

For Discussion  
On 10 December 2001

**Legislative Council**  
**Information Technology and Broadcasting Panel**  
**Progress of Interconnection Issues and**  
**Update on the Coverage of the Network and Services**  
**of the Three New Wireline-based**  
**Local Fixed Telecommunications Network Services Operators**

**Background**

On 8 January 2001, the Panel was briefed of the issues relating to interconnection between local fixed networks. On 12 February 2001, the Panel was briefed of the coverage of the networks and services of the three new wireline-based local fixed telecommunications network services operators (new FTNS operators) up to the end of 2002. This paper gives an update on the progress of interconnection issues and the coverage of the FTNS operators.

**Interconnection**

2. The paper prepared for the Panel meeting on 8 January 2001 provided a list of the determinations for interconnection which had been completed by the Office of the Telecommunications Authority (OFTA) since July 1995 and a list of determination then in progress. The two lists are updated and attached to this paper in Annex 1.

Annex 1

**Coverage**

3. The commitments regarding the extension of network and services coverage made by the new FTNS operators, namely Hutchison Global Crossing Limited (HGC), Wharf New T & T Limited (New T & T) and New World Telephone Limited (NWT) under their respective Deeds of Undertakings to the Government are as follows:

- (a) network coverage through “Type II interconnection” to the local exchange of PCCW-HKT;
- (b) Provision of direct access to buildings; and
- (c) A minimum capital investment.

In addition to the commitments for 2002, the new FTNS operators have also laid down interim milestones for the years 2000 and 2001. The progress are set out at Annex 2.

Annex 2

4. Two of the operators have met the respective interim milestones made for 2000 and one of them even rolled out beyond the initial commitments. HGC did not complete the Type II interconnection in three local exchanges by end 2000. The TA requested HGC to take reasonable actions or remedies to fulfill the target set. HGC has since completed the Type II interconnection in two of the three exchanges and has limited coverage in one exchange.

5. Since 29 September 2001, OFTA has also published in its website ([www.ofta.gov.hk](http://www.ofta.gov.hk)) information supplied by the new FTNS operators relating to their network coverage. The lists of exchanges cover all the exchanges to which Type II interconnection have been made so far. OFTA will verify such commitments when undertaking the verification exercise at the year end.

6. Given that the milestones are not measured on the basis of network coverage in public housing estates, private residential premises and commercial premises, it is difficult to assess the respective network coverage of the new FTNS operators in public housing estates, private residential premises and commercial premises by district. However, it is stipulated in the licence conditions (i.e. General Condition (GC) 10(2)) that if an FTNS operator has access to the telephone exchange of a region or has direct connection to a particular building, it should provide services to customers of that region or occupants of that building. Also, it cannot refuse to provide services to customers of individual building (e.g. public housing estates). If there is infringement of the licence conditions, the Telecommunications Authority (TA) could take necessary action in accordance with the Telecommunications Ordinance.

7. With the number of the telephone exchanges and premises connected by the three operators up to September 2001 we estimate that currently more than 35% of residential customers can choose to subscribe to the services provided by one of the three new operators. Considering the current progress of network coverage, we believe that by the end of 2002, more than 50% of residential customers will have an alternative choice of at least one of the three new FTNS operators.

8. In terms of market share, we estimate that the three new operators currently have a market share of about 10%. We would however like to highlight that market share of the three new operators is a matter for the market which depends on, inter alia, customer preferences. Our aim is to provide alternative choices to consumers through competition in a liberalising market.

### **Safeguarding Fair Competition among the FTNS Operators**

#### *Improving productivity for local loop interconnection*

9. In order to facilitate competition in the local telephone market, it is vital that PCCW-HKTC should provide an efficient service in the interconnection of local loops to the new FTNS operators. Having considered the representations made by PCCW-HKTC and the new FTNS operators, and having inspected locations where interconnection took place, the TA has formed the view that PCCW-HKTC should improve its productivity on the interconnection of local loops.

10. On 16 November 2001, the TA accepted the proposal of PCCW-HKTC to improve its productivity by deploying more resources and streamlining its process. The number of local loop interconnections will increase from 9 per 2-hour per operator per exchange to a maximum of 16, depending on the technical constraints in the telephone exchange concerned. The proposal will run for a trial period of six months from 2 January 2002, during which the TA will monitor the productivity and examine the demand from the new FTNS operators to see whether this improved productivity will meet the demand. At the end of the trial period, the TA will review the adequacy of the improved productivity.

