For discussion 11 February 2022

Legislative Council Panel on Commerce and Industry

The Chief Executive's 2021 Policy Address Policy Initiatives of Innovation and Technology Bureau

Purpose

The Chief Executive ("CE") delivered the 2021 Policy Address ("PA") on 6 October 2021. This paper aims to present the major initiatives related to innovation and technology ("I&T") in the PA and PA Supplement, as well as the progress / achievements of the current-term Government in promoting I&T.

Solidifying the foundation rooted in I&T

2. I&T is a key policy area of the current-term Government. I&T development fosters economic diversification, improves citizens' quality of life, and creates quality employment opportunities. The CE set forth eight major areas¹ for developing I&T in the 2017 PA. The current-term Government has unprecedentedly invested over \$130 billion in developing infrastructure, promoting research and development ("R&D"), nurturing talent, and supporting the industry, etc., thereby striving to enhance the I&T ecosystem in Hong Kong.

- 3. The satisfactory growth in many I&T-related figures in recent years reflects that various I&T initiatives are gradually taking effect, and that the I&T ecosystem in Hong Kong has become increasingly vibrant and the I&T atmosphere consistently enhanced. For example:
 - (i) The number of start-ups rose from around 1 000 in 2014 to around 4 000 in 2021, and that of start-up employees increased from some 2 400 to some 14 000. We have also witnessed the birth of 12 unicorns in the same period;

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Including increasing resources for R&D, pooling together technology talent, providing investment funding, providing technological research infrastructure, reviewing existing legislations and regulations, opening up government data, Government to lead changes to procurement arrangements, and strengthening popular science education.

- (ii) Venture capital investment in Hong Kong also substantially increased from around \$1.2 billion in 2014 to over \$40 billion in 2021; and
- (iii) Hong Kong is currently Asia's largest and the world's second largest fundraising hub for biotechnology companies. As at end-January 2022, 48 pre-revenue / pre-profit biotechnology companies have listed in Hong Kong, with the relevant funds raised through initial public offering amounting to over \$112 billion.
- 4. Hong Kong's I&T development has been internationally acclaimed, winning numerous awards and accolades. For example:
 - (i) 2021 World Digital Competitiveness Ranking: first in Asia and second worldwide, and first worldwide in terms of "Technology";
 - (ii) 2021 World Talent Ranking: first worldwide in terms of "Readiness";
 - (iii) 2020 Digital Intelligence Index ² and 2019 World Competitiveness Report: third worldwide; and
 - (iv) Over the past two years, the technologies developed by I&T quangos (e.g. five R&D Centres³, Hong Kong Productivity Council, etc.) have won over 40 international awards, including Edison Awards, R&D 100 Awards, CES Innovation Awards, as well as the International Exhibition of Inventions of Geneva.
- 5. Relevant progress / achievements of the policy initiatives under the Innovation and Technology Bureau ("ITB") during the current-term Government are set out at **Annex**.

Going from strength to strength in developing I&T at full steam

6. Our country provides staunch support for Hong Kong's I&T development. The 14th Five-Year Plan ("the Plan") promulgated in March last year set out in its prologue the grand vision to develop our country into an innovative one with solid technology. The Plan put forward the development pattern of "dual circulation", which takes the domestic market as the mainstay

² Jointly published by Mastercard and the Fletcher School of the Tufts University in the United States.

Automotive Platforms and Application Systems R&D Centre; Hong Kong Applied Science and Technology Research Institute; Hong Kong Research Institute of Textiles and Apparel; Logistics and Supply Chain MultiTech R&D Centre; and Nano and Advanced Materials Institute.

while enabling domestic and foreign markets to interact positively with each other. In addition to expressing clear support for Hong Kong's development into an international I&T hub, the Plan, for the first time, included the Shenzhen-Hong Kong Loop as one of the four major platforms of co-operation in the Guangdong-Hong Kong-Macao Greater Bay Area ("GBA"), which fully demonstrates the importance the Central Government attaches to Hong Kong's I&T. Meanwhile, the GBA development provides Hong Kong with the best platform to integrate into national development.

