

**APPLICATION FOR A DECLARATION OF NON-DOMINANCE
FOR PCCW-HKT TELEPHONE LIMITED IN THE MARKET FOR
BUSINESS DIRECT EXCHANGE LINE SERVICES**

Industry Consultation Paper

23 September 2003

Introduction

1. The Telecommunications Authority (TA) has received an application (the Application) by PCCW-HKT Telephone Limited (PCCW-HKTC) for a declaration of non-dominance in the market for business direct exchange line (BDEL) services. The Application is made in accordance with General Condition (GC) 16(2) of PCCW-HKTC's Fixed Telecommunications Network Services (FTNS) Licence (the Licence) and section 7L of the Telecommunications Ordinance (the Ordinance), requesting the TA to direct under GC 44 of the Licence that GC 17, 20, 21, 22 and 23 shall not apply to PCCW-HKTC in respect of the market of BDEL services.

2. The TA invites submissions from the industry on the Application. He has identified some preliminary issues and asked a number of questions in this consultation paper in order to facilitate discussion, but interested parties should feel free to raise other relevant issues not specifically mentioned or asked by the TA. Relevant comments will be considered by the TA in deciding whether to accede to the Application in full or in part, or to refuse it. For the sake of transparency, but also as a matter of fairness to PCCW-HKTC, the TA makes public those parts of the Application not considered commercially confidential.

Legal basis

3. According to section 7L of the Ordinance and GC 16(2) of the Licence, 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 stipulated in the guidelines issued by the TA.

4. In the ‘Guidelines to Assist the Interpretation and Application of the Competition Provisions of the FTNS Licence’ dated June 1995 (the Competition Guidelines), the TA included ‘the nature of corporate relationships’ as a relevant factor for his analysis of dominance. He also found it appropriate to draw on the jurisprudence of other jurisdictions in his interpretation and application of the concepts of ‘market’, ‘competition’ and ‘dominance’ referred to in the Ordinance.

5. GC 44 of the Licence provides 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 Licence with respect to any market for telecommunications services provided under the Licence, he may direct that, for such period and on such conditions as the TA may determine, either one or any combination of GC 17, 20, 21, 22 and 23, either completely or as to particular obligations imposed thereunder, shall not apply to the licensee.

6. GC 17, 20, 21, 22 and 23 of the Licence requires PCCW-HKTC to, amongst other things, adopt certain accounting separation practices as specified by the TA (in an Accounting Manual), charge no more and no less than the published tariffs unless otherwise approved by the TA and seek TA approval for new services and changes in tariffs.

7. The Competition Guidelines also set out the procedure for the TA to form an opinion whether a licensee is dominant. He will first define the relevant market along the product, geographic and functional dimensions, and then examine those factors stipulated under section 7L of the Ordinance, GC 16(2) of the Licence as well as the Competition Guidelines, in respect of the defined relevant market.

Definition of the relevant market

8. The concept of ‘market’ has an accepted meaning in economic theory and such meaning has been adopted in the competition laws of other jurisdictions. The TA will use the generally accepted test of ‘substitutability’ and ‘cross-elasticity’ in both demand and supply. Essentially, a market is an area of close competition or potential competition and defining a market involves assessing which products are close enough substitutes to be competing in the same market. Therefore, the relevant market for the Application should include the subject service together with all services which the TA determines to be substitutes or potential substitutes. It is also relevant to consider the geographic boundaries to the market (i.e. the territorial area in which the products or services compete) and the functional level of the market (i.e. whether it is at the wholesale or the retail level).

The product market

9. A proper definition of the product dimension of a market should include all those products or services that are close demand-side and supply-side substitutes:

- Product B is a *demand-side substitute* for A if an increase in the price of A would promptly cause consumers to use more B instead, and vice versa.
- Product B is a *supply-side substitute* for A if, in response to an increase in the price of A, firms that are producing B would promptly switch some of their production facilities to the production of A, and vice versa.

In both cases, the presence of B significantly constrains the pricing of A.

