

**EXTENSION OF THE DIRECTIONS ISSUED TO
REACH NETWORKS HONG KONG LIMITED AND
PCCW-HKT TELEPHONE LIMITED ON
15 MARCH 2002 AND 1 JUNE 2002 RESPECTIVELY
PURSUANT TO GENERAL CONDITION 44 OF THEIR
FIXED TELECOMMUNICATIONS NETWORK SERVICES LICENCES
REGARDING DECLARATION OF NON-DOMINANCE
IN THE MARKET FOR EXTERNAL BANDWIDTH SERVICES**

Statement of the Telecommunications Authority

14 March 2003

BACKGROUND

1. On 15 March 2002, the Telecommunication Authority (TA) declared Reach Networks Hong Kong Limited (Reach Networks) non-dominant in the ‘external bandwidth services’ (EBS) market (the Reach Non-Dominance), pursuant to General Condition (GC) 44 of its Fixed Telecommunications Network Services (FTNS) Licence. He published on that date a statement¹ (the Reach Statement) setting out his views and conclusions as well as a direction (the Reach Direction) to that effect for a ‘probationary’ period of twelve months from the date of issue. The TA pledged to review his Reach Non-Dominance decision as the Reach Direction expires on 15 March 2003, taking into account any new development in the market during the period.

2. On 1 June 2002, the TA declared PCCW-HKT Telephone Limited (PCCW-HKTC) non-dominant in the EBS market (the PCCW Non-Dominance), pursuant to GC 44 of its FTNS licence. He published on that date a statement² (the PCCW Statement) setting out his views and conclusions as well as a direction (the PCCW Direction) to that effect for a ‘probationary’ period of twelve months from the date of issue. The TA pledged to review his PCCW Non-Dominance decision as the PCCW Direction expires on 1 June 2003, taking into account any new development in the market during the period.

¹ TA Statement: *Application by Reach Limited for Declaration of Non-Dominance in the Market for External Bandwidth Services*, dated 15 March 2002.

² TA Statement: *Application by PCCW-HKT Telephone Limited for Declaration of Non-Dominance in the Market for External Bandwidth Services*, dated 1 June 2002.

3. The issues regarding the Reach Non-Dominance and the PCCW Non-Dominance are similar. There are differences, however, revolving around the fact that Reach Networks targets only licensed carriers (network operators) and service providers who use EBS as an input to their own telecommunications networks and services, while PCCW-HKTC targets mainly corporate customers, i.e., end-users.

4. In the lead towards the expiry date of such ‘probationary’ period for Reach Networks and PCCW-HKTC, the TA issued a consultation paper on 20 January 2003 (the Consultation Paper), inviting comments from the industry on the possible extension of *both* the Reach Direction and the PCCW Direction, as well as any related issue. The TA received four submissions from the following respondents (in alphabetical order):

- Hutchison Global Communications Limited (HGC)
- PCCW-HKTC
- Reach Ltd. (Reach)
- Wharf T&T Limited (WT&T)

5. Taking into account the views and comments from the industry in response to the Consultation Paper, the TA forms his conclusions and decisions in this statement on the possible extension of the Reach Non-Dominance and the PCCW Non-Dominance.

6. This statement must be read in conjunction with the Reach Statement, Reach Direction, PCCW Statement, PCCW Direction as well as the public versions of the industry submissions. These documents are available on OFTA’s web site at www.ofta.gov.hk. The comments from the respondents are also summarized in the **Annex**.

LEGAL BASIS

7. Reach Networks and PCCW-HKTC are obliged under GC 17, 20, 21, 22 and 23 of their respective FTNS licences to, amongst other things, adopt certain accounting separation practices as specified by the TA (in an Accounting Manual), charge no more or no less than the published tariffs unless otherwise approved by the TA and seek TA approval for new services

and changes in tariffs.

8. Under GC 16(2) of the FTNS licences of Reach Networks and PCCW-HKTC (the “Licences”), a licensee is in a dominant position when, in the opinion of the TA, it is able to act without significant competitive restraint from its competitors and customers. In considering whether a licensee is dominant, the TA will take into account the market share of the licensee, its power to make pricing and other decisions, the height of barriers to entry, the degree of product differentiation and sales promotions and such other relevant matters which are or may be contained in the “*Guidelines to Assist the Interpretation and Application of the Competition Provisions of the FTNS Licence*” (the Competition Guidelines) issued by the TA in June 1995.

