香港特別行政區政府 創新及科技局

香港添馬添美道二號 政府總部西翼二十樓



LC Paper No. CB(1)1148/17-18(01) INNOVATION AND TECHNOLOGY BUREAU

THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION

20/F, West Wing, Central Government Offices, 2 Tim Mei Avenue, Tamar, Hong Kong

By email

19 June 2018

Mr Desmond LAM
Clerk to Panel on Commerce and Industry
Legislative Council Complex
1 Legislative Council Road
Central, Hong Kong

Dear Mr LAM,

Panel on Commerce and Industry Meeting on 15 May 2018

Measures to support the Hong Kong Science and Technology Parks Corporation and the establishment of technology research clusters; and creation of an Assistant Commissioner post in the Innovation and Technology Commission

Regarding the follow-up questions raised by the Chairman of the Panel on 18 May 2018 for the captioned item, the Government's response is enclosed herewith for Members' reference.

Yours sincerely,

(Ricky CHONG)

for Secretary for Innovation and Technology

c.c. Commissioner for Innovation and Technology (Attn.: Ms Zorina WAN)

Panel on Commerce and Industry Meeting on 15 May 2018

Measures to support the Hong Kong Science and Technology Parks Corporation and the establishment of technology research clusters; and creation of an Assistant Commissioner post in the Innovation and Technology Commission

(A) Establishing Research Clusters

Control Mechanism

To ensure strong governance and accountability, we will put in place a rigorous governance regime to ensure that the quality and focus of publicly-funded research activities at the two research clusters align with our expectations and overall directions. In this regard, a Governing Committee will be set up for approving the admission of institutions and overseeing the daily operation of the two clusters. On the premise of ensuring that the research centres/laboratories align with the expectations and overall directions of the clusters, the Governing Committee will strike an appropriate balance to allow flexibility, upholding academic and research autonomy of the research centres/laboratories concerned to foster innovative scientific research.

2. The membership of the Governing Committee will include representative scholars, experts and industry participants from the relevant technology fields, as well as representatives from the Government and the Hong Kong Science and Technology Parks Corporation (HKSTPC). We are pleased to continue liaising with different stakeholders and listening to their views on the research clusters.

Staffing Arrangements of the Research Centres/Laboratories

- 3. The manpower ratio of the research centres/laboratories (i.e. 40 research staff and 20 support staff) only serves as a preliminary assumption to allow the Government to make an estimation for the development planning of the research centres/laboratories. Such planning assumption will not impede the actual manpower input of the research centres/laboratories in the future.
- 4. When making such assumption, we have taken into account that a certain number of support staff may be required during the early days of operation of the research centres/laboratories to cope with the administrative work arising from the initial establishment, such as setting up the necessary

internal administration and operation mechanism. As the operation of the research centres/laboratories become more established and more R&D projects commence, there will be an increase in the percentage of researchers in the total number of staff.

- 5. We expect that in addition to handling the administrative work arising during the early days of operation of the research centres/laboratories, the support staff will also be responsible for providing necessary support for the scientific research work, including general project coordination, procurement and day-to-day office management, etc. With effective administrative support, we believe that the research staff will be able to better focus on their R&D work.
- 6. When formulating the control and administrative mechanism for the research clusters, the Innovation and Technology Commission (ITC) will liaise closely with different stakeholders and, on the premise of ensuring a proper usage of public resources, consider leveraging information technology to minimise administrative work at the research centres/laboratories.

Complementary Facilities

- 7. The Government proposed that around \$3 billion out of the \$10 billion set aside for HKSTPC be used to make available a range of facilities foster research work in healthcare and intelligence (AI)/robotics technologies, which include the provision of laboratory and work spaces for research, such as converting a building in the Hong Kong Science Park (Science Park) to make available about 178 000 ft² of laboratory space for healthcare research, as well as identifying another around 20 000 ft² of laboratory space with higher loading for setting up We will also provide "one-stop" core research robotics laboratories. facilities for the research work in healthcare and AI/robotics technologies in the Science Park, including Pilot Batch Production Facilities, Bio Bank and Medical Informatics, Robo Standard Testing Laboratory, etc.
- 8. These facilities will benefit the research centres/laboratories under the two clusters. The aggregate area to be taken up by the two clusters mainly depends on the development progress of the clusters and the needs of the research centres/laboratories to be admitted.

Admission of Private Enterprises

9. We aim to foster collaboration among universities, R&D institutions and technology enterprises through the research clusters. When handling application for admission from technology enterprises, factors for

consideration will be similar to those from non-profit-making research institutions, such as the R&D capabilities of these technology enterprises in the areas concerned, the track record or concrete plans in collaborating with local universities, research institutions or industry partners, etc.