10. The Application was made with respect to the ‘market’ for ‘BDEL services’, or conceptually the narrowband switched connectivity between a business customer’s termination point and the termination points of other customers of the public switched telephone network (PSTN). The connectivity comprises two parts - the ‘access’ connecting the business customer to the nearest local exchange and the ‘switching and transmission’ of telecommunications traffic over the PSTN. The TA must first examine whether the proposed definition of the product market by PCCW-HKTC is indeed appropriate and reflective of the contemporary market situation. In this context, the TA has identified some generic categories of products and services in relation to ‘BDEL services’ that require economic testing in order to determine whether they constitute combined or separate product markets:

- *Business and Residential services* – on the demand side, it should be obvious that the requirements of business users are quite different from residential users in terms of both traffic pattern and degree of sophistication. On the supply side, however, it may also be argued that the connectivity is essentially the same for business and residential services, and that any distinction in functionality would be artificial. The fact that business lines are currently more expensive than residential lines may not logically lead to the conclusion that residential users are not prepared to use more sophisticated products in response to price changes (although business users are, perhaps for artificial reasons, not eligible for residential line subscription). There are also borderline users such as small-to-medium-sized enterprises (SME) and small-office home-office (SOHO) customers that may exhibit hybrid characteristics.

- *Fixed-line and mobile¹ services* – in recent years, mobile service has gradually narrowed the gap to fixed-lines in terms of geographic coverage, quality of service and consumer perception. In Hong Kong, it is not uncommon that mobile prices are cheaper than fixed-line², and there are currently more mobile users than fixed-line³. Although it could be argued that today, mobile service may, to a certain extent, offer comparable functionality as fixed-line in providing access to telecommunication services, the complex call and data handling requirements, especially for business users, may require the provision of more sophisticated or multiple exchange lines and wider range of services. Therefore, the degree of demand-side substitution between fixed-line and mobile services may vary across different applications. More objectively, the TA considers that it is relevant to observe whether the actual changes in penetration levels in response to price changes, especially the tariff re-balancing of fixed-line services and the price competition of mobile services, so as to conclude whether mobile services should be viewed as substitutes or complements to fixed-line.
- *Exchange and leased line services* – exchange (or switched) and leased lines services have not traditionally been regarded as substitutes, given their different functionalities (switched and dedicated connections) and contrasting price structures for users of different consumption patterns. However, due to continuous technology and service innovations, the provision of telecommunications services, especially for business usage, is clearly trending towards the ‘integrated solution’ type of offerings. In drawing distinctions between exchange and leased line services, which are often supplied by the same network and purchased as a bundle, sources of market power may not be fully captured in the analysis of dominance.
- *Narrowband and broadband services* – although narrowband and broadband connectivity can be supplied under the same telecommunications network, users do not typically make the choice between the two services based on price, given the different bandwidth requirements in supporting different applications. If the TA takes the view that narrowband and broadband are separate markets, it is necessary to define the cut-off point between the two services. In the TA Statement ‘*Broadband Interconnection*’ dated 25

¹ Public Mobile Radiocommunications Services (PMRS) and Personal Communications Services (PCS).

² Fixed-line subscription is for unlimited access, while mobile plans are typically for a limited number of minutes per month. Therefore, their prices may not be directly comparable.

³ Mobile subscription is a personal service, while fixed-line is a firm or household product. Therefore, the number of users for the two services may not be directly comparable.

November 2000, the distinction is drawn at a data rate of 144 kbps. However, there are services such as integrated services digital network (ISDN) which offer data rates between 64 kbps and 384 kbps.

- *Voice, fax and data applications* – on the demand side, these services are different in functionality, such that price changes may not promptly lead to substitution between these services. Unlike residential users, business users do not typically use the same subscription line for voice, fax and internet access. From a supply point of view, however, these services are provided under essentially the same switched connectivity to a telecommunications network. Moreover, business users often acquire all these services in bundles.
- *Basic line, value-added services (VAS) and other call management services* – VAS and call management services are unilaterally complementary services to basic lines, i.e., the latter is a prerequisite to the former, but not vice versa. Lines with VAS or call management services are often called ‘premium lines’. The different intrinsic values between basic and premium lines may render market share comparison difficult, although it does not necessarily undermine the degree of demand-side substitutability between different classes of lines. On the supply side, basic and premium lines are provided under the same network.

Question 1: Based on arguments of demand-side and supply-side substitutability, should each of the above categories of services, or any other relevant categories not specifically mentioned by the TA, constitute combined or separate product markets?

11. In particular, PCCW-HKTC provided a list of its own services, together with comparable services provided by its competitors, that it proposes should be included in the relevant product market:

- *Basic Business Direct Exchange Lines* – including lines with fax and data support and premium fax services.
- *Hunting Lines* – business telephone line services for connecting customer branching equipment to the PSTN.
- *Datel Lines* – providing a general purpose dial-up service for local and

international data transmission over the PSTN.

