

立法會
Legislative Council

LC Paper No. CB(1)1893/10-11(07)

Ref. : CB1/PL/CI

Panel on Commerce and Industry

Meeting on 19 April 2011

**Updated background brief on
progress on improving the Innovation and Technology Fund and
promotion of use of innovation and technology in the public sector**

Purpose

This paper provides background information on the review of the mechanism of the Innovation and Technology Fund (ITF) and a summary of views and concerns expressed by the Panel on Commerce and Industry (the Panel) on related issues.

Background

2. Innovation and technology are drivers for economic development and competitiveness. They help improve the efficiency and performance of 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 aims to provide funding support for projects that contribute to innovation and technology upgrading in manufacturing and service industries, so as to increase productivity and enhance competitiveness. It was set up as a statutory fund under the Public Finance Ordinance (Cap. 2) by resolution of the Legislative Council on 30 June 1999. On 9 July 1999, the Finance Committee approved the proposed injection of HK\$5 billion into the ITF which came into operation on 1 November 1999. The ITF is currently administered by the Innovation and Technology Commission and comprises the following four programmes:

- (a) Innovation and Technology Support Programme (ITSP) – for mid-stream/downstream research and development (R&D) projects mainly undertaken by local public research institutes (including

R&D Centres, universities and Hong Kong Productivity Council). There are broadly two categories of projects:

- (i) platform projects which require industry contribution of at least 10% of the project cost. The industry sponsors (minimum of two) will not own the project intellectual property (IP); and
 - (ii) collaborative projects which require industry contribution of at least 30% (for R&D Centre projects only) or 50% (for non-R&D Centre projects) of the project cost. The industry sponsor(s) will be entitled to utilize the project IP exclusively for a defined period or own the project IP;
- (b) University-Industry Collaboration Programme (UICP) – for projects undertaken by a local university in collaboration with a company in conducting R&D. The company contributes no less than 50% of the project expenditure and owns the project IP;
 - (c) Small Entrepreneur Research Assistance Programme – 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) General Support Programme – for non-R&D projects and activities, e.g. surveys, seminars and competitions. A minimum of 10% industry contribution from at least two industry sponsors is required.

3. As at end-September 2010, ITF has funded more than 2 200 projects at a total ITF funding of \$5.5 billion. Taking into account the accumulated income over the years (including investment income from the Exchange Fund), the uncommitted funding balance (i.e. available to support new ITF projects) is about \$2.4 billion.

4. Following the operation of the ITF after ten years, the Administration commenced a full review of the ITF funding mechanism in view of the feedback from R&D Centres and other stakeholders on the difficulties encountered in meeting the ITF funding and procedural requirements. The Administration had put in place improvements to address the following issues –

- (a) whether the existing ITF funding mechanism gave rise to

fragmented R&D work by different parties and hence not sufficient synergy;

- (b) whether the existing funding arrangements under ITF were too restrictive to sustain the momentum of the local research community and to push for commercialization;
- (c) whether the present requirements on industry contribution and benefit sharing arrangements were too straight-jacketed;
- (d) whether there were sufficient incentives in the ITF framework to motivate universities, R&D Centres and the industry to collaborate more in applied R&D;
- (e) whether the current project vetting requirements and procedures were too complex and cumbersome to facilitate worthy projects to be undertaken quickly; and
- (f) whether ITF could dovetail with the various Government-funded research programmes to create greater synergy.