9. GC 44 of the Licences provide that if the TA forms the opinion that the licensee is not in a dominant position within the meaning of GC 16(2) of the Licences with respect to any market for telecommunications services provided under the Licences, he may direct that the obligations, either completely or as to any particular obligations, imposed under GC 17, 20, 21, 22 and 23, shall not apply to the licensee for such period and on such conditions as the TA may determine.

BACKGROUND

The Reach Non-Dominance

10. On 31 May 2001, the TA received an application (the “Reach Application”) from Reach Ltd. for Reach Networks to be declared non-dominant in the EBS market. On 19 October 2001, the TA issued a consultation paper seeking views from the industry on the Reach Application. On 19 December 2001, Reach Ltd. announced the acquisition of the Asian assets of a facilities-based competitor, Level 3 Asia (the Level 3 Acquisition). The TA on 21 December 2001 issued a supplementary consultation paper calling for comments on the acquisition in relation to the Reach Application.

11. The TA, in view of the submissions received and the information available to him, acceded to the Reach Application but subject to conditions (the “Reach Conditions”) as well as an initial ‘probationary’ period of 12 months. The Reach Conditions were established primarily due to concerns over the vertical relationship between Reach Networks and PCCW-HKTC,

especially the cross-supply of essential network components for the provision of end-to-end connectivity in EBS.

The PCCW Non-Dominance

12. On 18 June 2001, the TA received an application (the “PCCW Application”) from PCCW-HKT Limited for PCCW-HKTC to be declared non-dominant in the EBS market. On 26 October 2001, the TA issued a consultation paper seeking views from the industry on the PCCW Application. On 19 December 2001, Reach Ltd. announced the acquisition of the Asian assets of a facilities-based competitor, Level 3 Asia. The TA on 21 December 2001 issued a supplementary consultation paper calling for comments on the acquisition in relation to the PCCW Application.

13. The TA, in view of the submissions received and the information available to him, acceded to the PCCW Application but subject to an initial ‘probationary’ period of 12 months. Apart from that, there were no additional conditions attached to the PCCW Non-Dominance. The TA was satisfied that the Reach Conditions, as well as the FTNS licence conditions of PCCW-HKTC, are sufficient to address the concerns over the vertical relationship between the two companies, in particular the cross-supply of essential network components for the provision of end-to-end connectivity in EBS.

MARKET DEFINITION

Product market

14. In the Reach Statement and the PCCW Statement, the TA defined the product market of EBS as the provision of dedicated, point-to-point international capacity via cable or satellite. International Private Leased Circuits (IPLC), indefeasible right of use (IRU) and managed network services were included, but switched or on-demand capacity services such as IDD, Internet and Virtual Private Network (VPN) based on Internet Protocol (IP) or Asynchronous Transfer Mode (ATM) technologies were excluded. Domestic connectivity (domestic tails) was also excluded.

15. Reach, PCCW-HKTC and HGC agree to this definition of the product market in their submissions. WT&T maintains that domestic connectivity should be included because the service is publicly described by both Reach Networks and PCCW-HKTC as “seamless”, “one-stop-shop”

service for “end-to-end connectivity”. The TA however considers the crux of this issue to be the availability of standalone supply on local connectivity. Reach Networks submits that while it may resell domestic tails acquired from PCCW-HKTC, its customers are free to acquire domestic tails from any wireline-based FTNS operator, including but not limited to PCCW-HKTC, as evidenced in its gazetted IPLC tariff. The TA also considers that PCCW-HKTC is bound by its FTNS licence conditions to supply domestic tails to affiliated and third parties on a non-discriminatory basis.

16. WT&T also submits that the special arrangements, such as volume discounts, between Reach Networks and PCCW-HKTC allow lower prices to be offered, such that alternative supply of local connectivity cannot compete. The TA however does not consider volume discount itself to be a preferential treatment, unless another hypothetical operator with the same volume were denied of similar discounts. In fact, volume discount is justified by cost reductions from economies of scale. In any case, the TA has observed no clear trend from market share and prices of EBS suggesting that Reach Networks or PCCW-HKTC has gained advantage. He also maintains that the customers of EBS are sophisticated buyers with sufficient purchasing power to shop around for the right price, and that the cost of domestic tails is insignificant relative to the external component.

17. Having considered the submissions received, the TA is satisfied that the same product market definition of EBS in the Reach Statement and the PCCW Statement should be maintained.

Functional market

18. In the Reach Statement, the TA defined the functional market of EBS as the wholesale market, largely because the Reach Application was only concerning the wholesale level, i.e., supply to network operators and service resellers. Subsequently in the PCCW Statement, he recognized the difficulty in segregating the wholesale and retail levels of the EBS market, or distinguishing between resellers and end-users. For example, a service provider acquiring external bandwidth for its switched or on-demand service, which is outside the scope of EBS, could well be considered as an end-user. He then assessed the PCCW Non-Dominance at both the wholesale and retail levels.

