For information **FCRI(2000-01)17**

NOTE FOR FINANCE COMMITTEE

Privatisation of the Telecom Technology Centre

INTRODUCTION

This paper informs Members that the Telecom Technology Centre (TTC)(1), which was established with funding from the then Industrial Support Fund (ISF)(2), has been sold to a private company at $25 million.

BACKGROUND

2. In June 1994, Finance Committee approved vide FCR(94-95)25 at
Encl. the Enclosure a commitment of $83.9 million as a project to be funded by the ISF under Head 73 Industry Department Subhead 840 Industrial support (block vote). The amount was to cater for the setting up of the TTC and its operating expenses for the first three years. Members also noted that the total financial implications of establishing the TTC might reach $112.3 million over a six-year period from 1994-95 before it was expected to become self-financing.

3. The TTC was established in 1995 as a wholly-owned subsidiary of the Hong Kong Productivity Council (HKPC) to -

(a) undertake applied research and development work, focusing on telecommunications and related areas, in collaboration with participants from local industry; and

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(1) Although TTC was called "Telecommunications Product Technology Development Centre" in FCR(94-95)25, it was formally registered and incorporated as "Telecom Technology Centre" under the Companies Ordinance.

(2) The ISF was set up in April 1994 to support projects that contributed to the industrial and technological development of Hong Kong. The objective of the then ISF was to enhance the competitiveness of the local manufacturing industry through the provision of financial assistance for industrial support programmes. The ISF was subsequently subsumed under the Innovation and Technology Fund on 9 July 1999.

(b) transfer appropriate enabling and product technologies from local and overseas sources to local industrialists.

4. Due to the time taken to recruit the key personnel, the TTC was only officially launched in April 1996. As a result of this delay, the then Industry Department agreed in December 1996 to extend the funding period of the project from the original three years to five years while capping the funding support at the original commitment level of $83.9 million.

PRIVATISATION

5. The TTC was established at a time when there was no private sector interest in providing a service which was important for the development of Hong Kong's telecommunications and electronics industry. Over the years the TTC had established itself as the telecommunications solution centre in Hong Kong, providing building blocks/design solution packages and technology transfer links to telecommunications product manufacturers. The design solutions were provided in the form of application specific integrated circuits, protocol stacks, application software and man machine interface, etc. Since its establishment, the TTC had successfully conducted 70 projects for 29 clients.

6. However, in late 1999 at least one local company had started to provide telecommunications product solutions. Another company had also indicated interest in acquiring the TTC. These developments raised the concern as to whether it would be necessary for the TTC, a public body, to carry out the original mission.

7. A major consideration was the financial viability of the TTC. In this connection the TTC was not able to achieve a balanced budget as originally envisaged, despite its business growth and the expansion of its client base in recent years. Its recurrent income of about $10 million each year could only cover half of its recurrent costs. We also estimated that the TTC would suffer a total net loss of $24 million in the coming four years and would only be self-sufficient by 2004-05 at the earliest. As we had already disbursed to the TTC the original commitment of $83.9 million, to continue to maintain the TTC as a public entity, further funding by the Government would be required. This is highly undesirable, partly for the reasons set out in the criticisms of the Director of Audit's Value for Money (VFM)

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Report 29 issued in August 1997[(3)] and partly because such further financial support from public funds would constitute unfair competition with similar services provided by the private sector. On the other hand privatisation would add value to the services of the TTC with the commercial strengths of the private sector. We therefore decided to privatise the TTC.

8. After a competitive restricted tendering exercise[(4)] involving 50 international and local telecommunication companies, a subsidiary of a Canadian company specialising in embedded software solutions for telecommunication products was selected. This was in fact the only bid received but the acceptance was based on the bidding price, the technological capabilities of the company and its service plan. The bidding price at $25 million fell within the range of the estimated values of the TTC as advised by an independent third party professional consultant firm. We were also satisfied with the technological capabilities of this international company. Indeed its marketing and sales strength should be able to optimise the potential of the TTC's capabilities. This international company also undertook to continue to serve the existing customers and strengthen its support to local industry.

