立法會
Legislative Council

LC Paper No. CB(1) 1679/01-02
(These minutes have been seen by the Administration)

Ref : CB1/PL/CI/1

Panel on Commerce and Industry

Minutes of meeting
held on Monday, 11 March 2002, at 4:30 pm
in the Chamber of the Legislative Council Building

Members present	**:**	Hon Kenneth TING Woo-shou, JP (Chairman) Hon HUI Cheung-ching, JP (Deputy Chairman) Hon NG Leung-sing, JP Hon Mrs Selina CHOW LIANG Shuk-yee, JP Hon CHEUNG Man-kwong Hon CHAN Kam-lam Hon Mrs Sophie LEUNG LAU Yau-fun, SBS, JP Hon SIN Chung-kai Hon CHOY So-yuk Hon Henry WU King-cheong, BBS Hon MA Fung-kwok
Member absent	**:**	Dr Hon LUI Ming-wah, JP
Public officers attending	**:**	For Items IV & V Mr Francis HO Commissioner for Innovation and Technology For Item V Mr Brian LO Assistant Commissioner (Funding Schemes) Innovation and Technology Commission Ms Cecilia YEN Assistant Commissioner (Infrastructure) Innovation and Technology Commission

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Clerk in attendance : Ms Connie SZETO
Chief Assistant Secretary (1)4

Staff in attendance : Mr TSANG Siu-cheung
Senior Assistant Secretary (1)7

I Confirmation of minutes of previous meetings
(LC Paper Nos. CB(1) 1234/01-02 and 1235/01-02)

The minutes of the special meeting and meeting held on 18 December 2001 and 14 January 2002 respectively were confirmed.

II Information papers issued since last meeting

2. Members noted that no information paper had been issued since the last meeting.

III Date of the next meeting and items for discussion
(LC Paper No. CB(1) 1232/01-02(01) - List of outstanding items for discussion
LC Paper No. CB(1) 1232/01-02(02) - List of follow-up actions)

3. Members agreed that the next regular meeting would be held on Monday, 8 April 2002 at 4:30 pm to discuss the item on "Review of Hong Kong Productivity Council" proposed by the Administration. As there was only one discussion item for the meeting, the Chairman advised that members who wished to propose other discussion items could inform the Clerk after the meeting.

IV Review of Innovation and Technology Fund
(LC Paper No. CB(1) 1232/01-02(03))

4. The Commissioner for Innovation and Technology (CIT) briefed members on the findings of the "Review of Innovation and Technology Fund". Details were set out in the information paper provided by the Administration (LC Paper No. CB(1) 1232/01-02(03)).

Applications received and approved under the Innovation and Technology Fund (ITF)

5. Mr Henry WU was concerned about whether the projects approved under the four programmes of ITF, namely, the Innovation and Technology Support

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Scheme Programme (ITSP), the University and Industry Collaboration Programme (UICP), the General Support Programme (GSP) and the Small Enterprise Research Assistance Programme (SERAP), would be completed according to schedule.

6. In response, the Assistant Commissioner (Funding Schemes), Innovation and Technology Commission (ITC) advised that as at the end of December 2001, 236 projects had been approved under the ITF since it was launched in November 1999. Each project had an average completion period of 25 months. Taking the ITSP and the UICP as examples, the 21 projects completed under these two programmes were on schedule. As the majority of the research projects were approved only in 2000-01 and were still in progress, it was difficult to predict how many projects would deviate from the original schedule at this stage. CIT added that in general, the approved projects would be completed according to the schedule set out in the funding applications. He emphasized that ITC operated a very stringent mechanism to monitor the progress of approved projects. The funded organizations were allowed to revise reasonably the development direction of the projects or the original schedule provided that such revisions were fully justified or conducive to their commercialization. If revisions were made without sufficient justifications, the ITF had the right to terminate its funding support at any time.

