

立法會 *Legislative Council*

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Panel on Commerce and Industry

Meeting on 20 January 2015

Background brief on the Innovation and Technology Fund

Purpose

This paper provides background information on the Innovation and Technology Fund (ITF) and a summary of views and concerns expressed by Members on related issues during previous discussions.

Background

2. The ITF was set up as a statutory fund under the Public Finance Ordinance (Cap. 2) by resolution of the Legislative Council on 30 June 1999 to provide financial support to a spectrum of activities that boost Hong Kong's innovation and technology (I&T) capability, ranging from applied research and development (R&D), technology transfer and commercialization related activities to promotional activities that foster an innovation culture within the community. On 9 July 1999, the Finance Committee approved the proposed injection of \$5 billion into the ITF which came into operation on 1 November 1999. The ITF is currently administered by the Innovation and Technology Commission (ITC) and comprises the following four programmes:

- (a) the Innovation and Technology Support Programme which supports mid-stream/downstream applied R&D projects mainly undertaken by the five R&D Centres¹ set up by the Government,

¹ The Government set up five R&D Centres in June 2006, namely –

- (a) Hong Kong Automotive Parts and Accessory Systems R&D Centre;
- (b) R&D Centre for Information and Communications Technologies under the Hong Kong Applied Science and Technology Research Institute;
- (c) Hong Kong Research Institute of Textiles and Apparel;
- (d) Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies; and
- (e) Nano and Advanced Materials Institute.

local universities and other designated local public research institutions;

- (b) the University-Industry Collaboration Programme which supports collaborative projects undertaken by private companies in collaboration with local universities in the form of matching grant;
- (c) the Small Entrepreneur Research Assistance Programme (SERAP) which provides dollar-for-dollar matching fund for small technology based enterprises to undertake in-house R&D projects; and
- (d) the General Support Programme which supports non-R&D projects for the upgrading and development of the local industries as well as the promotion of an I&T culture in Hong Kong.

3. As at the end of November 2014, the ITF has funded more than 4 250 projects at a total commitment of about \$8.9 billion. Taking into account the funding for the operation of the R&D Centres set up under the ITF, the uncommitted ITF balance of about \$0.2 billion is expected to be fully committed in mid-2015.

Comprehensive review of ITF

4. In order to evaluate the operation of the ITF after some 15 years of operation and identify areas of improvement, the Administration conducted a comprehensive review on the ITF (the Review) in mid-2013. In the course of the Review, the Panel was briefed on the interim progress and consulted on the recommendations arising from the Review at its meetings held on 18 February 2014 and 18 March 2014. Details of the improvement measures were set out in the Administration's papers (LC Paper Nos. [CB\(1\)885/13-14\(03\)](#) and [CB\(1\)1072/13-14\(07\)](#)).

5. The Review was completed in November 2014 and the Panel was briefed on the Final Report of the Review ([LC Paper No. CB\(1\)211/14-15\(03\)](#)) at its meeting on 18 November 2014. The report covered analysis of the operation of the ITF since its establishment, its developments and improvements over the years, as well as the proposed way forward.

6. Following the announcement of the proposed setting up of an Enterprise Support Scheme (ESS) in the 2014-2015 Budget Speech to strengthen financial support for companies which conduct in-house R&D, the Panel was briefed on 16 December 2014 on the details and timeframe for launching the ESS. Details of the ESS were set out in the Administration's paper ([LC Paper No. CB\(1\)344/14-15\(04\)](#)).

Views and concerns expressed by Members

Private sector investment in R&D

7. Members have expressed concern that Hong Kong's gross expenditure on R&D as a percentage to Gross Domestic Product at below 0.8% was low compared to other knowledge-based economies. The Administration was urged to increase resources to encourage private sector investment in R&D and vigorously promote the development of I&T in Hong Kong.

8. Some members were concerned that local small and medium enterprises (SMEs) could not share the benefits of the R&D projects as substantial financial investment was required for participation in the projects. Members considered that the Administration should provide sufficient incentives (such as tax concessions and land resources) to motivate more private enterprises of the I&T industry to conduct in-house research and invest in applied R&D.

