Review of Regulatory Guidance on the Charging Principles of Interconnection between Fixed Carriers

Statement of the Communications Authority

16 April 2013

INTRODUCTION

On 7 November 2012, the Communication Authority ("CA") issued a consultation paper entitled "Review of Regulatory Guidance on the Charging Principles of Interconnection between Fixed Carriers" (the "Consultation Paper") to initiate a review of whether the regulatory guidance on the charging principles of interconnection between fixed carriers as first promulgated in a statement entitled "Interconnection and Related Competition Issues – Statement No. 7 – 'Carrier-to-Carrier Charging Principles'" ("Statement No. 7") issued in 1995 and last revised in 2009 ("Statement No. 7 (Third Revision)") (the "Regulatory Guidance") should be maintained or withdrawn under the present day circumstances and in view of future developments. The Consultation Paper set out the preliminary views of the CA, and sought views and comments on the options identified for the way forward on the Regulatory Guidance. In response to the Consultation Paper, submissions were received from the following parties¹ –

- Hong Kong Broadband Network Limited ("HKBN")
- Hong Kong Telecommunications (HKT) Limited ("HKT")
- New World Telecommunications Limited ("NWT")
- Wharf T&T Limited ("WTT").

2. Having considered the submissions received, the CA sets out in this statement its responses to the submissions and its decision on the way forward on the Regulatory Guidance as well as Statement No. 7 (Third Revision).

¹ The submissions are available at: http://coms-auth.hk/en/policies_regulations/consultations/completed/index_id_163.html.

OPTIONS IDENTIFIED IN THE CONSULTATION PAPER

3. At present, charges of circuit-switched narrowband interconnection between fixed carriers are the only type of carrier-to-carrier local interconnection charges which are still subject to regulatory guidance.² The regulatory guidance on the charging principles for these types of interconnection is promulgated in Statement No. 7 (Third Revision), on which the CA would rely in making a determination of terms and conditions of interconnection under section 36A of the Telecommunications Ordinance (the "Ordinance"). Under our longstanding market-driven policy and taking into account the significant changes and developments in the market and technology over the past two decades, the CA initiated a review and identified in the Consultation Paper the following two options on the way forward on the Regulatory Guidance and Statement No. 7 (Third Revision) –

(a) <u>Option 1: Maintain Statement No. 7 (Third Revision)</u>
 Under this Option, the Regulatory Guidance and Statement No. 7 (Third Revision) will remain in force.

(b) Option 2: Withdraw Statement No. 7 (Third Revision)

Under this Option, the Regulatory Guidance and Statement No. 7 (Third Revision) will be withdrawn. Fixed carriers will be free to commercially negotiate with each other on the interconnection arrangements for services currently covered by Statement No. 7 (Third Revision). Whether interconnection charges are required for the establishment of interconnection and exchange of traffic between fixed carriers, and the level of such charges if any, will be solely determined through commercial negotiations.

² The provision of external telecommunications service ("ETS") is subject to local access charge ("LAC"). ETS operators shall pay LAC to local carriers for conveyance of ETS traffic to and from the end users. A fixed carrier may act as an ETS operator and have to pay LAC to the originating/terminating carrier for the conveyance of ETS traffic. A fixed carrier may also act as a hosting carrier for an ETS operator and have to pay LAC to the originating/terminating carrier for the conveyance of ETS traffic. A fixed carrier may also act as a hosting carrier for an ETS operator and have to pay LAC to the originating/terminating carrier and will in turn recover such charge from the ETS operator it hosts. In other words, carriers may pay or receive LAC to or from each other for the conveyance for ETS traffic. Payment of LAC is currently subject to a determination made in 1998 which was subsequently revised in 2012 by a supplementary determination. Starting from July 2013, a new regulatory regime for LAC will be implemented. To facilitate the industry to conduct commercial negotiations on LAC, the LAC regulatory guide has been issued to provide guidance for the industry's reference in respect of the payment obligation, charging principles and settlement arrangements. For details, please refer to the statement entitled "New Regulatory Regime for Local Access Charge" as well as "Regulatory Guide of Local Access Charge" issued on 23 December 2011.