Commercialisation of R&D Results

- 10. The Government will continue to enhance Hong Kong's innovation and technology (I&T) ecosystem, and to provide favourable environment for commercialising the R&D results of the two research clusters.
- 11. With regards to the provision of land and infrastructure, the Government strives to provide sustainable environment for the I&T development and "re-industrialisation" in Hong Kong. For instance, the Government revised the industrial estate (IE) policy in 2015 to develop specialised multi-storey industrial buildings in the three existing IEs for rental to multiple users, so as to attract high value-added technology industries and manufacturing processes suitable for Hong Kong to dovetail with downstream production. HKSTPC is constructing 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.
- 12. Besides, we have preliminarily identified a site of around 56 hectares near the Liantang/Heung Yuen Wai Boundary Control Point for the development of a new IE. The preliminary planning study has demonstrated that such proposal is technically feasible. The consultant of the planning study will identify suitable target industries and conduct a demand study to ascertain the land use requirements on their operation and production facilities so as to formulate an appropriate land use proposal for the new IE.
- 13. On the other hand, we have adopted other measures endeavouring to retain local R&D deliverables in Hong Kong's industry chain. For instance, through the Innovation and Technology Fund (ITF), we finance applied R&D projects which contribute to the upgrading of technology levels of local industries, encouraging and promoting projects with greater potentials for realisation/commercialisation. Many R&D deliverables of the projects funded by the ITF have been successfully applied in Hong Kong's industry chain. For instance, in recent years, the Nano and Advanced Materials Institute has, in collaboration with several enterprises, successfully developed different types of new nano materials, ranging from batteries, hydroponics, buildings, to beautycare and healthcare products, many of which have already been brought to the market.

14. We will encourage research centres/laboratories at the research clusters to collaborate with local industry and conduct applied R&D. We will also continue to fund R&D projects undertaken by research centres/laboratories in collaboration with the local industry through the ITF.

Key Performance Indicators

- 15. We will devise indicators on the number of R&D projects completed and the number of talents trained. In considering the admission applications from individual research institutions, we will devise appropriate indicators on the number of R&D projects and the number of talents trained (including the arrangement for and number of research team leaders/members dispatched from the parent institution to the research centre/laboratory, and arrangement and scale of hiring local talent) in accordance with the relevant development plans, including the scale and financial arrangements of the research centres/laboratories, so as to monitor and ensure that the research clusters will bring the expected benefits to Hong Kong.
- 16. We will work out a tripartite agreement for each research centre/laboratory to be signed between ITC, the parent institution of the centre/laboratory and HKSTPC. The agreement will set out the respective rights and obligations of different parties. ITC will assist the Governing Committee of the research clusters in overseeing the institutions' effective implementation of the key performance indicators devised.

(B) Additional Resources for HKSTPC

Manpower Support

17. In the coming years, HKSTPC will develop a number of R&D infrastructure facilities to dovetail with the development of the research clusters. Various measures (such as expanding the Incubation Programmes and the Corporate Venture Fund, setting up a Smart Campus etc.) will also be launched to support its tenants and incubatees. With the implementation of the measures, HKSTPC expects a significant increase in the number of tenants and incubatees as well as the working population in the Science Park. Additional manpower is required for HKSTPC to ensure effective and adequate support for commercial and R&D activities in the Science Park. Given that the various measures will be launched in a progressive manner, HKSTPC will recruit staff in phases, with an initial plan to recruit about 10 additional staff in the first phase. Subsequently, HKSTPC will consider the total number of additional staff required with regard to factors such as the increase in the number of companies and working population, the modus

operandi of the R&D facilities, and the actual implementation status of the various measures. HKSTPC will control its establishment and manpower expenditure in a prudent manner, with a view to ensuring the proper use of resources.

18. To dovetail with the development direction of the Science Park, HKSTPC's organisational structure has been adjusted and manpower re-allocated in the past years. It is therefore difficult to make a direct comparison of manpower changes amongst various divisions. Nevertheless, as HKSTPC has been focusing its resources on providing technological and business expansion support for companies and incubatees in the Science Park in recent years, its increase in manpower is mainly from its Corporate Development Division, Project Development Division and Marketing Division. Change in manpower is insignificant in the Finance and Accounting Division and the Human Resources and Office Administration Division, which now comprise 15 and 13 staff respectively, representing an increase of about 7% to 8% when compared to the figures five years ago.

Financial Position

19. The administrative and operating expenses, as well as the total expenditure of HKSTPC in the past five years are as follows –

(\$ million)	2016-17	2015-16	2014-15	2013-14	2012-13
Administrative and Operating Expenses	204.3	213.7	183.4	155.8	130.1
Total Expenditure	541.7	547.7	509.1	447.0	478.0

Note 1: The financial figures for 2017-18 are subject to audit by independent external auditors appointed by HKSTPC.

Note 2: The above figures are rounded to the nearest \$100,000.