9. The deal was completed on 21 July 2000. Given that HKPC has provided much support to the establishment and operation of the TTC, in terms of the latter's overall planning, strategic development, business referrals and other service support, we agreed to allocate $3 million out of the $25 million to HKPC in recognition of its contribution. The remaining $22 million was credited to the Innovation and Technology Fund (ITF) account to fund future projects[(5)].

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(3) Director of Audit commented in his VFM Report 29 in August 1997 on a review of the Government's funding schemes in promoting technology development in industries (including the ISF) that as the actual income of TTC turned out to be considerably below the projected income, it was likely that further capital injection of substantial amounts was required. Director of Audit considered that there was a need for close monitoring of the performance of this project.

(4) According to our legal advice, a restricted tendering exercise, instead of an open tendering exercise, has to be conducted for this exercise because of the restrictions in the Articles of Association of the Centre, the Companies Ordinance (Cap. 32 of Hong Kong Laws) and the Protection of Investors Ordinance (Cap. 335).

(5) The Legislative Council Resolution of ITF provides, inter alia, that there be credited to the Fund the proceeds of the sale of any investment made from the ITF. Since ISF has been subsumed under ITF and become part of it, the credit arrangement is in line with the Resolution.

10. In future, we will consider privatising similar government funded projects which are ready to be taken up by the private sector if we are satisfied that it is in the public interest to do so.

Commerce and Industry Bureau
December 2000

For discussion
on 17 June 1994

FCR(94-95)25

ITEM FOR FINANCE COMMITTEE

HEAD 73 - INDUSTRY DEPARTMENT
Subhead 840 Industrial support (block vote)

Members are invited to -

(a) note the financial implications of establishing a Telecommunications Product Technology Development Centre, estimated at $112.3 million over a six-year period from 1994-95; and

(b) approve a commitment of $83.9 million for the setting up of the proposed Centre and its operations in 1994-95 to 1996-97, with expenditure to be charged to the Subhead 840 Industrial support (block vote).

PROBLEM

The local electronics industry will not be able to maintain its competitiveness in the world market in the manufacture of high value-added telecommunications products unless some assistance is provided on applied research and product development work.

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PROPOSAL

2. The Director-General of Industry (DG of I) proposes that a Telecommunications Product Technology Development Centre (the Centre) be established under the aegis of the Hong Kong Productivity Council (HKPC) to -

(a) undertake applied research and development work, focusing on the telecommunications and related areas, in collaboration with participants from the local industry; and

(b) transfer appropriate enabling and product technologies from local and overseas sources to local industrialists.

JUSTIFICATION

3. Hong Kong's electronics industry has been able to compete in the world market by offering quality and competitively-priced original equipment manufacturing capability to overseas companies. However, this niche is gradually being eroded because of the increasing costs of production in Hong Kong.

4. To remain competitive, our electronics industry must focus more on applied research and product development work, using the latest enabling and product technologies. However, the majority of our electronic manufacturing operations, which are small to medium sized, do not have the financial or human resources to access, or develop in-house, the necessary technologies in a timely manner. This problem is further compounded by the fact that the life-cycle of electronic products is getting shorter and shorter. Therefore, unless the needed technologies are developed or secured two to three years ahead of the market, local electronics companies would not be in a position to design and manufacture the products required by the world market in time.

5. Companies in other newly industrialised countries encountering the same problem are supported by government or quasi-government agencies tasked to undertake research work, the fruit of which is then disseminated to the manufacturers. Without similar infrastructural support in Hong Kong, our manufacturers will lag behind in the technology race.

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6. With this in mind, and having regard both to its own technological strength and the considerable market potential for new telecommunications products, the HKPC proposes to establish the Centre, which would assist manufacturers by undertaking applied research in technologies and processes in the telecommunications field with commercial promise. Given the trend towards the integration of computing and telecommunications products, as exemplified in personal digital assistants, it is felt that the work of the Centre would have wide application in the electronics industry.

7. The Centre would initiate research into technologies with commercial potential, and would invite companies to join sponsoring consortia. Consortium members would enjoy access to the resulting technology at reduced rates, while other companies would have to pay the full licence fee. The Centre would also undertake contract research at the request of individual companies and groups of companies. The Centre would also purchase licences for technologies developed elsewhere, where this would help the Centre's development work.