7. The Hong Kong Special Administrative Region ("HKSAR") Government will give full play to Hong Kong's strengths and develop I&T with We will actively participate in the brand new mindset and at full steam. development of the GBA into an international I&T hub and, by integrating into the country's new development pattern of "external circulation" and "domestic circulation", leverage Hong Kong's strengths to serve the needs of the country. We will continue to enhance the I&T ecosystem, which comprehensively covers R&D, financing, production and marketisation. At the same time, we will complement the I&T development in Shenzhen and, more so, the GBA, such that I&T will become a new economic engine to drive economic restructuring and create more diversified job opportunities. Meanwhile, as for the development of the GBA into an international I&T hub, we will continue to explore measures to facilitate the cross-boundary flow of innovation elements such as talent, capital, information and technologies, strengthen international I&T cooperation, develop quality technological infrastructure and innovation platforms, etc. HKSAR Government has formulated a number of policy initiatives which further drive I&T development based on the above direction, including providing land and infrastructure, further promoting R&D, as well as supporting I&T enterprises and enlarging the talent pool. These policy initiatives have been delivered in the CE's 2021 PA and PA Supplement. Details are set out in paragraphs 8 to 25 below.

New initiatives

Providing land and infrastructure

8. Having regard to the substantial increase in Hong Kong's demand for land dedicated to scientific research and new industries, the Government has been proactively identifying land to provide the industry with the necessary space for its development in the short, medium and long term. A number of sites have been reserved for I&T development in the 2021 PA. The Government is committed to leveraging the clustering effect and synergistic development among relevant projects, as well as providing adequate ancillary facilities.

9. The Hong Kong-Shenzhen Innovation and Technology Park Limited is pressing ahead with the construction works of the Hong Kong-Shenzhen Innovation and Technology Park ("HSITP") in the Lok Ma Chau Loop ("Loop"). The first batch of eight buildings will be completed in phases from end-2024 onwards. The Government is studying ways to expedite the development of HSITP. In the long run, under the Northern Metropolis Development Strategy ("Development Strategy"), HSITP and the areas around Lok Ma Chau / San Tin will be consolidated to form the San Tin Technopole, where land for I&T-related uses is estimated to amount to about 240 hectares ("ha."). The Technopole, together with the Shenzhen I&T Zone, will form the Shenzhen-Hong Kong I&T Co-operation Zone of approximately 540 ha., which will combine the strengths of both Hong Kong and Shenzhen to pool local and non-local talent, and become an essential propeller for the development of an international I&T hub in the GBA.

Ma Liu Shui reclamation project

10. The Government will revive the Ma Liu Shui reclamation project which, together with the land to be vacated by the relocation of the Sha Tin Sewage Treatment Works to caverns, will provide a total of 88 ha. of new land. The Government proposes that the newly provided land should be mainly for I&T development rather than the originally suggested residential use, so as to strengthen the development of the Eastern Corridor with I&T as a major economic function. The Government will also take this opportunity to improve the public transport service connection of Pak Shek Kok and the Science Park.

Building of landmark I&T facilities with a scale comparable to Cyberport in Lau Fau Shan

- 11. Cyberport is another landmark I&T community in Hong Kong. Cyberport has accommodated a number of technology enterprises and incubated five unicorns, covering the areas of Fintech, smart living and digital entertainment. Over the past three years, the start-ups in Cyberport have also attracted investment of over \$12.9 billion. The Cyberport 5 Project, which will increase the gross floor area of Cyberport by more than 40% within four years, has commenced.
- 12. In the long run, the proposed upgrading of the Hung Shui Kiu / Ha Tsuen as the New Territories North Modern Services Centre under the Development Strategy will be expanded to include Lau Fau Shan. Consideration may be given to the building of landmark I&T facilities with a

scale comparable to Cyberport at a location facing Qianhai, Shenzhen on the other side of the Shenzhen Bay.

Universities' R&D facilities

13. The Government has accepted in principle the proposals of the University of Hong Kong ("HKU") and The Chinese University of Hong Kong ("CUHK"), including reserving a 4-ha. site currently zoned "Green Belt" at Pokfulam for HKU to construct facilities for deep technology research, as well as supporting CUHK to use a 2.5-ha. site in the vicinity of the CUHK Medical Centre mainly zoned "Government, Institution or Community" to build research facilities and expand the Medical Centre, and at the same time improving the existing public transport interchange and parking facilities at the University Station of the East Rail Line. The Government will also support The Hong Kong Polytechnic University in exploring the use of its Hung Hom Bay Campus, which is currently used for self-financing post-secondary education, for academic and research uses.

