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**Panel on Commerce and Industry** 

Meeting on 18 February 2014

## Background brief on improvements to the Innovation and Technology Fund to promote innovation and application of research and development outcomes

#### 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. Innovation and technology are drivers for economic development and They help improve the efficiency and performance of competitiveness. enterprises which in turn contribute to the sustainable growth of an economy. The establishment of the ITF underlines the Government's commitment to its policy and strategy for promoting innovation and technology in Hong Kong. The ITF is set up to provide financial support to a spectrum of activities that boost Hong Kong's innovation and technology 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. It was set up as a statutory fund under the Public Finance Ordinance (Cap. 2) by resolution of the Legislative Council on 30 June On 9 July 1999, the Finance Committee approved the proposed 1999. injection of HK\$5 billion into the ITF which came into operation on 1 The ITF is currently administered by the Innovation and November 1999. Technology Commission (ITC) and comprises the following four programmes:

- (a) <u>Innovation and Technology Support Programme</u> for mid-stream/downstream R&D projects mainly undertaken by local public research institutes (including the five R&D Centres, local universities, Hong Kong Productivity Council, Vocational Training Council, etc). There are broadly two categories of projects:
  - (i) <u>platform projects</u> which require industry contribution of at least 10% of the project cost from two or more companies. The industry sponsors will not be entitled to own the project intellectual property (IP); and
  - (ii) <u>collaborative projects</u> which require industry contribution of at least 30% (for R&D Centre projects) or 50% (for non-R&D Centre projects) of the project cost. The industry partner will be entitled to exclusive right to utilize the project IP for a defined period or own the project IP;
- (b) <u>University-Industry Collaboration Programme</u> for projects undertaken by a local university in collaboration with a company in conducting R&D. The company is required to contribute no less than 50% of the project cost;
- (c) <u>Small Entrepreneur Research Assistance Programme</u> (SERAP) operates as a matching grant for small and medium enterprises (SMEs) under the size of 100, i.e. company contributing 50% of the project cost. The IP will be owned by the company. Unlike collaborative projects in (a) and (b) above, the company will be required to pay back the funding grant from the ITF as and when they make profits from the project; and
- (d) <u>General Support Programme</u> supports non-R&D projects such as conferences, surveys, events, etc to help upgrade industry, promote the culture of innovation and technology in the community, etc.

3. As at the end of December 2013, the ITF has funded more than 3 600 projects at a total commitment of about \$7.9 billion. Taking into account the funding for the operation of the R&D Centres set up under the ITF, the uncommitted ITF balance of around \$0.9 billion is expected to be fully committed around 2015-2016.

#### Improvements to the ITF to facilitate commercialization of R&D results

4. Over the years, the Administration has regularly reviewed the operation of the ITF and introduced various enhancements to the ITF mechanism. In 2011, the Administration had conducted a comprehensive review of the ITF mechanism with a view to promoting realization and commercialization of R&D results. Some of the improvement measures implemented included:

- (a) extending the scope of the ITF funding by launching the Public Sector Trial Scheme which provided additional funding support to R&D projects undertaken by the R&D Centres for the production of tools/prototypes/samples and the conduct of trial schemes in the public sector;
- (b) refining the ITF project vetting criteria to give greater emphasis to relevant factors apart from scientific/technical considerations, such as the plan for realization/commercialization, relevance with Government policies or in overall interest of the community;
- (c) reviewing the industry contribution models so as to encourage a higher level of financial contribution where possible; and
- (d) shortening the ITF vetting process of project applications.

Details of the improvement measures were set out in the Administration's paper on "Creation of a favourable ecological environment to facilitate the realization of R&D results" for the Panel on Commerce and Industry (the Panel) meeting on 16 November 2010 (LC Paper No. CB(1)389/10-11(05)).

5. In April 2012, the Administration implemented the following enhancements to the SERAP to support technology companies, in particular SMEs, in pursuing R&D activities:

- (a) increasing the funding ceiling for each project from \$4 million to \$6 million;
- (b) extending the programme to cover companies with venture capital investment; and
- (c) expanding the funding scope to facilitate commercialization, including industrial designs, testing and certification of prototypes, pre-clinical trials, etc.

6. In July 2012, the Public Sector Trial Scheme was extended from projects undertaken by the R&D Centres to all completed ITF projects to facilitate the realization and commercialization of R&D results. The trial projects were also allowed to be applied in the public sector outside Hong Kong and in the Mainland.