8. The Centre would be established as a wholly-owned subsidiary of the HKPC, allowing greater flexibility in staffing, and faster response to changing technology and market developments. The Centre would be overseen by a separate board of directors comprising industry representatives and telecommunications experts, as well as HKPC members. The Board would provide strategic guidance to the Centre, as well as monitoring the outcome of research projects.

9. The Industry and Technology Development Council strongly supports the proposal. Members of the electronics industry also feel that the Centre would help to meet the need for an applied research facility, identified in a recent techno-economic study on Hong Kong's electronics industry. Accordingly, the DG of I strongly recommends this project.

10. HKPC, as the principal industry-support agency subvented by Government, is the most appropriate body to implement the proposal, taking into account its track record and close working relationship with the electronics industry, as well as local and overseas higher education institutions.

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FINANCIAL IMPLICATIONS

11. Taking account of projected income arising from start-up fees paid by participating companies, royalty payments and licence fees, it is estimated that the Centre will require $112.3 million over six years from 1994-95. The DG of I proposes that Members approve a commitment of $83.9 million, being the funds required for the first three years. HKPC expects the Centre to become self-financing in its sixth year of operation. Before the completion of the first three years of operation, HKPC will complete a management review of the Centre, on the basis of which the DG of I will decide whether further funds will be provided, and if so, in what form. Where necessary, Members' approval will be sought.

12. The breakdown of the estimated cost and cashflow for the years
Encl. 1994-95 to 2000-2001 are at the Enclosure.

13. HKPC will recruit full time and contract staff to operate the Centre. Some additional work for the Industry Department will arise as a result of the need to monitor the progress of the Centre. The department will handle this increase in workload through internal redeployment of staff.

14. We shall fund the commitment, if approved, from Head 73 Industry Department Subhead 840 Industrial support (block vote). We have included sufficient provision under this subhead in the 1994-95 Estimates to meet the cashflow requirement.

BACKGROUND INFORMATION

15. On 26 November 1993, Members approved the creation of Subhead 840 Industrial support (block vote), with provision of $180 million to be included in the 1994-95 Estimates. Members also delegated to the DG of I the authority to approve projects costing up to the same ceiling as Category D projects in the Public Works Programme, currently $10 million. Members asked that individual projects under the block vote costing more than the Category D ceiling be submitted to Members for approval.

Trade and Industry Branch
June 1994

Estimated cashflow for the setting up and operation of the proposed Telecommunications Product Technology Development Centre

$ million

	Expenditure	**1994-95**	**1995-96**	**1996-97**	**1997-98**	**1998-99**	**1999-2000**	**2000-01**	**Total**
(a)	Staffing	6.7	18.9	20.8	22.9	25.2	27.7	30.0	152.2
(b)	External consultants/ licensing fees	3.0	8.0	10.0	6.0	6.0	6.0	6.0	45.0
(c)	Operating costs	1.2	2.4	2.6	2.4	3.0	3.0	3.0	17.6
(d)	Capital equipment	10.0	6.0	1.0	-	2.0	-	-	19.0
(e)	Tooling cost (including integrated circuit marks and prototypes)	0.3	5.6	5.4	5.6	7.0	7.0	7.0	37.9
	Sub-total	21.2	40.9	39.8	36.9	43.2	43.7	46.0	271.7
<u>Less</u> income from									
(f)	Start-up fees	0.8	1.5	4.5	8.0	12.0	16.3	18.0	61.1
(g)	Royalty payments/ licensing fees	1.2	2.5	7.5	13.0	19.5	26.6	29.0	99.3
	Sub-total	2.0	4.0	12.0	21.0	31.5	42.9	47.0	160.4
	Net expenditure	19.2	36.9	27.8*	15.9	11.7	0.8#	(1.0)	111.3

* Total expenditure for three years from 1994-95 to 1996-97 is $83.9 million.
# Total expenditure for six years from 1994-95 to 1999-2000 is $112.3 million.