- *Centrex Lines* – an advanced business telephone service provided on the basis of user groups with a wide range of features such as Call Pick Up, Call Hold, Call Transfer and Intercom Dialing.
- *Integrated Digital Access (IDA)* – these lines employ digital technology to provide multi-channel voice and voice band communications between customer equipment and the PSTN.
- *Direct Dialing In (DDI) Lines* – these lines provide a service for business customers to connect customer private automatic branch exchange (PABX) systems.
- Self-built BDEL lines of any other fixed-line FTNS licensees (e.g. Wharf T&T Limited, Hutchison Global Communications Limited, New World Telecommunications Limited, Hong Kong Broadband Network Limited (HKBN) and others).
- Wireless BDEL local loops of HKBN and other Local Multipoint Distribution System (LMDS)/wireless providers.
- BDEL lines provided through unbundled local loops (ULL).
- Mobile services to business users.

Question 2: Should the products or services listed above, or any other specific products or services, be included or excluded in respect of the product market for ‘BDEL services’?

The geographic market

12. In the various non-dominance applications previously made by PCCW-HKTC in the market of ‘external call services’, the TA has already defined local and external telecommunications services as separate markets⁴. The geographical boundary of the market of ‘BDEL service’ could be the Hong Kong Special Administrative Region (HKSAR). However, a further question is whether the HKSAR market should be sub-divided. For example, the HKSAR market for ‘BDEL services’ could be

⁴ Paragraph 3.2.16 of the TA Report “*Application from Hong Kong Telephone Company Limited for a Declaration of Non-Dominance in the International Business Call Market*” dated 28 November 1997.

subdivided by districts or exchanges.

13. Similar to the tests for the product market, two locations should belong to the same geographic market if the presence of a product or service in one location would substantially constrain the pricing of the same or substitutable services in another location. One may argue that on the demand side, given the immobility of fixed-line service consumers, there may not be a choice of services from different locations. Supply side substitution, on the other hand, will involve the assessment of whether entry could take place in a different location within a relatively short period of time without incurring significant additional costs or risks in response to small and non-transitory changes in relative prices. The UK Office of Fair Trading Guidelines on Market Definition (OFT 403, March 1999), for example, consider the ‘relatively short period’ to be within a year. The TA preliminarily considers that it is reasonable to adopt ‘one year’ as a yardstick for assessing the supply-side substitutability and respondents are welcome to comment on this. Applying these principles, the TA recognizes that on the supply side, there could be different competitive pressures in different geographic areas depending on the barriers to entry (whether physical, economic or otherwise). On that basis, the market for ‘BDEL services’ may be sub-divided. On the other hand, given the dynamic nature of telecommunications markets, this may create uncertainty or lead to proliferation of markets, as different competitive pressures could emerge over time. Moreover, it may be difficult to collect accurate market information and draw representative conclusions on the market power of PCCW-HKTC.

Question 3: Should the geographic market of ‘BDEL services’ be sub-divided, and if yes, in what way?

The functional market

14. PCCW-HKTC appears to propose an integrated wholesale and retail market for ‘BDEL services’, since it did not specifically address the functional aspect of the market in the Application. The TA notes that the present licensing regime does not cater for pure resellers⁵ in the local fixed-line market, and all the licensees in that market are facilities-based⁶. There is currently no gazetted wholesale tariff for ‘BDEL services’ among the local FTNS licensees being offered to resellers. Nevertheless, the TA intends to examine the Application with respect to the ‘BDEL services’ market at both the retail and the wholesale levels.

⁵ in the form of Public Non-Exclusive Telecommunications Services (PNETS) licences.

⁶ Local Fixed Telecommunications Network Services (FTNS) or Fixed Carrier licences.

15. Some local FTNS operators currently rely on Type II Interconnection, or ULL, as an essential input to the provision of ‘BDEL services’ to some of their customers. However, the supply of local loops is not in the same market as ‘BDEL services’. There is no direct wholesale/retail relationship between the two services. As such, PCCW-HKTC’s market power on ‘BDEL services’ would have no ramification on, and can therefore be considered independently from, its market power over local loops. Since the Application was made specifically on ‘BDEL services’, the TA’s analysis of dominance will be conducted in that context, regardless of whether the ‘BDEL services’ are based on self-built or ULL lines.

Question 4: Is there a meaningful split between wholesale and retail levels for the market of BDEL services?

16. The TA notes that the market share calculation in the Application (section 5.1 of PCCW-HKTC’s submission) is based on a different definition of BDEL lines to the monthly statistics collected from the FTNS licensees by the TA. In particular, PCCW-HKTC has excluded those IDA lines that are provided to carriers and PNETS licensees for the connection of various services (including traffic from fixed, mobile, external and internet services) to the PSTN. This essentially implies that these licensees are not end users, but instead they acquire the IDA lines as an input for the provision of their own services. However, it can also be argued that these licensees are not acquiring the IDA lines for direct resale, but rather for the provision of such services that are outside the product market of ‘BDEL services’. In this context, these licensees may as well be considered as end users. Should these IDA lines be excluded from the relevant market, it would necessarily follow that there is a separate wholesale market of BDEL lines provided to telecommunications operators (including PCCW-HKTC itself and other licensees).