Science Park Expansion and the second Advanced Manufacturing Centre

- 14. The Science Park at Pak Shek Kok currently supports about 1 100 technology enterprises and start-ups in areas such as artificial intelligence ("AI"), life and health, environmental technology, and four unicorns have been incubated therein so far. Over the past three financial years, its tenants / incubatees have raised funds amounting to \$33 billion. The Science Park will be expanded so that more space can be provided for technology enterprises and start-ups. The first batch of Stage 2 of the Science Park Expansion Programme (SPX2a), to be implemented in the third quarter of this year, is expected to provide a gross floor area of some 13 100 m² by 2024, mainly for wet laboratories.
- 15. The Advanced Manufacturing Centre ("AMC") at the Tseung Kwan O InnoPark and the Microelectronics Centre at the Yuen Long InnoPark will be completed in the middle of this year and 2023 respectively. The satisfactory industry response to these two facilities indicates that many enterprises share the view that high value-added and technology-intensive manufacturing processes and production lines can be set up in Hong Kong. HKSTPC has started to plan for the construction of the second AMC, and is currently identifying suitable land for specialised industries to use advanced manufacturing production lines so as to further promote the development of "re-industrialisation" in Hong Kong.

Further promoting R&D

16. R&D is the foundation of I&T. Hong Kong possesses a strong technological foundation and research capability, with five universities at the world's top 100 and two medical schools at the world's top 50, numerous world-class scholars and distinguished researchers, and rich experience in global research collaboration. Our achievements have been nationally and internationally recognised. To date, we have 16 State Key Laboratories, six Hong Kong Branches of Chinese National Engineering Research Centres, and 22 Joint Laboratories with the Chinese Academy of Sciences.

InnoLife Healthtech Hub

17. With the emphasis of the 14th Five-Year Plan on frontier fields such as life and health disciplines, we believe that Hong Kong should better leverage our strengths in life and health sciences to meet the country's needs. has a solid research foundation in this respect and a good number of worldrenowned experts, whose achievements have been widely acclaimed. clinical trial centres are recognised by the National Medical Products Administration, and their data which meet relevant clinical trial standards are also widely recognised by relevant bodies in the United States and the European To better leverage Hong Kong's strengths and act in concert with national development, the Government proposes to set up an InnoLife Healthtech Hub in HSITP in the Loop, with the 16 life and health-related laboratories in the InnoHK research clusters and the eight State Key Laboratories in life and health disciplines as the basis, to focus on R&D of biomedicine, chemistry, physics, engineering, and AI, etc., for application in fields of prevention, diagnosis, pathology tracking, medicine, surgical micro-robots, advanced treatment and rehabilitation, etc. Quite a number of start-ups or large enterprises in life and health disciplines have identified Hong Kong's strengths in this area and the market potential of the GBA are interested in gaining a foothold in Hong Kong. The San Tin Technopole will be able to provide land for the relevant research and advanced manufacturing industries.

Dedicated fund to finance participation in national R&D projects

18. Over the years, local universities have established close collaborative relationships with research institutions in the Mainland through various research programmes of which many have borne fruit. In recent years, quite a number of national R&D projects and funding schemes have been opened up by the Central Government to researchers in Hong Kong. The Government will set up a dedicated fund to finance local universities or research institutes to participate in

national R&D projects, to encourage Hong Kong scientists to continue to take part in such extremely meaningful collaborations and contribute to our country.

Utilising clinical data for R&D

19. Clinical data is indispensable to R&D on life and health disciplines. The Hospital Authority ("HA") has accumulated clinical data from over 40 hospitals and 100 specialist clinics over the past 20 years, and made impressive achievements in terms of quantity and quality. A mechanism is already in place to open up such data for R&D use by universities. As a next step, we will explore collaboration between HA and HKSTPC on the use of HA's clinical data for R&D purposes, so as to support the industry and R&D institutes.

