

**APPLICATION FOR A DECLARATION OF NON-DOMINANCE
IN THE RETAIL EXTERNAL CALL SERVICES MARKET
FOR ALL THE ROUTES OVER WHICH
PCCW-HKT TELEPHONE LIMITED
IS STILL REGARDED AS DOMINANT**

Statement of the Telecommunications Authority, Hong Kong

8 October 2002

BACKGROUND

1. On 25 April 2002, the Telecommunications Authority (“TA”) received an application by PCCW-HKT Limited¹ (“PCCW-HKT”) on behalf of PCCW-HKT Telephone Limited² (“PCCW-HKTC”) for a declaration of non-dominance in the retail market for external call services (the “Application”) on all the routes over which it is still regarded as dominant (the “Routes”). See **Appendix I** for a list of the Routes.

2. PCCW-HKT has provided the following justifications for a declaration of non-dominance on the Routes:

- (a) The structural separation of PCCW-HKTC from Reach Networks Hong Kong Limited (“Reach Networks”) renders the former simply a reseller of the latter’s wholesale gateway service, and arguably at a disadvantageous position to those Fixed Telecommunications Network Services (“FTNS”) and External FTNS (“EFTNS”) licensees which own external facilities and are vertically integrated;
- (b) Retail price competition on the Routes is intensive and PCCW-HKTC is generally not a price leader but rather a price follower;
- (c) PCCW-HKTC’s traffic volume on the Routes is insignificant, such that granting non-dominance on a collective basis will not

¹ Formerly known as Cable & Wireless HKT Limited. It wholly owns PCCW-HKTC. It also indirectly holds a 50% share interest in REACH Ltd. which has an indirect 100% share interest in Reach Networks Hong Kong Limited (formerly known as PCCW-HKT International Limited and, before that, as Cable & Wireless HKT International Limited). Reach Networks Hong Kong Limited holds an external FTNS licence

² Formerly known as Cable & Wireless HKT Telephone Limited. It holds a Fixed Telecommunications Network Services (FTNS) Licence

affect competition, but instead ease the administrative burden for the industry and benefit consumers;

- (d) PCCW-HKTC's statistics demonstrate that its collective market share over the Routes was well below 50% as at January 2002, and the routes where it has individual market shares of above 50% represent only a minority of the Routes and the traffic volume concerned was immaterial;
- (e) There is no wholesale supply constraint, as Reach Networks is required to offer connectivity over the Routes to PCCW-HKTC's competitors at arm's length. There are also viable alternatives to Reach Networks' gateway through transit and refile;
- (f) It is impossible for PCCW-HKTC to use its profits generated from incoming call services to finance deep discounts on outgoing call services, as there are sustainable alternatives for the Routes and the amount of Modified Delivery Fee ("MDF") received from Reach Networks is rather insignificant to accord any meaningful advantage to PCCW-HKTC's retail services.

3. On a separate but related account, the TA received a request from PCCW-HKT on 21 December 2001 (the "Request") for reconsideration of the conditions imposed under the TA direction on 4 August 1999 (the "1999 Direction"), subsequently reinstated by the TA in the directions issued to PCCW-HKTC on 28 September 2000 (the "2000 Direction") and 10 August 2001 (the "2001 Direction"), in relation to prices and offers of retail external call services for the routes where PCCW-HKTC has been declared non-dominant (the "Conditions"). The Conditions are summarized as follows:

- i) To establish systems and controls so as to ensure its compliance with its pricing obligations;*
- ii) To ensure that necessary information regarding the provision of the services declared to be non-dominant (i.e. breakdown of costs, business case, etc.) be kept on file in full details so as to respond within two working days to requests for information by the TA in investigating complaints about pricing; and*
- iii) PCCW-HKTC may not impose a minimum period of contract between itself, or any other affiliated company, and the customer*

for offering any tariff or package of tariffs or discount to a customer.

4. PCCW-HKT has provided the following justifications for removing the Conditions:

- (a) The Conditions are inconsistent with the TA's non-dominance decision by re-establishing a more limited set of dominance controls;
- (b) PCCW-HKTC should be treated equitably and in a non-discriminatory manner. The Conditions should either be lifted or applied equally to all non-dominant licensees over Category A destinations;
- (c) The structural separation of PCCW-HKTC from Reach Networks renders the former simply a reseller of the latter's wholesale gateway service, and Reach Networks deals with PCCW-HKTC on an arm's length and non-discriminatory basis;
- (d) Competition on external telecommunications facilities and services is intensive;
- (e) PCCW-HKTC's obligations under the amended Telecommunications Ordinance and its FTNS license conditions are sufficient to serve the purpose of the Conditions, and the TA has sufficient regulatory power to act swiftly against anti-competitive conduct on an *ex post* basis;
- (f) Term discounts and bundling arrangements are generally accepted industry best practices that are not *per se* anti-competitive as long as they involve no abuse of dominance. The dominance restrictions on other parts of the PCCW-HKT group are sufficient to avoid such abuses.

5. In response to the Application and the Request, the TA published on 12 July 2002 a consultation paper together with the actual documents of PCCW-HKT, after excluding such information as the TA considered commercially confidential. The TA invited comments on the Application and the Request, and asked the following questions in particular:

Question 1: whether the approach set out in the August 1999 Non-Dominance

Statement and the September 2000 Extension Statement upon which TA examined PCCW-HKTC's application and request, his findings and his conclusions are still valid under the present state and competitive nature of the market, in particular whether PCCW-HKTC's non-dominance applications should continue to be evaluated on a route-by-route basis, or collectively.

Question 2: the degree of vertical integration between PCCW-HKTC and Reach Networks and in particular, whether PCCW-HKTC enjoys any benefit of being vertically integrated at a wholesale and retail level, rather than being simply a reseller.

Question 3: the level of competition, including market share, pricing power and supply constraints. In particular, PCCW-HKT's claim that competition is intense, their collective market share on the Routes is consistently below 50%, Reach Networks deals with PCCW-HKTC at an arm's length and on a non-discriminatory basis, and alternative wholesale suppliers are available via transit and refile.

Question 4: whether the Conditions are fair, appropriate and necessary as the competitive safeguard, and whether the TA should lift the Conditions in full or in part. In particular, PCCW-HKT's accusation of inconsistency and discrimination.

Question 5: whether PCCW-HKTC can use the MDF received from Reach Networks for incoming traffic to finance deep discounts on outgoing call services, should the TA consider that PCCW-HKTC is no longer dominant on some or all of the Routes. In particular, PCCW-HKTC's claim that transit and refile are available and the amount of MDF it collects is insignificant; and

Question 6: what conditions, if there is any apart from the Conditions, should the TA impose should he consider that PCCW-HKTC is no longer dominant in some or all of the Routes, and what other relevant matters should he take into account in considering whether PCCW-HKTC is dominant or not.

6. The consultation paper also stated that the Application and the Request should be read in conjunction with previous TA decisions, in particular “*Local Access Charge and Modified Delivery Fee Arrangements*” dated 25 November

1998 (the “November 1998 LAC & MDF Statement”), “*Application for a Declaration of Non-Dominance in the International Call Services Market for Non-China Routes by Cable & Wireless HKT Telephone Limited*” dated 4 August 1999 (the “August 1999 Non-dominance Statement”) and “*Application for the Extension of the Direction issued to Cable & Wireless HKT Telephone Limited on 4 August 1999 pursuant to General Condition 44 of its Fixed Telecommunications Network Services Licence in response to ‘Application for Declaration of Non-dominance in the International Call Services Market for Non-China Routes’ by Cable & Wireless HKT Limited*” dated 28 September 2000 (the “September 2000 Extension Statement”). These documents, and past documents issued by the TA concerning PCCW-HKT’s applications for declaration of non-dominance of PCCW-HKTC in the retail external call services market and the reclassification of Category B routes, are available on the web site of Office of the Telecommunications Authority at www.ofta.gov.hk.

Previous Non-Dominance and Reclassification Applications

7. On 1 January 1999, following the liberalisation of the external telecommunications services market, interconnection arrangements between external services operators and local network operators changed and external traffic routes were divided into Category A and Category B routes. Category A routes include those with genuine competition at the wholesale external gateway level and Category B are those reliant on a single external gateway operated by PCCW-HKT (now operated by Reach Networks Hong Kong Limited³). Within Category B routes, there are routes which are classified as “Category B Routes on the Observation List”, being the potentially competitive external traffic routes through indirect means such as transit and refile.

8. The TA set out the criteria and procedures for route categorisation in the November 1998 LAC & MDF Statement (paragraph 7-14). According to these criteria and procedures, the Routes, together with others which have since been reclassified as Category A routes, were classified as Category B routes in accordance with the TA’s statement “*Local Access and Modified Delivery Fee*

³ Formerly known as PCCW-HKT International Limited and before that, as Cable & Wireless HKT International Limited. It, from 30 March 1998 till 30 January 2001, together with PCCW-HKTC and PCCW-HKT CAS Limited held jointly and severally a FTNS licence issued on 29 June 1995. As from 31 January 2001, it holds an external FTNS licence. It is 100% owned by REACH Ltd., which in turn is 50% owned by PCCW-HKT through indirect share holdings, and the other 50% by Telstra Corporation Limited which is a company incorporated in Australia.