7. In response to Mr Henry WU's enquiry about the reasons why some approved projects could not be completed on schedule, CIT explained that there were a number of reasons. For instance, the funded institutions had underestimated complexity of the project and had inaccurately estimated the required completion time; the funded institutions discovered during the implementation process that the development direction or details of the project required modifications, and hence needed to revise the schedule; due to problems in technological and equipment installations, therefore failed to meet the project schedule.

8. Referring to the information provided in Appendix A which indicated that among the 390 applications the SERAP had received so far, only 72 applications had been approved at $80 million in total, Mr NG Leung-sing expressed reservation about imposing a funding ceiling of $2 million per project and enquired whether the amount of funding and the vetting criteria would be reviewed to benefit more projects with development potentials.

9. CIT advised that according to existing arrangements, the $2 million funding support provided for each approved project under the SERAP was granted to the funded organization in two instalments. The first instalment amounted to $400,000. If the project made satisfactory progress, the funded organization would receive the remaining $1.6 million in the second instalment. The $80 million mentioned by Mr NG was only the first funding instalment provided for the 72 approved projects. If these 72 projects could successfully

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proceed to the second phase, the total amount of funding involved would exceed $100 million. CIT stressed that the amount of funding received by each project might vary, depending on the contents of individual projects and the amount of funds applied for. As compared with other risk fund-supported programmes, the vetting criteria for the SERAP was less stringent. Currently, the SERAP had a success rate of 20%.

Approach in funding ITSP projects

10. Members noted that the ITSP review recommended, inter alia, the adoption of a more top-down approach in funding applied research and development (R&D) activities through identification of key technology areas for priority development. Initially, nanotechnology, digital entertainment and integrated circuit design support centre were identified as the three areas for development.

11. Given that the research work on nanotechnology was relatively scattered according to the paper, Mr HUI Cheung-ching enquired about measures taken to consolidate the research work. CIT replied that the Administration was considering soliciting research proposals from various organizations under the theme of nanotechnology with a view to centralizing research resources. Since nanotechnology was an advanced stream of technology, he highlighted the need to set up a centre of excellence to support the organizations which gained the upper hand in this research area.

12. In response to Mr HUI Cheung-ching's enquiry about the application and commercialization of nanotechnology, CIT pointed out that nanotechnology had a wide scope of application including battery production, environmental protection and data storage technologies. A practical example involved the use of nanotechnology by garment manufacturers in processing cloth to enhance its waterproof quality. CIT added that based on overseas experience, the development period for midstream/upstream nanotechnology products would be 10 to 15 years. According to the Administration, the development cycle of nanotechnology products in Hong Kong ranged from four to five years on average.

The effectiveness of the ITF and the way forward

Strategy of the ITF and the commercialization and technology transfer of the projects

13. Mrs Selina CHOW acknowledged the objectives of the ITF i.e. to finance applied research projects that contributed to innovation in local industries to be undertaken by government or non-government entities. However, she considered that in view of the changing economic environment over the past two years, it was high time to review the strategy of the ITF so as to improve its

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operation for effective accomplishment of its mission. To better utilize the development resources, she agreed that the ITF should focus on funding research projects with greater development potentials. In addition, the commercialization and technology transfer of funded projects should also be enhanced. This would enable the commercial and industrial sectors to benefit from the research results.

14. CIT responded that a proactive solicitation arrangement had been made for the ITSP to invite proposals under eight solicitation themes including applied genomics. Such an arrangement aimed at utilizing resources more effectively and achieving the objectives of commercialization and technology transfer of research deliverables. Regarding the selection of key research projects, comprehensive consultation would be conducted among the research and industry sectors. Apart from providing support to public organizations such as universities in conducting scientific research, ITF would also launch an innovative product development assistance programme to promote innovation in product design and development with a view to upgrading the product design capability of local manufacturers. It was believed that the programme would provide further support to local manufacturers. Initially, consumer electronics products had been selected for pilot testing and the industries would be invited to express their views on the pilot scheme before the end of 2002.

