CHAPTER 2

THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION

GENERAL REVENUE ACCOUNT

GOVERNMENT DEPARTMENTS

Office of the Telecommunications Authority

Government Supplies Department

Management of the use of telecommunications services by the Government

Audit Commission Hong Kong 20 March 2002

MANAGEMENT OF THE USE OF TELECOMMUNICATIONS SERVICES BY THE GOVERNMENT

Contents

		Parag	;rap	hs
SUMMA	RY AND KEY FINDINGS			
PART 1:	INTRODUCTION	1.1	_	1.2
F	Expenditure on telecommunications services		1.3	
I	iberalisation of telecommunications market	1.4	_	1.6
A	Audit review	1.7	-	1.8
PART 2:	USE OF LOCAL FTNS			
I	ntroduction of competition to local FTNS market	2.1	_	2.3
	OFTA's guidelines for selecting ocal fixed telephone line services		2.4	
	Jsage of the four FTNS operators' ervices by government departments		2.5	
J le	oint-user buildings using new operator's ocal fixed telephone line services	2.6	_	2.8
J le	oint-user buildings using the incumbent's ocal fixed telephone line services	2.9	_	2.16
Ľ	Oata line services	2.17	_	2.22
A	Audit observations on the use of local FTNS	2.23	_	2.28
A	Audit recommendations on the use of local FTNS	2.29	_	2.31
K	Response from the Administration	2.32	-	2.37
PART 3:	USE OF MOBILE PHONE SERVICES			
N	Tobile phone service contracts	3.1	_	3.2

		Paragraphs
The t	hree contracts effective from 1 November 1999	3.3
GSD'	s guidance	3.4
Audit	observations on the use of mobile phone services	3.5 - 3.11
Audit	recommendations on the use of mobile phone services	3.12 - 3.15
Respo	onse from the Administration	3.16 - 3.19
PART 4: US	E OF IDD CALL SERVICES	4.1
Publi	cation of IDD call rates by OFTA	4.2
Audit	observations on the use of IDD call services	4.3 - 4.5
Audit	recommendations on the use of IDD call services	4.6 - 4.7
Respo	onse from the Administration	4.8 - 4.11
Appendix A:	Government's recurrent expenditure on telecommunication period 1 April 1994 to 30 September 2001	ns services for the
Appendix B:	Type I and Type II interconnections	
Appendix C:	FTNS operators providing local fixed telephone line services joint-user buildings for their PABX systems as at 30 November	
Appendix D:	Acronyms and abbreviations	

MANAGEMENT OF THE USE OF TELECOMMUNICATIONS SERVICES BY THE GOVERNMENT

Summary and key findings

- A. **Introduction.** Telecommunications services used by government departments include services for local fixed telephone line, mobile phone and international direct dialling (IDD) call. During the period 1994-95 to 2000-01, excluding the cost of specialised telecommunications services provided to some departments under the Technical Services Agreement, the Government's total recurrent expenditure on telecommunications services had increased by 108% from \$100 million to \$208 million. Heads of Department are responsible for authorising the use of telecommunications services in their departments. The Office of the Telecommunications Authority (OFTA) is responsible for coordinating the provision of telecommunications services or equipment upon request by government departments, and advising the Government on new developments in the telecommunications field (paras. 1.1 to 1.3).
- B. **Audit review.** Audit has recently conducted a review to examine the management of the use of telecommunications services by the Government. The audit has revealed that there is room for improvement in a number of areas (para. 1.7). The major audit findings are summarised in paragraphs C to E below.
- C. **Use of local fixed telecommunications network services (FTNS).** The audit findings are as follows:
 - (a) **Need to take action to benefit from liberalisation of the local FTNS market.** In July 1995, three new wireline-based operators were licensed to provide local FTNS in competition with the incumbent who operated under an exclusive franchise before July 1995. Audit's analysis found that, for the period 1 April to 30 September 2001, only 7% of the \$82 million government payment for FTNS was made to the three new operators. This indicates that, more than six years after the introduction of competition in July 1995, the usage of new operators' FTNS is still low. Audit considers that government departments should take action to assess the technical feasibility and cost-effectiveness of using the services provided by the new operators (paras. 2.1 and 2.23);
 - (b) Need to conduct regular reviews to assess the cost-effectiveness of local fixed telephone line services provided by operators. Audit found that, as at 30 November 2001, only two (the Cheung Sha Wan Government Offices and the Shatin Government Offices) of 29 government joint-user buildings used a new FTNS operator's local fixed telephone line services for their Private Automatic Branch Exchange (PABX) systems. The new operator's quoted prices for providing fixed telephone line services to these two new government buildings were the lowest. Audit noted that 21 (78%) of the other 27 joint-user buildings, which were still using the incumbent's local fixed telephone line services, had already been covered by at least one of the new FTNS operators' network. Audit conducted case studies of three of the 21 joint-user buildings using the incumbent's

services. Audit found that the administrators of the PABX systems of the Revenue Tower and the Wanchai Tower had not regularly reviewed the cost-effectiveness of the continued use of the incumbent's services, while the administrator of the PABX system of the Immigration Tower had performed ad hoc reviews on three occasions (paras. 2.7, 2.24 and 2.25); and

- (c) **Need to assess the technical feasibility and cost-effectiveness of using other local FTNS provided by the new operators.** Audit noted that, by switching to the services of a new FTNS operator in August 2001, the Works Bureau achieved savings of about 27% in the rental fees for data lines. Audit considers that, based on the Works Bureau's experience, the Administration should take action to assess the technical feasibility and cost-effectiveness of using other local FTNS provided by the new operators (paras. 2.22 and 2.28).
- D. **Use of mobile phone services.** The audit findings are as follows:
 - (a) **Need to strengthen the administration of mobile phone service contracts.** According to the three mobile phone service contracts awarded by the Government Supplies Department (GSD) effective from 1 November 1999, the maximum price of any service package specified in the contract should not exceed the prevailing market price of the service package offered by the contractor to the general public. However, Audit could not find documentary evidence indicating that the GSD had performed any price review during the period 1 November 1999 to 31 December 2001 to ensure that the contract prices were not higher than the prevailing market prices. Moreover, Audit noted that, contrary to the contract provision, one of the contractors had not offered the GSD new service packages available to the general public. Audit considers that the GSD should have taken action to ascertain such new packages and to enforce the contract provision (paras. 3.3, 3.5 and 3.7);
 - (b) **Need to provide further guidance for acquiring mobile phone services.** Audit found that, for 81% of the subscriptions for mobile phone service packages made under the three contracts during the period 1 November 1999 to 30 September 2001, the departments concerned had not chosen the contractor whose service charges were the lowest. Audit considers that the GSD should have advised departments that due regard should be paid to economy in using mobile phone services (para. 3.8);
 - (c) *Need to switch to new mobile phone service contracts.* In November 1999, the GSD advised departments that they could opt to use the services, with the lower service charges, under the three contracts. Audit's sample check of the payments for mobile phone services made by two government departments (the Immigration Department (Imm D) and the Information Services Department (ISD)) in the quarter ended 30 September 2001 found that officers of the Imm D had used service packages with the lower service charges provided under the three contracts. However, three of the 83 users of the ISD were still using a service package under one of the expired contracts before 1 November 1999 with higher service charges. Audit considers that the GSD should have reminded government departments to switch all users' subscriptions to the three contracts prevailing at the time (para. 3.10); and