Arrangements – Classification of Routes into Categories A & B” on 24 December 1998.

9. In January and April 1999, PCCW-HKT filed two applications to the TA respectively for re-classification of eleven routes on the Category B Observation List. However, in the TA Statement of 4 August 1999 the applications were rejected but control of gateway prices in the outgoing direction for all routes, except Vietnam, was removed on the basis that genuine price competition could be established in the outgoing direction. However, delivery fee mechanism remained in effect for these routes because competition in the incoming direction had not been established.

10. On 15 April 1999, PCCW-HKT sought a declaration of non-dominance for the external call services market for non-China routes. The TA issued the August 1999 Non-dominance Statement that dealt with dominance classification of PCCW-HKTC in the retail services market over routes outside those to/from Mainland China. Where a route has been classified as Category A in the wholesale external gateway services market, PCCW-HKTC should also be regarded as non-dominant in the associated retail external call services market. The declaration for non-dominance given to Category A routes, in the form of the 1999 Direction, was subject to conditions. The TA also imposed a time limit for the non-dominance declaration till 30 September 2000.

11. On 1 September 2000, PCCW-HKTC made an application for an indefinite and unconditional extension of the declaration referred to in paragraph 10 for non-dominance in the retail market over Category A routes. The TA subsequently agreed to extend the approval subject to the same conditions and agreed to review this situation in 18 months. The September 2000 Extension Statement and the 2000 Direction (replacing the 1999 Direction) were issued to this effect.

12. On 21 January 2000, PCCW-HKT filed an application for a declaration for non-dominance of PCCW-HKTC over Mainland China routes. On 25 May 2000 this application was rejected in the TA statement “*Application for a Declaration of Non-Dominance in the External Call Services Market for Mainland China Routes by Cable & Wireless HKT Limited*”. On 23 October 2000 PCCW-HKT submitted an application for the reclassification of Mainland China routes to Category A and, upon reclassification declaring PCCW-HKTC non-dominant in the retail market. The TA approved the application and issued a statement “*Application by PCCW-HKT for Reclassification of Mainland*

China Routes as Category A and Declaration of Non-Dominance in the Retail Market for External Call Services over Mainland China Routes” to this effect on 17 January 2001. This declaration of non-dominance over Mainland China routes was also subject to the same conditions stipulated in the 2000 Direction.

13. On 23 February 2001, PCCW-HKT submitted an application to the TA for a declaration for non-dominance in the retail market over eight routes⁴ on the Category B Observation List. On 27 March 2001, Reach Networks submitted an application to the TA for reclassification of these eight routes as Category A routes. On 24 July 2001, the TA decided that the Indonesia and Malaysia routes should be re-classified as Category A routes and PCCW-HKTC be automatically declared non-dominant in the retail market, and the gateway price control for Vietnam route should be lifted⁵. The TA statement entitled “*Application for Reclassification of Category B Observation List Routes as Category A Routes by Reach Networks Hong Kong Limited*” was issued on 24 July 2001 to this effect. On 10 August 2001, the TA decided that PCCW-HKTC should be declared non-dominant in the retail market over five of the remaining routes⁶, but should remain dominant over the Vietnam route. The TA statement entitled “*Application for a Declaration of Non-dominance in the Retail External Call Services Markets for Category B Observation List Routes by PCCW-HKT Telephone Limited*” (“August 2001 Non-Dominance Statement”) and the 2001 Direction, replacing the 2000 Direction, were issued on 10 August 2001 to this effect.

14. With the declaration of non-dominance over the seven routes under the 2001 Direction, the TA lifted the conditions imposed to PCCW-HKTC under the 1999 Direction and reinstated in the 2000 Direction relating to the disclosure and use of customer information between PCCW-HKTC and Reach Networks, in view of the structural separation between the two entities and their respective license conditions being sufficient. However, the TA was of the view that the remaining conditions (the Conditions referred to in the Request) should continue to apply in order to protect competition and avoid any abuse of dominance over Category B routes. He maintained his commitment under the 2000 Direction to review his decisions and findings in 18 months from 28 September 2000.

⁴ India, Indonesia, Malaysia, Pakistan, South Africa, Sri Lanka, Thailand and Vietnam.

⁵ Prior to 24 July 2001, Vietnam was the only route on the Category B Observation List that remained controlled by gateway prices in the outgoing direction.

⁶ India, Pakistan, South Africa, Sri Lanka and Thailand.

15. On 9 August 2002, the TA received an application from Reach Limited on behalf of Reach Networks for a reclassification of all the remaining Category B and Category B Observation List routes, including but not limited to the same destinations as the Routes. In this regard, the TA is preparing a separate industry consultation process, independent to the present Application.

THE SUBMISSIONS

16. In response to the industry consultation, the TA received seven submissions from the following parties (in alphabetical order):

- (a) Apple Communications (HK) Limited (“Apple”)
- (b) Hong Kong Broadband Network Limited (“HKBN”)
- (c) Hutchison Global Communications Limited⁷ (“HGC”)
- (d) New World Telephone Limited (“NWT”)
- (e) PCCW-HKT Limited (“PCCW-HKT”)
- (f) Reach Limited (“Reach”)
- (g) Wharf New T&T Limited (“WNTT”)

17. Of the submissions, only PCCW-HKT and Reach consider that the TA should accede to the Application and the Request. The remaining submissions generally do not support a collective assessment of PCCW-HKTC’s dominance over the Routes given the lack of substitutability, and consider a route-by-route analysis to be more appropriate, effective and consistent. HKBN expresses the concern that even insignificant volume from the Routes might generate significant revenues and wider profit margins due to relatively higher tariffs. Most submissions challenge the extent of structural separation between PCCW-HKTC and Reach Networks, and express doubt over “arm’s length” in practice. WNTT and HKBN consider that PCCW-HKTC’s dominance in the local fixed line market has a significant influence over the external call services market. Apple and HKBN consider that LAC/USC payments provide PCCW-HKTC with a cash flow advantage over its competitors. WNTT considers that PCCW-HKTC can use its MDF receipts to finance discounts on outgoing external call services, while Apple, HGC and NWT declined to comment without the actual data on such MDF receipts. NWT also considers the Conditions to be necessary

as an *ex ante* safeguard to competition.

ANALYSIS

General

18. In considering the Application and the Request, the TA has followed the approach set out in the “Guidelines to Assist the Interpretation and Application of the Competition Provisions of the Fixed Telecommunications Network Services (FTNS) Licence” issued by the TA in June 1995, the August 1999 Non-Dominance Statement and the September 2000 Extension Statement.

19. The TA first confirmed whether the relevant market defined in his August 1999 Non-dominance Statement is still valid. He then assessed whether PCCW-HKTC is dominant in the relevant market by examining its market share, the fluctuation of market share, market concentration, barriers to entry, pricing of the services over time, any vertical relationships that may exist, the competitive safeguard provisions in PCCW-HKTC’s FTNS licence and the constraints still in place where PCCW-HKTC or Reach Networks are still dominant. After the TA established the position of PCCW-HKTC in the relevant market, he considered whether the Application and the Request should be fully or partially acceded to.

Legal basis

20. General Condition (GC) 44 of the FTNS Licence issued to PCCW-HKTC (the Licence) provides that if the TA considers that the licensee is non-dominant with respect to any market for telecommunications services provided under the licence, he may exempt that licensee from certain licence obligations in relation to that market. These obligations include the implementation of specified accounting practices, obtaining prior approval of the TA for the tariffs of new services or the revisions of existing tariffs, and a prohibition on unauthorised discounts from the tariffs approved by the TA. GC 44 also provides that the TA may lift any such obligations either completely or in part and for such period and on such conditions as he may determine. The TA Statement and Direction of August 1999, September 2000 and August 2001

⁷ Then called Hutchison Global Crossing Limited

were all issued on this basis, and the Application is being processed on the same basis.

Relevant market

Product Market

21. In the August 1999 Non-Dominance Statement, the TA accepted that the general scope of the “external call services market” is:

“... the market for international call services which exclude those provided by operators of mobile services and through Self-Provided External Telecommunications Systems (SPETS) but include... International Simple Resale (ISR) services for fax and data and International Virtual Private Network (IVPN) services” (paragraph 19-20).

22. The TA noted that all submissions, except WNTT, were silent to the definition of the scope of the relevant market. WNTT reiterated the same argument made in its responses to previous non-dominant applications by PCCW-HKTC that the relevant market should include the provision of access to end users and connectivity to external call services in Hong Kong. The TA stated in the August 1999 Non-Dominance Statement (paragraph 20) that he had considered its comments as well as other submissions at that time and, for the reasons set out in previous reports, he was not satisfied that it was appropriate to widen the scope of the relevant market to include local access and connectivity⁸. In considering the Application and the Request, the TA considers that the same definition on the scope of the “external call services market” remains valid.

Functional Market

23. The TA noticed that, among the submissions, there are some confusions between the dominance/non-dominance classification of routes in the *retail* external call services market and the Category A/B classification of routes in the *wholesale* gateway services market. As explained in paragraph 7,

⁸ See paragraphs 3.4 to 3.9 of “Telecommunications Authority’s Findings and Conclusions” on “Application from Hong Kong Telephone Company Limited for a Declaration of Non-Dominance in the International Call Services Market” issued on 23 May 1998.

external call destinations are divided into those with genuine competition at the wholesale level (Category A Routes) and those without (Category B Routes).

