

LC Paper No. CB(1)1413/02-03 (These minutes have been seen by the Administration)

Ref: CB1/PL/CI/1

Panel on Commerce and Industry

Minutes of meeting held on Monday, 10 February 2003, at 4:30 pm in Conference Room A 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, GBS, JP Hon CHEUNG Man-kwong Hon CHAN Kam-lam, JP Hon Mrs Sophie LEUNG LAU Yau-fun, SBS, JP Hon SIN Chung-kai Hon Henry WU King-cheong, BBS, JP Hon MA Fung-kwok, JP	
Member absent	:	Dr Hon LUI Ming-wah, JP	
Public officers	:	Items IV to VI	
attenuing		Mr Francis HO	
		Permanent Secretary for Commerce, Industry and	
		Broadcasting)	
		Mrs Sarah KWOK	
		Acting Commissioner for Innovation and Technology	
		Items VI and V	
		Mr Tony LAM	
		Assistant Commissioner for Innovation and	
		Technology	

Items IV and VI

Mr Brian LO Assistant Commissioner for Innovation and Technology

Clerk in attendance :	Ms Connie SZETO Chief Assistant Secretary (1)4
Staff in attendance :	Mr TSANG Siu-cheung Senior Assistant Secretary (1)7
	Ms Christina SHIU Legislative Assistant

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I Confirmation of minutes of meeting (LC Paper No. CB(1)812/02-03)

The minutes of the special meeting held on 16 December 2002 were confirmed.

II Information papers issued since last meeting

2. <u>Members</u> noted that no information paper had been issued since the last meeting.

III Date of the next meeting and items for discussion (LC Paper Nos. CB(1)844/02-03(01) and (02))

3. <u>Members</u> agreed to hold the next regular meeting on Monday, 10 March 2003 at 4:30 pm to discuss the following items proposed by the Administration:

- (a) Enhancement of the Government Back-end System for Electronic Processing of Cargo Manifests (EMAN); and
- (b) Progress of the work of the Applied Science and Technology Research Institute (this item was proposed by Mr SIN Chung-kai).

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IV Briefing on the evaluation framework for Innovation and Technology Fund

(LC Paper No. CB(1)844/02-03(03))

Evaluation mechanism

4. The Permanent Secretary for Commerce, Industry and Technology (Information Technology and Broadcasting) (PSCIT(ITB)) briefed members on the progress made in the development of a framework to evaluate the performance of completed projects funded by the Innovation and Technology Fund (ITF). The details were set out in the information paper provided by the Administration. He pointed out that following the establishment of a three-tier system, the Administration had completed the evaluation of ITF at individual project level. As regards the evaluation at other levels, including the effectiveness of the four specific ITF programmes, and the overall benefits and impact ITF projects brought about to the relevant industries, the Administration expected to report to the Panel by the end of 2003 after the completion of the evaluation concerned.

In response to Mr SIN Chung-kai's enquiry, <u>PSCIT(ITB)</u> advised that the 5. Administration had referred to overseas experience, such as that of the European Union (EU) and the United States (US), when developing the ITF evaluation framework. He pointed out that at present, EU assisted and promoted the development of innovation and technology (I&T) on a programme basis. According to his understanding, EU was working hard on the sixth development plan for its member states. In US, corporate contribution in research and development (R&D) accounted for 70% to 75% of its total R&D spending. Unlike EU and US, Hong Kong did not have a clear direction and strategy for I&T development in the past. The Administration maintained frequent contacts with the universities to keep abreast of Hong Kong's strengths with a view to developing beneficial R&D projects. However, as compared with EU and US, the lack of private sector participation and support made it more difficult for the Administration to bring about substantial I&T development to Hong Kong on its own.

6. <u>Mrs Selina CHOW</u> was concerned that the evaluation criteria of individual ITF programmes might be too strict, particularly the relevance between project deliverables and industries, and were disincentives to the R&D institutions. <u>PSCIT(ITB)</u> responded that in addition to the focus on the innovative ideas of R&D projects during the vetting process, the Administration also hoped that the project deliverables would ultimately be transferred to the relevant industries for application, with a view to promoting the development of the industries. He stressed that this had long been the policy objective of the Administration in setting up ITF.