9. While agreeing with the need to ensure proper use of public funds, some members were of the view that too much emphasis on industry contribution and revenue return within a relatively short period of time might hinder the development of new R&D initiatives. Instead, projects should also be assessed on the basis of their social and economic contributions to the broader community.

10. There was also concern that for the avoidance of criticisms of transfer of benefits to certain large companies, the Administration might impose over-stringent requirements for assessing the applications and in monitoring the funded projects, which would discourage companies from applying. To maximise the benefits of the ITF, members called on the Administration to adopt new thinking in keeping the ITF mechanism as simple as possible to minimize constraints posed on projects.

11. Some members criticized the Administration for being too conservative in providing funding support or incentives as well as other support measures to attract overseas technology companies to set up their R&D bases in Hong Kong. Members were concerned that Hong Kong had lost out to neighbouring economies in I&T development, and urged the Administration to step up its efforts in attracting overseas I&T talents and nurturing local talents. Members also called on the Administration to build an effective and sustainable technology start-up ecosystem, in particular to consider formulating relevant financial policies and legislation to facilitate investments from angel investors, venture capitalist firms or crowdfunding in financing the start-ups at various stages.

12. The Panel had followed closely the implementation of the R&D Cash Rebate Scheme (CRS)² launched in April 2010. While the funding source of the CRS was independent from the ITF, members affirmed its important role in promoting R&D and reinforcing the research culture among private companies. The Administration was requested to consider further increasing the level of cash rebate from 30% to 50% to enhance the attractiveness of the CRS. Some members called on the Administration to collaborate with relevant chambers of commerce and trade associations to promote the CRS to SMEs and to arouse their interests in applying I&T in their business operations, as well as strengthening their collaboration with local research institutions and academia on research projects. Efforts should also be made to publicize the successful R&D outcomes under the CRS to the general public.

The proposed ESS

13. While members generally welcomed the launch of the ESS to encourage more private sector investment in I&T and R&D, some members were deeply concerned that small technology companies might be less competitive than large companies when applying for the ESS, and that more established company applicants might take away the bulk of the funding, depleting the ESS fund pool quickly at the expense of SME applicants. These members suggested that the Administration should consider allocating to SMEs and start-ups a certain percentage of approved projects, and draw up objective and concrete assessment criteria taking into account the needs and special circumstance of SMEs.

14. There was a view that the Administration should include experts from relevant technology areas in the assessment panel so as to ensure a fair and balanced assessment of applications, and consider putting in place an appeal mechanism for unsuccessful applications. The Administration was also urged to explore measures to facilitate conversion of recently approved SERAP cases and SERAP applications being processed into the ESS.

15. Some other members expressed concern that since the ESS had no mandatory recoupment requirement, the ESS funds might be expended without generating actual economic contributions to Hong Kong as some applicant companies might lack the driving force to pursue successful commercialization of their projects vigorously.

Commercialization of R&D results and technology transfer to the industry

16. Panel members urged the Administration to step up the efforts in promoting commercialization of R&D results and technology transfer. The

² Apart from the ITF, the CRS with a funding commitment of \$200 million was approved by the Finance Committee in January 2010 to provide cash rebate to private companies on their investment in R&D projects funded by the ITF or conducted in partnership with designated local public research institutions. The initial level of cash rebate at 10% was subsequently increased to 30% in February 2012 to increase the attraction of the CRS.

Administration should also strengthen collaborations among the Government, industry, academic and research sectors to facilitate commercialization of R&D results to bring about wider social and economic benefits to the community. Some Panel members called on the Administration to take the lead to adopt more local R&D results, and to extend the scope of the funding to cover the conduct of trial projects in the private sector.

17. To help improve the chance of successful commercialization of the deliverables of the R&D projects in the private sector, some members held the view that apart from financial support, the Administration should consider providing sustained professional support, such as arranging some experienced industry players to provide technical and management advice as appropriate for the SMEs and start-ups receiving ITF funding.

