



創新科技署

Innovation and Technology Commission

香港特別行政區政府

The Government of the Hong Kong Special Administrative Region

Our Ref. : ITC CR 6/1/2168/18

Your Ref. : CB1/BC/8/17

**(By Fax 2869 6794)**

11 Jun 2018

Mr Derek LO  
 Clerk to Bills Committee  
 Legislative Council Complex  
 1 Legislative Council Road  
 Central, Hong Kong

Dear Mr LO,

### **Bills Committee on Inland Revenue (Amendment) (No. 3) Bill 2018**

I refer to your letter dated 23 May 2018 and email dated 31 May 2018 on the follow-up items arising from the meeting on 18 May 2018. Our responses are as follows:

#### **(a) & (b) 32 new technology products or services under Fintech Supervisory Sandbox**

The classification of the 32 new technology products or services are set out below. The Hong Kong Monetary Authority (“HKMA”) is unable to disclose further details about the technology service providers due to the secrecy provision in the Banking Ordinance.

<b>Technology Involved</b>	<b>Number of Pilot Trials</b>
Application programming interface	2
Back-end infrastructure	1
Biometric authentication	7
Chatbot	2
Digital banking	1
Distributed ledger technologies	4
Instant messaging platform	1
Mobile banking	2
Notification service via social media	2

Technology Involved	Number of Pilot Trials
platforms / other digital channels	
Online insurance service	1
Remote onboarding	1
Securities trading	2
Self-service terminal	2
Soft token	4
<b>Total</b>	<b>32</b>

The Hong Kong Applied Science and Technology Research Institute and the Logistics and Supply Chain MultiTech R&D Centre have also carried out research and development (“R&D”) projects on Fintech. Recent Fintech projects carried out include: the development of the Cybersecurity Intelligence Sharing Platform in collaboration with Hong Kong Association of Banks, the use of blockchain technology for mortgage business, and the development of an e-Cheque wallet application in collaboration with the HKMA.

The R&D activities undertaken by public R&D centres in various technology fields can have applications across different industries, including those industries regarded as the “old” or “new” economy.

**(c) Number of local firms/institutions engaging in biometric authentication**

At the moment, five firms/institutions in the Hong Kong Science Park and one in the Cyberport are engaged in biometric authentication.

**(d) Questions raised by Hon WU Chi-wai about the vetting and approving work by Innovation and Technology Commission (“ITC”) relating to tax deduction for expenditure on research and development**

The ITC currently has 61 professional officers who provide advice and support on science and technology matters, including technical assessment of project proposals under the Innovation and Technology Fund. We plan to create 11 new professional posts in the coming two years to further enhance the technical support in ITC.

Information related to the strength, experience and academic qualifications of the professional officers in ITC is summarised in tables below. The entry requirements of these grades are at the **Annex**.

<b>Strength</b>	<b>Total</b>
Biotechnology Director	1
Science Advisor	1
Executive Administrator (Accreditation)	1
Senior Electrical and Mechanical Engineer	4
Electrical and Mechanical Engineer	8
Chief Electronics Engineer	1
Senior Electronics Engineer	4
Electronics Engineer	12
Senior Scientific Officer	6
Scientific Officer	14
Biotechnology Officer	3
Senior Technologist	1
Technologist	2
Senior Manager	1
Manager	2
<b>Total</b>	<b>61</b>

<b>Experience</b>	<b>Total</b>
More than 15 years	14
11 to 15 years	12
6 to 10 years	14
Less than 5 years	21
<b>Total</b>	<b>61</b>

<b>Academic qualification</b>	<b>Total</b>
PhD Degree	27
Master's Degree	33
Bachelor's Degree	1
<b>Total</b>	<b>61</b>

#### Work related to enhanced tax deduction for expenditure on R&D

In respect of the proposed enhanced tax deduction regime, the Commissioner for Innovation and Technology (“CIT”) will advise the Commissioner of Inland Revenue on R&D tax deduction claims and advance ruling cases. In addition, CIT will be responsible for processing applications from local private organisations for designation as “designated local research institutions” (“DLRI”) and the subsequent monitoring of these DLRI.

With the support of a strong professional team, ITC is well-versed to perform the new tasks arising from the amendment bill. All the aforesaid professional officers are ITC departmental staff and will not be transferred to other departments.

