications submitted under the 2 tracks are both vetted by the ESS assessment panel based on the same assessment criteria. Meetings for assessing applications under the “designated track” are convened more frequently than those under the “non-designated track”. An applicant enterprise could be notified of the vetting result in around 2 months, the soonest, upon submission of all the required information and documents.

Once the funded enterprise has signed the project agreement and submitted the proof of expenditure of using the entire amount of the first instalment of contribution, the Innovation and Technology Commission (ITC) will disburse the first matching fund payment within 30 days. The schedule for signing the funding agreement and disbursing the initial funding mainly depends on whether the enterprise has submitted the concerned documents and the progress of their project’s R&D work. We do not have the statistics on the processing time and number of correspondences at each stage of the vetting process.

- (3) In 2017-18 (as at end-February 2018), a total of 130 applications were processed. Among these processed applications, 40 were supported, involving a funding of about \$118 million. The average amount of funding for each approved application was about \$3 million.

- (4) ITC has been closely monitoring the implementation of the ESS and conducts review from time to time to enhance the ESS as appropriate. We introduced a number of enhancement measures in the past year, including updating the application form and the guide to filling in the application form so as to facilitate applicant enterprises to submit the required information and documents. In addition, more assessment panel members were appointed so that the number of assessment meetings could be increased, thereby expediting the vetting of applications.
- (5) All funded projects will be monitored by the ITC according to the milestones set out in the approved projects. Funded enterprises are required to submit progress reports and audited project account statements as well as to arrange site inspections or meetings for the ITC to monitor the project progress.
- (6) In 2017-18, 6 seminars or talks were organised to introduce the details of the ESS to the industry. We will continue to promote the ESS in the coming year to encourage more applications from the industry.

- End -

CONTROLLING OFFICER'S REPLY

ITB151

(Question Serial No. 5746)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned in the Policy Address that the Government will expand the current Internship Programme to benefit more enterprises and Science, Technology, Engineering and Mathematics (STEM) graduates. In this connection, please inform this Committee of the following:

- (1) What are the respective research projects and research institutions funded by the Innovation and Technology Fund (ITF) to recruit interns, the number of interns, the areas of the research projects and the funding amount in the latest 3 financial years?
- (2) What are the percentage of interns employed for 2 consecutive years under the Programme, and the number and percentage of interns securing a job in the scientific research field after completing the internship in the past 3 years?
- (3) What is the number of internship applications received and approved under the Programme and the annual total amount of funding in the past 3 years? Please list in tabular form by interns with a Bachelor's degree or a Master's and/or higher degree.
- (4) What are the number of beneficiary companies, the total number of additional interns employed and the total amount of funding in 2017-18 upon the increase in allowances and the extension of the Programme to cover incubatees and small and medium enterprises (SME) tenants of Cyberport and the Science Park? Please list in tabular form by interns with a Bachelor's degree or a Master's and/or higher degree. What are the estimated number of beneficiary companies, the number of additional interns employed and the total amount of funding in 2018-19? Please list in tabular form by interns with a Bachelor's degree or a Master's and/or higher degree.
- (5) What are the specific details in respect of the extension to cover the start-ups to be funded by the Innovation and Technology Venture Fund, the manpower required and the expenditure involved?
- (6) What are the expenditure and details of publicity activities for promoting the Internship Programme to incubatees and SMEs, as well as the number of participants in 2017-18? What are the estimated expenditure and publicity plan for promoting the Programme in the coming year?

(7) What are the specific details of the work plan, the manpower required and the expenditure involved for expanding the current Programme to benefit more enterprises and STEM graduates?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 127)

Reply:

The requested information is provided below:

(1) A breakdown of the figures related to the Internship Programme (Programme) by research area in the latest 3 financial years is tabulated below:

Research area	Year	Research institution																Total number of interns approved	Funding amount approved (\$ million)
		The Chinese University of Hong Kong	City University of Hong Kong	The Education University of Hong Kong	Hong Kong Baptist University	The Hong Kong Polytechnic University	The Hong Kong University of Science and Technology	The University of Hong Kong	Vocational Training Council	Hong Kong Productivity Council	Hong Kong Institute of Biotechnology	Automotive Parts and Accessory Systems R&D Centre	Hong Kong Research Institute of Textiles and Apparel	Hong Kong Applied Science And Technology Research Institute	Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies	Nano and Advanced Materials Institute	Private companies		
Biotechnology	2015-16	13	8	0	0	5	2	7	0	0	0	0	0	0	0	0	3	38	9.9
	2016-17	22	4	0	4	12	11	9	0	0	1	0	2	0	0	0	15	80	21.2
	2017-18 ^{Note}	14	2	0	0	6	11	9	0	0	1	0	1	0	0	0	34	78	23.2
Chinese medicine	2015-16	3	0	0	7	0	0	3	0	0	0	0	0	0	0	0	0	13	3.0
	2016-17	2	0	0	9	2	6	1	0	0	0	0	0	0	0	0	0	20	5.5
	2017-18 ^{Note}	0	0	0	6	2	2	5	0	0	0	0	0	0	0	0	0	15	4.2
Electrical and electronics	2015-16	8	14	0	0	1	8	1	0	0	0	0	0	9	0	0	5	46	8.9
	2016-17	3	2	0	0	0	2	5	0	0	0	2	0	8	0	1	5	28	7.7
	2017-18 ^{Note}	3	8	0	0	5	3	1	0	0	0	0	0	7	0	0	54	81	24.9
Environmental technology	2015-16	2	2	2	0	2	2	2	0	0	0	0	0	0	0	0	0	12	2.3
	2016-17	1	5	0	0	4	10	4	0	2	2	0	2	0	0	1	6	37	11.2
	2017-18 ^{Note}	2	4	0	0	6	9	2	0	0	0	0	4	0	0	0	11	38	9.8
Information technology	2015-16	11	6	0	4	4	12	2	0	0	0	0	3	13	12	0	9	76	15.4
	2016-17	9	11	0	2	3	12	5	1	0	0	0	2	10	6	0	22	83	19.3
	2017-18 ^{Note}	7	12	1	6	7	20	4	0	0	0	0	1	21	8	0	170	257	68.1
Ma nuf	2015-16	7	12	0	0	25	2	4	0	4	0	4	21	1	0	0	0	80	18.6
	2016-17	8	8	0	0	25	2	0	0	14	0	8	11	4	0	1	6	87	21.9

	2017-18 ^{Note}	12	8	0	0	19	8	1	0	11	2	3	16	0	0	0	1	81	20.3
Material Science	2015-16	0	1	0	0	5	1	0	0	0	0	0	0	2	0	0	0	9	1.6
	2016-17	0	8	0	0	5	0	0	0	0	0	0	6	0	0	0	0	19	4.2
	2017-18 ^{Note}	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nanotechnology	2015-16	4	7	0	1	2	7	1	0	0	0	0	0	0	0	33	0	55	10.5
	2016-17	0	3	0	0	2	4	9	0	0	0	0	0	0	0	10	3	31	7.6
	2017-18 ^{Note}	0	5	0	0	1	6	2	0	0	0	0	0	0	0	4	5	23	7.4
Others	2015-16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2016-17	0	0	0	0	3	0	0	0	0	0	0	0	0	1	0	0	4	1.3
	2017-18 ^{Note}	0	3	2	0	0	2	0	0	0	0	0	0	0	0	0	0	7	2.2

Note: as at end-January 2018

The summaries of research and development (R&D) projects are available on the Innovation and Technology Fund website (https://www.itf.gov.hk/1-eng/prj_search_index.asp).

- (2) The maximum duration of internship for each intern under the Programme is 24 months. In the past 3 years, the average duration of internship of an intern exceeds 14 months. Around 70% of interns who had completed the Programme either found a job or indicated interest in pursuing a career in the scientific research field.
- (3) The number of applications and the amount of funding under the Programme by the academic qualification of interns in the latest 3 financial years are tabulated as follows:

Year	2017-18 (as at end-January 2018)		2016-17		2015-16	
Academic qualification of interns	Bachelor's degree	Master's or higher degree	Bachelor's degree	Master's or higher degree	Bachelor's degree	Master's or higher degree
Number of applications received and processed	331	291	180	273	111	233
Number of interns approved	303	277	147	242	108	221
Total amount of funding approved (\$ million)	160.1		99.9		70.2	

- (4) The Programme was extended to incubatees and small and medium enterprise (SME) tenants of the Hong Kong Science and Technology Parks Corporation (HKSTPC) and the Cyberport in December 2016, and further extended to all innovation and technology (I&T) tenants of both HKSTPC and the Cyberport in December 2017. Meanwhile, we have increased the monthly allowances of interns immediately from

the date of announcement of the Policy Address in October 2017. As at end-January 2018, applications from about 200 companies in HKSTPC and the Cyberport were approved, involving 301 interns and 117 of them had a Master's or higher degree. The total amount of funding approved was about \$90.1 million. We expect that the number of received and processed applications from both HKSTPC and Cyberport as well as the amount of funding will increase by about 30% in 2018. The estimated total amount of funding is about \$110 million.

- (5) We will further extend the Programme to cover local I&T start-ups to be funded by the Innovation and Technology Venture Fund in the second half of 2018, and the extension of the Programme will be implemented by existing manpower and resources.
- (6) We promote the extension of the Programme to the incubatees and tenants, and communicate with target companies mainly through HKSTPC and Cyberport. No additional government manpower and expenditure are involved.
- (7) The Programme was further extended to cover all I&T tenants (not limited to SME tenants) of HKSTPC and Cyberport in December 2017. It is estimated that an additional expenditure of about \$10 million is required annually. The relevant work will be handled by existing manpower.

- End -

CONTROLLING OFFICER'S REPLY

ITB152

(Question Serial No. 5747)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

Page 431 of the Estimates of Expenditure mentions the implementation of Stage 1 of the Science Park Expansion Programme (SPX1). Will the Government advise on the following:

- (1) Please provide a complete construction design for the 2 buildings of SPX1. What is the progress of the foundation works? What are the number of companies that can be accommodated and the usable floor area for each company?
- (2) Have the main construction works been commenced and what is the progress? Can the works be completed within 2020 as scheduled? What are the Hong Kong Science and Technology Parks Corporation's additional manpower plan and budget for supporting the work of this project in 2018-19?
- (3) As assessed by the Government, it is estimated that the economic contribution of the Hong Kong Science Park to Hong Kong will increase from about \$14.9 billion (assuming that Phases 1 to 3 are fully occupied) to about \$19 billion (when achieving full occupancy of Phases 1 to 3 and the expanded floor area of SPX1); and the total employment (comprising direct, indirect and induced employment) brought is expected to further increase from about 24 300 (assuming that Phases 1 to 3 are fully occupied) to about 30 600 (when achieving full occupancy of Phases 1 to 3 and the expanded floor area of SPX1). Will the Government provide a detailed breakdown of and justifications for these estimates?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 128)

Reply:

The requested information is provided below:

- (1) & (2) The detailed design and foundation works of Stage 1 of the Hong Kong Science Park Expansion Programme (SPX1) have been completed, whereas the main construction works commenced in July 2017 are expected to be completed in 2020. The project involves the construction of 2 scientific research buildings of 14 and 15 storeys respectively, with a gross floor area of about 73 760 square metres. In addition to serving as offices, the buildings will reserve spaces for bare-shell laboratories. As regards the number of companies that can be accommodated and the usable floor area for each company, the Hong Kong Science and Technology Parks Corporation (HKSTPC) is now carrying out detailed planning on these matters. HKSTPC will deploy additional manpower and internal resources as appropriate to support the work of this project.
- (3) In 2015, HKSTPC engaged a consultant to conduct an economic impact analysis of SPX1 to estimate the economic contribution of the Hong Kong Science Park (HKSP) to Hong Kong in the future based on parameters such as demand forecast of the technology industry, floor space per capita and value added per capita, etc. In carrying out the analysis, the consultant collected information and data from multiple aspects, including interviewing the then-tenants at HKSP, making reference to information provided by HKSP and relevant data adopted by other similar studies, to estimate the economic contribution of and employment opportunities to be brought about by HKSP to Hong Kong. The estimated results have also been checked and properly compared against international examples and past studies.

With reference to the estimations from the consultant, a detailed breakdown of the economic contribution of HKSP to Hong Kong is as follows:

When Phases 1 to 3 of HKSP are fully occupied

Economic contribution	Value added (\$ million)	Total employment
Direct	10,080	13 730
Indirect	3,260	7 870
Induced	1,600	2 710
Total	14,940	24 310

When achieving full occupancy of Phases 1 to 3 of HKSP and SPX1

Economic contribution	Value added (\$ million)	Total employment
Direct	12,780	17 170
Indirect	4,160	10 040
Induced	2,030	3 440
Total	18,970	30 650

- End -

CONTROLLING OFFICER'S REPLY**ITB153****(Question Serial No. 5748)**

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (3) Promotion of Technological Entrepreneurship

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the Hong Kong Science Park (HKSP)'s efforts in nurturing technology enterprises and promoting applied innovation and technology (I&T), please advise on the following:

(1) The 3 incubation programmes of HKSP (Incu-App, Incu-Tech and Incu-Bio)

	2015-16	2016-17	2017-18
Operating expenditure of the programmes (HK\$ million)			
Number of companies applied for admission to the programmes			
Average time required for processing an application (working days)			
Percentage of successful applications			
Number of companies admitted to the programmes (incubatees)			
Cumulative total number of incubatees			
Average amount of financial			

assistance received by each incubatee (HK\$ million)			
Number of patents registered or patent applications filed by the incubatees			
Average number of full-time employees of each incubatee			
Average salary of a full-time employee of an incubatee			
Number of incubatees rated as “failing to meet the business targets” in the regular milestone assessment			
Number of incubatees previously participated in the programmes but has ceased operation			
Percentage of incubatees still in business in Hong Kong 3 years after graduation in the total number of incubatees			
Number of cases in which the incubatees’ projects received follow-up fund injections			
Average amount of investment obtained by those projects receiving follow-up fund injections (HK\$ million)			
Percentage of incubatees receiving follow-up fund injections in the total number of incubatees			
Source of investment funds received by the projects of incubatees (e.g. angel, venture capital, I&T venture funds)			
Number of graduated			

incubatees which were listed or acquired, or entered into joint ventures, or had spin-off projects			
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(2) Leading Enterprises Acceleration Programme

	2015-16	2016-17	2017-18
Operating expenditure of this programme (HK\$ million)			
Number of companies applied for admission to the programme			
Number of participating enterprises whose business nature was “web/mobile applications”			
Amount of financial assistance			
Number of participating enterprises which were “incubatees of the Hong Kong Science and Technology Parks Corporation (HKSTPC)’s incubation programmes”			
Number of participating enterprises which were “graduates of the incubation programmes”			
Number of participating enterprises which were “current partner enterprises in HKSP”			
Number of participating enterprises which were not accommodated in HKSTPC			
Percentage of participating enterprises still in business in Hong Kong 3 years after graduation in the total			

number of companies			
Number of cases in which the participating enterprises' projects received follow-up fund injections			
Average amount of investment obtained by those projects receiving follow-up fund injections (HK\$ million)			
Percentage of participating enterprises receiving follow-up fund injections in the total number of companies			
Source of investment funds received by the participating enterprises (e.g. angel, venture capital, I&T venture funds)			
Number of initial public offerings launched by participating enterprises			

- (3) What was the number of collaborations between technology enterprises and leading enterprises/blue-chip companies in Hong Kong fostered by the "Technologies from Science Park" programme last year? (Please set out by type of technological solution). Will additional resources be allocated to encourage more local enterprises to adopt technological solutions from local technology start-ups in 2018-19? What are the details, expenditure and targets?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 129)

Reply:

The requested information is provided below:

- (1) The statistics of the 3 incubation programmes (including Incu-App, Incu-Tech and Incu-Bio) of the Hong Kong Science and Technology Parks Corporation (HKSTPC) are tabulated below:

	2015-16	2016-17	2017-18 (as at February 2018)
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Operating expenditure of the programmes (HK\$ million) (Note 1)	5.72	7.26	8.29
Number of companies applied for admission to the programmes	283	207	221
Average time required for processing an application (working days)	HKSTPC undertakes to process an application within 52 working days, which has all along been achievable		
Percentage of successful applications	48%	59%	40%
Number of companies (incubatees) currently participating in the programmes	238	267	258
Cumulative total number of all incubatees previously participated in the programmes	815	938	1 026
Annual total amount of financial assistance received by the incubatees (HK\$ million) (Note 1)	7.24	10.70	19.38
Number of patents registered or patent applications filed by the incubatees	78	57	47
Average number of full-time employees of each incubatee	3.7	3.4	4.2
Average salary of a full-time employee of an incubatee (Note 2)	-	-	-
Number of incubatees rated as “failing to meet the business targets” in the regular milestone assessment	0	1	1
Cumulative number of incubatees previously participated in the programmes but has ceased operation (Note 3)	100	117	130

Percentage of incubatees still in business in Hong Kong 3 years after graduation in the total number of incubatees (Note 4)	75%	74%	76%
Number of cases in which the incubatees' projects received follow-up fund injections (Note 1, 5)	26	22	20
Average amount of investment obtained by those projects receiving follow-up fund injections (HK\$ million) (Note 1, 5)	12.42	15.09	110.83
Percentage of incubatees receiving follow-up fund injections in the total number of incubatees (Note 1, 5, 6)	22.8%	22.5%	22.5%
Source of investment funds received by the projects of incubatees (e.g. angel, venture capital, innovation and technology (I&T) venture funds) (Note 1)	23 from angel investors; 3 from venture capital	13 from angel investors; 9 from venture capital	11 from angel investors; 9 from venture capital
Number of graduated incubatees which were listed or acquired, or entered into joint ventures, or had spin-off projects (Note 1)	0	5 acquisition projects	2 acquisition projects

(2) The statistics of the Leading Enterprises Acceleration Programme (LEAP):

	2015-16	2016-17	2017-18 (as at February 2018)
Operating expenditure of this programme (HK\$ million) (Note 1)	5.72	7.26	8.29
Number of companies applied for admission to the programme (Note 7)	34	30	44

Number of participating enterprises whose business nature was “web/mobile applications”	4	6	7
Amount of financial assistance (Note 1)	7.24	10.70	19.38
Number of participating enterprises which were “incubatees of HKSTPC’s incubation programmes”	5	9	10
Number of participating enterprises which were “graduates of the incubation programmes”	7	7	7
Number of participating enterprises which were “current partner enterprises in the Hong Kong Science Park (HKSP)” (Note 8)	1	2	5
Number of participating enterprises which were not accommodated in HKSTPC	At present, only companies previously participated in the incubation programmes or current partner enterprises in HKSP may participate in the LEAP		
Percentage of participating enterprises still in business in Hong Kong 3 years after graduation in the total number of companies	The first batch of companies graduated in 2016, thus relevant statistics are not available		
Number of cases in which the participating enterprises’ projects received follow-up fund injections (Note 1, 5)	26	22	20
Average amount of investment obtained by those projects receiving follow-up fund injections (HK\$ million) (Note 1, 5)	12.42	15.09	110.83
Percentage of participating enterprises receiving follow-up fund injections in the total number of companies (Note 1, 5, 6)	22.8%	22.5%	22.5%

Source of investment funds received by the participating enterprises (e.g. angel, venture capital, I&T venture funds) (Note 1)	23 from angel investors; 3 from venture capital	13 from angel investors; 9 from venture capital	11 from angel investors; 9 from venture capital
Number of initial public offerings launched by participating enterprises (Note 1)	0	5 acquisition projects	2 acquisition projects

Note 1: The figure refers to the total under the incubation programmes and the LEAP. As both incubation programmes and the LEAP mainly target at incubatees, part of the services and resources are shared, there is no breakdown of the two items.

Note 2: Relevant statistics are not available.

Note 3: HKSTPC only tracks the operation of incubatees that have successfully graduated. Therefore the figures only include the cumulative number of companies having successfully graduated from the programmes. Companies which have been merged/acquired are considered as having ceased operation.

Note 4: The figure represents the cumulative percentage based on all the graduates, irrespective of their duration of operation. Companies which have been merged/acquired are considered as having ceased operation.

Note 5: Based on investment cases involving more than HK\$400,000 recorded by HKSTPC, including graduated incubatees.

Note 6: The figure refers to the ratio of the cumulative number of investment cases to the cumulative total of incubatees at that time.

Note 7: The figure refers to the total number of companies which submitted applications for admission to the LEAP.

Note 8: Excluding participating enterprises which were “graduates of the incubation programmes”.

- (3) Since the launch of the “Technologies from Science Park” programme (the programme) up to March 2018, HKSTPC collaborated with over 50 leading local enterprises/public organisations, such as the Mass Transit Railway Corporation Limited, Maxim’s Group and the Hongkong and Shanghai Banking Corporation Limited, etc., to identify for them technological applications which can enhance economic efficiency. Through the programme, HKSTPC has arranged these enterprises/organisations to meet with 320 technology companies from HKSP, fostering 44 collaborative projects for application in such industries as retail, public transport, energy and telecommunications network.

In 2018-19, HKSTPC will devote more resources to promote the programme. Discussions with organisations in the banking, retail, entertainment and educational sectors on plans for collaboration are underway, with a view to facilitating market development for companies from HKSP. The expenditure involved in the programme is met by HKSTPC’s internal resources. No additional subsidy is provided by the Government.

- End -

CONTROLLING OFFICER'S REPLY

ITB154

(Question Serial No. 5749)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (3) Promotion of Technological Entrepreneurship

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the Data Studio set up by the Hong Kong Science and Technology Parks Corporation, please inform this Committee of the following:

- (1) Please provide a list of the existing data providers and those under negotiation, and list in tabular form the estimated numbers of partnering data providers and datasets to be increased within this year?
- (2) What are the number of dataset suggestions received, the number and details of suggested datasets that were successfully published since the launch of the Studio?
- (3) What are the number of data publishers who have opened an account and the average number of datasets published since the launch of the Studio?
- (4) Is there any assessment on the utilisation of the Studio and the website? What are the details?
- (5) What are the expenditure on promoting the Data Studio and the details of the publicity activities in 2017-18? Please list out the activities and the number of participants. What are the estimated expenditure on promoting the Data Studio and the planned publicity activities in the coming year?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 130)

Reply:

A consolidated reply to various parts of the question is as follows:

The Data Studio officially commenced operation in February 2017. The number of data providers has increased from initially 16 to currently 42, which are mainly industrial data providers and companies in the Hong Kong Science Park, each publishing an average of 3 to 5 datasets. The suggested datasets that have been successfully published include the estimated time of arrival for Hong Kong Tramways, the weather forecast for Hong Kong and real-time information, the location of public toilets, etc. For more details on the data

providers and datasets, please refer to its portal (<http://datastudio.hkstp.org/>). The Hong Kong Science and Technology Parks Corporation (HKSTPC) hopes to attract more partnering data providers in the coming year with an additional publication of 10 to 30 new datasets.

The average monthly number of visitors to the Data Studio is about 300 since its launch, and that in the past 6 months reaches as many as 400. The average monthly number of web page visits is about 500 in terms of hit rate.

HKSTPC plans to organise more hackathons and training courses on big data technology in the coming year, so as to make good use of the data from the Data Studio and dovetail with smart city development. The expenditure involved in the promotion of the Data Studio is met by HKSTPC. No subsidy is provided by the Government.

- End -

CONTROLLING OFFICER'S REPLY

ITB155

(Question Serial No. 5750)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (1) Support for Research and Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Research and Development (R&D) Cash Rebate Scheme (CRS) encourages private enterprises, small and medium enterprises in particular, to conduct R&D works. The Government has extended the Public Sector Trial Scheme (PSTS) to cover incubatees of the Cyberport and the Hong Kong Science Park (HKSP) to conduct trials of their R&D results in the public sector, with a view to facilitating commercialisation of R&D results. The Innovation and Technology Commission will continue to administer the schemes. In this connection, will the Government advise on:

- (1) the number of applications received, the number of applications approved and its percentage in the total number of applications, and the average amount of cash rebate under the CRS in the past 3 years;
- (2) the local public research institutions that conducted Innovation and Technology Fund projects and partnership projects respectively with cash rebate applications approved (please set out the numbers in tabular form), and the funding amount and number of projects in the past 3 years;
- (3) the increase in the number of applications and the number of applications approved after the extension of the CRS, as well as the manpower and resources involved in handling such duties;
- (4) the number of applications received, the number of applications approved and its percentage in the total number of applications under the PSTS, the number of start-ups conducting trial projects and the trial organisations in the past 3 years (please set out the numbers in tabular form);
- (5) the number of projects with their products successfully commercialised and introduced to the market on completion of the PSTS, as well as its percentage in the total number of PSTS projects in the past 3 years; and

- (6) the increase in the number of applications and the number of applications approved after the extension of the PSTS to cover incubatees of HKSP and Cyberport, as well as the manpower and resources involved in handling such duties?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 131)

Reply:

The requested information is provided below:

- (1) The Research and Development (R&D) Cash Rebate Scheme (CRS) provides cash rebate to 2 types of applied R&D projects, namely R&D projects funded under the Innovation and Technology Fund (ITF) and partnership projects. In the past 3 years (i.e. 2015, 2016 and 2017), the total number of projects involving cash rebate applications was 219, 230 and 251 respectively and all eligible applications were approved. The average amount of cash rebate for each project was about \$220,000, \$280,000 and \$380,000 respectively.
- (2) For the cash rebate applications involving ITF projects and partnership projects in the past 3 years, a breakdown on the number of projects involving designated local public research institutions (i.e. excluding R&D projects conducted by companies under the Small Entrepreneur Research Assistance Programme and the Enterprise Support Scheme) is tabulated as follows:

	No. of ITF projects (cash rebate (\$ million))			No. of partnership projects (cash rebate (\$ million))		
Designated local public research institutions	2015	2016	2017	2015	2016	2017
Local universities	56 (7.32)	55 (14.80)	44 (15.09)	12 (8.90)	12 (3.20)	27 (8.17)
Automotive Parts and Accessory Systems R&D Centre	10 (4.73)	7 (3.02)	8 (3.81)	0 (0)	0 (0)	0 (0)
Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies	7 (1.70)	9 (2.43)	12 (2.85)	0 (0)	1 (0.01)	0 (0)
Hong Kong Research Institute of Textiles and Apparel	16 (2.50)	7 (1.15)	15 (4.29)	0 (0)	0 (0)	1 (0.11)
Nano and Advanced Materials Institute	15 (4.11)	25 (9.92)	48 (11.91)	15 (1.86)	12 (1.84)	10 (4.55)
Hong Kong Applied Science and Technology Research Institute	18 (4.60)	11 (4.57)	14 (9.06)	29 (3.55)	25 (6.00)	12 (4.78)
Others (including Hong Kong Productivity	2 (0.05)	3 (0.34)	5 (2.34)	21 (3.90)	37 (8.63)	36 (17.59)

Council, Vocational Training Council and Hong Kong Institute of Biotechnology)						
Total:	124 (25.01)	117 (36.23)	146 (49.35)	77 (18.21)	87 (19.68)	86 (35.20)

- (3) Since the level of cash rebate under the CRS had been increased from 30% to 40% in February 2016, the number of projects with cash rebate applications approved increased from 219 in 2015 to 251 in 2017, representing a rise of 15%. As for partnership projects, applicant companies are required to pre-register with the Innovation and Technology Commission (ITC) prior to commencement of the R&D projects to indicate their intention of application. The number of pre-registrations of new partnership projects in 2017 was 130, which was higher than that of 2015 by about 37%. We expect that the number of applications and pre-registrations will remain steady in 2018. The relevant work will be absorbed by ITC's existing manpower and resources.
- (4) The Public Sector Trial Scheme (PSTS) provides funding to R&D projects under the ITF as well as incubatees and graduate tenants of the Hong Kong Science and Technology Parks Corporation (HKSTPC) and the Cyberport for producing prototypes/samples from their R&D outcomes or products/services and conducting trials in the public sector. In the past 3 years, the number of applications, the number of projects approved and the trial organisations under the PSTS are detailed in the table below:

	PSTS projects		Types of trial organisations
	No. of applications	No. of projects approved (percentage in total no. of applications)	
2015	32	31 (97%)	<ul style="list-style-type: none"> - Government departments (e.g. Hong Kong Customs and Excise Department, Highways Department, Hong Kong Police Force) - Hospitals (e.g. Hospital Authority, Hong Kong Sanatorium & Hospital) - Elderly centres (e.g. Tung Wah Group of Hospitals) - Non-government organisations and public bodies (e.g. Hong Kong Housing Society, St. James' Settlement, Hong Kong Sports Institute) - Universities (e.g. The University of Hong Kong, The Chinese University of Hong Kong)
2016	29	25 (86%)	

	PSTS projects		Types of trial organisations
	No. of applications	No. of projects approved (percentage in total no. of applications)	
			- Trade associations/chambers of commerce (e.g. Hong Kong Intimate Apparel Industries' Association, Hong Kong Sea Transport and Logistics Association)
2017	33	23 (70%)*	
Total	94	79 (84%)	

(* number of projects approved as at end-January 2018)

- (5) Since the inception of the PSTS in 2011, 165 projects have been supported with funding of over \$270 million, benefitting 240 organisations of different categories. Around 100 of these projects have already been completed. Among them, the R&D results of over 70 projects have reached the stages of realisation and commercialisation, including transferring the relevant technology to the industry through licensing agreements or contract research, or continued application by the relevant public sector organisations.
- (6) As at end-2017, a total of 5 applications from incubatees and graduate tenants of HKSTPC and Cyberport were received under the PSTS, and 3 were supported. The relevant work is absorbed by ITC's existing manpower and resources.

- End -

CONTROLLING OFFICER'S REPLY

ITB156

(Question Serial No. 5751)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (1) Support for Research and Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the Midstream Research Programme for Universities (MRP), will the Government inform of the following:

(1) What are the income or loss and the rate of investment return of the \$2 billion injected into the Innovation and Technology Fund in late June 2016, as well as the details of the MRP projects financed in 2017-18?

(2) What is the annual operating expenditure of the MRP? What are the expenditure and manpower involved so far? What is the average number of working days needed from processing of an application to disbursement of funds?

(3) What is the average funding amount approved for each application since the launch of the MRP? Please list the number of applications received and the number of applications approved by individual project/collaboration project, university unit funded, and another local/non-local university or research institution. When are the injection and investment income expected to be exhausted?

(4) What are the themes of the research proposals invited by the MRP since its launch?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 132)

Reply:

The required information is provided below:

(1), (3) and (4) In June 2016, the Legislative Council Finance Committee approved an injection of \$2 billion into the Innovation and Technology Fund (ITF) as endowment capital to generate investment income to finance projects under the Midstream Research Programme for Universities (MRP). The \$2 billion, after injection into the ITF in late June 2016, is placed with the

Exchange Fund for investment return. So far, the amount of investment return is about \$92 million.

The first round of MRP application was open from December 2016 to March 2017 and the second round is now open for applications, both under the theme “Elderly Health and Care”.

The first round of MRP application received a total of 111 project proposals from 6 universities (including City University of Hong Kong, Hong Kong Baptist University, the Chinese University of Hong Kong, the Hong Kong Polytechnic University, the Hong Kong University of Science and Technology, and the University of Hong Kong). Of these, 70 applications involved collaboration across disciplines or institutions. After assessment and recommendation by a panel comprising experts from the academia and the industry, 8 projects were approved, 7 of which involved collaboration, with a total funding of \$33.6 million and an average funding of \$4.2 million. Once the applicant organisation has duly signed an agreement for the approved project, the project summary (including the title and amount of funds approved) will be available on the ITF website (https://www.itf.gov.hk/l-eng/prj_search_index.asp). References of the 6 projects with agreements duly signed are set out in the Annex.

Currently, ITF’s cumulative revenue from the investment return suffices to fully finance the approved projects, which is in line with MRP’s intent to preserve capital as far as practicable and to operate in a sustainable manner.

- (2) About 5 staff of the Innovation and Technology Commission are deployed for the implementation of the MRP, involving an annual expenditure of about \$4 million, while they are also responsible for duties of operating other programmes under the ITF. The vetting of the MRP will be carried out during the interval between two rounds of application. It generally takes around 4 months from project recommendation by the expert panel to disbursement of funds.

- End -

Midstream Research Programme for Universities

(Approved Projects with Project Agreements
Duly Signed by Applicant Organisations in 2017-18)

No.	Project Reference
1	MRP/011/17X
2	MRP/020/17
3	MRP/056/17X
4	MRP/066/17X
5	MRP/072/17X
6	MRP/092/17X

CONTROLLING OFFICER'S REPLY

ITB157

(Question Serial No. 5752)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (3) Promotion of Technological Entrepreneurship

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned on page 429 of the Estimates of Expenditure that the Innovation and Technology Commission will continue to administer the Technology Start-up Support Scheme for Universities (TSSSU) this year to provide funding support to 6 local universities to encourage their professors and students to establish technology start-ups and the commercialisation of scientific research results. Will the Government inform this Committee of the following:

- (1) Please list in tabular form the number of funded companies and the amount of funding approved in the past 3 years by year, university, technology area of the company and number of staff. Are these enterprises still in operation?
- (2) How many funded enterprises are still in operation and how many have ceased operation in the past 3 years? Please provide information on the survival rate of the funded enterprises by year. For the enterprises which have ceased operation, please provide such information as the total amount of funding, the commencement and end dates of funding and the date of operation cessation of the enterprises.
- (3) How many companies have had their results commercialised and launched in the market and what is the number of results commercialised and launched in the market each year in the past 3 years? What are the details of the follow-up investment and international awards received by the funded enterprises?
- (4) What are the details of the Government's review on the funding arrangements in 2017-18, including the schedule, manpower and resources involved?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 133)

Reply:

- (1) & (2) The Technology Start-up Support Scheme for Universities (TSSSU) was launched in September 2014 to provide funding to the scientific research teams of 6 local universities in starting businesses. In the past 3 years (i.e. 2015-16 to 2017-18), a total of 145 start-ups were funded under TSSSU with a total amount of funding at \$70.57 million. The technology areas mainly cover information and communication technologies, biotechnology, electronics as well as nanotechnology and materials science, etc. The abovementioned 145 start-ups are still in operation. The teams comprise over 700 professors/students/alumni of the associated universities. We do not have information on the number of employees in these enterprises. Details of the enterprises are set out in Annex A.
- (3) From 2014-15 to 2016-17 (year ended), of the 122 funded start-ups, 77 commercialised their scientific research results and over 140 products or services were rolled out in the market; 61 received follow-up investments; and 32 were presented with international awards. Details are set out in Annex B.
- (4) We continued to maintain close contact with the 6 local universities for the implementation of TSSSU in 2017-18. Funded start-ups and universities are required to submit annual reports on the enterprises' performance to the Innovation and Technology Commission (ITC) at the end of each year for ITC's review on TSSSU. The implementation of the TSSSU is one of the work activities under Programme (3) "Promotion of Technological Entrepreneurship". The revised estimate under Programme (3) for 2017-18 is \$19.7 million, which is mainly for salaries and departmental expenses. We do not have the breakdown of departmental expenses and salaries.

- End -

Technology Start-up Support Scheme for Universities

[Note: N.A. denotes “Not Applicable”]

Serial No.	Universities that submitted recommendations	Name of Technology Start-ups	Technology Areas	2015-16		2016-17		2017-18		Operational Status of the Start-ups
				Number of Team Members	Amount of Funding Approved (\$'000)	Number of Team Members	Amount of Funding Approved (\$'000)	Number of Team Members	Amount of Funding Approved (\$'000)	
1	The University of Hong Kong	Appedu (Holding) Limited	Information and communication technologies	5	150	N.A.	N.A.	N.A.	N.A.	In operation
2	The University of Hong Kong	CISC Ltd	Information and communication technologies	N.A.	N.A.	4	500	5	400	In operation
3	The University of Hong Kong	Comma Technology Limited	Information and communication technologies	5	100	6	100	N.A.	N.A.	In operation
4	The University of Hong Kong	Conzeb Limited	Biotechnology	N.A.	N.A.	3	500	3	500	In operation
5	The University of Hong Kong	EN Technology Limited	Nanotechnology and materials science	N.A.	N.A.	3	500	4	500	In operation
6	The University of Hong Kong	Eonzen Technology Company Limited	Biotechnology	N.A.	N.A.	6	250	N.A.	N.A.	In operation
7	The University of Hong Kong	Enzyme Design Limited	Biotechnology	N.A.	N.A.	N.A.	N.A.	2	450	In operation
8	The University of Hong Kong	Fano Labs Limited (Formerly known as Accosys Limited)	Information and communication technologies	1	600	3	150	12	250	In operation
9	The University of Hong Kong	Flectrode Technology Limited	Nanotechnology and materials science	N.A.	N.A.	5	250	N.A.	N.A.	In operation
10	The University of Hong Kong	Hactis Limited	Information and communication technologies	N.A.	N.A.	3	350	3	350	In operation
11	The University of Hong Kong	Hong Kong Unific Publishing Limited	Information and communication technologies	10	200	N.A.	N.A.	N.A.	N.A.	In operation
12	The University of Hong Kong	Immuno Cure Limited (Great Super Limited)	Biotechnology	2	800	N.A.	N.A.	N.A.	N.A.	In operation
13	The University of Hong Kong	ImmunoDiagnostics Limited	Biotechnology	N.A.	N.A.	4	500	4	500	In operation

Serial No.	Universities that submitted recommendations	Name of Technology Start-ups	Technology Areas	2015-16		2016-17		2017-18		Operational Status of the Start-ups
				Number of Team Members	Amount of Funding Approved (\$'000)	Number of Team Members	Amount of Funding Approved (\$'000)	Number of Team Members	Amount of Funding Approved (\$'000)	
14	The University of Hong Kong	Lifespans Limited	Biotechnology	N.A.	N.A.	N.A.	N.A.	5	750	In operation
15	The University of Hong Kong	Living Tissues Company Limited	Biotechnology	5	600	4	300	N.A.	N.A.	In operation
16	The University of Hong Kong	Movabar Limited	Information and communication technologies	N.A.	N.A.	3	100	N.A.	N.A.	In operation
17	The University of Hong Kong	Novoheart Limited	Biotechnology	4	400	N.A.	N.A.	N.A.	N.A.	In operation
18	The University of Hong Kong	OncoSeek Limited	Biotechnology	2	300	N.A.	N.A.	N.A.	N.A.	In operation
19	The University of Hong Kong	OrthoSmart Limited	Biotechnology	9	400	N.A.	N.A.	N.A.	N.A.	In operation
20	The University of Hong Kong	Passber Limited	Information and communication technologies	2	200	N.A.	N.A.	N.A.	N.A.	In operation
21	The University of Hong Kong	Printact Limited	Electronics	3	250	4	100	N.A.	N.A.	In operation
22	The University of Hong Kong	SkinData Limited	Biotechnology	N.A.	N.A.	3	400	3	300	In operation
23	The Chinese University of Hong Kong	A-Biotech (Hong Kong) Company Limited	Biotechnology	N.A.	N.A.	N.A.	N.A.	3	200	In operation
24	The Chinese University of Hong Kong	Accukit Technology Limited	Electronics	N.A.	N.A.	5	400	5	200	In operation
25	The Chinese University of Hong Kong	ACE VR Limited	Others (Ophthalmic Care and Vision Protection)	N.A.	N.A.	3	100	3	300	In operation
26	The Chinese University of Hong Kong	BrainNow Medical Technology Limited	Biotechnology	3	300	2	100	2	100	In operation
27	The Chinese University of Hong Kong	C4Cat Entertainment Limited	Information and communication technologies	10	300	10	200	N.A.	N.A.	In operation
28	The Chinese University of Hong Kong	CocoRobo Limited	Information and communication technologies	N.A.	N.A.	N.A.	N.A.	7	500	In operation
29	The Chinese University of Hong Kong	Codex Genetics Limited	Biotechnology	4	300	5	200	N.A.	N.A.	In operation
30	The Chinese University of Hong Kong	CUREhab Limited	Information and communication technologies	N.A.	N.A.	3	400	N.A.	N.A.	In operation
31	The Chinese University of Hong Kong	DecaSense Technology Limited	Electronics	N.A.	N.A.	3	400	3	200	In operation
32	The Chinese University of Hong Kong	DG Care Limited	Electronics	N.A.	N.A.	4	300	N.A.	N.A.	In operation

Serial No.	Universities that submitted recommendations	Name of Technology Start-ups	Technology Areas	2015-16		2016-17		2017-18		Operational Status of the Start-ups
				Number of Team Members	Amount of Funding Approved (\$'000)	Number of Team Members	Amount of Funding Approved (\$'000)	Number of Team Members	Amount of Funding Approved (\$'000)	
	Kong									
33	The Chinese University of Hong Kong	Edvant Company Limited	Information and communication technologies	5	100	N.A.	N.A.	N.A.	N.A.	In operation
34	The Chinese University of Hong Kong	GEMVCare Limited	Biotechnology	3	340	N.A.	N.A.	N.A.	N.A.	In operation
35	The Chinese University of Hong Kong	Hawkeyes Solutions Limited	Logistics and supply chain management	N.A.	N.A.	2	300	3	100	In operation
36	The Chinese University of Hong Kong	Health View Bioanalytic Limited	Biotechnology	2	300	2	100	2	100	In operation
37	The Chinese University of Hong Kong	HippoTuring Technologies Company Limited	Biotechnology	4	300	N.A.	N.A.	N.A.	N.A.	In operation
38	The Chinese University of Hong Kong	HSK GeneTech Limited	Biotechnology	3	300	N.A.	N.A.	N.A.	N.A.	In operation
39	The Chinese University of Hong Kong	Imsight Medical Technology Company Limited	Biotechnology	N.A.	N.A.	N.A.	N.A.	3	500	In operation
40	The Chinese University of Hong Kong	Intelligent Sensing Limited	Electronics	N.A.	N.A.	N.A.	N.A.	6	500	In operation
41	The Chinese University of Hong Kong	Lione Limited	Textiles/Apparel/Footwear	5	100	N.A.	N.A.	N.A.	N.A.	In operation
42	The Chinese University of Hong Kong	Opinion Network Limited	Information and communication technologies	N.A.	N.A.	3	300	N.A.	N.A.	In operation
43	The Chinese University of Hong Kong	Precision Instrument and Optics Limited	Biotechnology	5	430	5	100	N.A.	N.A.	In operation
44	The Chinese University of Hong Kong	RegCourse Limited	Information and	N.A.	N.A.	3	400	N.A.	N.A.	In operation

Serial No.	Universities that submitted recommendations	Name of Technology Start-ups	Technology Areas	2015-16		2016-17		2017-18		Operational Status of the Start-ups
				Number of Team Members	Amount of Funding Approved (\$'000)	Number of Team Members	Amount of Funding Approved (\$'000)	Number of Team Members	Amount of Funding Approved (\$'000)	
	Kong		communication technologies							
45	The Chinese University of Hong Kong	R-Guardian Limited*	Others (Internet of Things)	N.A.	N.A.	N.A.	N.A.	4	200	In operation
46	The Chinese University of Hong Kong	SicureLabs Company Limited	Electronics	3	300	N.A.	N.A.	N.A.	N.A.	In operation
47	The Chinese University of Hong Kong	SmarteYE Tech Limited	Advanced manufacturing technology/Process development	N.A.	N.A.	N.A.	N.A.	6	400	In operation
48	The Chinese University of Hong Kong	Stapworks Stem Cell Limited	Biotechnology	1	300	6	100	2	100	In operation
49	The Chinese University of Hong Kong	Sucabot MedTech International Limited (Formerly known as CuttingEdge MedTech Limited)	Biotechnology	3	300	3	100	N.A.	N.A.	In operation
50	The Chinese University of Hong Kong	Unitinno Architectural Technology Development Company Limited	Others (Construction)	N.A.	N.A.	7	400	4	200	In operation
51	The Chinese University of Hong Kong	VisionNav Robotics Limited	Advanced manufacturing technology/Process development	5	300	7	100	N.A.	N.A.	In operation
52	The Chinese University of Hong Kong	WIT Enterprises Limited	Information and communication technologies	N.A.	N.A.	N.A.	N.A.	7	400	In operation
53	City University of Hong Kong	Air Button Technology Limited	Electronics	1	170	2	770	2	233	In operation
54	City University of Hong Kong	BeVoid Limited	Information and	3	250	N.A.	N.A.	N.A.	N.A.	In operation

* R-Guardian Limited submitted its funding application via a different university in the second year (2017-18).