- (d) **Need to make full use of the air-time pool sharing scheme.** Under this scheme, the free air-time of all users in the scheme is pooled together so as to reduce the payment of extra air-time charges for excess usage. Audit's sample check of the payments for mobile phone services made by the Imm D and the ISD in the quarter ended 30 September 2001 revealed that only three of the 124 eligible users of the Imm D had made use of the scheme. All eligible users of the ISD had not made use of the scheme to achieve savings. Audit considers that the GSD should have reminded departments to make full use of the scheme (paras. 3.3 and 3.11).
- E. **Use of IDD call services.** Since March 2000, OFTA has published the IDD call rates of the major service providers for the most popular IDD call destinations on the Government's Intranet. Audit's analysis found that the incumbent's IDD call rates, based on the IDD call rates published by OFTA for the period 1 April to 30 September 2001, were relatively high. However, Audit noted that 69% of the Government's total IDD payments of about \$1 million for the same period was made to the incumbent. Audit's sample check of the IDD payments made by three government departments (the Imm D, the Inland Revenue Department and the ISD) in the quarter ended 30 September 2001 found that they mainly used the incumbent's IDD call services. This indicated that these departments might not have made use of the IDD call rates published by OFTA, and might not have considered using the services of other IDD service providers at lower costs. Audit considers that there is a need for Controlling Officers to make use of the most cost-effective IDD call rates available in the market (paras. 4.2 to 4.5).
- F. **Audit recommendations.** Audit has made the following main recommendations:

Use of local FTNS

- (a) the Secretary for the Treasury should consider advising Controlling Officers to assess the technical feasibility and cost-effectiveness of using the services provided by the new FTNS operators (para. 2.29);
- (b) the Director-General of Telecommunications should provide Controlling Officers with the latest information about the local FTNS market through OFTA's website (para. 2.30);
- (c) the Commissioner of Inland Revenue, the Commissioner for Census and Statistics and the Director of Immigration, as the administrator of the PABX system of the Revenue Tower, the Wanchai Tower and the Immigration Tower respectively, should take action to ascertain whether better value for money can be obtained by using the new operators' services (para. 2.31(a));

Use of mobile phone services

- (d) the Director of Government Supplies should, in the administration of mobile phone service contracts:
 - (i) perform regular price reviews to enforce the contract provision that prices of the mobile phone service packages under the contracts should not exceed the prevailing prices of the service packages offered by the contractors to the general public, and take action to enforce the contract provision that the contractors should offer new service package to the Government at the prevailing market price (para. 3.12(a) and (b));
 - (ii) remind departments to pay due regard to economy when they subscribe to a service package provided under the mobile phone service contracts (para. 3.12(c)); and
 - (iii) require departments still using service packages under an expired mobile phone service contract to switch to the service packages provided under the prevailing mobile phone service contracts, provided that it is more cost-effective to do so, and remind Controlling Officers that they should make full use of the air-time pool sharing scheme offered by the contractors (para. 3.12(d) and (e));
- (e) the Director of Information Services should review the cases identified by Audit in which her staff were still using mobile phone service packages under one of the expired contracts before 1 November 1999 with higher service charges and consider switching the subscriptions to the service packages provided under the prevailing mobile phone service contracts (para. 3.14);
- (f) the Director of Immigration and the Director of Information Services should review the cases identified by Audit in which their staff had not made use of the air-time pool sharing scheme and take early action to use the scheme to achieve savings (para. 3.15);

Use of IDD call services

- (g) the Director-General of Telecommunications should continue to remind Controlling Officers that they should make use of OFTA's published IDD call rates so as to select the most cost-effective IDD call rates (para. 4.6); and
- (h) the Director of Information Services, the Director of Immigration and the Commissioner of Inland Revenue should take action to ensure that their staff refer to the IDD call rates published by OFTA and select the most cost-effective rates when using IDD call services (para. 4.7(b)).
- G. **Response from the Administration.** The Administration agrees with most of the audit recommendations (paras. 2.32 to 2.37, 3.16 to 3.19 and 4.8 to 4.11).

PART 1: INTRODUCTION

- 1.1 Telecommunications services are indispensable to the Government. Telecommunications services used by government departments include services for local fixed telephone line, public mobile radio-telephone (mobile phone) and international direct dialling (IDD) call.
- Heads of Department are responsible for authorising the use of telecommunications services in their departments. The Office of the Telecommunications Authority (OFTA), a government department established in July 1993, is responsible for coordinating the provision of telecommunications services (e.g. system planning and design) or equipment upon request by government departments. It is also responsible for advising the Government on new developments in the telecommunications field. Since 1 June 1995, OFTA has been operating on a trading fund basis. It charges departments for all services provided to them and pays for all services provided to it by departments. Departments may seek technical assistance from other telecommunications experts if they so wish. The Information Technology and Broadcasting Bureau, the policy bureau of OFTA, is responsible for the formulation of telecommunications policies.

Expenditure on telecommunications services

1.3 As shown at Appendix A, the Government's total recurrent expenditure on telecommunications services, including services for paging and maintenance of telephone systems, had increased by 108% from \$100 million in 1994-95 to \$208 million in 2000-01 (Note 1). A breakdown of the total recurrent expenditure for the period 1 April to 30 September 2001 is shown in Table 1 below. Based on the expenditure for this half-year period, Audit has estimated that the Government's total recurrent expenditure on telecommunications services in 2001-02 is about \$206 million.

Note 1: The expenditure does not include payments made under the Technical Services Agreement between the Government and a company to provide specialised telecommunications services to government departments. Such services include the supply and installation of specialised telecommunications equipment and systems, and their maintenance and operation.

Table 1

Expenditure on telecommunications services for the period 1 April to 30 September 2001

Service type	Amount	
	(\$ million)	
Local fixed telecommunications network (Note 1)	82	
Mobile phone	8	
IDD	1	
Others (Note 2)	12	
Total	<u>103</u>	

Source: Audit's analysis based on Treasury's records

Note 1: The amount of expenditure was based on the payments made to four operators providing local fixed telecommunications network services (see para. 1.5 below).

Note 2: They included paging services and maintenance of telephone systems.

Liberalisation of telecommunications market

- 1.4 The objective of the Government's telecommunications policy is to facilitate the development of the telecommunications industry and enhance Hong Kong's position as a telecommunications hub. In pursuing this policy objective, one of the targets is to ensure that Hong Kong has available high quality telecommunications services at competitive prices. The Government believes that liberalisation of the telecommunications market will bring about more effective competition, which in turn will lead to improvements in service quality, as well as better value for the consumers.
- 1.5 In July 1995, three new wireline-based operators were licensed to provide bcal fixed telecommunications network services (FTNS), including local fixed telephone line services, in

competition with the incumbent (Note 2). The incumbent also held another licence, originally due to expire in 2006, which provided him with exclusive rights for certain external telecommunications circuits and telephone services. In January 1998, the Government entered into an agreement with the incumbent for the early surrender of his external telecommunications licence. Since January 1999, the external telecommunications market has been opened up for competition.

1.6 The Government's initiative to liberalise the telecommunications market and the advent of new technology have attracted new operators to provide such services. Notably, the IDD markets have flourished in the last few years with a reduction in IDD call rates.

Audit review

- 1.7 Audit has recently conducted a review to examine the management of the use of telecommunications services by the Government. The audit, which focused on the use of FTNS, mobile phone services and IDD call services, has revealed that there is room for improvement in a number of areas.
- 1.8 In a separate review, Audit has also examined the Government's efforts to liberalise the local FTNS market. The findings of that review are reported in Chapter 1 of Report No. 38 of the Director of Audit.

Note 2: The term "incumbent" refers to the group of companies which operated the local fixed telephone line services under an exclusive franchise before July 1995.