The ITC will keep in view the additional workload arising from the R&D enhanced tax deduction regime, including enquiries referred from the Inland Revenue Department (“IRD”) and DLRI applications, and re-deploy manpower resources internally as appropriate. We anticipate that such enquiries/ applications would likely be more frequent in the initial stage of the implementation of this initiative. We will set up an expert panel composing of members from relevant industries and the academia to advise during the assessment process of DLRI applications.

#### Training to professional officers in ITC

To keep abreast of latest development in science and technology, training is crucial for the professional officers in ITC. They are encouraged and recommended to attend various international/regional/local scientific conferences, workshops, seminars and training courses to keep up-to-date of their professional knowledge.

**(e) How the Administration would incentivise overseas R&D institutions to establish their branches in Hong Kong and encourage the further development of innovation and technology by its various policy initiatives and amendments to the relevant ordinances.**

To attract top overseas scientific research institutions to Hong Kong, we must continue to enhance the overall attractiveness of the local I&T ecosystem. The introduction of the enhanced tax deduction is one of such initiatives. Other measures include enhancing the capital market, facilitating the admission of talents, upgrading research capability of local universities and R&D institutions and investment in infrastructure.

We have earmarked \$10 billion in the 2018-19 Budget to support the establishment of two world-class research clusters on healthcare technologies and on artificial intelligence and robotics technologies at the Hong Kong Science Park. We hope to attract top-notch universities, research institutions and technology enterprises from local, Mainland and overseas to set up research operation at the two clusters and conduct more collaborative R&D work. The \$10 billion funding earmarked will be used to provide financial support to research centres/laboratories set up by non-profit-making institutions at the two clusters.

We have also earmarked a funding of \$10 billion to Hong Kong Science and Technology Parks Corporation ("HKSTPC"), of which \$3 billion will be used to make available a range of facilities to foster research work in healthcare and AI/robotics technologies, and \$7 billion to strengthen support for tenants/incubatees of HKSTPC. These measures will help HKSTPC attract more overseas and Mainland research institutions to Hong Kong.

Furthermore, \$20 billion is set aside in the 2018-19 Budget for the first phase development of the Hong Kong-Shenzhen Innovation and Technology Park ("HSITP") in the Lok Ma Chau Loop. After completion, HSITP will be the largest I&T platform in Hong Kong. In the long run, it will become a strategic base for conducting more collaborative R&D operation and thus add to the growing momentum of the I&T ecosystem in Hong Kong.

ITC have also recently launched a three-year pilot Technology Talent Admission Scheme ("TechTAS") to expedite admission of technology

talent from outside Hong Kong to fill the manpower gap in areas that talents are not readily available in Hong Kong.

In addition, the Government will expand the scope of profits tax deduction for capital expenditure incurred for the purchase of intellectual property rights ("IPRs") by including additional three IPRs in layout design (topography) of integrated circuits, plant varieties and performances. Under the amendment legislation, the deduction for the purchase of IPRs is increased from the existing five types to eight types. The proposal could encourage businesses to further consider using and purchasing the three types of newly added IPRs. The increased demand for such IPRs would help contribute to a more favourable I&T ecosystem in Hong Kong as more businesses would invest in research and development for the creation of such IPRs. With "proprietary interest" of such IPRs, taxpayers would also be able to exploit the IPRs for further improvement or development, which is in line with the policy objective to promote innovation and upgrading.

Yours sincerely,



(WONG Wang-wah)

for Commissioner for Innovation and Technology

c.c. Hon Kenneth LEUNG (Chairman)

Department of Justice

(Attn.: Ms Mandy NG, Senior Government Counsel) (Fax: 3918 4613)

Inland Revenue Department

(Attn.: Ms. CHAN Shun-mei, Senior Assessor) (Fax: 2511 7414)

### Entry Requirements of Professional Posts in ITC

Professional Posts	Entry requirements
Science Advisor	<p>(a) (i) full professorship status in a relevant field, or</p> <p>(ii) a PhD degree in a relevant field and a minimum of 10 years' relevant post-qualification experience at a senior management level in a scientific or corporate setting;</p> <p>(b) strong research or technical background in the development, application and commercialisation of technology (preferably enjoy recognised international standing in his/her own specialist field); good scientific and/or business networks; competency in research and development and/or business and product development; and understanding of current trends in technology and market (familiarity with the research and development trend in the Mainland will be an advantage); and</p> <p>(c) strong command of both written and spoken English. Proficiency in written Chinese and spoken Cantonese and Putonghua will be an advantage.</p>
Biotechnology Director	<p>(a) (i) a PhD degree in the field of life science or biotechnology;</p> <p>(ii) a minimum of 10 years' relevant post-qualification experience at a senior management level in a scientific or corporate setting;</p>