24. In the August 1999 Non-Dominance Statement, the TA was satisfied that, for those routes which have been classified as Category A at the wholesale level, PCCW-HKTC should automatically be declared non-dominant at the retail level. However:

- PCCW-HKTC may *not* necessarily remain dominant at the retail level over Category B Routes; and
- the declaration of non-dominance at the retail level over certain route(s) does *not* necessarily trigger a reclassification of the same route(s) from Category B to Category A at the wholesale level.

25. In the August 2001 Non-Dominance Statement, the TA declared PCCW-HKTC non-dominant over five routes⁹ on the Category B Observation List for being satisfied that, among other factors, there was no barrier to entry arising from any lack of alternative wholesale service suppliers at competitive prices in the outgoing direction (paragraph 37). However, these five routes remained on the Category B Observation List due to the lack of competition in the incoming direction.

26. PCCW-HKT and Reach submit that transit and refile contributed to intense wholesale competition in the outgoing direction over the Routes. In the November 1998 LAC & MDF Statement, the TA stated that transit and refile arrangements will be taken into account when assessing the level of wholesale competition (paragraph 7). The TA noticed that the other submissions were silent to this approach, apart from WNTT. WNTT's submission (and the example of calling Macau and East Timor) highlighted that the supply-side substitutability between destinations brought about by refile at the wholesale level ought to be considered separately from the demand-side substitutability at the retail level.

27. Taking into account the above clarifications, the TA considers that the definition of the external call services market at both the wholesale and retail levels remain valid.

⁹ India, Pakistan, South Africa, Sri Lanka and Thailand.

Geographical Market

28. In the Application, PCCW-HKTC proposed a collective assessment of dominance over the Routes, as opposed to route-by-route analyses performed in previous non-dominance applications, for the reason of administrative ease, given the insignificant traffic generated from the Routes. Reach supports the proposal by quoting the TA statements¹⁰ where Reach and PCCW-HKTC were declared non-dominant in the “external bandwidth services” market at the wholesale and retail levels respectively, based on a collective assessment of destinations. Reach reckons that “external call services” is a downstream market to “external bandwidth services” and therefore the Application should also be processed on a collective basis. In the same TA statements, however, the TA considered that:

“the ‘external bandwidth services’ are basically for the supply of capacity dedicated to the customers. As such, ‘switched’ or ‘on-demand’ services which provide capacity to the customers upon request and the capacity is shared by customers... including IDD, Internet and VPN services are therefore not in the ‘external bandwidth services’ market relevant to the ...Application” (paragraph 59 of TA Statement of 1 June 2002)

29. Therefore, the TA considers that “external bandwidth services” and “external call services” constitute two different markets. While there may be a wholesale/retail relationship between external gateway services and external call services, there is no direct wholesale/retail relationship between “external bandwidth services” and “external call services”, and they do not necessarily exhibit similar competitive behaviours. The TA observes that international settlement is the most significant cost component for external gateway services, and hence external call services, but the settlement rates have not apparently moved in line with the decline in bandwidth costs globally, and the levels remain distinct for every individual route. The TA is not satisfied that the definition of the “external call services” market *must* adhere to the collective basis adopted for the “external bandwidth services” market.

30. Following the approach set forth in the August 1999 Non-Dominance Statement, the TA has revisited the cross-elasticity of demand and supply

¹⁰ “Application by Reach Limited for a Declaration of Non-Dominance in the Market for External Bandwidth Services” dated 15 March 2002; and “Application by PCCW-HKT Telephone Limited for a Declaration of Non-Dominance in the Market for External Bandwidth Services” dated 1 June 2002.

between destinations, product characteristics, pricing difference, judgement by participants and distinct sellers/buyers of the external call services market. Supply-side substitutability across destinations is found to be on the rise with increasing availability of transit and refile, driven by bandwidth prices decline as well as the development and sophistication of regional telecommunications hubs. On the demand side, consumers are less likely to shop around for the best offers route by route because operators typically set their tariffs over the Routes at the same level. However, IDD call delivery to different destinations are still not good substitutes against each other, and tariffs remain distinct for every individual route, and at both the wholesale and retail levels.

31. The TA stated in the August 1999 Non-Dominance Statement that, *“like all other market definitions – in particular in a fast moving telecommunications market – the definition can never be static and that in the future this may no longer be appropriate”* (paragraph 18). While the retail external call services market is becoming less and less segregated across different destinations, especially over the Routes, the TA does not consider the market to be fully synthesized yet. Therefore, he considers a pure collective assessment on the Application to be inappropriate and imprudent. Instead, the TA will first conduct a route-by-route analysis, and on top of which he will make further observations on a collective or grouped basis. He will then consider whether collective or grouped observations should contribute to his decision. The TA does not accept insignificant traffic and administrative ease to be the rationale for a collective assessment, but will take into account any difference in consumer and producer behaviours over the minority routes.

32. In regard to the origination, the TA remains satisfied that the relevant geographical market should be the whole of Hong Kong, and the relevant market share assessment should be based on outgoing external call traffic from Hong Kong.

ASSESSMENT OF DOMINANCE

Factors relevant to the assessment of dominance

33. The TA considered a number of factors in assessing whether PCCW-HKTC is in a position of dominance in the relevant markets on the Routes, including:

- (a) market share;

- (b) barriers to entry;
- (c) prices;
- (d) vertical integration; and
- (e) other relevant factors.

Market share

34. The TA stated in the “*Guidelines to Assist the Interpretation and Application of the Competition Provisions of the FTNS Licence*” issued in June 1995 that:

“Market share is an important, but not the sole determinant, of a licensee’s dominance in a market. While a very large market share will ordinarily be given a high weighting, the TA will not presume that it alone indicates a position of dominance. The TA will look at the market share of the competitors (collectively and individually) and at other behavioural and conduct factors in making his determination of whether a licensee is dominant”. (paragraph 37)

35. The TA stated in the August 1999 Non-Dominance Statement that:

“the TA has considered that if a firm has a market share persistently above 50%, it is likely that it is dominant. Therefore, when looking at the other market conditions, he needs to satisfy himself that these demonstrate that the market is competitive and/or contestable before he would classify a firm with market share above 50% as non-dominant. The opposite applies where the market share is consistently below 50%. In these cases, the TA will consider that it is more likely that the firm is not dominant and in examining the other market conditions, he will look to see if these are such that make the market non-competitive and/or non-contestable before he would classify a firm with market share below 50% as dominant.” (paragraph 44).

36. The TA has, like in previous applications, looked at outgoing external traffic volumes to examine market share. Based on the figures reported by each licensee in the external call services market over the past 6 months, the TA calculated the actual market share of each of them in each of the Routes. The traffic figures used are supplied by each licensee on a monthly basis and were

not supplied specifically for the Application.

37. The TA examined the market shares of PCCW-HKTC and other licensees over each of the Routes for the period from January to June 2002 inclusive (the “Period”). The TA also examined the market concentration. In respect of market concentration, the TA stated in the August 1999 Non-Dominance Statement that:

“[market] concentration is the combined market share of the leading firms. It shows the degree of oligopoly/concentration in a market but it does not provide a full picture of whether it is competitive or not. An oligopoly market – even a duopoly – can be very competitive. However, the TA wished to stress that, like the market share figures, the concentration in the market by itself does not carry any significance.”
(paragraph 51)

38. Full details of the test results for each of the 190 routes under the Application are shown in **Appendix I**. Below is a summary description on selected individual routes that are either singled out in the Application for special attention or deemed relatively significant by the TA. In addition, some collective or grouped observations have been made.

Bangladesh

39. The Bangladesh route represented approximately 0.1% of total industry outgoing traffic during the Period. PCCW-HKTC’s market share was consistently below 25%. The second and the third biggest players had a steady combined market share of above 30%, and each of them had a market share of below 20%. The gaps between PCCW-HKTC and the second and third operators were both consistently below 10%.

Greece

40. The Greece route represented approximately 0.03% of total industry outgoing traffic during the Period. PCCW-HKTC was consistently the second biggest player in the market with a market share consistently below 25%. The biggest player had a very close market share to PCCW-HKTC, while the third biggest operator had a market share consistently between 10-20%.

Macau

41. The Macau route represented approximately 1.2% of total industry outgoing traffic during the Period. PCCW-HKTC’s market share was consistently below 40%. The second and the third biggest players had a steady

combined market share of approximately 30%, and each of them had a market share of below 20%. The gaps between PCCW-HKTC and the second and third players were both between 15-30%.

Nepal

42. The Nepal route represented approximately 0.2% of total industry outgoing traffic during the Period. PCCW-HKTC was consistently not among the top two players in the market, and had market share of approximately 10%. The biggest player in the market had a steadily rising market share from above 30% to above 50% during the period. The second biggest player had a market share between 15-20%.

Portugal

43. The Portugal route represented approximately 0.01% of total industry outgoing traffic during the Period. PCCW-HKTC's market share was consistently below 35%. The second and the third biggest players had a steady combined market share between 30-40%, and each of them had a market share consistently below 25%. The gaps between PCCW-HKTC and the second and third players were approximately 10% and 20% respectively.