19. Among the submissions, only Reach supports the segregation of the

functional market of EBS into wholesale and retail levels. Despite the different customer targets between Reach Networks and PCCW-HKTC (as mentioned in paragraph 3), the TA remains conscious of the difficulties in splitting the functional market, given the continuous spectrum along which customers can acquire external bandwidth from different levels of suppliers in the market with different levels of value-added. As such, he is satisfied that both the Reach Non-Dominance and the PCCW Non-Dominance should be assessed at the wholesale and retail levels combined, i.e., a vertically integrated market. Accordingly, the scope of the Reach Non-Dominance, should it be extended, will be expanded to include the retail level.

Geographic market

20. In both the Reach Statement and the PCCW Statement, the TA defined the geographic market of EBS as Hong Kong in terms of origin, and globally in terms of destination, without subdividing into routes.

21. Among the submissions, Reach and PCCW-HKTC reiterate that the geographic market of EBS, in terms of origin, should at least be defined as the Asia-Pacific region, if not globally, given the geographic substitutability of EBS brought about by ‘hubbing’ arrangements. The TA however considers terminal connectivity to and from Hong Kong to be necessary in the provision of EBS, regardless of the hubbing and routing arrangement in-between. Even if a reseller or end-user in Hong Kong acquires radial connectivity from another telecommunications hub, it must as well establish the link between Hong Kong and that particular hub.

22. HGC submits that the geographical market, in terms of destination, should be sub-divided into routes, as quality-conscious customers always prefer direct connection to transit arrangements, and some locations can only be reached directly by Reach Networks. The TA however sees no evidence from market share and pricing trends suggesting the inferiority of hubbing arrangements in competing against direct connection. On the contrary, he considers the emergence of trading markets of bandwidth internationally to be a negative piece of evidence. As such, the TA maintains the same geographical market definition of EBS as stipulated in both the Reach Statement and the PCCW Statement.

ANALYSIS OF DOMINANCE

23. In the sections below, the TA revisits the tests of dominance performed under the Reach Statement. Since PCCW-HKTC is merely acquiring external bandwidth from Reach Networks for resale, its market share cannot be higher than that of Reach Networks. Also, if Reach Networks is not dominant, there should be no entry barrier for service-based operators like PCCW-HKTC, given the availability of alternative supply of EBS at competitive prices. As such, the assessment of dominance will focus mainly on Reach Networks. The TA is satisfied that, should he extend the Reach Non-Dominance for a definite or indefinite period, the PCCW Non-Dominance should automatically be extended accordingly.

Market share and market concentration

24. In the Reach Statement, the TA left his analysis on market share and market concentration inconclusive, in light of the controversy among industry participants in selecting the appropriate basis for measuring the market share of EBS (revenues, activated capacity, equipped capacity, total available capacity and upgradeable capacity). Different measures of market share would produce significantly different results, and the market share figures were volatile across all measures during the period when the Reach Non-Dominance and the PCCW Non-Dominance were assessed. The TA therefore did not put undue weight on his market share analysis.

25. The submissions generally concur with the open conclusion drawn by the TA. WT&T reckons that market share analysis should continue to be de-emphasized and more weight should be put on the entry barrier analysis. However, Reach Networks submit that, for over 12 months to the end of September 2002, its market share based on activated capacity – the most conservative approach – has been consistently below 25%, which is the threshold level for a presumption of non-dominance under the Competition Guidelines. According to the statistics submitted to the TA by the external facilities-based carrier licensees, Reach Networks and Reach Cable (Level 3 Asia) combined was not even the leading player in the market, and its market share was consistently below 25% throughout 2002 based on both activated capacity and upgradeable capacity. In terms of equipped capacity, its market share was consistently below 50% throughout 2002, and consistently below 25% from March 2002 onwards. Given the significance of the market share

figures in terms of extent, consistency and persistency, the TA is satisfied that Reach Networks should be *presumed* to be non-dominant in the EBS market, subject to the results from other factors in the analysis of dominance.

26. In terms of market concentration, using the Herfindahl-Hirschman Index (HHI) as a proxy³, the TA notes that the EBS market, across different measures of market share, ranks among those market segments in which there is no dominant player (Table 1). During 2002, the HHI of the EBS market has trended persistently and significantly downwards (Table 2). The TA will take these factors into account in reaching his final decision.