Previous discussions

5. In the past years, Panel members expressed concern over the pace of commercializing the R&D deliverables under ITF projects, particularly in the context of discussing the Annual Progress Report of the R&D Centres at the Panel meeting on 15 June 2010. Some Panel members urged the Administration to streamline the relevant procedures and explore possible areas of improvement. In particular, the following suggestions were raised –

- (a) wider use of research deliverables in the public sector should be encouraged, such as the use of light-emitting diode (LED) lighting in public housing estates of the Housing Authority and the use of radio frequency identification technology in the medical sector, the logistics trade (e.g. Hong Kong International Airport), and retail chain stores for stock-taking and inventory management;
- (b) facilitating the promotion of research deliverables by providing a reasonable number of prototypes for trial use by government departments (e.g. Highways Department and Education Bureau) and public organizations (e.g. Hospital Authority and Airport Authority);
- (c) apart from conducting trial schemes in government departments and public organizations, R&D Centres should also enlist the

interest of trade associations in promoting trial of the research deliverables in the private sector; and

- (d) extending the scope of the ITF to provide sustainability and bringing a wider positive impact to the community.

6. When discussing the creation of a favourable ecological environment to facilitate the realization of R&D results at the Panel meeting on 16 November 2010, members noted the major proposed measures to be undertaken by the Administration in the review of the ITF. These measures included extending the scope of ITF funding to cover production of tools/prototypes/samples and conducting of trial schemes in the public sector, providing "follow-on" funding, extending the scope of ITF to provide synergy and enhance impact, refining the current ITF project vetting criteria to give greater emphasis to relevant factors apart from scientific/technical considerations, reviewing the existing industry contribution models, making greater use of the General Support Programme, shortening the ITF process, aligning the ITF to meet long term development goals, and facilitating negotiations on IP rights and sharing to promote more R&D work.

7. Panel members expressed support for the Administration's proposal to refine the policy framework of the ITF. They also welcomed the Administration's plan to speed up the ITF funding process which had been a major obstacle to industry participation in R&D projects. Panel members also noted that in view of the rapidly changing global economic environment, the emergence of the Mainland as a major R&D investor and consumer, as well as the very robust technology advances, the Administration had refined the Government's policy framework for promoting innovation and technology development to ensure that it continued to support the policy direction, as well as provided the necessary impetus to meet the challenges ahead. The refined strategy included promoting collaboration among stakeholders for achieving greater synergy, creating an ecological environment that was conducive to the development of innovation and technology, refining the funding mechanism to encourage and select projects with greater prospect of realization/commercialization, facilitating the trial of R&D products (especially in the public sector) so that researchers and product developers could gain actual experience to fine-tune their products, motivating the private sector to invest more in R&D activities in Hong Kong, fostering a stronger innovation and technology culture in Hong Kong, and enhancing co-operation with the governments, industry, and academic and research institutes in the Mainland. Details of the refined strategy are given in the **Appendix**. The Panel was generally in support of the Administration's refined strategy to create a favourable ecological environment which was conducive to the realization of R&D results in Hong Kong.

8. At the Panel meeting on 15 March 2011, the Administration briefed the Panel on the progress on improving the ITF and promotion of use of innovation and technology in the public sector. Panel members noted that various improvement measures, in particular the refined ITF project vetting criteria to give greater emphasis to relevant factors apart from scientific/technical considerations, had been finalized and incorporated into the new round of ITSP application exercise launched on 1 March 2011. In general, ITC aimed to complete the vetting process within four months after receipt of the applications. Panel members in general supported the improvement measures and the shortened ITF process.

9. On the front of promoting the use of innovation and technology in the public sector, Panel members noted that a number of projects were currently being explored. These projects included handy device for community nurses during home visits, LED streetlamp deployment on public roads of Hong Kong, ultimate e-book for e-learning, modified electric vehicle with enhanced battery management system, e-lock-based enabling technology for monitoring the container cargo transshipment process, multi-functional odour-control uniform and enhanced ductility and service life of galvanized structural steel members. In view that the realization and commercialization of R&D deliverables could bring about wide economic and social benefits to the community, Hon Emily LAU called on the Administration to further promote the use of innovation and technology in Government departments/bureaux.

Recent developments

10. At the special meeting of the Finance Committee to examine the Estimates of Expenditure 2011-2012 on 21 March 2011, Dr Hon Samson TAM raised questions on the Administration's review of UICP under ITF. Members noted that ITC aimed to conduct the second phase of the review of the ITF mechanism in 2011, covering the scope of UICP and related IP arrangements to consider room for improvement under the existing mechanism.