Question 5: Should the carriers and PNETS licensees using IDA lines for the connection of various services (e.g. mobile, external and internet services) be considered as resellers or end-users? Should the IDA lines provided to these licensees be included to or excluded from the relevant market of ‘BDEL services’?

Assessment of dominance

17. As stated in paragraphs 3 and 4, ‘dominance’ is defined as the ability of a licensee to act without significant competitive restraint from its competitors and customers, and the TA will consider the following factors in assessing PCCW-HKTC’s

dominance in the relevant market:

- Market share and market concentration
- Power to implement decisions
- Barriers to entry
- Product differentiation and sales promotion
- The nature of corporate relationships
- Any other relevant factor

Question 6: How relevant is, and what weight should the TA assign to, each of the above factors in assessing the Application?

Market share and market concentration

18. Market share is of fundamental importance in the assessment of dominance, although it is not the sole determinant. In the Competition Guidelines, the TA specified a set of ‘rebuttable quantitative presumptions of dominance’ as follows:

- A licensee with a greater than 75% market share will be presumed to be dominant;
- A licensee with a less than 25% market share will be presumed to be non-dominant; and
- A licensee with a market share of between 25-75% will not be subject to any presumption.

These thresholds are starting points only and do not replace the definition of dominance. The TA may overturn such presumption of dominance if he is given or has reason to consider that the market conduct of a licensee exhibits features against the presumption. In the Competition Guidelines, the TA also found it appropriate to draw on the jurisprudence of other jurisdictions in his assessment of dominance. Under EU and UK competition laws, a licensee with a market share persistently above 50% can be presumed to be dominant in the absence of evidence to the contrary⁷. In fact, the TA has

⁷ See, for example, the European Court of Justice’s judgment in *AKZO Chemie BV vs Commission* [1993] 5 CMLR 215, which has also been followed by the UK competition authorities.

previously applied the 50% threshold in his assessment of the various non-dominant applications made by PCCW-HKTC on the markets of external call services and external bandwidth services⁸. Considering the fact that the Competition Guidelines have been in place for more than 8 years⁹, and that other jurisdictions have since established different thresholds for presumptions of dominance, the TA finds it necessary to solicit industry comments on the appropriate thresholds to apply to the Application.

Question 7: Should PCCW-HKTC be presumed dominant in the market of ‘BDEL services’ at a certain level of market share in the absence of evidence to the contrary, and if yes, at what level?

19. It is important for the TA to adopt the proper measure of market share. He envisages that the measure will either be in terms of subscriptions or revenues. Depending on the scope of the product market defined, there could be different types of lines or subscriptions for ‘BDEL services’ which may be of different inherent values. In this regard, revenues may be a more comprehensive measure of market share. However, collecting revenue data may be more resource consuming, and more time-lag could be involved in the reporting process. This may limit the TA’s ability to draw an accurate and timely conclusion on the Application.

Question 8: Should PCCW-HKTC’s market share of ‘BDEL services’ be measured by subscription (lines) or revenues, or any other measure as appropriate?

20. In assessing market share, the TA will also look at the recent history of the licensee’s market share in the relevant market. This generally provides a more representative picture of its competitive position in the market, rather than taking a snapshot of market share at a single moment in time. He can also examine the consistency, persistency and rate of change of the market share across a reasonable period of time. Nevertheless, the TA notes that historical data may not always be relevant to future trends, especially in such a dynamic market as telecommunications services.

Question 9: How long should the TA trace back in history in assessing PCCW-HKTC’s market share for ‘BDEL services’?

21. In addition to market share analysis, it is also relevant to consider the market

⁸ See the corresponding TA statements dated 8 October 2002 and 1 June 2002.

⁹ The TA is currently reviewing the Competition Guidelines, with an industry consultation expected before the end of 2003.

concentration in assessing the degree of competition in the relevant market. In other major jurisdictions, the Herfindahl-Hirschman Index (HHI)¹⁰ is generally accepted as the standard measure for market concentration, particularly in assessing merger and acquisition activities. A market is considered lowly concentrated if its HHI is below 1,000, moderately concentrated if its HHI is between 1,000 and 1,800, and highly concentrated if its HHI is above 1,800¹¹.