Table 1: Market concentration of major telecommunications segments in Hong Kong (end December 2002)

Market segment	Is there a dominant player?	Basis for calculating market share	HHI
Local fixed telephony	Yes	Number of lines	6,777
Local leased lines	Yes	Total bandwidth	3,500
Dial-up internet access	No	Traffic minutes	3,435
Broadband internet access	No	Number of subscribers	3,205
External bandwidth services	Under review	Activated capacity	3,080
		Equipped capacity	2,340
		Upgradeable capacity	1,672
Mobile access services	No	Number of subscribers	1,822
External call services	No	IDD minutes	1,430

Table 2: Market concentration of major telecommunications segments in Hong Kong (end December 2002)

	Dec-01	Mar-02	Jun-02	Sep-02	Dec-02
Activated capacity	4,870	4,802	4,162	3,551	3,080
Equipped capacity	3,085	2,910	2,462	2,351	2,340
Upgradeable capacity	5,012	3,540	1,986	1,672	1,672

Power to implement decisions

27. In assessing the Reach Non-Dominance, no specific comments were made by the industry on this factor. The TA then covered this factor indirectly under his analysis on other factors of dominance, such as entry barriers.

28. In response to the Consultation Paper, the industry provided more information on the pricing trends of the EBS market during the probationary period of Reach Networks. The submissions generally agree that EBS prices have declined substantially. Reach Networks submits that EBS prices have declined by 40-50% during 2002, compared to X% discount of its own (the

³ HHI is the most generally accepted measure of market concentration, calculated by the sum of squared market shares

actual figure is provided to the TA on a confidential basis). WT&T also submits that EBS prices have declined by 50-70% since the issue of the Reach Direction and the PCCW Direction. The TA finds no evidence suggesting the possession of pricing power by Reach Networks.

Entry barriers

29. In the Reach Statement, the TA concluded that there are little or no barriers to entry after considering the following factors:

- regulatory barriers;
- sunk cost;
- spare capacity;
- advantages of incumbency; and
- bottleneck facilities.

Regulatory barriers

30. From 1 January 2003, the external telecommunications sector in Hong Kong has been fully liberalized, removing any regulatory barrier to entry. Fixed carrier licences may be granted to anyone directly investing in cable capacity or acquiring capacity through IRU. There is no preset limit on the number of licensees and no performance commitments. The TA is satisfied that there is no regulatory barrier to entry for the EBS market.

Sunk cost

31. In the Reach Statement, the TA concluded that the significant sunk costs involved in constructing submarine cables had not deterred facilities-based entry, for various reasons including projections of high levels of demand. HGC and WT&T submits that the EBS market has turned out to be less contestable since then. With the global economic downturn, most of the anticipated cable projects have been put on hold, and some major bandwidth suppliers have filed for 'Chapter 11' bankruptcy protection, effectively removing themselves from the on-going market. On the contrary, Reach submits that these bankrupt players do not actually leave the market, but instead return with even lower cost bases after debt restructuring or acquisition by other entities. The TA concurs with this view, and further observes that there

have been more entries to and less exit from the EBS market during 2002 (Table 3). He maintains his conclusion under the Reach Statement.

Table 3: Entry to and exit from the EBS market from during 2002

	Entry	Exit
Number of licensees	5	3
Equipped capacity (GB)	346	2
Upgradeable capacity (GB)	23,594	4,690

Spare capacity

32. In the Reach Statement, the TA concluded that the oversupply in the EBS market had not discouraged new entry by sending a signal to potential entrants that incumbents have means to strategically lowering their prices quickly. Since the issue of the Reach Direction, equipped capacity in the EBS market has expanded by 27 times, while activated capacity has only expanded by 10 times, implying a decline in capacity utilization from 43% to 16% (Table 4). This continued trend suggests that spare capacity has been a non-factor for market entry. The TA maintains his conclusion under the Reach Statement.

Table 4: Capacity of External Telecommunications Facilities of Hong Kong (Figures in Mbps)

Quarter-end	Equipped capacity	Activated capacity	Implied capacity utilization
Mar-01	21,700	9,399	43%
Jun-01	22,302	9,956	45%
Sep-01	164,176	40,444	25%
Dec-01	234,613	49,725	21%
Mar-02	271,517	66,100	24%
Jun-02	557,096	73,932	13%
Sep-02	584,923	83,480	14%
Dec-02	586,338	95,860	16%

Advantages of incumbency

33. In the Reach Statement, the TA found no evidence that Reach Networks haven strategically taken its advantages of incumbency to deter new entry. In particular, he did not consider the established bilateral relationships with overseas carriers inherited from the monopoly era to constitute an entry barrier because the relevant geographic market of EBS was not subdivided into routes. Without further views and comments from the industry, the TA maintains his conclusion.