Supporting start-ups / enlarging talent pool

- 20. The Government has been supporting start-ups through funding schemes (e.g. Enterprise Support Scheme, Re-industrialisation Funding Scheme, and Technology Start-up Support Scheme for Universities, etc., under the Innovation and Technology Fund), investment funds, incubation programmes, etc., as well as adopting a two-pronged approach in enlarging the I&T talent pool by nurturing local talent and attracting research talent from the Mainland and overseas. Progress of relevant initiatives is detailed at **Annex**.
- 21. In order to nurture students' interest in I&T from a young age, the Government has been striving to promote STEM education in multiple Beyond the regular curriculum, the IT Innovation Lab in dimensions. Secondary Schools and Knowing More About IT Programmes subsidise secondary and primary schools respectively to organise extra-curricular activities related to information technology. The STEM Internship Scheme, the Innovation and Technology Scholarship and various schemes implemented by HKSTPC and Cyberport provide internship and training opportunities to encourage university students to explore the I&T sector. The Government has also launched various schemes to assist the youth to pursue a career in I&T after graduation; for instance, the Research Talent Hub funds enterprises and research institutes to recruit university graduates to conduct R&D work, and the Reindustrialisation and Technology Training Programme funds local enterprises on a matching basis for their staff to receive training in advanced technologies.

Global STEM Professorship Scheme

22. The Global STEM Professorship Scheme was launched in June 2021 to step up efforts to support universities in recruiting internationally renowned I&T scholars and their teams to conduct research and teaching activities in Hong Kong. The scheme has supported over 60 outstanding scholars so far. These scholars and their teams are gradually arriving in Hong Kong. The Government will continue to implement the scheme in order to further pool research talent.

GBA InnoAcademy

23. HKSTPC will set up the "GBA InnoAcademy" at its branch in Shenzhen to serve as a resource centre, training hub and exchange platform for talent. It is expected to commence operation in the middle of this year.

GBA InnoExpress

24. HKSTPC will also set up the "GBA InnoExpress" at its branch in Shenzhen to nurture start-ups and support I&T enterprises to attract foreign investments and go global. It is expected to commence operation in the middle of this year.

Facilitating flow of talent within the GBA

25. The Government will explore the extension of the Immigration Arrangement for Non-local Graduates to cover graduates of Hong Kong universities' GBA campuses. HKSTPC will work with the relevant institutions to establish incubator networks in their GBA campuses to train up talent for and provide assistance to start-ups.

Way forward

26. In order to delineate the ITB's regular policy functions and future focus of work more clearly, the current-term Government proposes to rename the ITB as the Innovation, Technology and Industry Bureau in the re-organisation of Government structure to demonstrate the mission to promote "reindustralisation" policies through the application of I&T and smart production and highlight the direction of promoting "re-industrialisation" through I&T in Hong Kong.

- 27. Hong Kong presents endless opportunities in I&T. The Government will continue to foster the positive interaction with the industry, academia and research sectors, with a view to formulating strategies and developing Hong Kong into an international I&T hub with concerted efforts.
- 28. The Government will continue to encourage individual bureaux/departments to implement various initiatives under the *Smart City Blueprint for Hong Kong 2.0*, with a view to enabling the general public to perceive the convenience and benefits to their daily lives brought by smart city and the use of I&T.

Innovation and Technology Bureau Innovation and Technology Commission Office of the Government Chief Information Officer Efficiency Office February 2022

Progress / Achievements of Innovation and Technology ("I&T")-related Policy Initiatives of the Current-term Government

Policy Initiatives	Progress / Achievements of
Policy Initiatives	the Current-term Government
(1) Resources for Res	search and Development ("R&D")
Enhanced tax	Introduced the enhanced tax deduction for qualifying
deduction for	R&D expenditure incurred by enterprises on or after
research and	1 April 2018. The total amount of relevant
development	expenditure for claiming tax deduction in the year of
("R&D")	assessment 2019/20 was about \$3.21 billion, more than
expenditure	100% increase as compared to 2017/18. For the year
	of assessment 2020/21, based on the tax returns as at
	31 December 2021, the relevant amount of R&D
	expenditure for claiming tax deduction was about
	\$2.49 billion.
Innovation and	Injected a total of \$19.5 billion into the Fund from 2018
Technology Fund	to 2022 and consolidated the balance of certain
	subheads to better utilise resources.
Additional provision	Doubled the annual funding for each State Key
of funding	Laboratory and Hong Kong branch of Chinese National
	Engineering Research Centre to \$10 million, and that
	for both the Technology Start-up Support Scheme for
	Universities and the technology transfer offices of
	universities to \$8 million per university since
	April 2019.
(2) Technological Res	search Infrastructure
InnoHK research	Established two world-class research clusters -
clusters	Health@InnoHK focusing on healthcare technologies
	and AIR@InnoHK on artificial intelligence and robotics
	technologies. 28 research laboratories set up
	collaboratively by world-renowned local and non-local
	universities and research institutions have commenced
	operation progressively.
Hong Kong-	Commenced construction of major infrastructure works
Shenzhen Innovation	at the Lok Ma Chau Loop in July 2021 and foundation
and Technology Park	works for the first three buildings in December 2021.
("HSITP")	First batch of eight buildings to be completed in phases
	from end-2024 to 2027.