Question 10: Should the TA adopt HHI, or any other generally accepted measure, for the analysis of market concentration of ‘BDEL services’?

Power to implement decisions

22. The TA will look at the extent to which a licensee must take into account the reactions of its competitors or customers in making decisions as to pricing or other strategic matters. Power to act independently, or pricing power, is an important indicator of dominance, because if a licensee is able to raise its price without expecting a reaction from its competitors or customers which forces it to lower its price again, then it is able to increase its profits. The effectiveness or otherwise of regulatory mechanisms applying to the licensee may also be a factor which affects the power to act independently.

23. Since 1 July 1998, the TA has lifted the cap on PCCW-HKTC’s BDEL tariffs¹², although approval by the TA is still required for tariff revisions. PCCW-HKTC raised its standard BDEL tariffs from HK\$110 to HK\$128.8 per month in January 2001 which is understood to be a tariff re-balancing change. The revised tariff has been effective up to present, save for a number of promotions and discounts approved by the TA. Although PCCW-HKTC has not raised its BDEL tariffs since 2001, the TA will consider whether maintaining the same prices under a deflationary environment would be equivalent to raising prices. He will also consider relative price levels between PCCW-HKTC and its competitors, i.e., PCCW-HKTC’s ability to maintain a price premium in the market.

24. On the other hand, since the tariff approval mechanism requires that PCCW-HKTC price its services at above cost, it cannot practise predatory pricing at the

¹⁰ HHI equals to the sum of squared market shares of each individual player in a market.

¹¹ *The Horizontal Merger Guidelines*, the US Department of Justice and Federal Trade Commission 1992. The same thresholds are followed by EC and UK competition authorities.

¹² *Agreement between Hong Kong SAR Government and Hong Kong Telecoms Ltd. on the Development of the External Telecommunications Sector* dated 20 January 1998 (the Framework Agreement) and repeal on 1 July 1998 of the Price Control Arrangement under the Telephone Regulation.

moment. However, the TA cannot rule out the possibility that, in the hypothetical situation where the tariff approval regime does not exist, PCCW-HKTC may strategically lower its BDEL tariffs in attempt to drive its competitors out of the market.

Question 11: To what extent is PCCW-HKTC able to set prices independently in the market of ‘BDEL services’ and how do PCCW-HKTC’s prices generally compare with others in the market?

Barriers to entry

25. The existence of high barriers to entry protects existing market players from the competitive pressures of new entrants. Entry barriers may be constituted in a number of forms, including regulatory barriers (such as licensing requirements), physical barriers (such as control over ‘bottleneck’ facilities), economic barriers (such as economies of scale and cost advantages), strategic barriers (i.e. behaviour engaged in specifically to deter market entry) as well as advantages of incumbency and an established customer base.

Regulatory barriers

26. Since 1 January 2003, the local fixed-line market has been fully liberalized in Hong Kong. There is no pre-set limit on the number of licences issued for the provision of, amongst others, BDEL services. There are currently 11 local FTNS licensees across different technology platforms, although some of them are observed to be more focused on residential rather than business services. It should be obvious that no regulatory barrier to entry exists for the market of ‘BDEL services’ even under a narrow scope of product market definition.

Physical barriers

27. Local fixed-line services have traditionally been considered as a market of relatively high physical barriers, especially with respect to the control over ‘last-mile’ facilities. In Hong Kong, the TA alongside with the Government has taken a number of initiatives over the years to lower such barriers, including coordinating road opening

requirements¹³, educating property owners and managers about building access rights¹⁴, facilitating interconnection to in-building wiring¹⁵, etc. However, he also recognizes that the legal framework may not practically remove all levels of physical barriers to entry.

Question 12: To what extent are there physical entry barriers to the market of ‘BDEL services in Hong Kong?’

28. In the Application, PCCW-HKTC included the coverage maps of its competitors (Attachment 1 of its submission). The maps were based on data obtained from road-opening records of other operators for duct laying. PCCW-HKTC also derived the percentage of tenants of commercial and industrial buildings being covered by its competitors by taking a 50-metre radius from the duct network laid by each wireline operator or 1,000 metres from the transmitters of LMDS operators (see section 7.5, Page 25-28 of PCCW-HKTC’s submission).