Saudi Arabia

44. The Saudi Arabia route represented approximately 0.1% of total industry outgoing traffic during the Period. PCCW-HKTC was consistently not among the top three players, and with a market share consistently below 10%. Each of the top three players in the market had a market share consistently above 10%.

United Arab Emirates ("UAE")

45. The UAE route represented approximately 0.1% of total industry outgoing traffic during the Period. PCCW-HKTC was consistently the third biggest player with a market share between 10-20%. The first and second biggest players had a steady combined market share consistently above 30%, and each of them had a market share between 15-25%.

Afghanistan and Antarctica

46. PCCW-HKTC has consistently zero traffic over the Afghanistan and Antarctica routes during the Period. The industry traffic over the Afghanistan route was steady and finite. The market leader had a market share consistently above 50%, and the second biggest player had a market share of approximately 10%. The industry traffic over Antarctica was negligible.

East Timor and Palestine

47. The TA notices that the industry does not separately report traffic over the East Timor and Palestine routes during the Period. As such, he is satisfied that these two routes should be merged into the Indonesia and Israel routes respectively.

Collective and Grouped Observations

48. The TA has made the following collective and grouped observations:

- The Routes contributed approximately 3% of total industry outgoing traffic during the Period, and consistently less than 10% of industry revenues (i.e. based on traffic volume and weighted average tariffs).
- On a collective basis over the Routes, PCCW-HKTC was the market leader throughout the Period with a market share consistently below 30% of traffic. Both the second and third biggest operators had a market share of between 10-20%, and their gaps with PCCW-HKTC were both consistently less than 20%.
- PCCW-HKTC's collective market share over the Routes was not significantly different from, and occasionally lower than, its own market share over other non-dominant routes. In fact, they exhibited similar trends of decline during the Period.
- During the Period, PCCW-HKTC was consistently the market leader over 53 of the Routes, concerning 55% of industry traffic and 30% of industry revenues over the Routes. PCCW-HKTC was consistently not the market leader over 48 of the Routes, concerning 25% of industry traffic and 40% of industry revenues over the Routes.
- During the period, PCCW-HKTC's market share was consistently below 50% over 146 of the Routes, concerning over 95% of both industry traffic and revenues over the Routes. Its market share was consistently above 50% over 9 of the Routes, concerning 1% of industry traffic and 2% of industry revenues over the Routes.

Barriers to entry

49. As stated in paragraph 36 of the August 2001 Non-Dominance Statement, the TA was satisfied that there are no regulatory restrictions on the

number of operators that can offer external telecommunications services. There has not been any change in this respect.

50. The TA stated in the August 2001 Non-Dominance Statement that:

“ [By the definition of] Category B Observation List Routes... there are alternative wholesale services available at competitive prices in the outgoing direction... the TA is satisfied that there are no barriers to entry at the retail level arising from any lack of alternative wholesale service suppliers” (paragraph 37)(emphasis added).

51. For the time being, 7 of the Routes are classified as Category B Observation List Routes. For the remaining 183 of the Routes, the TA has followed the same approach in assessing the level of entry barriers. He has observed Reach Networks’ market share of outgoing external calls during the Period as an indicator for the availability of alternative wholesale services via transit and refile. The TA has also examined PCCW-HKT’s submission of a route-by-route refile cost¹¹ comparison against Reach Networks’ adjusted Gateway Price¹². Full details of the test results are shown in **Appendix I**. Below is a summary of the TA’s findings:

- During the Period, Reach Networks’ market share of outgoing traffic was consistently below 50% over 112 of the Routes, consistently above 50% over 23 of the Routes, and consistently 100% over 4 of the Routes.
- Refile rates are available for all but 4 of the Routes. Industry traffic over these 4 routes was negligible.
- For 177 of the Routes, refile costs are lower than Reach Networks’ adjusted Gateway Prices. Were the Gateway Prices unadjusted, refile costs would be unanimously lower for all of the Routes except where refile is unavailable.

52. Even for those 4 routes where refile rates are unavailable (Antarctica, Sakhalin, Iridium and Thuraya), the TA is satisfied that there is no entry barrier arising from any constraint in the supply of the wholesale services, as Reach Networks is mandated to provide wholesale external call services at the

¹¹ Refile cost = 2 * IPLC (half-circuit) per-minute cost + Refile Rate. The TA has scrutinized PCCW-HKTC’s assumptions on refile rates and IPLC cost based on available market information.

¹² PCCW-HKTC adjusted Reach’s Gateway Price by eliminating the profits shared from MDF receipts in the incoming direction according to the formula: Gateway Price – In/Out Ratio * (MDF-LAC-USC).

Gateway Price determined by the TA, and at arm's length to all retail external call service providers. As a matter of fact, PCCW-HKTC's retail market shares over these 4 routes fluctuated from 0% to 100% during the Period, as the industry traffic patterns over these routes typically comprise no more than a few calls per month, if any.

53. The TA stated in the November 1998 LAC & USC Statement that:

“From time to time, the TA could expand the coverage of the [Category B] observation list to include the potentially competitive routes by taking into account the trend of traffic flow and any other relevant information, such as the establishment of alternative correspondent relationship.” (paragraph 18)

54. The TA is mindful that, given the refile analysis results, it may be appropriate for him to expand the coverage of the Category B Observation List to most of the Routes which are currently classified as Category B, since the wholesale market is deemed competitive in the outgoing direction. However, in light of the concurrent reclassification application by Reach referred to in paragraph 15, the TA will conduct a full analysis separately on this matter.

55. In summary, given that Reach Networks is under the obligation of supplying wholesale external gateway services over the Routes to all retail external call service providers at Gateway Price determined by the TA, and that alternative routing in the outgoing direction is available through transit and refile over all of the Routes except four, the TA is satisfied that over the Routes, there is no entry barrier for the retail external call services market arising from any wholesale supply constraint.

Prices

56. As stated in the August 1999 Non-Dominance Statement, in examining the competitiveness of a market and whether a firm is dominant, the TA would look at the power of a licensee in making decisions as to pricing or other strategic matters. He would examine whether there is genuine independent price competition in the market or whether price changes are better characterized in terms of a leader-follower situation.

57. The TA observes that most of the Routes (apart from Macau and Portugal) are not popular ones that service providers regularly include in

promotional offers. Prices of all the major market players including PCCW-HKTC were the same, and there have been no substantial market price changes during the Period. He also observes that the tariff levels over the Routes are generally higher than that over more popular routes. The TA does not consider this to be unreasonable given the relative diseconomies of scale in providing services over the minority destinations. Moreover, it is often the offshore carriers in non-competitive markets who make monopoly profits by keeping international accounting rates at high levels, rather than the gateway operators or service providers in Hong Kong. As such, he would not attribute the higher tariff levels over the Routes to PCCW-HKTC's pricing power.

58. As detailed in paragraphs 49-55, the TA is satisfied that there is no wholesale supply constraint for offering retail outgoing external call services given the availability of transit and refile, as well as the TA-determined Gateway Prices from Reach Networks. There should be no restraints to competing operators in setting retail prices to compete effectively with PCCW-HKTC based on the underlying costs of wholesale services available to the market. The *independent* decisions by competing operators not to undercut PCCW-HKTC's prices do not necessarily reflect pricing power or leadership for PCCW-HKTC over the Routes. The TA is satisfied that the absence of entry barriers is an effective restraint for PCCW-HKTC to implement pricing decisions, particularly in raising prices.

59. As demonstrated by the market share analysis in paragraphs 34-48, PCCW-HKTC's market share over most of the Routes are consistently below 50% during the Period, and in some of the Routes it is not even the biggest individual player in the market. As such, the TA is satisfied with the viability of competition even without any pricing differential. This further restrains PCCW-HKTC from implementing pricing decisions, particularly in raising prices.

60. Since prices are substantially the same among service providers over the Routes, consumers are likely to choose their service providers based on promotional offers over more popular destinations first, and then proceed to use the same service provider over the Routes for convenience or perceptual reasons. Therefore, services between majority and minority routes are somewhat complementary, more so than in-between the majority routes where consumers have more information to shop around route by route. To a certain extent, intense price competition over more popular routes is a dominant force for consumer choices over the Routes.

61. In summary, the TA considers that PCCW-HKTC has no better ability than its competitors to raise prices, given the absence of wholesale supply constraints and the proven viability of competition against PCCW-HKTC even with the same prices. Also considering the ramifications from intense price competition over more popular routes, the TA concludes that, over the Routes, PCCW-HKTC does not have significant power to implement pricing decisions.

Vertical integration

62. The TA stated in the August 1999 Non-Dominance Statement that:

“Vertical integration in itself does not imply that an undertaking is dominant. However, where an undertaking is dominant or has market power in one market and is vertically integrated into upstream or downstream markets around that market, then it may have the ability to affect adversely competition in the upstream and downstream markets. Consequently, the potential for vertical integration to lead to an abuse of a dominant position is a significant aspect of the analysis of market power in telecommunications.” (paragraph 68)

63. The TA has in the past addressed the issue of vertical integration between Reach Networks and PCCW-HKTC extensively in various non-dominance applications by the two companies. Background descriptions on their relationships in terms of ownership structures and licensed rights of operation are detailed in paragraph 1 (Footnote 1) and paragraph 7 (Footnote 3). For the present Application, most respondents remain concerned about the continued corporate relationships between Reach Networks and PCCW-HKTC in a practical manner. As such, the TA has revisited the three major areas of vertical integration concerns that he has previously identified:

- **Information sharing** – The TA stated in the August 2001 Non-Dominance Statement that Reach Networks and PCCW-HKTC are both bound by GC 12(1) and GC12(2) of their respective FTNS licenses that no customer information should be disclosed to and/or used by the other. On that ground, the TA then lifted the condition stipulated on the 2000 Direction to PCCW-HKTC in relation to disclosure and use of customer information. Moreover, as the wholesale market over the Routes is deemed competitive in the outgoing direction, the TA is satisfied that Reach Networks does not have complete market information to share with PCCW-HKTC in

the first place.