Policy Initiatives	Progress / Achievements of the Current-term Government
Cyberport Smart- Space 8 co-working space	Commenced operation in July 2018, with an occupancy rate of around 90%.
Science Park expansion	Completed Stage 1 of the Science Park expansion programme in 2019 with the total gross floor area increased to around 400 000 square metres. It will be further expanded to provide more I&T space and facilities.
Further development of R&D facilities in Science Park	Injected \$3 billion into Hong Kong Science and Technology Parks Corporation ("HKSTPC") in 2018 for developing R&D-related facilities, such as biobank and the Robotics Catalysing Centre, which have gradually been commissioned since 2020.
InnoCell	Completed with about 500 residential spaces in end-2020 to provide living and collaborative space.
Data Technology Hub	Commenced operation in 2020.
Cyberport 5	Commenced works; target completion in 2025.
(3) I&T Co-operation	
One zone, two parks	Co-operated with the Shenzhen Municipal People's Government to jointly develop the Shenzhen-Hong Kong I&T Co-operation Zone ("Co-operation Zone") which comprises the Shenzhen I&T Zone and HSITP, with a view to establishing "one zone, two parks".
Joint policy package	Signed a co-operation arrangement with Shenzhen Municipal People's Government in September 2021 for jointly attracting more talent and enterprises to the Co-operation Zone.
Shenzhen branch of the Hong Kong Science Park	Signed a framework agreement by HKSTPC with the Shenzhen-Hong Kong Science and Technology Innovation Cooperation Zone Development Co Ltd in September 2021 regarding the establishment of the Shenzhen branch of the Hong Kong Science Park. HKSTPC has identified a building in Futian Free Trade Zone for the establishment of the Shenzhen branch of the Hong Kong Science Park.

Policy Initiatives	Progress / Achievements of
Policy Initiatives	the Current-term Government
Joint Funding	Supported R&D projects with Guangdong
Scheme	Province/Shenzhen Municipality and the Ministry of
	Science and Technology ("MOST") through
	Guangdong-Hong Kong Technology Cooperation
	Funding Scheme and Mainland-Hong Kong Joint
	Funding Scheme since 2007 and 2019 respectively.
	By end-December 2021, approved around
	HK\$300 million for 149 projects and HK\$73 million
C 1 1	for 38 projects respectively.
Cross-boundary	Since 2019, over RMB\$440 million (around
remittance of R&D	HK\$540 million) of R&D funding has been approved
funding from	by MOST and Mainland provinces and municipalities
Mainland to Hong Kong	for Hong Kong's universities and R&D institutions for
Kong	conducting R&D projects or setting up laboratory.
Relaxing the	The Central Government announced in November 2019
limitation on	the policy measure in relaxing the limitation on
exporting Mainland	exporting Mainland human genetic resources to Hong
human genetic	Kong. So far, four Mainland branches established by
resources to Hong	Hong Kong's universities have been confirmed by the
Kong	MOST to be meeting the specified requirements as the
	pilot units for exporting human genetic resources to
(4) G	Hong Kong independently.
(4) Support for Tech	
Innovation and	Co-invested in local I&T start-ups with partner venture
	capital funds since 2019. By December 2021,
Fund	invested in 23 start-ups with around \$172 million,
C:4-1::::	attracting around \$1,570 million private investment.
Capital injection into	Injected \$7 billion into HKSTPC in 2018 for enhancing
the HKSTPC	support for its tenants, including:
	- increasing the financial support under HKSTPC's
	Incubation Programmes to a maximum of \$4 million, benefiting over 520 start-ups so far; and
	- launching a pre-incubation programme in 2019 to
	provide \$100,000 seed funding for entrepreneurial
	technology talents, with over 370 applications
	approved so far.
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Policy Initiatives	Progress / Achievements of the Current-term Government
Corporate Venture	Injected funding by HKSTPC into this Fund in 2019 and
Fund	2021, with the current fund size reaching \$600 million.
	Invested \$238.3 million in 21 start-ups, attracting over
	\$3.1 billion of private investment as at end-November
	2021.
Capital injection into	Injected \$200 million into Cyberport in 2018 for
Cyberport	enhancing support for its start-ups and tenants,
	including:
	- increasing the financial subsidy under the
	Cyberport Incubation Programme to a maximum of
	\$500,000 benefiting 587 start-ups so far;
	 launching the Easy Landing Scheme; and
	- launching the Overseas/Mainland Market
	Development Support Scheme, with
	74 applications approved so far.
Cyberport Macro	Injected \$200 million by Cyberport into this Fund in
Fund	2021, with the current fund size at \$400 million. More
	than \$162 million have been invested in 20 companies
	as of end-December 2021, attracting over \$1.425 billion
F14	of private investment.
Electronic sports	Injected \$100 million into Cyberport in 2018 to promote
("E-sports")	the development of e-sports. Cyberport opened a new
	e-sports competition venue in July 2019 and introduced the E-sports Industry Facilitation Scheme and E-sports
	Internship Scheme in April 2019, with 144 projects and
	80 intern positions approved so far.
Promotion of Hong	Established the I&T Inventions Experience Sharing and
Kong's	Business Promotion Platform with the Hong Kong
technological	Trade Development Council and I&T sector to promote
research	Hong Kong's research outcome and applications.
(5) Nurturing Technology Talent	
Knowing More	Launched in all publicly-funded primary schools
About IT	starting from 2021/22 school year for three years with
Programme	\$225 million. Over 100 primary schools submitted
	funding applications since the launch of the Programme
	with over \$13 million allocated.