29. In relation to the above claims by PCCW-HKTC, the TA considers the definition of ‘coverage’ to be critical in assessing the level of physical barriers in the provision of ‘BDEL services’. Under Special Condition (SC) 1 of the FTNS licence issued to WT&T in 1995, for example, coverage for commercial buildings was defined as ‘Point of Presence’ (PoP) which meant an optical fibre node installed within close proximity of a commercial building so as to allow the ready connection of customers located in that building to the network within a reasonable time so as to access the service provided by the licensee. Under SC1 of Local Wireless FTNS licences, a commercial building is covered if it is equipped with customer outdoor units and interfacing equipment which are ready for interconnection with the in-building blockwiring system for service provision. In these licences, however, the meanings of “close proximity”, “reasonable time” or “ready” were not specified. In defining these concepts, it is important to follow the economic principles of ‘contestability’, i.e., not only the actual availability of alternative supply, but also the potential entry of alternative supply promptly in response to price changes. The TA is also aware that some of the operators mentioned by PCCW-HKTC are more focused on residential customers at the moment. However, it does not necessarily follow that these operators are not ready to enter the business market within their coverage areas in response to price changes.

Question 13: How should the ‘network coverage’ for the provision of ‘BDEL

¹³ See the Road Opening Guidelines (Issue 2) dated 12 December 2001.

¹⁴ Section 14 of the Ordinance and the Building (Amendment) Ordinance 2000.

¹⁵ TA Statement *Class Licence for In-Building Telecommunications Systems* dated 11 October 2002.

services’ be defined, especially the concepts of ‘close proximity’, ‘reasonable time for service provision’ and ‘readiness for connection’ in a numerical context?

Question 14: Each individual operator is requested to supplement its comments with information on its own network coverage, including a coverage map, breakdown in the number of commercial buildings/tenants covered in individual districts and the percentage of the total number of tenants covered in commercial buildings in Hong Kong, based on the coverage definition under Question 13.

Economic barriers

30. The rollout of fixed telecommunications networks typically involves intensive fixed capital investment, and therefore the degree of scale economy for fixed-line services is relatively high, especially in terms of last-mile facilities. New entrants may not be able to match the cost base of the incumbent without attaining a sizeable critical mass of customers within a local area or even a commercial building. One mitigating factor is that the addressable market for ‘BDEL services’, i.e. the business districts, is concentrated in location, thus lowering the capital intensity of network investments in last-mile facilities.

Question 15: Does the level of capital intensity in fixed network investments, especially ‘last-mile’ facilities, constitute economic barriers to entry for the market of ‘BDEL services’?

Strategic barriers, advantages of incumbency and established customer base

31. It has been 8 years since the beginning of the liberalization of the local fixed-line market in Hong Kong. Although PCCW-HKTC is still regarded as dominant in the market of ‘BDEL services’ for the time being, the TA considers it necessary to assess whether any residual advantage it enjoys should increasingly be attributed to merits rather than an advantage from incumbency or an established customer base. .

Question 16: To what extent do the strategic behaviour, advantages of incumbency and established customer base of PCCW-HKTC constitute barriers to entry in the market of ‘BDEL services’?

Type II interconnection policy review

32. The TA is currently reviewing his policy on Type II interconnection¹⁶, with a decision expected by early 2004. Matters for this review include, amongst other things, whether ULL should continue to be mandated for the incumbent carrier, whether the concept of 'bottleneck' or 'essential facilities' should be introduced, and whether a 'ladder' structure of interconnection charges should be applied to facilities of different degrees of essentiality. Although it is beyond the scope of this consultation for the industry to comment on the issues related to Type II interconnection, the outcome of the policy review may affect the level of physical or economic barriers to entry for the market of 'BDEL services'. The TA estimates that around 50% of business fixed-lines of PCCW-HKTC's competitors currently rely on ULL for service provision. However, the TA would like to assure the industry that his analysis and conclusions on the level of entry barriers to the market of 'BDEL services', which is an important but not the only factor to consider for both the Application and the Type II interconnection policy review, will be consistent.

Question 17: Would the ongoing policy review on Type II interconnection have a bearing on the physical or economic barriers to entry in the market of 'BDEL services', and if yes, in what way?

Product differentiation and sales promotion

33. A licensee which dominates a market may be less inclined to differentiate its product from a competitor's or to engage in serious sales promotions to attract customers. It has an established customer base which means a new entrant has to incur higher advertising costs to gain market share. A licensee in a competitive market must be responsive to consumer requirement. This in turn stimulates other licensees to respond to changes by supplying increasingly differentiated products, i.e. service innovation.

34. The TA, through the tariff approval process, is well aware of the frequency and extent of the product differentiation and sales promotion activities by PCCW-HKTC on 'BDEL services', but it is more difficult for him to keep abreast of similar activities by other competitors. It is necessary for the TA to see the full picture of the market in order to form an opinion as to whether PCCW-HKTC is a leader or follower

in these activities within the market of ‘BDEL services’.