WAY FORWARD ON STATEMENT NO. 7 (THIRD REVISION)

- 4. In the Consultation Paper, the CA asked the following questions –
- Question 1: Do you think that there are justifications to maintain Statement No. 7 (Third Revision) (Option 1)? If so, please state your justifications.
- Question 2: If you support Option 1, do you consider that (a) Statement No.
 7 (Third Revision) should be maintained without any revision;
 or (b) certain revisions should be made to Statement No. 7
 (Third Revision)? If you support (b), please clearly specify the revisions that are required and provide the justifications.
- Question 3: What are your views on the proposed withdrawal of Statement No. 7 (Third Revision) (Option 2), in particular the potential impact on carriers and consumers?

Views and Comments Received

5. WTT supported Option 1, i.e. the Regulatory Guidance and Statement No. 7 (Third Revision) should be maintained without any revision. It submitted that if Statement No. 7 (Third Revision) was to be withdrawn, fixed carriers would need to negotiate new arrangement for fixed-fixed interconnection while they were still in the process of commercial negotiations on local access charge ("LAC"),³ thus increasing market uncertainty. WTT also submitted that the difference between the level of fixed-fixed interconnection charge ("FFIC")⁴ and that of LAC might widen if fixed carriers commercially decided to adopt the bill-and-keep ("BAK") arrangement for FFIC after the withdrawal of Statement No. 7 (Third Revision), and this would encourage illegal LAC bypass activities.⁵ WTT also opined that, for

³ In a statement entitled "New Regulatory Regime for Local Access Charge" issued on 23 December 2011, it was decided, among others, that starting from July 2013, ETS operators and local carriers will set the LAC for conveyance of ETS traffic through commercial negotiations. The industry is in the course of conducting commercial negotiations on LAC.

⁴ Under Statement No. 7 (Third Revision), an interconnection usage charge will be paid for passing local telephony traffic from one fixed network to another fixed network via an established interconnection link as well as terminating or originating that traffic within the network. Such usage charge is commonly referred to as FFIC.

⁵ Some ETS operators, licensed or unlicensed, disguise their external traffic as local traffic with a

buildings where there was only one set of blockwiring system and such system was operated by a single operator, the sole blockwiring operator might substantially increase the charges if Statement No. 7 (Third Revision) was to be withdrawn, and this might adversely affect competition.

6. HKBN supported Option 2 in principle but submitted that a minimum set of rules should be maintained, e.g. charging principle concerning the costs of providing physical ports and associated datafill activities.

7. NWT and HKT did not explicitly indicate whether they supported Option 1 or Option 2. That said, NWT recommended that the CA should ensure BAK arrangement was to be adopted for fixed-fixed interconnection. HKT considered that it would be important to maintain the obligation to pay FFIC (the "Obligation to Pay") so that the terminating fixed carriers would be able to recover the cost incurred. Otherwise, fixed carriers would be disincentivised to continue investing in their networks. HKT suggested that one way to maintain the Obligation to Pay was to maintain Statement No. 7 (Third Revision) and remove those unnecessary principles, e.g. principles in relation to the use of cost of the most efficient network, application of a cap based on historical cost standard, etc. If Statement No. 7 (Third Revision) was to be withdrawn and any-to-any ("A2A") connectivity requirement⁶ continued to apply, HKT submitted that the CA should maintain the Obligation to Pay and issue replacement regulatory guidance to assist in making a determination of the charges presently covered by Statement No. 7 (Third HKT was concerned that maintaining the A2A connectivity Revision). requirement without maintaining the Obligation to Pay would give rise to freeriding and discourage commercial negotiations between fixed carriers, as well as encourage illegal LAC bypass activities. HKT submitted that under the new LAC regulatory regime to be implemented in July 2013, external telecommunications service ("ETS") operators had an obligation to pay LAC although the level of LAC was to be set by commercial negotiations.

view to evading the payment of LAC. Such activities are termed as "illegal bypass".