Policy Initiatives	Progress / Achievements of
•	the Current-term Government
IT Innovation Lab in	Launched in the 2020/21 school year for three years,
Secondary Schools	with \$500 million to support information technology-
Programme	related extra-curricular activities. Over 310 schools
	submitted funding applications since the launch of the
	Programme with over \$110 million allocated.
STEM Internship	Launched in June 2020 with over 4 700 interns trained.
Scheme	
Research Talent Hub	Launched in July 2020 under which the Post-doctoral
	Hub was merged with the Researcher Programme, with
	around 6 260 talents recruited since 2017.
Greater Bay Area	Launched in January 2021. Over 250 enterprises have
("GBA") Youth	provided I&T job vacancies, benefiting over
Employment	300 graduates.
Scheme	
Technology Talent	Launched in 2018, with 614 quotas allotted, and the
Admission Scheme	Immigration Department correspondingly approved
	275 visa/ entry permits.
Global STEM	Launched in June 2021 to support universities in
Professorship	recruiting internationally-renowned STEM scholars.
Scheme	Supported over 60 scholars so far.
City I&T Grand	Launched the inaugural competition in December 2020.
Challenge	Received more than 740 submissions from over
	1 250 contestants on an individual or team basis.
	Grand Pitch has been successfully held in mid-October
	2021. Winning solutions of University/Tertiary
	Institutes and Open Groups are progressing to
	prototypes production phase. Trial runs at
	government departments or public organisations are
	expected to be gradually implemented during the
	second half of 2022.
(6) Re-industrialisati	
Re-industrialisation	Launched the Scheme in July 2020 to subsidise
Funding Scheme	manufacturers to set up new local smart production
	lines. Supported 21 applications with around
	\$153 million.
Re-industrialisation	Launched in August 2018 to support staff of local
and Technology	enterprises to attend advanced technology training
Training Programme	courses. Supported over 8 000 trainees to attend over
	10 000 training sessions with funding amount of about
	\$75 million as at end-December 2021.
L	The first to the December 2021.

Dalla Talkar an	Progress / Achievements of
Policy Initiatives	the Current-term Government
Advanced Manufacturing Centre and Microelectronics Centre	Commenced the development of the Advanced Manufacturing Centre and Microelectronics Centre by HKSTPC, with anticipated completion in the middle of this year and 2023 respectively.
(7) Smart City	
Steering Committee	Established in December 2017 under the chairmanship
on Innovation and	of the Chief Executive to steer I&T and smart city
Technology	development.
Smart City Blueprint	Released the Smart City Blueprint for Hong Kong in
for Hong Kong	December 2017 and the Smart City Blueprint for Hong
	Kong 2.0 in December 2020, with over 130 initiatives
	under six smart areas.
Smart village pilots	Explore the use of technology in addressing daily life issues in rural areas. Provided free Wi-Fi services at 24 village premises, and will extend the services progressively to some 100 village premises.
One-stop personalised digital services platform "iAM Smart"	Launched in December 2020 with over 1.1 million Hong Kong residents registered and over 10 million access through "iAM Smart" to online services. As at January 2022, the public can access more than 180 public and private online services. The Hong Kong Monetary Authority is currently working with the Office of the Government Chief Information Officer to develop the business version of the "iAM Smart" digital identity authentication platform.
Next Generation Government Cloud and Big Data Analytics Platform	Launched in September 2020 to expedite the implementation of e-Government services by bureaux and departments and support more projects adopting big data analytics. As at January 2022, the Next Generation Government Cloud has supported over 340 digital government services, and the Big Data Analytics Platform has supported the implementation of over 15 big data projects.