Latest position

11. The Administration will brief the Panel on 19 April 2011 on the progress of work in promoting innovation and technology, including the latest development of the review of ITF, and the plan for further work in the next 12 months.

Relevant papers

Resolution establishing the Innovation and Technology Fund passed by the Legislative Council on 30 June 1999

<http://www.legco.gov.hk/yr98-99/english/fc/fc/papers/pfc36ea2.pdf>

Paper for meeting of Finance Committee on 9 July 1999: FCR(1999-2000)36

<http://www.legco.gov.hk/yr98-99/english/fc/fc/papers/fc090736.htm>

Minutes of Finance Committee meeting on 9 July 1999

<http://www.legco.gov.hk/yr98-99/english/fc/fc/minutes/fcmn0907.htm>

Administration's paper on progress report on Research and Development Centres for 2009-2010 for the Commerce and Industry Panel meeting on 15 June 2010

<http://www.legco.gov.hk/yr09-10/english/panels/ci/papers/ci0615cb1-2191-6-e.pdf>

Administration's paper on interim report on the comprehensive review of Research and Development Centres for the Commerce and Industry Panel meeting on 15 June 2010

<http://www.legco.gov.hk/yr09-10/english/panels/ci/papers/ci0615cb1-2191-7-e.pdf>

Background brief prepared by the Legislative Council Secretariat for the Commerce and Industry Panel meeting on 15 June 2010

<http://www.legco.gov.hk/yr09-10/english/panels/ci/papers/ci0615cb1-2191-8-e.pdf>

Minutes of Commerce and Industry Panel meeting on 15 June 2010

<http://www.legco.gov.hk/yr09-10/english/panels/ci/minutes/ci20100615.pdf>

Administration's paper on review of operating costs of the Research and Development Centres for the Commerce and Industry Panel meeting on 16 November 2010

<http://www.legco.gov.hk/yr10-11/english/panels/ci/papers/ci1116cb1-389-3-e.pdf>

Administration's paper on creation of a favourable ecological environment to facilitate the realization of research and development results for the Commerce and Industry Panel meeting on 16 November 2010

<http://www.legco.gov.hk/yr10-11/english/panels/ci/papers/ci1116cb1-389-5-e.pdf>

Background brief prepared by the Legislative Council Secretariat for the Commerce and Industry Panel meeting on 16 November 2010

<http://www.legco.gov.hk/yr10-11/english/panels/ci/papers/ci1116cb1-389-4-e.pdf>

Minutes of Commerce and Industry Panel meeting on 16 November 2010

<http://www.legco.gov.hk/yr10-11/english/panels/ci/minutes/ci20101116.pdf>

Administration's paper on progress on improving the Innovation and Technology Fund and promotion of use of innovation and technology in the public sector for the Commerce and Industry Panel meeting on 15 March 2011

<http://www.legco.gov.hk/yr10-11/english/panels/ci/papers/ci0315cb1-1531-3-e.pdf>

Background brief prepared by the Legislative Council Secretariat for the Commerce and Industry Panel meeting on 15 March 2011