Question 18: How frequent and deep are the product differentiation and sales promotion activities by PCCW-HKTC as well as other competitors in the market of ‘BDEL services’?

The nature of corporate relationships

35. This factor looks at the extent to which a licensee is vertically integrated. A licensee which controls all aspects of the production and distribution process is more likely to be unconstrained by its competitors in pricing and to be able to operate independently of its competitors.

36. The TA considers that ‘BDEL services’ is largely a vertically integrated service on its own, no matter for PCCW-HKTC or other FTNS licensees. As such, there may not be any concern over corporate relationships. However, depending on the definition of the functional market for ‘BDEL services’, PCCW-HKTC may have a degree of control over local loop facilities, which it has partially opened up for Type II interconnection for the time being.

37. At present, all of PCCW-HKTC’s affiliated entities, including but not limited to Reach Networks (Hong Kong) Limited and PCCW IMS Limited, is considered to be non-dominant by the TA in the provision of substantially all the major telecommunications services. Therefore, no concern over corporate relationships should arise in case the TA declares PCCW-HKTC non-dominant in the market of ‘BDEL services’. However, depending on the scope of the product market definition for ‘BDEL services’, there could be other telecommunications services provided by PCCW-HKTC itself in which markets it is still dominant, such as residential fixed-line and local leased line services. In any case, these concerns are not exactly vertical integration in nature.

Question 19: Is there any vertical integration concern arising from the nature of corporate relationships between PCCW-HKTC and its affiliated companies, or among different services provided by PCCW-HKTC itself, in relation to the provision of ‘BDEL services’?

¹⁶ Consultation Paper *Review of the Regulatory Policy for Type II Interconnection* dated 23 May 2003

Universal Service Obligation (USO)

38. Based on the existing universal service policy, BDEL services fall within the definition of ‘basic services’. As such, PCCW-HKTC is currently assuming the USO for the provision of BDEL services. In case PCCW-HKTC is declared non-dominant, Hong Kong will still need a universal service provider (USP), be it PCCW-HKTC or another operator. However, the TA observes that it may still take some time before the competitors of PCCW-HKTC can match its local fixed network coverage. Besides, the TA has not yet evaluated whether it is feasible or efficient to split the USO into different services, such as BDEL and RDEL, for different operators. Therefore, it may not be realistic for the TA to consider shifting the USO in the near future.

39. The TA is mindful of the potential difficulties that may arise if the USO is undertaken by a non-dominant entity:

- *Price discrimination* across different areas may not be compatible with the USO policy, which has the objective to ensure access to affordable basic telecommunications services on a non-discriminatory basis, irrespective of geographic location.
- *Unregulated price discounts* by the USP may turn some of its otherwise ‘economic’ customers into ‘uneconomic’ customers, thus inflating the total amount of universal service cost that would be unfairly borne by its competitors.
- *Service bundling* of the USP’s BDEL services with other services may be an unfair advantage because the USO effectively expands the addressable market for the USP towards ‘uneconomic’ customers where other operators cannot compete.

In summary, a declaration of non-dominance leading to price discounts, price discrimination and service bundling by the USP may adversely prejudice the USO policy. Having said that, the TA may address these issues separately through a possible review on the current universal service policy, the methodology of calculating the universal service cost and/or making the declaration of non-dominance subject to a ‘price cap’ control to ensure access to affordable basic telecommunications services even in geographic locations where there is insufficient competition to the USP’s services.

Question 20: In case the TA declares PCCW-HKTC non-dominant in the market of ‘BDEL services’, should he review the USO assignment?

Conversely, should the TA take into account the USO of PCCW-HKTC in assessing its market position for ‘BDEL services’?

Question 21: Should the methodology of calculating universal service cost be reviewed if PCCW-HKTC is declared non-dominant in the ‘BDEL services’ market?

Question 22: Should a ‘price cap’ control be imposed as a condition for a declaration of non-dominance to safeguard against price increases in geographic locations where there is insufficient competition to PCCW-HKTC’s services?

Ex-ante and ex-post regulation

40. PCCW-HKTC submits that a declaration of non-dominance simply reflects a shift from *ex-ante* regulation to *ex-post* regulation, which would not lessen the regulatory power of the TA. Specifically, it would still be subject to the provisions under section 7K of the Ordinance, or equivalently GC 15 of the Licence, against anti-competitive conduct in the market of ‘BDEL services’. However, the TA is also mindful of the implication of rendering the prohibition of certain strategic behaviour, such as predatory pricing, price discrimination and tying arrangements under section 7L of the Ordinance or GC 16 of the Licence inapplicable. Therefore, the implications of any non-dominance declaration may go beyond a mere shift from *ex-ante* to *ex-post* regulation.