Serial No.	Universities that submitted recommendations	Name of Technology Start-ups	Technology Areas	2015-16		2016-17		2017-18		Operational Status of the Start-ups
				Number of Team Members	Amount of Funding Approved (\$'000)	Number of Team Members	Amount of Funding Approved (\$'000)	Number of Team Members	Amount of Funding Approved (\$'000)	
			communication technologies							
55	City University of Hong Kong	B-Route Limited	Others (FinTech)	N.A.	N.A.	N.A.	N.A.	4	233	In operation
56	City University of Hong Kong	CINME TECH LIMITED	Nanotechnology and materials science	4	510	N.A.	N.A.	N.A.	N.A.	In operation
57	City University of Hong Kong	Hands Life Science Limited	Biotechnology	N.A.	N.A.	11	830	5	850	In operation
58	City University of Hong Kong	Initial Innovation Limited	Information and communication technologies	N.A.	N.A.	N.A.	N.A.	2	234	In operation
59	City University of Hong Kong	J&K Brassiere Co., Limited	Others (Artificial Intelligence)	N.A.	N.A.	N.A.	N.A.	2	525	In operation
60	City University of Hong Kong	Jacky Instruments Limited	Electronics	4	340	5	750	5	700	In operation
61	City University of Hong Kong	Kung Fu Motion Limited	Information and communication technologies	2	510	3	350	N.A.	N.A.	In operation
62	City University of Hong Kong	MindLayer Limited	Information and communication technologies	N.A.	N.A.	3	400	2	525	In operation
63	City University of Hong Kong	New System Technologies Limited	Information and communication technologies	4	360	N.A.	N.A.	N.A.	N.A.	In operation
64	City University of Hong Kong	NoPhish Technology Limited	Information and communication technologies	1	510	3	500	N.A.	N.A.	In operation
65	City University of Hong Kong	ProHub LIMITED	Information and communication technologies	3	340	N.A.	N.A.	N.A.	N.A.	In operation
66	City University of Hong Kong	Scooter (Technology) Limited	Others (Electric Vehicle)	N.A.	N.A.	N.A.	N.A.	5	350	In operation
67	City University of Hong Kong	Spreadfast Interactive Limited	Electronics	4	290	N.A.	N.A.	N.A.	N.A.	In operation
68	City University of Hong Kong	Teorema Limited	Information and communication technologies	7	360	N.A.	N.A.	N.A.	N.A.	In operation
69	City University of Hong Kong	The Worldpath Limited	Information and communication technologies	7	360	N.A.	N.A.	N.A.	N.A.	In operation
70	City University of Hong Kong	V&R Laboratory Limited	Information and communication technologies	N.A.	N.A.	3	400	3	350	In operation

Serial No.	Universities that submitted recommendations	Name of Technology Start-ups	Technology Areas	2015-16		2016-17		2017-18		Operational Status of the Start-ups
				Number of Team Members	Amount of Funding Approved (\$'000)	Number of Team Members	Amount of Funding Approved (\$'000)	Number of Team Members	Amount of Funding Approved (\$'000)	
71	The Hong Kong University of Science and Technology	Acoustic Metamaterials Company Limited	Nanotechnology and materials science	2	500	N.A.	N.A.	N.A.	N.A.	In operation
72	The Hong Kong University of Science and Technology	AI Egen Biotech Co., Limited	Biotechnology	N.A.	N.A.	3	500	N.A.	N.A.	In operation
73	The Hong Kong University of Science and Technology	beNovelty Limited	Information and communication technologies	N.A.	N.A.	5	200	N.A.	N.A.	In operation
74	The Hong Kong University of Science and Technology	Bio-Trick Limited	Biotechnology	N.A.	N.A.	N.A.	N.A.	3	500	In operation
75	The Hong Kong University of Science and Technology	Blue Innwater Company Limited	Environmental Protection	N.A.	N.A.	N.A.	N.A.	3	650	In operation
76	The Hong Kong University of Science and Technology	CoilEasy Technologies Limited	Electronics	N.A.	N.A.	3	500	3	400	In operation
77	The Hong Kong University of Science and Technology	Compathon Technology Limited	Information and communication technologies	N.A.	N.A.	5	400	N.A.	N.A.	In operation
78	The Hong Kong University of Science and Technology	Cytofluidics Biotechnology Limited	Biotechnology	N.A.	N.A.	N.A.	N.A.	5	300	In operation
79	The Hong Kong University of Science and Technology	DelTron Intelligence Technology Limited	Electronics	N.A.	N.A.	5	500	N.A.	N.A.	In operation
80	The Hong Kong University of Science and Technology	eTron Electronic Materials (Hong Kong) Co. Limited	Advanced manufacturing technology/Process development	2	700	N.A.	N.A.	N.A.	N.A.	In operation
81	The Hong Kong University of Science and Technology	Everest Innovation Technology Limited	Information and communication technologies	7	300	N.A.	N.A.	N.A.	N.A.	In operation
82	The Hong Kong University of Science and Technology	Free Flow Technology Limited	Energy	4	200	N.A.	N.A.	N.A.	N.A.	In operation
83	The Hong Kong University of Science and Technology	Hong Kong Innovative Display Technology Limited	Nanotechnology and materials science	4	200	N.A.	N.A.	N.A.	N.A.	In operation
84	The Hong Kong University of Science and Technology	Incus Company Limited	Electronics	N.A.	N.A.	N.A.	N.A.	3	650	In operation
85	The Hong Kong University of	Jetcomm Technologies	Electronics	8	450	N.A.	N.A.	N.A.	N.A.	In operation

Serial No.	Universities that submitted recommendations	Name of Technology Start-ups	Technology Areas	2015-16		2016-17		2017-18		Operational Status of the Start-ups
				Number of Team Members	Amount of Funding Approved (\$'000)	Number of Team Members	Amount of Funding Approved (\$'000)	Number of Team Members	Amount of Funding Approved (\$'000)	
	Science and Technology	Limited								
86	The Hong Kong University of Science and Technology	Light Innovation Technology Limited	Biotechnology	N.A.	N.A.	N.A.	N.A.	4	500	In operation
87	The Hong Kong University of Science and Technology	Mindvivid Limited	Biotechnology	N.A.	N.A.	6	200	N.A.	N.A.	In operation
88	The Hong Kong University of Science and Technology	MultiMedia Big Data Analytics Ltd.	Information and communication technologies	N.A.	N.A.	4	200	N.A.	N.A.	In operation
89	The Hong Kong University of Science and Technology	NanoBioImaging Limited	Biotechnology	7	500	N.A.	N.A.	N.A.	N.A.	In operation
90	The Hong Kong University of Science and Technology	Oxpecker Labs Limited	Electronics	N.A.	N.A.	N.A.	N.A.	6	500	In operation
91	The Hong Kong University of Science and Technology	Pear Limited	Information and communication technologies	N.A.	N.A.	4	500	N.A.	N.A.	In operation
92	The Hong Kong University of Science and Technology	Pleryon Therapeutics Limited (formerly known as NovaMatrix Limited)	Biotechnology	N.A.	N.A.	3	500	N.A.	N.A.	In operation
93	The Hong Kong University of Science and Technology	Seasafe Limited	Biotechnology	N.A.	N.A.	4	500	N.A.	N.A.	In operation
94	The Hong Kong University of Science and Technology	Set Sail Venture Limited	Information and communication technologies	N.A.	N.A.	N.A.	N.A.	4	200	In operation
95	The Hong Kong University of Science and Technology	Sonikure Technology Limited	Biotechnology	6	700	N.A.	N.A.	N.A.	N.A.	In operation
96	The Hong Kong University of Science and Technology	Sundial Technology Development Limited	Energy	N.A.	N.A.	N.A.	N.A.	4	300	In operation
97	The Hong Kong University of Science and Technology	Yfisoft Limited	Information and communication technologies	7	450	N.A.	N.A.	N.A.	N.A.	In operation
98	Hong Kong Baptist University	ANA Artwork Material Analysis Company Limited	Testing and certification	4	1,080	4	960	N.A.	N.A.	In operation
99	Hong Kong Baptist University	Booguu Company Limited	Biotechnology	N.A.	N.A.	4	800	3	1,030	In operation
100	Hong Kong Baptist University	Cathay Photonics Limited	Nanotechnology and	4	1,080	4	1,160	N.A.	N.A.	In operation

Serial No.	Universities that submitted recommendations	Name of Technology Start-ups	Technology Areas	2015-16		2016-17		2017-18		Operational Status of the Start-ups
				Number of Team Members	Amount of Funding Approved (\$'000)	Number of Team Members	Amount of Funding Approved (\$'000)	Number of Team Members	Amount of Funding Approved (\$'000)	
			materials science							
101	Hong Kong Baptist University	Gihon Biotech Limited	Biotechnology	N.A.	N.A.	N.A.	N.A.	4	910	In operation
102	Hong Kong Baptist University	Hong Kong Authentication Centre of Dendrobii Officinalis Caulis Limited	Testing and Certification	N.A.	N.A.	N.A.	N.A.	4	1,030	In operation
103	Hong Kong Baptist University	New Life Medicine Technology Company Limited	Biotechnology	N.A.	N.A.	N.A.	N.A.	4	1,030	In operation
104	Hong Kong Baptist University	OPER Technology Limited	Biotechnology	2	1,100	2	1,080	N.A.	N.A.	In operation
105	Hong Kong Baptist University	R & P Technology Limited	Biotechnology	2	740	N.A.	N.A.	N.A.	N.A.	In operation
106	The Hong Kong Polytechnic University	Acoustics Innovation Limited	Environmental protection	2	100	N.A.	N.A.	N.A.	N.A.	In operation
107	The Hong Kong Polytechnic University	Acquaintance Enterprises Limited	Logistics and Supply Chain Management	N.A.	N.A.	N.A.	N.A.	3	700	In operation
108	The Hong Kong Polytechnic University	Advwhere Limited	Information and communication technologies	2	100	N.A.	N.A.	N.A.	N.A.	In operation
109	The Hong Kong Polytechnic University	AlikeAudience (Hong Kong) Limited	Information and communication technologies	N.A.	N.A.	3	500	N.A.	N.A.	In operation
110	The Hong Kong Polytechnic University	Alps Robot Limited	Others (Robotics)	N.A.	N.A.	2	100	N.A.	N.A.	In operation
111	The Hong Kong Polytechnic University	Amazing Trace Technologies Limited	Information and communication technologies	1	100	N.A.	N.A.	N.A.	N.A.	In operation
112	The Hong Kong Polytechnic University	ASA Innovation & Technology Limited	Environmental Protection	N.A.	N.A.	N.A.	N.A.	2	100	In operation
113	The Hong Kong Polytechnic University	Cognix Limited	Information and communication technologies	2	100	N.A.	N.A.	N.A.	N.A.	In operation
114	The Hong Kong Polytechnic University	Control Free Limited	Electronics	2	100	N.A.	N.A.	N.A.	N.A.	In operation
115	The Hong Kong Polytechnic University	Creazine Limited	Information and communication technologies	8	100	N.A.	N.A.	N.A.	N.A.	In operation
116	The Hong Kong Polytechnic	dEyeY Inno Tech Limited	Information and	N.A.	N.A.	2	100	N.A.	N.A.	In operation

Serial No.	Universities that submitted recommendations	Name of Technology Start-ups	Technology Areas	2015-16		2016-17		2017-18		Operational Status of the Start-ups
				Number of Team Members	Amount of Funding Approved (\$'000)	Number of Team Members	Amount of Funding Approved (\$'000)	Number of Team Members	Amount of Funding Approved (\$'000)	
	University		communication technologies							
117	The Hong Kong Polytechnic University	Dr Coach Education Technology Limited	Information and communication technologies	5	100	N.A.	N.A.	N.A.	N.A.	In operation
118	The Hong Kong Polytechnic University	Easiread Limited	Information and communication technologies	N.A.	N.A.	N.A.	N.A.	2	100	In operation
119	The Hong Kong Polytechnic University	eSight Technology Company Limited	Advanced manufacturing technology/Process development	N.A.	N.A.	N.A.	N.A.	3	100	In operation
120	The Hong Kong Polytechnic University	Hocfu Technology Limited	Information and communication technologies	N.A.	N.A.	3	500	3	500	In operation
121	The Hong Kong Polytechnic University	Holumino Limited	Information and communication technologies	2	100	3	500	N.A.	N.A.	In operation
122	The Hong Kong Polytechnic University	I Pet Interactive Technology (HK) Co., Limited	Information and communication technologies	2	100	N.A.	N.A.	N.A.	N.A.	In operation
123	The Hong Kong Polytechnic University	Inno Frontage Limited	Information and communication technologies	3	100	N.A.	N.A.	N.A.	N.A.	In operation
124	The Hong Kong Polytechnic University	Innoplay Limited	Electronics	N.A.	N.A.	N.A.	N.A.	3	500	In operation
125	The Hong Kong Polytechnic University	InReader Limited	Information and communication technologies	N.A.	N.A.	2	100	N.A.	N.A.	In operation
126	The Hong Kong Polytechnic University	JabJabX Limited	Others (Sports and Wearable Technologies)	N.A.	N.A.	N.A.	N.A.	3	100	In operation
127	The Hong Kong Polytechnic University	Jobdoh Limited	Information and communication technologies	1	1,000	2	500	N.A.	N.A.	In operation
128	The Hong Kong Polytechnic University	Kubot Technology Limited	Advanced manufacturing technology/Process development	N.A.	N.A.	N.A.	N.A.	2	700	In operation
129	The Hong Kong Polytechnic University	Look Incorporation Limited	Information and communication technologies	N.A.	N.A.	3	100	N.A.	N.A.	In operation

Serial No.	Universities that submitted recommendations	Name of Technology Start-ups	Technology Areas	2015-16		2016-17		2017-18		Operational Status of the Start-ups
				Number of Team Members	Amount of Funding Approved (\$'000)	Number of Team Members	Amount of Funding Approved (\$'000)	Number of Team Members	Amount of Funding Approved (\$'000)	
130	The Hong Kong Polytechnic University	Marketeer Limited	Information and communication technologies	N.A.	N.A.	N.A.	N.A.	2	100	In operation
131	The Hong Kong Polytechnic University	MCTIPSS Limited	Information and communication technologies	N.A.	N.A.	3	100	N.A.	N.A.	In operation
132	The Hong Kong Polytechnic University	Microenergy Development Limited	Information and communication technologies	N.A.	N.A.	3	100	N.A.	N.A.	In operation
133	The Hong Kong Polytechnic University	MineCos Limited	Information and communication technologies	N.A.	N.A.	2	100	N.A.	N.A.	In operation
134	The Hong Kong Polytechnic University	Nearko Limited	Information and communication technologies	N.A.	N.A.	6	100	N.A.	N.A.	In operation
135	The Hong Kong Polytechnic University	Next Wifi Technologies Ltd.	Information and communication technologies	N.A.	N.A.	3	500	N.A.	N.A.	In operation
136	The Hong Kong Polytechnic University	Parallax Technologies Limited	Information and communication technologies	3	100	N.A.	N.A.	N.A.	N.A.	In operation
137	The Hong Kong Polytechnic University	Phi Info (Hong Kong) Limited	Information and communication technologies	2	100	N.A.	N.A.	N.A.	N.A.	In operation
138	The Hong Kong Polytechnic University	PlusD Technology Limited	Information and communication technologies	1	100	N.A.	N.A.	N.A.	N.A.	In operation
139	The Hong Kong Polytechnic University	Pokeguide Limited	Information and communication technologies	N.A.	N.A.	N.A.	N.A.	3	500	In operation
140	The Hong Kong Polytechnic University	R-Guardian Limited*	Electronics	2	100	N.A.	N.A.	N.A.	N.A.	In operation
141	The Hong Kong Polytechnic University	Superluminal Technology Limited	Information and communication technologies	3	100	N.A.	N.A.	N.A.	N.A.	In operation
142	The Hong Kong Polytechnic University	Techlabs Holdings Limited	Information and communication technologies	N.A.	N.A.	4	500	N.A.	N.A.	In operation
143	The Hong Kong Polytechnic University	Ultimate Sports Hub Limited	Information and communication technologies	N.A.	N.A.	3	100	N.A.	N.A.	In operation
144	The Hong Kong Polytechnic University	Vision Science and Technology Company	Others (Visual technology)	N.A.	N.A.	3	100	3	500	In operation

Serial No.	Universities that submitted recommendations	Name of Technology Start-ups	Technology Areas	2015-16		2016-17		2017-18		Operational Status of the Start-ups
				Number of Team Members	Amount of Funding Approved (\$'000)	Number of Team Members	Amount of Funding Approved (\$'000)	Number of Team Members	Amount of Funding Approved (\$'000)	
		Limited								
145	The Hong Kong Polytechnic University	Vox Technology Limited	Information and communication technologies	N.A.	N.A.	N.A.	N.A.	2	100	In operation
146	The Hong Kong Polytechnic University	Zunosaki Limited	Electronics	3	100	N.A.	N.A.	N.A.	N.A.	In operation
			Total	247	22,570	257	24,000	212	24,000	70,570
			Number of Start-ups Funded for the First Time	40		46		33		145

- End -

Technology Start-up Support Scheme for Universities

Achievements of Start-ups	2014-15	2015-16	2016-17	Total	Details
No. of start-ups that have commercialised the research and development results and rolled out their products or services in the market	17	42	36	77	From 2014-15 to 2016-17, over 140 products or services were rolled out in the market by 77 start-ups, 18 of which had their products or services rolled out in the market in more than 1 year.
No. of start-ups that have received follow-up investments <i>(Total amount of funding raised)</i>	14 <i>(\$34.2 million)</i>	30 <i>(\$55.32 million)</i>	29 <i>(\$46.89 million)</i>	61 <i>(\$136 million)</i>	From 2014-15 to 2016-17, 61 start-ups received follow-up investments, 12 of which received follow-up investments in more than 1 year. Major sources of these capitals were funding provided by the Government and the public sector, private injection by team members and company shareholders as well as other private investments (such as private equity funds, venture capital funds, angel investors, private investments), etc.
No. of start-ups presented with international awards	1	14	17	32	From 2014-15 to 2016-17, the international awards received include the 2015 Top 100 Global by Red Herring, those received at the International Exhibition of Inventions Geneva in 2016, namely the Grand Prix International Invention Award (highest honour) and 2 Gold Medals (Computer Sciences

					Category and Surgery Category), as well as 2 Gold Medals (Medicine Category and Sport Category) received at the International Exhibition of Inventions Geneva in 2017.
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CONTROLLING OFFICER'S REPLY

ITB158

(Question Serial No. 5753)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (1) Support for Research and Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned on page 428 of the Estimates of Expenditure that the Government will continue to support the activities of the research and development (R&D) Centres with emphasis on technology transfer of funded projects. Regarding the operation of the R&D Centres funded by the Government, will the Government inform this Committee of:

- (1) the annual operating expenditure, the number and total expenditure of R&D projects of the 5 R&D Centres respectively in the past 3 years;
- (2) the amount of industry sponsorship and contract service fees of the R&D Centres respectively in the past 3 years;
- (3) the number of projects commercialised and licences granted by the 5 R&D Centres respectively in the past 3 years; and
- (4) the specific work details and measures to enhance technology transfer of funded projects?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 134)

Reply:

The requested information is provided below:

- (1) Among the 5 Research and Development (R&D) Centres, the operating expenditure of the Nano and Advanced Materials Institute (NAMI), R&D Centre for Logistics and Supply Chain Management Enabling Technologies (LSCM), Hong Kong Research Institute of Textiles and Apparel (HKRITA) and Automotive Parts and Accessory Systems R&D Centre (APAS) is met by the funding under the Innovation and Technology Fund (ITF) approved by the Finance Committee of the Legislative

Council, while the operating expenditure of the R&D Centre for Information and Communications Technologies (ICT) under the Hong Kong Applied Science and Technology Research Institute (ASTRI) is funded by the Government's annual recurrent subvention to ASTRI (which is set out under Programme (7) "Subvention: Hong Kong Productivity Council, Hong Kong Applied Science and Technology Research Institute Company Limited").

The operating expenditure of the 5 R&D Centres in the latest 3 financial years (i.e. 2015-16 to 2017-18) is tabulated below:

	Operating expenditure (\$ million)		
	2015-16 (Actual expenditure)	2016-17 (Actual expenditure)	2017-18 (Revised estimate)
ASTRI	141.5	140.0	143.6
NAMI	57.2	55.3	66.0
LSCM	30.0	29.9	36.0
HKRITA	26.7	33.3	33.0
APAS	15.9	16.8	18.2
Total:	271.3	275.3	296.8

The number of new projects and on-going projects of the 5 R&D Centres in the past 3 financial years (i.e. 2014-15 to 2016-17) is tabulated below:

	Number of R&D projects					
	2014-15		2015-16		2016-17	
	New projects	On-going projects (as at end-March 2015)	New projects	On-going projects (as at end-March 2016)	New projects	On-going projects (as at end-March 2017)
ASTRI	44	61	42	69	38	62
NAMI	41	55	45	82	45	86
LSCM	17	29	16	35	18	37
HKRITA	25	57	21	62	18	59
APAS	8	26	13	36	16	44
Total:	135	228	137	284	135	288

The R&D expenditure of the 5 R&D Centres is supported by the ITF on individual R&D project basis. The amount of funding for R&D expenditure of the 5 R&D Centres in the latest 3 financial years (i.e. 2014-15 to 2016-17) is tabulated below:

	Amount of funding for R&D expenditure (\$ million)		
	2014-15 (Actual expenditure)	2015-16 (Actual expenditure)	2016-17 (Actual expenditure)
ASTRI	248.0	198.7	239.9
NAMI	41.3	71.2	70.7
LSCM	33.9	79.8	65.4
HKRITA	26.3	44.8	39.0
APAS	23.4	36.0	28.4
Total:	372.9	430.5	443.4

- (2) The amount of sponsorship for new projects and the contract service income of the

5 R&D Centres in the past 3 financial years (i.e. 2014-15 to 2016-17) are tabulated below:

	Amount of sponsorship and contract service income (\$ million)					
	2014-15		2015-16		2016-17	
	Amount of sponsorship for new projects	Contract service income	Amount of sponsorship for new projects	Contract service income	Amount of sponsorship for new projects	Contract service income
ASTRI	63.7	12.02	63.8	16.69	61.1	24.67
NAMI	19.6	13.21	30.7	5.07	47.7	13.56
LSCM	9.9	0.09	10.2	0.03	13.8	0.60
HKRITA	9.2	-	20.6	0.09	18.1	0.25
APAS	12.1	0.20	28.4	0.61	8.2	1.55
Total:	114.5	25.52	153.7	22.49	148.9	40.63

- (3) The 5 R&D Centres signed 64, 55 and 68 licensing agreements in 2014-15, 2015-16 and 2016-17 respectively.
- (4) ITF has been attaching importance to technology transfer of funded projects. The R&D Centres will undertake industry-driven and market relevant R&D, and subsequently transfer the technology to the industry through contract research or licensing arrangement. We have adopted the “level of income received from the industry” as one of the indicators to assess the R&D Centres’ performance from 2017-18 onwards. The indicator mainly covers sponsorship from the industry for their R&D, income arising from licensing/royalty and contract services, and other income, etc.

Currently, the R&D Centres have to return their commercialisation income generated from ITF project outcomes to the ITF. We plan to allow R&D Centres to retain such income to encourage the commercialisation of R&D results and facilitate technology transfer activities.

- End -

CONTROLLING OFFICER'S REPLY**ITB159****(Question Serial No. 5754)**

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

In respect of the public relations expenditure of the Hong Kong Science and Technology Parks Corporation (HKSTPC), will the Government inform this Committee of the following:

(1) The total expenditure of HKSTPC for publishing advertisements, sponsored content or advertorial in newspapers registered under the Registration of Local Newspapers Ordinance in 2017-18 as well as the relevant details:

Date of publish (Day/Month/Year)	Status (one-off/ ongoing/done) (as at 28 February 2018)	Name and purpose of advertisement	Name of media organisation and newspaper	Frequency (as at 28 February 2018)	Expenditure (as at 28 February 2018)

(2) The expenditure of HKSTPC for sponsoring local free-to-air television stations, paid television stations and radio stations to provide information and produce programmes or materials in 2017-18 as well as the relevant details:

Date of broadcast (Day/Month/Year)	Status (one-off/ ongoing/done) (as at 28 February 2018)	Name and purpose of advertisement	Media organisation	Frequency (as at 28 February 2018)	Expenditure (as at 28 February 2018)

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(3) The media organisations which published or broadcasted advertisements/sponsored content of HKSTPC in 2017-18, as well as the frequency and the total expenditure involved (in descending order of amount spent):

Name of media organisation	Frequency	Total expenditure (\$)

(4) The websites/network platforms on which HKSTPC published online advertisements/sponsored content in 2017-18, as well as the frequency, the duration (days) and the total expenditure involved (tabulated in descending order of amount spent):

Website/ network platform	Content of advertisement	Frequency	Duration (days)	Hit rate, frequency of exposure and no. of audiences	Total expenditure (\$)

(5) Other media channels through which HKSTPC published advertisements/sponsored content in 2017-18, as well as the frequency and the total expenditure involved (in descending order of amount spent):

Media	Frequency	Total expenditure (\$)

(6) What is the estimated expenditure of HKSTPC for advertisements/sponsored content in 2018-19?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 135)

Reply:

The requested information is provided below:

(1) The total expenditure of the Hong Kong Science and Technology Parks Corporation (HKSTPC) for publishing advertisements, sponsored content or advertorial in

newspapers registered under the Registration of Local Newspapers Ordinance in 2017-18 as well as the relevant details are as follows:

Date of publish (Day/Month/Year)	Status (one-off/ ongoing/done) (as at 28 February 2018)	Name and purpose of advertisement	Name of media organisation and newspaper	Frequency (as at 28 February 2018)	Expenditure (\$) (as at 28 February 2018)
4 April 2017	Done	Master Dynamics: Raise public awareness on the innovative technologies of companies at HKSTPC	PCM Market	1	13,650
25 April 2017	Done	SciTech Challenge: Encourage start-ups to promote their businesses	PCM Market	1	13,650
April- October 2017	Done	Promotion of AIS 2017 and Elevator Pitch Competition 2017 (EPiC2017)	AmChamHK of the American Chamber of Commerce in Hong Kong (AmCham)	4	72,500
April- December 2017	Done	Promotion of AIS 2017 and EPiC2017	The Bulletin of the Hong Kong General Chamber of Commerce (HKGCC)	5	65,433
April- December 2017	Done	Promotion of AIS 2017 and EPiC2017	Hong Kong Industrialist of the Federation of Hong Kong Industries (FHKI)	8	63,480
2 May 2017	Done	Smart warehouse solution of RV Automation: Raise public awareness on the innovative technologies of companies at HKSTPC	PCM Market	1	13,650
9 May 2017	Done	Graduation Ceremony of Incubation Programmes: Raise public awareness on Incubation Programmes and the innovative inventions of graduates	PCM Market	1	13,650
16 May 2017	Done	International Exhibition of Inventions of Geneva: Raise public awareness on the innovative inventions of award-winning companies at the Park	PCM Market	1	13,650
May- October 2017	Done	Promotion of AIS 2017 and EPiC2017	Hong Kong Entrepreneurs of the Chinese Manufacturers' Association of Hong Kong (CMA)	2	23,100

Date of publish (Day/Month/Year)	Status (one-off/ ongoing/done) (as at 28 February 2018)	Name and purpose of advertisement	Name of media organisation and newspaper	Frequency (as at 28 February 2018)	Expenditure (\$) (as at 28 February 2018)
May- October 2017	Done	Promotion of AIS 2017 and EPiC2017	Vision of the Chinese General Chamber of Commerce, Hong Kong (CGCC)	4	39,600
June 2017	Done	Road to IPO: Seminar for High Growth Corporate: Promote how start-ups can prepare themselves to go for IPO with assistance from the Hong Kong Exchanges and Clearing Limited and HKSTPC	Bloomberg Businessweek (Chinese edition)	1	250,000
20 June 2017	Done	AIS Robotics: Raise public awareness on the potential of robotics technologies	PCM Market	1	13,650
26 June 2017	Done	Healthy Ageing Summit in Gerontech and Innovation Expo cum Summit 2017: Raise public awareness on healthy ageing	Hong Kong Economic Times (HKET)	1	25,000
27 June 2017	Done	Healthy Ageing Summit in Gerontech and Innovation Expo cum Summit 2017: Raise public awareness on healthy ageing	Headline Daily	1	38,000
June- November 2017	Done	Promotion of EPiC2017: Encourage start-ups to promote their businesses and connect with potential investors	Bloomberg Businessweek (Chinese edition)	1	300,000
25 July 2017	Done	Smart interior design of NowHere: Raise public awareness on the innovative technologies of companies at InnoCentre	PCM Market	1	13,650
1 August 2017	Done	InnoCell: Raise public awareness on InnoCell	PCM Market	1	13,650
15 August 2017	Done	Surfwheel and Bid N Eat: Raise public awareness on the innovative technologies of incubatees	PCM Market	1	13,650
22 August 2017	Done	Smart city media briefing for Animae and Motive Force: Raise public awareness on the smart city technologies of companies at HKSTPC	PCM Market	1	13,650

Date of publish (Day/Month/Year)	Status (one-off/ ongoing/done) (as at 28 February 2018)	Name and purpose of advertisement	Name of media organisation and newspaper	Frequency (as at 28 February 2018)	Expenditure (\$) (as at 28 February 2018)
12 September 2017	Done	Sensor Hub: Raise public awareness on smart city technologies	PCM Market	1	13,650
19 September 2017	Done	AIS Smart City: Raise public awareness on smart city development	PCM Market	1	13,650
3 October 2017	Done	SciTech Challenge: Promote start-up business	PCM Market	1	13,650
24 October 2017	Done	SPRINTER: Connect start-ups with various stakeholders	PCM Market	1	13,650
October 2017	Done	Promotion of MICE venues at the Hong Kong Science Park	Mix magazine Business Traveler	3	150,961
November 2017	Done	Media briefing: Promotion of HKSTPC	iMoney	1	150,000
14 November 2017	Done	EPiC 2017: Encourage start-ups to promote their businesses and connect with potential investors	PCM Market	1	13,650
21 November 2017	Done	Mobile payment platform One2Paid's smart payments for taxi fares: Raise public awareness on the innovative inventions of incubatees	PCM Market	1	13,650
21 November 2017	Done	Media briefing: Promotion of HKSTPC	PCM Market	1	13,650
21 November 2017	Done	Media briefing: Promotion of HKSTPC	Wen Wei Po & Ta Kung Pao	1	50,000
21 November 2017	Done	Media briefing: Promotion of HKSTPC	HKET	1	39,000
21 November 2017	Done	Media briefing: Promotion of HKSTPC	Sing Tao Daily & Headline Daily	1	81,000
21 November 2017	Done	Media briefing: Promotion of HKSTPC	Ming Pao	1	45,000
12 December 2017	Done	Smart City Digital Hub: Promote smart city development	PCM Market	1	13,650

Date of publish (Day/Month/ Year)	Status (one-off/ ongoing/done) (as at 28 February 2018)	Name and purpose of advertisement	Name of media organisation and newspaper	Frequency (as at 28 February 2018)	Expenditure (\$) (as at 28 February 2018)
26 December 2017	Done	Opening of Robotics Catalysing Centre: Promote the development of robotics technologies	PCM Market	1	13,650
18 December 2017	Done	3 rd Stem Cell & Regenerative Medicine Conference: Promote the development of healthy ageing	Hong Kong Economic Journal Monthly	1	18,000
11 January 2018	Done	StemUp x18@Science Park	South China Morning Post (SCMP) Young Post	1	93,500
14 February 2018	Done	Adoption of Hong Kong start-up Platysens' innovative inventions by La Salle swimming team: Raise public awareness on the innovative inventions of incubatees	IT Square of Sing Tao Daily	1	25,000
27 February 2018	Done	MakeiTYourCareer@Science Park 2018	Headline Daily	1	38,000
28 February 2018	Done	MakeiTYourCareer@Science Park 2018	Metro Daily	1	18,000
February- March 2018	Ongoing	MakeiTYourCareer@Science Park 2018	SCMP	2	40,000

- (2) The expenditure of HKSTPC for sponsoring local free-to-air television stations, paid television stations and radio stations to provide information and produce programmes or materials in 2017-18 as well as the relevant details are as follows:

Date of broadcast (Day/Month/ Year)	Status (one-off/ ongoing/done) (as at 28 February 2018)	Name and purpose of advertisement	Media organisation	Frequency (as at 28 February 2018)	Expenditure (as at 28 February 2018) (\$)
30 August 2017	Done	EPiC 2017: Encourage start-ups to promote their businesses and connect with potential investors	Television Broadcasts Limited (TVB)	11	200,000

- (3) The media organisations which published or broadcasted advertisements/sponsored content of HKSTPC in 2017-18, as well as the frequency and the total expenditure involved are as follows:

Name of media organisation	Frequency	Total expenditure (\$)
Bloomberg Businessweek (Chinese edition)	2	550,000
PCM Market	19	259,350
Hong Kong Economic Times Group	3	214,000
TVB	11	200,000
Sing Tao News Corporation Limited	4	182,000
Mix Magazine Business Traveler	3	150,961
South China Morning Post Publishers Limited	3	133,500
AmChamHK of AmCham	4	72,500
The Bulletin of HKGCC	5	65,433
Hong Kong Industrialist of FHKI	8	63,480
Ming Pao	1	45,000
Vision of CGCC	4	39,600
Wen Wei Po	1	25,000
Ta Kung Pao	1	25,000
Hong Kong Entrepreneurs of CMA	2	23,100
Metro Daily	1	18,000
Hong Kong Economic Journal	1	18,000

- (4) The websites/network platforms on which HKSTPC published online advertisements/sponsored content in 2017-18, as well as the frequency, the duration and the total expenditure involved are as follows:

Website/ network platform	Content of advertisement	Frequency	Duration (days)	Hit rate, frequency of exposure and no. of audiences	Total expenditure (\$)
Business Weekly	AIS 2017, EPiC2017 and AUTM Asia 2017	1	Article will not be deleted after being published on website	32 500	116,644
On.cc	EPiC 2017	1	Article will not be deleted after being published on website	Frequency of exposure: 992 022	45,000

Website/ network platform	Content of advertisement	Frequency	Duration (days)	Hit rate, frequency of exposure and no. of audiences	Total expenditure (\$)
	3rd Stem Cell & Regenerative Medicine Conference	1	Article will not be deleted after being published on website	Frequency of exposure: 826 776	45,000
	Media briefing	1	Article will not be deleted after being published on website	Frequency of exposure: 705 915	45,000
	StemUp x18@Science Park	1	Article will not be deleted after being published on website	Frequency of exposure: 904 877	45,000
	Opening of Robotics Catalysing Centre	1	Article will not be deleted after being published on website	Frequency of exposure: 890 233	45,000
	Adoption of Hong Kong start-up Platysens' innovative inventions by La Salle swimming team	1	Article will not be deleted after being published on website	Frequency of exposure: 960 327	45,000
	6th Peacemakers' Cultural Celebration: Actions for Peace	1	Article will not be deleted after being published on website	Frequency of exposure: 739 011	45,000
	Smart warehouse solution of RV Automation, a company at HKSTPC	1	Article will not be deleted after being published on website	Frequency of exposure: 838 269	45,000
	SciTech Challenge	1	Article will not be deleted after being published on website	Frequency of exposure: 791 223	45,000
	Graduation Ceremony of Incubation Programmes	1	Article will not be deleted after	Frequency of exposure: 767 530	45,000

Website/ network platform	Content of advertisement	Frequency	Duration (days)	Hit rate, frequency of exposure and no. of audiences	Total expenditure (\$)
			being published on website		
	Road To IPO	1	Article will not be deleted after being published on website	Frequency of exposure: 896 378	45,000
	AIS Robotics	1	Article will not be deleted after being published on website	Frequency of exposure: 950 930	45,000
	DreamCatchers Medtech Hackathon	1	Article will not be deleted after being published on website	Frequency of exposure: 807 201	45,000
	InnoCell	1	Article will not be deleted after being published on website	Frequency of exposure: 689 350	45,000
	Smart city media briefing for Animae and Motive Force	1	Article will not be deleted after being published on website	Frequency of exposure: 850 030	45,000
	Sensor Hub	1	Article will not be deleted after being published on website	Frequency of exposure: 685 082	45,000
	AIS Smart City	1	Article will not be deleted after being published on website	Frequency of exposure: 992 007	45,000
HK01	EPiC 2017	1	Article will not be deleted after being published on website	No. of audiences: 200 292	42,000

Website/ network platform	Content of advertisement	Frequency	Duration (days)	Hit rate, frequency of exposure and no. of audiences	Total expenditure (\$)
	Media briefing	1	Article will not be deleted after being published on website	No. of audiences: 103 050	40,000
	StemUp x18@Science Park	1	Article will not be deleted after being published on website	No. of audiences: 107 750	40,000
	Opening of Robotics Catalysing Centre	1	Article will not be deleted after being published on website	No. of audiences: 30 464	40,000
	Adoption of Hong Kong start-up Platysens' innovative inventions by La Salle swimming team	1	Article will not be deleted after being published on website	No. of audiences: 189 330	40,000
	6th Peacemakers' Cultural Celebration: Actions for Peace	1	Article will not be deleted after being published on website	No. of audiences: 164 157	40,000
StartupBeat	Mobile payment platform One2Paid's smart payments for taxi fares	1	Article will not be deleted after being published on website	No. of audiences: 5 896	36,800
	Media briefing	1	Article will not be deleted after being published on website	No. of audiences: 4 307	36,800
	Opening of Robotics Catalysing Centre	1	Article will not be deleted after being published on website	No. of audiences: 4 273	36,800
	Adoption of Hong Kong start-up Platysens' innovative	1	Article will not be deleted after	No. of audiences: 5 599	36,800

Website/ network platform	Content of advertisement	Frequency	Duration (days)	Hit rate, frequency of exposure and no. of audiences	Total expenditure (\$)
	inventions by La Salle swimming team		being published on website		
	Media Luncheon	1	Article will not be deleted after being published on website	No. of audiences: 4 123	36,800
	Graduation Ceremony of Incubation Programmes	1	Article will not be deleted after being published on website	Not available from the media	35,000
	InnoCell	1	Article will not be deleted after being published on website	No. of audiences: 8 681	36,800
	DreamCatchers Medtech Hackathon	1	Article will not be deleted after being published on website	No. of audiences: 4 788	36,800
	SenseTime, the first unicorn at HKSTPC	1	Article will not be deleted after being published on website	No. of audiences: 8 526	36,800
	MakeITMashUp	1	Article will not be deleted after being published on website	Not available from the media	30,000
	SPRINTER	1	Article will not be deleted after being published on website	No. of audiences: 4 786	36,800
	EPiC 2017	1	Article will not be deleted after being published on website	No. of audiences: 16 160	36,800

Website/ network platform	Content of advertisement	Frequency	Duration (days)	Hit rate, frequency of exposure and no. of audiences	Total expenditure (\$)
SCMP	Media briefing	1	Article will not be deleted after being published on website	Frequency of exposure: 69 556	29,000
Hket.com	Media briefing	1	Article will not be deleted after being published on website	Not available from the media	18,000
unwire	MakeITMashUp	1	Article will not be deleted after being published on website	No. of audiences: 13 249	25,000
	Interview with start-up Fano Labs	1	Article will not be deleted after being published on website	No. of audiences: 23 431	25,000
	Adoption of Hong Kong start-up Platysens' innovative inventions by La Salle swimming team	1	Article will not be deleted after being published on website	No. of audiences: 14 572	25,000
	MakeiTYourCareer@ Science Park 2018 (Facebook feed)	1	Post will not be deleted after being published on page	No. of audiences: 159 600	21,000
	Olympia City STEM Lab	1	Article will not be deleted after being published on website	No. of audiences: 13 544	25,000
	One2Paid, a mobile payment platform of incubatee CamClaim	1	Article will not be deleted after being published on website	No. of audiences: 26 576	25,000
	AIS Smart City	1	Article will not be deleted after being	No. of audiences: 23 487	25,000

Website/ network platform	Content of advertisement	Frequency	Duration (days)	Hit rate, frequency of exposure and no. of audiences	Total expenditure (\$)
			published on website		
	SciTech Challenge	1	Article will not be deleted after being published on website	No. of audiences: 12 871	25,000
	EPiC 2017	1	Article will not be deleted after being published on website	No. of audiences: 28 795	25,000
Unwire Pro Facebook Live	MakeITMashUp	1	Video will not be deleted after being published on website	Not available from the media	38,000
LinkedIn Ad Exchange	MakeiTYourCareer@ Science Park 2018	1	14	Frequency of exposure: 477 656	51,150
Ad Exchange	MakeiTYourCareer@ Science Park 2018	1	14	Frequency of exposure: 400 000	10,000
Google Display Network	MakeiTYourCareer@ Science Park 2018	1	18	Frequency of exposure: 13 599 231	53,250
cpjobs.com	MakeiTYourCareer@ Science Park 2018	1	7	Frequency of exposure: 10 220	6,750
Jobsdb	MakeiTYourCareer@ Science Park 2018	1	14	Frequency of exposure: 571 666	35,000
Facebook	Facebook Feed	1	330	Frequency of exposure: 1 499 451	62,834.47
YouTube	EPiC 2017	1	60	Frequency of exposure: 174 000	33,200

- (5) Other media channels through which HKSTPC published advertisements/sponsored content in 2017-18, as well as the frequency and the total expenditure involved are as follows:

Media channel	Frequency	Total expenditure (\$)
FHKI Members' Directory 2017-18	1	16,340
The Hong Kong Electronic Industries Association Directory	1	32,800

Programme booklet for the Inauguration Ceremony of the 32nd Council of the Hong Kong Association for the Advancement of Science and Technology	1	15,000
HKGCC Free Ride Day	1	16,000
AmCham's Members Directory 2018	1	19,000

- (6) HKSTPC will bear the expenditure and manpower involved in its advertisements and publicity activities. No additional subsidy is provided by the Government.

- End -

CONTROLLING OFFICER'S REPLY**ITB160****(Question Serial No. 5763)**

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the sites selected for innovation and technology (I&T) purposes at Wang Chau, Yuen Long; Kwu Tung North New Development Area (NDA); Hung Shui Kiu NDA; and near Liantang/Heung Yuen Wai Boundary Control Point, please advise in tabular form a list of the lands which are currently reserved for I&T development (by district, location, land area, use under planning, plot ratio), and information of the sites of which land uses are to be changed in response to the development plan of the Hong Kong-Shenzhen Innovation and Technology Park in the Lok Ma Chau Loop (by district, location, land area, new land use, plot ratio); whether there were plans to carry out consultancy studies on the aforementioned sites to formulate appropriate land uses in 2017-18; if yes, what the details and expenditures are; whether consultancy studies will be carried out in 2018-19; if yes, what the details and expenditures are.

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 153)

Reply:

Information of the sites currently reserved for innovation and technology (I&T) development is set out below:

	Site	Approximate area reserved for I&T	Site information
1.	Kwu Tung North New Development Area (NDA)	17.5 hectares (ha)	On the Outline Zoning Plan (OZP), the site is zoned "Other Specified Uses (annotated as suitable sites planned for "Research and Development")" (5.8 ha) and "Business and Technology Park" (11.7 ha).

	Site	Approximate area reserved for I&T	Site information
2.	Hung Shui Kiu NDA	9 ha	Sites have been reserved for I&T-related development on the OZP. Detailed development plan of the sites is subject to further study.
3.	Yuen Long Industrial Estate (YLIE) Extension at Wang Chau	15 ha (to be further studied)	In January 2012, the Committee on Planning and Land Development endorsed that the site could be used for extension of the YLIE. According to Stage 1 Preliminary Planning and Engineering Study completed by the Hong Kong Science and Technology Parks Corporation (HKSTPC) in February 2014, the site was technically feasible for the industrial estate (IE) extension. This site is to be developed by HKSTPC as an extension to YLIE and has been incorporated into the development plan of HKSTPC.
4.	Site near Liantang/Heung Yuen Wai Boundary Control Point	56 ha (to be further studied)	According to the preliminary planning study conducted by the consultancy engaged by HKSTPC, the site is technically feasible for developing a science park and IEs. The consultant's fees of around \$1.57 million are borne by HKSTPC.

To cope with the society's overall development, the Government will examine the most suitable use for each site in light of the latest situation as appropriate. Last year, in response to the latest situation (including the development of the Lok Ma Chau Loop), the Innovation and Technology Bureau and the Development Bureau reviewed the various sites reserved for I&T development, and decided to release a total of 84.8 ha of reserved land, including 74 ha at Lung Kwu Tan and 10.8 ha at Tuen Mun Area 38. The Government will continue to review from time to time the demand for I&T land so as to dovetail with the development of relevant industries.

- End -

CONTROLLING OFFICER'S REPLY

ITB161

(Question Serial No. 5765)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the work of the Steering Committee on Innovation and Technology and the Committee on Innovation, Technology and Re-industrialisation (the Committee), please advise on the number of meetings convened, issues discussed and attendance rate of each meeting since the establishment of the Committee, and whether minutes of the meetings are available and open to the public; the number of relevant meetings convened, issues discussed and attendance rate of each meeting for the working groups (if any), and whether minutes of the meetings are available and open to the public; the work plan and schedule for 2018-19. If such information is not available, what are the reasons?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 155)

Reply:

Since its establishment in April 2017, the Committee on Innovation, Technology and Re-industrialisation (the Committee) convened a total of 4 meetings in May, August and October 2017 and January 2018. The attendance rate of members is over 80% on average. The Committee discussed the latest scene of innovation and technology (I&T) development in Hong Kong, its work focus and different I&T-related topics, including enhanced tax deduction for research and development (R&D) expenditure, nurturing I&T talents, attracting overseas R&D institutions to Hong Kong, supporting the development of start-ups in Hong Kong, electronic payment, development of the e-sports industry, and the Smart City Blueprint for Hong Kong. The Committee plans to convene 4 meetings in 2018 to continue advising the Government on matters relating to the promotion of I&T development and re-industrialisation in Hong Kong.

- End -

CONTROLLING OFFICER'S REPLY

ITB162

(Question Serial No. 0691)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title): (000) Operational expenses

Programme: (2) Fostering University-Industry Collaboration

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

Under Programme (2), companies in the private sector are encouraged to invest and leverage the knowledge and resources of local universities through 3 schemes under the Government's University-Industry Collaboration Programme (UICP), namely the Teaching Company Scheme, Matching Grant for Joint Research, and Industrial Research Chair Scheme. Figures show that the number of applications received and processed under the UICP decreased from 28 in 2016 (actual) to 26 in 2017 (actual), and will further decrease to 25 in 2018 (estimate). In this connection, please inform this Committee of the following:

(a) While the Government's provision for the UICP increases year on year, the estimated number of applications to be received and processed in 2018 has dropped instead of rising, what are the reasons for that?

(b) Please set out in details the number of applications and the provisions for the 3 schemes under the UICP.

(c) In order to enhance the engagement of private companies and universities to collaborate in research and development projects, will the Government consider relaxing the existing arrangement of requiring the companies to contribute half of the project cost? If so, what are the details; if not, what are the reasons?

Asked by: Hon NG Wing-ka, Jimmy (Member Question No. (LegCo use): 99)

Reply:

The requested information is provided below:

(a) As the available resources, incentives, workload, etc. of the universities and the industry vary from year to year, there are variations in the number of applications and funded projects under the University-Industry Collaboration Programme (UICP) every

year. 22, 28 and 26 applications were received under the UICP in 2015, 2016 and 2017 respectively. The estimated number of applications to be received in 2018 is 25, which is projected based on the average number in the past 3 years. We will continue encouraging enterprises and local universities to collaborate in research and development (R&D) projects of commercial nature. In addition to the UICP, enterprises can also apply for funding from various programmes under the Innovation and Technology Fund to undertake R&D projects in collaboration with public R&D centres or making use of their internal resources.

- (b) A total of 76 applications were received under the UICP in the past 3 years (2015-2017), with a funding amount of about \$96.64 million. Details are as follows:

	Teaching Company Scheme		Matching Grant for Joint Research	
	Number of applications	Funding amount (\$ million)	Number of applications	Funding amount (\$ million)
2015	6	1.23	16	26.14
2016	4	0.27	24	27.22
2017	1	0.45	25	41.33

No applications for the Industrial Research Chair Scheme were received by the Innovation and Technology Commission in the past 3 years (2015-2017).

- (c) The UICP aims to stimulate private sectors' interest in conducting more R&D projects through leveraging the expert knowledge of universities. Intellectual property rights arising from the projects will be solely owned by the participating companies. Therefore, the arrangement for the applicant companies to contribute half of the project cost is considered appropriate.

- End -

CONTROLLING OFFICER'S REPLY

ITB163

(Question Serial No. 0964)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned in paragraph 73 of the Budget Speech that the Government will relax the eligibility criteria for the Technology Voucher Programme (TVP). All local enterprises, irrespective of size and duration of operation, may apply. Besides, the restriction that an applicant enterprise should have business operation in Hong Kong for at least one year will be removed. This will enable more medium enterprises and start-ups to benefit from the TVP. What are the number of applications to be received under the TVP, the number of beneficiary enterprises, and the average funding amount for the approved applications in the next 3 years as estimated by the Commission? In addition, what are the estimated publicity expenditure for promoting the TVP and its breakdown in the next 3 years as estimated by the Commission? Will the Government introduce a "revolving" approval mechanism under which enterprises that have already used up their maximum amount of funding may be granted eligibility for re-application upon a certain period of time? If yes, what are the details; if not, what are the reasons?

Asked by: Hon NG Wing-ka, Jimmy (Member Question No. (LegCo use): 85)

Reply:

We initially expected to receive and finish processing about 360 applications for the Technology Voucher Programme (TVP) in 2018, and that around 330 applications would be approved, with a total funding of about \$43 million and an average funding amount of \$130,000. With the relaxation of the eligibility criteria since this year's Budget Day, we expect that the numbers of applications and projects to be approved will further increase.

Currently, the average funding amount for the projects approved is about \$130,000, which has not yet reached the cumulative funding ceiling of \$200,000 for each eligible enterprise. As such, there is no urgent need to raise the funding ceiling, which, however, will be re-examined together with other requirements in a comprehensive review on the effectiveness and modus operandi of the TVP to be conducted in the second half of 2018.

The Innovation and Technology Commission has been promoting the TVP with existing resources. No breakdown of expenditure on the relevant work is available.

- End -

CONTROLLING OFFICER'S REPLY

ITB164

(Question Serial No. 5137)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Government set up the Committee on Innovation, Technology and Re-industrialisation (the Committee) last April to co-ordinate innovation and technology development and re-industrialisation in Hong Kong. In order to promote re-industrialisation more effectively, has the Government planned to expand the Committee's structure in the coming 5 years? If yes, what are the details; if not, what are the reasons? What is the estimated annual operating expenditure in the next 5 years? Take the Inno Space, which provides workspace and technical support for start-ups, students and graduates, as an example, what is the estimated annual operating expenditure in the next 5 years?

Asked by: Hon NG Wing-ka, Jimmy (Member Question No. (LegCo use): 86)

Reply:

Since its establishment in April 2017, the Committee on Innovation, Technology and Re-industrialisation (the Committee) convened a total of 4 meetings in May, August and October 2017 and January 2018. It discussed the latest scene of innovation and technology (I&T) development in Hong Kong, its work focus and different I&T-related topics, including enhanced tax deduction for research and development (R&D) expenditure, nurturing I&T talents, attracting overseas R&D institutions to Hong Kong, supporting the development of start-ups in Hong Kong, electronic payment, development of the e-sports industry, and the Smart City Blueprint for Hong Kong. Non-official members of the Committee mainly come from the I&T and industrial sectors. We will review the composition of the Committee from time to time to listen extensively to views from different sectors.

The Innovation and Technology Commission provides secretariat support to the Committee with existing manpower and resources. The related support services are part of the work under Programme (4) "Planning for Innovation and Technology Development". The estimated expenditure under Programme (4) for 2018-19 is \$67.1 million, mainly for

salaries and general departmental expenses. We do not have a breakdown of the estimated expenditure on the provision of secretariat support to the Committee.

The annual recurrent operating expenditure of the Inno Space is about \$3.75 million. The Government has been providing, starting from 2017-18, an additional subvention to the Hong Kong Productivity Council (HKPC) in 2 annual instalments, which are for the capital expenditure of the Inno Space and its recurrent operating expenditure in the first 2 years, while its future operating expenditure will be met by the recurrent subvention provided to HKPC by the Government and HKPC's revenue.

- End -

CONTROLLING OFFICER'S REPLY

ITB165

(Question Serial No. 5262)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (3) Promotion of Technological Entrepreneurship

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Commission's estimated financial provision for promotion of technological entrepreneurship for 2018-19 increases by around 15% when compared with the revised financial provision for 2017-18, citing that the increased provision will be used on general departmental expenses. How many activities for promoting technological entrepreneurship in the second half of 2018 will involve the promotion of biotechnology, artificial intelligence, smart city and financial technologies? What are the expenditure and establishment for the relevant activities?

Asked by: Hon NG Wing-ka, Jimmy (Member Question No. (LegCo use): 83)

Reply:

Major work under Programme (3) "Promotion of Technological Entrepreneurship" for 2018-19 includes:

- (a) continuing to administer the Enterprise Support Scheme;
- (b) continuing to administer the Technology Start-up Support Scheme for Universities;
- (c) continuing to administer the Innovation and Technology Venture Fund, etc.