PART 2: USE OF LOCAL FTNS

Introduction of competition to local FTNS market

- 2.1 In July 1995, three new wireline-based operators were licensed to provide local FTNS in competition with the incumbent (Note 3). Under the licence conditions, consumers can switch to the local fixed telephone line services of another FTNS operator without changing their telephone numbers.
- Tariffs of new operators not subject to price control. As the incumbent is the dominant operator, his tariffs for local fixed telephone line services are subject to the approval of the Telecommunications Authority (i.e. the Director-General of Telecommunications). The incumbent is not allowed to give discounts from his published tariffs without the approval of the Telecommunications Authority. However, the tariffs for local fixed telephone line services of the other three new operators are not subject to any price control.
- Network coverage of new operators. Since 1 July 1995, the three new operators have installed and expanded their FTNS network infrastructure which includes telephone exchanges and transmission cables. They have installed their optical fibre backbone in the urban areas and out to Chek Lap Kok to form the "trunk" networks. They have also installed underground ducts and cables to connect individual buildings to their "trunk" networks. Inside individual buildings, the new operators' networks can be directly connected to customers in individual units through the buildings' blockwiring systems (see Appendix B). In a multi-network environment, it is essential that all operators' networks interconnect with each other so that customers of a network can directly communicate with customers of all other networks in a convenient and efficient manner. There are two types of interconnection, namely Type I and Type II interconnections (see Appendix B), as follows:
 - (a) **Type I interconnection.** This refers to the interconnection between network gateways via points of interconnection. Through Type I interconnection, customers of one network can directly communicate with customers of another network (Note 4); and
- **Note 3:** To introduce more competition to the local FTNS market, in January 2000, the Government issued licences to five companies to provide local fixed wireless network services. At the same time, a television company was also permitted to provide telecommunications services over its cable network.
- **Note 4:** Without Type I interconnection, customers would be reluctant to be connected to the network of a new operator because most of the phone numbers they want to call would still be kept in the incumbent's network.

(b) **Type II interconnection.** This refers to the interconnection of a new operator's network with the incumbent's network at the local loop level. Through Type II interconnection, the new operators can also provide local fixed telephone line services to customers within the service areas of the incumbent's telephone exchanges connected (Note 5).

In June 2001, the Administration informed the Legislative Council that, having regard to the number of telephone exchanges (i.e. Type II interconnection) and premises connected by the three new operators in 2000, it estimated that 45% of commercial line customers could choose the services provided by the three new operators. As at September 2001, according to the market information collected by OFTA, 15% of commercial line customers were using the services provided by the three new operators.

OFTA's guidelines for selecting local fixed telephone line services

- 2.4 According to the guidelines issued by OFTA in February 1997, government departments are advised to consider the following factors when selecting local fixed telephone line services:
 - (a) *User requirements.* These refer to user departments' requirements for the type of service, the service features, and the total number of telephone lines and their compatibility;
 - (b) *In-service date.* This refers to the date by which the required telephone services are ready for use. User departments should request the operator to submit his facility requirements and installation schedule;
 - (c) **Tariff against service.** This refers to the level, quality, and terms and conditions against the tariff of a service; and
 - (d) **Impacts of the change of operator.** These refer to the costs for the change (including installation charges and administration cost). User departments should make arrangement to minimise the disruption due to the change of operator.

OFTA also advised departments to use the guidelines for selecting other FTNS (e.g. data communications and leased circuits).

Note 5: The rollout of new operators' network to reach potential customers takes time. To enable the benefits of competition and choice to be reaped by as many potential customers as soon as possible, by means of Type II interconnections, the new operators' networks interconnect with the incumbent's network at the local loop level. A local loop is the wired connection from a telephone company's central office in a locality (e.g. an exchange) to its customers' telephones at homes and businesses.

Usage of the four FTNS operators' services by government departments

2.5 Following the liberalisation of the local FTNS market, users of local telecommunications services (including government departments) can obtain the services at competitive prices from the three new FTNS operators, in addition to those of the incumbent. However, Audit's analysis of the payments made by government departments indicated that, of the \$82 million paid for FTNS during the period 1 April to 30 September 2001, only 7% was paid to the three new operators.

Joint-user buildings using new operator's local fixed telephone line services

- To ascertain the reasons for the low usage of the services provided by the new operators, Audit selected all of the 29 government joint-user buildings which used the Private Automatic Branch Exchange (PABX) systems (Note 6) for review. These 29 joint-user buildings, listed at Appendix C, in general, have a large floor area and their expenditures on local fixed telephone line services are generally higher than those of other smaller government buildings. The telephone lines in these 29 buildings are shared by the user departments through the buildings' PABX systems. As at 30 November 2001, only two of the 29 buildings used a new operator's local fixed telephone line services. The other 27 buildings continued to use the services of the incumbent.
- New operator's services only used in newly constructed buildings. The two joint-user buildings using the new operator's services are the Cheung Sha Wan Government Offices (CSWGO) and the Shatin Government Offices (STGO). The construction of these buildings was completed in October 1999 and December 2001 respectively. For these two buildings, quotations were obtained from the FTNS operators for the provision of local fixed telephone line services. The prices quoted by a new operator for the CSWGO and the STGO were the lowest. His quotations were lower than the highest quotations by 24% for the CSWGO and by 28% for the STGO. This new operator was therefore selected to provide the services. In addition, the new operator waived the installation fees for both buildings, and the rental fees of the telephone line services of the STGO for four months.
- 2.8 For both the CSWGO and the STGO, the Government Property Agency (Note 7) engaged OFTA as the consultant for the selection of operators for the provision of telephone line services for the PABX systems in the buildings. OFTA obtained quotations from the FTNS operators for the provision of services. For the CSWGO, in July 1999, OFTA informed the Government Property Agency that it considered that the new operator was recommendable in terms of cost and technical feasibility, because he offered the lowest price and, as an FTNS licensee, he had to comply with the Telecommunications Authority's technical standards. Furthermore, a connection test had been carried out between the new operator and the PABX contractor, and only minor issues were found. For the STGO, in February 2001, OFTA informed the Government Property Agency that it considered that the new operator was recommendable because he offered
- **Note 6:** In a PABX system, all the office extension telephones and some exchange lines from a public telephone exchange are connected to one another and to telephones outside the building. The PABX system of a government joint-user building is normally registered in the name of the largest user department of that building which administers and pays for the cost of core services of the system from its departmental expenses.
- **Note 7:** The Government Property Agency is responsible for coordinating the construction and fitting-out works of government office buildings, including the provision of telephone systems.

the lowest price and had previous experience of connecting his telephone lines to other PABX systems.

Joint-user buildings using the incumbent's local fixed telephone line services

2.9 The 27 joint-user buildings which used the local fixed telephone line services of the incumbent are mainly older government buildings. To ascertain whether the Government had taken adequate action to assess the technical feasibility and cost-effectiveness of using the new operators' services, Audit selected the Revenue Tower, the Wanchai Tower and the Immigration Tower for case studies. Audit notes that, since January 2000, the three joint-user buildings have been directly connected to the networks of two new operators. More information on these three joint-user buildings is shown in Table 2 below.

Table 2

Information on three government joint-user buildings

	Revenue Tower	Wanchai Tower	Immigration Tower
Year of completion	1992	1987	1991
Administrator of the PABX system and major user department	Inland Revenue Department	Census and Statistics Department	Immigration Department
Date of direct connection to new operators' network	January 2000	January 2000	December 1999
Number of new operators' network	2	2	2

Source: OFTA's records

Revenue Tower

- 2.10 The Revenue Tower has two PABX systems. One system is for telephone lines of all user departments in the building. The other system is for the interactive voice response system at the Telephone Enquiry Centre of the Inland Revenue Department (IRD).
- 2.11 The IRD, as the administrator of the PABX system of the Revenue Tower, is responsible for administering the provision of telephone line services for the PABX system for all user departments in the building. In late 2000, the IRD obtained two quotations from the new FTNS operators. The price quoted by a new operator, being the lowest, was 45% lower than that charged

by the incumbent at that time. However, because of concerns about the service reliability of the new operators, in February 2001 the IRD decided that it would continue using the services provided by the incumbent. The IRD intended to test and install a new PABX system to replace the existing one in mid-2003. It would then consider using the services of the new operators.