Bottleneck facilities

34. In the Reach Statement, the TA identified cable landing station and backhaul as possible bottleneck facilities for EBS. He then concluded that cable landing station does not constitute an entry barrier based on the TA Statement “*Access to and Co-location at Cable Landing Stations*” dated 19 September 2000. He also concluded that the full liberalization of the external telecommunications services market from 1 January 2003 would allow external facilities-based licensees to self-provide backhaul capacity, thereby removing any barriers to entry. HGC and WT&T, in their respective submissions, reiterate that cable landing stations and backhaul are bottleneck facilities, without further substantiating their positions on top of the TA’s findings in the Reach Statement. WT&T also reiterates that local connectivity is a bottleneck, but the TA does not consider local connectivity, which is beyond the scope of the relevant product market of EBS, to constitute an entry barrier. He maintains his conclusion under the Reach Statement.

Product differentiation and sales promotion

35. In the Reach Statement, the TA deemed this factor irrelevant and did not analyze it in detail, considering that external bandwidth is a highly commoditized product. Without further comments from the industry, the TA maintains this view.

The nature of corporate relationships

36. In the Reach Statement, the TA concluded that the continued relationships between Reach Networks and PCCW-HKTC do not in themselves create, protect or significantly enhance a position of dominance for Reach Networks after considering a number of relevant factors. Since PCCW-HKTC is dominant in the supply of domestic tails, it is bound by its FTNS licence conditions to deal with Reach Networks and its EBS competitors in arm’s length, including service provision, pricing and confidentiality. The TA also imposed the Reach Conditions to safeguard competition during the probationary period of the Reach Non-Dominance. He is satisfied that the original conclusion should be maintained. Later in this statement, he will give due consideration on whether the Reach Conditions remain fair, necessary and

appropriate, should the Reach Non-Dominance be extended.

The Reach Conditions

37. As mentioned above, the Reach Conditions were established primarily due to concerns over the vertical relationship between Reach Networks and PCCW-HKTC. Conditions (a)-(c) were in fact proposed by Reach and accepted by the TA, while Condition (d) was imposed by the TA himself. Reach submits that the Reach Conditions are no longer necessary, as Reach Networks and PCCW-HKTC have not engaged in any preferential treatment with each other during the probationary period, and the EBS market has become more competitive. However, the TA cannot prove whether the arm's length would have been upheld *without* the Reach Conditions.

38. The concerns behind the Reach Conditions revolve around PCCW-HKTC's dominant status in the supply of the domestic tails. Apart from that, by the definition of the Reach Non-Dominance and PCCW Non-Dominance, alternatives for the external component are available. PCCW-HKTC submits that the Reach Conditions are unnecessary, as its FTNS licence conditions are sufficient in preventing any preferential treatment in the supply of domestic tails. The TA will therefore revisit each of the Reach Conditions in this context.

Condition (a) Reach Networks shall provide the TA with a quarterly report on the prices it pays PCCW-HKTC for the domestic tails and the lead time for obtaining such tails from PCCW-HKTC;

39. The concern behind Condition (a) was that Reach Networks' position might be unduly enhanced through any preferential treatment from PCCW-HKTC against other EBS providers in the supply of domestic tails, such as price discounts and shorter provisioning time. The TA was mindful that PCCW-HKTC was already obliged under GC10, 15, 16, 20(4), 21 and 22 of its FTNS licence to supply its domestic tails to affiliated and third parties on a non-discriminatory basis. Condition (a) allowed the TA to monitor closely the compliance of such.

40. HGC submits that Condition (a) should be amended to include a clause to require Reach Networks to disclose the price paid by PCCW-HKTC for the IPLC acquired from Reach Networks, i.e., the opposite direction to the

present requirement under Condition (a). HGC is concerned that PCCW-HKTC may engage in predatory pricing by reselling IPLC to end users at below the cost at which it acquires from Reach Networks. However, the TA considers that such a clause would be inconsistent to the PCCW Non-Dominance, which implies full pricing flexibility for PCCW-HKTC on EBS resale in a competitive market, subject to compliance with the provisions and licence conditions prohibiting anti-competitive conduct. It would also be inconsistent to the Reach Non-Dominance, which implies that there are alternative suppliers to Reach Networks' EBS at competitive prices to prevent any margin squeezing caused by Reach Networks' pricing relative to PCCW-HKTC's prices. In contrast, the present requirement under Condition (a) was designed to monitor the supply of domestic tails, a service in which market PCCW-HKTC is dominant, instead of the external component.