7. To further facilitate commercialization of R&D results, the ITC has promulgated in August 2013 a new guide on IP arrangements (covering ownership, licensing and benefit-sharing, etc) for R&D projects funded by the ITF. The new guide sets out the latest policy and aims to provide a clear, transparent, fair and consistent framework for IP arrangements, and allows greater flexibility for the R&D Centers and other local research institutions to determine the best terms of commercialization and benefit-sharing arrangements having regard to their individual circumstances.

## Views and concerns expressed by Members

8. The Panel has followed closely issues relating to the promotion of innovation and technology in Hong Kong. In particular, Panel members were concerned about the pace of commercialization of R&D results and technology transfer to the industry.

9. Some Panel members expressed concern that the industry was not very keen on collaborating with the R&D Centres in conducting R&D projects. Some industry stakeholders were of the view that the existing funding arrangements under the ITF were too restrictive in confining its scope to collaborative projects with universities and the R&D Centres. The project vetting requirements and procedures were too complex and cumbersome to facilitate worthy projects to be undertaken quickly. As the ITF had been in operation for nearly 15 years, members urged the Administration to conduct a comprehensive review and explore areas of improvement. Some members were concerned that local SMEs could not share the benefits of the R&D projects as substantial financial investment was required for participation in the At present, support for private companies' in-house research was projects. only through SERAP, which had its limitations, e.g. the industry regarded the terms not attractive enough, and the scope a bit too narrow. These members considered that the Administration had not provided sufficient incentives (such as tax concessions) to motivate more private enterprises to invest in applied R&D.

10. Panel members urged the Administration to allocate more resources to R&D development and step up the efforts in promoting commercialization of R&D results and technology transfer. The 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 Public Sector Trial Scheme to cover the conduct of trial projects in the private sector. In addition, Hon Charles Peter MOK had raised a question on the Public Sector Trial Scheme at the Council meeting on 27 February 2013 enquiring about the statistics and details of the approved project applications under the scheme.

11. 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, 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.

## **Recent developments**

12. The Administration has commenced a comprehensive review of the ITF in mid-2013. It will take a critical look at the long-term funding arrangements for R&D projects/activities and the R&D Centres funded by the ITF. Key areas to be covered in the review included the funding scope, support for private sector R&D, arrangements for IPs generated from the projects, as well as the evaluation mechanism.

### Latest position

13. The Administration will brief the Panel on 18 February 2014 on the progress of the comprehensive review of the ITF and the proposed improvement measures.

### **Relevant papers**

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

Council Business Division 1 Legislative Council Secretariat 14 February 2014

# Improvements to the Innovation and Technology Fund to promote innovation and application of research and development outcomes

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/pfc36e a2.pdf
9/7/1999	Finance Committee	Administration's paper	FCR(1999/2000)36 http://www.legco.gov.hk/yr98- 99/english/fc/fc/papers/fc0907 36.htm
		Minutes of meeting	FC8/99-00 http://www.legco.gov.hk/yr98- 99/english/fc/fc/minutes/fcmn 0907.htm
16/11/2010	Panel on Commerce and Industry	Administration's paper	CB(1)389/10-11(05) http://www.legco.gov.hk/yr10- 11/english/panels/ci/papers/ci1 116cb1-389-5-e.pdf
		Updated background brief	CB(1)389/10-11(04) http://www.legco.gov.hk/yr10- 11/english/panels/ci/papers/ci1 116cb1-389-4-e.pdf

# List of relevant papers

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	CB(1)1531/10-11(03) http://www.legco.gov.hk/yr10- 11/english/panels/ci/papers/ci0 315cb1-1531-3-e.pdf
		Background brief	CB(1)1531/10-11(04) http://www.legco.gov.hk/yr10- 11/english/panels/ci/papers/ci0 315cb1-1531-4-e.pdf
		Minutes of meeting	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	CB(1)1298/11-12(07) http://www.legco.gov.hk/yr11- 12/english/panels/ci/papers/ci0 320cb1-1298-7-e.pdf
		Updated background brief	CB(1)1298/11-12(09) http://www.legco.gov.hk/yr11- 12/english/panels/ci/papers/ci0 320cb1-1298-9-e.pdf
		Minutes of meeting	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.
27/2/2013	Council	Question No. 16 raised by Hon Charles Peter MOK	Hansard http://www.legco.gov.hk/yr12- 13/english/counmtg/hansard/c m0227-translate-e.pdf#named dest=wrq16