These funding schemes involve projects/enterprises of various technology areas and application domains, including biotechnology, artificial intelligence, smart city and financial technologies, etc.

The establishment under Programme (3) involves 15 staff in 2018-19. The estimated expenditure is \$22.7 million, which is \$3 million (or 15.2%) higher than the revised estimate for 2017-18, mainly for salaries and departmental expenses. We do not have a breakdown of departmental expenses and salaries for each technology area.

- End -

CONTROLLING OFFICER'S REPLY

ITB166

(Question Serial No. 5265)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Government has extended the Public Sector Trial Scheme (PSTS) to cover the incubatees of the Hong Kong Science and Technology Parks Corporation and Cyberport. The scheme will provide each eligible project with a maximum subsidy of \$1 million. What is the total number of participating organisations and companies since the launch of the PSTS? What are the funded projects and funding amounts in relation to the PSTS? How many start-ups and small and medium enterprise (SMEs) are expected to participate in the PSTS in the coming 5 years? What is the estimated annual expenditure on promotion of the PSTS after the next 5 years? Will the Government increase the funding amount for projects so as to attract more applications from start-ups and SMEs? If yes, what are the details; if not, what are the reasons?

Asked by: Hon NG Wing-ka, Jimmy (Member Question No. (LegCo use): 88)

Reply:

The Public Sector Trial Scheme (PSTS) provides funding to research and development (R&D) projects funded by the Innovation and Technology Fund (ITF) as well as incubatees and graduate tenants of the Hong Kong Science and Technology Parks Corporation and the Cyberport for producing prototypes/samples from their R&D outcomes or products/services and conducting trials in the public sector, so as to facilitate commercialisation of local research outcomes. As at end-January 2018, we received a total of 184 applications and supported 165 projects, involving funding of over \$270 million with more than 240 organisations participating in the trials. We expect that around 50 applications will be approved in 2018.

The Innovation and Technology Commission will continue to promote the PSTS with existing manpower and resources. No breakdown on the expenditure is available.

We will closely monitor the implementation and effectiveness of the PSTS, review its implementation details (including the funding amount) in a timely manner, and launch appropriate enhancement measures subject to the results of the review.

- End -

CONTROLLING OFFICER'S REPLY

ITB167

(Question Serial No. 5281)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

Will the Commission advise the respective percentages of the provisions for enhancing public awareness of innovation and technology (I&T), supporting technology co-operation with the Mainland and overseas economies, organising local I&T promotional events, administering the Internship Programme, as well as promoting the development of Chinese medicines in the total financial provision, and their percentage increase over the past 5 years?

Asked by: Hon NG Wing-ka, Jimmy (Member Question No. (LegCo use): 84)

Reply:

The aim of Programme (4) is to support the formulation and co-ordination of innovation and technology (I&T) policies and sustain public awareness of innovation and technology (I&T). Major work for 2018-19 includes:

- (a) implementing a Technology Talent Scheme and rolling out a pilot fast-track admission scheme for technology talents;
- (b) supporting technology co-operation with the Mainland and other overseas economies;
- (c) organising I&T promotional events and administering the General Support Programme to fund projects which help foster an I&T culture;
- (d) administering the Internship Programme; and
- (e) co-ordinating the promotion of the development of research and development as well as testing of Chinese medicines, etc.

The provision under this Programme is mainly for salary and departmental expenses. The overall estimated provision under Programme (4) for 2018-19 is \$67.1 million, of which \$33.6 million (50.1%) is for salary expenses and \$33.5 million (49.9%) is for departmental expenses. The expenditure and the percentage increase under Programme (4) over the past 5 years are as follows:

Year	2018-19 (Estimate)	2017-18 (Revised estimate)	2016-17	2015-16	2014-15	2013-14
Expenditure (\$million)	67.1	55.1	42.8	36.4	36.9	34.2
Percentage increase	21.8%*	28.7%*	17.6%	-1.4%	7.9%	-

(* The increases in 2017-18 and 2018-19 are relatively significant, which are mainly due to increased salary and departmental expenses arising from the respective creation of 11 and 18 civil service posts in the two years.)

We do not have the breakdown and percentage of the departmental expenses and salaries for individual items.

- End -

CONTROLLING OFFICER'S REPLY

ITB168

(Question Serial No. 3221)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (3) Promotion of Technological Entrepreneurship

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned in the Estimates that the Innovation and Technology Commission administers the Technology Start-up Support Scheme for Universities (TSSSU). What is the amount of provision earmarked for the TSSSU in 2018-19? What are the specific plans?

Asked by: Hon OR Chong-shing, Wilson (Member Question No. (LegCo use): 52)

Reply:

The Technology Start-up Support Scheme for Universities (TSSSU) was launched in September 2014 to provide funding to the research teams of the 6 local universities in starting technology businesses and commercialising their research and development (R&D) results. An annual funding of up to \$4 million is provided to each of the 6 local universities. Each funded start-up may receive up to \$1.2 million each year for no more than 3 years.

Start-ups should submit applications to the knowledge transfer/technology transfer offices of their associated universities. Each university has devised its assessment mechanism, with assessment criteria including the innovation and technology content of the start-ups' businesses, the commercial viability of the businesses, the capability of the teams, as well as the social impact of the businesses and R&D work of the start-ups, etc. Applications assessed and recommended by the universities will be forwarded to the Innovation and Technology Commission for consideration.

TSSSU is one of the work activities under Programme (3) "Promotion of Technological Entrepreneurship". The estimated expenditure under Programme (3) for 2018-19 is \$22.7 million, which is mainly for salaries and departmental expenses. We do not have separate breakdown of departmental expenses and salaries on TSSSU.

- End -

CONTROLLING OFFICER'S REPLY

ITB169

(Question Serial No. 2469)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

Please list out the total number of applications for the Technology Voucher Programme (TVP) since its launch, and the numbers of which that were assessed, approved, withdrawn, unable to be processed or rejected. Why were the applications withdrawn, unable to be processed or rejected? What were the average amount of funding for each approved application and the total amount of funding approved? What was the average time for processing the applications by the Government? How many small and medium enterprises and start-ups will be attracted to participate in the TVP after the relaxation of its eligibility criteria as estimated by the Government?

Asked by: Hon QUAT Elizabeth (Member Question No. (LegCo use): 42)

Reply:

As at 28 February 2018, the Innovation and Technology Commission (ITC) received applications for the Technology Voucher Programme (TVP) from a total of 889 enterprises. Of the 403 applications assessed by the TVP Committee (the Committee), 377 were approved for funding, representing a success rate of 94% and involving a total funding of about \$49.7 million and an average funding of about \$130,000. 26 applications were not supported by the Committee because the projects were largely for purchasing off-the-shelf software and hardware or involved only little or no technological elements, and therefore failed to meet the objectives and terms of the TVP. Among the remaining applications, 348 are still awaiting supplementary information from the applicant enterprises or are currently under assessment by the TVP Secretariat; 138 could not be processed and had to be returned, mainly because the applicant enterprises failed to submit all the supporting documents required.

Meanwhile, 138 applications were withdrawn by the enterprises mainly because the applicant enterprises subsequently realised that their projects were not consistent with the objectives or terms of the TVP, or they intended to submit another application, or failed to

submit necessary supplementary information or clarify the project details at the request of ITC.

From receipt of applications to completion of vetting by the Committee, the shortest processing time is 14 working days while the average processing time is about 80 working days.

We initially expected to receive and finish processing about 360 applications in 2018. With the relaxation of the eligibility criteria since this year's Budget Day, we expect that the number of applications will further increase.

- End -

CONTROLLING OFFICER'S REPLY

ITB170

(Question Serial No. 3422)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (2) Fostering University-Industry Collaboration

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

A total of 26 applications for the University-Industry Collaboration Programme (UICP) were received in 2017 and it is expected that 25 applications will be received in 2018. Will the Government advise on:

1. the reasons for the year-by-year decreasing trend in the number of applications observed since 2016;
2. whether the collaboration between local universities and industrial organisations is unsatisfactory when compared with that in other regions; if yes, the reasons; if not, the details; and
3. whether there are any measures for encouraging collaboration between innovative enterprises and universities; if yes, the details; if not, the reasons?

Asked by: Hon SHEK Lai-him, Abraham (Member Question No. (LegCo use): 86)

Reply:

The requested information is provided below:

1. As the available resources, incentives for collaboration, workload, etc. of the universities and the industry vary from year to year, there are variations in the number of applications and funded projects under the University-Industry Collaboration Programme (UICP) every year. In addition, private companies may also apply for funding from the Enterprise Support Scheme (ESS) for their in-house research and development (R&D) work since its launch in 2015. 22, 28 and 26 applications were received under the UICP in 2015, 2016 and 2017 respectively. The estimated number of applications to be received in 2018 is 25, which is projected based on the average number in the past 3 years.

2. As at end January 2018, 334 UICP projects involving 6 universities and 237 private companies have been supported, involving a total funding of \$410 million. As the collaboration models and situations amongst universities and industrial organisations vary in different regions, it is difficult to make direct comparison.
3. Currently, there are various funding schemes under the Innovation and Technology Fund (ITF) to encourage and provide funding for the universities and the industry in Hong Kong to collaborate in conducting R&D projects. They include:
 - (a) the Innovation and Technology Support Programme (ITSP) which supports R&D projects undertaken by local universities and public research institutions. Private companies can become industry co-applicants of the projects through sponsorship to conduct R&D jointly with universities and scientific research institutions;
 - (b) the UICP which provides dollar-for-dollar matching fund for R&D projects jointly undertaken by private companies and local universities; and
 - (c) the R&D Cash Rebate Scheme which provides 40% cash rebate to private companies for their expenses in ITF R&D projects as well as those funded entirely by these companies and undertaken by local universities or public research institutions.

We plan to merge the UICP and the collaborative stream of the ITSP into a new Partnership Research Programme in early 2019. Where the requirements of the 2 programmes differ, the more flexible arrangement will be adopted. The merged programme will be conducive to fostering collaboration between the industry and local universities for more R&D projects.

- End -

CONTROLLING OFFICER'S REPLY

ITB171

(Question Serial No. 3423)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

During 2018-19, the Commission will work on the setting up of 2 research clusters, one on healthcare technologies and another on artificial intelligence/robotics technologies. In this connection, will the Commission advise on:

1. whether the operational effectiveness of the 2 research clusters will be reviewed regularly for improvement; if yes, the details; if not, the reasons;
2. whether there are justifications for having the view that the research clusters will attract top research institutions and enterprises to Hong Kong; if yes, the details; if not, the reasons.

Asked by: Hon SHEK Lai-him, Abraham (Member Question No. (LegCo use): 87)

Reply:

A consolidated reply to various parts of the question is as follows:

To promote the development of innovation and technology in Hong Kong, the Government is working on the establishment of the 2 research clusters on healthcare technologies and on artificial intelligence and robotics technologies, to attract the world's top research institutions and technology enterprises to Hong Kong for conducting more research and development projects in collaboration with local universities and research institutions. Such clusters will pool and nurture more technology talent in Hong Kong. In this connection, we have earmarked \$10 billion to provide financial support for non-profit-making research institutions that will establish their presence in the 2 clusters. We are working out relevant details of the clusters and will review their effectiveness regularly upon commencement of operation.

- End -

CONTROLLING OFFICER'S REPLY**ITB172****(Question Serial No. 5378)**

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned in the Budget Speech that the Government will relax the eligibility criteria for the Technology Voucher Programme (TVP). All local enterprises, irrespective of size and duration of operation, may apply. This will enable more medium enterprises and start-ups to benefit from the TVP. Will the Government list in tabular form the number of enterprises approved for technology vouchers, by industry and number of employees?

Asked by: Hon SHIU Ka-fai (Member Question No. (LegCo use): 57)

Reply:

Of the 403 applications for the Technology Voucher Programme (TVP) so far assessed by the TVP Committee, 377 were approved for funding. The major types of business engaged in by the successful applicant enterprises and the number of employees are as follows –

Type of business	Number of applications ^{Note 1}
Wholesale and retail	75
Import and export trade	70
Professional services	28
Engineering	27
Information technology	24

^{Note 1} Applicant enterprises may engage in more than one type of business.

Number of employees	Number of applications
1-9	200
10-19	105
20-29	25
30-39	28
40-49	16
50-99	3

- End -

CONTROLLING OFFICER'S REPLY

ITB173

(Question Serial No. 5148)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (1) Support for Research and Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

With regard to the Guangdong-Hong Kong Technology Co-operation Funding Scheme, please list in tabular form the total number of applications in the past 5 years, the projects approved in each of the years, as well as the title and the funding amount approved for each project.

Asked by: Hon TAM Man-ho, Jeremy (Member Question No. (LegCo use): 542)

Reply:

A total of 234 applications under the Guangdong-Hong Kong Technology Co-operation Funding Scheme were received in the past 5 years. Of these, 86 projects were approved with a total funding of about \$180 million. The project summary (including the title and amount of funds approved) is available on the Innovation and Technology Fund website: https://www.itf.gov.hk/l-eng/prj_search_index.asp. Reference numbers of the approved projects in each of the past 5 years are listed in the Annex.

- End -

Guangdong-Hong Kong Technology Co-operation Funding Scheme

(Projects funded from January 2013 to December 2017)

2013	
No.	Project reference
1	GHP/008/11SZ
2	GHP/015/11SZ
3	GHP/018/11SZ
4	GHP/061/11SZ
5	GHP/001/12
6	GHP/004/12SZ
7	GHP/005/12SZ
8	GHP/006/12
9	GHP/007/12SZ
10	GHP/011/12
11	GHP/014/12SZ
12	GHP/015/12SZ
13	GHP/017/12SZ
14	GHP/022/12
15	GHP/026/12
16	GHP/034/12SZ
17	GHP/038/12
18	GHP/039/12
19	GHP/044/12SZ
20	GHP/048/12
21	GHP/052/12SZ
22	GHP/057/12
23	GHP/059/12SZ
24	GHX/005/11SZ
25	GHX/013/11SZ
26	GHX/002/12SZ
27	GHX/003/12
28	GHX/005/12
29	GHX/006/12GD
30	GHX/007/12
31	GHX/011/12NI

2014	
No.	Project reference
1	GHP/001/13AZ
2	GHP/002/13SZ
3	GHP/007/13SZ
4	GHP/012/13SZ
5	GHP/014/13SZ
6	GHP/020/13
7	GHP/022/13SZ
8	GHP/025/13SZ
9	GHP/030/13
10	GHP/031/13SZ
11	GHP/038/13SZ
12	GHX/003/13SZ
2015	
No.	Project reference
1	GHP/018/13SZ
2	GHP/006/14SZ
3	GHP/007/14SZ
4	GHP/009/14SZ
5	GHP/010/14SZ
6	GHP/015/14SZ
7	GHP/016/14SZ
8	GHP/017/14SZ
9	GHP/028/14SZ
10	GHP/029/14SZ
11	GHP/043/14SZ
12	GHP/048/14
13	GHP/050/14GD
14	GHP/053/14
15	GHP/055/14SZ
16	GHP/057/14AP

2016	
No.	Project reference
1	GHP/041/14
2	GHP/003/16GD
3	GHP/004/16GD
4	GHP/012/16GD
5	GHP/024/16GD
6	GHP/025/16GD
7	GHP/030/16GD
8	GHP/034/16GD
9	GHX/002/14SZ
10	GHX/001/16GD
2017	
No.	Project reference
1	GHP/007/17GD
2	GHP/008/17GD
3	GHP/011/17SZ
4	GHP/021/17SZ
5	GHP/022/17GD
6	GHP/025/17SZ
7	GHP/036/17SZ
8	GHP/040/17GD
9	GHP/042/17GD
10	GHP/055/17
11	GHP/057/17SZ
12	GHP/071/17SZ
13	GHP/076/17GD
14	GHP/079/17SZ
15	GHX/002/17GD
16	GHX/004/17
17	GHX/005/17SZ

CONTROLLING OFFICER'S REPLY**ITB174****(Question Serial No. 5242)**

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the Technology Talent Scheme and the fast-track innovation and technology (I&T) talent admission scheme, please inform this Committee of the following:

Please list in tabular form the respective (i) estimates and (ii) staffing establishment of the Technology Talent Scheme and the fast-track I&T talent admission scheme in the coming year.

		2018-19
Technology Talent Scheme	Estimate	
	Staffing establishment	
Fast-track I&T talent admission scheme	Estimate	
	Staffing establishment	

2) Please list in tabular form the estimated number of talents to be trained under the Technology Talent Scheme in the coming years by professional field.

	2018	2019	2020	2021	2022
e.g. Biotechnology					
e.g. Data science					
e.g. Artificial					

intelligence					
e.g. Robotics					
e.g. Cyber security					
....					
Estimated number of talents to be trained per year					

3) How many talents are scheduled to be admitted under the fast-track I&T talent admission scheme in the next 5 years? Please list by professional field.

	2018	2019	2020	2021	2022
Biotechnology					
Data science					
Artificial intelligence					
Robotics					
Cyber security					

4) Please advise on the vetting procedures and criteria of the fast-track I&T talent admission scheme, as well as the quota for each of the 5 types of talents.

5) Will the Government provide the human resource statistics on the above 5 types of talents, including (i) the number of employed persons in the respective professional fields, (ii) the number of relevant enterprises, (iii) the relevant market valuation, (iv) the number of vacancies; and (v) the breakdown of manpower shortfall by position?

	Biotechnology	Data science	Artificial intelligence	Robotics	Cyber security
i. Employed population					
ii. Number of enterprises					
iii. Market valuation					

iv. Number of vacancies					
v. Major occupation categories:					
e.g. Managers and administrators					
e.g. Professionals					
e.g. Associate professionals					

Asked by: Hon TAM Man-ho, Jeremy (Member Question No. (LegCo use): 636)

Reply:

The requested information is provided below:

(1), (3) and (4) Technology Talent Scheme

We will set aside \$500 million under the Innovation and Technology Fund (ITF) for a 5-year pilot Technology Talent Scheme to nurture and bring together more technology talents, which comprises:

(a) a Postdoctoral Hub programme to provide funding support to ITF recipients as well as incubatees and innovation and technology (I&T) tenants of the Hong Kong Science and Technology Parks Corporation/the Cyberport to recruit up to 2 postdoctoral talents for research and development work. This programme will be administered by existing manpower of the Innovation and Technology Commission; and

(b) a Reindustrialisation and Technology Training Programme (RTTP) to subsidise local enterprises on a 2:1 matching basis for training staff in advanced technologies, especially those related to “Industry 4.0”. The RTTP will be administered by the Vocational Training Council.

We aim to launch the Technology Talent Scheme in the third quarter of 2018. The estimated annual expenditure is about \$100 million.

Technology Talent Admission Scheme

Technology companies are facing intense competition from the world on the front of recruiting scientific research talents in recent years. To ease the difficulties encountered by technology companies in this aspect and

pool together technology talents in Hong Kong for strengthening I&T development, the Government is considering viable means, targeting at the technology areas with acute talent shortage, to facilitate admission of relevant talents for meeting the demand. Details will be announced in due course.

- (2) The Postdoctoral Hub is open for postdoctoral talents from science, technology, engineering or mathematics (“STEM”)-related disciplines, and it is expected that there will be some 200 applications per year. As for RTTP, it is expected that there will be about 1 000 applications per year. We do not have a breakdown of estimates by professional field.
- (5) We do not have the related statistical figures.

- End -

CONTROLLING OFFICER'S REPLY

ITB175

(Question Serial No. 5844)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Government is preparing for the construction of an InnoCell adjacent to the Hong Kong Science Park to provide about 500 residential units. Will the Government advise the Committee on:

- (a) the project cost, the responsible department, and whether it is self-financing; if yes, the payback period and the specific plan;
- (b) the admission criteria, the duration of residence, rent, average living space per person, and whether a residence extension mechanism is in place; if yes, the specific plan and conditions; if not, the reasons.

Asked by: Hon TAM Man-ho, Jeremy (Member Question No. (LegCo use): 734)

Reply:

The required information is provided below:

- (a) The InnoCell, with an estimated development cost of \$800 million, is expected to be completed by 2021. The Legislative Council Finance Committee approved in February 2018 the Government's injection of \$560 million and guarantee for a commercial loan amounting to \$240 million and the interest arising therefrom to the Hong Kong Science and Technology Parks Corporation (HKSTPC) to develop the InnoCell. HKSTPC will manage the overall project cost in a prudent manner. In the event that the project cost exceeds the current estimate, HKSTPC is expected to bridge the funding gap using its own resources. Any surplus arising from the operation of the InnoCell will be credited to the general revenue reserve account of the HKSTPC for financing its operation.
- (b) The target tenants of the InnoCell include principals of tenants/incubatees in the Hong Kong Science Park (HKSP) and their overseas or Mainland employees, as well as overseas or Mainland visiting scientists/researchers participating in research and

development projects at the HKSP. Applicants for the InnoCell will be subject to a set of pre-determined admission criteria and applications will be considered by an assessment panel to be formed by HKSTPC, with a scoring system that covers both “Merit” and “Need” considerations. The tenancy period will depend on the categories of applicants with reference made to their rental period/length of incubation programme/period of employment/project duration in the HKSP, but will not exceed 48 months. The assessment panel will review from time to time the admission criteria and scoring system, taking into account operational experience, the demand and supply situation, etc.

In the preliminary design plan, the average saleable floor area of an InnoCell unit is approximately 290 square feet (ranges from approximately 250 square feet for typical 1-bed units to approximately 610 square feet for typical 3-bed units). The monthly rental will tentatively be set at around 60% of the market rent of properties of similar quality in the nearby areas. When setting the rental of the InnoCell, HKSTPC will take into account the income level and affordability of small and medium enterprises, start-ups and incubatees, and may charge the tenants concerned lower rental.

- End -

CONTROLLING OFFICER'S REPLY

ITB176

(Question Serial No. 5847)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Government will inject \$7 billion into the Hong Kong Science and Technology Parks Corporation (HKSTPC) to enhance support for its tenants and incubatees, and set up a Smart Campus in the Hong Kong Science Park, etc. What are the specific projects? Will the Government inform this Committee of the implementation schedule for the above policy objectives, the specific return on investment (ROI), the department in charge of the implementation, the service providers, and the estimated provision involved in the next 3 years?

Asked by: Hon TAM Man-ho, Jeremy (Member Question No. (LegCo use): 735)

Reply:

The Government plans to allocate \$10 billion to the Hong Kong Science and Technology Parks Corporation (HKSTPC), of which \$7 billion will be used for strengthening HKSTPC's support measures such as the Corporate Venture Fund and the Incubation Programmes, attracting international technology enterprises to establish their presence in the Hong Kong Science Park (HKSP), setting up a Smart Campus, as well as enhancing the facilities in HKSP. The Government is discussing with HKSTPC on the implementation details. We will consult the relevant Panel of the Legislative Council (LegCo) on the plans, and seek approval for funding from the LegCo Finance Committee in due course. With funding approval, HKSTPC will be responsible for implementing the relevant plans and measures.

- End -

CONTROLLING OFFICER'S REPLY

ITB177

(Question Serial No. 1116)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (1) Support for Research and Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

On Programme (1) Support for Research and Development, will the Innovation and Technology Commission inform this Committee of:

- (a) the number of research and development (R&D) projects funded mainly by the Innovation and Technology Fund and the percentage of contract researches in such R&D projects in the past 5 years; and
- (b) the percentage of funding provided to Partner State Key Laboratories in Hong Kong and Hong Kong Branches of Chinese National Engineering Research Centres in the total funding for all research applications in the past 5 years?

Asked by: Hon TIEN Puk-sun, Michael (Member Question No. (LegCo use): 35)

Reply:

The requested information is provided below:

- (a) In the past 5 financial years (i.e. 2012-13 to 2016-17), the 5 Research and Development (R&D) Centres commenced a total of 605 R&D projects funded by the Innovation and Technology Fund (ITF). A total of 555 contract research projects were carried out during the same period. The total costs of the latter were borne by the sponsoring companies.
- (b) From 2013-14 onwards, the maximum annual funding provided by the ITF to each Partner State Key Laboratory (PSKL) has been increased from \$2 million to \$5 million, and such funding has been provided to the Hong Kong Branches of Chinese National Engineering Research Centres (CNERCs(HK)) as well. The current funding scope covers expenses related to manpower, equipment and consumables incurred for the purpose of conducting research, and the funding is

provided annually on a reimbursement basis. The percentage of the relevant funding amount in ITF expenditure in the past 5 financial years is as follows:

Year	Funding disbursed to PSKLs and CNERCs(HK) (\$ million)	ITF expenditure (\$ million)	Percentage
2013-14	24	732	3%
2014-15	80	882	9%
2015-16	85	1,014	8%
2016-17	97	1,258	8%
2017-18 (Revised estimate)	110	1,484	7%

- End -

CONTROLLING OFFICER'S REPLY

ITB178

(Question Serial No. 2235)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

- 1) How and under what policies will the 2 research clusters on healthcare technologies and on artificial intelligence/robotics technologies attract the world's top research institutions and technology enterprises to Hong Kong?
- 2) What are the details of provision of the earmarked \$10 billion and the expenditure items included?
- 3) How to define "non-profit-making research institutions"?
- 4) Which "non-profit-making research institutions" are expected to be provided with financial support?

Asked by: Hon TSE Wai-chun, Paul (Member Question No. (LegCo use): 15)

Reply:

A consolidated reply to various parts of the question is as follows:

To promote the development of innovation and technology in Hong Kong, the Government is working on the establishment of the 2 research clusters on healthcare technologies and on artificial intelligence and robotics technologies, to attract the world's top research institutions and technology enterprises to Hong Kong for conducting more research and development projects in collaboration with local universities and research institutions. Such clusters will pool and nurture more technology talent in Hong Kong. We have earmarked \$10 billion to provide financial support (such as the capital/operation costs of setting up research laboratories) for non-profit-making research institutions that will establish their presence in the 2 clusters. We are working out the details of the vetting and funding mechanisms, including the definition of "non-profit-making institutions".

- End -

CONTROLLING OFFICER'S REPLY

ITB179

(Question Serial No. 0854)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the implementation of the Technology Talent Scheme (the Scheme), will the Government inform this Committee of the following:

1. While the Government will set aside \$500 million under the Innovation and Technology Fund to launch the Scheme, what are the estimated expenditures for the next 5 years?
2. While the Scheme aims to provide funding to subsidise local enterprises for training staff on advanced manufacturing technologies, what are the estimated expenditures for the next 5 years?
3. What is the definition of “training on advanced manufacturing technologies”? Are there any minimum academic qualification requirements for the persons to be subsidised? If yes, what are they?
4. Which unit and who is responsible for vetting the applications for this Scheme? Please list the staff concerned by representative organisation.

Asked by: Hon WONG Kwok-kin (Member Question No. (LegCo use): 43)

Reply:

The requested information is provided below:

- 1 & 2. We will set aside \$500 million under the Innovation and Technology Fund (ITF) to launch a 5-year pilot Technology Talent Scheme (the Scheme), which comprises –
 - (a) a Postdoctoral Hub programme to provide funding support to ITF recipients as well as incubatees and innovation and technology tenants of the Hong

- Kong Science and Technology Parks Corporation and the Cyberport to recruit postdoctoral talents for research and development work; and
- (b) a Reindustrialisation and Technology Training Programme (RTTP) to subsidise local enterprises on a matching basis for training staff in advanced technologies, especially those related to “Industry 4.0”.

The estimated annual expenditure for the Scheme is about \$100 million in the next 5 years.

3. The RTTP will be administered by the Vocational Training Council (VTC), while the types of technology training eligible for funding will be determined and the RTTP itself will be overseen by VTC’s Innovation and Technology Training Board, which comprises members from various industry and trade organisations, public bodies as well as Government departments. There is no minimum academic qualification requirement for the persons to be funded under the RTTP, who however are required to have academic background or experience of relevant technical training courses.
4. Applications for the Postdoctoral Hub programme and RTTP will be vetted by the Innovation and Technology Commission and VTC respectively.

- End -

CONTROLLING OFFICER'S REPLY

ITB180

(Question Serial No. 0855)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

1. How many meetings have been convened by the Committee on Innovation, Technology and Re-industrialisation (the Committee) since its establishment in April last year? Please list the agenda items for each discussion by date of meeting as well as the follow-up actions taken in regard to the discussions.
2. Has the Committee discussed on setting key performance indicators in its discussions on Hong Kong's re-industrialisation strategy? If yes, what are the details and discussion results? If not, will this be included as a discussion item?

Asked by: Hon WONG Kwok-kin (Member Question No. (LegCo use): 41)

Reply:

The requested information is provided below:

1. Since its establishment in April 2017, the Committee on Innovation, Technology and Re-industrialisation (the Committee) convened a total of 4 meetings in May, August and October 2017 and January 2018. It discussed the latest scene of innovation and technology (I&T) development in Hong Kong, its work focus and different I&T-related topics, including enhanced tax deduction for research and development (R&D) expenditure, nurturing I&T talents, attracting overseas R&D institutions to Hong Kong, supporting the development of start-ups in Hong Kong, electronic payment, development of the e-sports industry, and the Smart City Blueprint for Hong Kong.

Noting the Committee's views, relevant bureaux and departments have taken appropriate follow-up actions. For example, the Innovation and Technology Commission is in the process of drafting legislation on enhanced tax deduction for R&D expenditure, and will launch a \$500 million Technology Talent Scheme as well

as proceed with planning for the establishment of 2 research clusters on healthcare technologies and on artificial intelligence and robotics technologies, so as to attract the world's top scientific research institutions to conduct R&D work in Hong Kong.

2. The Advisory Committee on Innovation and Technology (ACIT), of which establishment was announced by the Chief Executive in March 2015, published the Report of the Advisory Committee on Innovation and Technology (the Report) in March 2017. The Report summarises the work of ACIT during its 2-year term and draws up a set of recommendations on promoting I&T development in Hong Kong with clear overarching key performance indicators (KPIs). In this connection, the Government has adopted the 9 KPIs proposed in the Report, including reversing the declining trend of the manufacturing sector's contribution to Gross Domestic Product by 2020. To this end, the Government is actively taking measures, for instance, to encourage the manufacturing sector to migrate to smart production. The Hong Kong Science and Technology Parks Corporation is also developing an Advanced Manufacturing Centre and a Data Technology Hub in the Tseung Kwan O Industrial Estate with a view to providing key infrastructure for re-industrialisation. On talent training, we will launch the Technology Talent Scheme in the third quarter of 2018, including, among others, the Reindustrialisation and Technology Training Programme which subsidises local enterprises on a matching basis for training staff on high-end technologies, especially advanced technologies related to "Industry 4.0".

We will continue to maintain communication with stakeholders and make reference to the views from various sectors, so as to review the relevant KPIs as appropriate.

- End -

CONTROLLING OFFICER'S REPLY

ITB181

(Question Serial No. 0856)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

With regard to rolling out a pilot fast-track admission scheme for technology talents, will the Government inform this Committee of the following:

1. Which department and who is responsible for vetting the applications for the scheme? Please list the staff concerned by representative organisation.
2. What is the estimated number of talents to be admitted in the coming 5 years?

Asked by: Hon WONG Kwok-kin (Member Question No. (LegCo use): 44)

Reply:

Technology companies are facing intense competition from the world on the front of recruiting scientific research talents in recent years. To ease the difficulties encountered by technology companies in this aspect and pool together technology talents in Hong Kong for strengthening the development of innovation and technology, the Government is considering viable means, targeting at the technology areas with acute talent shortage, to facilitate admission of relevant talents for meeting the demand. Details will be announced in due course.

- End -

CONTROLLING OFFICER'S REPLY**ITB182****(Question Serial No. 2337)**

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

1 Would the Government provide the relevant information of the Internship Programme in accordance with the table below?

Year	Organisation	Project	Number of interns assigned	Amount of funding approved for the year	Graduated university	Graduated programme	Percentage of completion of the internship	Local graduates	Mainland graduates	Overseas graduates other than that from Mainland

2 While the Government will further extend the Programme to cover all innovation and technology tenants of the Hong Kong Science and Technology Parks Corporation and Cyberport, the estimated number of applications merely rises from 713 last year to 806 in 2018, with an increase of less than 100 applications. What is the basis for coming up with such an estimate?

3 Please list out the staff member by department/organisation responsible for vetting the applications for this Programme.

Asked by: Hon WONG Kwok-kin (Member Question No. (LegCo use): 40)

Reply:

The requested information is provided below:

1. The Internship Programme (the Programme) has supported over 3 000 interns since its launch in 2004. Only local university graduates are eligible for the Programme. In 2017-18 (as at end-January 2018), funding for hiring 580 interns was approved under the Programme. The average duration of internship of an intern exceeded 14 months. About 90% of the interns graduated from engineering, information technology, science or mathematics related disciplines. We do not have statistics on the local universities from which the interns graduated and early termination of internship.

A breakdown of the number of interns and funding amount approved, by applicant organisation/company and research area is tabulated below:

Year	Research area	Applicant organisations/companies															Total number of interns approved	Funding amount approved (\$ million)
		The Chinese University of Hong Kong	City University of Hong Kong	The Education University of Hong Kong	Hong Kong Baptist University	The Hong Kong Polytechnic University	The Hong Kong University of Science and Technology	The University of Hong Kong	Hong Kong Productivity Council	Hong Kong Institute of Biotechnology	Automotive Parts and Accessory Systems R&D Centre	Hong Kong Research Institute of Textiles and Apparel	Hong Kong Applied Science and Technology Research Institute	Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies	Nano and Advanced Materials Institute	Private companies		
2017-18 Note	Biotechnology	14	2	0	0	6	11	9	0	1	0	1	0	0	0	34	78	23.2
	Chinese medicine	0	0	0	6	2	2	5	0	0	0	0	0	0	0	0	15	4.2
	Electrical and electronics	3	8	0	0	5	3	1	0	0	0	0	7	0	0	54	81	24.9
	Environmental technology	2	4	0	0	6	9	2	0	0	0	4	0	0	0	11	38	9.8
	Information technology	7	12	1	6	7	20	4	0	0	0	1	21	8	0	170	257	68.1
	Manufacturing technology	12	8	0	0	19	8	1	11	2	3	16	0	0	0	1	81	20.3
	Nanotechnology	0	5	0	0	1	6	2	0	0	0	0	0	0	4	5	23	7.4
	Others	0	3	2	0	0	2	0	0	0	0	0	0	0	0	0	7	2.2
	Total	38	42	3	12	46	61	24	11	3	3	22	28	8	4	275	580	160.1

Note: as at end-January 2018

2. Of the 713 applications for the internship received and processed in 2017, 370 were from research and development (R&D) projects funded by the Innovation and Technology Fund (ITF), and 343 were from incubatees and small and medium enterprise tenants of the Hong Kong Science and Technology Parks Corporation (HKSTPC) and Cyberport. With the extension of the Programme to cover all innovation and technology tenants of HKSTPC and Cyberport in December 2017, we expect that the number of applications from both HKSTPC and Cyberport to be processed will increase by 30% to about 440 in 2018, while the number of applications from ITF-funded R&D projects will remain broadly unchanged, totalling about 810.

3. Applications for the Programme are processed by internal manpower of the Innovation and Technology Commission.

- End -

CONTROLLING OFFICER'S REPLY

ITB183

(Question Serial No. 2338)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (2) Fostering University-Industry Collaboration

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

1. Please provide the information related to the University-Industry Collaboration Programme in the past 5 years with the table below.

Year	Number of projects under the Teaching Company Scheme	Number of projects under the Matching Grant for Joint Research	Number of projects under the Industrial Research Chair Scheme	Participating universities and/or private organisations	Project details	Amount of subsidy approved	Any patent granted?

2. Which unit and who is responsible for vetting the applications for this Programme? Please list the staff concerned by representative organisation.

Asked by: Hon WONG Kwok-kin (Member Question No. (LegCo use): 42)

Reply:

The requested information is provided below:

1. The number of funded projects and funding amount under the University-Industry Collaboration Programme (UICP) in the past 5 years (2013-2017) are tabulated below:

Year	Number of projects under the Teaching Company Scheme	Number of projects under the Matching Grant for Joint Research	Number of projects under the Industrial Research Chair Scheme	Funding amount (\$ million)
2013	2	18	0	22.34
2014	7	12	0	24.19
2015	6	16	0	27.37
2016	1	13	0	27.49
2017	1	28	0	41.78

Once the applicant organisation has signed an agreement for the approved project, the project information (including project title, funding amount, participating universities, company name, etc.) will be available on the Innovation and Technology Fund website: https://www.itf.gov.hk/1-eng/prj_search_index.asp. The relevant project references are listed in the Annex.

Under the present funding arrangement of the UICP, the intellectual property rights arising from the projects are owned by the applicant companies. As commercially sensitive information may be involved, details of the projects and their patents will not be made public in general.

2. Applications for the UICP are vetted by the internal assessment panel of the Innovation and Technology Commission (including staff from the Science Advisor Team or the Biotechnology Director Team and Funding Schemes Division) based on the established assessment framework.

- End -

University-Industry Collaboration Programme
(Funded projects in the past 5 years (from 2013 to 2017))

No.	Project No.	No.	Project No.	No.	Project No.	No.	Project No.
1	UIM/226	31	UIM/268	61	UIM/304	91	UIT/121
2	UIM/228	32	UIM/269	62	UIM/305	92	UIT/122
3	UIM/230	33	UIM/270	63	UIM/306	93	UIT/123
4	UIM/231	34	UIM/271	64	UIM/307	94	UIT/124
5	UIM/233	35	UIM/272	65	UIM/308	95	UIT/125
6	UIM/234	36	UIM/273	66	UIM/309	96	UIT/126
7	UIM/235	37	UIM/274	67	UIM/310	97	UIT/128
8	UIM/236	38	UIM/275	68	UIM/311	98	UIT/130
9	UIM/237	39	UIM/276	69	UIM/312	99	UIT/131
10	UIM/238	40	UIM/277	70	UIM/313	100	UIT/132
11	UIM/239	41	UIM/278	71	UIM/315	101	UIT/133
12	UIM/240	42	UIM/279	72	UIM/316	102	UIT/134
13	UIM/241	43	UIM/280	73	UIM/317	103	UIT/135
14	UIM/242	44	UIM/283	74	UIM/318	104	UIT/138
15	UIM/243	45	UIM/285	75	UIM/320		
16	UIM/245	46	UIM/286	76	UIM/321		
17	UIM/246	47	UIM/287	77	UIM/322		
18	UIM/247	48	UIM/288	78	UIM/323		
19	UIM/250	49	UIM/289	79	UIM/324		
20	UIM/251	50	UIM/290	80	UIM/325		
21	UIM/253	51	UIM/291	81	UIM/326		
22	UIM/254	52	UIM/292	82	UIM/327		
23	UIM/256	53	UIM/293	83	UIM/328		
24	UIM/257	54	UIM/296	84	UIM/331		
25	UIM/258	55	UIM/297	85	UIM/332		
26	UIM/260	56	UIM/298	86	UIM/334		
27	UIM/262	57	UIM/299	87	UIM/336		
28	UIM/263	58	UIM/300	88	UIT/118		
29	UIM/264	59	UIM/301	89	UIT/119		
30	UIM/265	60	UIM/303	90	UIT/120		

CONTROLLING OFFICER'S REPLY

ITB184

(Question Serial No. 0517)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

As stated in the Budget, the Government will earmark \$10 billion to support the establishment of 2 research clusters on healthcare technologies and on artificial intelligence and robotics technologies. Regarding the allocation of the \$10 billion, what are the specific composition and work of the clusters concerned; how will they attract research talents to Hong Kong; and how to ensure the relevant provision is truly in place to achieve the anticipated results?

Asked by: Hon WONG Ting-kwong (Member Question No. (LegCo use): 1)

Reply:

To promote the development of innovation and technology in Hong Kong, the Government is working on the establishment of the 2 research clusters on healthcare technologies and on artificial intelligence and robotics technologies, to attract the world's top research institutions and technology enterprises to Hong Kong for conducting more research and development projects in collaboration with local universities and research institutions. Such clusters will pool and nurture more technology talent in Hong Kong. In this connection, we have earmarked \$10 billion to provide financial support for non-profit-making research institutions that will establish their presence in the 2 clusters. We are working out relevant details of the clusters and will review their effectiveness regularly upon commencement of operation.

- End -

CONTROLLING OFFICER'S REPLY

ITB185

(Question Serial No. 0518)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

How effective has the Technology Voucher Programme been since its launch? What is the estimated expenditure upon relaxation of the eligibility criteria? What are the Government's plans to encourage more small and medium enterprises to apply for the technology vouchers?

Asked by: Hon WONG Ting-kwong (Member Question No. (LegCo use): 2)

Reply:

As at 28 February 2018, the Innovation and Technology Commission (ITC) received applications for the Technology Voucher Programme (TVP) from a total of 889 enterprises. Of the 403 applications so far assessed by the TVP Committee (the Committee), 377 were approved for funding, involving a total funding of about \$49.7 million. Among them, 71 enterprises have completed their approved projects and submitted the final project reports. In those 36 reports reviewed by ITC, all applicant enterprises expressed satisfaction towards the project outcomes.

We initially estimated that the amount of funding would be about \$43 million in 2018. With the relaxation of the eligibility criteria since this year's Budget Day, we expect that the number of projects to be approved and the relevant funding expenditure will further increase.

ITC has updated the eligibility criteria on the TVP website, pamphlet and Guidance Notes for Applications based on the details of the relaxation; and has also set up an enquiry hotline for enterprises. In addition, ITC has arranged several briefing sessions during March to May 2018 to explain to the industry the details of the relaxation and other points to note. ITC will continue to arrange more briefing sessions on a need basis, so as to assist more local enterprises in submitting applications.

- End -

CONTROLLING OFFICER'S REPLY

ITB186

(Question Serial No. 0519)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

Quite a number of members of the innovation and technology (I&T) industry consider that other than nurturing talents in Hong Kong, the admission of talents is also conducive to I&T development. However, only few recommendations on the subject concerned have been proposed in the Budget. Apart from the establishment of 2 research clusters on healthcare technologies and on artificial intelligence and robotics technologies to attract talents from scientific research institutions, are there any other support programmes and recommendations on admission of talents, including formulation of targeted policies on talent admission? If yes, what are the details; if not, what are the reasons?

Asked by: Hon WONG Ting-kwong (Member Question No. (LegCo use): 3)

Reply:

Technology companies are facing intense competition from the world on the front of recruiting scientific research talents in recent years. To ease the difficulties encountered by technology companies in this aspect and pool together technology talents in Hong Kong for strengthening the development of innovation and technology, the Government is considering viable means, targeting at the technology areas with acute talent shortage, to facilitate admission of relevant talents for meeting the demand. Details will be announced in due course.

- End -

CONTROLLING OFFICER'S REPLY**ITB187****(Question Serial No. 0531)**

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned in this year's Budget that the eligibility criteria for the Technology Voucher Programme will be relaxed. In this connection, how many enterprises applied for Government's technology vouchers in the past 5 years? What types of enterprises were they in general? For what purposes were the applied technology vouchers used in general?

Asked by: Hon WONG Ting-kwong (Member Question No. (LegCo use): 15)

Reply:

The Technology Voucher Programme was launched in November 2016. As at end February 2018, the Innovation and Technology Commission received applications from a total of 889 enterprises. The major types of business engaged in by the applicant enterprises and the major types of technological services or solutions involved in the proposed projects are as follows –

Type of business	Number of applications ^{Note 1}
Wholesale and retail	172
Import and export trade	139
Professional services	63
Information technology	61
Engineering	50

^{Note 1} Applicant enterprises may engage in more than one type of business.

Technological service/solution	Number of applications ^{Note 2}
Enterprise resource planning solution	411
Document management and mobile access system	220
Electronic inventory management system	209
Point-of-sales system	129
Electronic procurement management system	113

^{Note 2} Proposed projects may involve more than one technological service or solution.

Basic information of the approved projects which have already commenced, including the project title, the technological services or solutions adopted, approved funding amount and project period etc., have been uploaded to the website of the Innovation and Technology Fund for public inspection.

- End -

CONTROLLING OFFICER'S REPLY

ITB188

(Question Serial No. 0546)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (6) Quality Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

China is making vigorous efforts in pursuing the Belt and Road strategy, while the Hong Kong Government also hopes to leverage its strengths in this policy. The testing and certification industry in Hong Kong, with high level of professionalism, enjoys a relatively high reputation in the international arena. Does the Government plan to invest resources in promoting the services of the Hong Kong Council for Testing and Certification among the Belt and Road countries? If yes, what is the estimated expenditure?

Asked by: Hon WONG Ting-kwong (Member Question No. (LegCo use): 39)

Reply:

The Hong Kong Council for Testing and Certification (HKCTC) strives to promote Hong Kong's testing and certification services with targets including countries along the Belt and Road. For instance, HKCTC has been participating in the exhibitions at the Belt and Road Summit jointly organised by the Government and the Hong Kong Trade Development Council (HKTDC) annually since 2016. In addition, through the Hong Kong pavilions set up at overseas trade shows organised by HKTDC, HKCTC conducts promotional work to South Africa, Malaysia, India, the United Arab Emirates and other countries along the Belt and Road

HKCTC's annual promotional expenditure already covers the costs required for the above activities. We do not have a breakdown of expenditure on the promotion related to the Belt and Road Initiative.

- End -

CONTROLLING OFFICER'S REPLY

ITB189

(Question Serial No. 1259)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Government's estimated expenditure on Planning for Innovation and Technology Development for 2018-19 is \$67.1 million, representing an increase of 21.8% over 2017-18. What is the specific breakdown of the additional expenditure? What are the specific details on the implementation of a Technology Talent Scheme and the rolling out of a pilot fast-track admission scheme for technology talents? When will they be officially launched and what is the Government expenditure involved?

Asked by: Hon WONG Ting-kwong (Member Question No. (LegCo use): 20)

Reply:

The requested information is provided below:

Overview of Financial Provision for Programme (4)

The aim of Programme (4) is to support the formulation and co-ordination of innovation and technology (I&T) policies and sustain public awareness of I&T. The provision under this Programme is mainly for salary and departmental expenses. The estimate for 2018-19 is 21.8% (or \$12.0 million) higher than the original estimate for 2017-18. This is mainly due to:

- (a) increased provision for salary arising from the creation of 18 civil service posts in 2018-19; and
- (b) increased salary expenses arising from the full-year salary payment for 11 civil service posts created in the second half of 2017-18.

Technology Talent Scheme

We will set aside \$500 million under the Innovation and Technology Fund (ITF) to launch a 5-year pilot Technology Talent Scheme to nurture and bring together more technology talents, which comprises –

- (a) a Postdoctoral Hub programme to provide funding support to ITF recipients as well as incubatees and I&T tenants of the Hong Kong Science and Technology Parks Corporation/Cyberport to recruit up to 2 postdoctoral talents for research and development work. The ITF will provide a monthly allowance of \$32,000 for each postdoctoral researcher for up to 24 months. The concerned researcher must possess a doctoral degree in a science, technology, engineering or mathematics (“STEM”)-related discipline from either a local university or a well-recognised non-local institution; and
- (b) a Reindustrialisation and Technology Training Programme (RTTP) to subsidise local enterprises on a 2:1 matching basis for training staff in advanced technologies, especially those related to “Industry 4.0”. Eligible trainee must be a Hong Kong permanent resident, as well as employed by a local enterprise or non-government subvented organisation.

We are finalising the details of the Scheme and aim to launch it in the third quarter of 2018. The annual estimated expenditure is about \$100 million.

Technology Talent Admission Scheme

Technology companies are facing intense competition from the world on the front of recruiting scientific research talents in recent years. To ease the difficulties encountered by technology companies in this aspect and pool together technology talents in Hong Kong for strengthening I&T development, the Government is considering viable means, targeting at the technology areas with acute talent shortage, to facilitate admission of relevant talents for meeting the demand. Details will be announced in due course.

- End -

CONTROLLING OFFICER'S REPLY

ITB190

(Question Serial No. 1260)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Government's estimated expenditure on infrastructural support for 2018-19 is \$57.3 million, representing a substantial increase of 306.4% over 2017-18. What is the specific breakdown of the additional expenditure? What are the specific work on the setting up of 2 research clusters on healthcare technologies and artificial intelligence/robotics technologies in 2018-19 and the expenditure involved?

Asked by: Hon WONG Ting-kwong (Member Question No. (LegCo use): 22)

Reply:

The aim of Programme (5) is to develop world-class support infrastructure to facilitate technological upgrading and development of the industry and to promote innovation and technology (I&T). The major work in 2018-19 includes setting up 2 research clusters; continuing to work closely with the Hong Kong Science and Technology Parks Corporation on the implementation of its various new developments of the Hong Kong Science Park and the Industrial Estates; and developing the Hong Kong-Shenzhen Innovation and Technology Park in the Lok Ma Chau Loop, etc. The estimate for 2018-19 is 306.4% (or \$43.2 million) higher than that for 2017-18. This is mainly due to:

- (a) increased provision for salary arising from the 29 civil service posts to be created in the Innovation and Technology Commission (ITC) to strengthen support for various infrastructure related to scientific research; and
- (b) increased departmental expenses for ITC to enhance the efforts in promoting I&T.