⁵ Under Special Condition ("SC") 3.1 of the Unified Carrier Licence ("UCL"), A2A connectivity means that any customer in any one network can have access to any other customer in any interconnecting network and, where directed by the CA, to any service offered in any interconnecting network. While SC 3.1 of UCL is applicable to all types of telecommunications services, the CA has so far applied the requirement of A2A connectivity to only voice services.

8. HKT disagreed with the amount of HK\$9 million estimated by the CA in paragraph 28 of the Consultation Paper as the financial impact of withdrawing Statement No. 7 (Third Revision) on fixed carriers. HKT opined that the estimation had assumed that no FFIC would be paid between fixed carriers if Statement No. 7 (Third Revision) was to be withdrawn. It also considered that the estimated figure only represented the net financial impact on the industry as a whole, but the impact on specific carriers might differ significantly. Furthermore, it submitted that no account had been taken of the financial impact arising from increased illegal LAC bypass.

The CA's Considerations and Responses

A2A Connectivity and Obligation to Pay

9. The policy objective of A2A connectivity has been clearly promulgated in the statement issued by the former Telecommunications Authority⁷ in April 2007 on deregulation for fixed-mobile convergence.⁸ A2A connectivity is an important public interest objective, the absence of which would severely undermine Hong Kong's position as an international finance and commerce centre and a regional communications hub. A2A connectivity also promotes and maintains a competitive telecommunications industry. For the avoidance of doubt, the CA would like to make it clear that based on public interest ground A2A connectivity requirement shall continue to apply. The CA notes HKT's claim that free-riding might arise if A2A connectivity requirement continued to apply but the Obligation to Pay was not maintained. In a competitive telecommunications market, fixed carriers have mutual needs for interconnection and derive benefits from the interconnection. A customer of a fixed carrier may receive incoming call from, or make outgoing call to, a customer of another fixed carrier. In other words, fixed carriers are providing call termination services to each other. As such, the CA does not agree with the free-riding argument put forward by HKT. Fixed carriers commercially negotiate with each other on the terms and conditions of interconnection including the applicable interconnection charges, failing which either party

⁷ Pursuant to the Communications Authority Ordinance (Cap. 616), with effect from 1 April 2012, all duties and powers of the Telecommunications Authority are conferred on the CA, and all duties and powers of the Office of the Telecommunications Authority are conferred on Office of the Communications Authority, the executive arm of the CA.

⁸ http://tel_archives.ofca.gov.hk/en/tas/others/ta20070427.pdf.

may request for a determination under section 36A of the Ordinance. The CA is therefore not convinced that it is necessary for any regulatory intervention to impose requirement on the Obligation to Pay for interconnection between fixed carriers.

10. In response to HKT's comment that ETS operators' obligation to pay LAC would be maintained under the new LAC regulatory regime (despite deregulation of the level) and the same arrangement should apply to FFIC, the CA considers that interconnection between fixed carriers for passing local traffic to each other should be distinguished from interconnection between carriers and ETS operators,⁹ either directly or indirectly via a hosting carrier, for conveying ETS traffic to and from the end users. For the former, the need for interconnection between carriers for passing local traffic to each other as well as benefits to be derived from the interconnection should be mutual. That is to say, the two interconnecting fixed carriers, be they originating or terminating a local call, both derive benefits from the interconnection as both the calling party and the called party derive benefits from the call. On the other hand, for the latter, benefits to be derived from the interconnection between carriers and ETS operators for conveying ETS traffic tend to be comparatively less mutual in nature. A carrier may not find it commercially attractive to interconnect with an ETS operator, either directly or indirectly via a hosting carrier, when the interconnection serves to convey traffic of the ETS operator over the carrier's network such that the carrier's subscribers may have access to the ETS provided by the ETS operator. It is therefore necessary for the CA to ensure that the originating/terminating carriers will be fairly compensated by ETS operators for the use of their networks to carry ETS traffic. As such, the CA is of the view that the analogy between maintaining the obligation to pay LAC and that of FFIC, as put forward by HKT, is For the avoidance of doubt, the withdrawal of the Regulatory misguided. Guidance and Statement No. 7 (Third Revision) will not result in any change to the regulatory regime governing LAC, which has been thoroughly reviewed and concluded in December 2011 following rounds of public consultation exercise.¹⁰

⁹ An ETS operator may be a services-based operator or a fixed carrier authorized to provide ETS.