15. Mrs Selina CHOW welcomed the proactive approach in assisting the industry to commercialize the research deliverables expeditiously. Regarding Mrs Selina CHOW's concern about the lack of competitive edge of individual project investigators versus funded organizations in commercializing their project deliverables, CIT said that he would look into the matter after the meeting and take appropriate follow-up actions.

ITC

16. Mr CHEUNG Man-kwong remarked that the effectiveness of the various programmes under the ITF hinged on whether the project deliverables could eventually be commercialized and benefit the industry. He was concerned that under the existing ITSP, the commercialization of project deliverables and technology transfer failed to achieve the desired progress. Mr NG Leung-sing also enquired about measures taken by the Administration to achieve these two objectives.

17. CIT replied that clear guidelines on technology transfer had been promulgated at the end of 2000 for compliance by funded organizations engaging in research projects. Efforts had also been made to further promote the commercialization of project deliverables and technology transfer. The universities were encouraged to step up their efforts in technology transfer and to instil in project investigators the importance of commercialization. The commercialization potential of a project would be given more weight in vetting funding applications. In addition, details of ITF projects had also been uploaded onto the Internet for the industries' easy reference. The

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Administration was glad to know that some universities had already set up Technology Transfer Offices to assist project investigators in identifying relevant industrial partners to materialize their commercialization plan. Moreover, some project investigators had made use of the TechMart operated by the Hong Kong Productivity Council to help market their research results. On the number of funded projects which had achieved the objectives of commercialization and technology transfer at this stage, CIT advised that it was too early to evaluate the effectiveness of project commercialization as most projects were still in progress. The Administration planned to devise a systematic project evaluation mechanism by the end of 2002 to objectively assess the effectiveness of the commercialization of project deliverables. The Administration would brief the Panel on further details at that time.

ITC

Management and evaluation of ITF projects

18. Mrs Sophie LEUNG emphasized that the Administration should closely monitor the operation of the ITF as well as enhancing the accountability of the funded organizations. She also suggested that references should be drawn from similar technology funding programmes in overseas countries by laying down objective criteria for the vetting, monitoring and evaluation of ITF projects. In addition, she expressed reservation about earmarking some 60% of the ITF, i.e. HK$3 billion, for R&D programmes undertaken by the Applied Science and Technology Research Institute (ASTRI) over the next five years.

19. On the project vetting mechanism, CIT remarked that the ITC had set up a team of technical experts responsible for vetting the technology aspects of projects and where appropriate would seek technical advice from external reviews. In the case of the ITSP and GSP, the technical and/or processing teams of the ITC would submit their observations for consideration by an independent vetting committee comprising members from the research community and the industry of the relevant sectors. Moreover, the past performance of individual organizations in technology research would also be taken into account in the vetting process. On technical monitoring, the Administration would require the funded organizations to submit progress reports every six months in order to understand the progress of the projects approved. Besides, the Administration also held regular meetings with the universities since the end of 2001 to monitor closely the progress of the research projects. As regards project evaluation, the ITC currently evaluated the completed projects against the milestones and deliverables as laid down in the project proposals. However, since technology research projects involved certain level of risks, it would be very difficult to set objective evaluation criteria. Moreover, not all approved projects were able to achieve their intended results. Their failure was attributed to a number of complicated factors and the evaluation might not be useful. Furthermore, countries such as the United States, Singapore and South Korea had not developed any systematic evaluation mechanism. Nevertheless, the Administration understood that as the manager of ITF, it should be accountable to

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the public. As such, it had decided to develop a three-tier project evaluation system by the end of 2002 targeting at individual projects, the ITF programme as a whole and the impact of the ITF on the development of individual industries or technology areas. A number of objective and quantifiable performance indicators would be identified. Details of the project evaluation framework were at Appendix C.

20. Members noted the results of the review of the ITF and the proposed improvement measures. They urged the Administration to implement these measures expeditiously for the smooth operation of the ITF. This would in turn facilitate the ITF in achieving its objectives to foster an innovation and technology culture in the community, and promote technological entrepreneurship.