To promote the I&T development in Hong Kong, the Government is working on the establishment of the 2 research clusters on healthcare technologies and on artificial intelligence and robotics technologies, to attract the world's top research institutions and technology enterprises to Hong Kong for conducting more research and development projects in collaboration with local universities and research institutions. Such clusters will pool and nurture more technology talent in Hong Kong. In this connection, we have

earmarked \$10 billion to provide financial support for non-profit-making research institutions that will establish their presence in the 2 clusters.

- End -

CONTROLLING OFFICER'S REPLY

ITB191

(Question Serial No. 1261)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (7) Subvention: Hong Kong Productivity Council, Hong Kong Applied Science and Technology Research Institute Company Limited

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

What are the specific work plan and timetable for promoting re-industrialisation and Industry 4.0 in the next 3 years, as well as the government expenditure involved? Does the Government have any indicators to assess the effectiveness? If yes, what are the specific indicators; if not, what are the reasons?

Asked by: Hon WONG Ting-kwong (Member Question No. (LegCo use): 27)

Reply:

The Government is committed to promoting re-industrialisation with a view to developing high-end manufacturing that is based on new technologies and smart production but does not occupy much land, thereby seeking a new growing point for Hong Kong's economy and creating quality and diversified employment opportunities. Quality research and development (R&D) capabilities are necessary to support re-industrialisation. The Innovation and Technology Commission and relevant organisations will continue to promote re-industrialisation through various measures.

In terms of hardware, Stage 1 of the Hong Kong Science Park Expansion Programme is expected to be completed in 2020 to provide more research infrastructure for the industry. With regard to this project, the Legislative Council Finance Committee (FC) approved in May 2016 the Government's injection of \$2.878 billion and guarantee for a commercial loan amounting to \$1.107 billion to the Hong Kong Science and Technology Parks Corporation (HKSTPC). Meanwhile, HKSTPC is constructing a Data Technology Hub and an Advanced Manufacturing Centre in Tseung Kwan O Industrial Estate, which are expected to be completed in 2020 and 2022 respectively. For these two facilities, the FC approved in May 2016 the Government's injection of \$6.598 billion and the provision of a \$1.65 billion government loan to HKSTPC.

On R&D support, we plan to inject \$10 billion into the Innovation and Technology Fund (ITF) in 2018 to continue our support for applied R&D work and innovation and technology projects in Hong Kong and promote re-industrialisation through different ITF funding schemes. We also plan to introduce new measures in the third quarter of 2018 to encourage more enterprises to conduct scientific research activities in Hong Kong by providing enhanced tax deduction for qualifying R&D expenditure incurred by enterprises.

On nurturing talent, we will set aside \$500 million under the ITF to launch a Technology Talent Scheme in the third quarter of 2018, which includes a Reindustrialisation and Technology Training Programme (RTTP) to subsidise local enterprises on a matching basis for training staff in advanced technologies, especially those related to “Industry 4.0”, with a view to driving re-industrialisation.

The Hong Kong Productivity Council (HKPC) has been dedicating efforts to promoting re-industrialisation to facilitate enterprises in moving towards high value-added production and gradually upgrading towards Industry 4.0. Major work of HKPC in the next 3 years includes:

- Operating the Inno Space, Smart Industry One and other technical support centres.
- Continuing to promote the “Industry 4.0 Upgrade and Recognition Programme” established together with the Fraunhofer Institute for Production Technology (Fraunhofer IPT), and provide enterprises with Industry 4.0 professional training accredited by the Fraunhofer IPT to help the industry gradually upgrade its operation towards Industry 4.0;
- Setting up in 2018 the Smart Industry One Consortium as a platform to facilitate the industry to exchange information on smart industry, assisting enterprises in upgrading and transforming into smart enterprises;
- Establishing in 2018 an Invention Centre jointly with Fraunhofer IPT to introduce Industry 4.0-related technologies, assisting the industry in accelerating adoption of innovative industrial technologies, and promoting the development of smart industry;
- Setting up a HKPC Institute of Innovation & Technology (Shenzhen) in Shenzhen to provide Hong Kong entrepreneurs in the Bay Area with solutions and services based on intelligent manufacturing, artificial intelligence, big data, environmental technology, etc.; and
- Conducting R&D on advanced material manufacturing and processing technologies, such as 3D printing materials, degradable polymer, smart fabric, renewable plastics, etc.

The operation of HKPC is supported by government subvention and HKPC’s revenue. The promotion of re-industrialisation is one of the many tasks of HKPC, and no breakdown of the expenditure is available.

We will closely monitor the progress and effectiveness of the above work, including the number of enterprises participating in the activities and programmes.

- End -

CONTROLLING OFFICER'S REPLY

ITB192

(Question Serial No. 3259)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Financial Secretary has mentioned in the 2018-19 Budget Speech that \$7 billion will be allocated for the Hong Kong Science and Technology Parks Corporation to enhance support for its tenants and incubatees, and set up a Smart Campus in the Park, etc. In this connection, will the Government inform this Committee of the breakdown of the specific expenditures for the \$7 billion, the expected number of beneficiary innovation and technology (I&T) enterprises, as well as the number of I&T-related jobs to be created?

Asked by: Hon WONG Ting-kwong (Member Question No. (LegCo use): 58)

Reply:

To reinforce the role of the Hong Kong Science and Technology Parks Corporation (HKSTPC) as Hong Kong's flagship technology infrastructure, the Government plans to allocate \$10 billion to HKSTPC. Of this, \$7 billion will be used for strengthening HKSTPC's support measures such as the Corporate Venture Fund and the Incubation Programmes, attracting international technology enterprises to establish their presence in the Hong Kong Science Park (HKSP), setting up a Smart Campus, as well as enhancing the facilities in HKSP. The Government is discussing with HKSTPC on the implementation details. We will consult the relevant Panel of the Legislative Council (LegCo) on the plans, and seek approval for the funding from the LegCo Finance Committee in due course. The above measures will assist the innovation and technology (I&T) enterprises in HKSP in expanding their businesses while creating I&T-related job opportunities. However, it is difficult to project the concrete figures at the current stage.

- End -

CONTROLLING OFFICER'S REPLY

ITB193

(Question Serial No. 0123)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

Matters requiring special attention include “continue to work closely with the Hong Kong Science and Technology Parks Corporation (HKSTPC) and the Hong Kong-Shenzhen Innovation and Technology Park Limited on the work for the development of the Hong Kong-Shenzhen Innovation and Technology Park (the Park) in the Lok Ma Chau Loop (the Loop)”. As stated by the Financial Secretary in his Budget Speech this year, \$20 billion has been earmarked for “the first phase of the Park in the Loop for, inter alia, site formation, infrastructure, superstructure and initial operation”.

1. According to the development plan of the Loop, the Civil Engineering and Development Department is responsible for the decontamination and infrastructure works at the Loop, while the subsidiary company set up by HKSTPC is in charge of the building of superstructure, operation and maintenance, etc. At present, have the division of work and roles of various government departments and HKSTPC's subsidiary company been changed?
2. How will the \$20 billion be used? Will the entire amount be passed to government departments for carrying out the relevant infrastructure works? Or will part of the provision be reserved for HKSTPC to carry out the superstructure works or for its future operation?
3. The Budget Speech also states that “it is estimated that the whole project will eventually cost far more than \$20 billion”. According to current assessment, what items are included in the earmarked provision of \$20 billion? Is there any project timetable? Please provide details by a breakdown of the provision.
4. Is there any assessment at present on when the subsidiary company of HKSTPC will submit the superstructure development plan of the Loop to the Government? When assessing the superstructure development plan, what are the factors and indicators to be considered by the Government in determining whether the plan will be endorsed?

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 9)

Reply:

A consolidated reply to various parts of the question is as follows:

The Government has commenced the work on the development of the Lok Ma Chau Loop (the Loop). The Lok Ma Chau Loop Outline Zoning Plan, completed by the Planning Department under the Town Planning Ordinance last year, was approved for publishing on 30 January 2018. The Civil Engineering and Development Department (CEDD) is responsible for the construction of the infrastructure of the Loop, including site formation, infrastructural facilities, and the provision of supporting infrastructural facilities which are necessary to its surrounding areas. CEDD hopes that funding approval could be obtained from the Legislative Council (LegCo) in mid-2018 for carrying out the Advance Works and the design of Main Works Package 1. The Hong Kong Science and Technology Parks Corporation (HKSTPC) set up a wholly-owned Hong Kong-Shenzhen Innovation and Technology Park Limited (HSITP) in October 2017, which is vested with the responsibility to build the superstructure of the Hong Kong-Shenzhen Innovation and Technology Park (the Park), as well as to operate, maintain and manage the same. The division of work and roles of various government departments and HSITP remain unchanged.

The \$20 billion earmarked by the Government for the Loop development will be used partly for site formation and infrastructure of Main Works Package 1 to be carried out by CEDD; as well as for supporting HSITP to construct the superstructure for the first phase of the Park and its initial operation. The Loop, which covers a large area, is a piece of undeveloped land without any infrastructure. As such, it is estimated that the development of the whole area will cost far more than \$20 billion. HSITP is carrying out a Master Layout Plan Study as well as a Business Model and Business Plan Study on the development of the Park. Both studies are expected to be completed in early 2019. When the studies are completed, we will make reference to the findings and further estimate the cost of the Loop development.

As for the project timetable, should funding approval be obtained from the LegCo in the first half of 2018, the Advance Works are expected to commence in mid-2018 the earliest. If the relevant works are in good progress, it is expected that the first batch of land will be handed over for construction of buildings and related facilities by HSITP in or before 2021 the earliest.

- End -

CONTROLLING OFFICER'S REPLY

ITB194

(Question Serial No. 0388)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (1) Support for Research and Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned in paragraph 66 of this year's Budget that \$10 billion will be injected into the Innovation and Technology Fund (ITF), and it is anticipated that the demand for funds will continue to increase. The Budgets of the past few years also proposed injections into the ITF. A transfer of \$9 billion to the ITF was formally made in 2016-17, resulting in an ITF balance amounting to \$6.77 billion in 2017-18. In addition, the expenditure of the ITF will increase from about \$1.48 billion in 2017-18 to about \$2.09 billion in 2018-19, which is mainly due to the provision of \$500 million to support the Innovation and Technology Venture Fund (ITVF):

1. Excluding the total expenditure of \$2 billion for the ITVF, the estimated expenditure for 2018-19 is in fact comparable to the actual expenditure for 2017-18. Now the Budget proposes an additional injection of \$10 billion. Does it mean that the Government plans to relax the application criteria of the existing programmes or to introduce new projects?
2. What is the expenditure growth of the various projects under the ITF in the next 5 years as estimated by the Government?
3. Regarding the revenue of the ITF, are there other sources of investment income in addition to the one placed with the Exchange Fund? What are the specific details of the other 2 items of revenue, namely "Net Income from Projects" and "Refund of Grants"?

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 13)

Reply:

The requested information is provided below:

1. The Government proposes to inject \$10 billion into the Innovation and Technology Fund (ITF) to support the continued operation of existing funding schemes under the ITF and introduce various new initiatives and enhancement measures, including:
 - (a) implementing a \$500 million Technology Talent Scheme which includes the Postdoctoral Hub programme and the Reindustrialisation and Technology Training Programme to nurture and bring together more technology talents;
 - (b) implementing a Mainland-Hong Kong Joint Funding Scheme to enhance collaboration on research and development (R&D) projects between the Mainland and Hong Kong; and
 - (c) supporting the R&D work of research laboratories to be established in the 2 research clusters at the Hong Kong Science Park.

As at end-January 2018, the uncommitted balance of the ITF was \$1.4 billion, which is expected to be depleted by end of 2018. The revised estimate of cash balance of the ITF for 2017-18 was \$6.77 billion, from which \$4 billion designated to the ITVF and the Midstream Research Programme for Universities as well as the funding commitment for other approved projects under ITF funding schemes have not been deducted.

2. The ITF will continue to support the operation of the various existing funding schemes and introduce new initiatives and enhancement measures. As the details are yet to be finalised, specific forecasts on the future expenditures of various projects under the ITF are not available at this stage. A general forecast of the ITF's overall expenditure is as follows:

	2018-19 Estimate	2019-20 Forecast	2020-21 Forecast	2021-22 Forecast	2022-23 Forecast
\$ million	2,085	2,313	2,422	2,109	2,099

3. In addition to the investment income placed with the Exchange Fund, ITF's investment income also includes interest income from the cash balance deposited with the bank. "Net Income from Projects" mainly includes income from licensing arrangements/royalties and other income from commercialisation of R&D results, etc. "Refund of Grants" refers to the amount of residual funds of the projects returned to the Government.

- End -

CONTROLLING OFFICER'S REPLY

ITB195

(Question Serial No. 0389)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (1) Support for Research and Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

At present, many indicators have been set for various funding schemes, while most of them involve the number of application received and the number of application approved. In order to evaluate the effectiveness of the funding schemes in a more comprehensive manner:

1. Will the Government consider setting other indicators, such as the number of products launched into the market, annual business turnover, etc. for suitable projects?
2. What are the results of each project under various funding schemes in the past 3 years, such as the total number of patents generated and products launched into the market? Please provide the relevant information by project.

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 14)

Reply:

The requested information is provided below:

1. As each of the funding schemes under the Innovation and Technology Fund (ITF) has its specific objectives and target areas, the ways to evaluate their effectiveness vary. For example, under the Technology Start-up Support Scheme for Universities, funded start-ups are required to submit annual reports to the Innovation and Technology Commission (ITC) with details on their business development, including commercialisation details of their research and development (R&D) results, and information such as the number of patent applications filed and income from R&D projects, etc. The relevant universities are also required to report to ITC their observations and assessment on the performance of their start-ups every year. In addition, we will collect data on patents successfully acquired under the Patent Application Grant. However, it is rather difficult to measure the effectiveness of some ITF funding schemes. For instance, platform projects under the Innovation and

Technology Support Programme aim to benefit the whole industrial sector or a large segment of that sector. They generally take longer time and require further downstream R&D before transforming into products. Therefore, the effectiveness of such projects cannot be effectively evaluated by adopting indicators such as the number of products, business turnover, etc. We will continue to work with applicant organisations such as universities to explore ways to gather more information for evaluating the effectiveness of different schemes.

In addition, R&D Centres benefitted from various funding schemes under Programme (1) not only promote applied R&D in focused areas, but also work closely with the industry to drive the commercialisation of R&D results. Since 2017-18, we have adopted new performance indicators to assess the performance of the 5 R&D Centres, with a view to further promoting collaboration with the industry and driving the commercialisation of R&D results. These indicators include the level of income received from the industry, the number of R&D projects involving industry participation, the number of companies participating in the R&D projects, and the number of patents filed, etc. We will report the performance of the R&D Centres in 2017-18 to the relevant Panel of the Legislative Council in mid-2018.

2. ITF actively promotes and supports applied R&D projects which contribute to the upgrading of technology levels of industries, as well as encourages and subsidises projects with greater potentials for realisation/commercialisation. At present, applicant organisations are required to provide a holistic plan on realisation/commercialisation in their applications for evaluation by relevant assessment panels. Applicant organisations are required to provide information to ITC upon completion of the projects to facilitate evaluation on the effectiveness of the funded projects.

A number of ITF-funded projects have gradually achieved some positive outcomes in realisation/commercialisation in recent years. Some successful examples are as follows:

- (a) The Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies (LSCM) has collaborated with the Hong Kong Customs and Excise Department to implement the Single E-lock Scheme, which reduces customs clearance time through the seamless clearance service provided by Internet of Things and e-lock-based technology. The Scheme has been adopted in over 30 control points in the Pearl River Delta region and has extensively facilitated the transshipment traffic to the Guangdong Province.
- (b) In collaboration with the Airport Authority Hong Kong, LSCM has developed a barcode and radio-frequency identification (“RFID”) scanner, which allows passengers to print luggage tags at home and self-check-in luggage, thereby reducing waiting time at the check-in counter. The system has already been adopted by 31 airlines.
- (c) The Hong Kong Polytechnic University has successfully designed a portable and multi-joint training device to facilitate patients doing upper-limb rehabilitation training at home, clinic, health centre and hospital. In addition to winning a

special merit award and a gold medal at the 43rd International Exhibition of Inventions of Geneva in Switzerland in 2015, the patent of the relevant technology has also been successfully licensed to 2 Mainland companies for product development.

- (d) Using near-infrared spectroscopy analytics technology, the Hong Kong Institute of Biotechnology has developed rapid testing of traditional Chinese medicine (CM) raw materials as well as analysis and identification of CM powder and its mixture to prevent substandard products. The technology has been successfully transferred to local CM manufacturers and applied in the production of CM products.
- (e) The Hong Kong Applied Science and Technology Research Institute developed in 2017 an intelligent surface inspection technology platform applicable to the production line. The system analyses different features of a product's surface, such as defects on the touch panel glass, through robotic vision to improve production efficiency and quality. A total of 5 related patents have been generated upon completion of the project. The "Cover Glass and Touch Panel Glass Automatic Defects Inspection System" also won the "2016 Hong Kong Awards for Industries - Equipment and Machinery Design".
- (f) In recent years, the Nano and Advanced Materials Institute has, in collaboration with several enterprises, successfully developed different types of nanofiber materials, ranging from batteries to healthcare products. Among which, the Smart Mask, equipped with highly breathable, bacteria-killing and suspended particulates PM2.5-filtering functions, was awarded the Gold Medal with Jury's Commendations at the 2017 International Exhibition of Inventions of Geneva. At present, high-performance mask products successfully developed by Hong Kong businesses are already brought on to the local market.

In addition, the 5 R&D Centres were granted 133, 140 and 107 patents in the past 3 financial years (i.e. 2014-15 to 2016-17) respectively.

- End -

CONTROLLING OFFICER'S REPLY

ITB196

(Question Serial No. 0407)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (3) Promotion of Technological Entrepreneurship

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

On “continue to administer the Technology Start-up Support Scheme for Universities (TSSSU)”, which aims to support technology start-ups established by teams of the 6 local universities to commercialise their research and development results:

1. What is the total number of technology start-ups established by the 6 local universities at present? How many of them were or/and are currently funded under TSSSU?
2. What are the annual numbers of start-ups funded under TSSSU since its inception in 2014? Please provide the details by institution and year.
3. Since 2014 up to now, have any of the start-ups (regardless of whether they were TSSSU participants) established by the universities ceased operation? If yes, how many? How many of them were TSSSU participants?
4. Has the Government evaluated the effectiveness of TSSSU since its implementation? What is the total number of companies that have successfully commercialised and launched their research results in the market so far? Please provide details of the companies, including the respective institutions, names/natures of products, response received after the launch in the market (e.g. specific indicators such as business turnover, revenue, etc.).
5. Does the Innovation and Technology Commission have any indicators to evaluate the effectiveness of the funding at present? If yes, what are the details? Are the various indicators set out in question number 4 included? If not, will the Government consider introducing indicators?

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 15)

Reply:

The requested information is provided below:

- (1) to (3) The Technology Start-up Support Scheme for Universities (TSSSU) was launched in September 2014 to provide funding to the scientific research teams of 6 local universities in starting technology businesses. In the past 4 years, a total of 155 start-ups were funded under TSSSU. According to records of the Companies Registry, 153 start-ups are still in operation while 2 have ceased operation. Details are as follows:

Universities	Number of funded start-ups			
	2014-15	2015-16	2016-17	2017-18
The University of Hong Kong	8	11	13	9
The Chinese University of Hong Kong	7	14	17	15
City University of Hong Kong	9	11	7	9
The Hong Kong University of Science and Technology	7	9	10	9
Hong Kong Baptist University	5	4	4	4
The Hong Kong Polytechnic University	0	17	16	12
Total (Note)	36	66	67	58

Note: Under TSSSU, each start-up would be funded for no more than 3 years. In the past 4 years, a total of 58 start-ups were funded in more than 1 year.

We do not have the information on the number of university start-ups not funded under TSSSU and their operation details.

- (4) From 2014-15 to 2016-17 (year ended), of the 122 funded start-ups, 77 commercialised their scientific research results and over 140 products or services were rolled out in the market. Details are set out in the Annex. For further information on these start-ups, please refer to the TSSSU Directory (website: https://www.itf.gov.hk/l-eng/TSSSU_directory.asp).
- (5) The Innovation and Technology Commission's indicators for evaluating the TSSSU include the number of start-ups that have generated intellectual property (IP) rights and the number of IP generated, the number of start-ups that have rolled out their products/services in the market, the number of start-ups that have raised capital and the amount of funding raised, the number of start-ups that have received revenue and the amount of revenue received, the number of jobs/training opportunities created, the number of start-ups admitted to incubation programmes, and the number of start-ups being presented with awards. The above indicators already cover those raised in Question 4.

- End -

Technology Start-up Support Scheme for Universities

Serial No.	Associated University	Name of Start-up	Name/Nature of Products/Services Rolled Out in the Market (as at 31 March 2017)	Revenue (\$'000)
1	The University of Hong Kong	Appedu (Holding) Limited	Snapask and Snapask ACE-Virtual Classroom	615
2	The University of Hong Kong	CISC Limited	A cloud-based solution, the IaaS platform, which can be used for intellectual property protection, cybercrime investigation as well as business intelligence analysis.	1,642
3	The University of Hong Kong	Comma Technology Limited	CommaPen (which integrates various functions such as UHF RFID reader, barcode scanning and temperature sensors), CommaGlove, CommaWatch, CommaCube, CommaAccessory, CommaPen-based Smart Patrolling System and CommaGlove-based Smart Warehousing System	220
4	The University of Hong Kong	Fano Labs Limited (Formerly known as Accosys Limited)	Electronic information platform services provided to a local electricity organisation as an artificial intelligence (AI) concierge	235
5	The University of Hong Kong	Hactis Limited	Mobile imseCAVE VR System which allows rapid assembly and disassembly for road show and exhibition at different sites	254
6	The University of Hong Kong	Hong Kong Unific Publishing Limited	Primary mathematics e-textbook	1,183
7	The University of Hong Kong	Movabar Limited	A movable and collapsible cocktail bar, supported by an application, to provide catering services in company events, private gatherings, etc.	2
8	The University of Hong Kong	Novoheart Limited	Human pluripotent stem cell-derived cardiomyocytes and the MyHeart™ Platform	813
9	The University of Hong Kong	OncoSeek Limited	The circulating tumour cells counting service which can be used for early screening for invasive cancer, real-time monitoring of cancer status/treatment response and estimating the risk of cancer recurrence	N.A.
10	The University of Hong Kong	Passber Limited	Passber cloud membership system which provides customised membership solution for its clients	N.A.

Serial No.	Associated University	Name of Start-up	Name/Nature of Products/Services Rolled Out in the Market (as at 31 March 2017)	Revenue (\$'000)
11	The University of Hong Kong	Printact Limited	3D printers equipped with plug-in features like remote control system and error-detection system	426
12	The Chinese University of Hong Kong	Accukit Technology Limited	Biomuscular model treatment system which helps users who are undergoing physical rehabilitation and sports training to strengthen their body functions	15
13	The Chinese University of Hong Kong	BrainNow Medical Technology Limited	AccuBrain, a system which can automatically quantify magnetic resonance images	N.A.
14	The Chinese University of Hong Kong	C4Cat Entertainment Limited ⁺⁺	A mobile music game named Dynamix and a cloud system for storing game account data	1,704
15	The Chinese University of Hong Kong	Codex Genetics Limited	Made a deal with a public hospital on the provision of hardware, software and training on cancer mutation screening. Successfully commercialised a pharmacogenomics test with a leading local diagnostic company to bring personalised medicine to the general public	664
16	The Chinese University of Hong Kong	CUREhab Limited	A home-based software platform which provides rehabilitation training	20
17	The Chinese University of Hong Kong	Edvant Company Limited	Edtool, mobile-ready solutions that revolutionise presentations and interactions for education purpose	51
18	The Chinese University of Hong Kong	GEMVCare Limited	Two testing services which can predict risk of having diabetes and its complications at an early stage	135
19	The Chinese University of Hong Kong	Hawkeyes Solutions Limited	A software platform which was developed for a local bank for staff management	120
20	The Chinese University of Hong Kong	Health View Bioanalytic Limited	An automatic retinal image analysis system for risk assessment of stroke and cardiovascular diseases	455
21	The Chinese University of Hong Kong	HippoTuring Technologies Company Limited	CVH-Slicer for medical technology companies and a health care app	368
22	The Chinese University of Hong Kong	HSK GeneTech Limited	Gut microbiome sequencing service for adult weight management, Gutsy reports, Gutsy guides and a microbiome-health relational database	294

Serial No.	Associated University	Name of Start-up	Name/Nature of Products/Services Rolled Out in the Market (as at 31 March 2017)	Revenue (\$'000)
23	The Chinese University of Hong Kong	HyperLab Limited	Search engine Hyperlink, a unified entry-point to search various data sources like social network, cloud storage and webs collection	N.A.
24	The Chinese University of Hong Kong	RegCourse Limited	RegReview (course review platform), RegPeanut (Q&A information platform), RegEvent (event promotional platform) and Reg&Uni (admission analytic platform)	N.A.
25	The Chinese University of Hong Kong	SicureLabs Company Limited	FIA Simulator for electric equipment suppliers	N.A.
26	The Chinese University of Hong Kong	Sucabot MedTech International Limited (Formerly known as CuttingEdge MedTech Limited)	Surgical planning system, cloud-based medical image processing system and NDI navigation system which assist surgeons based on actual clinical needs	90
27	The Chinese University of Hong Kong	Unitinno Architectural Technology Development Company Limited	“Summer ventilation version” and “the extreme winter model” of Chequered House, and provision of construction design services for hotels	30
28	The Chinese University of Hong Kong	VisionNav Robotics Limited	Vision-based pallet mover AGVs and their central control systems which can be used for handling work in production workshops of medical and paper factories	N.A.
29	City University of Hong Kong	Air Button Technology Limited	Air Button which provides shortcut control of mobile phones functions, and Button Pouch for water sports	340
30	City University of Hong Kong	BeVoid Limited	Mobile App Roundabuy which allows users to purchase products from Hong Kong brands	N.A.
31	City University of Hong Kong	C4Cat Entertainment Limited ⁺⁺	Mobile music game Dynamix	150

Serial No.	Associated University	Name of Start-up	Name/Nature of Products/Services Rolled Out in the Market (as at 31 March 2017)	Revenue (\$'000)
32	City University of Hong Kong	Hong Kong Bilingual Learning and Translation Studies Association Co. Limited	Online translation teaching platform	N.A.
33	City University of Hong Kong	Kung Fu Motion Limited	Media installations for kung fu exhibitions	360
34	City University of Hong Kong	MindLayer Limited	Cantonese-supported A.I. Banking Chatbot	88
35	City University of Hong Kong	New System Technologies Limited	Automated contracts for lenders and borrowers	N.A.
36	City University of Hong Kong	NoPhish Technology Limited	safeQR™, an anti-phishing mobile app	N.A.
37	City University of Hong Kong	ProHub LIMITED	Event management system which includes a server-client system and mobile applications	20
38	City University of Hong Kong	Spreadfast Interactive Limited	Costumes with sensors and audio equipment integrated as wearable musical instruments	9
39	City University of Hong Kong	Teorema Limited	A trading system and algorithms for use in the US equity markets	6
40	City University of Hong Kong	The Worldpath Limited	IELTS courses and services, and a mobile app for self-learning of Putonghua	119
41	The Hong Kong University of Science and Technology	Acoustic Metamaterials Company Limited	Metamaterial soundproofing panels which is very effective in absorbing low frequency sound	99
42	The Hong Kong University of Science and Technology	AIEgen Biotech Co., Limited	More than 10 bio-probes and more than 20 intermediates	1

Serial No.	Associated University	Name of Start-up	Name/Nature of Products/Services Rolled Out in the Market (as at 31 March 2017)	Revenue (\$'000)
43	The Hong Kong University of Science and Technology	beNovelty Limited	TabTab.io, an online music education platform for music students in primary and secondary schools	337
44	The Hong Kong University of Science and Technology	CoilEasy Technologies Limited	Micro-transformer for commercial use	100
45	The Hong Kong University of Science and Technology	Compathnion Technology Limited	Wherami Solution Suite as well as an online system to build, manage and maintain the content related to the mobile applications	168
46	The Hong Kong University of Science and Technology	DelTron Intelligence Technology Limited	Stabliser products Vimble X and Vimble S	1,600
47	The Hong Kong University of Science and Technology	eTron Electronic Materials (Hong Kong) Co. Limited	Conductive silver pastes which can be widely used in flexible circuit boards, touch screen, electromagnetic shielding and other fields	10
48	The Hong Kong University of Science and Technology	Everest Innovation Technology Limited	Integrated software solution Everest ALTISA™ to provide large-scale 3D reconstruction from photographs and a free online service platform for unmanned aerial vehicle (UAV) amateurs and professionals, as well as a mobile version to facilitate UAV users in collecting data	485
49	The Hong Kong University of Science and Technology	Hong Kong Innovative Display Technology Limited	Electronic Smart Label system which includes hardware smart labels, track, stand and wireless transceiver, management software and maintenance service	11
50	The Hong Kong University of Science and Technology	Mindvivid Limited	Alpha version of two mobile applications, namely MV Test and Brainastic	50
51	The Hong Kong University of Science and Technology	NanoBioImaging Limited	The second generation of the super-resolution localisation microscope system, SRiS v2.0, as well as improved and newly added functions to the software, Rohdea version 2.0.	361

Serial No.	Associated University	Name of Start-up	Name/Nature of Products/Services Rolled Out in the Market (as at 31 March 2017)	Revenue (\$'000)
52	The Hong Kong University of Science and Technology	Pear Limited	ViewCloud (GuanCloud) platform and ShadowFog, a crowdsourcing virtual private network service operating on its fog platform	15
53	The Hong Kong University of Science and Technology	Yfisoft Limited	Lavinet manager and Lavinet Mesh router to form a WiFi Cloud which includes a number of new features such as cloud WiFi management, automatic configuration, automatic firmware update, etc.	1,730
54	Hong Kong Baptist University	ANA Artwork Material Analysis Company Limited	Charged antique authentication service for private collectors and organisation. The service has been rolled out to the market for free in collaboration with museums.	21
55	Hong Kong Baptist University	Cathay Photonics Limited	Products with trademarks protection including ArmoGlass (a layer of sub-micron ultra-hard, anti-scratch thin film for the applications such as mobile phone screen, etc.) and Sapphire+ (a product for camera-lens protector)	20
56	Hong Kong Baptist University	R & P Technology Limited	An 8-channel mechanical cell wounder which allows simultaneous and reproducible wounding in various brands of 96-well culture plates	36
57	The Hong Kong Polytechnic University	Acoustics Innovation Limited	Noise insulation products, namely 7m high SilentUP, Type B Panel, 10m high SilentUP and movable noise barrier	445
58	The Hong Kong Polytechnic University	Advwhere Limited	Analytic tool to help marketing practitioners analyse the performance of key opinion leaders in social media platform	160
59	The Hong Kong Polytechnic University	AlikeAudience (Hong Kong) Limited	Google DoubleClick Bid Manager for media agencies to select audience segments	462
60	The Hong Kong Polytechnic University	Cognix Limited	Hong Kong Intelligent Cognitive Assessment Platform (HK-iCap) which assess the cognitive state of elderly patients through interactive games	N.A.
61	The Hong Kong Polytechnic University	dEYyEy Inno Tech Limited	Photo QR, a generator for photo QR code	N.A.
62	The Hong Kong Polytechnic University	Dr Coach Education Technology Limited	Dr Coach, an online homework tutoring platform that provides homework checking services, supplementary exercises, tutors' assistance to students, and parents' monitoring of the learning progress of their children	5

Serial No.	Associated University	Name of Start-up	Name/Nature of Products/Services Rolled Out in the Market (as at 31 March 2017)	Revenue (\$'000)
63	The Hong Kong Polytechnic University	Hocfu Technology Limited	Contractor mobile app version 2.0 called Hocfu to ensure better performance of contractors	3,046
64	The Hong Kong Polytechnic University	Holumino Limited	Mobile app Spindle, and installation projects for a design institute in Hong Kong	35
65	The Hong Kong Polytechnic University	I Pet Interactive Technology (HK) Co., Limited	Pet feeding products with unique functions, including P-TOUCH, P-WEIGHT, etc.	N.A.
66	The Hong Kong Polytechnic University	Jobdoh Limited	On-demand hiring platform in web and app versions for employers and employees	30
67	The Hong Kong Polytechnic University	Look Incorporation Limited	A marketing system through which users can create interactive videos, forms, and surveys	12
68	The Hong Kong Polytechnic University	MCTIPSS Limited	Mobile cloud software platform for learning centres, tutors, parents and students	N.A.
69	The Hong Kong Polytechnic University	Next Wifi Technologies Limited	AdWiFi service which provides advertisement service to the public in multiple locations of stores and shops in Hong Kong	43
70	The Hong Kong Polytechnic University	Parallax Technologies Limited	Provision of virtual reality and augmented reality marketing solutions to the real estate sector	N.A.
71	The Hong Kong Polytechnic University	Phi Info (Hong Kong) Limited	UGuide, a platform for university freshmen to meet fellow schoolmates	N.A.
72	The Hong Kong Polytechnic University	PlusD Technology Limited	Industrial system that provides precise and efficient measurement results under different production environments	N.A.
73	The Hong Kong Polytechnic University	R-Guardian Limited	Tracking chips for local fashion brands	238
74	The Hong Kong Polytechnic University	Superluminal Technology Limited	A website where customers can place orders for phone repair, purchase of phone accessories and second-hand phones, as well as an inventory management system for franchised store owners	21
75	The Hong Kong Polytechnic University	Techlabs Holdings Limited	Hatchee, a mobile responsive website in the market which allows users to browse wedding venue by 360 degree video, etc.	N.A.
76	The Hong Kong	Ultimate Sports Hub	CoachUs, a sports coach matching and intelligent health data analysis	46

Serial No.	Associated University	Name of Start-up	Name/Nature of Products/Services Rolled Out in the Market (as at 31 March 2017)	Revenue (\$'000)
	Polytechnic University	Limited	platform for coaches, individual and corporate users	
77	The Hong Kong Polytechnic University	Vision Science and Technology Company Limited	Standard manufacturing, verification and fitting system for Disc Lens, the defocusing contact lens	21
Total				20,036

N.A. denotes “Not Applicable”.

⁺⁺ The start-up comprised students and alumni of the Chinese University of Hong Kong and City University of Hong Kong in its team and could therefore submit its application to any of these universities. That said, the start-up, like others, could only be funded by TSSSU for no more than 3 years.

CONTROLLING OFFICER'S REPLY

ITB197

(Question Serial No. 3604)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is stated in paragraph 72 of the Budget Speech that the Data Technology (DT) Hub and the Advanced Manufacturing Centre (AMC) under construction are expected to be completed in 2020 and 2022 respectively.

1. What is the progress of the above 2 projects at present? For example, have the conceptual design of the AMC and the detailed design of the DT Hub been completed?
2. The DT Hub is expected to be completed after 2 years. Has the Government or the Hong Kong Science and Technology Parks Corporation drawn up any preliminary leasing criteria? When is the DT Hub expected to be available for leasing, and in which quarter of 2020 is it expected to officially commence operation?

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 152)

Reply:

The requested information is provided below:

1. The Hong Kong Science and Technology Parks Corporation (HKSTPC) is building a Data Technology (DT) Hub and an Advanced Manufacturing Centre (AMC) in the Tseung Kwan O Industrial Estate (TKOIE). The detailed design of the DT Hub has been completed and the foundation works have been commenced. The project is expected to be completed in 2020. The conceptual design of the AMC was completed in end-2017, while the detailed design work of the buildings is underway. The foundation works are expected to commence in mid-2018, and the project is expected to be completed in 2022.
2. The DT Hub is expected to be completed in end-2020 to provide infrastructural facilities for local and overseas information and communications technology

companies as well as information technology (IT)-related enterprises. Industries to be supported include data centres and their service providers, cloud service providers, IT outsources/system integrators, financial services companies, etc. The project will accommodate uses ancillary or complementary to the data transfer operations and global telecommunications at the data centres and switching centres at TKOIE and Hong Kong. It is equipped with special features to cater for data centre support, multi-media processing and submarine cable landing related needs, as well as research and development activities in these fields. The project will also support start-ups and IT companies engaged in smart manufacturing in the adjacent AMC. Appropriate leasing criteria will be prepared.

HKSTPC consulted data centres across the territory and operators of the cable landing stations in the industrial estates in November 2017 to gauge their initial views on and interest in renting the DT Hub, with a view to planning out the pre-lease strategies and marketing activities.

- End -

CONTROLLING OFFICER'S REPLY

ITB198

(Question Serial No. 1379)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

1. It is mentioned in the Budget Speech that the Government will relax the eligibility criteria for the Technology Voucher Programme (TVP). Please advise on the relevant details of the relaxation. How many companies, which are not eligible for application before the relaxation, are expected to apply? What is the estimated expenditure involved?
2. Will the Government enhance its efforts in promoting the TVP to small and medium enterprises? If yes, what are the relevant measures and targets; if not, what are the reasons?
3. With the relaxation of the eligibility criteria for the TVP, how much financial resources are earmarked for it this year?

Asked by: Hon YIU Si-wing (Member Question No. (LegCo use): 33)

Reply:

The requested information is provided below:

1. Since 28 February 2018, the eligibility criteria for the Technology Voucher Programme (TVP) have been relaxed as follows:
 - (a) an applicant enterprise is required to have substantive business operation in Hong Kong only at the time of application instead of for a year as previously required; and
 - (b) enterprises of all sizes (except listed enterprises) may apply, instead of just small and medium enterprises (SMEs).

Prior to the relaxation of the eligibility criteria, we once received applications from 1 company that did not fall into the definition of SMEs, and 2 companies that failed to provide proof of one-year substantive business operation. We believe that quite a number

of start-ups or medium-sized companies with over 50 employees did not submit applications due to previous restrictions, but it is difficult to estimate the actual number.

2. The Innovation and Technology Commission (ITC) has updated the eligibility criteria on the TVP website, pamphlet and Guidance Notes for Applications based on the details of the relaxation; and has also set up an enquiry hotline for enterprises. In addition, ITC has arranged several briefing sessions during March to May 2018 to explain to the industry the details of the relaxation and other points to note. ITC will continue to arrange more briefing sessions on a need basis.

3. We initially estimated that the total amount of funding for the applications to be approved would be about \$43 million in 2018. With the relaxation of the eligibility criteria since this year's Budget Day, we expect that the amount of funding to be approved will further increase.

- End -

CONTROLLING OFFICER'S REPLY

ITB199

(Question Serial No. 0927)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (5) Infrastructural Support

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the Government's investment of \$10 billion for setting up the research clusters on healthcare technologies and artificial intelligence/robotics in order to attract overseas research institutions to develop in Hong Kong, will the Government inform this Committee of:

- (1) the operation details of the research clusters, including the application procedures, targets, vetting criteria and mode of funding, as well as the staff establishment and administrative expenditure involved in the related work;
- (2) whether ceilings will be set on the amount of funding and the number of projects and organisations; and
- (3) its anticipated objectives or results of the initiative, and when the effectiveness of the initiative will be reviewed?

Asked by: Hon YUNG Hoi-yan (Member Question No. (LegCo use): 20)

Reply:

A consolidated reply to various parts of the question is as follows:

To promote the development of innovation and technology in Hong Kong, the Government is working on the establishment of the 2 research clusters on healthcare technologies and on artificial intelligence and robotics technologies, to attract the world's top research institutions and technology enterprises to Hong Kong for conducting more research and development (R&D) projects in collaboration with local universities and research institutions. Such clusters will pool and nurture more technology talent in Hong Kong to further enhance Hong Kong's R&D capabilities in the relevant fields. In this connection, we have earmarked \$10 billion to provide financial support for non-profit-making research

institutions that will establish their presence in the 2 clusters. We are working out relevant details of the clusters and will review their effectiveness regularly upon commencement of operation.

- End -

CONTROLLING OFFICER'S REPLY

ITB200

(Question Serial No. 0929)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

Currently, the Internship Programme under the Innovation and Technology Fund provides subsidy to eligible enterprises to recruit 2 local university graduates to participate as interns in their research and development work for a period up to 24 months. In this connection, will the Government inform this Committee of:

(1) the number, type and business scope of the funded enterprises or organisations, the number of posts offered, and the average duration of internship of an intern participating in the Programme in 2017-18; and whether the effectiveness of the Programme will be reviewed;

(2) the estimated expenditure and manpower for the Programme for 2018-19;

(3) whether the Government will consider extending the Programme to cover more small and medium innovation and technology enterprises, so as to encourage technology companies to employ more local young people and university graduates.

Asked by: Hon YUNG Hoi-yan (Member Question No. (LegCo use): 22)

Reply:

The requested information is provided below:

(1) and (3) In 2017-18 (as at end-January 2018), applications from 204 organisations/companies were approved under the Internship Programme (Programme), involving 580 interns. The average duration of internship of an intern exceeds 14 months.

A breakdown of the number of approved interns by type of applicant organisation/company and research area, is tabulated below:

Year	Research area	Type of applicant organisation/company			Total number of interns approved	Funding amount approved (\$ million)
		University	R&D Centre	Private company		
2017-18 ^{Note}	Biotechnology	42	2	34	78	23.2
	Chinese medicine	15	0	0	15	4.2
	Electrical and electronics	20	7	54	81	24.9
	Environmental technology	23	4	11	38	9.8
	Information technology	57	30	170	257	68.1
	Manufacturing technology	48	32	1	81	20.3
	Nanotechnology	14	4	5	23	7.4
	Others	7	0	0	7	2.2
	Total	226	79	275	580	160.1

Note: as at end-January 2018

Around 70% of interns who have completed their internship either found a job or indicated interest in pursuing a career in scientific research field.

The Programme was extended to incubatees and small and medium enterprise tenants of the Hong Kong Science and Technology Parks Corporation (HKSTPC) and the Cyberport in December 2016, and further extended to all I&T tenants of both HKSTPC and the Cyberport in December 2017. As at January 2018, applications from a total of about 200 companies in HKSTPC and the Cyberport were approved, involving 301 interns and the total amount of funding approved was about \$90.1 million. We will closely monitor the implementation and effectiveness of the Programme and conduct reviews and enhancement in a timely manner.

- (2) The Innovation and Technology Commission administers the Programme with existing manpower and resources. No breakdown of expenditure is available.

- End -

CONTROLLING OFFICER'S REPLY

ITB201

(Question Serial No. 1609)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (1) Use of IT in Government

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the support provided by the Office of the Government Chief Information Officer to bureaux and departments in the development of mobile applications (apps) for e-government services, please inform this Committee of the following:

- (a) What were the names, project costs involved, launch dates and numbers of downloads of the apps developed by the Government in the past 2 years?
- (b) What are the names, project costs involved and launch dates of the apps for which the development work will be completed soon in the coming year?
- (c) Does the Government have any plan to increase the usage rate and number of downloads of the apps?

Asked by: Hon CHAN Chi-chuen (Member Question No. (LegCo use): 34)

Reply:

The required information is provided as follows:

- (a) Information of the mobile apps launched by government bureaux and departments (B/Ds) in the past 2 years is set out at Annex A.
- (b) Information of the mobile apps planned to be launched by B/Ds in 2018-19 is set out at Annex B.
- (c) The Office of the Government Chief Information Officer (OGCIO) has been supporting B/Ds through various measures to develop user-friendly mobile apps that meet users' needs. OGCIO has formulated the "Practice Guide for Developing Mobile Apps" for reference by B/Ds. The guide stipulates that B/Ds are required to set the objectives and understand the needs of target user groups when developing an

app. B/Ds should also regularly review and evaluate the cost-effectiveness and suitably improve their apps. Besides, B/Ds should conduct appropriate publicity and promotion to allow target users to understand the objectives and usage of the app. In addition, the “GovHK Apps” and the GovHK website of OGCIO have also included a list of mobile apps provided by the Government to help promote the government mobile apps.

Information of the mobile apps launched by B/Ds in the past 2 years (2016-17 and 2017-18)

No.	B/D	App Name	(Approximate) Development Cost	Launch Date	Total Number of Downloads (As at 28 Feb 2018)
1.	Buildings Department	Quick Guide for Mandatory Building Inspection Scheme/ Mandatory Window Inspection Scheme	\$299,000	Apr 2016	10 000
2.	Fire Services Department	Catch time, save life	\$105,000	Apr 2016	24 000
3.	Environmental Protection Department	Hong Kong T ▪ PARK	\$713,000	Jun 2016	15 000
4.	Transport Department	eTraffic News	\$337,000	Sep 2016	77 000
5.	Hongkong Post	ShopThruPost	\$310,000	Oct 2016	3 300
6.	Development Bureau	My Kowloon East (MyKE)	Developed and maintained internally. No additional expenditure is involved.	Dec 2016	7 100
7.	Civil Engineering and Development Department	Bowen Road Slope Study Trail	\$150,000	Jan 2017	1 200
8.	Companies Registry	CR eFiling	Included in the enhancements of the core system of Companies Registry.	Feb 2017	7 100
9.	Tourism Commission	HK Food Truck	\$212,000	Feb 2017	36 000
10.	Home Affairs Department	Yuen Long District-led Actions Scheme Mobile Application	\$80,000	Mar 2017	3 400
11.	Hongkong Post	HKPostStamps	\$150,000	Apr 2017	11 000
12.	Water Supplies Department	WSD GA Product Directory	\$175,000	Jul 2017	4 900

No.	B/D	App Name	(Approximate) Development Cost	Launch Date	Total Number of Downloads (As at 28 Feb 2018)
13.	Education Bureau (Assessment and HKEAA Section)	說話加油站 (Chinese name only)	Developed with the related website. As it is not a stand-alone project, no separate breakdown of the expenditure is available.	Sep 2017	3 800
14.	Education Bureau (Kindergarten Administration Section)	Profile of Kindergartens and Kindergarten-cum-Child Care Centres 2017	Included in the cost of the whole project of Profile of Kindergartens. As it is not a stand-alone project, no separate breakdown of the expenditure is available.	Oct 2017	27 000
15.	Education Bureau (Personal, Social and Humanities Education Section)	History Trip Go Easy: Cheung Chau Jiao Festival	Developed as a part of the e-book and e-portal project. As it is not a stand-alone project, no separate breakdown of the expenditure is available.	Nov 2017	5 200
16.	Tourism Commission	A Symphony of Lights	\$537,000	Dec 2017	4 000

Information of the mobile apps planned to be launched by B/Ds in 2018-19

No.	B/D	App Name	Development Cost	Expected Launch Date
1.	Food and Environmental Hygiene Department	Internet Memorial Service Mobile App	\$300,000	First half of 2018
2.	Leisure and Cultural Services Department	Museum Multi-media Information Guide System (MMGS)	The app is a part of the MMGS project. As it is not a stand-alone project, no separate breakdown of the expenditure is available.	First half of 2018
3.	InvestHK	InvestHK	\$580,000	May 2018
4.	Transport Department	Hong Kong eMobility	\$460,000	Mid-2018
5.	Marine Department	eSeaGo	\$600,000	Aug 2018

- End -

CONTROLLING OFFICER'S REPLY**ITB202****(Question Serial No. 3661)**

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title): (000) Operational expenses

Programme: (3) IT in the Community

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned under this Programme that the Government will develop Hong Kong into a Wi-Fi Connected City and expand the "Wi-Fi.HK" programme. In this connection, please list out in tabular form the numbers of "Wi-Fi.HK" (hotspots) in 18 districts. What are the locations, manpower and expenditure involved?

As the Government increases the number of Wi-Fi hotspots, the recurrent maintenance costs and Internet access fees involved will be greatly increased. What are the respective annual costs at present?

How will the Government reduce the costs in this regard, and achieve cost-effectiveness on the usage and maintenance costs in order to avoid under-usage with high maintenance costs?