- **Contractual relationship** – In respect of wholesale external gateway services in the outgoing direction over the Routes, Reach Networks is bound by TA's determination on 30 December 1998 (to implement the November 1998 LAC & MDF Statement) to deal with PCCW-HKTC and its competitors at arm's length, either at TA-determined gateway prices for Category B Routes or at competitive rates for Category B Observation List Routes. Because of the obligation to provide the external gateway services on a non-discriminatory basis, the TA is satisfied that PCCW-HKTC cannot secure a better cost base over the Routes than its competitors via any contractual relationship with Reach Networks.
- **Settlement relationship** – A number of respondents are of the view that PCCW-HKTC has a superior cost base over its competitors due to the MDF, LAC and USC receipts from its dominant local fixed line operation. The TA considers that LAC and USC are not of concern because, by definition, they merely reflect and compensate for the actual cost-based expenses/deficits incurred by PCCW-HKTC's operation in providing the local access service and meeting the universal service obligation. However, MDF from incoming calls contains a profit-sharing element¹³ that PCCW-HKTC could potentially use to finance discounts on outgoing calls. In this regard, PCCW-HKTC has demonstrated via its refile analysis (paragraph 51) that, on a route-by-route basis, its advantages from MDF receipts are more than offset by the wholesale price premium it pays to Reach Networks (which also contain a profit element *to* offshore carriers) versus refile rates over most of the Routes. On a collective basis, the profit element of PCCW-HKTC's MDF receipts represents consistently less than 2% of its retail external call service revenues. The TA is satisfied that MDF is not significant enough to distort the level playing field of retail external call services between PCCW-HKTC and its competitors.

64. The TA is therefore satisfied that the extent of vertical relationship between Reach Networks and PCCW-HKTC does not have a detrimental effect on competition over retail external call services on the Routes.

¹³ Profit-sharing element = MDF – LAC - USC

Other relevant factors

65. As detailed in paragraph 3, the Conditions were imposed under the 2001 Direction issued to PCCW-HKTC for those routes over which it has been declared non-dominant (see **Appendix II**). Most respondents support retaining the Conditions as a competitive safeguard. WNTT reckons that a discrimination against PCCW-HKTC is appropriate to avoid any abuse of its local fixed line dominance. HGC reckons that the Conditions are fair as long as PCCW-HKTC remains dominant over any of the Routes. HKBN reckons that the Conditions are essential in preventing PCCW-HKTC from re-establishing its dominance. NWT reckons that an *ex ante* regulation is necessary, but the TA notes that the Conditions, unlike dominant restraints, are already *ex post* in nature. Apple draws an analogy between the Conditions and the US anti-trust laws, but the TA notes that anti-trust laws apply to a dominant entity, while the Conditions applies to a non-dominant service. WNTT also submits that none of the Conditions place any unreasonable burden upon PCCW-HKTC, and suggested that the TA impose further conditions including time limit, price floor and bundling restrictions. However, the TA does not consider himself to be in a position to intervene the competitive pricing of a non-dominant service provider via a price floor mechanism.

66. Having considered all the representations made, the TA then revisited each individual Conditions and clarified its interpretations on each, in order to substantiate his position as to whether such Conditions remain fair, necessary and appropriate:

- (i) ***To establish and maintain all necessary steps, systems and controls so as to secure its compliance with all its legal and licensing obligations concerning the pricing of any of the services declared to be non-dominant.***

67. The TA stated in the August 1999 Non-Dominance Statement his original intention in establishing Condition (i):

“The TA in reaching his decision has been very aware of the fact that [PCCW-HKTC] has in the past failed to comply with its licence obligations and on more than one occasion it has given cause to him to take enforcement action and impose financial penalties. In

particular the fact that all the case involved unauthorised discounts and/or IDD calls... [PCCW-HKTC] is still to demonstrate that it has established a robust and effective internal compliance system and controls in respect of pricing issues” (paragraphs 74-75)

68. The TA notes that these incidents of non-compliance happened before PCCW-HKTC was first declared non-dominant over any route of the external call services market. Condition (i) was essentially a “probation” for PCCW-HKTC to demonstrate its compliance ability during the infant stage of competition. The TA observes that competition over the retail external call services market has become mature since then.

69. The TA also notes that PCCW-HKTC is already obliged under General Condition (“GC”) 7 of its FTNS licence (the “Licence”) to comply generally with the Telecommunications Ordinance (the “Ordinance”) and its own license conditions, in particular GC 15 in relation to anti-competitive conduct, GC 16 in relation to abuse of dominant position and GC 20, 21 and 22 in relation to tariff arrangements for its dominant services, reverberating sections 7K and 7L of the Ordinance.

70. Considering PCCW-HKTC’s legal and licence obligations on pricing matters that are already in place, as well as the relatively mature stage of competition in the ‘retail external call services’ market, the TA is satisfied that Condition (i) is no longer warranted. However, lifting Condition (i) does not effectively loosen any pricing obligation for PCCW-HKTC, since it must continue to comply with the relevant sections of the Ordinance as well as the GCs of the Licence.

(ii) *To establish and maintain all necessary steps, systems and controls so as to ensure that proper records are kept by it concerning pricing of the services declared to be non-dominant so as to be able to provide within two working days of a formal request being made on information that the TA may require pursuant to an investigation, whether proactive or in response to a complaint, concerning the price at which a service is or has been offered. Information includes, but is not limited to, breakdown of costs and a fully reasoned business case.*

71. Under GC 18 of the Licence, which mirrors section 7I of the

Ordinance in relation to information:

“The licensee shall furnish to the Authority, in such manner and at such times as the Authority may request in writing, such information related to the business run by the licensee under this license, including financial information, accounts and other records as the Authority may reasonably require in order to perform his functions under the Ordinance and this licence including but not limited to his functions under General Conditions 15, 16 and 20(4)”.

72. Considering PCCW-HKTC’s legal and licence obligations already in place in relation to information, the TA is satisfied that Condition (ii) is no longer necessary. However, lifting Condition (ii) does not effectively loosen PCCW-HKTC’s obligations to comply with the relevant sections of the Ordinance as well as the GCs of the License. It must remain prepared for possible *ex post* investigation by the TA and in such case respond to his requests for information in a prompt manner. The TA also finds it necessary to maintain his monitoring over PCCW-HKTC’s pricing behaviour in case it re-establishes a dominant position in the future.

(iii) *Any offer of services declared to be non-dominant shall not be subject to a condition that the customer must commit to a minimum period of time to use that service or any other service that may be available by PCCW-HKTC or any other affiliate company or that discount to be offered will be adjusted at a future date according to the period that the service has been used.*

73. PCCW-HKTC submits that “term discounts” and “bundling arrangements” are generally accepted industry best practices that are not *per se* anti-competitive, but instead very common among retail external call service providers in Hong Kong. The TA, while concurring to this view, further notes that there are various other forms of promotional offers to consumers that may not possibly be listed on the Conditions extensively and consistently. The TA, in declaring PCCW-HKTC non-dominant over any particular service, would in fact allow any degree of pricing flexibility on that service, as long as such pricing arrangements involve no abuse of position over other areas of dominant services provided by PCCW-HKTC or its affiliates. As such, the TA is satisfied that Condition (iii) is no longer warranted.

Local fixed telephony/IDD bundling

74. In light of the concern expressed by a number of respondents about the possible cross-leveraging of market power by PCCW-HKTC via bundling its local fixed telephony and IDD services (the “Bundle”) once the Conditions are lifted, the TA finds it necessary to address the subject specifically on legal grounds.

75. As PCCW-HKTC’s local fixed line service is currently regarded as dominant, its tariffs are regulated by the TA under GC 20, 21 and 22 of the Licence. However, PCCW-HKTC has full pricing flexibility on its IDD services over whichever routes it has been declared non-dominant, regardless of its cost levels. In the 2001 Direction, the TA has waived PCCW-HKTC’s pricing obligations under GC 20(4), 21 and 22 for its external call services over non-dominant routes.

76. In regard to bundling, the TA is satisfied that, since there is a dominant service element within the Bundle, the Bundle *as a whole* is subject to pricing constraints under GC20, 21 and 22 of the Licence. Contrary to full pricing flexibility on *standalone* IDD services, the Bundle *as a whole* must comply with GC 15 and 16 of the Licence (section 7K and 7L of the Ordinance). The TA may consider any predatory pricing, price discrimination, term discount, etc. within the Bundle, including the non-dominant element, to fall within the definition of anti-competitive conduct and/or abuse of dominant position. Under GC18 of the Licence (section 7I of the Ordinance), PCCW-HKTC must be prepared to respond promptly to a possible TA investigation in furnishing information. For the IDD element of the Bundle, PCCW-HKTC must be able to supply to the TA the information on cost breakdown, fully reasoned business case, etc., on a *route-specific* and *offer-specific* basis.