2.12 In October 1998, OFTA, as the maintenance administrator of the PABX system, advised the IRD that the PABX system for the interactive voice response system was not Year 2000 compliant (Note 8). In June 1999, in connection with the installation of a new PABX system to replace the old system, OFTA discussed with the FTNS operators concerning the provision of telephone line services for the PABX system. In view of the tight schedule for ensuring that the PABX system was Year 2000 compliant, OFTA recommended the IRD to continue using the services provided by the incumbent and limit changes to those which were absolutely necessary. However, up to December 2001, the IRD had not taken further action to review the technical feasibility and cost-effectiveness of using the new FTNS operators to provide telephone line services for the PABX system.

Wanchai Tower

2.13 In April 1999, in connection with the installation of a new PABX system to replace the old system which was not Year 2000 compliant, OFTA, as the maintenance administrator of the PABX system, obtained three quotations from the FTNS operators for the provision of telephone line services for the PABX system. The price quoted by a new operator, being the lowest, was 25% lower than that quoted by the incumbent. However, in his offer, the incumbent committed himself to providing the shortest lead-time and the shortest changeover time. He also guaranteed the early provision of services for testing and a minimal service interruption during the changeover. In view of the tight schedule for ensuring that the PABX system was Year 2000 compliant, OFTA advised the Census and Statistics Department (C&SD), the administrator of the PABX system of the Wanchai Tower, that a timely delivery of service was the major concern. To ensure a smooth changeover of the PABX system, the C&SD placed the order with the incumbent for the provision of telephone line services for the new PABX system. However, up to December 2001, the C&SD had not taken further action to review the technical feasibility and cost-effectiveness of using the new FTNS operators to provide telephone line services for the PABX system.

Immigration Tower

2.14 First review on the provision of telephone line services for the PABX system. In May 1999, in connection with the installation of a new PABX system to replace the old system which was not Year 2000 compliant, the Immigration Department (Imm D), the administrator of the PABX system of the Immigration Tower, engaged OFTA as the consultant. OFTA obtained three quotations from the FTNS operators for the provision of telephone line services for the PABX system. The price quoted by a new operator, being the lowest, was 23% lower than that quoted by the incumbent. However, as the change of FTNS operator might delay the tight schedule for ensuring that the PABX system was Year 2000 compliant, OFTA advised the Imm D to accept the incumbent's offer. The Imm D then placed the order with the incumbent.

Note 8: The practice of using a two digit year in computer systems creates the Year 2000 Problem. If such a problem is not corrected, it may lead to system failure in computers and microchip-embedded equipment.

- 2.15 **Second review on the provision of telephone line services for the PABX system.** In December 1999, the Information Technology Services Department was allocated a new sub-office at the Immigration Tower and planned to move in around February 2000. In connection with the provision of telephone line services to the new sub-office (this was subsequently addressed by using the existing telephone lines) and with a view to changing to an FTNS operator whose services were cheaper, the Imm D engaged OFTA to carry out a detailed technical study on the provision of telephone line services by the new FTNS operators for the PABX system in the Immigration Tower.
- 2.16 Further review on the provision of telephone line services for the PABX system. In July 2000, OFTA completed the study and recommended the Imm D to select the new FTNS operator because he offered the lowest price. In September 2000, the Imm D decided that one trunk telephone line would be installed by the new operator for testing for one month. If the performance of the trunk line was satisfactory, the new operator would be engaged for the provision of all other trunk lines. However, in February 2001, the Imm D informed OFTA that, in view of its experience of using the local fixed telephone line services of this new operator, it had concerns about the stability of his telephone services. The Imm D considered that it would not change to another FTNS operator until such time when it felt comfortable to do so. In January 2002, the Imm D informed OFTA that it still had reservations about the services of this new operator due to its experience of ordering his telephone services for one of its offices at another building in late 2001.

Data line services

- 2.17 Apart from local fixed telephone line services, other local FTNS (e.g. data communications and leased circuits) are provided by the FTNS operators. Audit noted that the Works Bureau (WB) achieved savings by switching the use of the data line services from the incumbent to a new FTNS operator (see paras. 2.18 to 2.22 below). Audit considers that it is worthwhile for other government departments to share this experience.
- 2.18 In 1994, the WB implemented a computerised Public Works Management System (PWMS) for providing management information on government works projects. To enable nearly 200 terminals, located at over 20 sites, to gain access to the PWMS database placed at a central site, the WB engaged the incumbent to provide data line services for 49 data lines. According to the contract entered into between the WB and the incumbent, either party might terminate the service agreement by giving the other at least 30 days' written notice.

Open tendering for selection of operator

2.19 In early 1999, the WB asked the three new FTNS operators whether they could provide the required data line services. However, the WB found that only five PWMS data lines could be provided by them due to constraints on their coverage of data line services. In September 1999, the Finance Bureau (FB) gave approval to the WB to engage the incumbent to provide the data line services by entering into a 12-month agreement. Under the agreement, the WB would enjoy a discount of 7% on the published prices of the incumbent. The WB agreed to review the possibility of tendering the provision of data line services for the PWMS before the expiry of the agreement.

2.20 In September 2000, on the condition that the open tendering exercise would be completed within 12 months, the FB gave approval to the WB to engage the incumbent to provide data line services for the PWMS for another 12 months.

Savings achieved through switching to a new operator

- 2.21 In March 2001, the WB, through the Government Supplies Department (GSD), invited all interested parties to submit tenders for the provision of data line services (Note 9) for the PWMS for a period of two years. Two tenders were received. The tender submitted by a new FTNS operator at a tender sum of \$3.7 million was the lowest.
- 2.22 The two tenders were assessed by the WB and OFTA. They jointly recommended to the GSD Tender Board to accept the lowest conforming tender from the new operator. According to the tender report, the rental fees for the data lines offered by the new operator were lower than those of the incumbent under the agreement made in September 2000 by about 27%. In August 2001, the GSD Tender Board gave approval to award a two-year contract to the new operator.

Audit observations on the use of local FTNS

Need to take action to benefit from liberalisation of the local FTNS market

Since 1 July 1995, competition has been introduced to the local FTNS market and departments can choose among four FTNS operators the most cost-effective one to provide FTNS. However, Audit noted that the Administration did not have readily available information about the extent to which the Government had used the operators' FTNS. Audit has found that, for the period 1 April to 30 September 2001, only 7% of the \$82 million government payment for FTNS was made to the three new operators (see para. 2.5 above). This indicates that, more than six years after the introduction of competition, the usage of new operators' FTNS is still low. Audit considers that government departments should take action to assess the technical feasibility and cost-effectiveness of using the services provided by the new operators.

Need to conduct regular reviews to assess the cost-effectiveness of local fixed telephone line services provided by operators

Audit found that as at 30 November 2001, of the 29 government joint-user buildings using PABX systems, only two newly constructed buildings (the CSWGO and the STGO) used a new operator's local fixed telephone line services. As at 30 November 2001, 21 (78%) of the other 27 joint-user buildings, which were still using the incumbent's local fixed telephone line services, had already been covered by at least one of the new operators' network (see Appendix C).

Note 9: The services included the installation and relocation of digital leased circuits and integrated services digital network.