¹⁰ Please refer to footnote 2.

Illegal LAC Bypass Activities

11. Regarding the comments from WTT and HKT that illegal LAC bypass activities would be encouraged, the CA notes that WTT's comments were based on the assumption that fixed carriers adopted the BAK arrangement for FFIC after the withdrawal of Statement No. 7 (Third Revision) whereas HKT's comments were based on the assumption that terminating fixed carriers would be unable to collect any FFIC if the Obligation to Pay was not maintained. It should be noted that the object and effect of Option 2 are not to remove charges for fixed-fixed interconnection but to deregulate them, such that fixed carriers are free to commercially negotiate with each other on whether interconnection charges are required for the establishment of interconnection and exchange of traffic between them, and if affirmative, the level of such charges. It would be up to fixed carriers to decide, without regulatory intervention, whether their existing interconnection arrangements should be retained, changed or removed. If fixed carriers consider that there is any causality between the level of FFIC and illegal LAC bypass activities, they may take this into account when they commercially negotiate the interconnection arrangements. On the other hand, the CA has been, and will continue to be, committed to combating illegal LAC bypass activities.¹¹

Market Uncertainty

12. The CA notes WTT's argument that withdrawal of Statement No. 7 (Third Revision) would increase market uncertainty as fixed carriers needed to negotiate new arrangement for fixed-fixed interconnection while they were still in the process of commercial negotiations on LAC. The CA's view is that if WTT considers that a widening difference between the level of FFIC and that of LAC would indeed encourage illegal LAC bypass activities, WTT could always consider the two issues together when it conducts commercial negotiations with other carriers. Also, WTT has not submitted any compelling argument to show that withdrawal of Statement No. 7 (Third Revision) would result in any insurmountable difficulties for fixed carriers to

¹¹ Apart from the ongoing enforcement actions against illegal LAC bypass activities, the CA has introduced other measures against illegal LAC bypass, including the introduction of performance bond requirement in the Services-Based Operator licence of ETS operators with the actual implementation timetable to be decided according to the state of LAC evasion, as well as an enhanced vetting procedure for ETS licence application that requires among others all applicants to submit duly signed interconnection agreements with hosting carriers before a licence is issued.

agree on interconnection arrangements. In any event, in instances where there is a failure to conclude commercial agreements on interconnection, fixed carriers are still obliged to interconnect their services and networks with each other to ensure A2A connectivity, while either party may request for a determination on terms and conditions under section 36A of the Ordinance.

Charges of Interconnection to In-building Blockwiring System

13. In response to WTT's concern that the sole blockwiring operator might substantially increase the interconnection charges if Statement No. 7 (Third Revision) was to be withdrawn, the CA reiterates that the charging principles for Type II interconnection promulgated in Statement No. 7 (Third Revision) pertain only to the determination of interconnection to copper-based local loops for narrowband services. Copper-based local loops for broadband services and fibre-based local loops fall outside the scope of Statement No. 7 (Third Revision). As a matter of fact, the CA has not made any determination under section 36A of the Ordinance for the level of charges of interconnection to inbuilding blockwiring system. Such charges have all along been set by commercial negotiations and fixed carriers are always permitted to implement commercial agreements that deviate from the charging principles as promulgated in Statement No. 7 (Third Revision). As such, the CA does not see any direct impact on the level of blockwiring charges to be brought about by withdrawal of Statement No. 7 (Third Revision). For the avoidance of doubt, the withdrawal of Statement No. 7 (Third Revision) will not result in any change to the mandatory Type II interconnection requirement at the street level and in-building level (i.e. Type II interconnection at Point B and Point C respectively).¹² In any case, if fixed carriers (or a fixed carrier and a class licensee) are unable to agree on the charges of interconnection to in-building blockwiring system, irrespective of whether it is for broadband or narrowband services, they may submit a request for determination under section 36A of the Ordinance.