*Revising procedure for making determinations of interconnection*

11. With a view to providing parties involved in an interconnection dispute with certainty as regards the timing required to complete the determination process, the TA on 27 September 2001 revised the procedure for making determinations on the terms and conditions of interconnection agreements. The revised procedure now specifies the time limit for each step in the determination process. According to the revised procedure, a normal case should be determined in less than 5 months while a complex case should be determined in 6½ months.

Office of Telecommunications Authority  
December 2001

**Determinations made by the Telecommunications Authority  
and Determination Proceedings in Progress under Section 36A of the  
Telecommunications Ordinance**

(1) Determinations already made by the TA under section 36A of the Telecommunications Ordinance

Date	Parties	Subject Matter
9 Aug 1995	Wharf Cable Limited and Wo Kee Hong Limited	Interconnection between subscription television network and Satellite Master Antenna Television (SMATV) system
29 Sept 1995	Hong Kong Telecom International and local network operators	Delivery fee for interconnection between international gateway and local fixed and mobile networks
16 Feb 1996	Wharf Cable Limited and Global Satellite TV Limited	Interconnection between subscription television network and Satellite Master Antenna Television (SMATV) systems
13 June 1996	Wharf Cable Limited and Global Satellite TV Limited	Interconnection between subscription television network and Satellite Master Antenna Television (SMATV) systems
26 Nov 1997	Wharf Cable Limited and Global Satellite TV Limited	Interconnection between subscription television network and Satellite Master Antenna Television (SMATV) systems
24 April 1998	Yieldhost and Public Mobile Radiotelephone Service Operators	Interconnection between mobile networks and integrated radio system at Hong Kong Convention and Exhibition Centre
21 Aug 1998	Hong Kong Telephone Company Limited and New T & T Hong Kong Limited	Terms and conditions for Type I interconnection between fixed networks
7 Oct 1998	Hong Kong Telecom International and local network operators	Delivery fee arrangement for interconnection between international gateway and local fixed and mobile networks
30 Dec 1998	Hong Kong Telecom International and local network operators	Implementation of local access fees and modified delivery fee arrangements
19 Apr 1999 (settled by mediation)	Hong Kong Telephone Company Limited and New	Charges for Type II interconnection between local fixed network operators

Date	Parties	Subject Matter
	World Telephone Limited	
19 Aug 1999	Hong Kong Telecom International and local network operators	Revised gateway prices and delivery fees for Category B routes
10 Dec 1999	Cable & Wireless HKT Telephone Limited and New World Telephone Limited	Interconnection charges to be paid by fixed network operator providing the service chosen by the payphone users and to be received by the fixed network operator operating the payphone
12 July 2000	Rediffusion Satellite Services Limited and Hutchvision Hong Kong Limited	Interconnection between services under satellite television uplink and downlink licence and Satellite Master Antenna Television (SMATV) systems
3 March 2001	PCCW-HKT Telephone Limited and Hutchison Global Crossing Limited	Level of Operator Number Portability Charges between the networks of fixed telecommunications network services licensees.
16 March 2001	PCCW-HKT Telephone Limited and New T & T Hong Kong Limited	Terms and conditions for the provision of "Point of Interconnection" capacity between fixed networks for value-added service and external telecommunications services.

(2) Determination Proceedings in Progress by the TA under section 36A of the Telecommunications Ordinance (November 2001)

Parties	Subject Matter
Two local wireline fixed network operators	Level of charges between operators for the implementation of Operators Number Portability for Non-level 2 numbers
Two local wireline fixed network operators	Level of "Type I" interconnection usage charge between fixed networks.
Two local wireline fixed network operators	Level of charges of Sub-tie Cable and inter-MDF Tie Cable installation in telephone exchanges
Two local wireline fixed network operators	Level of charges of Sub-tie Cable and inter-MDF Tie Cable installation in telephone exchanges
Two local wireline fixed network operators	Technical configuration of interconnection between fixed networks
Two local wireline fixed network	Broadband "Type II" interconnection

Parties	Subject Matter
operators	
Two local wireline fixed network operators	Broadband “Type II” interconnection

**Progress on meeting network and services commitments  
made by the three new FTNS operators**

(1) Commitments on expansion of network coverage through Type II interconnection –