18. Some Panel members opined that the ITF should identify specific technology areas with development potential, such as biotechnology, the medicine industry, etc, and focus on funding projects that were commercially viable and suitable for manufacturing locally, thereby helping to boost the development of the manufacturing and other industries in Hong Kong.

19. Some other members opined that in addition to funding support, technology transfer involved diverse activities which required technical know-how, knowledge about the commercialization process and professional support services in patent management, intellectual property (IP) protection, financial management, and contract negotiations with angel investors and venture capitalists, etc. The Administration should strengthen the nurturing and training of the requisite talents to facilitate technology transfer and enhance commercialization of R&D results.

IP ownership rights of ITF-funded projects

20. Panel members advised the Administration to clearly spell out the IP ownership right and benefit-sharing arrangements between designated research institutions and the collaborating private companies for ITF-funded projects to ensure fairness and transparency in the ITF's operation. Some members noted with concern that while it might be necessary to award the exclusive licence for the project IPs to collaborating private companies for quite a long period so as to provide sufficient commercial incentives for private companies to engage and invest in R&D projects, such arrangements however might attract criticism of transfer of benefits to particular companies as the projects supported by the ITF were funded by public money and the industry as a whole could not benefit from the new technologies. There was a suggestion that it would be more appropriate to confine the period of the exclusive licence for project IPs to three years or less so as to allow wider application of new technologies in the industry. The Administration was urged to strike a proper balance in addressing the issue.

21. Given the limited life span of a new technology, some other members also suggested that the Administration should consider opening up the IP rights of platform projects of the ITF held by local research institutions for use by the industry in an open, transparent and non-exclusive manner to facilitate the realization and commercialization of the relevant technologies.

Way forward for the ITF

22. The Panel affirmed the role of the ITF in promoting development of I&T in Hong Kong. Members noted with concern that the uncommitted balance of the ITF at about \$0.2 billion was expected to be fully committed in around mid-2015, and looked forward to the Administration's updates on the future financial arrangements of the ITF.

Latest position

23. The Chief Executive announced in the 2015 Policy Address the proposal to inject \$5 billion into the ITF and subsume the CRS under the ITF to provide sustained and comprehensive support for I&T development. The Administration will brief the Panel on details of the proposal on 20 January 2015.

Relevant papers

24. A list of relevant papers is shown in the **Appendix**.

Council Business Division 1
Legislative Council Secretariat
19 January 2015

Innovation and Technology Fund

List of relevant papers

Date of meeting	Meeting	Minutes/Paper	LC Paper No.
30/6/1999	Council	Resolution establishing the Innovation and Technology Fund passed by the Legislative Council	http://www.legco.gov.hk/yr98-99/english/fc/fc/papers/pfc36ea2.pdf
9/7/1999	Finance Committee	Administration's paper Minutes of meeting	FCR(1999/2000)36 http://www.legco.gov.hk/yr98-99/english/fc/fc/papers/fc090736.htm FC8/99-00 http://www.legco.gov.hk/yr98-99/english/fc/fc/minutes/fcmm0907.htm
16/11/2010	Panel on Commerce and Industry	Administration's paper Updated background brief	CB(1)389/10-11(05) http://www.legco.gov.hk/yr10-11/english/panels/ci/papers/ci116cb1-389-5-e.pdf CB(1)389/10-11(04) http://www.legco.gov.hk/yr10-11/english/panels/ci/papers/ci116cb1-389-4-e.pdf