Professional Posts	Entry requirements
	<p>(b) strong research or technical background in biotechnology and related areas (preferably enjoy recognised international standing in his/her own specialist field); good scientific and/or business networks; competency in research and development and/or business and product development; and understanding of current trends in technology and market (familiarity with the research and development trend in the Mainland will be an advantage); and</p> <p>(c) strong command of both written and spoken English. Proficiency in written Chinese and spoken Cantonese and Putonghua will be an advantage.</p>
Senior Technologists	<p>(a) a 1st or 2nd class honours degree in the physical sciences or engineering from a Hong Kong university, or equivalent. A master or PhD in relevant disciplines is preferred;</p> <p>(b) normally 8 years' post-graduate experience in the relevant fields;</p> <p>(c) knowledge of the various emerging and advanced technologies in material science, nanotechnologies, or display system technologies; and</p> <p>(d) experience in project management, fund administration, etc., is preferred</p>
Scientific Officer	<p>(a) a 1st or 2nd class honours bachelor's degree in medical technology, health sciences, life sciences, chemistry, applied physics, material science, or engineering from a university in Hong Kong or</p>



Professional Posts	Entry requirements
	<p>equivalent;</p> <p>(b) 3 years' post-qualification experience relating to laboratory, certification body or inspection body operation or accreditation of such bodies; or administration of research and development projects in the biotechnology, environmental technology, material science or material technology related fields, or assessment of such project applications; and</p> <p>(c) have met the language proficiency requirements of "Level 1" result in the two language papers (Use of Chinese and Use of English) in the Common Recruitment Examination or equivalent.</p>
Technologist (New Technologies)	<p>(a) a Master degree in materials science and engineering, nanotechnology, or related disciplines from a Hong Kong university, or equivalent. A Bachelor degree in chemistry, physics, materials science or engineering from a Hong Kong university or equivalent with substantial experience in the materials-related fields may also be considered;</p> <p>(b) at least 3 years' post-qualification experience in the materials-related fields for candidates with a master degree; or at least 6 years' post-qualification experience in the materials-related fields for candidates with a degree. Experience in assessing the technical and commercial merits of projects in the related fields, project management, fund administration, etc. is preferred;</p> <p>(c) in-depth knowledge in the various emerging and advanced technologies in nanotechnology,</p>

Professional Posts	Entry requirements
	<p>materials-related technologies in displays, lighting, photovoltaics, batteries, organic electronics, etc; and</p> <p>(d) good written Chinese and English, be able to speak fluent Cantonese and have met the language proficiency requirements of Level 2 or above in Chinese Language and English Language in the HKDSEE or HKCEE, or equivalent.</p>
Technologist (Electronics)	<p>(a) a 1st or 2nd class honours degree in electronics engineering from a Hong Kong university, or equivalent; a higher degree in relevant discipline is preferred;</p> <p>(b) 6 years of post-qualification experience in the latest technological development in the electronics industry; experience in assessing the technical and commercial merits of projects in the relevant field and managing their operation is preferred; preferred areas of knowledge are microelectronics, electronic packaging and assembly, data storage devices, radio or wireline networking, power electronics, biomedical electronics, photo-electronics, microelectromechanical systems, embedded systems and multimedia technologies, etc.;</p> <p>(c) good written Chinese and English, be able to speak fluent Cantonese and have met the language proficiency requirements of Level 2 or above in Chinese Language and English Language in the HKDSEE or HKCEE, or equivalent; and</p> <p>(d) have sense of responsibility and with good interpersonal and communication skill.</p>

Professional Posts	Entry requirements
Electrical and Mechanical Engineer	<p>(a) be corporate members of the Hong Kong Institution of Engineers (Electrical/ Electronics/ Mechanical/ Manufacturing and Industrial Discipline); and</p> <p>(b) have met the language proficiency requirements of “Level 1” result in the two language papers (Use of Chinese and Use of English) in the Common Recruitment Examination or equivalent.</p>
Electronic Engineer	<p>(a) be Corporate Members of the Hong Kong Institution of Engineers (Electronics or Electrical Discipline); and</p> <p>(b) have met the language proficiency requirements of “Level 1” result in the two language papers (Use of Chinese and Use of English) in the Common Recruitment Examination or equivalent.</p>