- 2.25 Audit's case studies of three government joint-user buildings still using the incumbent's local fixed telephone line services found that the administrators of the PABX systems of the Revenue Tower and the Wanchai Tower (i.e. the IRD and the C&SD) had not regularly reviewed the cost-effectiveness of the continued use of the incumbent's services, while the administrator of the PABX system of the Immigration Tower (i.e. the Imm D) had performed ad hoc reviews on three occasions (see paras. 2.10 to 2.16 above).
- 2.26 Audit considers that the IRD, the C&SD and the Imm D should take action to assess whether better value for money can be obtained by using the new operators' local fixed telephone line services because:
 - (a) lower prices were quoted by the new operators; and
 - (b) the three joint-user buildings have already been covered by the new operators' networks.

Audit also considers that the IRD and the Imm D should seek advice from telecommunications experts (e.g. OFTA) to address their concerns about the service reliability of the new operators (see paras. 2.11 and 2.16 above).

2.27 For the other 18 of the 21 joint-user buildings still using the incumbent's local fixed telephone line services, Audit considers that the administrators of the PABX systems of these buildings should assess whether better value for money can be obtained by using the new operators' local fixed telephone line services.

Need to assess the technical feasibility and cost-effectiveness of using other local FTNS provided by the new operators

2.28 Audit considers that, based on the WB's experience of achieving savings by switching to a new FTNS operator's data line services (see para. 2.22 above), the Administration should take action to assess the technical feasibility and cost-effectiveness of using other local FTNS provided by the new operators.

Audit recommendations on the use of local FTNS

- In view of the availability of three new local FTNS operators in the market, Audit has recommended that the Secretary for the Treasury should consider advising Controlling Officers, especially those who are responsible for administering the PABX systems of the 21 joint-user buildings still using the incumbent's local fixed telephone line services, to assess the technical feasibility and cost-effectiveness of using the services provided by the new FTNS operators.
- 2.30 Audit has recommended that the Director-General of Telecommunications should provide Controlling Officers with the latest information about the local FTNS market (e.g. the network coverage of the three new FTNS operators) through OFTA's website.

- 2.31 Audit has recommended that the Commissioner of Inland Revenue, the Commissioner for Census and Statistics and the Director of Immigration, as the administrator of the PABX system of the Revenue Tower, the Wanchai Tower and the Immigration Tower respectively, should:
 - (a) take action to ascertain whether better value for money can be obtained by using the new operators' services; and
 - (b) consider seeking confirmation from a telecommunications expert (e.g. OFTA) that it is technically feasible to use the services provided by the new FTNS operators.

Response from the Administration

- 2.32 The **Secretary for the Treasury** has said that the general principle of procurement having to be made in a cost-effective manner is already embodied in the Stores and Procurement Regulations made by the Financial Secretary under section 11(1) of the Public Finance Ordinance (Cap. 2). When the Government has special messages to convey to Controlling Officers over the procurement of specific products or services, the specific department managing the use of the products or services concerned or the procuring body will be better placed to do so.
- 2.33 The **Director-General of Telecommunications** has said that he intends to continue with the practice of updating the latest information about the FTNS market on OFTA's website to facilitate Controlling Officers in making decisions.
- 2.34 The **Commissioner of Inland Revenue** agrees with the audit recommendations mentioned in paragraph 2.31 above. She has said that:
 - (a) the IRD is open to suggestions of using the FTNS provided by the new operators. In the light of the audit recommendations, in February 2002, the IRD has requested OFTA to conduct a study to examine the suitability of using a new FTNS operator for the provision of telephone line services for the two PABX systems in the Revenue Tower, taking into account the impact of the IRD's plan to replace the PABX system for all user departments in the Revenue Tower in mid-2003. OFTA has also been requested to invite quotations from appropriate new operators and make recommendation on the selection of operators if the findings of its study are positive; and
 - (b) OFTA has advised that there may be insufficient space to make new wiring in the present PABX room for the interactive voice response system at the IRD's Telephone Enquiry Centre. This physical constraint in the PABX room apparently rules out the possibility of using a new FTNS operator. However, as action is underway to relocate the

Telephone Enquiry Centre on operational grounds in 2002, the IRD will take the opportunity to explore the possibility of modifying the new PABX room to enable a new FTNS operator to provide telephone line services.

- 2.35 The **Commissioner for Census and Statistics** has said that he is prepared to conduct a review to assess whether better value for money can be obtained by using the new operators' local fixed telephone line services. Advice from OFTA is essential for such a review. He has also said that:
 - (a) the C&SD and other user departments in the Wanchai Tower had used, on a trial basis, services provided by the new FTNS operators when installing direct telephone/facsimile lines in 1997 to 1999. The C&SD had also engaged a new FTNS operator to provide data line services for the computer systems in the Wanchai Tower; and
 - (b) the C&SD has not conducted a review on the services provided by the incumbent since 1999 because his services have been satisfactory, and the C&SD has not been informed of the need to review the telephone services either from other user departments in the Wanchai Tower or OFTA.

2.36 The **Director of Immigration** has said that:

- (a) the goal of the Imm D's reviews on the provision of telephone line services for the PABX system in the Immigration Tower is to change to a service provider whose services are cheaper. The Imm D will continue to keep in view the performance of the FTNS operators, and strike a balance between cost and quality of service; and
- (b) the Imm D has sought OFTA's advice on all telecommunications matters and will continue to do so.

2.37 The **Secretary for Works** has said that:

- (a) the WB is most willing to share its experience with interested bureaux and departments in identifying and adopting more cost-effective telecommunications services, particularly in respect of the preparation of tender documents for the required services; and
- (b) for the WB's PWMS, savings have been achieved by switching to the Government backbone network administered by the Information and Technology Services Department in place of the lease of dedicated data lines, and replacing high speed lines by lower speed lines, which are cheaper in terms of rental fees but which still provide adequate speed of transmission. The availability of such opportunities for achieving savings depends on the merits of individual cases. Intensive professional input is required to assess the feasibility and to implement the alternative means of the provision of telecommunications services.

PART 3: USE OF MOBILE PHONE SERVICES

Mobile phone service contracts

- 3.1 Mobile phones are provided to government officers to meet their operational needs. Since July 1995, departments may acquire mobile phone services by placing orders under the contracts administered by the GSD.
- 3.2 Before the award of the contracts, the GSD conducted surveys of departments' requirements for mobile phone services. In the contracts, the Government did not commit itself to ordering a specific quantity of mobile phone services. Departments could place orders for mobile phone services with the contractors as and when required. Up to 31 December 2001, the GSD had awarded eight contracts covering the periods shown in Table 3 below.

Table 3

Eight contracts awarded by the GSD for mobile phone services

Contract period	Number of contracts
1 July 1995 — 28 February 1997	1
1 March 1997 — 30 November 1998	1
15 January 1999 — 14 October 1999	3
1 November 1999 — 30 November 2001	$\begin{array}{c} 1 \\ \end{array}$
1 November 1999 — 31 January 2002	$2\int_{0}^{\infty}$
Total	_ <u>8</u> =

Source: GSD's records

Note: On 9 February 2002, the GSD awarded five mobile phone service

contracts which will expire on 8 August 2003.

The three contracts effective from 1 November 1999

3.3 The key features of the three contracts effective from 1 November 1999 (one of which expired on 30 November 2001 and two expired on 31 January 2002) were as follows:

- (a) the contracts were in the form of standing offer agreements. The Government might acquire mobile phone services from the contractors as and when required. However, there was no exclusive right for the contractors to provide the services to the Government. Service packages with different free air-time (Note 10) and value-added services (e.g. free voice mail) were provided under the contracts;
- (b) the maximum prices of the contractors' mobile phone services were specified in the contracts. However, the maximum price of any service package offered to government departments should not exceed the prevailing market price of the service package offered by the contractor to the general public;
- (c) if a new service package, a new service or a new mobile phone of a contractor was commercially available, the contractor should offer the same to the Government at the prevailing market price with all available discounts;
- (d) a department could make use of the air-time pool sharing scheme provided under each contract if the actual number of users in that department exceeded the minimum number specified in the contract. Under this scheme, the free air-time of all users in the scheme was pooled together so as to reduce the payment of extra air-time charges for those users whose air-time used exceeded their free air-time; and
- (e) departments might continue to obtain the services for a period of six years after they had chosen to subscribe to the service packages during the contract period. In any case, one month's prior written notice to the contractor was required if any user wished to terminate the subscription to the services.