41. During the probationary period, Reach Networks has been submitting quarterly reports in compliance with Condition (a), and the TA has not noticed any preferential treatment from PCCW-HKTC. He also considers that, even without Condition (a), he is empowered to request such information at any time under section 7I of the Telecommunications Ordinance or GC18 of Reach Networks' EFTNS licence to facilitate an investigation on any preferential treatment, whether initiated by himself or in response to a complaint. As such, the TA is satisfied that Condition (a) is no longer necessary.

Condition (b) Reach Networks shall propose within one month (from the issue of the Reach Direction) for the approval of the TA a process for supplying further technical information about changes in Reach Networks' network relevant to end-to-end service quality of external circuits on a non-discriminatory basis to licensees who rely on such information for the supply of external circuits;

42. The concern behind Condition (b) was that Reach Networks might not provide the other licensees (who rely on its network to supply EBS) with interconnection to its external facilities of a technical quality equivalent to that provided to PCCW-HKTC. On 10 April 2002, Reach Networks submitted to the TA a draft document in compliance with Condition (b). The TA subsequently approved the process contained in the document on the basis that the document was adopted and implemented by Reach Networks. Although

Reach Networks has already fulfilled Condition (b) in a one-off manner, the TA must consider whether the execution of the approved process remains an ongoing concern.

43. PCCW-HKTC submits that Condition (b) is unnecessary because the EBS market is competitive, and customers can easily switch to other suppliers in case Reach Networks give them sub-quality services. The TA agrees that Condition (b) is indeed inconsistent to the Reach Non-Dominance in the sense that, with the availability of alternative supply of EBS, other licencees may not strictly “rely” on Reach Networks for service provision. As such, he is satisfied that Condition (b) is no longer necessary.

Condition (c) Reach Networks shall maintain records of all requests from the local FTNS and fixed carrier licensees for connection to external capacity, together with the time taken to process and connect;

44. The concern behind Condition (c) was that connection to the other local FTNS licensees or fixed carriers might not be of the same quality as for PCCW-HKTC in terms of timing. Similar to Condition (b), the TA considers that Reach Networks would churn customers in a competitive environment if it delays any requests for connection to its external capacity. Also considering the requirement under GC13 of Reach Networks’ EFTNS licence on interconnection, the TA is satisfied that Condition (c) is no longer necessary.

Condition (d) Reach Networks shall separately price its EBS and the domestic tails acquired from local FTNS or fixed carrier licences, and allow its customers the freedom of choice of the suppliers for the domestic tails.

45. The objective behind Condition (d) was to mandate unbundling of the EBS and the domestic tails (although Reach Networks’ customers may still choose the bundled option). Reach submits that Condition (d) is unnecessary because it intends to offer EBS and domestic tails (resale) separately anyway, as demonstrated in its gazetted tariff. However, the TA cannot satisfy himself whether this will be the case *without* Condition (d).

46. WT&T submits that Condition (d) should be re-drafted to include a

provision that Reach Networks should demonstrate that its customers have been given a fair choice of suppliers for domestic tails. The TA does not consider such demonstration of compliance to be necessary, as Reach Network must comply with any condition imposed by the TA, who closely monitors its compliance. Notwithstanding, the TA considers Reach Networks' gazetted tariff to be a clear demonstration of compliance to Condition (d) during the probationary period. WT&T also submits that the same clause should apply to PCCW-HKTC. Again, the TA considers a demonstration of compliance to be unnecessary.

47. The TA notes that PCCW-HKTC is already under its GCs of FTNS licence to price EBS and domestic tails separately, given its dominance in the latter. The availability of domestic tails from PCCW-HKTC on a standalone basis, together with competition from other EBS providers for the external component, would act as an effective price restraint for Reach Networks' bundled offering. In fact, it is of commercial interest to Reach Networks to provide the unbundled option in a competitive environment. As such, the TA no longer considers mandatory unbundling of Reach Networks' EBS and domestic tail resale to be necessary. He is satisfied that Condition (d) is should be lifted.

48. On the other hand, The TA considers the separate pricing of EBS and domestic tails to be essential for PCCW-HKTC, given its dominance in the latter. He is however satisfied that the relevant GCs in its FTNS licence are sufficient in addressing this concern, such that no additional condition is necessary.