Question 23: In case the TA declares PCCW-HKTC non-dominant in the market of ‘BDEL services’, would *ex-post* regulation under section 7K of the Ordinance or GC 15 of the Licence suffice as the safeguard for competition?

41. The TA is aware that in overseas jurisdictions, for example, the UK and Australia, there is an interim stage where after the liberalization and emergence of competition in the historical monopolistic fixed-line market, the incumbent would be allowed pricing flexibility by abolishing the *ex ante* tariff approval regime while relying on *ex post* competition enforcement to control any abuse by the dominant incumbent. The effect of this approach is that the incumbent (without being declared non-dominant in the market) is allowed pricing flexibility in response to competition so long as it does not abuse its dominant position (e.g. predatory or exploitative pricing). However, GC44 may not be able to accommodate this approach. Under GC44, waiver

of the tariff approval requirement is conditional upon a declaration of non-dominance. After enactment of the Telecommunications (Carrier Licences) Regulation, existing FTNS licensees are entitled to surrender their FTNS licences in exchange for a Fixed Carrier Licence. Although it is envisaged that the existing rights and obligations should be carried forward to the new carrier licence, this may offer an opportunity for the equivalent GC44 to be modified with the consent of PCCW-HKTC to give effect to an interim stage of regulation by de-linking the waiver from a declaration of non-dominance. The TA acknowledges that this approach constitutes a deviation from the existing licensing regime and could not be implemented unless:

- (a) the industry has been adequately consulted; and
- (b) PCCW-HKTC surrenders its FTNS licence and consents to the proposed amendments to the equivalent GC44.

Question 24: In case the TA finds that PCCW-HKTC remains dominant in the market of ‘BDEL services’, should he consider waiving the tariff approval requirement while maintaining the dominant status of PCCW-HKTC, similar to the approach taken by other jurisdictions for the ‘interim stage’ of market competition? If so, should such an approach be effected by amending the equivalent GC44 during the grant of a Carrier Licence upon surrender of the existing FTNS licence by PCCW-HKTC?

Conditions

42. As explained in paragraph 5, if the TA declares PCCW-HKTC non-dominant in the market of ‘BDEL services’, he may waive either one or any combination of GC 17, 20, 21, 22 and 23 of the Licence, or specific obligations thereunder. The declaration of non-dominance would also be for such period and on such conditions as the TA may determine. These conditions comprise accounting separation, tariff approval and publication of tariff requirements. While tariff approval is for *ex ante* control, accounting separation is a vital tool to detect or safeguard against predatory pricing, margin squeezing and cross-subsidization for both *ex ante* and *ex post* regulation. Tariff publication is for enhancing transparency and is currently applied indiscriminately to dominant and non-dominant operators.

43. It should, however, be emphasized that the economic analysis carried out in this consultation is for the purpose of determining whether PCCW-HKTC should be

declared non-dominant for the purpose of GC 44. This is without prejudice to future competition law investigation and decisions as markets defined in specific cases under section 7K to 7N of the Telecommunications Ordinance (or related licence conditions) may not always be identical with this exercise. It is thus incumbent upon the licensee to keep abreast of changes in the markets and to comply with all relevant statutory or licence obligations applicable to it.

Question 25: In case the TA declares PCCW-HKTC non-dominant in the market of ‘BDEL services’ or the approach suggested in paragraph 41 is adopted, should he waive either one or any combination of GC 17, 20, 21, 22 and 23, or specific obligations thereunder?

Question 26: In case the TA declares PCCW-HKTC non-dominant in the market of ‘BDEL services’ or the approach suggested in paragraph 41 is adopted, should he impose a ‘probationary’ period and/or any special condition?

Invitation for comments

44. The TA invites comments from the telecommunications industry and other interested parties on the Application. Comments should be made in writing and reach the Office of the Telecommunications Authority **on or before 22 November 2003**. The TA reserves the right to publish all views and comments and, accordingly, any part of a submission considered commercially confidential should be clearly marked together with the reasons for such claims.

45. Submissions should be addressed to:

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29/F Wu Chung House
213 Queen’s Road East
Wanchai
Hong Kong
[Attention: Mr. Herbert Fung]
Fax: 2803-5112
E-mail: hchfung@ofta.gov.hk

An electronic copy of the submission should be provided by e-mail to the

address indicated above.

Office of the Telecommunications Authority
23 September 2003