77. More generically, the TA is satisfied that any concern about the leverage of dominance from other services of PCCW-HKTC or its affiliates into the retail “external call services” market, or any leverage of pricing flexibility from the ‘retail external call services’ market into other dominant services of PCCW-HKTC and its affiliates, can be adequately addressed by the provisions relating to anti-competitive conduct and abuse of dominant position under the Ordinance (section 7K and 7L) and in the Licence (GC 15 and 16).

Life of Direction

78. In the 2001 Direction, the TA made his non-dominance declaration for PCCW-HKTC on an indefinite basis, although he had previously committed in the 2000 Direction to reconsider the Conditions within 18 months from 28 September 2000. In view of the fact that PCCW-HKTC is still subject to the competition provisions of the Licence and the Ordinance, the TA is satisfied that at any stage (since he continues to monitor the market regularly), he is in a position to deal with any anti-competitive conduct effectively and efficiently. As such, the TA is satisfied that it is appropriate not to impose an automatic expiry date for any direction issued in concluding this review. In any event, major changes in the relevant market and/or failure to comply with the obligations in other circumstances could lead the TA to review the direction issued today.

CONCLUSION

79. The TA is satisfied that the previously used definition of the general scope of the relevant market of “external call services” is still valid, the functional market is the retail market and the geographical market is the whole of Hong Kong. In processing the Application, the TA considers that a route-by-route analysis supplemented with collective observations is appropriate.

80. Over the Routes, considering that:

- (a) PCCW-HKTC was consistently the market leader of 53 of the Routes, but consistently not the market leader over 48 of the Routes during the Period;
- (b) the route-specific market shares of PCCW-HKTC were consistently below 50% for 146 of the Routes, but consistently above 50% for 9 of the Routes;
- (c) the collective market share of PCCW-HKTC over the Routes was consistently below 30% during the Period;
- (d) there is no entry barrier to the markets of the Routes arising from any wholesale supply constraints, given the availability of transit and refile, and/or the TA-determined gateway prices from Reach Networks;

- (e) PCCW-HKTC does not have superior power over its competitors in raising prices;
- (f) the extent of vertical relationship between Reach Networks and PCCW-HKTC does not distort the level playing field of the market; and
- (g) the Conditions are no longer warranted given the pricing obligations of PCCW-HKTC under the Ordinance and the Licence,

the TA is satisfied that:

- (1) PCCW-HKTC should be declared non-dominant in the retail external call services market over the Routes, and since there is no more routes that it remains dominant, it is now non-dominant in the retail external call services market as a whole;
- (2) the Conditions should no longer apply to PCCW-HKTC over any route of the retail external call services market that it is regarded as non-dominant, including but not limited to the Routes.

81. The TA has therefore issued today a direction under GC 44 of the FTNS Licence to PCCW-HKTC to that effect. The new direction 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.

82. As stated in the August 1999 Non-Dominance Statement, the licence obligations of PCCW-HKTC concerning abuse of dominance remain. Should the TA find in the future that PCCW-HKTC is dominant over any route of the retail external call services market, and that it has abused its position, the TA can take necessary action either under the licence conditions of the Licence or the Ordinance. A prior declaration of dominance is not a pre-requisite. The declaration is required where the TA wishes to impose additional conditions such as the requirement to obtain approval for price changes. Even where prior approval is not required, dominant licencees in any market must not abuse their position. It is therefore a matter for each licensee to monitor, and where necessary, adjust its behaviour depending on its market power.

Office of the Telecommunications Authority
8 October 2002

SUMMARY OF SUBMISSIONS RECEIVED

1. Apple Communications (HK) Limited – does not support the Application and the Request

- It is totally unacceptable to classify all the routes into one market because ‘substitution effect’ does not exist from one route to another.
- PCCW’s collective market share on the Routes, even if below 50%, is not insignificant. For example, any shareholder with over 35% of total shares of any listed company is regarded as the dominant shareholder.
- “Arms-length” in a legal sense is not the main consideration, but “arms-length” in commercial practice is the crux of this issue.
- Infrastructure control is the key determinant of dominance. PCCW controls 85% of the “last mile” and can easily squeeze any competitor.
- LAC costs HK\$0.121 per minute for less than 50km of access, versus the access charge for 12,527km from Hong Kong to Chicago of only HK\$0.10 per minute. This illustrates the damage in productivity caused by a monopoly.
- Should PCCW be treated solely as a retailer, it must publicly release the price at which it pays for minutes purchased from Reach and provide evidence that the same bulk volume discount is available to all. It should also wipe out the LAC.
- Under the free market principle and for the Hong Kong economy’s well-being, the Conditions set forth by OFTA are consistent.
- Anti-trust laws in some advanced economies are discriminatory to the dominant players of the market, in order to restore competition where it had disappeared, and preserve it where it still prevails.
- Without any information about the amount of MDF PCCW receives from Reach, it is unfair to make a judgment. However, LAC makes up 65% of the total cost of any service provider, and LAC provides cash advantages for PCCW to give discounts on its own retail prices.
- OFTA should consider exercising its power to reduce the amount of LAC imposed by PCCW.

2. **Hong Kong Broadband Network Limited** – does not support the Application and the Request

- PCCW-HKTC failed to represent substantial evidence, such as traffic trends, whether alternative connections have been made and the price trends of each individual destination of the Routes.
- The route-by-route basis is of longstanding and effective foundation on assessing non-dominance of PCCW-HKTC. A collective basis is inappropriate, non-scientific and arbitrary.
- Although it might be of partial truth that PCCW-HKTC's market share over some of the Routes is less than 50%, the remaining routes have still been under suppression of genuine price competition.
- With a collective approach, individual routes with no genuine price competition in place may be improperly classified as Category A.
- The insignificant traffic claimed by PCCW-HKTC over the Routes may produce significant revenues at higher margins due to higher tariffs. Such lucrative profits from the improperly classified routes may be used to subsidize below-cost prices over Category A routes. Such “finance bundling” among all the routes may bring additional entry barriers to new entrants. Even worse, PCCW-HKTC may eventually become the dominant player over all the routes.
- PCCW-HKTC could take advantage of ‘favourable’ price offered by Reach to offer predatory prices on those improperly classified routes.
- PCCW-HKTC controls the local loop access facilities for external traffic, and in most cases free from paying LAC and USC.
- Sharing of key management staff between PCCW-HKTC and Reach means that information can always be shared and decisions can be made for their mutual interests.
- The Conditions should continue to apply to PCCW-HKTC in order to protect competition and to avoid any abuse and re-activation of dominance. With PCCW-HKTC's ‘inborn’ advantage of local loop access, a fair level playing field has not been seen in the retail external call services market so far.

3. **Hutchison Global Communications Limited** – does not support the Application and the Request

- The Application should be evaluated on a route-by-route basis because consumers tend to compare the prices between different IDD service providers on a route-by-route basis as well.
- Prices for most of the Routes are not as competitive as Category A routes. The small volumes of traffic gives little incentive for foreign carriers to split their traffic between FTNS operators in Hong Kong and the incumbent PCCW-HKTC gets most of the incoming traffic.
- Transit and refile over these low volume routes are limited.
- Insignificant traffic alone cannot be a reason for PCCW-HKTC to be granted non-dominance on a collective basis.
- PCCW-HKTC and Reach share close staff-ties and board members, as well as market intelligence. They supply products to each other on a bundled basis, and can cross-leverage their competitiveness. Rather than being simply a reseller, PCCW-HKTC indeed enjoys various benefits of vertical integration benefits.
- Category A/B classification is well established and the same factors should be looked at in drawing the distinction as applied in the past. PCCW-HKTC's claim of less than 50% market share on a collective basis is not a relevant factor in consideration of dominance.
- The Conditions are fair and necessary as competitive safeguard as long as PCCW-HKTC is still dominant on any routes under the Category A/B distinction approach.
- Without the actual figures, HGC cannot comment on whether the MDF that PCCW-HKTC receives from Reach is insignificant.

4. **New World Telephone Limited** – does not support the Application and the Request

- The Category A/B classification was established to safeguard competition, and the route-by-route evaluation is working fine with the industry. Administrative burden is part of the costs for dominant operators to bear and should not be used as an excuse for a collective evaluation.

- Although PCCW-HKTC and Reach are separate entities, effective vertical integration still exists due to their common ownership. PCCW-HKT must have influence on the decision-making and operation of Reach, and can tailor-make its strategies for the benefit of PCCW-HKTC.
- It is true that alternative suppliers are available for Category B routes and the market shares of PCCW-HKTC on these routes are dropping. However, there is no evidence that effective competition on these routes have actually taken place or can potentially take place.
- The Conditions is an *ex-ante* regulatory measure to ensure PCCW-HKTC complies with the Ordinance and the Licence conditions. Ex-post regulation is insufficient because PCCW-HKTC, with its market power over local and retail external call services as well as its affiliation with Reach, can permanently drive out competitors within a short period of time. Since the regulatory objective is to prevent rather than to penalize, the Conditions should be retained.
- PCCW-HKTC still owns over 90% of local fixed lines and receives almost all of LAC. Its MDF revenues should be extremely huge and can easily be used to offer deep discounts on outgoing calls. The TA should demand PCCW-HKTC to provide audited accounting figures on the said revenues.