Asked by: Hon CHAN Chi-chuen (Member Question No. (LegCo use): 153)

Reply:

As at end-February 2018, the distribution of Wi-Fi.HK hotspots in 18 districts is as follows:

	Number of Wi-Fi.HK hotspots
Hong Kong	
Central and Western District	2 957
Eastern District	612
Southern District	1 453
Wan Chai	1 126
Kowloon	
Kowloon City	3 369
Yau Tsim Mong	1 473
Sham Shui Po	615
Wong Tai Sin	413

	Number of Wi-Fi.HK hotspots
Kwun Tong	652
New Territories	
Tai Po	299
Yuen Long	583
Tuen Mun	1 401
North District	275
Sai Kung	1 015
Sha Tin	3 587
Kwai Tsing	369
Tsuen Wan	404
Islands	711
Total:	21 314

In 2017-18, the estimated expenditure for the Wi-Fi Connected City programme is about \$43.16 million, broken down as follows:

	Estimated Expenditure (\$ million)
Programme coordination, management and support of the Wi-Fi Connected City programme	13.59
Operation and maintenance costs of Government Wi-Fi (GovWiFi) services	26.27
Subsidising the provision of free Wi-Fi services at youth service centres and study rooms operated by non-governmental organisations	1.74
Promotion of Wi-Fi.HK	1.56
Total:	43.16

To ensure the cost-effectiveness of the public Wi-Fi service, we will monitor the bandwidth usage at each venue, regularly review and adjust the bandwidth and the number of hotspots at the venue so as to strike a balance between service usage and Internet access fees and maintenance costs. In addition, we will continue to provide free Wi-Fi services at more venues through the public-private collaboration model, and encourage public and private organisations to participate in the Wi-Fi.HK brand so as to expand the coverage of Wi-Fi.HK hotspots without the need for the Government to fund the implementation and operation costs.

- End -

CONTROLLING OFFICER'S REPLY

ITB203

(Question Serial No. 3669)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (3) IT in the Community

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

In the era of big data, information security is no longer confined to the security of websites and storage servers. To make it easier for citizens to go online in early years, the Government has installed many public Wi-Fi facilities for free Internet access by the general public. The security arrangements, however, remain unknown. Moreover, some information and communications technology experts have pointed out that it is dangerous to use unencrypted free Wi-Fi networks because data stored in the mobile phones of users may be stolen by hackers through the networks. In this connection, what are the security measures taken by the Government for public Wi-Fi facilities? What can be done to ensure that there will be no data leakage when the citizens go online with their mobile phones? The media conducted tests recently in situ at 6 cafes with “fake free Wi-Fi” networks. It was revealed that the mobile phones of 55% of the visitors to the cafes had been connected to the “fake free Wi-Fi” networks and the testing personnel were able to view the instant messages and emails of others. In this connection, how will the Government educate the public to choose unauthenticated public Wi-Fi networks with due care?

Asked by: Hon CHAN Chi-chuen (Member Question No. (LegCo use): 162)

Reply:

We have all along been reminding the public not to provide any sensitive information when using public Wi-Fi service. To enhance the security of free Wi-Fi service, the Wi-Fi.HK service at all government venues has installed digital server certificates to enable Wi-Fi service users to verify the identity of the service provider, thereby minimising the risk of the public accessing fake Wi-Fi.HK service. We also encourage other public and private Wi-Fi.HK participating organisations to use digital server certificates for their Wi-Fi.HK service. As at February 2018, there were already 84 Wi-Fi.HK participating organisations using digital server certificates, covering more than 10 000 hotspots.

Moreover, we provide the latest security information, including those requiring attention during the use of Wi-Fi service, to the public through various channels such as the InfoSec

website and the Cyber Security Information Portal, and organise seminars and forums to explore and disseminate knowledge on cyber security to the public. The “Guidelines on the Security Aspects for the Design, Implementation, Management and Operation of Public Wi-Fi Service” issued by the Office of the Communications Authority also provide Wi-Fi service providers with practical guidance on implementing Wi-Fi network security measures.

- End -

CONTROLLING OFFICER'S REPLY

ITB204

(Question Serial No. 3670)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (3) IT in the Community

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

With the popularity of cloud technology, different companies, organisations and government departments will perform their daily work on cloud. It is learnt that there are currently 11 high-tier data centre companies in the Tseung Kwan O Industrial Estate, covering the provision of cloud technology services. Since cloud companies will store a large quantity of important corporate and personal information, there will be dire consequences in case of cyber attacks and hacker intrusion. In recent years, ransomware caused havoc on a global scale. Some travel agencies were even blackmailed for an enormous ransom while the affected database contained information of customers, including their names, ID and passport numbers, credit card information, etc. Therefore, having one business organisation or cloud company blackmailed will put the personal data of all Hong Kong people at risk. However, the only responsive measure taken by the Government is to disseminate precautionary advice through the "Cyber Security Information Portal". That means the companies have to surf the Internet for the information on their own. The measure is not proactive enough. In fact, will resources be allocated by the Government to provide a list of risks for various industries, for example targeted cyber security support will be given to industries (e.g. banks, insurance (companies), travel agencies, cloud platform companies, etc.) which always have to collect sensitive information from customers so that their sensitive personal information can be encrypted?

Will the Bureau enhance cooperation and communication with different cloud providers/service providers to strengthen the security technologies of cloud tech/service providers, including transmission encryption and users' multiple login to protect user information from leakage?

Asked by: Hon CHAN Chi-chuen (Member Question No. (LegCo use): 163)

Reply:

The Government attaches great importance to information technology and cyber security. The Office of the Government Chief Information Officer (OGCIO) has been working

closely with the Hong Kong Computer Emergency Response Team Coordination Centre (HKCERT) under the Hong Kong Productivity Council and the Cyber Security and Technology Crime Bureau (CSTCB) of the Hong Kong Police Force to monitor the overall cyber security situation in Hong Kong and provide appropriate support. Apart from making continuous efforts to disseminate security advice and provide reference tools through the Cyber Security Information Portal, the Government has proactively launched various publicity and education activities through different channels, including sector-specific thematic seminars and workshops, social media, newspapers, radio programmes, etc. to remind different industries and the public to take necessary cyber security measures for protecting information systems and data assets, thereby raising the information security awareness of the industries and the public.

Having regard to the security risks and business characteristics of different industries, the relevant regulatory agencies will stipulate respective regulatory ambit and devise information system measures (including information system and data security, data encryption, multiple factor authentication, risk management, response to cyber threats, contingency arrangements, recovery of business operations, etc.) relevant to those specific industries. OGCIO will regularly publish and update the article “An Overview of ISO/IEC 27000 family of Information Security Management System Standards” on the InfoCloud thematic portal (www.infocloud.gov.hk) to encourage the industry to adopt internationally recognised information security standards and practice guides to enhance their cyber security awareness and capability to defend against cyber attacks. HKCERT has organised targeted seminars for the travel industry, retail industry and fund management industry to assist them in adopting information security standards and best practices. HKCERT also continues to work with different industry associations to publicise and promote the importance of cyber security in their sectors, as well as to provide cyber security support.

As for service providers, OGCIO, HKCERT and CSTCB organised a seminar with the theme of online service security in March 2018 with the participation of nearly 300 local and overseas representatives and professionals of online service providers. They shared ways to enhance the levels of security techniques and ensure that customers’ data are properly protected, so as to reduce the risks of data leakage. Furthermore, to address the potential security risks of cloud services, OGCIO has, through the InfoCloud portal, provided information such as useful checklists on cloud computing security and protection of personal data privacy, as well as practice guide for procuring cloud services, in order to enhance the security awareness among cloud service providers and users.

- End -

CONTROLLING OFFICER'S REPLY**ITB205****(Question Serial No. 0605)**

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (2) IT Infrastructure and Standards

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is included under Matters Requiring Special Attention in 2018-19 of Programme (2) to “plan and implement the ‘eID’ initiative to facilitate the use of public and private online services”. Will the Government advise on the following:

1. What is the implementation timetable of the “eID” initiative? What are the estimated manpower and expenditure involved?
2. How much resources will be allocated by OGCIO for publicising the above initiative and educating the public?

Asked by: Hon CHAN Chun-ying (Member Question No. (LegCo use): 41)

Reply:

The requested information is as follows:

1. We plan to seek the Finance Committee (FC)’s funding approval for implementing the eID project in mid-2018. Subject to FC’s approval, the Office of the Government Chief Information Officer will proceed with tendering in the second half of 2018, and the new system is expected to commence operation by mid-2020. The estimated non-recurrent cost of the project is \$112 million, broken down as follows:

Item	(\$ million)
(a) Hardware	19.1
(b) Software	30.6
(c) System Implementation and Support	34.0
(d) Contract Staff	16.6
(e) Site Preparation	0.5
Total:	100.8
(f) Contingency (about 10%)	11.2
Grand Total:	\$112.0

2. We expect to conduct promotion and publicity for eID in the first quarter of 2020. The resources required will be determined in the course of formulating the promotion plan.

- End -

CONTROLLING OFFICER'S REPLY

ITB206

(Question Serial No. 0606)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (3) IT in the Community

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Under Matters Requiring Special Attention in 2018-19, the Government will “continue to provide one-stop support to facilitate the setting up of data centres in Hong Kong, including use of existing industrial buildings and industrial lots for data centre use”. Will the Government advise on the following:

1. Has it studied that which departments (e.g. the Lands Department, Buildings Department, Fire Services Department and other departments) are involved in vetting whether existing industrial buildings are suitable for data centre use? What are the estimated time and amount of expenditure involved for the change of use?
2. How much manpower will be deployed by the Office of the Government Chief Information Officer (OGCIO) to provide the one-stop support? What are the specific role and work of OGCIO?

Asked by: Hon CHAN Chun-ying (Member Question No. (LegCo use): 42)

Reply:

The requested information is as follows:

1. Generally owners intending to use their premises in industrial buildings for uses other than those permitted under the lease are required to apply to the Lands Department (LandsD) for temporary waivers to cater for the intended use and pay the waiver fee for issuing waivers. In processing the applications, LandsD will consult the relevant departments, such as the Planning Department and the Fire Services Department as appropriate, and if needed, consult the local community through the Home Affairs Department.

The Government introduced in mid-2012 facilitation measures to encourage the industry to make use of existing industrial buildings for data centre development. Owners of industrial buildings aged 15 years or above in “Industrial”, “Commercial” or “Other

Specified Uses” annotated “Business” zones may apply for change of use in parts of the industrial buildings to data centres use, with the fees for issuing the waivers would be exempted. The waiver will be valid for the lifetime of the existing building or until expiry or termination of the current lease of the lot concerned, whichever is the earlier. Since May 2016, LandsD together with the Office of the Government Chief Information Officer (OGCIO) had streamlined the procedures for issuing waivers for change of use of industrial under which valid applications might be approved in around two weeks. Given the unique circumstances of each case, the actual processing time varies depending on the complexity of the matters involved in individual cases.

2. Through the Data Centre Facilitation Unit (DCFU) and the thematic website (www.datacentre.gov.hk), OGCIO provides support and inter-departmental coordination issues for enterprises that are interested in setting up data centres in Hong Kong. There are 2 staff members in the DCFU.

- End -

CONTROLLING OFFICER'S REPLY**ITB207****(Question Serial No. 3974)**

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: Not Specified

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Internet Learning Support Programme (ILSP) has provided on-site computer repair services. What is the total number of people served since the implementation of ILSP? (Please list out by year)

Asked by: Hon CHEUNG Chiu-hung, Fernando (Member Question No. (LegCo use): 5561)

Reply:

The Internet Learning Support Programme (ILSP) was launched in July 2011 to help students from low-income families undertake web-based learning at home. ILSP provides a range of services to eligible families, but not computer repair services.

In line with the recommendations of the 2013 mid-term review, the Implementers have strengthened free on-site technical support services (including computer check-up, installation of free anti-virus software, assistance in replacement of computer peripherals, etc.) since the 2013/14 school year. The numbers of on-site technical support services for each year are tabulated as follows:

Year	Number of Services
2013-14 (from January 2014)	863
2014-15	8 588
2015-16	14 492
2016-17	15 671
2017-18 (up to January 2018)	12 846
Total	52 460

- End -

CONTROLLING OFFICER'S REPLY**ITB208****(Question Serial No. 4404)**

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (3) IT in the Community

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Please list out in tabular form the numbers and distribution of Wi-Fi hotspots across various districts in Hong Kong, as well as the average connection speed and average monthly numbers of users at these hotspots.

Asked by: Hon CHEUNG Chiu-hung, Fernando (Member Question No. (LegCo use): 43)

Reply:

As at end-February 2018, the distribution of Wi-Fi.HK hotspots under the Wi-Fi Connected City programme is as follows:

District	Number of hotspots
Hong Kong	
Central and Western District	2 957
Eastern District	612
Southern District	1 453
Wan Chai	1 126
Kowloon	
Kowloon City	3 369
Yau Tsim Mong	1 473
Sham Shui Po	615
Wong Tai Sin	413
Kwun Tong	652
New Territories	
Tai Po	299
Yuen Long	583

District	Number of hotspots
Tuen Mun	1 401
North District	275
Sai Kung	1 015
Sha Tin	3 587
Kwai Tsing	369
Tsuen Wan	404
Islands	711
Total:	21 314

According to the regular tests conducted in 2017, the average connection speed at the GovWiFi hotspots was about 3 to 4 Mbps. As for other Wi-Fi.HK hotspots (which are mainly free Wi-Fi service provided by private enterprises and public organisations), according to the sample survey conducted by the Hong Kong Wireless Technology Industry Association in 2017, the average connection speed ranged from 11 to 12 Mbps. We will continue to monitor the connection speed at the Wi-Fi.HK hotspots and liaise with the public and private organisations concerned to ensure the quality of the Wi-Fi service.

In 2017-18 (as at end-February 2018), the average numbers of monthly users of the GovWiFi service at government venues by district are as follows:

District	Average number of monthly users for all hotspots
Hong Kong	
Central and Western District	158 655
Eastern District	87 260
Southern District	46 888
Wan Chai	150 336
Kowloon	
Kowloon City	63 581
Yau Tsim Mong	131 865
Sham Shui Po	81 976
Wong Tai Sin	45 969
Kwun Tong	84 248
New Territories	
Tai Po	48 882
Yuen Long	80 071
Tuen Mun	38 644
North District	68 094
Sai Kung	65 281
Sha Tin	87 700

District	Average number of monthly users for all hotspots
Kwai Tsing	50 135
Tsuen Wan	46 407
Islands	18 212
Total:	1 354 204

As for the Wi-Fi.HK hotspots operated by service operators and public and private organisations, we do not have the related usage figures.

- End -

CONTROLLING OFFICER'S REPLY

ITB209

(Question Serial No. 5964)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (2) IT Infrastructure and Standards

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned in the Smart City Blueprint for Hong Kong promulgated by the Government that remote sensing devices (e.g. facilities like multi-functional smart lampposts) will be used to collect data of traffic information, air quality, etc. In this connection, will the Government advise on the following:

- (a) The numbers of smart lampposts and their proposed locations under the scheme, as well as the costs involved;
- (b) The types of traffic information and air quality data to be gauged by the lampposts;
- (c) How will the data collected be applied and provided for public use?

Asked by: Hon KWOK Wing-hang, Dennis (Member Question No. (LegCo use): 33)

Reply:

The requested information is as follows:

- (a) In October 2017, the Chief Executive announced in the Policy Address the launch of a “Multi-functional Smart Lampposts” pilot scheme in 4 selected urban areas (Causeway Bay / Wan Chai, Central / Admiralty, Tsim Sha Tsui and Kwun Tong / the Kai Tak Development Area) to install about 400 new lampposts with smart devices for enhancing city and traffic management. The estimated cost of the whole project is about \$272 million, with an annual operating cost of about \$32 million.
- (b) & (c) One of the main functions of “Multi-functional Smart Lampposts” is to help government departments collect various city data and disseminate more real-time information to the public. In respect of traffic, Transport Department will collect more real-time traffic data, including vehicle speed, vehicle type, traffic flow, etc. to facilitate the public, tourists and the industry to make use of such information. It also helps handle traffic incidents. As for weather, Hong Kong Observatory will collect

meteorological and related data at district level, including temperature, humidity, wind speed and direction, rainfall, untra-violet index, etc. to strengthen district-specific meteorological monitoring and forecast. On environmental protection, Environmental Protection Department will collect data on air quality and illegal dumping monitoring at district level to enhance city management. The Government plans to provide the city data collected from the smart lampposts free of charge through the “data.gov.hk” portal, which allows the public to use such data to develop more innovative applications.

- End -

CONTROLLING OFFICER'S REPLY

ITB210

(Question Serial No. 0565)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (2) IT Infrastructure and Standards

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Since 2015/16, the Government has implemented the Enriched IT Programme in Secondary Schools, including Enriched IT Classes and Enriched IT Activities to stimulate interest in information technology (IT) in the school community. In this connection, please inform this Committee of the following:

- (1) What are the numbers of partner schools, participants, and details and effectiveness of the Enriched IT Classes and Enriched IT Activities in each year since the implementation of the Programme?
- (2) What are the manpower and expenditure for supporting the above Programme?
- (3) What measures will the Government take in future to cultivate IT talents?

Asked by: Hon LAU Ip-keung, Kenneth (Member Question No. (LegCo use): 54)

Reply:

The requested information is as follows:

- (1) The Office of the Government Chief Information Officer (OGCIO) launched the pilot eight-year Enriched IT Programme in Secondary Schools (the Programme) in the 2015/16 school year, providing Enriched IT Class (IT Class) in 8 partner schools for students who are interested and talented in IT with 2-3 hours of training per week. The numbers of IT Class students in different school years are as follows:

School Year	Number of IT Class Students
2015/16	353
2016/17	699
2017/18	922 (as at February 2018)

In addition, the Programme subsidises secondary schools to organise Enriched IT Activities to foster an IT culture and stimulate students' interest in IT. In the 2015/16 and 2016/17 school years, a total of 85 secondary schools organised Enriched IT Activities including aerial photography, 3D design, robotics control and mobile application programming, covering about 9 500 students. In the 2017/18 and 2018/19 school years, the Programme will provide funding support to 89 schools to organise Enriched IT Activities.

- (2) A Government funding commitment of \$75 million is provided for the Programme. The manpower required is met by internal resources of OGCIO and no additional expenditure is involved.
- (3) The Government released the Smart City Blueprint for Hong Kong on 15 December 2017. Measures to nurture technology professionals under the area of “Smart People” include:
 - (a) Organise intensive training programmes on STEM education for curriculum leaders of primary and secondary schools from the 2017/18 to 2019/20 school years;
 - (b) Provide enhanced information technology training to secondary school students outside normal school curriculum;
 - (c) Encourage industry to hire STEM graduates for R&D through the “Postdoctoral Hub” programme and enhanced Internship Programme; and
 - (d) Launch a fast-track I&T talent admission scheme in 2018. Attract and retain more I&T professionals, especially talents in biotechnology, data science, artificial intelligence, robotics and cyber security.

OGCIO will continue to promote the development of information and communications technology professionals address the manpower needs of the digital economy and the community.

- End -

CONTROLLING OFFICER'S REPLY**ITB211****(Question Serial No. 1876)**

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (3) IT in the Community

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Launched in 2008, the “Government Wi-Fi” (“GovWiFi”) programme provides free Wi-Fi service mainly at government venues with high patronage. It is announced in the 2016 Policy Address that the Government will progressively expand the coverage of Wi-Fi.HK by doubling the number of hotspots to 34 000 within 3 years, and the speed of Wi-Fi connection at government venues will be progressively enhanced. However, there are still complaints about slow connection speed of the service and even service disconnection from time to time. Please list out the 10 locations of Wi-Fi.HK hotspots with the highest number of public complaints in the past year, the respective numbers and nature of complaints, measured connection speed, as well as the improvement measures taken.

Asked by: Hon LEE Wai-king, Starry (Member Question No. (LegCo use): 11)

Reply:

In 2017-18 (up to end-February 2018), information on the complaints related to the Wi-Fi.HK hotspots at government venues is as follows:

Venue	Number of complaints	Major details of complaint	Approximate average connection speed measured (Mbps)
Hong Kong Central Library	16	Unable to connect, unstable connection and weak signal	4 to 5
Siu Sai Wan Sports Ground	8	Unable to connect, unstable connection and weak signal	4 to 5
Sha Tin Public Library	7	Unable to connect, unstable connection and weak signal	4
Lai Chi Kok Park	6	Unable to connect	2

Venue	Number of complaints	Major details of complaint	Approximate average connection speed measured (Mbps)
Morse Park Sports Centre	6	Unable to connect and unstable connection	3
Ma On Shan Public Library	4	Unable to connect	3
Tai Po Public Library	4	Unable to connect	3 to 5
Tin Shui Wai Park	4	Unable to connect	2
Victoria Park	3	Unable to connect	4 to 5
Ho Man Tin Sports Centre	3	Unable to connect	2
Others	1-3	Mainly unable to connect, unstable connection and weak signal	-

After receiving the complaints, we have immediately checked the service and followed up accordingly. In order to improve the speed and stability of the Wi-Fi.HK hotspots at government venues, we will progressively adopt the latest Wi-Fi technology standard (IEEE 802.11ac) to reduce signal interference. It is estimated that the related works can be completed within 2018. Besides, we have requested the contractor to use fibre network wherever feasible to provide faster and more stable Wi-Fi service. On the other hand, we regularly examine the transmission speed and usage of the Wi-Fi service at the government venues, and adjust the bandwidth and number of hotspots at the venues when necessary to ensure the quality of the Wi-Fi service. As for the Wi-Fi.HK hotspots operated by service operators and public and private organisations at non-government venues, we do not have the related complaint figures.

- End -

CONTROLLING OFFICER'S REPLY

ITB212

(Question Serial No. 1547)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (2) IT Infrastructure and Standards

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Several local travel agencies were suspected of being blackmailed with their databases intruded by hackers earlier. Information contained therein includes names, ID and passport numbers, telephone numbers, credit card information, bank records of customers, etc. The WannaCry ransomware caused havoc on a global scale, and it is fortunate that no significant impact has been caused by several hacker incidents. In this connection, will the Government inform this Committee of whether it will allocate more resources to strengthen information technology and cyber security? Please advise on the details.

Asked by: Hon LEUNG Mei-fun, Priscilla (Member Question No. (LegCo use): 12)

Reply:

The Government attaches great importance to information security. Apart from making use of various channels in raising the awareness of information and cyber security among the general public, the Government launched a \$500 million Technology Voucher Programme on a pilot basis under the Innovation and Technology Fund in November 2016 to subsidise small and medium enterprises in using technological services and solutions, including cyber security solutions, to strengthen the ability to defend against cyber attacks and recover business operation. In addition, the Government allocated \$10 million in 2016-17 to launch the "Pilot Information Technology Development Matching Fund Scheme for Travel Agents" through the Travel Industry Council of Hong Kong (TIC) to subsidise small and medium-sized travel agents, on a matching basis, to make use of information technology, including strengthening the security of their information systems, so as to enhance the competitiveness of the trade. In view of the positive feedback of the trade, the Government will allocate an additional funding of \$30 million to TIC in 2018-19 for enhancing the Scheme to benefit more small and medium-sized travel agents.

- End -

CONTROLLING OFFICER'S REPLY

ITB213

(Question Serial No. 2562)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (1) Use of IT in Government

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Developing a big data analytics platform within the Government is an effective initiative to build a smart government and enhance the efficiency of public services in the prevailing environment characterised by modernised information technology. There will be a net increase of 23 posts under "Use of IT in Government" in 2018-19. What are the details and terms of appointment of these 23 posts, especially the details of duties involving big data analytics and cloud service review?

Asked by: Hon LIAO Cheung-kong, Martin (Member Question No. (LegCo use): 58)

Reply:

The net increase of 23 civil service posts proposed by the Office of the Government Chief Information Officer in 2018-19 includes 1 Chief Systems Manager, 1 Senior Systems Manager, 4 Systems Managers, 3 Analyst/Programmer Is, 11 Analyst/Programmer IIs and 3 Computer Operator IIs. Among these 23 posts, 7 will be responsible for supporting bureaux and departments to open up and share government data, as well as to develop the next generation integrated government cloud infrastructure and big data analytics platform. The other 16 posts will be mainly responsible for managing and supporting information technology applications; and for enhancing information security management and cyber security threat surveillance. Vacancies in the basic ranks of civil service (viz. Analyst/Programmer II and Computer Operator II) would be filled by open recruitment. As for vacancies in the promotion ranks, they would normally be filled by promotion of suitable candidates within the civil service.

- End -

CONTROLLING OFFICER'S REPLY

ITB214

(Question Serial No. 2563)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (1) Use of IT in Government

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Government Cloud Platforms comprise the “in-house Private Cloud” owned and operated by the Government, the “outsourced Private Cloud” housed in secure data centres operated by contractors dedicated to government use, and the “Public Cloud” provided by over 40 service providers for provision of general services involving non-sensitive information. The Government plans to commence the implementation of the next generation integrated government cloud infrastructure in 2018-19. What are the specific details of the work and which of the aforesaid cloud platforms is/are mainly involved?

Asked by: Hon LIAO Cheung-kong, Martin (Member Question No. (LegCo use): 59)

Reply:

Apart from building secure and reliable “private clouds”, the proposed “Next Generation GovCloud Platform and Big Data Analytics Platform” will also make use of “public clouds” which are highly flexible, elastic, and in compliance with security requirements. The new platform will provide the following central services with economies of scale:

Infrastructure as a Service (IaaS): Including servers, storage, network resources, cloud management platform and related services for operation, maintenance and support

Platform as a Service (PaaS): On top of IaaS, providing system software, application servers, database management system software and related services for operation, maintenance and support

Application Architecture: Agile development technologies, including central application programming interface management, containerisation, continuous integration and continuous delivery technologies, etc.

The Next Generation Government Cloud Infrastructure will include “in-house private cloud”, “outsourced private cloud” and “public cloud” with enhanced security features to drive B/Ds to adopt the latest information technologies so as to develop citizen-centric digital government services in a more efficient, secure and cost-effective manner.

- End -

CONTROLLING OFFICER'S REPLY

ITB215

(Question Serial No. 0322)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (1) Use of IT in Government

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Efficiency Unit and the Business Facilitation Division currently under the Offices of the Chief Secretary for Administration and the Financial Secretary respectively will be transferred to the Innovation and Technology Bureau and be renamed as “Efficiency Office” on 1 April this year. Its main functions are to support the Government’s objectives for promoting innovation and technology and smart city development, and emphasis is placed on facilitating collaboration with stakeholders to enhance public services and efficiency in operations through application of technology, innovation in business models or processes. In this connection, please advise whether the Government has taken into account the aspirations of the business sector, allocated specific resources and drawn up a timetable to require all departments to release various government data in machine readable format to facilitate the use by application developers and related industries. If yes, what are the details? If not, what are the reasons?

Asked by: Hon LO Wai-kwok (Member Question No. (LegCo use): 18)

Reply:

Open data is an important component in promoting the development of smart city. The Government will open up data in suitable formats to provide raw materials for scientific research and innovation. The Office of the Government Chief Information Officer (OGCIO) has issued guidelines to assist bureaux and departments (B/Ds) in releasing data in the most suitable formats and ways (such as through application programming interfaces (APIs)) in accordance with the natures of different data, in order to make it convenient for application developers and related industries to make use of the data. In addition, OGCIO will review the presentation and formats of the uploaded data with the B/Ds concerned from time to time and provide them with technical support and assistance. B/Ds will also timely review their data to ensure data usability.

Following the guidelines, B/Ds have generally been releasing data in machine-readable formats. As at end-February 2018, there are over 3 200 datasets on the “data.gov.hk” portal, of which about 2 400 datasets are in machine-readable formats, whereas the rest are

in image formats. These images are also frequently used for applications development. For example, the traffic snapshots provided by the Transport Department have been widely used in many smartphone applications and have been downloaded for over 1.7 billion times in 2017. The portal also provides about 1 200 APIs for software developers to extract the information required from the large amount of information therein.

To take forward and expedite the work on open data and analytics more effectively, OGCIO creates a permanent post of Chief Systems Manager (D1) in 2018-19, who is responsible for advocating and supporting B/Ds to open up data and make use of big data analytics, and issuing relevant government-wide practices and guidelines.

- End -

CONTROLLING OFFICER'S REPLY

ITB216

(Question Serial No. 2222)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (3) IT in the Community

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Office of the Government Chief Information Officer (OGCIO) has stated that it will work with relevant departments to explore the mobile payment technologies which support digital wallets, with a view to introducing the relevant technical solutions in 2017 for the adoption by government departments according to their respective business needs. In this connection, please advise on the expenditure involved and results of the studies, as well as the follow-up measures.

Asked by: Hon MA Fung-kwok (Member Question No. (LegCo use): 79)

Reply:

In the third quarter of 2017, the Office of the Government Chief Information Officer (OGCIO) introduced a technical solution supporting mobile payment of credit card using digital wallets, namely Apple Pay and Android Pay, for adoption by government departments according to their own business needs. The non-recurrent expenditure of OGCIO for developing this technical solution is about \$0.9 million. The mobile application “My Library” of the Leisure and Cultural Services Department is the first e-government service adopting this technical solution, and the digital wallet mobile payment function was launched for public use in January 2018. OGCIO will continue to monitor the adoption and the latest development of various electronic and mobile payment services available in the market so as to introduce them in a timely manner.

- End -

CONTROLLING OFFICER'S REPLY

ITB217

(Question Serial No. 2287)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (1) Use of IT in Government

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

On reforming the development technology of e-Government systems and building a big data analytics platform, please advise on the following:

What are the details and timetable of the project to reform the development technology of e-Government systems, as well as the financial resources and manpower required for the development?

What are the details of the project to commence the development of a shared big data analytics platform, the datasets and departments to be included in the platform (please list out in tabular form), as well as the timetable and the financial resources and manpower required?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 17)

Reply:

Apart from building secure and reliable “private clouds”, the proposed “Next Generation Government Cloud Platform and Big Data Analytics Platform” will also make use of “public clouds” which are highly flexible, elastic, and in compliance with security requirements. The new platform will provide the following central services with economies of scale:

Infrastructure as a Service (IaaS):	Servers, storage, network resources, cloud management platform and related services for operation, maintenance and support
Platform as a Service (PaaS):	On top of IaaS, providing system software, application servers, database management system software and related services for operation, maintenance and support
Application Architecture:	Agile development technologies, including central application programming interface management, containerisation, continuous integration and continuous delivery technologies, etc.

The proposed “Big Data Analytics Platform” provides big data analytics tools, artificial intelligence cognitive tools, parallel computing management system, etc. to facilitate B/Ds to implement more big data analytics projects in different areas (e.g. weather, transport, environment, etc.). The datasets and departments involved in individual big data analytics projects can only be confirmed during the implementation stage, and the related information is not available now.

The “Next Generation Government Cloud Platform and Big Data Analytics Platform” project will incur a non-recurrent cost of \$533.3 million, including an estimated expenditure of \$83.8 million for hiring contract IT staff with relevant technical skills and experience to assist in implementing, deploying, managing and supporting the Next Generation Government Cloud and the Big Data Analytics Platform, and providing consulting service to all B/Ds.

We plan to seek funding approval from the Finance Committee (FC) in mid-2018 to implement the “Next Generation Government Cloud Platform and Big Data Analytics Platform” project. Subject to the funding approval of FC, the Office of the Government Chief Information Officer will invite tenders in the second half of 2018, and the new system is expected to be launched in the second quarter of 2020.

- End -

CONTROLLING OFFICER'S REPLY**ITB218****(Question Serial No. 2289)**

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (1) Use of IT in Government

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the employment of information technology (IT) staff by the Government, please advise on the following:

- (1) The numbers and total number of vacancies of civil service IT staff in government bureaux and departments (B/Ds) in 2017

Chief Systems Manager, Senior Systems Manager and Systems Manager	Analyst/ Programmer I	Analyst/ Programmer II	Number of Vacancies

- (2) The numbers of civil service IT staff in B/Ds in 2017 (in descending order by staff number)

B/D	Chief Systems Manager, Senior Systems Manager and Systems Manager	Analyst/ Programmer I	Analyst/ Programmer II	Total Number

- (2) The total number of full-time Non-Civil Service Contract (NCSC) staff providing IT support in B/Ds in 2017. Please provide the numbers of these staff in descending order;

- (3) The total number of staff employed by T-contractors for B/Ds, and the year-on-year percentage change;
- (4) Years of service and salaries of civil service IT staff in B/Ds in 2017

	Average Year of Service	Average Monthly Salary (Including Allowances)	Other Benefits
Chief Systems Manager			
Senior Systems Manager			
Systems Manager			
Analyst/Programmer I			
Analyst/Programmer II			

- (5) Average years of service and salaries of staff employed by T-contractors for B/Ds

	Average Year of Service	Average Monthly Salary (Including Allowances)	Other Benefits
Senior IT Services Manager			
IT Services Manager			
Systems Analyst			
Analyst/Programmer			

- (6) The pay adjustment mechanism and the average percentage of pay adjustment for the staff employed by T-contractors in 2017-18;
- (7) What is the number of IT staff among the newly created civil service permanent posts in B/Ds in 2018-19? (Please provide a breakdown by post title and B/D and list out in descending order by the total number)
- (8) The estimated numbers of T-contract staff to be employed through T25 contractors for the Government (by post type).

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 19)

Reply:

The required information is provided as follows:

(1) As at 31 December 2017, the numbers of civil service information technology (IT) staff ^{Note 1} and the number of vacancies of such staff in the Government are as follows:

Chief Systems Manager, Senior Systems Manager and Systems Manager	Analyst/Programmer I	Analyst/Programmer II	Number of Vacancies
305	394	390	60

(2) As at 31 December 2017, the numbers of civil service IT staff in B/Ds are at **Annex I**.

The numbers of full-time ^{Note 2} non-civil service contract staff providing IT support for B/Ds are at **Annex II**.

(3) In the past 3 years, the total numbers of staff engaged by B/Ds through T-contractors (T-contract staff), and the year-on-year rates of change of such figures are as follows:

As at	Total Number	Rate of Change
31 December 2015	2 602	+8%
31 December 2016	2 760	+6%
31 December 2017	2 890	+5%

Note 1: Including civil service IT staff occupying permanent posts and time-limited posts.

Note 2: “Full-time” means the employment is on a “continuous contract” as defined by the Employment Ordinance, i.e. an employee works continuously for the same employer for 4 weeks or more, with at least 18 hours per week.

(4) As at 31 December 2017, the years of service and salaries of civil service IT staff in B/Ds are as follows:

Rank	Average Number of Years of In-rank Service	Monthly Salary ^{Note 3} (HK\$)
Chief Systems Manager	4.7	138,500 – 151,550
Senior Systems Manager	6.7	107,870 – 124,280
Systems Manager	8.3	67,270 – 101,070
Analyst/Programmer I	10.6	53,300 – 67,065
Analyst/Programmer II	2.4	30,320 – 50,900

The allowances and fringe benefits of the staff of the ranks listed above are determined by the established civil service mechanism.

(5) The average lengths of service of T-contract staff engaged by B/Ds as at 31 December 2017 are as follows:

Staff Category	Average Length of Service ^{Note 4}
Senior Project Manager	12.3
Project Manager	6.8
Senior Systems Analyst	8.1
Systems Analyst	5.6
Analyst/Programmer	4.0

T-contract staff are employees of T-contractors. The Government does not have the information on the actual remunerations offered to T-contract staff by T-contractors.

Note 3: According to the prevailing civil service pay scales.

Note 4: Length of service refers to the number of years of service provided by individual T-contract staff to the same B/D, during which the staff concerned may not be working in the same position and responsible for the same project.

(6) Under the T24 contract, the Government may initiate the rate adjustment mechanism to adjust upwards, on an annual basis, the service fees payable to T-contractors according to changes in the Government Consumer Price Index (B). In the latest rate adjustment exercise, the service fees payable to T-contractors have increased by 1.4% with effect from 1 February 2018. As far as we know, the wages of T-contract staff have been correspondingly adjusted upwards. In order to retain talents, some T-contractors indicated that the wages of some T-contract staff have increased by a percentage higher than that of the service fees increase.

(7) Among the new posts planned for creation in the civil service establishment by B/Ds in 2018-19, 166 are IT grade posts. Details are at **Annex III**.

(8) The T25 contract is a standing offer agreement, which will commence on 1 February 2019. The estimated requirements of B/Ds for T-contract staff services during the term of the T25 contract are set out in the table below. Nevertheless, the actual requirements may be adjusted depending on the operational needs.

Staff Category	Estimated No. of T-contract Staff Required Per Annum
Senior Project Manager	10
Project Manager	170
Senior Systems Analyst	230
Systems Analyst	1 080
Analyst/Programmer	870
Programmer/Junior Programmer	220
Senior Information Technology Assistant/ Information Technology Assistant	360
Total:	2 940

**Numbers of Civil Service IT Staff in B/Ds
(position as at 31 December 2017)**

B/Ds	Chief Systems Manager, Senior Systems Manager and Systems Manager	Analyst/ Programmer I	Analyst/ Programmer II	Total
Office of the Government Chief Information Officer	108	138	81	327
Hong Kong Police Force	15	24	49	88
Immigration Department	15	21	22	58
Housing Department	7	24	8	39
Department of Health	13	6	15	34
Inland Revenue Department	7	11	13	31
Social Welfare Department	10	9	11	30
The Treasury	6	13	10	29
Customs and Excise Department	4	16	7	27
Judiciary	13	7	7	27
Census and Statistics Department	3	10	12	25
Education Bureau	8	9	8	25
Leisure and Cultural Services Department	6	6	9	21
Rating and Valuation Department	2	9	8	19
Civil Service Bureau	1	5	9	15
Marine Department	4	3	8	15
Post Office	6	6	3	15
Land Registry	5	4	5	14
Working Family and Student Financial Assistance Agency (Student Finance Office)	3	2	9	14
Companies Registry	3	3	6	12
Hong Kong Observatory	0	3	9	12
Security Bureau	3	4	5	12
Food and Health Bureau	6	3	2	11
Chief Secretary for Administration's Office	2	5	3	10

B/Ds	Chief Systems Manager, Senior Systems Manager and Systems Manager	Analyst/ Programmer I	Analyst/ Programmer II	Total
Food and Environmental Hygiene Department	4	2	4	10
Trade and Industry Department	2	3	5	10
Buildings Department	2	2	5	9
Department of Justice	2	3	4	9
Planning Department	3	2	4	9
Commerce and Economic Development Bureau (Commerce, Industry and Tourism Branch)	6	1	1	8
Labour Department	3	3	2	8
Transport Department	3	2	3	8
Development Bureau (Works Branch)	1	2	3	6
Lands Department	1	4	1	6
Registration and Electoral Office	2	0	4	6
Working Family and Student Financial Assistance Agency (Working Family Allowance Office)	1	2	3	6
Commerce and Economic Development Bureau (Communications and Creative Industries Branch)	1	2	2	5
Environmental Protection Department	1	2	2	5
Home Affairs Bureau	1	2	2	5
Home Affairs Department	0	4	1	5
Information Services Department	2	2	1	5
Water Supplies Department	1	2	2	5
Agriculture, Fisheries and Conservation Department	2	1	1	4
Correctional Services Department	2	1	1	4

B/Ds	Chief Systems Manager, Senior Systems Manager and Systems Manager	Analyst/ Programmer I	Analyst/ Programmer II	Total
Development Bureau (Planning and Lands Branch)	1	1	2	4
Electrical and Mechanical Services Department	1	0	3	4
Government Logistics Department	1	2	1	4
Labour and Welfare Bureau	1	1	2	4
Legal Aid Department	2	1	1	4
Transport and Housing Bureau (Transport Branch)	1	1	2	4
Drainage Services Department	1	0	2	3
Financial Services and the Treasury Bureau (The Treasury Branch)	1	1	1	3
Constitutional and Mainland Affairs Bureau	1	0	1	2
Highways Department	1	1	0	2
Intellectual Property Department	1	0	1	2
Official Receiver's Office	1	1	0	2
Auxiliary Medical Service	0	0	1	1
Civil Aid Service	0	0	1	1
Civil Engineering and Development Department	1	0	0	1
Financial Services and the Treasury Bureau (Financial Services Branch)	0	0	1	1
Fire Services Department	1	0	0	1
Government Flying Service	0	1	0	1
Innovation and Technology Bureau	0	0	1	1
University Grants Committee Secretariat	0	1	0	1
Total	305	394	390	1 089

**Numbers of Full-time Non-civil Service Contract (NCSC) Staff
Providing IT Support in B/Ds
(position as at 31 December 2017)**

B/Ds	Number of NCSC staff
Electrical and Mechanical Services Department	135
Education Bureau	85
Leisure and Cultural Services Department	24
Post Office	22
Efficiency Unit	21
Working Family and Student Financial Assistance Agency	21
Rating and Valuation Department	16
Lands Department	15
Hong Kong Observatory	14
Inland Revenue Department	14
Office of the Communications Authority	14
Water Supplies Department	9
Fire Services Department	7
Drainage Services Department	6
Radio Television Hong Kong	5
The Treasury	5
Home Affairs Department	3
Invest Hong Kong	3
Trade and Industry Department	3
Government Laboratory	2
Innovation and Technology Commission	2
Planning Department	2
Social Welfare Department	2
Commerce and Economic Development Bureau	1
Chief Secretary for Administration's Office	1
Civil Engineering and Development Department	1
Department of Health	1
Labour Department	1
Office of the Government Chief Information Officer	1
University Grants Committee Secretariat	1
Total	437

**Numbers of New IT Posts Planned for Creation in the Civil Service Establishment
2018-19**

B/Ds	Chief Systems Manager, Senior Systems Manager and Systems Manager	Analyst/ Programmer I	Analyst/ Programmer II	Total ^{Note}
Office of the Government Chief Information Officer	12	7	13	32
Housing Department	0	10	10	20
Leisure and Cultural Services Department	1	7	5	13
Social Welfare Department	2	2	6	10
Education Bureau	0	2	6	8
Commerce and Economic Development Bureau (Commerce, Industry and Tourism Branch)	3	2	2	7
Correctional Services Department	1	3	3	7
Customs and Excise Department	1	3	3	7
Immigration Department	4	3	0	7
Food and Environmental Hygiene Department	1	2	3	6
Department of Health	3	2	1	6
Land Registry	1	3	1	5
Judiciary	0	0	4	4
Water Supplies Department	0	3	1	4
Fire Services Department	0	1	2	3
Food and Health Bureau	1	0	2	3
Labour Department	1	1	1	3
Official Receiver's Office	1	1	1	3
Home Affairs Department	1	1	0	2

B/Ds	Chief Systems Manager, Senior Systems Manager and Systems Manager	Analyst/ Programmer I	Analyst/ Programmer II	Total ^{Note}
Hong Kong Police Force	0	2	0	2
Innovation and Technology Bureau	1	1	0	2
Department of Justice	1	1	0	2
Planning Department	1	0	1	2
Registration and Electoral Office	1	1	0	2
Buildings Department	0	0	1	1
Chief Secretary for Administration's Office (Government Records Service)	1	0	0	1
Companies Registry	0	0	1	1
Intellectual Property Department	1	0	0	1
Rating and Valuation Department	0	1	0	1
Transport Department	0	1	0	1
Total	39	60	67	166

Note: Including permanent posts and time-limited posts

- End -

CONTROLLING OFFICER'S REPLY

ITB219

(Question Serial No. 2291)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (1) Use of IT in Government

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the procurement of information technology (IT) products and services under the Standing Offer Agreement for Quality Professional Services (SOA-QPS), please advise on the following:

- (1) As at 28 February 2018, what are the respective total values of IT products and services procured by the Government, and the number of contracts awarded to small and medium enterprises (SMEs)?
- (2) As at 28 February 2018, among those items awarded under SOA-QPS4, what are the respective percentages and average item values of the 4 service categories, the percentages and average item values of small-scale and large-scale items under service categories (2) and (3), the percentage of items with expenditure exceeding the estimated cost against the total numbers, as well as the percentage of items with the completion date delayed for more than 30 days against the estimated date?
- (3) What measures will be adopted to encourage local SMEs to bid for government IT projects in 2018-19? If yes, what are the details?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 21)

Reply:

The required information is provided as follows:

- (1) In 2017-18 (as of 28 February 2018), the total values of information technology (IT) services procured by government bureaux and departments (B/Ds) through the Standing Offer Agreement for Quality Professional Services (SOA-QPS) were \$511 million. Of these services, 149 contracts were awarded to small and medium enterprises (SMEs).

- (2) Since the commencement of the Standing Offer Agreement for Quality Professional Services 4 (SOA-QPS4) on 31 July 2017 and up to 28 February 2018, a total of 235 contracts were awarded. The percentages and average item values of respective service categories were provided below:

	Percentage	Average item value
Service Category 1 (Pre-implementation Services)	13%	\$710,000
Service Category 2 (On-going Services)	23% (of which minor group: 89%; major group: 11%)	\$1,580,000 (minor group: \$960,000; major group: \$6,440,000)
Service Category 3 (System Development and Implementation Services)	19% (of which minor group: 64%; major group: 36%)	\$2,930,000 (minor group: \$1,350,000; major group: \$5,790,000)
Service Category 4 (IT Security and Independent Testing Services)	45%	\$90,000

All these awarded contracts did not have their expenditure exceeding the estimated cost.

The percentages of projects with completion date delayed for more than 30 days against the planned completion date were provided below:

- Service Category 1: 14%
 - Service Category 2: 0% (with no project completed yet)
 - Service Category 3: 0% (with no project completed yet)
 - Service Category 4: 10%
- (3) The Government has implemented a number of measures to facilitate local SMEs to bid for government IT projects, e.g. in the new round of SOA-QPS (SOA-QPS4), the contract value limit of the minor group has been raised to \$3 million, which is more than double the original limit of \$1.43 million, so that SMEs can participate in government projects of higher contract values. Among the total of 49 companies under the current SOA-QPS4, there are 16 SMEs (33%), which is 6 more than the last agreement.

The Office of the Government Chief Information Officer will closely monitor the overall effectiveness of the enhancement measures, and will review them at appropriate time in order to encourage more local SMEs to bid for government IT projects.

- End -

CONTROLLING OFFICER'S REPLY**ITB220****(Question Serial No. 2293)**

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (1) Use of IT in Government

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the mobile applications (apps) developed by government departments and public organisations, please provide the related information.

- (a) Please advise on the related information in 2017-18 in the following table (in ascending order by the number of downloads and in descending order by development cost):

The information of mobile apps to be developed by government departments in 2017-18

Govt Dept	Name	Target	Regular/ One-off Projects	Applicable Platform (e.g. iOS/ Android)	Mode of Development (by internal development or contractors engaged by tender)	Development Cost	Routine Maintenance Cost	Promotion Expenditure	Start Date, Official Launch Date of the Project	Total Number of Downloads as at 28 Feb 2018	Average User Retention Rate on the 7 th Day of the Download	Average User Retention Rate on the 30 th Day of the Download	Number of Active Users in Feb 2018	Has user survey been conducted

- (b) The numbers of apps developed with mobile apps platforms and templates.
- (c) The information of mobile apps to be developed by government departments in 2018-19 (government departments / names of apps / content and purpose / platforms / modes of development / estimated development costs / estimated routine maintenance costs / estimated promotion expenditure / expected launch dates). Please provide the information in descending order by estimated development cost.
- (d) A list of government mobile apps that have already been withdrawn in 2017-18 (departments, names, total numbers of downloads, development and maintenance costs), and a list of mobile apps considered to be ceased in 2018-19.

Reply:

The required information is provided as follows:

- (a) Information of the mobile applications (apps) launched by government bureaux and departments (B/Ds) in 2017-18 is set out at **Annex A**.
- (b) The Office of the Government Chief Information Officer (OGCIO) currently sets up 3 mobile app platforms, i.e. GovHK Notifications, GovHK Apps and EventHK. They are now being used by 67 B/Ds for providing one-stop public services to citizens.

Besides, OGCIO currently provides 9 mobile app templates, namely “Appointment Booking”, “Mobile App Version Check”, “Remote Content Retrieval”, “Mobile Device System Configuration Check”, “User-Friendly Navigation Framework”, “Simple Form for Information Collection/Survey”, “Illustration of Optical Character Recognition Technology”, “Collection of User Behaviour Statistics” and “e-Payment Module”, for B/Ds’ reference when they develop mobile apps. Different government mobile apps have adopted part of the functions provided by these templates.

- (c) Information of the mobile apps planned to be launched by B/Ds in 2018-19 is set out at **Annex B**.
- (d) Information of the mobile apps that have already been removed from the app store by B/Ds in 2017-18 is set out at **Annex C** and information of the mobile apps being considered to be removed in 2018-19 is set out at **Annex D**.