The 'probationary' period

49. The key consideration behind the 'probationary' period was twofold. The first was the controversy in selecting the proper basis for the calculation of the EBS market share. As mentioned above, however, the EBS market share figures has become a more significant evidence for a competitive environment in terms of extent, consistency and persistency.

50. The second reason was the Level 3 Acquisition. In light of the dynamic characteristics of the EBS market, the competitive landscape of the EBS market may be altered significantly with the possibility of further merger and acquisition ("M&A") activities. The TA then found it imprudent to grant

the Reach Non-Dominance indefinitely, and therefore pledged to review his decision towards the end of the ‘probationary’ period.

51. In the Consultation Paper, the TA asked for comments on the M&A prospects in the EBS market. The submissions from HGC and WT&T focused on the the filings for ‘Chapter 11’ bankruptcy protection by a number of major players. As mentioned above, such proceedings have not reduced the capacity available to the EBS market. Reach submits that some of its competitors have strengthened their positions through acquisitions. The TA, however, observes no evidence from the market share or pricing trends of the EBS market that these acquisition, as well as the Level 3 Acquisition, have lessened competition.

52. Reach submits that the TA should assess the impact of M&A on competition on a case by case basis, rather than putting the Reach Non-Dominance on probation. The TA is satisfied that he is empowered to take appropriate action at any time should an M&A significantly affect competition, including a possible review of the Reach Non-Dominance and the PCCW Non-Dominance.

53. Based on the above considerations, the TA is satisfied that the Reach Non-Dominance and the PCCW Non-Dominance should no longer be subject to automatic expiry dates.

CONCLUSION

54. In relation to the EBS market, considering that:

- (a) the relevant product market is the provision of dedicated, point-to-point international capacity via cable or satellite, excluding local connectivity (domestic tails); the relevant functional market is the vertically integrated market; and the relevant geographic market is Hong Kong in terms of origin, without subdividing into routes in terms of destination;
- (b) Reach Networks and Reach Cable (Level 3 Asia) combined was not the market leader throughout 2002. Its market share based on activated capacity and upgradeable capacity was consistently below 25%, and that based on equipped capacity was consistently below 25% from March 2002 onwards;

- (c) the market concentration ranks among other market segments without a dominant player;
- (d) prices have fallen in the range of around 40-50% during the probationary period;
- (e) the external telecommunications market has been fully liberalized from 1 January 2003, enabling external facilities-based licensees to self-provide backhaul capacity;
- (f) equipped capacity and activated capacity have expanded by 27 and 10 times respectively, implying a decline a capacity utilization from 43% to 16% during the probationary period;
- (g) the Reach Conditions are no longer warranted given the competitiveness of the market and the licence obligations in place for both Reach Networks and PCCW-HKTC; and
- (h) PCCW-HKTC is simply reselling the bandwidth acquired from Reach Networks,

the TA is satisfied that:

- (1) The Reach Non-Dominance and the PCCW Non-Dominance should be extended without a definite expiry date; and
- (2) the Reach Conditions should no longer apply.

55. The TA has therefore replaced the Reach Direction and the PCCW Direction with new ones issued today to that effect. The new directions should take immediate effect and will continue to be in force until such date as it may be revoked, in full or in part, in writing by the TA.

56. In light of the dynamic characteristics in the supply side of the EBS market, the TA will continue to monitor the market closely for any change in circumstances (e.g. M&A activities or exit of any major player) that may warrant a review of his decision today.

Office of the Telecommunications Authority

14 March 2003

SUMMARY OF SUBMISSIONS RECEIVED

1. Hutchison Global Communications Limited (HGC)

- The TA should declare Reach Networks and PCCW-HKTC to be dominant in the EBS market.
- The functional market of EBS should be a vertically integrated one because the wholesale and retail levels are indistinguishable.
- The geographical market should be sub-divided into routes as quality-conscious customers always prefer direction connection to hubbing, and some locations are only connected to Reach Networks.
- Many bandwidth expansion projects have been put on hold under the global economic downturn, and a number of major bandwidth providers have filed for bankruptcy protection. Reach Networks and PCCW-HKTC likely beneficiaries of customer migration as a result.
- In case the TA extends the Reach Direction and the PCCW Direction, he should impose an expiry date (say 1 year) for further review, as the EBS market is still extremely volatile.
- The Reach Conditions should be amended to include a clause requiring PCCW-HKTC to disclose the prices it pays for the IPLC acquired from Reach Networks to ensure there is no cross subsidy between the two companies.