V Update on the operation of the Applied Research Fund
(LC Paper Nos. CB(1) 939/01-02 and 1232/01-02(04))

21. CIT briefed members on the operation and the financial position of the Applied Research Fund (ARF) since July 2001. Details were set out in the information paper provided by the Administration (LC Paper Nos. CB(1)939/01-02 and 1232/01-02(04)).

22. Members in general expressed grave concern about the heavy losses incurred in the ARF's investments processed by the then Industry Department (ID) and fund managers. For the projects funded through fund managers, the general evaluation as at the end of 2001 had plummeted to about 60% of the investment at cost. Mr CHEUNG Man-kwong was worried about the management and the investment prospects of the ARF.

23. CIT said that all investments had risks. Given the global economic downturn in recent years, technology businesses were facing enomerous challenges. As such, the underperformance of the ARF's investee companies was inevitable. It was expected that with improvement in external economic environment, the investments of the ARF would become profitable again. CIT stressed that in assessing the financial performance of the ARF, a comprehensive analysis on the investment portfolio should be made on a long-term basis. He pointed out that at present, the fund managers mostly invested in information technology and telecommunications businesses. The performance of these businesses was relatively better than other high technology businesses. He further added that the Finance Committee (FC), when approving a new capital injection in 1998, also endorsed the ARF's public mission of bringing about social and economic benefits instead of investment returns. FC also agreed to dispense with the ARF's original target return rate of 5%.

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24. On the management of the ARF, CIT pointed out that the venture capital industry had become increasingly cautious with very few new investments following the burst of the dotcom bubble in 2000. The Applied Research Council (ARC) adopted a very prudent and responsible approach in handling the ARC's investments. Only one new investment and four follow-on investments had been approved since July 2001.

25. Mr SIN Chung-kai considered the ARF a high-risk investment fund prone to record losses under the current adverse economic climate. He expressed concern about the bankruptcies of investee companies and suggested that these cases should be analyzed to avoid the recurrence of similar problem which might cause even greater losses to the ARF. CIT explained that the problem might be attributed to the way the then ID managed the ARF, with the majority of the approved projects being supported in the form of direct loans instead of equity injection. If the company concerned was in financial difficulties, it would be difficult to cover the loans. Moreover, the arrangement of having civil servants, rather then professionals, to vet funding applications and manage the ARF left much to be desired since civil servants did not possess adequate commercial sense to fully grasp the changes in the market and formulate appropriate investment strategy. As such, the Administration started to engage private sector venture capital firms to be the ARF's fund managers from November 1998 onwards to address the deficiencies in the ARF system.

26. Mr NG Leung-sing, Mrs Selina CHOW and Mr CHEUNG Man-kwong expressed concern about the uncertain future of the ARF. They opined that in view of huge budget deficits, the Administration should ensure better untilization of existing ARF resources through redeployment to other more urgent uses. Due to the availability of other venture capital funds in the market to provide capital for technology start-up companies, the Administration should actively consider reviewing the role of the ARF and examining whether it should cease operation.

27. CIT responded that the ARF was set up in 1993 to provide funding support to technology ventures and R&D projects which had commercial potentials in order to enhance the competitiveness of local industries. At that time, the ARF was the only major venture capital fund which provided development capital for local technology-based start-up companies. Over the past few years, the ARF had accomplished its mission. However, since the burst of the dotcom bubble in 2000, the venture capital industry had become more risk adverse and conservative, resulting in shrinking investments from venture capitalists. The ARC had conducted a review of the ARF against such circumstances and acknowledged that the ARF still had a role to play in this difficult time. The ARC believed that promising investments would continue to be achievable. It would explore further with the fund managers new investment opportunities which could provide momentum and benefits for local technological development. Despite the situation, the Administration recognized members'

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ITC concerns and would carefully examine and consider whether the ARF should be retained.

VI Any other business

28. There being no other business, the meeting ended at 6:20 pm.

Legislative Council Secretariat
7 May 2002