¹² For the decision of maintaining the mandatory Type II interconnection requirement at Point B and Point C, please refer to the statement entitled "Review of Type II Interconnection Policy" issued on 6 July 2004.

Estimation of Total Amount of FFIC among All Fixed Carriers

14. The CA wishes to stress that the purpose of the estimation in the Consultation Paper was not to calculate the actual financial impact on individual fixed carrier after withdrawal of Statement No. 7 (Third Revision), as the actual impact would be dependent on various direct and indirect factors. For example, if two fixed carriers commercially agree to maintain status quo after withdrawal of Statement No. 7 (Third Revision), there should not be any significant financial impact on these two carriers arising from the withdrawal of Statement No. 7 (Third Revision). Other factors may include the decrease or increase of the overhead costs arising from the commercial arrangement to be agreed by two fixed carriers, which will be more streamlined or more elaborate, as the case may be. In response to HKT's comment that the financial impact should also take into account the increased illegal LAC bypass activities, the CA wishes to reiterate, as in paragraph 11 above, that if fixed carriers consider that there is any causality between the level of FFIC and illegal LAC bypass activities, they may take this into account when they commercially negotiate the interconnection arrangements, and the actual financial impact on each individual carrier would depend on the commercial terms they are going to agree with other carriers. Given that the actual financial impact would be dependent on various direct and indirect factors, the CA has never intended to estimate the impact as it is simply not in a position to do so.

15. The CA disagrees with HKT's comment that the estimation made in paragraph 28 of the Consultation Paper had assumed that no FFIC would be paid between fixed carriers if Statement No. 7 (Third Revision) was to be withdrawn. It should be noted that the purpose of the estimation is to assist the industry in gauging the total amount of FFIC that was paid or received in 2011. As such, the estimation did not and needed not make any assumption on the commercial arrangements of FFIC after the withdrawal of Statement No. 7 (Third Revision).

16. The CA also disagrees with HKT's comment that the estimated figure of HK\$9 million a year only represented the net financial impact on the industry as a whole. As explained in paragraph 28 and footnote 24 of the Consultation Paper, a fixed carrier may pay or receive a net amount of FFIC to

or from other fixed carriers. The total estimated amount of FFIC of HK\$9 million was derived by aggregating the estimated net amount of FFIC of each fixed carrier in 2011, irrespective of whether this estimated net amount was a net outgoing or a net income for a particular fixed carrier. As the amount of HK\$9 million represented the estimated amount of FFIC paid and received by ALL local fixed carriers in 2011, the estimated net amount of FFIC for individual fixed carrier in 2011 would necessarily be much smaller than HK\$9 million.

The CA's Conclusion

17. The CA notes that none of the submissions has provided any concrete evidence to show that the withdrawal of Statement No. 7 (Third Revision) is likely to result in a market failure. While one respondent argued that illegal LAC bypass was a market failure and thus objected to the withdrawal of Statement No. 7 (Third Revision) on that ground, for reason explained in paragraph 11 above, the CA does not find the argument convincing. The CA is also not convinced by the arguments in relation to market uncertainty and blockwiring charges put forward by the respondents to justify maintaining Statement No. 7 (Third Revision), for reasons explained in paragraphs 12 and Further, as elaborated in the Consultation Paper, there have been 13. significant changes and developments in the market and technology over the past two decades. The Regulatory Guidance, which only applies to the determination of circuit-switched narrowband interconnection between fixed carriers, is increasingly out of place under the present day circumstances where broadband service has become the norm. Having considered the fact that facility-based competition has been well established in our telecommunications market and that a wide variety of service offerings are available to our consumers at affordable prices, the CA is of the view that market forces without any regulatory guidance should be sufficient to safeguard consumers' To be consistent with the market-driven policy, the CA has come to interest. the conclusion that it is unnecessary to retain the Regulatory Guidance and therefore Statement No. 7 (Third Revision). Accordingly, it is the CA's decision that the Regulatory Guidance and Statement No. 7 (Third **Revision**) are to be withdrawn, subject to a transitional period as further discussed below.