5. **PCCW-HKT Limited** – supports the Application and the Request

- The TA should evaluate the Routes on a collective basis since, with increasing availability of transit and refile, routing arrangements are no longer under bilateral agreements route by route. The TA should also re-classify the Routes to Category A for administrative ease, given the insignificant traffic concerned.
- However, should the TA find that PCCW-HKTC is dominant over the Routes on a collective basis, it should then evaluate the Routes on a route-by-route basis, especially for the routes that are liberalized such as Portugal and Greece, the routes where PCCW-HKTC has market share consistently below 50% such as Macau, and the routes which PCCW-HKTC has no traffic such as Afghanistan and Antarctica.
- The different structures, shareholders and management of PCCW-HKTC and Reach guarantee the arm's length, transparent and non-

discriminatory nature of transactions between the two companies.

- PCCW-HKTC is simply reselling Reach's wholesale services, and is in fact more constrained than its competitors who own facilities.
- Reach is required to offer connectivity over the Routes to PCCW-HKTC and its competitors at arms-length, and at OFTA-determined rates. There are also viable alternatives to Reach's gateway through transit and refile. There is no wholesale supply constraint or vertical integration concern.
- Consumers are likely to use the same service providers for both dominant and non-dominant routes. Non-dominant routes represent over 96% of the IDD market and are certainly the key driver for consumer choice. Competition on the Routes is thus indirectly as intensive as the non-dominant routes.
- PCCW-HKTC's collective market share is estimated to be consistently below 50% over the Routes, and is not dis-similar to that of the non-dominant routes. Only over 8 of the Routes were its market shares above 50%, but the industry traffic concerned is immaterially small.
- The monthly external call traffic figures collected by the TA for the calculation of USC tend to understate the actual industry traffic and inflates PCCW-HKTC's market share, because not all licencees report their traffic in full. Nevertheless, the TA's figures should represent the maximum possible market share of PCCW-HKTC over the Routes.
- The Routes are not major or popular ones that are regularly included in promotional offers, although some service operators choose to include Israel, Macau, Nigeria Saudi Arabia and UAE. The three FTNS operators typically set their standard rates at the same level as PCCW-HKTC's, but the actual offers are practically below the gazetted rates via different kinds of volume or bonus plans.
- As PCCW-HKTC's prices are subject to TA's approval, it cannot be the price leader. Even on Category A routes, PCCW-HKTC has never acted in a predatory fashion. As the Routes are contestable, whether PCCW-HKTC or its competitors choose to actively compete should not dictate that PCCW-HKTC or its competitors must be dominant.
- It is impossible for PCCW-HKTC to increase prices over the Routes without losing further market share. Predatory pricing is also not of concern because the Routes are not significant enough to affect the

overall competitiveness of the market. Granting non-dominance to PCCW-HKTC over the Routes will benefit consumers with more competitive prices.

- The Conditions are inconsistent with the TA's non-dominance decision by re-establishing a limited set of dominance controls, discriminatory against PCCW-HKTC by not applying also to other non-dominant licencees, inappropriate by disallowing term discounts and bundling which are common industry practices, and unnecessary given the redundancy against GC 15&16 of the Licence and Section 7I, 7K & 7L of the Ordinance.
- It is impossible for PCCW-HKTC to use its MDF received from Reach to finance deep discounts on its outgoing external call services because there are sustainable alternatives for the Routes. Also, the amount of MDF it receives is rather insignificant to accord any meaningful advantage to PCCW-HKTC in the retail external call services market.
- Even the Routes are continued to be classified as Category B, PCCW-HKTC should still be declared non-dominant at the retail level because it is just a simple reseller.

6. **Reach Limited** – supports the Application and the Request

- Route-by-route evaluation is no longer appropriate given the increasing availability of transit and refile, driven by the oversupply of external bandwidth as well as the further development and sophistication of regional telecommunications hubs. Any operator who has access to any hub will then have onward access to any destination at competitive prices.
- Reach's market share for the outgoing direction over Category B has been consistently below 50% since October 2001, and that for the incoming direction, while not consistently below 50%, has fallen 29%.
- As the TA has declared Reach and PCCW-HKTC to be non-dominant for 'external bandwidth services' at the wholesale and retail levels respectively, the TA should also reclassify all routes in the downstream 'external call services' market to Category A and thus automatically declare PCCW-HKTC non-dominant at the retail level.
- The TA was satisfied under the August 1999 Non-Dominant Statement that there were adequate safeguards in place to prevent any misuse of

customer information. Since then, the structural separation between Reach and PCCW-HKTC has further distanced the two companies. As the wholesale external call services market is competitive, there is now no information for Reach to share with PCCW-HKTC in the first place. PCCW-HKTC merely buys capacity from Reach either at competitive market price or TA-determined gateway prices, completely at arm's length. There is no vertical integration concern.

- The Conditions should now be lifted, as PCCW-HKTC has already served its probationary period during its initial stage of non-dominance. The TA has sufficient regulatory power under the Licence and the Ordinance to take action if necessary. The Conditions is an additional burden and constraint on PCCW-HKTC which are not imposed on any of the other non-dominant operators.
- PCCW-HKTC cannot use MDF it receives from Reach to finance deep discounts on its outgoing call services to any meaningful extent because neither the traffic concerned nor the profit margin is significant. Category B routes contributed only 5.7% of Reach's incoming traffic. Over time, the TA is expected to reclassify more and more Category B routes to Category A, the amount of MDF will diminish further.

7. **Wharf New T&T Limited** – does not support the Application and the Request

- WNTT disagrees with TA's definition of the relevant market. External call service routes should not be divided into Category A and B as none of these routes are truly substitutable. The relevant market should be wide enough to include end-user access and connectivity to international call services in Hong Kong, where PCCW is still vastly dominant.
- The TA should continue to evaluate non-dominance applications on a route-by-route basis given the lack of substitutability between calls to different destinations. Transit and refile do not make the routes themselves substitutable. Collective market share is meaningless.
- Reach and PCCW-HKTC are practically vertically integrated and are ultimately accountable to PCCW-HKT. They have an exclusive agreement for high-volume discounted wholesale services. WNTT is happy to supply wholesale services to PCCW-HKTC but, according to

PCCW-HKTC, the exclusive agreement stands in the way.

- The dominance restraint imposed upon PCCW-HKTC has brought about a meager competitive start. Should non-dominance be granted, there would be nothing to stop PCCW-HKTC from predatory pricing to drive competitors out of market.
- The Conditions have been effective in restraining PCCW-HKTC from anti-competitive conduct. None of the Conditions place any unreasonable burden on PCCW-HKTC. PCCW-HKTC is being treated differently due to its local fixed line dominance and its vertical relationship with Reach.
- According to the information WNTT has received, the amount of MDF PCCW-HKTC receives from Reach is very significant and may be used to finance discounts on outgoing call services.
- Should the TA grant conditional non-dominance status to PCCW-HKTC over the Routes, he should impose additional conditions including a time limit as a type of probationary period, a price floor based on accurately measured marginal or average-incremental cost, and restrictions against bundling between the Routes and other routes.

RESULTS ON TESTS OF DOMINANCE OVER THE ROUTES

The Routes	PCCW-HKTC's outgoing market share	Reach's outgoing market share	Refile analysis
Afghanistan	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Albania	Consistently < 50%	Average < 50%	Refile cost < adjusted gateway price
Algeria	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
American Samoa	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Andorra	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Angola	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Anguilla	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Antarctica	Industry traffic = 0	Industry traffic = 0	Refile not available
Antigua & Barbuda	Average < 50%	Average < 50%	Refile cost < adjusted gateway price
Argentina	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Armenia	Average > 50%	Average > 50%	Refile cost < adjusted gateway price
Aruba	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Ascension	Average < 50%	Average < 50%	Refile cost < adjusted gateway price
Azerbaijan	Average > 50%	Average > 50%	Refile cost < adjusted gateway price
Bahamas	Consistently < 50%	Average < 50%	Refile cost < adjusted gateway price
Bahrain	Consistently < 50%	Average > 50%	Refile cost > adjusted gateway price
Bangladesh	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Barbados	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Belarus	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Belize	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Benin	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Bermuda	Consistently > 50%	Consistently > 50%	Refile cost < adjusted gateway price
Bhutan	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Bolivia	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Bosnia & Herzegovina	Consistently < 50%	Average < 50%	Refile cost < adjusted gateway price
Botswana	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Brazil	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Brunei Darussalam	Consistently < 50%	Average > 50%	Refile cost < adjusted gateway price
Bulgaria	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Burkina Faso	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Burundi	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Cambodia	Consistently < 50%	Consistently > 50%	Refile cost < adjusted gateway price
Cameroon	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Cape Verde Is	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Cayman Is	Consistently > 50%	Consistently > 50%	Refile cost < adjusted gateway price
Central African Rep	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Chad	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Chile	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Colombia	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Comoros Is	Average < 50%	Average < 50%	Refile cost < adjusted gateway price
Congo Rep	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Cook Is	Average < 50%	Consistently > 50%	Refile cost < adjusted gateway price
Costa Rica	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Cote D'Ivoire Rep	Average > 50%	Consistently > 50%	Refile cost < adjusted gateway price
Croatia	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Cuba	Consistently < 50%	Average < 50%	Refile cost < adjusted gateway price