GSD's guidance

- 3.4 In November 1999, the GSD issued a guidance memorandum which informed departments details of the three mobile phone service contracts effective from 1 November 1999. According to the GSD's memorandum:
 - (a) departments could choose to subscribe to the service packages that best suit their usage requirements and operational needs;
 - (b) in view of the lower prices under the three contracts, departments which were using the services obtained from the contracts before November 1999 could opt to order the services under the three contracts:

Note 10: There were service packages with monthly free air-time of 150 minutes to 1,300 minutes. For a service package which provided a free mobile phone, an extra fee was payable if the service was terminated by the user during the commitment period.

- (c) departments might continue to obtain the services for a period of six years after they had subscribed to the service packages during the contract period. In any case, one month's prior written notice to the contractor was required if any department wished to terminate the subscription to the services; and
- (d) departments were required to submit to the GSD a quarterly return on all orders placed under the three contracts, including the quantity of service packages ordered and the unit rate.

Audit observations on the use of mobile phone services

Need to strengthen the administration of contracts

- According to the three contracts effective from 1 November 1999, the maximum price of any service package specified in the contract should not exceed the prevailing market price of the service package offered by the contractor to the general public (see para. 3.3(b) above). Up to 31 December 2001, one of the three contractors had reduced the maximum prices of his service packages (by 10% to 24% in July 2001) to provide a more favourable price to the Government, while the other two contractors' maximum prices had remained unchanged. However, Audit could not find documentary evidence indicating that the GSD had performed any price review during the period 1 November 1999 to 31 December 2001 to ensure that the contract prices were not higher than the prevailing market prices. Audit considers that the GSD should have carried out regular price reviews so as to ensure that the Government obtained the most cost-effective services available.
- Audit compared the service packages offered by two of the three contractors to the general public in December 2001 with the service packages provided under their contracts with the Government (Note 11). Audit found that certain features in the service packages offered by one contractor to the general public (e.g. free intra-network air-time) were not available to government departments which obtained services under the contract. On the other hand, certain features available under the contract (e.g. free voice mail) were not included in the service packages offered to the general public by the same contractor.
- 3.7 Although the features of the service packages offered by the contractor to the general public might not be the same as those provided by him under the government contract, the charges of some of the comparable service packages offered by the contractor to the general public were lower than the Government's contract prices. However, Audit noted that, contrary to the contract provision mentioned in paragraph 3.3(c) above, the contractor had not offered the GSD these packages. To enable departments to obtain the best value service packages available to the general public, Audit considers that the GSD should have taken action to ascertain such new packages and to enforce the contract provision.

Note 11: Only the service packages under the two contracts covering the period 1 November 1999 to 31 January 2002 could be compared. For the contract which expired on 30 November 2001, no comparison was made.

Need to provide further guidance for acquiring mobile phone services

According to the GSD, the main reason for awarding the three mobile phone service contracts was to allow flexible purchasing whereby departments would be free to subscribe to the service packages that best suited their usage requirements and operational needs. Audit found that, for 81% (or 4,243) of the subscriptions for mobile phone service packages made under the three contracts during the period 1 November 1999 to 30 September 2001, the departments concerned had not chosen the contractor whose service charges were the lowest. As an illustration, Audit found that the contractors' highest and lowest monthly charges for a package with 150 minutes free air-time differed by about 151% (Note 12). Audit considers that the GSD should have advised departments in its guidance memorandum that due regard should be paid to economy when choosing a contractor to provide mobile phone services.

Need to issue guidelines on the use of mobile phone services

In January 2000, the Director of Administration issued a circular memorandum to departments about the use of official mobile phones for making private calls. According to the circular memorandum, the use of official mobile phones should normally be restricted to official purpose only. However, to allow flexibility, staff may be allowed to use official mobile phones provided to them for making private calls. For the use of official mobile phones in making local private calls, if the monthly air-time used exceeds the monthly free air-time under the service package and private telephone calls have been made during the period concerned, the officers concerned should reimburse the Government the cost of making private calls plus 20% overhead charge thereon as stipulated under Financial and Accounting Regulation 440. For the use of official mobile phones in making private overseas calls, the officers concerned should reimburse the Government the invoiced amount plus 20% overhead charge. The circular memorandum states that Heads of Department "may wish to draw up guidelines" on the use of official mobile phone for making private calls. In view of the considerable number of users of mobile phone services, Audit considers that there is a need for the Director of Administration to remind Controlling Officers to issue guidelines to their staff on the use of mobile phone services.

Need to switch to new contracts

3.10 According to its guidance memorandum issued in November 1999, the GSD advised departments using services obtained from the contracts expired before November 1999 that they could opt to use the services, with the lower service charges, under the three contracts effective from 1 November 1999 (see para. 3.4(b) above). Audit's sample check of the payments for mobile phone services made by two government departments (i.e. the Imm D and the Information Services Department (ISD) — Note 13) in the quarter ended 30 September 2001 found that officers of the Imm D had used the service packages with lower service charges provided under the three contracts. However, three of the 83 users of the ISD were still using a service package under one of the expired contracts before 1 November 1999 with higher service charges. **As such users are only required to give two months' notice to terminate their subscription to the service**

- **Note 12:** Since 11 July 2001, the contractor with the highest monthly charge for this service package has lowered his charge by 21%. However, the revised charge is still more expensive than the prevailing lowest charge of another contractor by 97%.
- **Note 13:** The Imm D and the ISD were selected for illustration purposes. Audit considered that the job nature of the staff of these two departments might involve frequent use of mobile phone services.

packages without extra charges, Audit considers that the GSD should have reminded government departments to switch all users' subscriptions to the three contracts prevailing at the time. In this connection, Audit noted that departments could continue using the services provided under the expired contracts for a maximum period of six years after their expiry. As a result, users of some departments may still be using the services provided under those contracts with higher service charges.

Need to make full use of the air-time pool sharing scheme

Air-time pool sharing schemes are provided under the three contracts. However, Audit's sample check of the payments for mobile phone services made by the Imm D and the ISD (see Note 13 to para. 3.10 above) in the quarter ended 30 September 2001 revealed that only three of the 124 eligible users of the Imm D had made use of the scheme, and that all eligible users of the ISD had not made use of the scheme. Audit noted that these two departments could have achieved savings if they had made use of the scheme (see para. 3.3(d) above). Audit considers that the GSD should have reminded departments to make full use of the scheme.

Audit recommendations on the use of mobile phone services

- 3.12 Audit has recommended that the Director of Government Supplies should, in the administration of mobile phone service contracts:
 - (a) perform regular price reviews to enforce the contract provision that prices of the mobile phone service packages under the contracts should not exceed the prevailing prices of the service packages offered by the contractors to the general public;
 - (b) take action to enforce the contract provision that the contractors should offer new service package to the Government at the prevailing market price, so as to enable departments to choose the most cost-effective service package available to suit their requirements;
 - (c) remind departments to pay due regard to economy when they subscribe to a service package provided under the mobile phone service contracts;
 - (d) require departments still using service packages under an expired mobile phone service contract to switch to the service packages provided under the prevailing mobile phone service contracts, provided that it is more cost-effective to do so; and
 - (e) remind Controlling Officers that they should make full use of the air-time pool sharing scheme offered by the contractors.
- 3.13 Audit has recommended that the Director of Administration should remind Controlling Officers to issue guidelines on the use of mobile phone services. The guidelines

should specify the justifications for the provision of mobile phone services and remind the users that the services should mainly be used for official purposes.