20. The total annual remunerations of the five highest paid employees of HKSTPC in the past five years are as follows –

(\$ million)	2016-17	2015-16	2014-15	2013-14	2012-13
Annual Remuneration	16.21	15.84	14.99	12.89	14.14

Note 1: The remuneration figures for 2017-18 are subject to audit by independent external auditors engaged by HKSTPC.

Note 2: The above figures are rounded to the nearest \$10,000.

21. In the coming years, HKSTPC will utilise the \$10 billion funding to implement a number of development projects and supporting measures. We expect that the relevant administrative and operating expenses will increase. HKSTPC will continue to operate its business according to prudent commercial principles and exercise tight control over its administrative and operating expenses, with a view to optimising the use of resources and benefitting its tenants and incubatees.

Benefits and Impact

- 22. We expect that the provision of the research facilities and the implementation of relevant measures by HKSTPC will strengthen the local I&T ecosystem and the research capabilities of Hong Kong, conducive to nurturing I&T talents and attracting world-renowned technology enterprises to establish their businesses in Hong Kong, and in turn bringing about employment opportunities. HKSTPC has commissioned a consultant to assess the economic benefits of developing and implementing the measures. A more specific projection will be available upon completion of the study.
- Currently, the gross floor area (GFA) of Phase 1 to Phase 3 of the Science Park totalled 330 000 m², with an occupancy rate of approximately 87%¹. Stage 1 of the Science Park Expansion Programme (SPX1), which involves construction of two additional buildings, is now underway. Upon completion of SPX1 in 2020, the GFA of the Science Park will increase to approximately 400 000 m². Apart from setting aside additional floors in the two new buildings for laboratory or work spaces for healthcare and AI/robotics technologies research, HKSTPC will provide additional space to accommodate more move-in technological enterprises.

(C) Creation of a Permanent Post of Administrative Officer Staff Grade C in ITC

Relevant Responsibilities and Anticipated Work Achievements

24. The responsibilities of the proposed Assistant Commissioner (Infrastructure) (AC(Infrastructure)) post include: (a) devising strategic plans for the establishment of key technology research clusters and overseeing its operation; (b) overseeing policy, resources and housekeeping matters relating to HKSTPC; and (c) overseeing the development of physical technological infrastructure.

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¹ Figure as at end of April 2018.

- 25. On promotion of the research clusters, AC(Infrastructure) will liaise and negotiate with the institutions intending to apply for admission to the research clusters with a view to facilitating the Governing Committee to consider the applications, and take follow up actions on the implementation and signing of the tripartite agreement. Meanwhile, AC(Infrastructure) will provide necessary administrative support (such as secretariat services) and advice to the Governing Committee to assist its members in overseeing the operation of the two clusters in an effective manner.
- 26. Besides, AC(Infrastructure) will take over matters relating to the Science Park; and assist HKSTPC in implementing the provision of technological facilities and support for its tenants/ incubatees with the Government's \$10 billion funding.
- 27. HKSTPC is a statutory body established under the Hong Kong Science and Technology Parks Corporation Ordinance (the Ordinance) (Cap. 565). The Government is the sole shareholder. As the governing body of HKSTPC, the Board of Directors is responsible for formulating overall strategic directions and policies of the Corporation and overseeing management of the business. Hence, the Government will, through the Board of Directors and its Committees, take part in the deliberations and decision-making processes of the policies and development directions of HKSTPC. In accordance with the Ordinance, some of the HKSTPC's operations (such as borrowing or raising money, establishing funds and appointing Chief Executive Officer) are subject to Government approval.
- 28. In addition, HKSTPC is required under the law to submit an estimate of income and expenditure, report on the activities, statement of accounts and auditor's report to the Government annually. The Government will scrutinise the above reports to ensure the proper use of resources and fulfilment of the Corporation's public mission of supporting the I&T sector through its business activities. The above reports will also be provided to the Legislative Council.
- 29. On the other hand, HKSTPC's management will maintain close contact with ITC and meet ITC regularly to report the business progress as well as discuss its business plans and future development direction.

Arrangements for Individual Posts in Infrastructure Division

30. The two non-civil service contract (NCSC) employees under the Infrastructure Division are now affiliated with the Infrastructure and Quality Services Division and responsible for assisting the current AC(Infrastructure & Quality Services) in overseeing the planning and development progress of capital works projects of HKSTPC. Their major duties include seeking the

Legislative Council's funding approval for the relevant projects, guiding and administering the planning and enforcement of consultancy and construction contracts collectively with HKSTPC, as well as coordinating with the relevant bureaux/departments etc. They are also responsible for conducting studies on new projects of HKSTPC (including the development of Liantang/Heung Yuen Wai Boundary Control Point and the expansion of Yuen Long IE etc.). In addition, these two staff are currently taking up the work relating to the capital works for the development of the Lok Ma Chau Loop. As the capital works and infrastructure projects for the development of the Science Park are conducted on a time-limited basis, these two posts are now filled by NCSC employees.

Innovation and Technology Bureau Innovation and Technology Commission June 2018