Information of mobile apps launched by B/Ds in 2017-18 (in ascending order of numbers of downloads)

No.	B/D	Name	Target	Regular/ One-off Projects	Applicable Platform (e.g. iOS/ Android)	Mode of Development (by internal development or contractors engaged by tender)	(Approximate) Development Cost	(Approximate) System Maintenance Cost	(Approximate) Promotion Expenditure	Start Date, Official Launch Date of the Project	Total Number of Downloads as of 28 Feb 2018	Average User Retention Rate on the 7 th day of the Download	Average User Retention Rate on the 30 th day of the Download	Number of Active Users in Feb 2018	Has user survey been conduct- ed
1.	Education Bureau (Assessment and HKEAA Section)	說話加油站 (Chinese name only)	Teachers and students	Regular	iOS and Android	Developed by contractor	Developed with the related website. As it is not a stand-alone project, no separate breakdown of the expenditure is available.	Maintained with the related website. As it is not a stand-alone project, no separate breakdown of the expenditure is available.	Included in the recurrent expenditure	Project start date: Aug 2016 Official launch date: Sep 2017	3 800	~75%	~66%	380	Yes
2.	Tourism Commission	A Symphony of Lights	Public	Regular	iOS and Android	Developed by contractor	\$537,000	\$42,000	Nil	Project start date: Aug 2016 Official launch date: Sep 2017	4 000	~40%	~26%	The Commission was unable to provide the information	No
3.	Water Supplies Department	WSD GA Product Directory	Public	Regular	iOS and Android	Developed by contractor	\$175,000	First year maintenance cost is included in the development cost of the mobile app.	Nil	Project start date: Aug 2016 Official launch date: Sep 2017	4 900	The department was unable to provide the information	The department was unable to provide the information	300	Yes
4.	Education Bureau (Personal, Social and Humanities Education Section)	History Trip Go Easy: Cheung Chau Jiao Festival	Mainly secondary school teachers and junior secondary students	Regular	iOS and Android	Developed by contractor	Developed as a part of the e-book and e-portal project. As it is not a stand-alone project, no separate breakdown of the expenditure is available.	Maintained as a part of the e-book and e-portal project. As it is not a stand-alone project, no separate breakdown of the expenditure is available.	Nil	Project start date: Dec 2015 Official launch date: Nov 2017	5 200	~70%	~60%	2 300	Yes
5.	Hongkong Post	HKPost-	Public	Regular	iOS and	Developed by	\$150,000	Maintained by	Nil	Project start	11 000	The	The	The	No

No.	B/D	Name	Target	Regular/ One-off Projects	Applicable Platform (e.g. iOS/ Android)	Mode of Development (by internal development or contractors engaged by tender)	(Approximate) Development Cost	(Approximate) System Maintenance Cost	(Approximate) Promotion Expenditure	Start Date, Official Launch Date of the Project	Total Number of Downloads as of 28 Feb 2018	Average User Retention Rate on the 7 th day of the Download	Average User Retention Rate on the 30 th day of the Download	Number of Active Users in Feb 2018	Has user survey been conduct- ed
		Stamps			Android	contractor		deploying internal resources. No additional expenditure is involved.		date: Jul 2016 Official launch date: Apr 2017		department was unable to provide the information	department was unable to provide the information	department was unable to provide the information	
6.	Education Bureau (Kindergarten Administration Section)	Profile of Kindergar- tens and Kindergar- ten-cum- Child Care Centres 2017	Public	Regular	iOS and Android	Developed by contractor	Included in the cost of the whole project on the Profile of Kindergartens. As it is not a stand-alone project, no separate breakdown of the expenditure is available.	Included in the cost of the whole project on the Profile of Kindergartens. As it is not a stand-alone project, no separate breakdown of the expenditure is available.	Nil	Project start date: Jan 2017 Official launch date: Oct 2017	27 000	The bureau was unable to provide the information	The bureau was unable to provide the information	7 400	No

Information of mobile apps to be launched by B/Ds in 2018-19 (in descending order of estimated development cost)

No.	B/D	Name	Content and Purpose	Platform (e.g. iOS/ Android)	Mode of Development (by internal development or contractors engaged by tender)	Estimated Development Cost	Estimated System Maintenance Cost	Estimated Promotion Expenditure	Expected Launch Date
1.	Marine Department	eSeaGo	For local ship users to download and make use of professional and accurate off-line electronic navigational chart for enhancing navigation safety and marine services.	iOS and Android	Developed by contractor	\$600,000	Around \$173,000 per annum	Nil	Aug 2018
2.	InvestHK	InvestHK	A platform for providing latest investment news and case studies.	iOS and Android	Developed by contractor	\$580,000	Around \$300,000 per annum	Nil	May 2018
3.	Transport Department	Hong Kong eMobility	To integrate various existing transport mobile apps into an “all in one” platform to facilitate one stop search for walking, driving, public transport and real-time traffic information by the public.	iOS and Android	Developed by contractor	\$460,000	Around \$100,000 per annum	Nil	Mid-2018
4.	Food and Environmental Hygiene Department	Internet Memorial Service Mobile App	To facilitate the public in paying tribute to their beloved ones who have passed away with mobile devices, provide information on after-death arrangements and promote green burial.	iOS and Android	Developed by contractor	\$300,000	To be maintained internally. No additional expenditure will be involved.	Promotion for the mobile app will be included in the green burial promotion. No separate breakdown of the expenditure is available.	First half of 2018
5.	Leisure and Cultural Services Department	Museum Multi-media Information Guide system (MMGS)	To allow visitors to obtain multi-media information of exhibits and enjoy personalised guided tours in the Hong Kong Science Museum and Hong Kong Space Museum with indoor positioning function.	iOS and Android	Developed by contractor	This mobile app is a part of the project of MMGS. As it is not a stand-alone project, no separate breakdown of the expenditure is available.	Included in the system maintenance cost of MMGS. No separate breakdown of the expenditure is available.	To be confirmed	First half of 2018

Information of mobile apps that have already been withdrawn by B/Ds in 2017-18

No.	B/D	Name	Last Recorded Total Number of Downloads	(Approximate) Development Cost	(Approximate) System Maintenance Cost
1.	Civil Engineering and Development Department	Greener Slopes Better Cityscape	210	Developed and maintained internally. No additional expenditure is involved.	Maintained by deploying internal resources. No additional expenditure is involved.
2.	Education Bureau (Further Education Division)	Concourse for Self-financing Post-secondary Education	21 000	\$275,000	\$76,000
3.	Education Bureau (Information Technology in Education Section)	Eye Care for Hong Kong Students	4 400	Included in the cost of other outsourcing services. As it is not a stand-alone project, no separate breakdown of the expenditure is available.	Maintained by deploying internal resources. No additional expenditure is involved.
4.	Education Bureau (Kindergarten Administration Section)	Profile of Kindergartens and Kindergarten-cum-Child Care Centres 2016	24 000	Included in the cost of the whole project on the Profile of Kindergartens. As it is not a stand-alone project, no separate breakdown of the expenditure is available.	Maintained by deploying internal resources. No additional expenditure is involved.
5.	Education Bureau (Language Fund)	Workplace English Tic-Tac-Toe	24 000	\$606,000 (Including first year maintenance cost, 1-year extension of maintenance cost and promotion expenditure)	Included in the development cost.
6.	Education Bureau (Speech and Hearing Services Section)	Hearing-Impaired Students' Lexicon Learning	3 400	Included in the production cost of the resource package on 'Hearing Impaired Students' Lexicon Learning. As it is not a stand-alone project, no separate breakdown of the expenditure is available.	Maintained by deploying internal resources. No additional expenditure is involved.
7.	Development Bureau (In collaboration with Construction Industry Council)	Working at Height Training	3 100	\$160,000	Maintained by deploying internal resources. No additional expenditure is involved.
8.	Efficiency Unit	SIE Fund	6 700	\$300,000	\$40,000
9.	Environmental Protection Department	Don't Fly-Tip	7 100	\$197,000 (Including maintenance cost for the first year)	\$14,000
10.	Financial Secretary's Office (Economic Analysis and Business Facilitation Unit)	Business Consultation e-Platform mobile application	4 900	\$248,000	Maintained by deploying internal resources. No additional expenditure is involved.
11.	Sham Shui Po District Office, Home Affairs Department	Chocolate Rain	4 000	\$60,000	Included in the development cost.
12.	Home Affairs Department	Pilot Scheme on Enhancement of District Administration Through District Management Committees in Yuen Long	1 200	\$59,000	Maintained by deploying internal resources. No additional expenditure is involved.
13.	Hongkong Post	ARstampsGOrevitalised	900	\$108,000	Maintained by deploying internal resources. No additional expenditure is involved.

No.	B/D	Name	Last Recorded Total Number of Downloads	(Approximate) Development Cost	(Approximate) System Maintenance Cost
14.	Independent Commission Against Corruption	ICAC Corruption Fighters	2 000	Included in development cost of the ICAC Smartphone App. As it is not a stand-alone project, no separate breakdown of the expenditure is available.	Maintained by deploying internal resources. No additional expenditure is involved.
15.	Independent Commission Against Corruption	ICAC eBooks Tablet App	700	\$212,000	Maintained by deploying internal resources. No additional expenditure is involved.
16.	Information Services Department	“Hong Kong Yearbook 2014”	1 300	\$126,000	Maintained by deploying internal resources. No additional expenditure is involved.
17.	Information Services Department	Government Bookstore	15 000	\$651,000	Maintained by deploying internal resources. No additional expenditure is involved.
18.	Office of the Government Chief Information Officer	e-Auth	3 600	Developed and maintained internally. No additional expenditure is involved.	Maintained by deploying internal resources. No additional expenditure is involved.
19.	Radio Television Hong Kong	RTHK Cube	55 000	\$174,000	Maintained by deploying internal resources. No additional expenditure is involved.
20.	Radio Television Hong Kong	RTHK LENS	6 100	Developed and maintained internally. No additional expenditure is involved.	Maintained by deploying internal resources. No additional expenditure is involved.

Information of mobile apps considered to be ceased by B/Ds in 2018-19 (including those that may be replaced by other related mobile apps)

No.	B/D	Name
1.	Civil Engineering and Development Department	HK Landslides
2.	Efficiency Office	1823 Online mobile app
3.	Hong Kong Observatory	iCWeatherOS
4.	Hongkong Post	HKPostStamps
5.	Leisure and Cultural Services Department	Bruce Lee: Kung Fu • Art • Life
6.	Office of the Government Chief Information Officer	HK GovWiFi
7.	Transport Department	eTraffic News
8.	Transport Department	Hong Kong eRouting
9.	Transport Department	Hong Kong eTransport

- End -

CONTROLLING OFFICER'S REPLY

ITB221

(Question Serial No. 2295)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (3) IT in the Community

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the development of information technology (IT) human capital, will the Government advise on the following:

- (1) How did the Government follow up the development of a unified framework for professional qualification recognition to enhance the recognition and status of IT practitioners? If not, what are the reasons?
- (2) What are the related activities of the "IT – You Study, We Hire!" Campaign, the numbers of students participating in innovation camps and technology camps, expenditures of the activities and the estimated expenditure for 2018-19?
- (3) What is the number of eligible ICT-related courses registered under the Continuing Education Fund? What is the number of applications for subsidy for studying ICT-related courses in 2017-18?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 25)

Reply:

The requested information is as follows:

- (1) The Task Force on Information and Communications Technology (ICT) Professional Development and Recognition had published a report on establishing a unified framework for professional recognition. Given the society had not yet reached any general consensus, it would be difficult to proceed with a unified framework.

The Government will continue to enhance the recognition and status of information technology (IT) practitioners through different measures, including:

- (a) financial support for ICT professional development initiatives through various funding schemes;
- (b) encouraging and providing financial support for government IT staff to undertake relevant professional qualification programmes;
- (c) collaborating with stakeholders through the Industry Training Advisory Committee of the ICT industry to develop Specification of Competency Standards (SCSs) for the ICT industry under the Qualifications Framework. The SCSs for “Software Products and Software Services”, “Communications and Information Services”, “Operation and Support” and “Digital Media Technology” have been developed; and
- (d) encouraging qualifications awarding bodies to continue exploring cross recognition of professional qualification schemes with other jurisdictions.

(2) Under the “IT – You Study, We Hire!” Campaign, a number of promotion videos by Chief Executive Officers (CEO) and Chief Information Officers (CIO) from large corporations and young IT practitioners were released from March to July 2017 on social media and government websites, in which they shared their views on the development opportunities in the IT industry. In addition, the “IT Career Role Models Platform” was launched under the campaign in November 2017 to provide students with information on IT positions and career prospects in different industries, thereby encouraging them to work in different professional areas in the IT industry. In 2018-19, the Office of the Government Chief Information Officer will continue to support the operation of the “IT Career Role Models Platform” through deployment of internal resources.

(3) According to the information provided by the Labour and Welfare Bureau, Continuing Education Fund (CEF) courses include courses under 8 specified domains (i.e. Business Services, Financial Services, Logistics, Tourism, Creative Industries, Design, Languages, and Interpersonal and Intrapersonal Skills for the Workplace) as well as the SCS-based courses under the Qualifications Framework. Currently, a total of 11 SCS-based courses of “Information and Communications Technology (ICT)” are on the list of CEF reimbursable courses. In 2017-18, no applications for reimbursement claims for these courses are received by CEF.

A number of CEF courses under the 8 specified domains contained content and elements of ICT. The Government however does not have the relevant statistics.

- End -

CONTROLLING OFFICER'S REPLY**ITB222****(Question Serial No. 2297)**

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (3) IT in the Community

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the release of public data on “data.gov.hk”, please advise on the following:

- (1) As at 28 February 2018, the top 10 datasets with the highest numbers of downloads and the top 10 keywords with the highest numbers of searches;
- (2) As at 28 February 2018, the data-providing organisations, numbers of datasets and numbers of application program interfaces (APIs);

Data-providing Organisation	Number of Datasets (in descending order)	Number of APIs (in descending order)

- (3) As at 28 February 2018, the distribution of dataset formats;

	Number of Datasets (in descending order)	Percentage against the Total Number
XML/JSON/CSV		
XLS/XLSX		
PDF		
GIF/JPG/TIF/PNG		
RSS		

HTML		
Others		

- (4) As at 28 February 2018, the numbers of APIs and geospatial data;

Category of data	Number of APIs	Resources containing geospatial data	Number of resources providing historical information

- (5) What are the new datasets, numbers of APIs and resources containing geospatial data planned to be released in 2018-19?
- (6) What are the details and expenditure (of training/seminars) organised by OGCIO in 2017-18 to brief government departments on the policy of releasing public sector information in digital formats and the detailed technical arrangements for data management?

Government Department	Theme of Events	Number of Training/Seminars	Number of Participants

- (7) What are the work plan, timetable and manpower for starting the provision of thematic data with the health, transport and education sectors from 2018?
- (8) What are the expenditure and the names of the contractors for enhancing the “data.gov.hk” portal? What is the number of applications designed by users with the datasets?
- (9) Is there any plan to promote the use of open data to the public and encourage public and private organisations to open up more data to facilitate smart city innovation in 2018-19? If yes, what are the expenditure and manpower required?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 27)

Reply:

The required information is provided as follows:

- (1) In 2017-18 (as of 28 February 2018), the top 10 datasets with the highest numbers of downloads (in descending order) on the “data.gov.hk” portal are as follows:
1. Traffic snapshot images
 2. Current weather report
 3. Weather warning summary
 4. Local weather forecast
 5. Journey time indicators
 6. Conversion data between HK 1980 Grid Coordinates and WGS84 Coordinates (Latitude and Longitude)
 7. 9-day weather forecast
 8. Weather warning information
 9. Traffic speed map
 10. Speed map panels

In 2017-18 (as of 28 February 2018), the top 10 keywords with the highest numbers of searches (in descending order) on the “data.gov.hk” portal are as follows:

1. air quality
2. address
3. traffic
4. mtr
5. bus
6. weather
7. gdp
8. parking
9. map
10. api

- (2) In 2017-18 (as of 28 February 2018), the numbers of datasets and application programming interfaces (APIs) released on the “data.gov.hk” portal by government bureaux/departments (B/Ds) or organisations are listed in **Annex A**.
- (3) In 2017-18 (as of 28 February 2018), the distribution of formats of the datasets released on the “data.gov.hk” portal is as follows:

File Format	Number of Datasets (in descending order)^{Note}	Percentage against the Total Number
XLS/XLSX	1 751	54.7%
GIF/JPG/TIF/PNG	803	25.1%
XML/JSON/CSV	504	15.7%
RSS	14	0.4%
Others (e.g. MDB, GML, KML)	130	4.1%
TOTAL	3 202	100%

Note: Datasets in different languages or of different years/months are not counted multiple times.

- (4) In 2017-18 (as of 28 February 2018), the numbers of APIs, datasets with geospatial information and datasets with historical data released on the “data.gov.hk” portal by data category are listed in **Annex B**.
- (5) In 2018-19, B/Ds will continue to release more data in the most suitable formats and ways (such as through APIs) for free use by the public. The related work is on-going in nature.
- (6) In 2017-18, the Office of the Government Chief Information Officer (OGCIO) organised about 50 training sessions and seminars to help B/Ds enrich their knowledge and techniques on open data, data application and big data. There were about 730 participants from various B/Ds, involving a training cost of around \$570,000. The work was carried out by the existing manpower of OGCIO and no additional resources were involved.
- (7) Since January 2018, around 100 additional datasets under the category of “Health”, “Transport” and “Education” were released on the “data.gov.hk” portal, including:
- (a) Data on a variety of major diseases, statistics on healthcare, and information on the distribution of its clinics and centres provided by the Department of Health;
 - (b) Government expenditure on domestic health provided by the Food and Health Bureau;
 - (c) Service throughput of public hospitals and clinics, inpatient figures and statistics on cancer provided by the Hospital Authority;
 - (d) Intelligent Road Network data opened up by the Transport Department; and
 - (e) Data on a variety of statistics related to education, institution facilities and courses opened up by the Education Bureau and related departments.

OGCIO will continue to promote and support B/Ds to open up more data in a timely manner. The work was carried out by the existing manpower of OGCIO and no additional resources were involved.

- (8) The total expenditure of enhancing the “data.gov.hk” portal is about \$9.2 million, which is funded under the Capital Works Reserve Fund Head 710. HK Systems Limited was responsible for website design, and Arcotect Limited was responsible for security risk assessment and audit. At present, over 70 mobile applications use the open data on the “data.gov.hk” portal to deliver innovative and useful applications and services. For example, various mobile applications have been developed using the traffic snapshot images to provide real-time traffic conditions that enable drivers to plan their route.
- (9) OGCIO will continue to encourage the industry to use the open data of the Government through various ways, such as supporting organisations (such as the Hong Kong Science and Technology Parks Corporation) to hold hackathons of various themes, developing innovative solutions and promoting industry development. Besides, the Government will continue to explain to public and private organisations the value of opening up their data that would be beneficial to their organisations and

businesses, and to actively encourage them to support the Government's open data policy.

To effectively carry out and expedite the work on open data and data analytics, we obtained the approval of the Finance Committee of the Legislative Council in February 2018 to create 1 post of Chief Systems Manager (D1) in OGCIO, who will be supported by 9 non-directorate posts and responsible for advocating and supporting B/Ds to open up data and make use of big data analytics. The annual staff cost is about \$7 million.

Numbers of datasets & APIs released on the “data.gov.hk” portal by B/Ds or organisations in 2017-18 (as of 28 February 2018)

B/D or Organisation	Number of Datasets^{Note} (in descending order)	Number of APIs
Census and Statistics Department	1 526	460
Transport Department	391	19
Architectural Services Department	370	0
Department of Health	181	145
Registration and Electoral Office	81	55
Lands Department	61	103
Buildings Department	50	44
Leisure and Cultural Services Department	50	2
Insurance Authority	50	63
Hospital Authority	40	0
Rating and Valuation Department	30	24
Office of the Government Chief Information Officer	29	40
Planning Department	29	0
Electrical and Mechanical Services Department	27	26
Office of the Communications Authority	27	25
Companies Registry	21	36
Marine Department	21	0
Education Bureau	19	5
Inland Revenue Department	13	4
Food and Environmental Hygiene Department	13	1
Correctional Services Department	12	15
Government Property Agency	11	21
MTR Corporation Limited	11	11
Working Family and Student Financial Assistance Agency	11	3
Social Welfare Department	11	0

B/D or Organisation	Number of Datasets^{Note} (in descending order)	Number of APIs
Intellectual Property Department	10	10
Hong Kong Police Force	10	3
Environmental Protection Department	8	3
Food and Health Bureau	8	0
Agriculture, Fisheries and Conservation Department	7	5
Hong Kong Observatory	7	0
Official Receiver's Office	6	9
Customs and Excise Department	5	0
Radio Television Hong Kong	5	0
Land Registry	4	27
Development Bureau	4	4
Hong Kong Housing Authority	4	0
The Hong Kong Society for Rehabilitation	4	0
Government Laboratory	3	12
The Hongkong Electric Company, Limited	3	5
University Grants Committee Secretariat	3	5
Civil Aviation Department	3	3
Trade and Industry Department	3	3
Civil Engineering and Development Department	3	2
Innovation and Technology Commission	3	0
Hong Kong Tramways, Limited	2	6
Efficiency Unit	2	0
Financial Services and the Treasury Bureau	2	0
The Treasury	2	0
CLP Power Hong Kong Limited	1	2
Centaline Property Agency Limited	1	1
Office for Film, Newspaper and Article Administration	1	1
Financial Secretary's Office	1	0
Government Logistics	1	0

B/D or Organisation	Number of Datasets^{Note} (in descending order)	Number of APIs
Department		
Information Services Department	1	0
TOTAL	3 202	1 203

Note: Datasets in different languages or of different years/months are not counted multiple times

**Numbers of APIs, datasets with geospatial information & datasets with historical data
released on the “data.gov.hk” portal by data category
in 2017-18 (as of 28 February 2018)**

Data Category	Number of APIs	Number of Datasets with Geospatial Information	Number of Datasets with Historical Data
City Management	0	0	5
Climate and Weather	0	0	7
Commerce and Industry	49	0	94
Development	119	79	471
Education	13	0	33
Employment and Labour	0	0	30
Environment	8	1	19
Finance	133	0	166
Food	2	1	14
Health	146	6	228
Housing	82	0	69
IT and Broadcasting	49	0	53
Law and Security	18	0	25
Population	460	16	16
Recreation and Culture	4	0	50
Social Welfare	2	0	13
Transport	49	4	440
Miscellaneous	69	0	87
TOTAL	1 203	107	1 820

- End -

CONTROLLING OFFICER'S REPLY**ITB223****(Question Serial No. 2299)**

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (3) IT in the Community

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned in Programme (3) that the Government will continue to implement the Internet Learning Support Programme (ILSP) until it ends. Please advise on the following:

- (a) What are the percentages of eligible families served by ILSP against the overall percentage in 2017/18? What is the promotion expenditure involved?
- (b) Please list out in the table below the numbers of ILSP beneficiaries and the related information in each of the past 3 years:

	No. of Subsidised Families	No. of Subsidised Secondary School Students	No. of Subsidised Primary School Students	No. of Recipients of On-site Computer Repair Services	No. of Participants in Internet Access Discount Programmes	No. of Computers Purchased through ILSP
2017/18						
2016/17						
2015/16						

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 29)

Reply:

The requested information is as follows:

- (a) In 2017-18, about 165 000 families were eligible for the "Internet Learning Support Programme" (ILSP). As at January 2018, about 23 100 families (14%) have used the services under ILSP. The expenditure for promoting ILSP in 2017-18 is around \$660,000.

- (b) The respective numbers of ILSP beneficiaries in each of the past 3 years are as follows:

Year	No. of families served	No. of secondary school students served	No. of primary school students served	No. of on-site technical support services consumed Note	No. of Internet package sale services consumed	No. of computer equipment sale services consumed
2017-18 (as at January 2018)	23 144	6 389	17 466	12 846	5 581	865
2016-17	23 209	6 259	17 789	15 671	4 421	990
2015-16	23 740	7 416	16 494	14 492	4 209	1 235

Note:

On-site services include computer check-up, installation of free anti-virus software, and assistance in replacement of computer peripherals, etc., but not computer repair services.

- End -

CONTROLLING OFFICER'S REPLY

ITB224

(Question Serial No. 5767)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (1) Use of IT in Government

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the new government data centre (complex) and the central IT infrastructure facilities, please advise on the following:

- (1) The expenditure for operating government data centres and the expenditure for renting private data centres or procuring data centre hosting services by government bureaux and departments (B/Ds)

	Expenditure for operating government data centres	Expenditure for renting private data centres or procuring data centre hosting services by B/Ds
2016-17		
2017-18		
2018-19 (Estimate)		

- (2) What is the expenditure of the pre-construction consultancy work for the government data centre complex, the estimated construction cost, and the plan for 2018-19?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 157)

Reply:

The required information is provided as follows:

- (1) The expenditure for operating government data centres and the expenditure for renting private data centres or procuring data centre hosting services by government bureaux and departments (B/Ds) are as follows:

	Expenditure for operating government data centres	Expenditure for renting private data centres or procuring data centre hosting services by B/Ds
2016-17	\$217 million	\$112 million
2017-18	\$212 million	\$116 million
2018-19 (Estimate)	\$224 million	\$102 million

- (2) The expenditure of the pre-construction consultancy services for the government data centre complex (the Complex) is \$52.6 million, and the funding was approved by the Finance Committee (FC) of the Legislative Council (LegCo) in June 2015. We are conducting cost estimation for the construction works of the Complex, and plan to consult the LegCo Panel on Information Technology and Broadcasting in the first half of 2018 and then seek funding approval from FC. Subject to the approval of funding, the construction works will commence immediately.

- End -

CONTROLLING OFFICER'S REPLY

(Question Serial No. 5768)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (1) Use of IT in Government

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the implementation of the initiatives on “enhancing the Government’s cyber security capability to address new security risks” stated in the Smart City Blueprint, please advise on the following:

- (1) The number of cyber attacks (web defacement, intrusion of networking and information systems, distributed denial of service (DDoS) attacks, ransomware and data leakage) targeting government networks and websites in 2017-18, broken down by department and type of security incidents in tabular form;
- (2) The expenditure of government bureaux and departments (B/Ds) for security risk assessments and audits in 2017-18, and the percentage against their annual information technology (IT) expenditure;
- (3) Have information security risk assessments and checks been performed for websites, applications and mobile applications developed by B/Ds in 2018-19? What are the details and expenditure involved?
- (4) What are the estimated expenditure for the study and review on the government IT security policy, as well as the work, manpower and expenditure involved in 2018-19?
- (5) What are the B/Ds with IT security compliance monitoring and audits planned to be conducted in 2018-19?
- (6) What are the dates, details, training departments, targets and numbers of participants of the security awareness seminars and training planned to be organised in 2018-19?
- (7) What are the numbers of government IT staff who have obtained the professional qualifications or taken professional courses on information security? What is the

estimated expenditure of the Government for training more information security professionals?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 158)

Reply:

The required information is provided as follows:

(1) In 2017-18 (up to February 2018), the Office of the Government Chief Information Officer received a total of 5 information security incident reports of attacks against or intrusion into government networks, including 3 cases of ransomware infection, 1 case of Denial-of-Service (DoS) attack and 1 case of intrusion into computer systems. Five departments were involved.

(2) Government bureaux and departments (B/Ds) will conduct security risk assessments before launching new information systems or large-scale upgrade of the existing systems. They also perform regular security audits on information systems to ensure compliance with IT security policies and adoption of effective security measures. The expenditure of such work is generally included in the development and maintenance costs of the relevant information systems, and there is no separate breakdown for the expenditure.

Besides, B/Ds will conduct comprehensive information security risk assessments and audits around once every 2 years. In 2017-18 (up to February 2018), the estimated total expenditure on security risk assessments and audits was about \$14.07 million, accounting for about 0.2% of the estimated total annual IT expenditure.

(3) B/Ds are required to conduct information security risk assessments in the development of new websites, application systems and mobile applications. The related work is generally included in the development plans and estimated expenditure of the relevant information systems, and there is no separate breakdown for the expenditure.

(4) We will launch a new round of study and review on the government IT security policy at the end of 2018, and the estimated expenditure is \$3.5 million.

(5) The Government has carried out a new round of compliance audits since December 2016 and has conducted information security compliance monitoring and audits for about 30 B/Ds in 2017-18. In 2018-19, we plan to continue the compliance audits for the remaining some 50 B/Ds to assess their compliance status.

(6) In 2018-19, we will continue to arrange different seminars and training related to information security, including refresher courses on information security management and response for departmental IT security officers and information security incident response teams of all B/Ds, thematic seminars and professional training on cyber security for information security management and professional officers, as well as information security awareness training for staff of B/Ds. The estimated number of participants of these seminars and training is about 2 000.

(7) One hundred and sixty government IT staff have obtained information security professional qualifications, including 57 Certified Information System Auditors (CISA), 9 Certified Information Security Managers (CISM), and 81 Certified Information System Security Professionals (CISSP). In 2017-18, the Government organised a number of seminars, training sessions and solution showcases for government IT staff. The number of participants was around 2 000 and the expenditure was around \$0.52 million. The estimated expenditure in 2018-19 is similar to that of 2017-18.

- End -

CONTROLLING OFFICER'S REPLY

ITB226

(Question Serial No. 5769)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (1) Use of IT in Government

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the enhancement of e-government services, please advise on the following:

- (1) The total number of web page visits and the content most viewed (top 10) of the GovHK portal in 2017-18;
- (2) The number of government mobile apps and number of MyGovHK accounts in 2017-18;
- (3) The expenditure for revamping the website of the Office of the Government Chief Information Officer (OGCIO) in 2017-18;
- (4) OGCIO stated last year that it was studying with relevant departments on mobile payment technology which supports e-wallet and aimed to work out relevant technology options within 2017 for departments' consideration of adoption having regard to their business needs. Please advise on the details of the related work in 2017-18. Is there any plan in 2018-19 to introduce more mobile payment modes into e-government services which are commonly used by the public? If yes, what are the details and expenditure involved?
- (5) What is the amount of expenditure earmarked for the User Experience Research and Usability Test on electronic public services, government web pages or mobile apps in 2018-19?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 159)

Reply:

The required information is provided as follows:

- (1) In 2017-18 (as of end-February), the total number of web page visits to the GovHK portal and the content most viewed (top 10) are as follows:

Total number of web page visits	63.04 million
Content most viewed (top 10)	<ol style="list-style-type: none"> 1. Taxes & Duties: eTAX 2. Immigration Services: HKSAR Travel Documents 3. Immigration Services: Identity Cards and Right of Abode 4. Taxes & Duties: Tax Computation of Salaries Tax & Personal Assessment 5. Immigration Services: Services for Non-permanent Residents 6. Transport & Motoring: Driving Licences & Tests 7. Employment: Looking for a Job 8. Taxes & Duties: Tax Return Filing, Enquiry & Payment 9. Transport & Motoring: Vehicle Registration & Examination 10. Immigration Services: Births, Deaths and Marriage Registration

- (2) In 2017-18 (as of end-February), the number of government mobile apps is 106, and the number of MyGovHK accounts is over 460 000.
- (3) In 2017-18, the expenditure for revamping the website of the Office of the Government Chief Information Officer (OGCIO) is \$2.534 million.
- (4) In the third quarter of 2017, OGCIO introduced a technical solution supporting mobile payment of credit card using digital wallets, namely Apple Pay and Android Pay, for adoption by government departments according to their own business needs. The mobile application “My Library” of the Leisure and Cultural Services Department launched its digital wallet mobile payment function in January 2018, which is the first e-government service adopting this technical solution. OGCIO will continue to monitor the adoption and the development of various electronic and mobile payment services available in the market, and work with relevant departments to explore the feasibility of introducing other mobile payment technologies.
- (5) The revamped GovHK portal with responsive web design has been well received by the public since its launch. An online survey and focus group meetings will be conducted in 2018 to ensure that our services meet the needs of the public, with user experience research and usability test to be conducted for continuous improvement of the services of GovHK. The cost required is around \$0.6 million and the workload involved will be absorbed by the existing resources and manpower of OGCIO.

- End -

CONTROLLING OFFICER'S REPLY

ITB227

(Question Serial No. 5771)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (1) Use of IT in Government

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

- (1) The expenditure on procuring business software licences and related services by government bureaux and departments (B/Ds) for the implementation of computer projects under the Capital Works Reserve Fund Head 710 – Computerisation:

	2016-17	2017-18	2018-19 (Estimate)
Expenditure on procuring business software licences and related services			
Percentage of the expenditure against IT expenditure for the year			
Increase			

- (2) The number of B/Ds that have adopted open source software to implement various kinds of work:

	2016-17	2017-18	2018-19 (Estimate)
Server software / desktop software			
Office software			
Departmental portals			
Government mobile applications			

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 161)

Reply:

The required information is provided as follows:

- (1) The expenditure on procuring business software licences and related services by government bureaux and departments (B/Ds) for the implementation of computer projects under the Capital Works Reserve Fund Head 710 – Computerisation is tabulated as follows:

	2016-17	2017-18	2018-19 (Estimate)
Expenditure on procuring business software licences and related services	\$246 million	\$277 million	\$338 million
Percentage of the expenditure against IT expenditure for the year	13.5%	13.9%	13.4%
Increase	-	\$31 million (12.6%)	\$61 million (22%)

- (2) The number of B/Ds that has adopted open source software to carry out various kinds of work is as follows:

	2016-17	2017-18	2018-19 (Estimate)
Server software/ desktop software	75	72	B/Ds will select the required software according to their business and operational needs.
Office software	33	40	
Departmental portals	27	32	
Government mobile applications	41	38	

- End -

CONTROLLING OFFICER'S REPLY**ITB228****(Question Serial No. 5772)**

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (1) Use of IT in Government

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the work of revamping the government cloud infrastructure platform by 2020 to enable digital government services delivery through collaboration and partnership among government departments, IT service providers and other third party entities, please advise on the following:

- (1) Please list out in tabular form the departments that have implemented the e-Procurement System to conduct all their low-value purchases, and the departments that have not implemented the e-Procurement System to conduct all their low-value purchases;
- (2) Please provide the details of the Electronic Recordkeeping System (ERKS);

Bureau/ Department (B/D)	The Year Commencing the Use of ERKS	Development and Operating Expenditure (\$)	Number of Users	Number of Records in ERKS (in the First Year of ERKS in Use)	Number of Records in ERKS and the Percentage Change over that of Last Year (in the Second Year of ERKS in Use)	Number of Records in ERKS and the Percentage Change over that of Last Year (in the Third Year of ERKS in Use)

- (3) What are the timetable, specific objectives, estimated expenditure and manpower for taking forward the implementation of ERKS in B/Ds in 2018-19?
- (4) The number of B/Ds that have completed the system upgrade for the confidential email system, and the number of B/Ds that will complete the system upgrade in 2018-19;
- (5) For B/Ds adopting the Government Public Cloud Services (GPCS) in 2017-18, please

list out in the table below the systems adopted as well as the names/titles of companies or services;

B/D	Productivity Applications	Business Applications	Cloud IT Services	Social Media Applications

- (6) What are the details of the service contracts awarded, the service providers, expenditure and timetable for revamping the government cloud infrastructure platform?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 162)

Reply:

The required information is provided as follows:

- (1) The Government is progressively rolling out the full functions of the e-Procurement System to bureaux and departments (B/Ds) so that they can conduct all their low-value purchases through electronic procurement. Details of the current adoption are at **Annex A**.

- (2) Details of the common shared services for the Electronic Recordkeeping System (ERKS) implemented and hosted on government cloud platforms by B/Ds are at **Annex B**.

- (3) The Government commenced the second stage of implementation programme of ERKS at the end of 2015. Among the 6 B/Ds involved, the Administration Wing, the Intellectual Property Department and the Office of the Government Chief Information Officer (OGCIO) have fully rolled out ERKS. The Civil Engineering and Development Department has rolled out ERKS since March 2017, and it is expected that their ERKS will be fully implemented in 2018-19. ERKS will be implemented in the Architectural Services Department and the Marine Department by phases starting from 2018-19. Upon the initial completion of the second stage of the implementation programme of ERKS, the Government will conduct an assessment and review on its effectiveness in order to formulate a long-term development plan for the full implementation of ERKS. Currently, we have not set a timetable for the full implementation of ERKS. The expenditure for the second stage of implementation of ERKS in the B/Ds will be covered by existing resources and there is no separate breakdown of the expenditure.

- (4) As at March 2018, a total of 81 B/Ds have completed the system upgrade of the confidential email system. 5 B/Ds will complete the relevant system upgrade in 2018-19.

- (5) A list of B/Ds adopting the Government Public Cloud Services (GPCS) and the systems and companies or services engaged in 2017-18 (as at end-February 2018) is at **Annex C**.

- (6) The implementation of the next generation government cloud and big data analytics platform will incur a non-recurrent cost of \$533.3 million. Subject to the funding approval of the Finance Committee of the Legislative Council, OGCIO will invite tenders in the second half of 2018, and the new system is expected to be launched in the second quarter of 2020.

B/Ds that have implemented the e-Procurement System to conduct their low-value purchases

Audit Commission, Auxiliary Medical Service, Buildings Department, Census and Statistics Department, Civil Engineering and Development Department, Customs and Excise Department, Drainage Services Department, Environment Bureau, Environmental Protection Department, Financial Services and the Treasury Bureau (Financial Services Branch), Financial Services and the Treasury Bureau (The Treasury Branch), Food and Environmental Hygiene Department, Government Flying Service, Government Logistics Department, Government Property Agency, Hong Kong Observatory, Immigration Department, Independent Commission Against Corruption, Inland Revenue Department, Innovation and Technology Bureau, Intellectual Property Department, Invest Hong Kong, Joint Secretariat for the Advisory Bodies on Civil Service and Judicial Salaries and Conditions of Service, Lands Department, Office of the Government Chief Information Officer, Official Receiver's Office, Trade and Industry Department, The Treasury, Working Family and Student Financial Assistance Agency (Student Finance Office), Working Family and Student Financial Assistance Agency (Working Family Allowance Office)

Details of the common shared services for ERKS implemented and hosted on government cloud platform

B/D	The Year Commencing the Use of ERKS	Development and Operating Expenditure (\$)	Number of Users	Number of Records in ERKS (in the First Year of ERKS in Use)	Number of Records in ERKS and the Percentage Change over that of Last Year (in the Second Year of ERKS in Use)	Number of Records in ERKS and the Percentage Change over that of Last Year (in the Third Year of ERKS in Use)
Government Records Service	2014	Development cost: \$11.8M Annual operating expenditure: \$0.94M	130	119 000 (as at May 2015)	311 000 (as at May 2016), increased by 161% over the same period last year (Note 1)	489 000 (as at May 2017), increased by 57% over the same period last year (Note 1)
Intellectual Property Department	2016	Development cost: \$14.9M Annual operating expenditure: \$2.7M (Note 2)	200	10 000 (as at February 2017)	26 521 (as at February 2018), increased by 165% over the same period last year	
Office of the Government Chief Information Officer	2016		1 000	17 000 (as at February 2017)	116 000 (as at February 2018), increased by 247% over the same period last year if the 57 000 records migrated from pilot ERKS are excluded (Note 3)	
Administration Wing	2016	Development cost: \$5.5M Annual operating expenditure: \$0.93M	160	48 360 (as at February 2018) (Note 4)		

B/D	The Year Commencing the Use of ERKS	Development and Operating Expenditure (\$)	Number of Users	Number of Records in ERKS (in the First Year of ERKS in Use)	Number of Records in ERKS and the Percentage Change over that of Last Year (in the Second Year of ERKS in Use)	Number of Records in ERKS and the Percentage Change over that of Last Year (in the Third Year of ERKS in Use)
Civil Engineering and Development Department	2017	Development cost: \$10.9M Annual operating expenditure: \$3.1M	1 500	(Note 5)		
Architectural Services Department	2018 (planned)	Development cost: \$13.6M Annual operating expenditure: \$2.0M (Note 2)	200	(Note 6)		
Marine Department	2018 (planned)		750	(Note 6)		

Note:

1. Although the percentage increase in the number of records in the ERKS decreased from 161% in the second year to 57% in the third year, the actual annual growth in the number of records in the system remained in the range of 180 000 to 190 000.
2. The implementation and the maintenance and support services for the ERKSs of the two departments are covered under a single contract.
3. The Office of the Government Chief Information Officer developed a pilot ERKS in 2008 for use by some groups of staff. The pilot ERKS ceased operation after the records were migrated to the new ERKS in April 2017.
4. The ERKS was implemented in two phases in the Administration Wing starting from December 2016 and was fully adopted in March 2017.
5. The ERKS was only rolled out to some of the users for the time being. The figures are not yet available.
6. The ERKS has not been rolled out. The figures are not yet available.

B/Ds that have adopted GPCS and the systems and companies or services engaged

Note: The GPCS providers that provide related services are given in parentheses.

B/D	Productivity Applications	Business Applications	Cloud IT Services	Social Media Applications
Buildings Department	-	-	Hosting service (Master Concept (Hong Kong) Limited)	-
Constitutional and Mainland Affairs Bureau	-	Cloud-based email service (Telecommunications and Technology Asia Limited)	-	-
Education Bureau	-	Cloud-based service desk management service (Hong Kong Telecommunications (HKT) Ltd.)	Hosting service (SunnyVision Limited, Master Concept (Hong Kong) Limited, Microware Limited)	-
Food and Health Bureau	-	-	Hosting service (Dimension Data China/Hong Kong Limited)	-
Housing Department	-	-	-	Video hosting service (Master Concept (Hong Kong) Limited)
Hong Kong Observatory	-	Cloud-based email service (Telecommunications and Technology Asia Limited)	-	-
Immigration Department	-	Cloud-based email service (Telecommunications and Technology Asia Limited)	-	-
Invest Hong Kong	-	Cloud-based email service (Telecommunications and Technology Asia Limited)	-	-
Information Services Department	-	-	Hosting service (SunnyVision Limited) Content delivery network service (Masterson Technology Limited)	Webcasting service (SunnyVision Limited)
Labour and Welfare Bureau	-	-	Hosting service (Master Concept (Hong Kong) Limited)	-
Marine Department	-	Cloud-based email service (Master Concept (Hong Kong) Limited)	-	-

B/D	Productivity Applications	Business Applications	Cloud IT Services	Social Media Applications
Office of the Government Chief Information Officer	Instant messaging application service (Continuous Technologies International Limited) Cloud-based office software service (Continuous Technologies International Limited)	-	Hosting service (Master Concept (Hong Kong) Limited, ClusterTech Limited) Content delivery network service (Master Concept (Hong Kong) Limited, ClusterTech Limited, Microware Limited)	-
Planning Department	-	Cloud-based email service (Telecommunications and Technology Asia Limited)	Hosting service (Hong Kong Telecommunications (HKT) Ltd.)	-
Radio Television Hong Kong	-	-	Hosting service (Masterson Technology Limited)	-
Rating and Valuation Department	-	Cloud-based email service (Telecommunications and Technology Asia Limited)	-	-
Transport Department	-	Cloud-based email service (Arcotect Limited)	Hosting service (ClusterTech Limited, SunnyVision Limited, Arcotect Limited)	-

- End -

CONTROLLING OFFICER'S REPLY

ITB229

(Question Serial No. 5773)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (2) IT Infrastructure and Standards

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

With the increase in online data, Hong Kong must provide more sites for data centre use and speed up the construction to support the industries that grow rapidly every year and meet the long-term needs of the market. Regarding the provision of sites for high-tier data centre development, please advise on the following:

What are the progress of the remaining 2 sites reserved for high-tier data centre development in Tseung Kwan O, and the work plan for 2018-19?

What are the policies and planning progress of and the consultancy fees or project costs required for developing data centres in caverns? What is the estimated site area that will be available?

What are the progress of reserving land in new development areas under planning to support data centre development, and the progress of providing more sites for data centre use in industrial estates?

In 2018-19, how will the Government identify and reserve more sites for high-tier data centre development to meet Hong Kong's demand for continuous development of big data and digital economy and to facilitate Hong Kong to be a data centre hub in Asia?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 163)

Reply:

In consultation with the Civil Engineering and Development Department (CEDD) and the Planning Department (PlanD), our reply to the question is as follows:

The Government has reserved 3 sites in Tseung Kwan O with a total area of 3 hectares (ha) for high-tier data centre development. The first site of about 1 ha was disposed in 2013 through open tender, and the data centre concerned has been in operation since last year. It

is expected that the remaining 2 ha of land would be made available for open tender in the latter half of 2018.

According to CEDD, the Government's Cavern Master Plan (CMP) has delineated the locations of strategic cavern areas in the territory with a list of land uses having potential for development in rock caverns. The CMP serves as an effective planning tool to facilitate planning for development of data centres to consider cavern option for housing their facilities. At present, there is at present no planning study specifically on data centres under way.

According to PlanD, land within New Development Areas (NDAs) has been reserved for supporting innovative and high-end technology industries. These include about 11.7 ha and 5.8 ha of land at Kwu Tung North designated as "Business and Technology Park" and "Research and Development" uses respectively, as well as about 10 ha at Hung Shui Kiu designated as "Enterprise and Technology Park". Flexibility has been made in the above land planning for accommodating various innovative and technology uses including data centres.

Regarding Industrial Estates (IE), the Hong Kong Science and Technology Parks Corporation (HKSTPC) has granted more than 19 ha of land within their IE to the Information and Telecommunications Industry for data centre uses. Besides, HKSTPC is developing a Data Technology Hub, which comprises purpose-designed infrastructure for data technology and telecommunications services, with a gross floor area of about 27 000m² on a 0.54 ha site in Tseung Kwan O IE. The project is expected to be completed in 2020.

- End -

CONTROLLING OFFICER'S REPLY

ITB230

(Question Serial No. 5774)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (3) IT in the Community

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the launching of the “Enriched IT Programme in Secondary Schools” to nurture IT professionals for the future development of Hong Kong, please advise on the following:

- (1) The numbers of students, class hours and the average attendance rates of the Enriched IT Classes as at 28 February 2018 in the 2017/18 school year;
- (2) The total number, titles, venues, the numbers of attending students and the expenditure involved for the Enriched IT Activities organised as at 28 February 2018 in the 2017/18 school year;
- (3) The estimated number of partner schools that can arrange internships for Secondary Six Enriched IT Class students during the summer vacation of 2018, the number of interns, as well as the names of information technology companies, details and number of hours of the internship work;
- (4) The total numbers, titles, dates, venues, the numbers of attending students and the expenditure involved for Mainland and overseas exchange activities arranged for Enriched IT Class students in the 2016/17 school year and the 2017/18 school year (as at 28 February 2018);
- (5) Details of the Enriched IT Activities, internships, and Mainland and overseas exchange activities that partner schools plan to provide in the 2018/19 school year.

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 164)

Reply:

The requested information is as follows:

- (1) As at end-February 2018, there were over 900 Enriched IT Class (EITC) students in the 2017/18 school year. The average class hours are 2-3 hours per week, with an average attendance rate of 89.8%.
- (2) The Office of the Government Chief Information Officer (OGCIO) provides funding support to schools for organising Enriched IT Activities. A total of 89 schools will receive funding support for the 2017/18 and 2018/19 school years. Details are available on the programme's thematic portal (https://www.eitp.gov.hk/sites/eitp/files/participating_schools/List_of_Participating_Schools_for_2017-18_Enriched_IT_Activities_Programme_EN.pdf). As relevant activities have not yet been completed, information such as attendance rate and the expenditure involved is not available at the moment.
- (3) Two partner schools will arrange their Secondary Six EITC students to participate in work experience activities during the summer vacation of 2018. Details such as the corresponding number of students, names of companies, content and hours of the work experience activities are yet to be confirmed.
- (4) In the 2016/17 and 2017/18 school years, OGCIO organised visits for EITC students to the Huawei Campus in Longgang District, Shenzhen in January 2017 and the Shenzhen Skyee Artificial Intelligence Institute in Nanshan Park, Shenzhen in January 2018. The numbers of participating students were 55 and 65 respectively. The expenditure involved was about \$30,000. In addition, all 8 partner schools have organised Mainland and overseas exchange programmes for EITC students in the 2016/17 and 2017/18 school years, and the destinations included the United States, Canada, France, Australia and the Mainland.
- (5) The preparation work for the 2018/19 EITC of the 8 partner schools will commence in June 2018. Relevant information is not available at the moment.

- End -

CONTROLLING OFFICER'S REPLY

ITB231

(Question Serial No. 5775)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (3) IT in the Community

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the Wi-Fi Connected City Programme, please advise on the following:

- (1) On the additional Wi-Fi hotspots provided in 2017-18, please list out the providers (government/private organisations/others), venue types, districts, free session time, maximum numbers of sessions and bandwidth;
- (2) The 10 venues with the highest and lowest average numbers of daily usage sessions and daily usage hours connected to Government Wi-Fi (GovWiFi) services and Wi-Fi.HK in 2017-18. What are the average numbers of daily users at these venues?
- (3) What is the number of government venues with the speed of Wi-Fi services enhanced in 2017-18? What is the plan for 2018-19?
- (4) On doubling the number of Wi-Fi.HK hotspots to expand the coverage in 2019, please list out the venues with additional hotspots to be provided in 2018-19 by type of venues, district, location, free trial service time (minute) and expenditure.
- (5) What are the numbers and distribution of districts of the free Wi-Fi hotspots installed in youth service centres and study rooms, and the numbers of usage sessions and hours connected to these hotspots in 2017-18?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 165)

Reply:

The requested information is as follows:

- (1) In 2017-18 (as at February 2018), there was an increase of 2 163 Wi-Fi.HK hotspots under the Wi-Fi Connected City programme. The related providers, venue types, districts, free session time and maximum numbers of sessions are tabulated as follows:

Provider	Number of increased hotspots
Private Companies	1 382
Public Bodies	754
Government	27
Total:	2 163

Venue Type	Number of increased (decreased) hotspots
Banks	718
Study Rooms and Youth Service Centres	614
Stores/Shopping Centres	393
Public Transport	169
Sports, Cultural & Recreational	155
Hospitals and Clinics	96
Hotel/Guesthouse	64
Schools and Learning Centres	62
Government Buildings and Offices	35
Office of Public Bodies	19
Restaurants	10
Entertainment & Leisure	10
Telephone Booths	(7)
Convenience Stores	(65)
Universities and Tertiary Institutions	(110)
Total:	2 163

District	Number of increased (decreased) hotspots
Hong Kong	
Central and Western District	(322) ^[Note]
Eastern District	123
Southern District	491
Wan Chai	85
Kowloon	
Kowloon City	(18)
Yau Tsim Mong	298
Sham Shui Po	139
Wong Tai Sin	114
Kwun Tong	172

District	Number of increased (decreased) hotspots
New Territories	
Tai Po	80
Yuen Long	258
Tuen Mun	109
North District	81
Sai Kung	89
Sha Tin	170
Kwai Tsing	34
Tsuen Wan	68
Islands	192
Total:	2 163

Note: In 2017-18, there was an increase of 123 hotspots in the Central and Western District. However, as some participating organisations have corrected the location information of their hotspots, we have accordingly re-grouped 445 hotspots from the Central and Western District to the Southern District. Hence, even though there was an increase of 123 hotspots in the Central and Western District in 2017-18, the above indicates a negative change.