	HGC	New T&T	NWT
<p><b>End 2000</b></p> <p>– Verification of the interim milestones already done. Please see detailed explanations in paragraph 4 of the covering paper.</p>	<p><b>Admiralty, Chai Wan, [East], [Hermes House], Hung Hom, Jordan, King's Road, Kwai Chung, Lockhart, Ngau Tau Kok, Queen's Road, [Shatin], Shau Kei Wan, Telecom House, Wanchai, West</b></p> <p>- a total of 16 exchanges</p> <p>Note : Exchanges in [ ] not yet completed in end 2000. See details of the remedial action directed by the TA in paragraph 4 of the covering paper.</p>	<p><b>Admiralty, Kwai Chung, Ngau Tau Kok, Queen's Road, Shau Kei Wan, Telecom House, West</b></p> <p>- a total of 7 exchanges. In addition, this operator has completed 2 exchanges in advance of schedule under the Deed of Undertakings :- <b>Kwun Tong, Wanchai</b></p>	<p><b>Admiralty, East, Jordan, Lockhart, Ngau Tau Kok, Shau Kei Wan, Telecom House, Tsuen Wan, West</b></p> <p>- a total of 9 exchanges</p>

	HGC	New T&T	NWT
End 2001	<b>Admiralty, Chai Wan, East, [Hermes House] Hung Hom, Jordan, King's Road, Kwai Chung, Lockhart, Ma On Shan, Ngau Tau Kok, Queen's Road, Shatin, Shau Kei Wan, Tai Po, Telecom House, Wanchai, West</b>	<b>Admiralty, Kwai Chung, Kwun Tong, Ngau Tau Kok, Queen's Road, Shau Kei Wan, Telecom House, West</b>	<b>Admiralty, East, Jordan, Kwai Chung, Lockhart, Ngau Tau Kok, Shanghai Street, Shatin, Shau Kei Wan, Telecom House, Tsuen Wan, West</b>
- Verification to be done in early 2002. This reflects latest information supplied by the FTNS operators.	- a total of 18 exchanges  Note : An exchange in [ ] still with limited coverage	- a total of 8 exchanges. In addition, this operator has completed the following exchanges : a) 2 exchanges in advance of schedule under the Deed of Undertakings. <b>Lai Chi Kok, Wanchai</b> b) 7 exchanges beyond their commitments set out in the Deed of Undertakings <b>Chai Wan, East, King's Road, Lockhart, North Point, Shanghai Street, Shatin</b>	- a total of 12 exchanges

	HGC	New T&T	NWT
End 2002 – Verification to be done in early 2003. This lists out the exchanges to be connected by Type II interconnection committed by the three new FTNS operators.	Aberdeen, Admiralty, Chai Wan, East, Hermes House, Hung Hom, Jordan, King's Road, Kwai Chung, Lockhart, Ma On Shan, Ngau Tau Kok, On Lok, Queen's Road, Shatin, Shau Kei Wan, Tai Po, Telecom House, Tsing Yi, Wanchai, West, Yuen Long  - a total of 22 exchanges	Admiralty, Kwai Chung, Kwun Tong, Lai Chi Kok, Ngau Tau Kok, Queen's Road, Shau Kei Wan, Telecom House, Wanchai, West  - a total of 10 exchanges	Admiralty, East, Jordan, King's Road, Kwai Chung, Lockhart, Ngau Tau Kok, Shanghai Street, Shatin, Shau Kei Wan, Telecom House, Tsing Yi, Tsuen Wan, West, Wong Tai Sin  - a total of 15 exchanges

(2) Commitments on number of buildings with direct access – all three new operators have met the interim milestones in end 2000. The TA will verify the commitments for end 2001 and end 2002 in due course.

	HGC	New T&T	NWT
End 2000	780	950*	140
End 2001	1300	1050*	200
End 2002	1500	1200*	260

\* includes network coverage through Type II interconnection.

(3) Commitments on accumulated capital investment as from 1 January 1999 (in million HK dollars) – all three new operators have met the interim milestones in end 2000. The TA will verify the commitments for end 2001 and end 2002 in due course.

	HGC HK \$M	New T&T HK \$M	NWT HK \$M
End 2000	1300	200	300
End 2001	1700	300	500
End 2002	2000	400	600