REPLACEMENT REGULATORY GUIDANCE

Views and Comments Received

18. A number of respondents suggested the issue by the CA of replacement regulatory guidance or other form of guidance if Statement No. 7 (Third Revision) was to be withdrawn. HKT recommended the issue of replacement guidance. HKBN suggested maintaining a minimum set of rules. NWT recommended that the CA should ensure the adoption of BAK arrangement.

The CA's Considerations and Responses

19. The CA considers that these suggestions amount in effect to putting in place another form of regulatory intervention after the withdrawal of Statement No. 7 (Third Revision). The outcome of these suggestions, if acceded to, is de facto to retain charges of circuit-switched narrowband interconnection between fixed carriers as the only type of carrier-to-carrier local interconnection charges subject to regulatory guidance. Under our longstanding market-driven policy, the CA considers that unless the market, without any regulatory guidance on the charging principles of interconnection between fixed carriers, will fail or likely to fail, it is questionable in today's market environment to maintain any regulatory intervention either in the form of Statement No. 7 (Third Revision) or other form of guidance to be issued. So far, the CA has not received concrete evidence to show that the absence of regulatory intervention on interconnection charges between fixed carriers is likely to result in a market failure.

The CA's Conclusion

20. Having considered the submissions received, the CA decides that it will not issue replacement regulatory guidance upon the withdrawal of Statement No. 7 (Third Revision). However, the CA will continue to monitor the market developments. Should market conditions change and/or indications of likely market failure emerge, it will re-consider the need for regulatory guidance on interconnection charges between fixed carriers. Stakeholders will be fully consulted if the CA intends to issue such guidance in the future.

TRASITIONAL ARRANGEMENTS

Question 4: What are your views on the proposed transitional arrangements for implementation of Option 2 as outlined in paragraphs 31 of the Consultation Paper?

Views and Comments Received

21. HKBN opined that the proposed one-year transitional period was insufficient and over optimistic in view of the time required for concluding commercial negotiations as well as the subsequent adjustments to the IT and financial arrangements. It suggested that if the industry could not reach commercial agreements by the end of the transitional period, the status quo should apply until the CA has made a determination and the determination shall be backdated to the end of the transitional period. HKT submitted that if Option 2 was to be adopted, the transitional period should be at least 18 months as it would take time to negotiate the interconnection arrangements and operators might also take into account illegal LAC bypass activities in their commercial negotiations on the level of FFIC. While WTT did not support Option 2 was to be adopted such that the industry could have sufficient time to negotiate and adjust their arrangements.

The CA's Considerations and Responses

22. Having considered the justifications put forward by the respondents for a longer duration of transitional period, the CA agrees that it would be reasonable to allow more time for the industry to conduct commercial negotiations before the withdrawal of Statement No. 7 (Third Revision). That said, an undue extension of the transitional period is neither appropriate nor necessary. Taking into account the recent experience in the deregulation of fixed-mobile interconnection charges as well as the implementation of the new LAC regulatory regime, the CA considers that a transitional period of 18 months should be a reasonable period.

23. In response to HKBN's suggestion that if the industry could not reach commercial agreements by the end of the transitional period, the determination

if made by the CA shall be backdated to the end of the transitional period, the CA would wish to stress that if a determination is to be made under section 36A of the Ordinance, the terms and conditions of interconnection, including but not limited to the effective date of such terms and conditions, whether applicable prospectively or retrospectively, should be determined on a case-by-case basis.

The CA's Conclusion

24. Having considered the submissions received, the CA decides that the transitional period should be 18 months starting from 16 April 2013. During the transitional period, Statement No. 7 (Third Revision) will remain applicable in case the CA is to make a determination on interconnection that falls within the scope of Statement No. 7 (Third Revision). At the end of the transitional period, Statement No. 7 (Third Revision)¹³ will cease to be effective and the CA will not issue any replacement guidance.

Communications Authority 16 April 2013

¹³ For the avoidance of doubt, Statement No. 7 issued on 10 June 1995, Statement No. 7 (First Revision) revised on 18 November 1997 and Statement No. 7 (Second Revision) revised on 18 March 2002 will also cease to be effective at the end of the transitional period.