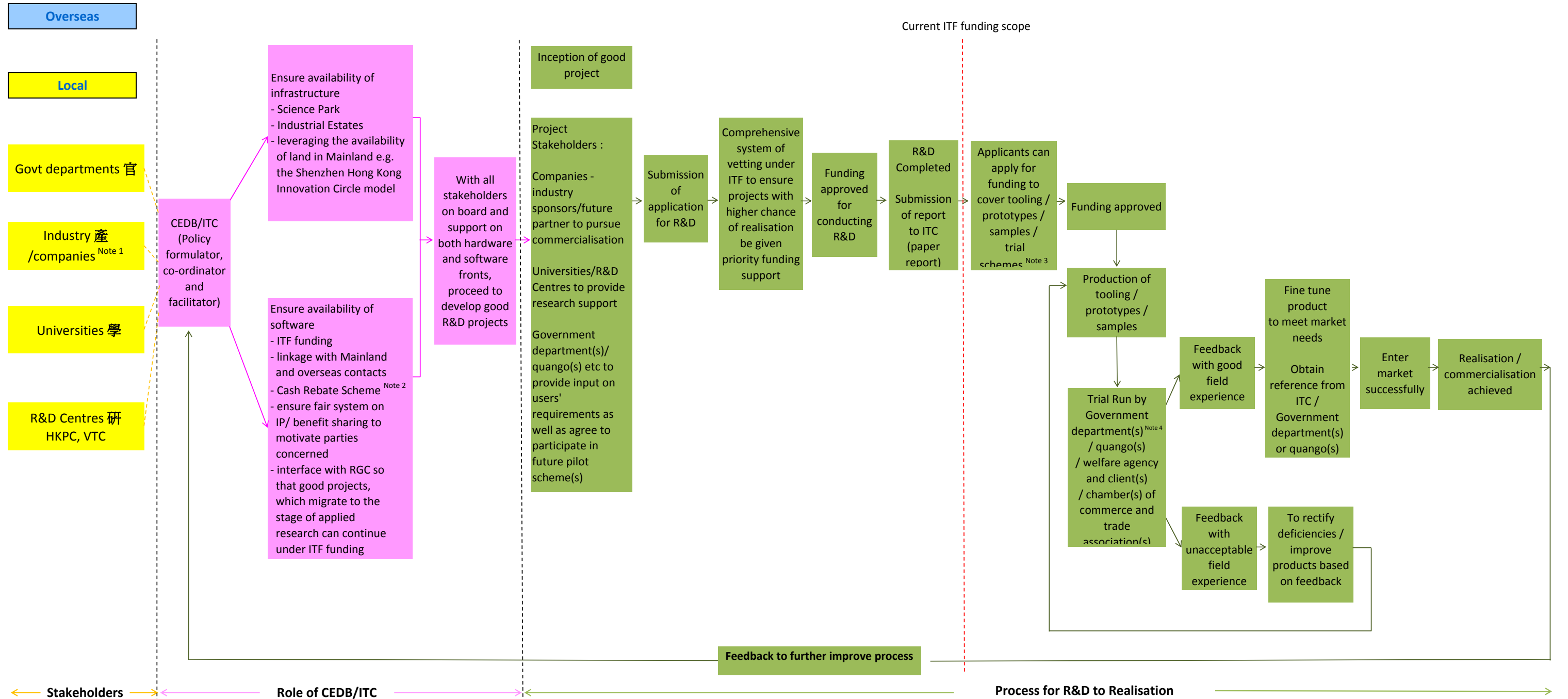
<http://www.legco.gov.hk/yr10-11/english/panels/ci/papers/ci0315cb1-1531-4-e.pdf>

Administration's replies to initial written questions raised by Finance Committee Members in examining the Estimates of Expenditure 2011-2012: serial no. CEDB(CT)061

http://www.legco.gov.hk/yr10-11/english/fc/fc/w_q/cedb-ct-e.pdf

Council Business Division 1
Legislative Council Secretariat
15 April 2011

Creating an Ecological Environment Conducive to the Realisation of R&D Results



Note 1 : Can also include venture capital & private equity.

Note 2 : With the introduction of the Cash Rebate Scheme on 1st April 2010, for collaborative projects, a company only needs to come up with around \$37 for every \$100 spent on R&D because of ITF funding (\$50), tax saving (\$8.25) and refund under the Cash Rebate Scheme (\$5).

Note 3 : There will be flexibility such that application for funding for tooling / prototypes / samples / trial schemes can be submitted together with application for funding of R&D where circumstances justify.

Note 4 : Not all projects need to go through the trial run stage in Government. They can go down the commercialisation route direct.