Daily Free Usage Time	Number of increased hotspots
Unlimited usage	1 707
4 hours (1 hour per session)	101
3 hours (3 hours per session)	315
2 hours (1 hour per session)	19
35 minutes (35 minutes per session)	21
Total:	2 163

Organisations participating in the Wi-Fi.HK scheme must provide bandwidth of 3 Mbps or above.

- (2) In 2017-18 (as at February 2018), the 10 Government Wi-Fi (GovWiFi) venues with the highest average number of daily usage sessions are as follows:

	Venue	Average daily usage sessions	Average daily users
1	Hong Kong Central Library	3 023	1 645
2	Hong Kong-Macau Ferry Terminal (Inner pier passenger departure waiting hall)	1 262	1 124
3	Ping Shan Tin Shui Wai Public Library	1 064	589

	Venue	Average daily usage sessions	Average daily users
4	Tiu Keng Leng Public Library	855	458
5	Tai Po Public Library	849	476
6	China Ferry Terminal	849	738
7	Sha Tin Public Library	819	491
8	Hong Kong Cultural Centre cum Tsim Sha Tsui Promenade	791	605
9	Yuen Long Public Library	773	447
10	Tuen Mun Public Library	761	453

The 10 GovWiFi venues with the highest average number of daily usage hours:

	Venue	Average daily usage hours	Average daily users
1	Hong Kong Central Library	3 923	1 645
2	Ping Shan Tin Shui Wai Public Library	1 776	589
3	Tuen Mun Public Library	1 271	453
4	Yuen Long Public Library	1 243	447
5	Tai Po Public Library	1 178	476
6	Tiu Keng Leng Public Library	1 032	458
7	Tsuen Wan Public Library	1 014	415
8	Hong Kong-Macau Ferry Terminal (Inner pier passenger departure waiting hall)	957	1 124
9	Sha Tin Public Library	935	491
10	Sheung Shui Public Library	881	323

The 10 GovWiFi venues with the lowest average number of daily usage sessions:

	Venue	Average daily usage sessions	Average daily users
1	Oral Health Education Unit	4.4	2.7
2	Clear Water Bay Visitor Centre	4.2	2.9
3	Wang Tau Hom Maternal and Child Health Centre	4.1	2.7
4	Sha Tau Kok Community Hall	3.9	2.3
5	Lantau Link Visitors Centre	3.9	2.4
6	On Ting/Yau Oi Community Centre	3.7	3.2
7	East Kowloon Chest Clinic	3.7	2.7
8	Sam Tung Uk Museum	3.6	1.9
9	Stanley Community Hall	3.2	2.5
10	Tin Wan Market Cooked Food Centre	1.8	1.3

The 10 GovWiFi venues with the lowest average number of daily usage hours:

	Venue	Average daily usage hours	Average daily users
1	Lantau Link Visitors Centre	6.0	2.4
2	Oral Health Education Unit	5.9	2.7
3	East Kowloon Chest Clinic	5.6	2.7
4	On Ting/Yau Oi Community Centre	5.6	3.2
5	Wang Tau Hom Maternal and Child Health Centre	5.5	2.7
6	South Lamma Public Library	5.5	2.8
7	Sam Tung Uk Museum	4.7	1.9
8	Sha Tau Kok Community Hall	4.6	2.3
9	Stanley Community Hall	2.7	2.5
10	Tin Wan Market Cooked Food Centre	1.8	1.3

As for the Wi-Fi.HK hotspots at non-government venues operated by service operators and public and private organisations, we do not have the related data.

- (3) In 2017-18, we upgraded the bandwidth of the GovWiFi service at 70 government venues having regard to the usage at the venues. In 2018-19, the latest Wi-Fi standard, IEEE 802.11ac, will be adopted for the GovWiFi service to reduce signal interference and improve the speed and stability of data transmission. We also request the contractor to use fibre network where feasible to provide faster and more stable Wi-Fi service. On the other hand, we will regularly examine the transmission speed and usage of GovWiFi hotspots to ensure that the quality of the service meets the required level and is cost-effective, and will upgrade the bandwidth at the venues when necessary.
- (4) The estimated expenditure of the Wi-Fi Connected City programme in 2018-19 is about \$67.2 million. The new venues would include stores and shopping centres, tourist attractions, hospitals, government venues (including land boundary control points, public transport interchanges, footbridges, parks, sitting-out areas, promenades, sports venues, cultural and recreation venues, post offices and markets), etc. The participating organisations of the Wi-Fi Connected City programme shall provide at least 30 minutes of free service daily.
- (5) Through Government's subsidy, non-governmental organisations are providing free Wi-Fi service at youth service centres and study rooms. The Wi-Fi service has unlimited usage time during the opening hours of these venues. As at February 2018, 614 hotspots were in service. The distribution of these Wi-Fi hotspots by district is as follows:

District	Number of hotspots
Hong Kong	
Central and Western District	13
Eastern District	58
Southern District	20

District	Number of hotspots
Wan Chai	12
Kowloon	
Kowloon City	30
Yau Tsim Mong	18
Sham Shui Po	27
Wong Tai Sin	61
Kwun Tong	71
New Territories	
Tai Po	39
Yuen Long	25
Tuen Mun	31
North District	33
Sai Kung	24
Sha Tin	55
Kwai Tsing	46
Tsuen Wan	37
Islands	14
Total:	614

- End -

CONTROLLING OFFICER'S REPLY

ITB232

(Question Serial No. 5776)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (3) IT in the Community

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the support for underprivileged groups, please advise on the following:

What are the total numbers of downloads and the amounts of funding for the first and second rounds of digital inclusion mobile apps?

What are the modes of promotion and the expenditure for the digital inclusion mobile apps funded under the third round of the scheme in 2018-19?

Will the effectiveness of the Funding Scheme for Digital Inclusion Mobile Apps be reviewed in 2018-19?

What are the details of the measures to enhance the ICT knowledge of the elderly in ICT outreach and training activities, as well as the expenditure, manpower and targets in 2018-19?

What are the details and expenditure for supporting statutory and public organisations to adopt web accessibility design in their websites and mobile apps in 2017-18? What are the plan and expenditure in 2018-19?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 166)

Reply:

As at end-February 2018, the mobile apps under the first and second rounds of the Funding Scheme for Digital Inclusion Mobile Apps (Funding Scheme) recorded over 129 000 downloads in total. The total amount of funding was about \$3.86 million.

In 2018-19, the Office of the Government Chief Information Officer (OGCIO) and the organisations funded under the third round of the Funding Scheme will continue to organise promotion activities, including promotion through the social media of non-governmental

organisations and the Internet; displaying posters at public housing estates, government premises, special schools and social service organisations of the target groups; distributing leaflets, etc. The expenditure of the above activities will be met by internal deployment within OGCI and there is no separate breakdown of figures.

We will conduct a review to assess the effectiveness of the Funding Scheme with regard to the mode of operation, feedbacks from the funded organisations and app users, as well as the app usage and project achievements. The related work is expected to be completed by mid-2018.

Regarding the ICT outreach and training activities for the elderly, OGCI plans to launch an enhanced programme to enrich ICT knowledge among the elderly through outreach and training activities provided by non-governmental organisations in 2018-19. The new programme contains two components, including reaching out to around 3 000 elderly with limited mobility and lack of ICT knowledge (including elders with dementia) each year to provide them with basic ICT knowledge; and providing more in-depth training to around 2 000 elderly who are younger and more active, and have ICT knowledge each year to facilitate them in adopting digital technology in day-to-day activities. They will also be encouraged to become volunteers in helping other elders to lead a digital life.

The annual operating expenditure of the new programme is about \$9.3 million. In addition to existing manpower, OGCI will create two additional posts, namely one Analyst/Programmer I and one Analyst/Programmer II. The total annual emoluments of the above additional posts is about \$1.2 million.

In support of statutory and public bodies to adopt web accessibility design, OGCI has been promoting the adoption of accessible design in websites and mobile apps in both public and private sectors through various measures. In 2017-18, we published more practical information through the thematic portal (<http://www.webforall.gov.hk>), including “Accessible Mobile Application Templates”, which provides sample codes with essential accessible features and a developer guide, to facilitate different organisations (including statutory and public bodies) to adopt accessible mobile app design.

The Hong Kong Internet Registration Corporation Limited will organise the Web Accessibility Recognition Scheme (the Scheme) in 2018-19 which is open for application to local enterprises and organisations in March 2018. Statutory and public organisations are invited to participate. The Scheme provides participating organisations with free assessment and advisory services to help them understand the relevant technical requirements. Furthermore, we will continue to organise seminars and workshops for different sectors to increase their awareness of accessibility design.

The related work will be handled by the existing manpower and resources of OGCI. No additional expenditure is involved.

- End -

CONTROLLING OFFICER'S REPLY

ITB233

(Question Serial No. 5777)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (3) IT in the Community

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

What are the details, organisations, project titles (nature), targets, dates, expenditure and numbers of participants of the activities and training for promoting cloud computing among small and medium enterprises in 2017-18? What is the plan for 2018-19? (Please list out in tabular form)

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 167)

Reply:

The Office of the Government Chief Information Officer (OGCIO) launched the SME Cloud Promotion Campaign from December 2014 to June 2015 to provide training and organise promotional activities. The Campaign aims to increase SMEs' awareness and adoption of cloud computing solutions and have a better understanding of the benefits of cloud computing and how to choose cloud computing services to enhance operational efficiency and competitiveness. The Campaign provides more than 40 free training courses on cloud adoption for SMEs of different sectors, covering retail, catering, import and export trade, logistics and land transport, sales and marketing, as well as human resources management and accounting, benefiting over 3 800 SME practitioners. The Campaign also organised a competition on cloud computing adoption, granting the "Best SME Cloud Adopters Awards" and "Best SME Cloud Solutions Awards".

OGCIO provides a beginners' portal on cloud computing to provide SMEs with practical information, user guides and best practices with continuous updates. Apart from helping SMEs understand the benefits of using cloud computing, such information assists SMEs in understanding how to select cloud services, and the common issues like security and changing service providers where SMEs should be mindful when adopting cloud services.

According to the Cloud Readiness Index 2016 published by the Asia Cloud Computing Association in March 2016, Hong Kong is regarded as the top city in cloud readiness in the Asia-Pacific region. In addition, according to the Report on the Survey on Information Technology Usage and Penetration in the Business Sector for 2017 published in February

2018 by Census and Statistics Department, over 70% of SMEs used cloud computing services, which shows a notable increase (around 50%) when compared with the same survey conducted in 2015 .

With a higher awareness of cloud computing among SMEs, the work of promoting cloud computing to SMEs has been included as OGCIO's overall support for the industry in 2018-19. There is no breakdown of expenditure.

- End -

CONTROLLING OFFICER'S REPLY**ITB234****(Question Serial No. 5778)**

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (3) IT in the Community

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the organisation of the "International IT Fest" and "Internet Economy Summit", will the Government advise on the following:

- (1) The total expenditure and its breakdown, numbers of participants in the events and numbers of local and international media coverage for the International IT Fest held in 2017;
- (2) Details on funding organisations to stage events by the Government for the International IT Fest held in 2017. Please list out in the table below the details of all events funded by the Government, numbers of funding obtained by the organisations and total amounts of funding (in tabular form):

Year	Title of Activity/Event	Date of Activity/Event	Name of Organiser	Amount of Funding (if it is in form of non-monetary sponsorship, please provide the details)	Percentage of the Funding against the Total Expenditure of the Activity

- (3) What are the total expenditure for organising the Internet Economy Summit 2017, number of participants, amount of sponsorship (if any), revenue and its distribution?
- (4) What are the estimated expenditure for organising the Internet Economy Summit 2018, sponsors, amount of sponsorship, revenue and its distribution?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 168)

Reply:

The requested information is as follows:

(1) The expenditure on the “International IT Fest” organised by the Office of the Government Chief Information Officer (OGCIO) was borne by OGCI O and Cyberport. The event organisers were responsible for the planning and resources required for their individual events. The breakdown of expenditure for the “International IT Fest 2017” is as follows:

	Expenditure (\$'000)
Promotion and Publicity	520
Website Maintenance	480
IT Exploration Tour for Secondary Students	200
Total	1,200

The numbers of participants in the events of the “International IT Fest 2017” are as follows:

	Event	Number of Participants
1	Hong Kong ICT Awards 2017 Awards Presentation Ceremony cum International IT Fest 2017 Opening Ceremony	647
2	ISACA Student Group - Annual Case Competition 2017	66
3	Internet Economy Summit 2017	4 500
4	Global Sources Startup Launchpad	- *
5	Silicon Dragon Hong Kong 2017	300
6	International ICT Expo	31 499
7	Startup Zone at HKTDC Hong Kong Electronics Fair 2017 (Spring Edition)	- *
8	ICT Conference 2017	96
9	Digital Community Club 5.0	- *
10	Hong Kong Computer Society Series: - Girls for Tech - Mobile Payment Security - Fintech Innovation and the regulatory framework - Smart City - Looking into 2020	299
11	STEM in Business	80
12	Inter-School IT Elite Challenge 2017	303
13	Hong Kong Electronics Symposium 2017	241
14	Smart Tech · Smart City – “Building Smart City with Smart Technologies”	150

	Event	Number of Participants
15	“Best .hk Website Awards 2016” Award Presentation Ceremony	100
16	Hong Kong Projection Mapping Festival Joint-School Primary	165
17	Startup Weekend Hong Kong	70
18	Tech Idiots Unite!	25
19	“Build a Secure Cyberspace 2017” Seminar	160
20	Greater China Free and Open Source Software Seminar	43
21	Hong Kong Regional Contest - Underwater Robot Challenge 2017	720
22	Ask Me Anything (AMA): Tech Hero in Hong Kong	207
23	My Most Liked Social Media Voting Competition Award Presentation Ceremony	80
24	Applications of Virtual Reality and Augmented Reality in Hong Kong	28
25	Big Data for Big Impact!	121
26	“Big Data, Artificial Intelligence and Privacy” Seminar	310
27	FinTech Startup Forum	288
28	Cocoon Pitch Night Finals 2017	145
29	Microsoft Imagine Cup 2017 (Final Competition)	50
30	Championing Your Smart Business with IoT as the Catalyst	22
31	Social Media 2017: Big Data/IoT -- Business, Education and Technology	257
32	“iCare is always on its Way” - Digital Entertainment Exhibition & Commendation Ceremony	290
33	IT Exploration Tours for Secondary Students	1 367
	Total Number of Participants	42 629

* Organisers did not keep records of the numbers of participants in the events

Numbers of local and international media coverage on the “International IT Fest 2017” are as follows:

Media Coverage	Item
Local Media	165
Mainland Media	5
International Media	11
Total	181

(2) OGCIO did not provide funding support to any organisations for organising events.

(3) There were 4 500 participants in the three-day “Internet Economy Summit 2017”. The total expenditure was \$9.8 million, which was borne by OGCIO and Cyberport. The

ticketing revenue was \$0.38 million and the total sponsorship was \$0.52 million. The sponsorship and ticketing revenue was fully used to offset the expenditure of the Summit.

(4) The estimated expenditure for the two-day “Internet Economy Summit 2018” is \$6.06 million, which will be borne by OGCIO and Cyberport. Similar to last year, the sponsorship and ticketing revenue will be fully used to offset the expenditure of the Summit. The Summit was held on 12-13 April 2018. The sponsorship and ticketing revenue have not yet been finalised.

- End -

CONTROLLING OFFICER'S REPLY

ITB235

(Question Serial No. 5779)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (3) IT in the Community

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the organisation of the Hong Kong Information and Communications Technology (HKICT) Awards, will the Government advise on the following:

- (1) The total expenditure and its breakdown, numbers of entries of each award, numbers of participants in the activities and numbers of local and international media coverage for the HKICT Awards organised in 2017;
- (2) Details on funding organisations to organise the HKICT Awards by the Government in 2017. Please list out in the table below the details of all awards funded by the Government, numbers of funding obtained by the organisations and total amounts of funding (in descending order):

Year	Title of Award	Name of Organiser	Amount of Funding (in descending order)	Percentage of the Funding against the Total Expenditure of the Activity

- (3) Since the eligibility of winners of some awards has been disputed, what are the plans to enhance the strictness of the assessment of eligibility for the awards in 2018-19?
- (4) Has the Government arranged for the trial use of winning entries of the awards by public organisations or government departments to support the adoption of local innovation and technology, and subsidised winners to go abroad for exchange in order to raise the local standards?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 169)

Reply:

The requested information is as follows:

(1) The total expenditure incurred for organising the HKICT Awards 2017 is \$7.1 million, including \$1.7 million of sponsorship to the Leading Organisers and \$5.4 million for publicity and promotion activities, award presentation ceremony, exhibition of winning entries, etc. The number of participants in the award presentation ceremony is about 650. The HKICT Awards 2017 attracted a total of 267 local and international media reports. The numbers of entries of each award category are tabulated below:

Name of Award	Number of Entries
Best Business Solution Award	53
Best Digital Entertainment Award	101
Best FinTech Award	39
Best ICT Startup Award	147
Best Lifestyle Award	46
Best Mobile Apps Award	45
Best Smart Hong Kong Award	115
Best Student Invention Award	574
Total:	1 120

(2) Details of the sponsorship from the Office of the Government Chief Information Officer (OGCIO) to the Leading Organisers of the HKICT Awards 2017 are as follows:

Title of Award	Name of Organiser	Amount of Funding (\$'000) (in descending order)	Percentage of Funding against the Total Expenditure of the Activity
Best Business Solution Award	Hong Kong Computer Society	222	33%
Best Digital Entertainment Award	Hong Kong Digital Entertainment Association	222	30%
Best FinTech Award	The Hong Kong Institute of Bankers	222	24%
Best Lifestyle Award	Hong Kong Information Technology Federation	222	46%
Best Mobile Apps Award	Hong Kong Wireless Technology Industry Association	222	53%
Best Smart Hong Kong Award	GS1 Hong Kong Limited	222	64%
Best Student Invention Award	Hong Kong New Emerging Technology Education Association	222	45%
Best ICT Startup Award	Hong Kong Business Angel Network	131	58%

Title of Award	Name of Organiser	Amount of Funding (\$'000) (in descending order)	Percentage of Funding against the Total Expenditure of the Activity
	Total	1,685	

(3) Steering Committee and the Standards Assurance Sub-Committee (SASC) of the Hong Kong ICT Awards has recommended measures to enhance the judging criteria and related mechanism which have been put in place in the 2017 and 2018 rounds of the Awards, which mainly include:

- (a) the applicant must disclose disputes arising in any place over the world over intellectual property right about the applicant's entry product or service for the Leading Organiser to consider the eligibility of the application;
- (b) products/prototypes put on crowdfunding platforms will not be accepted as meeting the eligibility requirement that the entries must be launched in the market or in operation;
- (c) after selecting all winning entries, the Leading Organisers must double-check all supporting documents for the entries to ensure their eligibility;
- (d) SASC will arrange its members to sit in the assessment meetings panel for the Best ICT Startup Award and report any anomalies identified; and
- (e) with the exception of entries of students, the submitted product/service must have been available in the market or in live operation for at least 3 months.

(4) The Government will arrange various kinds of exhibitions for the awardees, allowing their winning entries to reach out to different users, including the public sector and government departments. OGCIO will also provide funding support for individual winners to participate in international and regional competitions such as the World Information Technology and Services Alliance (WITSA) Global ICT Excellence Awards and the Asia Pacific ICT Alliance (APICTA) Awards to facilitate the winners to exchange and share their winning entries with participants of other countries.

- End -

CONTROLLING OFFICER'S REPLY**ITB236****(Question Serial No. 5780)**

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (1) Use of IT in Government

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Chatbot can provide information and handle complaints, enabling proper handling of enquiries without manual efforts. It helps reduce service expenditure and enhance experience of e-service users. On facilitating government bureaux and departments to use Chatbot and artificial intelligence (AI) to improve and provide public services, what are the Government's plan, timetable, estimated expenditure and manpower resources for exploring and developing the application of Chatbot and AI in 2018-19?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 170)

Reply:

AI application projects (including Chatbots) to be implemented by the Government in 2018-19 are tabulated as follows:

Project Name / Service Description	Department	Start Date (Tentative)	Rollout Date (Tentative)	Estimated Expenditure (\$ million)	Manpower Resources (Civil Service Staff)
1. Pilot Partnership Programme for Cyber Security Information Sharing: to analyse cyber security information with AI and big data technologies and to share with various sectors cyber security threats so as to enhance the overall capability of Hong Kong in defending against and recovering from cyber attacks	Office of the Government Chief Information Officer (OGCIO)	Q4 2017	Q3 2018	8.5	The manpower required is met by internal deployment. No additional expenditure is involved.

Project Name / Service Description	Department	Start Date (Tentative)	Rollout Date (Tentative)	Estimated Expenditure (\$ million)	Manpower Resources (Civil Service Staff)
2. Illegal parking monitoring system: to study the feasibility of monitoring illegal parking by applying image analysis technology for trial run in Kowloon East	Development Bureau - Energizing Kowloon East Office	Q2 2018	To commence the field test in Q4 2018 and to complete the project in Q2 2020	8.0	The manpower required is met by internal deployment. No additional expenditure is involved.
3. Revamp of 1823 Website and Implementation of Chatbot Service: to enable the public to use 1823 service conveniently, access government information more directly and answer simple enquiries	Efficiency Office	Q2 2018	Q4 2019	7.3	The manpower required is met by internal deployment. No additional expenditure is involved.
4. Implementation of the second phase of the Cyber Risk Information Sharing Platform, in which real-time information from different sources is collected and potential cyber attacks against government information technology systems are identified with a dynamic threat data analysis model so as to issue early security advice to the departments concerned	OGCIO	Q3 2018	Q4 2019	5.5	The manpower required is met by internal deployment. No additional expenditure is involved.
5. Study on the development of a Cargo Big Data System to enhance the risk management capability of the Customs and Excise Department in cargo clearance	Hong Kong Customs and Excise Department	Q4 2017	Q3 2020	9.8	The manpower required is met by internal deployment. No additional expenditure is involved.
6. Feasibility study on an automation system for the collection, classification and association of cyber crime data	Hong Kong Police Force	Q4 2017	Q1 2020	6.8	The manpower required is met by internal deployment. No additional expenditure is involved.
7. Pilot Chatbot Service for Provision of Weather Information	Hong Kong Observatory	Q1 2018	Q4 2020 (To partially roll out some functions from Q4 2018 to Q1	2.9	The manpower required is met by internal deployment. No additional expenditure is involved.

Project Name / Service Description	Department	Start Date (Tentative)	Rollout Date (Tentative)	Estimated Expenditure (\$ million)	Manpower Resources (Civil Service Staff)
			2019)		
8. Implementing a big data analytics platform that adopts AI	OGCIO	Q3 2018	Mid 2020	69.0	To be implemented by 4 newly created civil service posts. The staff cost is around \$3.6 million.

- End -

CONTROLLING OFFICER'S REPLY

ITB237

(Question Serial No. 0689)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title): (000) Operational expenses

Programme: (3) IT in the Community

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

According to Programme (2), the Government intends to develop Hong Kong into a Wi-Fi connected city and facilitate open data applications, and oversaw the enhancement of public Wi-Fi services. In addition, a survey revealed that 84.2% of the local respondents did online shopping in the past 3 months, reflecting that online shopping is becoming part of the living of Hong Kong people. The industry hopes that the Government can enhance the facilities and support for the development of the local online shopping market. In this connection, please inform this Committee of the following:

- 1) Will the enhancement of the speed and coverage of public Wi-Fi networks be covered by the increased provision in this year's Budget? If yes, what are the details? If not, what are the reasons?
- 2) To facilitate the public to go online anytime and anywhere, including doing online shopping, will the Government draw on the experience of overseas smart cities and consider installing Wi-Fi transmission equipment onto the lampposts all over the streets in the territory? If yes, what are the details? If not, what are the reasons?

Asked by: Hon NG Wing-ka, Jimmy (Member Question No. (LegCo use): 111)

Reply:

The requested information is as follows:

- 1) In May 2016, the Finance Committee of the Legislative Council approved a funding commitment of \$500 million for implementing the "Wi-Fi Connected City" programme. Through a multi-pronged approach, we are progressively expanding the coverage of the free Wi-Fi.HK service and enhancing the speed of the Wi-Fi service at government venues. No additional provision is required for this programme in 2018-19.

- 2) In October 2017, the Chief Executive announced in the Policy Address that to take forward three smart city key infrastructure projects , including launching a “Multi-functional Smart Lampposts” pilot scheme in 4 selected urban areas (including Causeway Bay / Wan Chai, Central / Admiralty, Tsim Sha Tsui and Kwun Tong / the Kai Tak Development Area) to install about 400 new lampposts with smart devices for facilitating relevant departments to collect various real-time city data with a view to enhancing city and traffic management. “Multi-functional Smart Lampposts” are suitable street furniture for mobile network operators to install small cell stations for providing public mobile communications services (including the fifth generation (5G) services in future). They can also be used for providing free Wi-Fi services to the public and tourists. The first phase of some 50 lampposts is expected to come into operation progressively by mid-2019 and the installation of the remaining 350 lampposts will be completed before 2021-22.

- End -

CONTROLLING OFFICER'S REPLY

ITB238

(Question Serial No. 1026)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (3) IT in the Community

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned in the 2015-16 Budget that the Government will promote cloud computing applications among small and medium enterprises (SMEs) and provide them with relevant training. In the subsequent 3 years, the Government no longer mentioned the related training programmes in Policy Addresses and Budgets. In this connection, will the Government allocate additional financial resources to continue supporting the above initiatives? If yes, what is the estimated expenditure for promoting cloud computing? And what is the estimated expenditure for providing training? If not, what are the reasons?

Asked by: Hon NG Wing-ka, Jimmy (Member Question No. (LegCo use): 67)

Reply:

The Office of the Government Chief Information Officer (OGCIO) launched the SME Cloud Promotion Campaign from December 2014 to June 2015 to provide training and organise promotional activities. The Campaign aims to increase SMEs' awareness and adoption of cloud computing solutions, and have a better understanding of the benefits of cloud computing and how to choose cloud computing services to enhance operational efficiency and competitiveness. The Campaign provides more than 40 free training courses on cloud adoption for SMEs of different sectors, covering retail, catering, import and export trade, logistics and land transport, sales and marketing, as well as human resources management and accounting, benefiting over 3 800 SME practitioners. The Campaign also organised a competition on cloud computing adoption, granting the "Best SME Cloud Adopters Awards" and "Best SME Cloud Solutions Awards".

OGCIO provides a beginners' portal on cloud computing to provide SMEs with practical information, user guides and best practices with continuous updates. Apart from helping SMEs understand the benefits of using cloud computing, such information assist SMEs in understanding how to select cloud services, and common issues like security and changing service providers that SMEs should be mindful of when adopting cloud services.

According to the Cloud Readiness Index 2016 published by the Asia Cloud Computing Association in March 2016, Hong Kong is regarded as the top city in cloud readiness in the Asia-Pacific region. In addition, according to the Report on the Survey on Information Technology Usage and Penetration in the Business Sector for 2017 published in February 2018 by Census and Statistics Department, over 70% of SMEs used cloud computing services, which is a significant increase (around 50%) when compared with the same survey conducted in 2015.

With a higher awareness of cloud computing among SMEs, the work of promoting cloud computing to SMEs has been included as part of OGCIO's overall support for the industry in 2018-19. There is no breakdown of expenditure.

- End -

CONTROLLING OFFICER'S REPLY

ITB239

(Question Serial No. 1981)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: Not Specified

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

In the past 3 years, what were the training programmes and courses organised as well as measures taken internally by the Government to enhance innovation and technology awareness among its staff? What are the financial resources and manpower involved? What are the criteria for evaluating the effectiveness? The Government will establish a new civil service college to ensure that civil servants will add value with the times. Does the Office of the Government Chief Information Officer play a role in this regard?

Asked by: Hon QUAT Elizabeth (Member Question No. (LegCo use): 19)

Reply:

To enhance the knowledge of its staff about innovation and technology (I&T), the Office of the Government Chief Information Officer (OGCIO) has formulated a training strategy to provide systematic training to about 1 700 information technology staff of OGCIO and other government bureaux and departments.

In the past 3 years, OGCIO organised over 190 I&T training classes and seminars, covering topics on smart city, big data, cloud computing, artificial intelligence, Internet of Things, blockchain, etc. The expenditure is about \$940,000 and the number of trainees is about 2 400. The work is carried out by the existing manpower of OGCIO and no additional resources are involved. The overall effectiveness of training is positive, with about 95% of the trainees rated the programmes at satisfactory or above levels.

Moreover, the Government intends to establish a civil service college with upgraded training facilities to enhance training for civil servants in the areas of leadership development, interactive communication with the public, application of I&T, etc. The Civil Service Bureau, together with relevant departments, is actively carrying out study and project planning.

- End -

CONTROLLING OFFICER'S REPLY

ITB240

(Question Serial No. 1982)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (1) Use of IT in Government

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Please provide details in tabular form on the mobile applications (apps) launched by government departments and public organisations in the past year; the main functions, development costs, maintenance costs of each application; the organisations that developed and administered the applications; as well as the standards of accessibility that the applications achieved.

Asked by: Hon QUAT Elizabeth (Member Question No. (LegCo use): 20)

Reply:

Information of the mobile apps launched by government bureaux/departments (B/Ds) and public organisations in 2017-18 is set out at **Annex**.

Information of the mobile apps launched by B/Ds and public organisations in 2017-18

B/Ds

No.	B/D	Name	Main Functions	(Approximate) Development Cost	(Approximate) Maintenance Cost	Mode of Development (by internal development or contractors engaged by tender)	Mode of Administration (by internal maintenance or contractors engaged by tender)	Have Adopted Accessibility Design ^{Note}
1.	Education Bureau (Assessment and HKEAA Section)	說話加油站 (Chinese name only)	Content includes learning, teaching and assessment functions of storytelling from pictures. Students can learn storytelling while teachers can conduct assessment, provide feedback and recommend good examples with the app. It helps students to master the skills of storytelling from the pictures.	Developed with the related website. As it is not a stand-alone project, no separate breakdown of the expenditure is available.	Developed with the related website. As it is not a stand-alone project, no separate breakdown of the expenditure is available.	Developed by contractors engaged through tendering	Internal maintenance	Yes
2.	Education Bureau (Kindergarten Administration Section)	Profile of Kindergartens and Kindergarten-cum-Child Care Centres 2017	To provide relevant information of kindergartens across the territory and enhance the transparency of the kindergartens to facilitate parents' making informed choices for their children.	Included in the cost of the whole project of Profile of Kindergartens. As it is not a stand-alone project, no separate breakdown of the expenditure is available.	Included in the cost of the whole project of Profile of Kindergartens. As it is not a stand-alone project, no separate breakdown of the expenditure is available.	Developed by contractors engaged through tendering	Internal maintenance	Yes
3.	Education Bureau (Personal, Social and Humanities Education Section)	History Trip Go Easy: Cheung Chau Jiao Festival	Based on the resource pack: Case Study of Local Heritage Studies – Cheung Chau Jiao Festival published by the Education Bureau in 2014, this mobile app contains an e-book with guideline on field trips and exemplars of learning and teaching activities. It also adopts augmented reality (AR) which creatively incorporates field trips into the learning and teaching activities of intangible cultural heritage and enhances students' motivation to learn.	Developed as a part of the e-book and e-portal project. As it is not a stand-alone project, no separate breakdown of the expenditure is available.	Developed as a part of the e-book and e-portal project. As it is not a stand-alone project, no separate breakdown of the expenditure is available.	Developed by contractors engaged through tendering	Internal maintenance	Yes
4.	Hongkong Post	HKPostStamps	This app uses innovative AR technology. By scanning specially designed stamps with	\$150,000	Maintained by deploying internal	Developed by contractors engaged	Internal maintenance	Yes

No.	B/D	Name	Main Functions	(Approximate) Development Cost	(Approximate) Maintenance Cost	Mode of Development (by internal development or contractors engaged by tender)	Mode of Administration (by internal maintenance or contractors engaged by tender)	Have Adopted Accessibility Design ^{Note}
			this app, vivid and interesting multimedia content will be displayed on mobile devices, offering a new philatelic experience. It also provides quick access to HongkongPost's online shop "ShopThruPost", enabling users to purchase philatelic products anytime and anywhere.		resources. No additional expenditure is involved.	through tendering		
5.	Tourism Commission	A Symphony of Lights	To allow visitors and the public to tune into the music of "A Symphony of Lights" and obtain information on this spectacular show through the mobile app.	\$537,000	\$42,000	Developed by contractors engaged through tendering	Maintained by contractors engaged through tendering	Yes
6.	Water Supplies Department	WSD GA Product Directory	To search plumbing products with WSD's General Acceptance by entering category, brand or model number.	\$175,000	First year maintenance cost is included in the development cost of the mobile app.	Developed by contractors engaged through tendering	Internal maintenance	Yes

Public Organisations

No.	Public Organisation	Name	Main Functions	(Approximate) Development Cost	(Approximate) Maintenance Cost	Mode of Development (by internal development or contractors engaged by tender)	Mode of Administration (by internal maintenance or contractors engaged by tender)	Have Adopted Accessibility Design ^{Note}
1.	Construction Industry Council	The Construction Industry Council - Quick Guide on DWDS	This app provides information on the requirements of the designated workers for designated skills provisions as well as an interactive question and answer design for assessment of the works types under the Construction Workers Registration Ordinance.	\$600,000	Maintained by deploying internal resources. No additional expenditure is involved.	Developed by contractors engaged through tendering	Internal maintenance	Yes
2.	District Council, Yuen Long	Joy in Yuen Long	This app contains information on the restaurants and well-known sightseeing spots in Yuen Long and can serve as a	\$125,000	First year maintenance cost is included in the	Developed by contractors engaged through tendering	Maintained by contractors engaged through tendering	Yes

No.	Public Organisation	Name	Main Functions	(Approximate) Development Cost	(Approximate) Maintenance Cost	Mode of Development (by internal development or contractors engaged by tender)	Mode of Administration (by internal maintenance or contractors engaged by tender)	Have Adopted Accessibility Design ^{Note}
			sightseeing spots database and a search engine for food to facilitate users to search information of Yuen Long conveniently.		development cost of the mobile app.			
3.	Housing Authority	iHousing	This app provides public rental housing tenants with a wide range of services, including: - Support rent payment at designated convenience stores or supermarkets by using a Quick Response (QR) code; - Check rent position and rent payment history for the past six months; - Locate the nearby Estate Shroff Offices, convenience stores and supermarkets for rent payment by using Global Positioning System; - Receive rent payment reminders; and - Receive notification messages on the latest rent policy of the Housing Authority.	\$480,000	First year maintenance cost is included in the development cost of the mobile app.	Developed by contractors engaged through tendering	Maintained by contractors engaged through tendering	Yes
4.	Hospital Authority	i-Easy	To remind Kowloon West Cluster ophthalmic patients of their admission appointments/time of operations, medication instructions, and to provide eye-related information.	\$200,000	Maintained by deploying internal resources. No additional expenditure is involved.	Internal development	Internal maintenance	Yes
5.	Hospital Authority	DM Care	To provide information about diabetes care. Users can also enter personal Diabetes Mellitus (DM) data and relevant information for record and analysis. In addition, users can set reminders to measure blood glucose level and take follow-up consultation and the app will prompt alert in accordance with the setting.	\$100,000	Maintained by deploying internal resources. No additional expenditure is involved.	Internal development	Internal maintenance	Yes
6.	Vocational Training Council	Hong Kong Close-up	The project documents the young adults' perception on Hong Kong through illustration, graphic design, publishing, AR and music production.	\$50,000	Maintained by deploying internal resources. No additional	Developed by contractors engaged through tendering	Internal maintenance	Yes

No.	Public Organisation	Name	Main Functions	(Approximate) Development Cost	(Approximate) Maintenance Cost	Mode of Development (by internal development or contractors engaged by tender)	Mode of Administration (by internal maintenance or contractors engaged by tender)	Have Adopted Accessibility Design^{Note}
					expenditure is involved.			

Note: The World Wide Web Consortium that implements web accessibility standards has yet to publish an official set of accessibility standards that are fully applicable to mobile apps. Nevertheless, the Office of the Government Chief Information Officer has issued the “Mobile Application Accessibility Handbook” and formulated a set of “Baseline Accessibility Criteria for Government Mobile App” for reference by government departments.

- End -

CONTROLLING OFFICER'S REPLY

ITB241

(Question Serial No. 1985)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (2) IT Infrastructure and Standards

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Please provide details in tabular form on the respective numbers of cyber attacks against or intrusion into the personal computers of government departments, public organisations, industrial and commercial organisations, and members of the public.

Asked by: Hon QUAT Elizabeth (Member Question No. (LegCo use): 23)

Reply:

In 2017-18 (up to February 2018), the Office of the Government Chief Information Officer received a total of 5 information security incident reports of cyber attacks against or intrusion into government network systems, including 4 reports of cyber attacks and 1 report of intrusion into computer system.

For information security incidents involving public organisations, industrial and commercial organisations and personal computers of the general public, the Hong Kong Computer Emergency Response Team Coordination Centre received a total of 6 506 reports in 2017, including 6 480 reports of cyber attacks and 26 reports of intrusion into computer systems.

- End -

CONTROLLING OFFICER'S REPLY**ITB242****(Question Serial No. 2466)**

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (3) IT in the Community

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Please list out in tabular form the numbers of venues installed with Wi-Fi hotspots and the numbers of these hotspots in each district under the "Government Wi-Fi" and the Wi-Fi Connected City Programme, the average speed and the average monthly numbers of users at the government venues installed with Wi-Fi hotspots in the past 3 years. What is the expenditure incurred by the Government for publicising the related service in the past 3 years? How many complaints about the aforesaid service are received by the Government directly or indirectly in the past 3 years?

Asked by: Hon QUAT Elizabeth (Member Question No. (LegCo use): 39)

Reply:

As at end-February 2018, the distribution of hotspots and venues under the Government Wi-Fi programme (GovWiFi) and the Wi-Fi Connected City programme (Wi-Fi.HK) is as follows:

District	Number of hotspots (Number of venues installed with hotspots)	
	GovWiFi	Wi-Fi.HK ^[Note]
Hong Kong		
Central and Western District	359 (49)	2 957 (199)
Eastern District	244 (42)	612 (193)
Southern District	118 (32)	1 453 (168)
Wan Chai	310 (42)	1 126 (226)
Kowloon		
Kowloon City	208 (33)	3 369 (195)
Yau Tsim Mong	279 (46)	1 473 (584)
Sham Shui Po	228 (35)	615 (181)
Wong Tai Sin	123 (31)	413 (135)

District	Number of hotspots (Number of venues installed with hotspots)	
	GovWiFi	Wi-Fi.HK ^[Note]
Kwun Tong	183 (52)	652 (216)
New Territories		
Tai Po	91 (23)	299 (110)
Yuen Long	178 (31)	583 (166)
Tuen Mun	118 (31)	1 401 (203)
North District	119 (28)	275 (136)
Sai Kung	186 (29)	1 015 (134)
Sha Tin	163 (39)	3 587 (265)
Kwai Tsing	121 (33)	369 (152)
Tsuen Wan	147 (23)	404 (155)
Islands	53 (17)	711 (131)
Total:	3 228 (616)	21 314 (3 549)

Note: Including GovWiFi hotspots.

According to the regular checking conducted in 2017, the average connection speed at the GovWiFi hotspots was about 3 to 4 Mbps. As for other Wi-Fi.HK hotspots (which were mainly free Wi-Fi service provided by private enterprises and public organisations), according to the sample survey conducted by the Hong Kong Wireless Technology Industry Association in 2017, the average connection speed ranged from 11 to 12 Mbps. We will continue to monitor the connection speed at the Wi-Fi.HK hotspots and liaise with the public and private organisations concerned to ensure the quality of the Wi-Fi service.

In the past 3 years, the average monthly numbers of users of the GovWiFi service at government venues by district are as follows:

District	Average monthly numbers of users for all hotspots		
	2015-16	2016-17	2017-18 (as at end-February 2018)
Hong Kong			
Central and Western District	148 628	162 341	158 655
Eastern District	74 232	85 700	87 260
Southern District	41 306	45 905	46 888
Wan Chai	133 114	151 950	150 336
Kowloon			
Kowloon City	53 524	63 384	63 581
Yau Tsim Mong	134 197	138 703	131 865
Sham Shui Po	65 886	76 876	81 976
Wong Tai Sin	37 569	44 247	45 969
Kwun Tong	67 090	83 242	84 248
New Territories			
Tai Po	38 594	45 393	48 882
Yuen Long	64 465	74 352	80 071

District	Average monthly numbers of users for all hotspots		
	2015-16	2016-17	2017-18 (as at end-February 2018)
Tuen Mun	31 520	37 359	38 644
North District	57 127	66 994	68 094
Sai Kung	47 341	59 948	65 281
Sha Tin	59 725	74 334	87 700
Kwai Tsing	40 794	47 759	50 135
Tsuen Wan	41 329	45 661	46 407
Islands	16 768	18 495	18 212
Total:	1 153 209	1 322 643	1 354 204

In the past 3 years, the expenditure for the promotion of the Wi-Fi.HK programme is as follows:

Year	Promotion Expenditure (\$'000)
2015-16	470
2016-17	460
2017-18	1,560
Total:	2,490

In the past 3 years, the numbers of enquiries and complaints about GovWiFi are as follows:

Year	Number of Enquiries and Complaints about GovWiFi
2015-16	2 477
2016-17	1 931
2017-18 (as at end-February 2018)	1 263
Total:	5 671

As for the Wi-Fi.HK hotspots operated by service operators and public and private organisations at non-government venues, we do not have the related complaint figures.

- End -

CONTROLLING OFFICER'S REPLY**ITB243****(Question Serial No. 5305)**

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (1) Use of IT in Government

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

On the opening up of data by the 3 Secretaries of Departments and 13 Bureaux of the Government in the past 5 years, will the Government provide the specific details by policy bureau and by year in the table below?

(Year)

Policy Bureau	Open Data Item	Data with Type and Number of Files				One-off Expenditure Involved	Recurrent Expenditure Involved
				Static Data		Machine-readable Data	
		Type of File	Number of File	Type of File	Number of File		

Asked by: Hon TAM Man-ho, Jeremy (Member Question No. (LegCo use): 723)

Reply:

As at end-February 2018, 47 bureaux and departments (B/Ds) and 8 public/private organisations are publishing over 3 200 datasets on the “data.gov.hk” portal. The list of these 47 B/Ds, data formats, number of datasets and examples of more popular datasets are listed in **Annex**. Due to the large number of datasets involved, we will not list the information provided in the datasets one by one.

The work related to opening up data is undertaken by the relevant B/Ds. We do not have related breakdown of the expenditure.