- 3.14 Audit has recommended that the Director of Information Services should review the cases identified by Audit in which her staff were still using mobile phone service packages under one of the expired contracts before 1 November 1999 with higher service charges and consider switching the subscriptions to the service packages provided under the prevailing mobile phone service contracts.
- 3.15 Audit has recommended that the Director of Immigration and the Director of Information Services should review the cases identified by Audit in which their staff had not made use of the air-time pool sharing scheme and take early action to use the scheme to achieve savings.

Response from the Administration

- 3.16 The **Director of Government Supplies** agrees with the audit recommendations mentioned in paragraph 3.12 above. He has said that:
 - the GSD will strengthen the administration of the mobile phone service contracts by performing regular price reviews. On 9 February 2002, the GSD awarded five new mobile phone service contracts which will expire on 8 August 2003. The contractors of the five new mobile phone service contracts have agreed to submit monthly reports to the GSD providing detailed information regarding the changes of market prices and the introduction of new service packages and new mobile phones to other customers. The information will be used for comparison with the contract prices and for incorporation of new service packages and new mobile phones into the contracts if it is considered acceptable. In addition, the GSD will convene meetings, as appropriate, with the contractors to review the contract prices in order to ensure that they are no less favourable than the prevailing market prices;
 - (b) the GSD will remind departments to make reference to the circular memorandum issued by the Director of Administration in January 2000 about the use of official mobile phones for making private calls; and
 - (c) in its guidance memorandum to be issued to departments concerning details of the five new mobile phone service contracts, the GSD will:
 - (i) remind departments to pay due regard to economy before they subscribe to different service packages provided under the contracts, and to switch to the new contracts if it is more cost-effective to do so; and
 - (ii) include detailed procedures on the application of air-time pool sharing scheme provided under each contract and remind Controlling Officers to make full use of the scheme to minimise the need to pay extra air-time charges.

- 3.17 The **Director of Administration** agrees with the audit recommendation mentioned in paragraph 3.13 above. In February 2002, he issued a memorandum to Controlling Officers reminding them to issue guidelines on the use of official mobile phones. The guidelines should specify the justifications for the provision of mobile phone services and remind users that the services should mainly be used for official purposes.
- 3.18 The **Director of Information Services** has said that she agrees fully with the audit recommendations mentioned in paragraphs 3.14 and 3.15 above and that the ISD is taking actions to implement the audit recommendations. She has also said that:
 - (a) the ISD will step up its monitoring action to ensure that prompt action is taken to switch its subscriptions to the cheapest service package as soon as it becomes available. It will also monitor its subscriptions for mobile phone services more closely. Subscriptions of mobile phone services will be reviewed on a monthly basis jointly with the contractors concerned to ensure that optimal saving is achieved;
 - (b) she accepts that the ISD did not arrange to switch three users' subscriptions to the cheaper service package under the contract effective from 1 November 1999. Upon receipt of the audit report in February 2002, the ISD had taken action to switch users' subscriptions to the service package under that contract. Besides, the contractor agreed to refund to the ISD an amount calculated on the basis as if the ISD had switched the three users' subscriptions to the service package under that contract since July 2001; and
 - (c) she accepts that the ISD did not apply for the air-time pool sharing scheme when the ISD became eligible. Upon receipt of the audit report in February 2002, the ISD had taken action to make use of the air-time pool sharing scheme for its mobile phone users. Besides, a contractor agreed to refund to the ISD an amount calculated on the basis as if the ISD had joined the air-time pool sharing scheme since January 2002 together with a token sum of compensation.
- 3.19 The **Director of Immigration** agrees with the audit recommendation mentioned in paragraph 3.15 above. He has said that arrangements have now been made for eligible mobile phone users to use the air-time pool sharing scheme.

PART 4: USE OF IDD CALL SERVICES

4.1 Since 1 January 1999, the external telecommunications market has been opened up for competition. Up to 31 December 2001, OFTA had licensed 200 service providers for providing external telecommunications services. The opening up of the market has led to a sharp fall in IDD call rates. According to OFTA, in 2000, price competition resulted in a 44% reduction in the IDD call rates.

Publication of IDD call rates by OFTA

4.2 To ensure that the Government, as a user of IDD call services, can enjoy the full benefits of competitive IDD call rates offered in the market, OFTA has, since March 2000, published the IDD call rates of the major service providers for the most popular IDD call destinations on the Government's Intranet. OFTA ensures that the published data are up-to-date with the cooperation of the service providers, encourages departments to make the best use of the information in order to achieve savings in IDD expenses and advises them to promulgate the information to their staff, especially the frequent users of IDD call services.

Audit observations on the use of IDD call services

Need to make use of IDD call rates published by OFTA

- Based on the IDD call rates published by OFTA, Audit compared the average IDD call rates of the incumbent with the average lowest IDD call rates in the market for the period 1 April to 30 September 2001. Audit found that the call rates under the incumbent's IDD Call Service Packages A and B were relatively high. In particular, the IDD call rates of the incumbent's IDD Call Service Package A were much higher than the lowest rates offered by other service providers. However, Audit noted that 69% of the Government's total IDD payments of about \$1 million for the period 1 April to 30 September 2001 was made to the incumbent.
- 4.4 To ascertain the extent of usage of the incumbent's IDD call services, in particular the extent to which government departments had used the more expensive IDD Call Service Package A of the incumbent, Audit analysed the IDD payments made by three departments (i.e. the Imm D, the IRD and the ISD Note 14) in the quarter ended 30 September 2001. The results are shown in Table 4 below.

Note 14: The three departments were selected for illustration purposes. The selection was made because Audit considered that the Imm D and the ISD might use IDD call services frequently. The IRD was selected as an example of those departments which might not use IDD call services frequently.

Table 4

Audit's analysis of the IDD payments made by three departments in the quarter ended 30 September 2001

Department	Incumbent's IDD Call Service Package A		Incumbent's IDD Call Service Package B		Other service providers' IDD call services		
	Call time	Call charges (Note 1)	Call time	Call charges (Note 1)	Call time	Call charges (Note 1)	
	(Minutes)	(\$)	(Minutes)	(\$)	(Minutes)	(\$)	
Imm D (Note 2)	883	9,351	7,056	12,908	141	821	
IRD	73	715	120	937	-	_	
ISD	_	_	8,491	12,796	880	3,147	
Total	956	10,066	15,667	26,641	1,021	3,968	
Percentage of total call charges		25%		65%		10%	

Source: Records of Imm D, IRD and ISD

Note 1: The call charges included charges for sending fax overseas, and varied according to the call time and the destinations.

Note 2: According to the Imm D, under an IDD call plan of the incumbent used by the Imm D since August 1999, it had been charged at lower than the normal rates of the incumbent's IDD Call Service Package B for calls using fixed line telephones to 39 destinations. For an IDD call made under this plan to a destination other than these 39 destinations, the Imm D was charged at the normal rates and the call would be automatically switched to the incumbent's IDD Call Service Package A if it could not be connected under IDD Call Service Package B.

As shown in Table 4 above, the Imm D, the IRD and the ISD mainly used the incumbent's IDD call services, including the use of the more expensive IDD Call Service Package A of the incumbent. This indicated that these departments might not have made use of the IDD call rates published by OFTA, and might not have considered using the services of other IDD service providers at lower costs.

4.5 Audit considers that the Imm D, the IRD and the ISD should have made use of the IDD call rates published by OFTA to achieve savings in IDD expenses. There is also a need for OFTA to remind Controlling Officers to make use of the most cost-effective IDD call rates available in the market.