2. PCCW-HKT Telephone Limited (PCCW-HKTC)

- The TA should extend the PCCW Direction unconditionally and indefinitely.
- PCCW-HKTC agrees with the TA's approach in the market definition and the analysis of dominance on EBS under the PCCW Statement, except that the geographical market should be global because international market dynamics influences market price in Hong Kong.
- Even with the narrowest geographic market definition of Hong Kong only and the most conservative measure of market share by activated capacity, PCCW-HKTC's EBS market share throughout the probationary period have been well below 25% which is the threshold

level for a presumption of non-dominance.

- There is no more regulatory barrier with full market liberalization from 1 January 2003. External FTNS operators can now self-provide backhaul.
- PCCW-HKTC has been in full compliance with its regulatory and licence obligation in providing local connectivity to Reach Networks and unaffiliated parties on a non-discriminatory basis, as proven by further erosion of PCCW-HKTC's market share.
- PCCW-HKTC invites the TA to look into preferential treatment in other facilities-based, vertically integrated providers of EBS.
- A new expiry date is not necessary for the PCCW Non-Dominance, as the competitive provision in the FTNS licence and the Telecommunications Ordinance should suffice.
- The Reach Conditions are unfair, unnecessary and inappropriate given PCCW-HKTC's legal and licence obligations already in place as well as the competitiveness of the EBS market.
- PCCW-HKTC is merely a reseller of EBS without control of external facilities – a competitive disadvantage to other facilities-based, vertically integrated licensees.

3. **Reach Ltd. (Reach)**

- The TA should extend the Reach Direction unconditionally and indefinitely.
- Reach agrees with the TA's approach in the market definition of EBS under the Reach Statement, except that the geographical market should be intra-Asia, if not global, due to the substitutability of EBS from other telecommunications hubs.
- Reach agrees with the TA's approach in the tests of non-dominance under the Reach Statement, except that the controversy in market share analysis has become somewhat academic, as Reach Networks' market share based on activated capacity, the most conservative measure, has been consistency below 25% for more than 12 months.
- During 2002, intra-Asia capacity increased by 33%. Capacity landing Hong Kong increased by 67%. Market prices fell by 40-50%.
- Some EFTNS competitors are incumbent operators in their own

economies whose telecommunications markets are not as liberalized as that of Hong Kong – offering no competitive reciprocity.

- The TA should assess the competitive implications of M&A activities on a case by case basis instead of putting the Reach Non-Dominance on probation for concerns over M&A prospects. Notwithstanding, the Level 3 Acquisition has not had an adverse effect on competition.
- A number of Reach Networks' competitors have strengthened their positions through M&A activities. Other players who have filed for bankruptcy protection have not left the market, but instead return with much lower cost bases after debt restructuring or acquisition by other entities.
- There has been no preferential treatment between Reach Networks and PCCW-HKTC in the supply of essential network components for EBS.
- There is no justification for imposing a further probationary period for the Reach Non-Dominance, as the TA's previous concerns over the controversy in measuring market share and the M&A prospects of the EBS market are no longer warranted.
- The Reach Conditions are no longer warranted, as the EBS market has become more competitive during the probationary period.

4. **Wharf T&T Limited (WT&T)**

- The TA should not extend the non-dominant status for Reach Networks and PCCW-HKTC because they are likely to be dominant in the EBS market at this point of time.
- The product market of EBS should include local connectivity, because the affiliation between Reach Networks and PCCW-HKTC facilitates the offering of seamless end-to-end connectivity.
- The functional market of EBS should be a vertically integrated one because the wholesale and retail levels are indistinguishable.
- The TA's test of dominance has excessively relied on periodic market statistics provided by licensees without enough emphasis on the advantages of incumbency, vertical relationships and bottleneck facilities for the provision of EBS.
- There has been an increase in available capacity with a price reduction of 50-70% since the Reach Direction and the PCCW Direction have

been issued.

- The Level 3 Acquisition has strengthened Reach Networks' market position. Also, certain players have left the ongoing market with Chapter 11 proceedings. Removal of regulatory barriers from 1 January 2003 is unlikely to reduce Reach Networks' and PCCW-HKTC's market shares.
- WT&T is not in a position to provide evidence of preferential treatment between Reach Networks and PCCW-HKTC, but maintains that the special arrangements, such as volume discounts, between the two have enabled them to lower costs for their product offerings.
- Should the TA extends the Reach Direction and the PCCW Direction indefinitely, so should the Reach Conditions, in order to prevent irreparable market damage.
- Condition (d) should be redrafted to require Reach Networks to demonstrate that its customers have been given a fair choice of suppliers for domestic tails. A similar condition should be imposed on PCCW-HKTC.