Datasets released by B/Ds on the “data.gov.hk” portal

Bureaux	Underpinning Departments	Data Formats	Number of Datasets	Examples of Datasets
Commerce and Economic Development Bureau	1.Hong Kong Observatory	RSS	7	<ul style="list-style-type: none"> ✧ Current weather report ✧ Weather warning summary ✧ Local weather forecast ✧ 9-day weather forecast ✧ Weather warning information ✧ Quick messages on earthquake worldwide
	2.Intellectual Property Department	CSV	10	<ul style="list-style-type: none"> ✧ Statistics of trade marks, patents, designs and copyright - applications and registrations/grants
	3.Office for Film, Newspaper and Article Administration	XLS	1	<ul style="list-style-type: none"> ✧ List of registered newspapers and periodicals
	4.Office of the Communications Authority	XLSX	27	<ul style="list-style-type: none"> ✧ Lists of licensees, such as Experimental Station, Carrier, Internet Service Providers, Radio Dealer (Unrestricted), etc. ✧ Statistics on capacity of external telecommunications facilities ✧ Statistics on customer access via public switched telephone network and broadband network ✧ Statistics on Satellite Master Antenna Television
	5.Radio Television Hong Kong	XML	5	<ul style="list-style-type: none"> ✧ The latest finance, local, world, sports and Greater China news
	6.Trade and Industry Department	XLS, XML	3	<ul style="list-style-type: none"> ✧ Hong Kong’s principal trading partners
Constitutional and Mainland Affairs Bureau	7.Registration and Electoral Office	CSV, XLS, XLSX	81	<ul style="list-style-type: none"> ✧ Voter registration statistics ✧ Counting results of 2015 District Council Election and 2016 Legislative Council Election
Development Bureau	8.Development Bureau	JSON	4	<ul style="list-style-type: none"> ✧ Real-time parking vacancy data and carpark information

Bureaux	Underpinning Departments	Data Formats	Number of Datasets	Examples of Datasets
				in Kowloon East and nearby areas provided by the Energizing Kowloon East Office (EKEO)
	9. Architectural Services Department	JPG	370	✧ Information and images of government building projects
	10. Buildings Department	XLS	50	✧ Registers of Buildings Department ✧ Monthly Digests of Buildings Department
	11. Civil Engineering and Development Department	XLS, XLSX	3	✧ Disposal records of construction and demolition materials
	12. Electrical and Mechanical Services Department	XLSX	27	✧ Registers of various types of registered works, contractors and competent persons
	13. Land Registry	JSON, XLS	4	✧ Yearly and monthly statistics of Land Registry
	14. Lands Department	ASC, CSV, GML, JSON, KML, KMZ, RTCM, TIF, XLS, XLSX, XML	61	✧ Conversion data between HK 1980 Grid Coordinates and WGS84 Coordinates (Latitude and Longitude) ✧ Consents to Sell, Consents to Assign and Approvals of Deeds of Mutual Covenant issued since 1.1.1994 ✧ Consents to Sell, Consents to Assign and Approvals of Deeds of Mutual Covenant issued before 1994 ✧ Land Exchange Transactions, Lease Extension, Lease Modification Transactions, Private Treaty Grant, etc. ✧ Redevelopment and Conversion of Industrial Buildings
	15. Planning Department	GIF, JPG, PNG, XLS	29	✧ Projections of Population Distribution 2015-2024, and 2014-based Territorial Population and Employment Data Matrix (Generalised Version)

Bureaux	Underpinning Departments	Data Formats	Number of Datasets	Examples of Datasets
				✧ Land utilization in Hong Kong 2016
Education Bureau	16. Education Bureau	CSV, JSON, XLS, XLSX, XML	19	✧ School location and information ✧ List of study room ✧ Student enrolment statistics
	17. University Grants Committee Secretariat	CSV	3	✧ List of UGC-funded programmes and academic programme categories ✧ Research grants for UGC-funded universities
	18. Working Family and Student Financial Assistance Agency	XLSX	11	✧ Deadlines for submissions of various applications of Tertiary Student Finance Scheme ✧ Statistics of Financial Assistance and Subsidy Schemes
Environment Bureau	19. Environmental Protection Department	CSV, RSS, XML	8	✧ Past record of Air Quality Health Index ✧ Waste Less - Recyclable collection points data
Food and Health Bureau	20. Food and Health Bureau	XLSX	8	✧ Major health related statistics of Hong Kong ✧ Hong Kong's Domestic Health Accounts
	21. Agriculture, Fisheries and Conservation Department	CSV, XSLX	7	✧ Update of red tide situation ✧ Registered pesticides list
	22. Department of Health	CSV, JPG, XLSX, XML	181	✧ Statistics of birth, death and life expectancy ✧ Lists of Chinese medicine practitioners / licensed Chinese medicines traders ✧ Lists of clinics / centres of the Department of Health ✧ Number of notifiable infectious diseases by month
	23. Food and Environmental Hygiene Department	JPG, XLS, XML	13	✧ Various detailed lists including trade licences, restaurant licences, sale of restricted food permits, and products exempted from nutrition labelling ✧ Food and Environmental Hygiene Department's

Bureaux	Underpinning Departments	Data Formats	Number of Datasets	Examples of Datasets
				facility and service locations ✧ Statistics of food safety, public health and pleasant environment ✧ Information of live pig supply and auction prices ✧ Information of water dispensers in Food and Environmental Hygiene Department's public markets
	24. Government Laboratory	CSV, JSON	3	✧ Tar and Nicotine Reports
Financial Secretary's Office	25. Financial Secretary's Office	XML	1	✧ Financial Secretary - My Blog
Financial Services and the Treasury Bureau	26. Financial Services and the Treasury Bureau	CSV, ZIP	2	✧ Data related to annual estimates of the Government
	27. Census and Statistics Department	CSV, GIF, RSS, XLS, XLSX, XML	1 526	✧ 2006 Population By-census - Statistical Tables ✧ 2011 Population Census - Main Tables ✧ 2016 Population By-census - Main Tables
	28. Companies Registry	XLS	21	✧ Licensing of Money Lender ✧ Statistical data on local companies incorporated and registered Non-Hong Kong companies ✧ Statistical data on liquidations and dissolution ✧ Statistics data on prosecution
	29. Government Logistics Department	XML	1	✧ Open tenders issued via e-Tender Box of Government Logistics Department
	30. Government Property Agency	XLSX	11	✧ Annual reports ✧ Press releases of Government Property Agency ✧ Government Properties to Let – Tender
	31. Inland Revenue Department	XLS	13	✧ Analysis of allowances by income group

Bureaux	Underpinning Departments	Data Formats	Number of Datasets	Examples of Datasets
	32. Official Receiver's Office	XLS	6	✧ Statistics on Directors' Disqualification
	33. Rating and Valuation Department	XLS	30	✧ Property Market Statistics ✧ Summary statistics on Valuation List and Government Rent Roll
	34. The Treasury	CSV	2	✧ Data related to Accounts of the Government ✧ Data related to Consolidated Financial Statements of the Government
Home Affairs Bureau	35. Information Services Department	RSS	1	✧ Press releases
	36. Leisure and Cultural Services Department	JSON, RSS, XLS, XLSX, XML	50	✧ Location and information of leisure facilities ✧ Cultural programmes
Innovation and Technology Bureau	37. Efficiency Office	XML	2	✧ Government Job video channel ✧ Freshtube video channel
	38. Innovation and Technology Commission	XLS	3	✧ Information of approved projects of Innovation and Technology Fund
	39. Office of the Government Chief Information Officer	CSV, ICS, JSON, XLS, XML	29	✧ Address Lookup Service ✧ Real-time parking vacancy data (One-Stop Version) ✧ EventHK and GovHK Notifications: list of information and details ✧ Approved fund-raising activities ✧ IT Services Suppliers ✧ GovWiFi premises
Labour and Welfare Bureau	40. Social Welfare Department	CSV, XML	11	✧ List of School Social Work Organisations, List of Agencies providing Services for Young Night Drifters, List of Community Centres, List of Youth Outreaching Social Work Teams, etc. ✧ List of Centres for Drug Counselling, List of Counselling Centre for

Bureaux	Underpinning Departments	Data Formats	Number of Datasets	Examples of Datasets
				Psychotropic Substance Abusers ✧ Basic information and service quality information of Residential Care Homes for the Elderly, List of Neighbourhood Level Community Development Projects, List of Care and Support Networking Team, etc.
Security Bureau	41. Correctional Services Department	XLS	12	✧ Correctional institutions information ✧ Population under management / supervision of Correctional Services Department
	42. Customs and Excise Department	XLSX	5	✧ Customs statistics including revenue collection, cases, arrests, stop and search, and control points passenger throughput
	43. Hong Kong Police Force	JSON, XLS, XML	10	✧ Traffic statistics ✧ Rewards & Special Services
Transport and Housing Bureau	44. Civil Aviation Department	CSV	3	✧ Number of total flights handled ✧ Number of telecom messages relayed by the Aeronautical Fixed Telecommunication Network
	45. Housing Authority	JSON	4	✧ Location and profile of Public Housing Estates
	46. Marine Department	CSV, XML	21	✧ Arrival and departure information of vessels ✧ Hong Kong tidal stream prediction ✧ Shipping directory of Hong Kong ✧ Vessel Traffic Management System Report ✧ Seafarers' Examination Schedule
	47. Transport Department	CSV, GML, JPG, JSON,	391	✧ Traffic snapshot images ✧ Journey time indicators ✧ Traffic speed map ✧ Speed map panels

Bureaux	Underpinning Departments	Data Formats	Number of Datasets	Examples of Datasets
		MDB, PNG, XLS, XML, XSD, ZIP		<p>✧ Distribution of metered parking spaces at different districts in Hong Kong</p> <p>✧ Parking vacancy data</p>

- End -

CONTROLLING OFFICER'S REPLY**ITB244****(Question Serial No. 6133)**

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (1) Use of IT in Government

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Will the Government advise on the following: the numbers and origins of the cyber attacks against various government departments in each of the past 5 years? Please list out in tabular form the cyber attacks by type (botnet attack, denial-of-service attack, zero-day attack, SQL injection, drive-by download attack, social engineering attack).

Asked by: Hon TAM Man-ho, Jeremy (Member Question No. (LegCo use): 741)

Reply:

The required information is provided as follows:

In the past 5 years, the Office of the Government Chief Information Officer received a total of 42 information security incident reports of cyber attacks against or intrusion into government networks. As cyber attacks are mostly global nowadays, each attack may come simultaneously from different parts of the world and attackers can hide their origins. We, therefore, do not have figures on cyber attacks classified by origin. Figures on relevant incidents are set out as follows:

Information Security Incident	2013-14	2014-15	2015-16	2016-17	2017-18 (As at February 2018)
Web Defacement	5	2	2	1	-
Intrusion into Information Systems/ Unauthorised Access	-	2	1	4	1
Denial-of-Service Attack	-	6	2	-	1
Ransomware/ Malware Infection	-	-	-	12	3
Total :	5	10	5	17	5

- End -

CONTROLLING OFFICER'S REPLY

ITB245

(Question Serial No. 1185)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (3) IT in the Community

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

The Government has released data in digital formats for use by the public through the “data.gov.hk” portal. Please inform this Committee of the following:

1. Please list in tabular form the existing data provided, the departments concerned, the available formats, numbers of downloads, as well as the manpower and expenditure involved in data preparation.
2. When will the Government release data that do not involve personal privacy (e.g. locations of drinking fountains, public toilets, etc.) in digital formats for use by the public?

Asked by: Hon YEUNG Alvin (Member Question No. (LegCo use): 67)

Reply:

The required information is provided as follows:

1. As at end-February 2018, 47 bureaux and departments (B/Ds) and 8 public/private organisations are publishing over 3 200 datasets on the “data.gov.hk” portal. The list of these 47 B/Ds, data formats, total number of downloads and examples of more popular datasets are listed in **Annex**. Due to the large number of datasets involved, we will not list the information provided in the datasets one by one.

To effectively carry out and expedite the work on open data and data analytics, we obtained the approval of the Finance Committee in February 2018 to create 1 permanent post of Chief Systems Manager (D1) in OGCIO, who is supported by 9 non-directorate officers and responsible for advocating and supporting B/Ds to open up data and make use of big data analytics, and publishing relevant government-wide practices and guidelines. The required salaries and departmental expenditure are about \$7 million in 2018-19.

2. B/Ds are continuously releasing data of different types that do not involve personal data in suitable formats and ways (such as through application programming interfaces) for free use by the public. The data planned to be released in 2018-19 include a list of local kindergartens participating in the Free Quality Kindergarten Education Scheme by the Education Bureau, locations of electric vehicle charging stations in government car parks by the Environmental Protection Department, locations of water dispensers by the Leisure and Cultural Services Department, and excavation permit data by the Highways Department, etc. Besides, the Food and Environmental Hygiene Department (FEHD) has already released data in digital formats such as locations of public toilets and water dispensers in FEHD's public markets and cooked food centres.

Datasets released by B/Ds on the “data.gov.hk” portal

B/Ds	Data Format	Approximate Number of Downloads in 2017-18	Examples of Datasets
1.Agriculture, Fisheries and Conservation Department	CSV, XSLX	20 000	<ul style="list-style-type: none"> ✧ Update of red tide situation ✧ Registered pesticides list
2.Architectural Services Department	JPG	1.36 million	<ul style="list-style-type: none"> ✧ Information and images of government building projects
3.Buildings Department	XLS	2.85 million	<ul style="list-style-type: none"> ✧ Registers of Buildings Department ✧ Monthly Digests of Buildings Department
4.Census and Statistics Department	CSV, GIF, RSS, XLS, XLSX, XML	11.54 million	<ul style="list-style-type: none"> ✧ 2006 Population By-census - Statistical Tables ✧ 2011 Population Census - Main Tables ✧ 2016 Population By-census - Main Tables
5.Civil Aviation Department	CSV	10 000	<ul style="list-style-type: none"> ✧ Number of total flights handled ✧ Number of telecom messages relayed by the Aeronautical Fixed Telecommunication Network
6.Civil Engineering and Development Department	XLS, XLSX	120 000	<ul style="list-style-type: none"> ✧ Disposal records of construction and demolition materials
7.Companies Registry	XLS	460 000	<ul style="list-style-type: none"> ✧ Licensing of Money Lender ✧ Statistical data on local companies incorporated and registered Non-Hong Kong companies ✧ Statistical data on liquidations and dissolution ✧ Statistics data on prosecution
8.Correctional Services Department	XLS	100 000	<ul style="list-style-type: none"> ✧ Correctional institutions information ✧ Population under management / supervision of Correctional Services Department
9.Customs and Excise	XLSX	40 000	<ul style="list-style-type: none"> ✧ Customs statistics including revenue collection, cases,

B/Ds	Data Format	Approximate Number of Downloads in 2017-18	Examples of Datasets
Department			arrests, stop and search, and control points passenger throughput
10.Department of Health	CSV, JPG, XLSX, XML	230 000	<ul style="list-style-type: none"> ✧ Statistics of birth, death and life expectancy ✧ Lists of Chinese medicine practitioners / licensed Chinese medicines traders ✧ Lists of clinics / centres of the Department of Health ✧ Number of notifiable infectious diseases by month
11.Development Bureau	JSON	680 000	<ul style="list-style-type: none"> ✧ Real-time parking vacancy data and carpark information in Kowloon East and nearby areas provided by the Energizing Kowloon East Office (EKEO)
12.Education Bureau	CSV, JSON, XLS, XLSX, XML	30 000	<ul style="list-style-type: none"> ✧ School location and information ✧ List of study room ✧ Student enrolment statistics
13.Efficiency Office	XML	5 000	<ul style="list-style-type: none"> ✧ Government Job video channel ✧ Freshtube video channel
14.Electrical and Mechanical Services Department	XLSX	130 000	<ul style="list-style-type: none"> ✧ Registers of various types of registered works, contractors and competent persons
15.Environmental Protection Department	CSV, RSS, XML	14.75 million	<ul style="list-style-type: none"> ✧ Past record of Air Quality Health Index ✧ Waste Less - Recyclable collection points data
16.Financial Secretary's Office	XML	1.97 million	<ul style="list-style-type: none"> ✧ Financial Secretary - My Blog
17.Financial Services and the Treasury Bureau	CSV, ZIP	390 000	<ul style="list-style-type: none"> ✧ Data related to annual estimates of the Government
18.Food and Environmental Hygiene Department	JPG, XLS, XML	260 000	<ul style="list-style-type: none"> ✧ Various detailed lists including trade licences, restaurant licences, sale of restricted food permits, and products exempted from nutrition labelling ✧ Food and Environmental Hygiene Department's facility and service locations

B/Ds	Data Format	Approximate Number of Downloads in 2017-18	Examples of Datasets
			<ul style="list-style-type: none"> ✧ Statistics of food safety, public health and pleasant environment ✧ Information of live pig supply and auction prices ✧ Information of water dispensers in Food and Environmental Hygiene Department's public markets
19.Food and Health Bureau	XLSX	8 000	<ul style="list-style-type: none"> ✧ Major health related statistics of Hong Kong ✧ Hong Kong's Domestic Health Accounts
20.Government Laboratory	CSV, JSON	210 000	<ul style="list-style-type: none"> ✧ Tar and Nicotine Reports
21.Government Logistics Department	XML	The department concerned does not keep relevant data	<ul style="list-style-type: none"> ✧ Open tenders issued via e-Tender Box of Government Logistics Department
22.Government Property Agency	XLSX	100 000	<ul style="list-style-type: none"> ✧ Annual reports ✧ Press releases of Government Property Agency ✧ Government Properties to Let – Tender
23.Housing Authority	JSON	10 000	<ul style="list-style-type: none"> ✧ Location and profile of Public Housing Estates
24.Hong Kong Observatory	RSS	900 million	<ul style="list-style-type: none"> ✧ Current weather report ✧ Weather warning summary ✧ Local weather forecast ✧ 9-day weather forecast ✧ Weather warning information ✧ Quick messages on earthquake worldwide
25.Hong Kong Police Force	JSON, XLS, XML	180 000	<ul style="list-style-type: none"> ✧ Traffic statistics ✧ Rewards & Special Services
26.Information Services Department	RSS	14.39 million	<ul style="list-style-type: none"> ✧ Press releases
27.Inland Revenue Department	XLS	100 000	<ul style="list-style-type: none"> ✧ Analysis of allowances by income group
28.Innovation and Technology Commission	XLS	70 000	<ul style="list-style-type: none"> ✧ Information of approved projects of Innovation and Technology Fund

B/Ds	Data Format	Approximate Number of Downloads in 2017-18	Examples of Datasets
29.Intellectual Property Department	CSV	30 000	✧ Statistics of trade marks, patents, designs and copyright - applications and registrations/grants
30.Land Registry	JSON, XLS	190 000	✧ Yearly and monthly statistics of Land Registry
31.Lands Department	ASC, CSV, GML, JSON, KML, KMZ, RTCM, TIF, XLS, XLSX, XML	77.48 million	✧ Conversion data between HK 1980 Grid Coordinates and WGS84 Coordinates (Latitude and Longitude) ✧ Consents to Sell, Consents to Assign and Approvals of Deeds of Mutual Covenant issued since 1.1.1994 ✧ Consents to Sell, Consents to Assign and Approvals of Deeds of Mutual Covenant issued before 1994 ✧ Land Exchange Transactions, Lease Extension, Lease Modification Transactions, Private Treaty Grant, etc. ✧ Redevelopment and Conversion of Industrial Buildings
32.Leisure and Cultural Services Department	JSON, RSS, XLS, XLSX, XML	140 000	✧ Location and information of leisure facilities ✧ Cultural programmes
33.Marine Department	CSV, XML	2.23 million	✧ Arrival and departure information of vessels ✧ Hong Kong tidal stream prediction ✧ Shipping directory of Hong Kong ✧ Vessel Traffic Management System Report ✧ Seafarers' Examination Schedule
34.Office for Film, Newspaper and Article Administration	XLS	2 000	✧ List of registered newspapers and periodicals
35.Office of the Communications Authority	XLSX	140 000	✧ Lists of licensees, such as Experimental Station, Carrier, Internet Service Providers,

B/Ds	Data Format	Approximate Number of Downloads in 2017-18	Examples of Datasets
			Radio Dealer (Unrestricted), etc. ✧ Statistics on capacity of external telecommunications facilities ✧ Statistics on customer access via public switched telephone network and broadband network ✧ Statistics on Satellite Master Antenna Television
36.Office of the Government Chief Information Officer	CSV, ICS, JSON, XLS, XML	13.81 million	✧ Address Lookup Service ✧ Real-time parking vacancy data (One-Stop Version) ✧ EventHK and GovHK Notifications: list of information and details ✧ Approved fund-raising activities ✧ IT Services Suppliers ✧ GovWiFi premises
37.Official Receiver's Office	XLS	30 000	✧ Statistics on Directors' Disqualification
38.Planning Department	GIF, JPG, PNG, XLS	70 000	✧ Projections of Population Distribution 2015-2024, and 2014-based Territorial Population and Employment Data Matrix (Generalised Version) ✧ Land utilization in Hong Kong 2016
39.Radio Television Hong Kong	XML	The department concerned does not keep relevant data	✧ The latest finance, local, world, sports and Greater China news
40.Rating and Valuation Department	XLS	740 000	✧ Property Market Statistics ✧ Summary statistics on Valuation List and Government Rent Roll
41.Registration and Electoral Office	CSV, XLS, XLSX	230 000	✧ Voter registration statistics ✧ Counting results of 2015 District Council Election and 2016 Legislative Council

B/Ds	Data Format	Approximate Number of Downloads in 2017-18	Examples of Datasets
			Election
42.Social Welfare Department	CSV, XML	10 000	<ul style="list-style-type: none"> ✧ List of School Social Work Organisations, List of Agencies providing Services for Young Night Drifters, List of Community Centres, List of Youth Outreaching Social Work Teams, etc. ✧ List of Centres for Drug Counselling, List of Counselling Centre for Psychotropic Substance Abusers ✧ Basic information and service quality information of Residential Care Homes for the Elderly, List of Neighbourhood Level Community Development Projects, List of Care and Support Networking Team, etc.
43.Trade and Industry Department	XLS, XML	7 000	✧ Hong Kong's principal trading partners
44.Transport Department	CSV, GML, JPG, JSON, MDB, PNG, XLS, XML, XSD, ZIP	1.8 billion	<ul style="list-style-type: none"> ✧ Traffic snapshot images ✧ Journey time indicators ✧ Traffic speed map ✧ Speed map panels ✧ Distribution of metered parking spaces at different districts in Hong Kong ✧ Parking vacancy data
45.The Treasury	CSV	30 000	<ul style="list-style-type: none"> ✧ Data related to Accounts of the Government ✧ Data related to Consolidated Financial Statements of the Government
46.University Grants Committee Secretariat	CSV	9 000	<ul style="list-style-type: none"> ✧ List of UGC-funded programmes and academic programme categories ✧ Research grants for UGC-funded universities
47.Working Family and Student	XLSX	50 000	✧ Deadlines for submissions of various applications of Tertiary

B/Ds	Data Format	Approximate Number of Downloads in 2017-18	Examples of Datasets
Financial Assistance Agency			Student Finance Scheme ✧ Statistics of Financial Assistance and Subsidy Schemes

- End -

CONTROLLING OFFICER'S REPLY

ITB246

(Question Serial No. 1186)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (3) IT in the Community

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Please inform this Committee whether there is any plan for the “data.gov.hk” portal to request for real-time traffic data from public transport operators. If yes, please list in tabular form when requests for information/suggestion for provision of information has been made to public transport operators, the replies of various public transport operators, when the information will be provided to the Government, the reasons for their refusing the provision of information, how the Government will recommend public transport operators to provide real-time traffic data, and the expenditure involved in data preparation. If not, please explain the reasons.

Asked by: Hon YEUNG Alvin (Member Question No. (LegCo use): 68)

Reply:

To commercial organisations, data is an asset having commercial value. Individual organisations will determine whether to open up their data based on commercial considerations. According to the information provided by the Transport and Housing Bureau, with respect to the public transport operators, certain franchised bus companies, MTR and trams have provided passengers with free real-time arrival information of respective routes through their web pages, mobile applications and display panels installed at bus stops/platforms. The franchised bus companies are also cooperating with the Transport Department (TD) to provide real-time arrival information on TD’s “Hong Kong eTransport” mobile application and website. Moreover, the franchised and licensed ferry operators have provided service information on their piers through the websites or mobile applications.

The Government will continue to explain to the transport operators the value of opening up data that will be beneficial to their organisations and businesses, and to actively encourage them to support the Government’s open data policy by releasing their data via the “data.gov.hk” portal for more innovative applications.

- End -

CONTROLLING OFFICER'S REPLY

ITB247

(Question Serial No. 1228)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (2) IT Infrastructure and Standards

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

The work of the Hong Kong/Guangdong ICT Expert Committee is mentioned in paragraph 10 under Programme (2) of Head 47. In this connection, please inform this Committee of the following:

- (1) Please explain what “Internet + Regulation” mentioned in the 12th plenary meeting of the Hong Kong/Guangdong Expert Group on Co-operation in Informatisation refers to.
- (2) Please provide the full text of The Agreement on Information Framework Co-operation.

Asked by: Hon YEUNG Alvin (Member Question No. (LegCo use): 72)

Reply:

The requested information is as follows:

(1) The Governments of the Hong Kong Special Administrative Region and Guangdong Province have been actively promoting collaboration in information and communications technology (ICT), and established the Hong Kong/Guangdong Expert Group on Co-operation in Informatisation (EGCI) in 2006.

“Internet + Regulation” was one of the co-operation items discussed at the 12th Plenary Meeting of EGCI in July 2017. The discussions concerned mainly how governments and industries of the two places could make use of ICT and Internet platform to strengthen the monitoring, management and operation of food supply to Hong Kong and quarantine, including:

- (a) electronic ear tag management system for cross-border food animals supplied to Hong Kong;
- (b) monitoring system for vegetables supplied to Hong Kong; and

(c) quarantine monitoring system for small vessels navigating to Hong Kong and Macao.

(2) To further strengthen Guangdong-Hong Kong co-operation in informatisation , the Commerce & Economic Development Bureau of the Hong Kong SAR Government and the Economic & Information Commission of Guangdong Province signed “The Agreement on Information Framework Co-operation” in 2013. The full text of the Agreement was submitted to relevant panels of the Legislative Council for reference in October 2013. A copy of the document is at **Annex** (Chinese version only).

粵港信息化合作框架協議

為進一步加強粵港信息化合作，按照“一國兩制”方針和互利共贏、平等協商的原則，廣東省經濟和信息化委員會、香港特別行政區政府商務及經濟發展局，經友好協商，共同簽署以下合作框架協議。

一、大珠三角智慧城市群建設合作

1.合作推進信息基礎設施建設。落實《粵港澳基礎設施建設合作專項規劃》，支持運營商根據需求提高光纖通信容量；開展基于射頻識別（RFID）的信息基礎設施建設和應用合作；加強兩地無線頻率協調。

2.合作推進智慧城市應用。共同推動兩地智能交通等領域的建設交流與合作，支持智慧城市建設交流會、獎勵計劃和相關培訓，促進粵港相關企業開展智慧城市技術合作。共同拓展移動互聯網市場，幫助香港移動應用軟件開發商進入內地市場，促進內地移動應用軟件開發商走向國際市場。支持粵港企業開展技術交流和商貿合作。

3.合作推進雲計算應用。發揮粵港雲計算服務和標準委員會作用，完善粵港雲計算服務和標準專家委員會工作機制，每年定期召開兩次專家委員會全體會議，共同組織粵港雲計算發展會議、論壇和小組討論，充分利用粵港雲計算專家委員會交流平臺和門戶網站，共同開發建設粵港雲計算信息資源。徵集粵港雲計算應用成功案例、雲計算優秀產品和解決方案，加強粵港雲計算應用交流，舉辦粵港雲計算產業大會，推廣優秀雲計算應用產品和服務。組織制定雲計算安全保障標準、雲計算應用指南、雲計算技術標準體系，促進雲計算應用。積極推動“粵港信息科技青年創業計劃”實施，鼓勵研發雲計算等信息技術應用商業計劃，推動粵港青年創新和創業。

4. 加強大數據合作。支持行業組織建立粵港大數據技術產業聯盟，協調舉辦粵港大數據技術、應用交流會議，促進粵港大數據相關企業開展技術交流和商貿合作。

二、粵港通關便利化的物聯網應用合作

1.開展粵港物流信息技術應用合作。支持粵港物流企業開展信息技術應用合作交流。粵方開通南方物流公共信息平臺，開展通關便利等應用并與行業應用平臺對接。促進制定相關物流信息標準及射頻識別（RFID）標準，共同推進RFID在物流領域的應用。合作推廣使用粵港公交一卡通，推進供港活豬活牛的電子耳標標識管理的研究。

2.支持快速通關物聯網應用。支持粵港海關開展跨境快速通關對接合作，擴充快速通關試點，探索綠色電子關鎖應用。合作促進內港海關公路單證統一，提升通關效率。

3.加強電子商務合作。促進廣東省電子認證服務機構和香港認可核證機關簽發電子簽名互認證書，推進互認證書在跨境電子商務的應用。粵方促進電子商務基礎技術支撐平臺建設，研究採用電子支付、信息共享標準等公用技術。鼓勵粵港企業聯合開發信息共享平臺和電子交易平臺。支持香港創新商業模式在廣東落地。促進企業開拓國內外市場，加強人才交流，發揮行業組織作用，舉辦各類交流活動和人才培訓。

三、開展南沙信息服務產業園建設粵港合作

支持廣州市科技和信息化局、南沙區經貿科技和信息化局和香港特別行政區政府資訊科技總監辦公室共同著力推動南沙信息服務產業園建設。廣東省經濟和信息化委員會積極將廣東省有關產業政策落實到產業園建設中，同時共同爭取國家有關部門的政策支持。

本協議一式四份（繁體版、簡體版各兩份），簽署雙方各執兩份（繁體版、簡體版各一份），自簽署之日起生效。

廣東省經濟和信息化委員會
代表

香港特別行政區政府
商務及經濟發展局代表

2013年 月 日

2013年 月 日

- End -

CONTROLLING OFFICER'S REPLY

ITB248

(Question Serial No. 5300)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title): (000) Operational expenses

Programme: (1) Use of IT in Government

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

In 2017-18, the Office of the Government Chief Information Officer (OGCIO) “implemented a pilot platform to facilitate and support bureaux and departments (B/Ds) in developing big data applications collaboratively”. In this connection, please inform this Committee of the following:

1. The B/Ds that have participated in the above pilot platform, and the total expenditure of the pilot platform;
2. The total number of big data applications developed, and the main functions and development costs of each application.

Asked by: Hon YEUNG Alvin (Member Question No. (LegCo use): 62)

Reply:

A consolidated reply to the two parts of the question is as follows:

In 2017-18, the total expenditure of the “pilot big data analytics platform” project is about \$9.5 million, which was funded under the Capital Works Reserve Fund Head 710. Pilot big data projects developed using the platform include:

- (a) Office of the Government Chief Information Officer (OGCIO), the Hong Kong Observatory (HKO) and the Transport Department collaborated to conduct a preliminary analysis of the impact of rainfall on the traffic speed of some major roads by using data like traffic- and weather-related data;
- (b) OGCIO and the Planning Department collaborated to conduct a study on the relationship between town planning and population distribution and changes in some districts as a pilot;
- (c) OGCIO developed a pilot social media text analytics service to assist departments in analysing social media information;

- (d) OGCIO, the Electrical and Mechanical Services Department (EMSD) and HKO collaborated to analyse the impact of outdoor and indoor environment (e.g. temperature and humidity) on the energy consumption of the air conditioning system in the EMSD Headquarters Building; and
- (e) OGCIO analysed the search and browsing history of the GovHK website to further improve user experience.

- End -

CONTROLLING OFFICER'S REPLY

ITB249

(Question Serial No. 5301)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title): (661) Minor plant, vehicles and equipment (block vote)

Programme: Not Specified

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

The estimate of the Capital Account of the Office of the Government Chief Information Officer for 2018-19 represents an increase of 74.3% over that for 2017-18, and this is due to “the increased requirement for scheduled replacement of minor plant and equipment”. Please inform this Committee of the following by filling in the table below:

	Category	Scheduled replacement date	Expenditure
Minor plant			
Equipment			
Works			

Asked by: Hon YEUNG Alvin (Member Question No. (LegCo use): 64)

Reply:

There is an increase in the estimate of the Capital Account in 2017-18 because the Office of the Government Chief Information Officer plans to replace the air-conditioning and power supply systems in 3 government data centres by end-March 2019. The estimated expenditure is about \$10.15 million.

- End -

CONTROLLING OFFICER'S REPLY

ITB250

(Question Serial No. 5343)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (2) IT Infrastructure and Standards

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned in paragraph 10 under Programme (2) of Head 47 that the Office of the Government Chief Information Officer will “continue to participate in the Cloud Computing Working Group of the National Information Technology Standardization Committee to develop a national standard on purchase of cloud services by consumers”. In this connection, please inform this Committee of the following:

- (1) Will the above “national standard” cover the filtering of sensitive terms and the so called “non-compliant contents” in Mainland China?
- (2) Will the above “national standard” involve requirements pertaining to the disclosure of users’ personal information and digital property for inspection and law enforcement by the State?

Asked by: Hon YEUNG Alvin (Member Question No. (LegCo use): 74)

Reply:

The required information is provided as follows:

- (1) The Office of the Government Chief Information Officer participates in the Cloud Computing Working Group of the National Information Technology Standardization Committee to promote technical knowledge exchange between the two places and facilitate the development of cloud computing services. The national standard of “Information technology - Cloud computing - Cloud Service Purchase Guideline” is being formulated for providing a set of technical standards for cloud service customers and cloud service providers. The standard does not involve the processing of data in systems.

- (2) The requirements pertaining to the disclosure of users' personal information and digital property for inspection and law enforcement by the State are not within the scope of the national standard of "Information technology - Cloud computing - Cloud Service Purchase Guideline".

- End -

CONTROLLING OFFICER'S REPLY

ITB251

(Question Serial No. 6016)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title): (000) Operational expenses

Programme: (1) Use of IT in Government

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned in paragraph 4 under Programme (1) of Head 47 that the Office of the Government Chief Information Officer “provided secretariat support to the Steering Committee on Innovation and Technology chaired by the Chief Executive”. In this connection, please inform this Committee of the following:

- (1) Please provide details on the duties of the Steering Committee on Innovation and Technology, and explain the similarities and differences between the duties of the aforesaid committee and the Innovation and Technology Bureau;
- (2) Please provide details on the work progress of the Steering Committee on Innovation and Technology since its establishment;
- (3) Please list out in tabular form the establishment of the Secretariat to the Steering Committee on Innovation and Technology, broken down by post and staff number;
- (4) Please list out in tabular form the operational cost of the Secretariat to the Steering Committee on Innovation and Technology, broken down by salary, allowance, fee of hired services, etc.

Asked by: Hon YEUNG Alvin (Member Question No. (LegCo use): 76)

Reply:

The consolidated reply to the various parts of the question is as follows:

The Steering Committee on Innovation and Technology is an internal high-level, cross-bureau/departmental committee chaired by the Chief Executive to examine and steer initiatives under the eight areas of innovation and technology (I&T) development announced in the Policy Address and smart city projects, including allocation of resources and coordination of cross-bureau/departmental projects so as to more efficiently take

forward the I&T development in Hong Kong. The membership of the Steering Committee comprises most of the Government Secretaries. The Innovation and Technology Bureau is one of the Government's policy bureaux. It is responsible for formulating comprehensive I&T policies and is committed to establishing a thriving I&T ecosystem to facilitate the development of I&T and its related industries in Hong Kong.

The Steering Committee held two meetings in December 2017 and March 2018 respectively. The Innovation and Technology Bureau provides secretariat support to the Steering Committee. Breakdown of the manpower and expenditure is not available.

- End -

CONTROLLING OFFICER'S REPLY

ITB252

(Question Serial No. 1357)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (3) IT in the Community

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Regarding the mobile applications (apps) developed by the Government, please inform this Committee of the following:

1. What are the apps launched by various departments and the numbers of downloads in the past year, as well as the development costs of the apps?
2. Has the Government reviewed, during the year, the contents of the apps with appropriate enhancement and promotion to attract more users? If yes, what are the details? If not, what are the reasons?

Asked by: Hon YIU Si-wing (Member Question No. (LegCo use): 7)

Reply:

The required information is provided as follows:

1. Information of the mobile apps launched by government departments in 2017-18 is set out at Annex.
2. The Office of the Government Chief Information Officer (OGCIO) has formulated the "Practice Guide for Developing Mobile Apps" for reference by government bureaux and departments (B/Ds). The guide stipulates that B/Ds are required to set the objectives and understand the needs of target user groups when developing an app. B/Ds should also regularly review and evaluate the cost-effectiveness and suitably improve their apps. Besides, B/Ds should conduct appropriate publicity and promotion to allow target users to understand the objectives and usage of the app. In addition, the "GovHK Apps" and the GovHK website of OGCIO have also included a list of mobile apps provided by the Government to help promote the government mobile apps.

Information of the mobile apps launched by B/Ds in 2017-18

No.	B/D	App Name	(Approximate) Development Cost	Total Number of Downloads (As at 28 Feb 2018)
1.	Education Bureau (Assessment and HKEAA Section)	說話加油站 (Chinese name only)	Developed with the related website. As it is not a stand-alone project, no separate breakdown of the expenditure is available.	3 800
2.	Education Bureau (Kindergarten Administration Section)	Profile of Kindergartens and Kindergarten-cum-Child Care Centres 2017	Included in the cost of the whole project of Profile of Kindergartens. As it is not a stand-alone project, no separate breakdown of the expenditure is available.	27 000
3.	Education Bureau (Personal, Social and Humanities Education Section)	History Trip Go Easy: Cheung Chau Jiao Festival	Developed as a part of the e-book and e-portal project. As it is not a stand-alone project, no separate breakdown of the expenditure is available.	5 200
4.	Hongkong Post	HKPostStamps	\$150,000	11 000
5.	Tourism Commission	A Symphony of Lights	\$537,000	4 000
6.	Water Supplies Department	WSD GA Product Directory	\$175,000	4 900

- End -

CONTROLLING OFFICER'S REPLY**ITB253****(Question Serial No. 1373)**

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (3) IT in the Community

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Please list out the numbers of additional free public Wi-Fi service hotspots and the cumulative numbers of hotspots in each of the past 3 years in 18 districts. Will there be any specific plan to further increase the number of Wi-Fi service hotspots so that Hong Kong's Wi-Fi service can stay ahead in the region?

Asked by: Hon YIU Si-wing (Member Question No. (LegCo use): 27)

Reply:

The numbers of Wi-Fi.HK hotspots increased and the cumulative numbers of hotspots in the past 3 years, broken down by 18 districts, are as follows:

District	2015-16		2016-17		2017-18	
					(As at Feb 2018)	
	Number of hotspots increased (decreased)	Cumulative number of hotspots	Number of hotspots increased (decreased)	Cumulative number of hotspots	Number of hotspots increased (decreased)	Cumulative number of hotspots
Hong Kong						
Central and Western District	56	3 284	(5)	3 279	(322) ^[Note]	2 957
Eastern District	112	504	(15)	489	123	612
Southern District	95	379	583	962	491 ^[Note]	1 453
Wan Chai	87	537	504	1 041	85	1 126
Kowloon						
Kowloon City	1 923	3 364	23	3 387	(18)	3 369
Yau Tsim Mong	68	831	344	1 175	298	1 473
Sham Shui Po	52	412	64	476	139	615
Wong Tai Sin	15	186	113	299	114	413

District	2015-16		2016-17		2017-18	
	Number of hotspots increased (decreased)	Cumulative number of hotspots	Number of hotspots increased (decreased)	Cumulative number of hotspots	(As at Feb 2018)	
					Number of hotspots increased (decreased)	Cumulative number of hotspots
Kwun Tong	83	450	30	480	172	652
New Territories						
Tai Po	6	216	3	219	80	299
Yuen Long	30	340	(15)	325	258	583
Tuen Mun	8	1 289	3	1 292	109	1 401
North District	25	206	(12)	194	81	275
Sai Kung	9	904	22	926	89	1 015
Sha Tin	6	3 388	29	3 417	170	3 587
Kwai Tsing	72	330	5	335	34	369
Tsuen Wan	2	321	15	336	68	404
Islands	122	522	(3)	519	192	711
Total :	2 771	17 463	1 688	19 151	2 163	21 314

Note:

Since some participating organisations have corrected the location of their hotspots, we have accordingly re-grouped 445 hotspots from the Central and Western District to the Southern District. As a result, even though there was an increase of 123 hotspots in the Central and Western District in 2017-18, the above recorded a negative change.

We will continue to implement the Wi-Fi Connected City programme to expand the coverage of the Wi-Fi.HK service through a multi-pronged approach, including encouraging public and private organisations to join the programme, providing Wi-Fi services at government venues through a public-private collaboration model and subsidising the provision of free Wi-Fi service at youth service centres and study rooms, etc. Regarding the public-private collaboration model, the Government has implemented a pilot project and progressively launched free Wi-Fi service at more than 20 venues since July 2017. We are reviewing the pilot project and formulating the implementation details for the next stage. We aim to roll out the public-private collaboration model in full scale in 2018 to further increase the number of Wi-Fi.HK hotspots.

- End -

CONTROLLING OFFICER'S REPLY

(Question Serial No. 1375)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (2) IT Infrastructure and Standards

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

Smart lampposts are covered in the Smart City Blueprint for Hong Kong promulgated in this January. Please advise specifically on the applications of smart lampposts in future and the expenditure, and how tourist experience can be enhanced.

Asked by: Hon YIU Si-wing (Member Question No. (LegCo use): 29)

Reply:

To promote smart city development, the Government plans to launch a “Multi-functional Smart Lampposts” pilot scheme in 4 selected urban areas (Causeway Bay / Wan Chai, Central / Admiralty, Tsim Sha Tsui and Kwun Tong / Kai Tak Development) to install about 400 new lampposts with smart devices for enhancing city and traffic management. The estimated cost of the whole project is about \$272 million, with an annual operating cost of about \$32 million.

“Multi-functional Smart Lampposts” can help government departments collect various city data and disseminate more real-time information to the public, including district traffic information or alerts for the convenience of tourists in planning their itinerary to enhance their travel experience. In addition, “Multi-functional Smart Lampposts” are suitable street furniture for mobile network operators to install small cell stations to provide public mobile communications services (including the fifth generation (5G) mobile communications technology in future). They can also be used for providing free Wi-Fi services to the public and tourists.

- End -

CONTROLLING OFFICER'S REPLY

ITB255

(Question Serial No. 0866)

Head: (47) Government Secretariat : Office of the Government Chief Information Officer

Subhead (No. & title):

Programme: (1) Use of IT in Government

Controlling Officer: Government Chief Information Officer (Allen YEUNG)

Director of Bureau: Secretary for Innovation and Technology

Question:

As the Office of the Government Chief Information Officer will commence the development of a shared big data infrastructure to facilitate bureaux and departments (B/Ds) in developing and operating big data analytics applications for smart city development, will the Government inform this Committee of the following:

- (1) What were the details and expenditure of the projects on big data analytics applications implemented by B/Ds in 2017-18?
- (2) What training courses, measures and plans were implemented within the Government in 2017-18 to enhance staff knowledge of big data applications, and to encourage departments to release more open data on the government open data portal "data.gov.hk"? What were the financial resources and manpower involved in the aforesaid work?
- (3) What are the specific plan and objectives of developing the big data infrastructure, as well as the related timetable, estimated manpower and expenditure in 2018-19?
- (4) Does the Government have any specific measures and plans to facilitate public and private organisations, including public transport operators to open up more data? What are the estimated expenditure and manpower involved?

Asked by: Hon YUNG Hoi-yan (Member Question No. (LegCo use): 16)

Reply:

The required information is provided as follows:

- (1) The Office of the Government Chief Information Officer (OGCIO) together with various bureaux/departments (B/Ds) have been exploring the application of big data analytics within the Government to enhance operational efficiency and improve the

quality of public services. In 2017-18, government projects involving the application of big data analytics technology include:

- (a) OGCIO implemented the Pilot Big Data Analytics Platform to facilitate sharing of data and collaboration in the development of pilot big data applications among B/Ds;
- (b) OGCIO carried out the Pilot Implementation of Big Data Analytics for Cyber Threat Analysis, which adopted big data technology to collect and analyse cyber threat information and data, thus strengthening the ability to disseminate cyber threats and issue early security alerts to B/Ds;
- (c) OGCIO carried out the Pilot Partnership Programme for Cyber Security Information Sharing, which used artificial intelligence and big data technology to analyse cyber security information and share cyber security threats with the community to strengthen Hong Kong's overall capability in defending against and recovering from cyber attacks;
- (d) The Hong Kong Observatory commenced the Pilot Chatbot Service to provide a convenient and interactive means for citizens to enquire about weather information;
- (e) The Customs and Excise Department commenced the Study on the Development of a Cargo Big Data System to Enhance its Risk Management Capability in Cargo Clearance; and
- (f) The Hong Kong Police Force commenced the Feasibility Study on an Automation System for the Collection, Classification and Association of Cyber Crime Data.

The expenditure for the above projects in 2017-18 is about \$5.40 million.

- (2) In 2017-18, OGCIO organised about 50 training sessions and seminars to help B/Ds enrich their knowledge and techniques on big data application, and encourage them to open up more government data. There were about 730 participants from various B/Ds, involving a training cost of around \$570,000. The work was carried out by the existing manpower of OGCIO.
- (3) The proposed Big Data Analytics Platform will run on the next generation government cloud, providing big data analytics tools and artificial intelligence cognitive tools. Through resource sharing and adoption of big data analytics and artificial intelligence technologies, we aim to enhance government operation efficiency, enhance city management, and provide more efficient and reliable public services. The Big Data Analytics Platform is expected to be launched in 2020, and its development will incur a cost of about \$69 million to be funded by the Capital Works Reserve Fund Head 710. The staff cost is around \$3.6 million, involving 4 civil service posts.
- (4) We will continue to promote and support the Government and public organisations to open up more datasets in different categories to provide raw materials for technological research, innovation, big data analytics and the development of smart city. Regarding private organisations, data is an asset having commercial value. Individual organisations will determine whether to open up their data based on commercial considerations. With respect to the public transport operators, certain franchised bus companies, MTR and trams have provided passengers with free

real-time arrival information of respective routes through their web pages, mobile applications and display panels installed on bus stops/platforms. The franchised bus companies are also cooperating with the Transport Department (TD) to provide real-time arrival information on TD's "Hong Kong eTransport" mobile application and website. Moreover, the franchised and licensed ferry operators have also provided service information on their piers through the websites and mobile applications.

The Government will continue to explain to public and private organisations the value of opening up data that will be beneficial to their organisations and businesses, and to actively encourage them to support the Government's open data policy by releasing their data on the "data.gov.hk" portal for more innovative applications.

To take forward and expedite the work on open data and data analytics more effectively, we obtained the approval of the Finance Committee in February 2018 to create 1 permanent post of Chief Systems Manager (D1) in OGCIO, who will be supported by 9 non-directorate posts and responsible for advocating and supporting B/Ds to open up data and make use of big data analytics, and publishing relevant government-wide practices and guidelines. The related salaries and departmental expenses are about \$7 million in 2018-19.

- End -

CONTROLLING OFFICER'S REPLY

ITB256

(Question Serial No. 1574)

Head: (155) Government Secretariat: Innovation and Technology Commission

Subhead (No. & title):

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is mentioned in paragraph 74 of the Budget that \$500 million will be earmarked under the Innovation and Technology Fund to implement the Technology Talent Scheme (the Scheme) in support of the Policy Address. The Scheme will provide funding to subsidise staff of local enterprises on a matching basis. In this connection, will the Government advise this Committee on:

1. the approval criteria for applications for the Scheme, as well as the quota and funding ceiling for each application;
2. the specific measures to be implemented by the Government for encouraging local students to pursue a career in scientific research, and the resources for supporting young people who are interested in pursuing their career in scientific research?

Asked by: Hon LEUNG Mei-fun, Priscilla (Member Question No. (LegCo use): 44)

Reply:

The requested information is provided below:

1. We will set aside \$500 million under the Innovation and Technology Fund (ITF) to launch a 5-year pilot Technology Talent Scheme (the Scheme) in the third quarter of 2018, so as to nurture and bring together more technology talents. The Scheme comprises:

(a) a Postdoctoral Hub programme to provide funding support to ITF recipients as well as incubatees and innovation and technology (I&T) tenants of the Hong Kong Science and Technology Parks Corporation (HKSTPC)/Cyberport to recruit up to 2 postdoctoral talents for research and development work. The ITF will provide a monthly allowance of \$32,000 for each postdoctoral researcher for up to 24 months. The concerned researcher must possess a doctoral degree in a science, technology, engineering or mathematics

(“STEM”)-related discipline from either a local university or a well-recognised non-local institution. We are working out the programme details. It is expected that there will be some 200 applications per year; and

(b) a Reindustrialisation and Technology Training Programme (RTTP) to subsidise local enterprises on a 2:1 matching basis for training staff in advanced technologies, especially those related to “Industry 4.0”. Eligible trainee must be a Hong Kong permanent resident, as well as employed by a local enterprise or non-government subvented organisation. There is no minimum academic qualification requirement for the persons to be funded under the RTTP but they are required to have academic background or experience of relevant technical training courses. The RTTP will be administered by the Vocational Training Council (VTC) and overseen by VTC’s Innovation and Technology Training Board. We are working out the programme details (including the funding ceiling) with VTC. It is expected that there will be about 1 000 applications per year.

2. To encourage university graduates to pursue a career in I&T industry, we enhanced the Internship Programme under the ITF in 2017 through measures such as increasing the maximum monthly internship allowances to \$19,000 and further expanding the programme to all I&T tenants of HKSTPC and Cyberport, so that more STEM graduates will benefit and technology talents can apply what they have learned.

The Hong Kong Productivity Council established an Inno Space in October 2017 to provide workspace and technical support to start-up entrepreneurs, students and graduates and assist them in developing innovative ideas into industrial design, which may subsequently be translated into products through prototyping, so as to nurture a start-up culture in Hong Kong and support re-industrialisation.

Meanwhile, to enhance public understanding of I&T and encourage local students to pursue a career in research, the Innovation and Technology Commission (ITC) collaborates from time to time with HKSTPC, youth groups, social service agencies, the academic and business sectors, relevant government departments, etc. to organise promotional events including competitions, talks, scholarship award schemes, seminars, etc., and supporting various bodies through the General Support Programme under the ITF to organise events which help foster an I&T culture.

In 2018-19, ITC will continue to organise and support various promotional and educational activities to nurture more young innovative talents. The major initiatives or activities are as follows:

- organising the InnoTech Month, including the 9-day InnoCarnival;
- supporting the Hong Kong Student Science Project Competition;
- supporting the Innovation and Technology Scholarship Award Scheme; and
- supporting the Joint School Science Exhibition.

- End -

CONTROLLING OFFICER'S REPLY

ITB257

(Question Serial No. 1559)

Head: (111) Innovation and Technology Fund: Innovation and Technology

Subhead (No. & title):

Programme: Not Specified

Controlling Officer: Commissioner for Innovation and Technology (Ms Annie CHOI)

Director of Bureau: Secretary for Innovation and Technology

Question:

It is stated in paragraph 117 of the Budget that the Government must invest heavily in nurturing talent and create employment and business start-up opportunities with good prospects for our young people. Nevertheless, given the changing demographic structure of Hong Kong, there is an increasing number of elders and retirees, while many of the elders are well-educated with professional knowledge, a “can-do” spirit and rich social experience. In this connection, will the Government inform this Committee of:

1. Hong Kong's retired population in the past 3 years;
2. whether the Government has previously conducted relevant studies on retirees taking up employment again or starting their own businesses; if yes, the details and the relevant expenditure; if not, the reasons; and
3. whether the Government will consider launching an entrepreneur support scheme dedicated for retirees or persons thinking about retiring; if yes, the details; if not, the reasons?

Asked by: Hon LEUNG Mei-fun, Priscilla (Member Question No. (LegCo use):54)

Reply:

The requested information is provided below:

- (1) The Innovation and Technology Commission (ITC) does not have the relevant statistics requested.
- (2) & (3) ITC provides various support to innovation and technology (I&T) start-ups, including incubation programmes, technical support, working spaces and shared facilities, etc., through the Innovation and Technology Fund (ITF) and relevant

public organisations (including the Hong Kong Productivity Council and the Hong Kong Science and Technology Parks Corporation, etc.).

In addition, the Support and Consultation Centre for Small and Medium Enterprises (SMEs) (SUCCESS) of the Trade and Industry Department provides free and practical information as well as consultation services for SMEs. The Business Start-up Information Service of SUCCESS provides comprehensive information on starting a business in Hong Kong, such as information on required government licences and permits, guidelines on drafting business plan, budget analysis, etc. SUCCESS also organises seminars, workshops and other events to help SMEs broaden their business knowledge and enhance their entrepreneurial skills. SUCCESS also arranges SMEs to meet with experts from various sectors for professional consultation through its “Meet-the-Advisors” Business Advisory Service, providing SMEs with practical advice on resolving business problems. SUCCESS also implements a SME Mentorship Programme to provide an opportunity for SME owners who are at their early stage of business to consult accomplished entrepreneurs on business skills through free one-on-one counselling.

The above support programmes and measures are open to all members of the public, including retirees. There is no restriction on age or employment status.

The ITF aims to finance projects that contribute to I&T upgrading in manufacturing and services industries in Hong Kong as well as support the development of the industry. It has not provided funding support for conducting studies relating to retirees taking up employment again or starting their own businesses.

- End -