Policy Initiatives	Progress / Achievements of the Current-term Government
Smart lampposts	Installed 50 smart lampposts in Kwun Tong and Kai Tak
pilot scheme	Development Area, and is planning to install more
phot seneme	smart lampposts in phases in other pilot districts.
	Launched the smart lampposts virtual exhibition in
	March 2021 to enhance public understanding of smart
	lampposts. Testing the use of Light Detection and
	Ranging technology as a substitute for cameras in
	detecting vehicle speed and identifying vehicle types.
Smart Government	Set up in April 2019 to facilitate wider use of local
Innovation Lab	information technology solutions to improve public
	services. So far, matched more than 60 business needs
	with solutions, and arranged more than 80 thematic
	workshops. Arranged proof-of-concept testing for
	more than 30 solutions and launched the "Leading
	Towards Robotics Technologies" campaign in 2020 to
	inspire government departments to apply robotics
Public Sector Trial	technologies. Expanded the funding scope to all technology
Scheme	companies conducting R&D activities in Hong Kong in
Scheme	March 2020. From July 2017 up to now, funded more
	than 220 projects with \$479 million.
Technology Voucher	Regularised the Programme in February 2019; raised
Programme	the Government's funding ratio to 75% and increased
	the cumulative funding ceiling per applicant to
	\$600,000 in April 2020. Approved around \$1.1 billion
	for some 7 100 applications since launch up to
	December 2021.
TechConnect (block	Started in mid-2017 to support Government
vote)	departments to apply technologies with 99 projects
	approved so far as at mid-January 2022.
The GovHK chatbot	Launched in December 2019 to facilitate public search
(Bonny)	and access to around 3 700 government forms and
1022 -1414	related e-Government services.
1823 chatbot	Launched in December 2019 for citizens to obtain
	information and report cases for selected services more
	quickly, with over 35 000 requests handled.

Policy Initiatives	Progress / Achievements of	
	the Current-term Government	
Adoption of	Supported the development of a common online	
blockchain	platform by the Joint Universities Computer Centre for	
technology to	five tertiary education institutions on a pilot basis using	
promote service	blockchain technology to enable local tertiary students	
innovation	to provide global institutions or employers with proof	
	of education qualifications in an efficient and secure	
	manner. The platform is expected to be launched in	
	early 2022.	
(8) Opening Up Gove	(8) Opening Up Government Data	
Public Sector	Promulgated the open data policy in October 2018.	
Information Portal	Provided over 4 840 datasets in machine-readable	
	formats and around 1 800 application programming	
	interfaces on the Public Sector Information Portal.	
(9) Social Innovation		
Social Innovation	Injected a total of \$1 billion into the Fund with	
and	\$500 million injected in 2021-22 and \$500 million	
Entrepreneurship	injected at its launch in 2013. As at December 2021,	
Development Fund	allocated over \$490 million to fund 358 projects,	
	benefiting over 292 000 persons.	
Gerontechnology	Engaged an intermediary consortium of	
Platform	10 organisations in January 2021 to develop and operate	
	a one-stop Gerontechnology Platform under the Social	
	Innovation and Entrepreneurship Development Fund to	
	promote the use of gerontechnology in Hong Kong.	