Date of meeting	Meeting	Minutes/Paper	LC Paper No.
		Minutes of meeting	CB(1)1017/10-11 http://www.legco.gov.hk/yr10-11/english/panels/ci/minutes/ci20101116.pdf
15/3/2011	Panel on Commerce and Industry	Administration's paper Background brief Minutes of meeting	CB(1)1531/10-11(03) http://www.legco.gov.hk/yr10-11/english/panels/ci/papers/ci0315cb1-1531-3-e.pdf CB(1)1531/10-11(04) http://www.legco.gov.hk/yr10-11/english/panels/ci/papers/ci0315cb1-1531-4-e.pdf CB(1)2014/10-11 http://www.legco.gov.hk/yr10-11/english/panels/ci/minutes/ci20110315.pdf
20/3/2012	Panel on Commerce and Industry	Administration's paper Updated background brief Minutes of meeting	CB(1)1298/11-12(07) http://www.legco.gov.hk/yr11-12/english/panels/ci/papers/ci0320cb1-1298-7-e.pdf CB(1)1298/11-12(09) http://www.legco.gov.hk/yr11-12/english/panels/ci/papers/ci0320cb1-1298-9-e.pdf CB(1)1787/11-12 http://www.legco.gov.hk/yr11-12/english/panels/ci/minutes/ci20120320.pdf

Date of meeting	Meeting	Minutes/Paper	LC Paper No.
18/2/2014	Panel on Commerce and Industry	<p>Administration's paper</p> <p>Background brief</p> <p>Minutes of meeting</p> <p>Follow-up paper</p>	<p>CB(1)885/13-14(03)</p> <p>http://www.legco.gov.hk/yr13-14/english/panels/ci/papers/ci0218cb1-885-3-e.pdf</p> <p>CB(1)885/13-14(04)</p> <p>http://www.legco.gov.hk/yr13-14/english/panels/ci/papers/ci0218cb1-885-4-e.pdf</p> <p>CB(1)1234/13-14</p> <p>http://www.legco.gov.hk/yr13-14/english/panels/ci/minutes/ci20140218.pdf</p> <p>CB(1)1441/13-14(01)</p> <p>http://www.legco.gov.hk/yr13-14/english/panels/ci/papers/ci0218cb1-1441-1-e.pdf</p>
18/3/2014	Panel on Commerce and Industry	<p>Administration's paper</p> <p>Updated background brief</p> <p>Minutes of meeting</p>	<p>CB(1)1072/13-14(07)</p> <p>http://www.legco.gov.hk/yr13-14/english/panels/ci/papers/ci0318cb1-1072-7-e.pdf</p> <p>CB(1)1072/13-14(08)</p> <p>http://www.legco.gov.hk/yr13-14/english/panels/ci/papers/ci0318cb1-1072-8-e.pdf</p> <p>CB(1)1418/13-14</p> <p>http://www.legco.gov.hk/yr13-14/english/panels/ci/minutes/ci20140318.pdf</p>

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18/11/2014	Panel on Commerce and Industry	<p>Administration's paper</p> <p>Background brief</p> <p>Minutes of meeting</p> <p>Follow-up paper</p>	<p>CB(1)211/14-15(03)</p> <p>http://www.legco.gov.hk/yr14-15/english/panels/ci/papers/ci20141118cb1-211-3-e.pdf</p> <p>CB(1)211/14-15(04)</p> <p>http://www.legco.gov.hk/yr14-15/english/panels/ci/papers/ci20141118cb1-211-4-e.pdf</p> <p>CB(1)345/14-15</p> <p>http://www.legco.gov.hk/yr14-15/english/panels/ci/minutes/ci20141118.pdf</p> <p>CB(1)441/14-15(01)</p> <p>http://www.legco.gov.hk/yr14-15/english/panels/ci/papers/ci20141118cb1-441-1-e.pdf</p>
16/12/2014	Panel on Commerce and Industry	<p>Administration's paper</p> <p>Background brief</p> <p>Follow-up paper</p>	<p>CB(1)344/14-15(04)</p> <p>http://www.legco.gov.hk/yr14-15/english/panels/ci/papers/ci20141216cb1-344-4-e.pdf</p> <p>CB(1)344/14-15(05)</p> <p>http://www.legco.gov.hk/yr14-15/english/panels/ci/papers/ci20141216cb1-344-5-e.pdf</p> <p>CB(1)443/14-15(01)</p> <p>http://www.legco.gov.hk/yr14-15/english/panels/ci/papers/ci20141216cb1-443-1-e.pdf</p>