Audit recommendations on the use of IDD call services

- 4.6 In order to make external telecommunications more cost-effective, Audit has recommended that the Director-General of Telecommunications should continue to remind Controlling Officers that they should make use of OFTA's published IDD call rates so as to select the most cost-effective IDD call rates.
- 4.7 Audit has *recommended* that the Director of Information Services, the Director of Immigration and the Commissioner of Inland Revenue should:
 - (a) review the cases of using the incumbent's IDD call services identified by Audit with a view to introducing measures to use the most cost-effective IDD call services; and
 - (b) take action to ensure that their staff refer to the IDD call rates published by OFTA and select the most cost-effective rates when using IDD call services.

Response from the Administration

- 4.8 The **Director-General of Telecommunications** has said that he intends to continue with the practice of updating the latest information about the IDD call rates to facilitate Controlling Officers in making decisions.
- 4.9 The **Director of Information Services** has said that she agrees fully with the audit recommendations mentioned in paragraph 4.7 above and that the ISD is taking actions to implement the audit recommendations. She has also said that:
 - (a) upon receipt of the audit report, the ISD has stepped up its measures to ensure that the best value service available in the market is used by its IDD users. The actions taken include:
 - (i) updating its own IDD call rate table for all IDD service providers bi-weekly and publishing the information to all IDD users;
 - (ii) issuing a circular to all staff, in particular the IDD users, reminding them to check the IDD call rate table and choose the cheapest IDD call rate as far as possible; and

- (iii) checking IDD bills and seeking clarifications from those users who have not used the cheapest service available; and
- (b) there were operational considerations which had resulted in greater use of the incumbent's IDD call services because his services were generally more reliable and the quality of reception was better. Such considerations were particularly important for urgent calls.
- 4.10 The **Director of Immigration** agrees to make good use of the IDD call rates published by OFTA to achieve savings. He has said that:
 - (a) the Imm D has subscribed to IDD call services of the service providers other than the incumbent. He pledges that the Imm D will make better use of the services of these service providers;
 - (b) in September 1997, the Imm D issued a circular to its staff advising them to make use of the incumbent's IDD Call Service Package B for the sake of economy; and
 - (c) of the \$9,351 call charges for using the incumbent's IDD Call Service Package A, \$305 was spent on making IDD calls using mobile phones to destinations that could be reached easily on the incumbent's IDD Call Service Package B. The Imm D will advise mobile phone users not to use the incumbent's IDD Call Service Package A unless the destinations are difficult to reach by using other IDD call services. The remaining \$9,046 was spent on calls made on the incumbent's IDD Call Service Package B, but were automatically switched to the incumbent's IDD Call Service Package A because the telecommunications traffic condition so dictated. Presumably, the calls were made to those destinations which could not be easily reached by using IDD call services other than the incumbent's IDD Call Service Package A.

4.11 The **Commissioner of Inland Revenue** has said that:

- (a) the IRD has started to review the cases of using the incumbent's IDD call services identified by Audit; and
- (b) the IRD has registered with a number of major service providers for the use of their IDD call services, and has issued a circular to promulgate their use and to remind staff to refer to the IDD call rates published by OFTA for selecting the most cost-effective rates.

Government's recurrent expenditure on telecommunications services for the period 1 April 1994 to 30 September 2001

Financial year	Amount (Note)
	(\$ million)
1994-95	100
1995-96	116
1996-97	137
1997-98	151
1998-99	171
1999-2000	185
2000-01	208
2001-02 (1 April to 30 Sept. 2001)	103

Source: Audit's analysis based on the Treasury's records

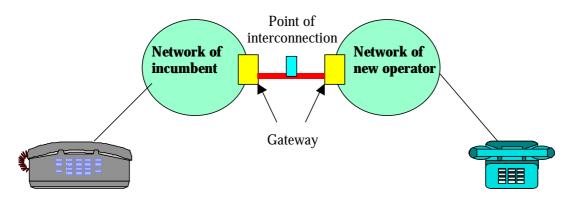
Note: The recurrent expenditure is equal to the total expenses incurred

by departments/bureaux under Items 561 (Telephones – rental), 562 (Telephones – call charges) and 564 (Telex and private communication lines) of the Departmental Expenses (i.e. Subhead 149) of their departmental votes in the General Revenue

Account.

Type I and Type II interconnections

Figure 1: Type I interconnection



Source: OFTA's records

Note: Without Type I interconnection, customers would be reluctant to be connected to the

network of a new operator because most of the phone numbers they want to call would

still be kept in the incumbent's network.

Incumbent's network of new operator

Customers' building

Exchange

Blockwiring

Local loop of the incumbent

Co-location Main Distribution site

Frame

Telecommunications and broadcasting equipment room

Figure 2: Type II interconnection

Source: OFTA's records

Note: Type II interconnection can be made in two ways: (a) by connecting the new operator's network to the incumbent's local loop at an exchange of the incumbent; or (b) by providing interconnection at the telecommunications and broadcasting equipment room of a building to the existing blockwiring owned by the incumbent. Without Type II interconnection, the new operators would have to duplicate the customer access networks first (e.g. laying of another set of telephone cables) before they can deliver their services to the customers.

FTNS operators providing local fixed telephone line services to 29 government joint-user buildings for their PABX systems as at 30 November 2001

	Name of building	Internal floor a (square metre	
(A) Build	ings using the services of a new operator		
1 2	0	43,514 27,040	
	Total	70,554	
(B) Build	ings using the services of the incumbent		
	ildings covered by the network of at least one of the new oper	rators (Notes 1 and 2)	
1	<u> </u>	47,708	
2		63,930	
3		65,132	
4	0	48,889	
5	. Harbour Building*	24,420	
6		19,648	
7		16,430	
8	J 1 0	10,785	
9		19,811	
10	O	9,238	
11		7,633	
12 13	v j	62,555 29,909	
14		29,909 18,760	
15	<i>J</i> 1	15,252	
16		10,303	
17	0	4,413	
18	Eastern Law Court Building**	3,909	
19	O	2,761	
20		1,986	
21		1,872	
	Subtotal	485,344	(89%)
(b) Bu	ildings not covered by the network of any new operator (Note	3)	
22	. Yaumatei Carpark Government Offices	20,240	
23	±	11,070	
24	. North District Government Offices Building	9,372	
25	. Yuen Long Government Offices	9,085	
26	. Tai Po Government Offices	6,650	
27	. Yuen Long District Office Building	4,071	
	Subtotal	60,488	(11%)
	Total	545,832	(100%)

Appendix C

Page 2/2

(paras. 2.6 and 2.24 refer)

Source: Audit's analysis based on the records of the Government Property Agency and OFTA

- Note 1: According to OFTA, the licences of the new operators require that, if an operator has direct connection to a particular building or has access to the telephone exchange of a region, it should provide services to customers of that region or occupants of that building.
- Note 2: Buildings marked with * (items 1 to 11) are directly connected to at least one of the new operators' network. Buildings marked with ** (items 12 to 21) are located within the service area of the incumbent's telephone exchanges to which at least one of the new operators is connected through Type II interconnection. Service provision to these buildings is subject to the availability of a local loop.
- Note 3: Buildings (items 22 to 27) are not directly connected to any new operator's network or covered by Type II interconnection.

Appendix D

Acronyms and abbreviations

C&SD Census and Statistics Department

CSWGO Cheung Sha Wan Government Offices

FB Finance Bureau

FTNS Fixed telecommunications network services

GSD Government Supplies Department

IDD International direct dialling

Imm D Immigration Department

IRD Inland Revenue Department

ISD Information Services Department

OFTA The Office of the Telecommunications Authority

PABX Private Automatic Branch Exchange

PWMS Public Works Management System

STGO Shatin Government Offices

WB Works Bureau