7. On those R&D projects which were rated as not practically useful or beneficial to the relevant industries, <u>Mr HUI Cheung-ching</u> enquired whether the

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Administration had looked into the reasons for such ratings, which could be used as reference for vetting ITF applications in future. <u>PSCIT(ITB)</u> responded that the above situation was mainly attributed to the high target set by the R&D institutions concerned which was beyond their development ability. He supplemented that the existing mechanism for vetting ITF applications was broadly in line with those adopted overseas. However, the development of R&D in Hong Kong still lagged behind overseas countries was mainly due to the absence of a forward looking R&D strategy in Hong Kong with a clear and long term goal. Taking US as an example, the Government concerned had formulated a 20-year development strategy for nanotechnology which was incomparable to that of Hong Kong.

Development strategy

8. <u>Mr SIN Chung-kai</u> suggested that although the Administration had already set the development objectives and themes for ITF, it could make reference to overseas experience by organizing technology conferences to receive views extensively from the industries on I&T and formulate a comprehensive R&D strategy to cater for the practical needs of Hong Kong. He pointed out that the above arrangements were conducive to enhancing the operation of ITF, particularly the transparency of resource allocation.

9. <u>PSCIT(ITB)</u> responded that the Administration had organized small scale seminars on specific technology sectors. Furthermore, it often solicited views from the industries on I&T development through science consultants. Given that R&D was still at the initial stage in Hong Kong, he considered it inappropriate to hold large scale seminars to seek the consensus of the industries in this respect.

Mr CHEUNG Man-kwong stressed that a forward looking development 10. strategy should be formulated for the development of I&T. On resource allocation, he opined that the Administration should focus on funding and developing the projects which Hong Kong had advantages, particularly those conducive to the development of traditional industries. <u>PSCIT(ITB)</u> shared Mr CHEUNG's views. Given that Hong Kong's foundation industries, including metal, plastics, textiles, electronic products, had development edge in the market, research on the technology concerned would certainly benefit the relevant industries and increase the use of new technology and products. As for those R&D projects lacking development edge or unable to catch up with the fast pace of market development, he advised that the feasibility of developing such projects should be carefully examined. He added that the Administration would further explore the theme of environmental technology development. In the area of information technology, the Administration would focus on establishing a development platform. For example, it would provide more room of development for information technology by upgrading the e-commerce technology. As regards biotechnology, he anticipated that while the direction and strategy for development was still unclear at present, it would be another

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drive of local economic growth following information technology. He believed that the top-notch medical facilities and personnel Hong Kong possessed would effectively enhance its competitiveness in this technology area. Hence, the Administration would focus on biomedicine when funding researches on biotechnology. <u>The Chairman</u> suggested that the Administration should review the technology areas covered by ITF funded projects so as to determine the way forward for R&D development. <u>Mr SIN Chung-kai</u> supported the Administration in funding the development of R&D projects which Hong Kong had advantages.

11. In view of the current budget deficits, <u>Mr CHAN Kam-lam</u> was concerned about whether the Administration would consider reducing the resources allocated for I&T development. He hoped that the Administration would adopt an open attitude in vetting and approving funding applications so as to avoid smothering R&D projects which were innovative and had development potential. <u>PSCIT(ITB)</u> clarified that the Administration had no intention to reduce the resources for I&T development. <u>Mrs Sophie LEUNG</u> advised that while encouraging I&T development, the Administration should consider and examine critically the feasibility of the projects so as to avoid wasting resources.

Performance of funded programmes/projects

12. While expressing concern about the low percentage of projects under the Innovation and Technology Support Programme (ITSP) which had been completed satisfactorily and rated as practically useful or beneficial to the relevant industries, Mrs Selina CHOW enquired how individual funded projects were assessed. PSCIT(ITB) advised that in general, the Administration would set milestones for the projects concerned to assess whether they had led to fruitful R&D results. Whether individual projects were recognized by the relevant industries depended on the corporate sponsorship that could be secured Judging from the present situation, private enterprises often ultimately. contributed up to about 10% of the costs of R&D projects with development potential. In reality, the contributions often accounted for a higher percentage. Concerning the fact that only 24% of the projects under the Small Entrepreneur Research Assistance Programme (SERAP) met the assessment criteria, PSCIT(ITB) explained that it was mainly because most of the assisted small and medium enterprises (SMEs), despite having implemented the approved project plan, were still incapable of generating revenue and attracting follow-on investment to satisfy the assessment criteria.

13. Referring to paragraph 22, which stated that many SERAP projects failed to proceed to Phase II, <u>the Chairman</u> expressed concern about the specific measures in place to address the situation. <u>PSCIT(ITB)</u> responded that the Administration would tighten up the screening of applications so that more worthy R&D projects could complete the two phases under SERAP. He added that in the past, there were many cases in which either a product prototype or a new technology or product had been successfully developed in accordance with

the approved project plan. However, the product could not be launched in the market successfully due to insufficient market demand or because the market was not ready to take up the technology. He advised that there were precedent cases on the termination of funding support for individual projects which could not meet the stipulated standards.