The Routes	PCCW-HKTC's outgoing market share	Reach's outgoing market share	Refile analysis
Cyprus	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Czech Rep	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Diego Garcia	Consistently > 50%	Consistently > 50%	Refile cost < adjusted gateway price
Djibouti	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Dominica	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Dominican Rep	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
East Timor	Not separately reported	Not separately reported	Refile cost < adjusted gateway price
Ecuador	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Egypt	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
El Salvador	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Equatorial Guinea	Consistently < 50%	Average < 50%	Refile cost < adjusted gateway price
Eritrea	Average < 50%	Average < 50%	Refile cost < adjusted gateway price
Estonia	Consistently < 50%	Average > 50%	Refile cost < adjusted gateway price
Ethiopia	Average < 50%	Average < 50%	Refile cost < adjusted gateway price
Falkland Is	Average > 50%	Average > 50%	Refile cost < adjusted gateway price
Faroes Is	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Fiji	Consistently < 50%	Average < 50%	Refile cost < adjusted gateway price
French Polynesia	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Gabon	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Gambia	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Georgia	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Ghana	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Gibraltar	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Greece	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Greenland	Consistently < 50%	Average < 50%	Refile cost < adjusted gateway price
Grenada	Consistently < 50%	Average < 50%	Refile cost < adjusted gateway price
Guam	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Guatemala	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Guinea Bissau	Consistently > 50%	Consistently > 50%	Refile cost < adjusted gateway price
Guinea Rep	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Guyana	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Haiti	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Honduras	Consistently < 50%	Average < 50%	Refile cost < adjusted gateway price
Hungary	Consistently < 50%	Consistently > 50%	Refile cost < adjusted gateway price
Iceland	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Iran	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Iraq	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Iridium	Consistently > 50%	Consistently > 50%	Refile not available
Israel	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Jamaica	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Jordan	Consistently < 50%	Average > 50%	Refile cost < adjusted gateway price
Kazakhstan	Consistently < 50%	Average < 50%	Refile cost < adjusted gateway price
Kenya	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Kiribati	Consistently > 50%	Consistently > 50%	Refile cost < adjusted gateway price
Korea DPR (North Korea)	Average < 50%	Average > 50%	Refile cost < adjusted gateway price
Kuwait	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Kyrgyzstan	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Laos	Consistently < 50%	Consistently > 50%	Refile cost < adjusted gateway price
Latvia	Consistently < 50%	Average < 50%	Refile cost < adjusted gateway price
Lebanon	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Lesotho	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price

The Routes	PCCW-HKTC's outgoing market share	Reach's outgoing market share	Refile analysis
Liberia	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Libya	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Lithuania	Consistently < 50%	Average < 50%	Refile cost < adjusted gateway price
Macau	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Macedonia	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Madagascar	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Malawi	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Maldives	Consistently < 50%	Consistently > 50%	Refile cost > adjusted gateway price
Mali	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Malta	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Mariana Is	Consistently < 50%	Average < 50%	Refile cost < adjusted gateway price
Marshall Is	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Mauritania	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Mauritius	Consistently < 50%	Consistently > 50%	Refile cost > adjusted gateway price
Mexico	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Micronesia	Average < 50%	Average > 50%	Refile cost < adjusted gateway price
Moldova	Average < 50%	Consistently > 50%	Refile cost < adjusted gateway price
Monaco	Consistently < 50%	Average < 50%	Refile cost < adjusted gateway price
Mongolia Pr	Consistently < 50%	Consistently > 50%	Refile cost < adjusted gateway price
Montserrat	Average < 50%	Consistently > 50%	Refile cost < adjusted gateway price
Morocco	Consistently < 50%	Average < 50%	Refile cost < adjusted gateway price
Mozambique	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Myanmar (Burma)	Consistently < 50%	Consistently > 50%	Refile cost < adjusted gateway price
Nakhodka	Average > 50%	Average > 50%	Refile cost > adjusted gateway price
Namibia	Consistently < 50%	Average < 50%	Refile cost < adjusted gateway price
Nauru	Average < 50%	Average < 50%	Refile cost < adjusted gateway price
Nepal	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Netherlands Antilles	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
New Caledonia	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Nicaragua	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Niger	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Nigeria	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Niue Is	Average < 50%	Consistently > 50%	Refile cost < adjusted gateway price
Norfolk Is	Average > 50%	Consistently > 50%	Refile cost < adjusted gateway price
Oman	Consistently < 50%	Average > 50%	Refile cost < adjusted gateway price
Palau	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Palestine	Not separately reported	Not separately reported	Refile cost < adjusted gateway price
Panama	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Papua New Guinea	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Paraguay	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Peru	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Poland	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Portugal	Consistently < 50%	Average > 50%	Refile cost < adjusted gateway price
Qatar	Consistently < 50%	Consistently > 50%	Refile cost > adjusted gateway price
Romania	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Russia	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Rwanda Rep	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Sakhalin	Average > 50%	Average > 50%	Refile not available
Sao Tome & Principe	Average > 50%	Consistently > 50%	Refile cost < adjusted gateway price
Saudi Arabia	Consistently < 50%	Consistently < 50%	Refile cost > adjusted gateway price
Senegal	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Seychelles	Consistently < 50%	Consistently > 50%	Refile cost > adjusted gateway price

The Routes	PCCW-HKTC's outgoing market share	Reach's outgoing market share	Refile analysis
Sierra Leone	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Slovak Rep	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Slovenia	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Solomon Is	Average < 50%	Consistently > 50%	Refile cost < adjusted gateway price
Somali Rep	Average < 50%	Average < 50%	Refile cost < adjusted gateway price
St Helena	Average < 50%	Average < 50%	Refile cost < adjusted gateway price
St Kitts & Nevis	Average < 50%	Average < 50%	Refile cost < adjusted gateway price
St Lucia	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
St Vincent & Grenadines	Average < 50%	Average > 50%	Refile cost < adjusted gateway price
Sudan	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Suriname	Average < 50%	Average > 50%	Refile cost < adjusted gateway price
Swaziland	Consistently < 50%	Average < 50%	Refile cost < adjusted gateway price
Syria	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Tajikistan	Average < 50%	Average < 50%	Refile cost < adjusted gateway price
Tanzania	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Thuraya	Industry traffic = 0	Industry traffic = 0	Refile not available
Togolese Rep	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Tonga	Consistently < 50%	Average < 50%	Refile cost < adjusted gateway price
Trinidad & Tobago	Consistently < 50%	Average < 50%	Refile cost < adjusted gateway price
Tunisia	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Turkey	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Turkmenistan	Average > 50%	Average > 50%	Refile cost < adjusted gateway price
Turks & Caicos	Average < 50%	Average > 50%	Refile cost < adjusted gateway price
Tuvalu Is	Average < 50%	Average < 50%	Refile cost < adjusted gateway price
Uganda	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Ukraine	Consistently < 50%	Average < 50%	Refile cost < adjusted gateway price
United Arab Emirates	Consistently < 50%	Consistently < 50%	Refile cost > adjusted gateway price
Uruguay	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Uzbekistan	Average < 50%	Average < 50%	Refile cost < adjusted gateway price
Vanuatu	Average > 50%	Consistently > 50%	Refile cost < adjusted gateway price
Venezuela	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Vietnam	Consistently < 50%	Average < 50%	Refile cost < adjusted gateway price
Virgin Is (British)	Consistently > 50%	Consistently > 50%	Refile cost < adjusted gateway price
Virgin Is (US)	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Wallis and Futuna	Average < 50%	Consistently > 50%	Refile cost < adjusted gateway price
Western Samoa	Consistently > 50%	Consistently > 50%	Refile cost < adjusted gateway price
Yemen Rep	Consistently < 50%	Average > 50%	Refile cost < adjusted gateway price
Yugoslavia	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Zaire	Consistently < 50%	Consistently < 50%	No gateway price
Zambia	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price
Zimbabwe	Consistently < 50%	Consistently < 50%	Refile cost < adjusted gateway price

**ROUTES OVER WHICH PCCW-HKTC HAS ALREADY
BEEN CLASSIFIED AS NON-DOMINANT
PRIOR TO THIS TA STATEMENT**

1 Austria	26 French Guyana
2 Australia	27 French WestIndies (Guadeloupe and Martinique)
3 Belgium	28 Mayotte
4 Canada	29 Reunion
5 Denmark	30 Saint Pierre & Miquelon
6 Finland	31 Singapore
7 France	32 Philippines
8 Germany	33 Taiwan
9 Ireland	34 China (Shenzhen & Shekou)
10 Italy	35 China (Guangdong)
11 Japan	36 China (Rest)
12 Luxembourg	37 Indonesia
13 Netherlands	38 Malaysia
14 New Zealand	39 India
15 Norway	40 Pakistan
16 South Korea	41 South Africa
17 Spain	42 Sri Lanka
18 Sweden	43 Thailand
19 Switzerland	
20 United Kingdom	
21 United States	
22 Liechtenstein	
23 Puerto Rico	
24 San Marino	
25 Vatican City	