	Progress / Achievements of
Policy Initiatives	the Current-term Government
Digital inclusion	Regularised the ICT Outreach Programme for the
	Elderly in December 2018, with around 48 000 outreach
	services provided to more than 12 000 elderlies.
	Launched the Enriched ICT Training Programme for the
	Elderly in February 2019, with over 100 free advanced
	digital training courses offered to about 3 200 elderlies
	with basic knowledge of digital technology so far.
	Launched the Elderly IT Learning Portal in October
	2019 with 30 learning modules published. The Social
	Innovation and Entrepreneurship Development Fund
	has granted a total funding of \$13 million in October
	2021 to support four innovative projects to promote
	inter-generational digital inclusion by engaging young
	people to assist the elderly in learning and adopting
(10) D Ll' - C 4 D	digital technologies.
(10) Public Sector Ro	
Transfer of the	Transferred the Efficiency Unit previously under the
Efficiency Unit to the Innovation and	Chief Secretary for Administration's Office to the
	Innovation and Technology Bureau on 1 April 2018 and renamed it as the Efficiency Office to build a stronger
Technology Bureau	team to further promote innovation and technology
	development within the Government.
Be the Smart	Completed over 75% of the 398 business facilitation
Regulator	measures committed from 2018-19 to 2020-21,
Regulator	covering about 270 licences with a total annual
	transaction volume of 2.4 million. Implementing
	plans to enable e-licensing for all applications by
	mid-2022.
Streamlining of	To reform about 900 government services involving
Government	application and approval on a continuous basis.
Services	39 bureaux and departments proposed 238 streamlining
	measures from 2019-20 to 2021-22, covering nearly
	500 government services with a total annual transaction
	volume of about 40 million.
` '	echnology to Combat COVID-19
COVID-19	Launched in February 2020 to provide the latest
Interactive Map	information on local COVID-19 cases, attracting more
Dashboard	than 60 million views as at January 2022.

Policy Initiatives	Progress / Achievements of the Current-term Government
Online booking	The online booking services for community testing
services	programme launched in November 2020 has processed
	more than 7.8 million bookings. The online booking
	services for the vaccination programme has processed
	more than 4.8 million bookings since it was launched in
	February 2021. The Return2hk Scheme launched in
	November 2020 has processed more than
	480 000 online bookings up to now, while the Come2hk
	Scheme has processed more than 40 000 online
	bookings since it was launched in September 2021.
Electronic wristband	Jointly developed with local research and development
and StayHomeSafe	institutes, universities and start-ups in early 2020 to
mobile app	support compulsory quarantine monitoring, now used
	by over 620 000 persons. This is the largest scale of
	such application in the world.
LeaveHomeSafe	Launched in November 2020 for the public to record
mobile app	visit history. Upgraded to version 2.0 and 3.0
	subsequently to enable the public to store and display
	the QR code of their vaccination record / COVID-19
	Vaccination Medical Exemption Certificate to support
	the implementation of "vaccine pass" and connect to the
	Hong Kong Health Code System. The number of
	downloads has exceeded 7.5 million. Over
	110 000 public and private venues and around 18 000 taxis have participated.
Hong Kong Health	Launched in December 2021 for the public to register
Code System	and use, in order to prepare for the orderly resumption
	of normal travel between the Mainland and Hong Kong.
	So far, received over 790 000 applications for the Health
	Code account, of which more than 640 000 accounts
	have been activated. Besides, the Health Code
	Conversion System has been facilitating the public to
	transmit valid negative nucleic acid results from the
	health code systems of Guangdong and Macao to the
	electronic health declaration system upon entry into
	Hong Kong under the Return2hk Scheme and the
	Come2hk Scheme.

Policy Initiatives	Progress / Achievements of
Policy Initiatives	the Current-term Government
COVID-19	Launched the COVID-19 Electronic Vaccination and
Electronic	Testing Record System in December 2020 for the public
Vaccination and	to download the electronic vaccination record through
Testing Record	the "iAM Smart" mobile app. The number of
System	downloads has reached over 4.5 million.
Telehealth services	Modernised HA's service model, including piloting the use of "HA Go" mobile app to provide telehealth services for suitable patients. Installed network infrastructure at village offices to enable provision of telehealth services for elderly persons living in remote
	areas.
Public Sector Trial	Launched in 2020 to support product development and
Scheme Special Call	application of technologies for prevention and control
	of the epidemic. 63 projects were approved with total funding of over \$102 million.
Distance Business	Accepted applications from 18 May 2020 to 31 October
Programme	2020 to support private enterprises to continue business during COVID-19 through adoption of information technology solutions. Around 26 000 approved applications were / are being implemented with funding of around \$1.7 billion.
CuMask+TM	Distributed over 10.7 million masks which met ASTM performance level 1 standard and were reusable for 60 times to citizens free of charge in mid-2020.

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