14. <u>Mr CHEUNG Man-kwong</u> was concerned that only 53% of the projects under the ITSP were rated as practically useful or beneficial to the relevant industries and considered that the percentage was on the low side. Given that similar funding programme was not found in other places and ITSP was still at the initial stage, <u>PSCIT(ITB)</u> opined that the effectiveness of ITSP could be assessed objectively and reasonably only after it had been implemented for two to three years, having regard to various factors including changes in the market, development of technology, technology level of enterprises, etc.

15. In response to Mr CHEUNG Man-kwong's enquiry, <u>PSCIT(ITB</u>) advised that there had been a lack of development projects on environment technology in Hong Kong. As regards biotechnology, although the number of related funding applications received was larger, it was still at the initial stage of development in the absence of the relevant industries. Even if a new technology or product had been successfully developed, it might not be adopted by the industries. In the case of information technology, due to rapid market development and the need to prevent the technology/product developed became obsolete, the Administration required the projects to match with the demand of the relevant industries and have a relatively short development cycle, which was two years in general, so that more development results could be transferred to the industries for application. These projects comprised mostly midstream to downstream R&D projects.

Other concerns

16. Responding to Mr NG Leung-sing's enquiry, <u>PSCIT(ITB)</u> advised that the Administration had drawn up clear vetting and approving criteria and monitoring mechanism for the four funding schemes under ITF. As to the matching of the technology/product developed with the enterprises in the Pearl River Delta (PRD), the Administration said that it would enhance communication with Mainland enterprises through the Hong Kong Productivity Council (HKPC) with a view to achieving technology/product transfer. He revealed that the Economic and Trade Office of the Government of the Hong Kong Special Administrative Region in Guangdong and HKPC had organized Hong Kong businessmen to assist in solving the problems of technology transfer.

17. <u>The Chairman</u> concluded that the Panel noted the Administration's briefing on the evaluation framework for ITF.

V Review of the role and future of the Applied Research Fund (LC Paper No. CB(1)844/02-03(04))

18. <u>PSCIT(ITB)</u> briefed members on the review of the role and future of the Applied Research Fund (ARF). The details were set out in the information paper provided by the Administration.

19. Referring to the unsatisfactory performance of AsiaTech Ventures Limited (AsiaTech) as revealed in the Annex to the paper, <u>Mr CHEUNG Man-kwong</u> expressed concern about the ability and quality of the fund managers engaged by ARF. In response, <u>PSCIT(ITB)</u> said that the Administration would not comment on the performance of individual fund managers. In fact, the Administration had terminated the fund management contract with AsiaTech and recovered the balance of fund which had not been invested.

20. In order to ensure the normal operation of ARF, <u>Mr CHEUNG Mankwong</u> considered that the Administration should conduct regular assessment, particularly risk assessment, on the performance of individual fund managers to determine whether they should continue to be entrusted with the management of the investment projects under ARF to avoid incurring loss of public money. <u>PSCIT(ITB)</u> advised that according to existing requirements, fund managers had to provide the Administration with updates on the changes of their assets and investments every three months. Such an arrangement enabled the Administration to understand and monitor the performance and operation of the fund managers.

21. <u>Mrs Sophie LEUNG</u> supported the management of ARF by fund managers as operation on a commercial basis could benefit more R&D projects. She stressed that the Administration should attract corporate investment vigorously and set a time-frame for the transfer of R&D projects to enterprises for development, thus making available more resources to develop other potential projects. <u>Mrs Selina CHOW</u> shared Mrs Sophie LEUNG's views. <u>PSCIT(ITB)</u> responded that the Administration would consider members' views. However, whether enterprises were willing to commit resources to undertake the development costs of individual R&D projects would be market-driven. In view of the uncertain economic situation at present and the rapid changes of the market environment, he opined that ARF still had a role to play in supporting individual R&D projects with development potential.

VI Development of Nanotechnology in Hong Kong (LC Paper No. CB(1)844/02-03(05))

22. <u>PSCIT(ITB)</u> briefed members on the action taken by the Administration in supporting the development of nanotechnology in Hong Kong and its proposal to support applied R&D in nanotechnology under ITF. The details were set out in the information paper provided by the Administration.

Development strategy

23. Mr CHEUNG Man-kwong was concerned about the strategy adopted by the Administration in developing nanotechnology. PSCIT(ITB) advised that there had not been any nanotechnology-based industries in Hong Kong. Upstream and academic research in nanotechnology was mainly carried out at local universities with funding support provided by the Research Grants Council. The setting up of ITF provided room for development and support for midstream to downstream research projects. He stressed that the Administration would capitalize on the universities' strengths in nanotechnology to cater for the development of related industries. On the one hand, it would make the industries understand the market opportunities created by nanotechnology. On the other hand, proactive efforts would be made to promote the commercialization of the technology concerned. Looking ahead, he anticipated that there would be a nanotechnology platform in the market for industries to develop and use.

Encouraging universities to conduct and promote nanotechnology research

24. <u>Mr CHEUNG Man-kwong</u> was concerned about whether any measures were in place to enhance cooperation among universities with a view to optimizing the use of limited resources and promoting the development of nanotechnology in Hong Kong. <u>PSCIT(ITB)</u> advised that the Administration did not rule out the possibility of providing continuous support for the universities to develop nanotechnology in future. However, as each university had its own direction and focus of development, it was rather difficult to require them to collaborate in the area of nanotechnology.

25. <u>Mr CHAN Kam-lam</u> suggested that the Administration should encourage universities to promote vigorously to the industries their research results and the scope of application concerned. This could facilitate the transfer of technology to related industries and promote the development of local industries. Moreover, universities should also be encouraged to seek additional corporate sponsorship for nanotechnology research so as to alleviate the burden of the Administration.

Exchange of nanotechnology between the Mainland and Hong Kong

26. <u>Mr HUI Cheung-ching</u> was concerned about the ways to promote exchange and cooperation between the Mainland and Hong Kong in nanotechnology development. <u>PSCIT(ITB)</u> advised that at present, nanotechnology research in the Mainland was mainly conducted by tertiary education institutions, which maintained frequent contacts and established amicable partnerships with local universities. For example, the Chinese Academy of Sciences and the Hong Kong University of Science and Technology (HKUST) signed an agreement two years ago on joint R&D in nano-materials. On Mr HUI Cheung-ching's suggestion that the Administration should enhance nanotechnology development in Guangzhou and Hong Kong through the Hong <u>Action</u>

Kong Productivity Council (HKPC), <u>PSCIT(ITB)</u> clarified that the research concerned had to be conducted by universities while HKPC could play a coordinating and supporting role in terms of technology transfer.

Application submitted by HKUST for its nanotechnology research project

27. <u>Mr SIN Chung-kai</u> expressed concern about the duration of the support provided for HKUST's nanotechnology research as referred to in Annex C of the paper. <u>PSCIT(ITB)</u> responded that the Administration intended to provide funding support for the research project for four years. Funding would be released to HKUST in stages, having regard to the development progress of the project.

28. Mr CHEUNG Man-kwong enquired about the contingency measures in case HKUST's research project failed to make satisfactory progress. PSCIT(ITB) advised that it was very difficult to predict the project result at this point. However, the Administration would conduct risk assessments on the project and monitor its progress on an on-going basis. If the research did not achieve satisfactory progress, such as the loss of competitiveness of the developed product or the emergence of substitutes in the market, the Administration would consider terminating its funding support. The knowledge and the relevant research facilities derived from the project would be in the custody of HKUST. Given that the funding the project received would be mainly spent on engaging R&D professionals, Mr CHEUNG Man-kwong was concerned about whether HKUST was aware of the above arrangement. <u>PSCIT(ITB)</u> said that HKUST did not object to the arrangement concerned. He expected that HKUST would work out the employment contracts of R&D personnel in the light of the current mode of funding.

Other concerns

29. <u>Mrs Sophie LEUNG</u> advised that the Administration must keep abreast of the latest global trend in nanotechnology development to avoid wasting development resources. Moreover, she urged the Administration to consider changes in market demand when developing new technology/products, and make forecasts and plan for contingencies as appropriate. Responding to Mrs Sophie LEUNG's enquiry, <u>PSCIT(ITB)</u> stressed that there was no duplication in the nanotechnology research projects currently under the Administration's sponsorship. In addition, the Nanotechnology Projects Vetting Committee was set up to select development projects conducive to enhancing the competitiveness of local enterprises in the international market on the advice of its expert members. As regards the estimated total cost of the nanotechnology project undertaken by the Hong Kong Polytechnic University, <u>PSCIT(ITB</u>) responded that the cost amounted to \$14,702,000.

VII Any other business

30. There being no other business, the meeting ended at 6:30 pm.

Council Business Division 1 Legislative Council Secretariat 10 April 2003