

## **Statement of the Communications Authority**

### **Acceptance of the Commitments Given by Hong Kong Broadband Network Limited, HKBN Enterprise Solutions Limited and WTT HK Limited to the Communications Authority pursuant to Section 60 of the Competition Ordinance (Cap. 619)**

**17 April 2019**

#### **PURPOSE**

This Statement sets out the competition assessment of the Communications Authority (“CA”) on the proposed acquisition of the entire issued share capital of WTT Holding Corp. by HKBN Ltd. (“Proposed Transaction”) and explains its decision to accept the commitments given by Hong Kong Broadband Network Limited, HKBN Enterprise Solutions Limited (both indirectly wholly-owned subsidiaries of HKBN Ltd. and collectively referred to as “HKBN” hereinafter) and WTT HK Limited (“WTT”) (an indirectly wholly-owned subsidiary of WTT Holding Corp.) to the CA under section 60 of the Competition Ordinance (Cap. 619) (“CO”) in relation to the Proposed Transaction.

#### **INTRODUCTION**

2. On 7 August 2018, HKBN Ltd. announced the Proposed Transaction<sup>1</sup>. As both HKBN and WTT hold carrier licences issued under the Telecommunications Ordinance (Cap. 106) (“TO”), the Proposed Transaction falls within the definition of a “merger” to which the Merger Rule applies pursuant to sections 3(2)(b) and 4(b) of Schedule 7 to the CO<sup>2</sup>. Under section 3(1) of Schedule 7 to the CO, the Merger Rule stipulates that an undertaking must not, directly or indirectly, carry out a merger that has, or is likely to have, the effect of substantially lessening competition (“SLC Effect”) in Hong Kong.

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<sup>1</sup> HKBN Ltd.’s announcement in relation to the Proposed Transaction is available at: [https://reg.hkbn.net/WwwCMS/upload/pdf/en/e\\_20180807\\_HKBN\\_VSA\\_Announcement.pdf](https://reg.hkbn.net/WwwCMS/upload/pdf/en/e_20180807_HKBN_VSA_Announcement.pdf).

<sup>2</sup> Sections 3(2)(b) and 4(b) of Schedule 7 to the CO provide that the Merger Rule applies where one or more undertakings acquire direct or indirect control of the whole or part of one or more other undertakings, and either the undertaking acquiring control or the undertaking in which control is acquired holds a carrier licence under the TO, or directly or indirectly controls an undertaking that holds such a licence.

3. The CA has conducted an inquiry through which it sought information from the merging parties and views from relevant third parties likely to be affected by or interested in the Proposed Transaction, including carrier licensees authorised to provide internal fixed, external fixed and/or mobile services, and top [REDACTED] customers of the merging parties in relation to the Proposed Transaction. For the avoidance of doubt, the CA has not conducted an investigation into the Proposed Transaction under section 39 of the CO.

4. On the basis of the information and data provided by the parties to which request was made as well as those otherwise available<sup>3</sup>, the CA conducted a competition assessment of the Proposed Transaction in accordance with the CO and the Guideline on the Merger Rule (“Merger Guideline”)<sup>4</sup>. To facilitate the CA’s assessment, the CA has engaged a consultant (“Consultant”) to conduct an economic analysis of the competition effects that may arise from the Proposed Transaction and has taken into account such analysis in its competition assessment.

5. After taking into account the views and information provided by the merging parties and relevant third parties, the CA identified two competition issues which would likely arise from the Proposed Transaction. After the CA communicated these two competition issues to them, HKBN and WTT offered a set of proposed commitments (“Proposed Commitments”) to the CA under section 60 of the CO in return for the CA not commencing an investigation or bringing proceedings in the Competition Tribunal in relation to the Proposed Transaction. The CA considered that the Proposed Commitments would be sufficient to effectively address the two competition issues identified. Accordingly, on 13 February 2019, the CA issued a notice (“Notice”) pursuant to section 2 of Schedule 2 to the CO to seek representations from the industry and interested parties on the CA’s proposed acceptance of the Proposed Commitments<sup>5</sup>. By the extended deadline of 7 March 2019<sup>6</sup>, the CA received four representations<sup>7</sup>.

6. The CA considered the representations received and took the view that the Proposed Commitments should be revised to address certain

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<sup>3</sup> Such as data reported by telecommunications licensees periodically to the CA for statistical purposes.

<sup>4</sup> The Merger Guideline is available at: [https://www.coms-auth.hk/filemanager/en/content\\_923/comp\\_guide3\\_en.pdf](https://www.coms-auth.hk/filemanager/en/content_923/comp_guide3_en.pdf).

<sup>5</sup> [https://www.coms-auth.hk/filemanager/en/content\\_711/cp20190213.pdf](https://www.coms-auth.hk/filemanager/en/content_711/cp20190213.pdf)

<sup>6</sup> The deadline for response to the notice was originally set for 28 February 2019. In response to the requests of the industry, the deadline for response was extended to 7 March 2019.

<sup>7</sup> [https://www.coms-auth.hk/en/policies\\_regulations/consultations/completed/index\\_id\\_501.html](https://www.coms-auth.hk/en/policies_regulations/consultations/completed/index_id_501.html)

points raised in the representations. On 26 March 2019, HKBN and WTT offered a set of revised commitments (“Revised Commitments”) in the light of the CA’s views.

7. After due consideration, the CA has decided to accept the Revised Commitments as set out in the **Annex** under section 60 of the CO in return for not commencing an investigation into the Proposed Transaction.

## **COMPETITION ASSESSMENT ON THE PROPOSED TRANSACTION**

### **Merging Parties**

8. HKBN Ltd., the acquirer, is publicly listed on the Stock Exchange of Hong Kong and indirectly wholly owns HKBN, which holds unified carrier licences (“UCLs”) to provide internal and external fixed telecommunications services. HKBN Ltd. also indirectly holds, through HKBN and other wholly-owned subsidiaries, a number of services-based operator (“SBO”) licences for the provision of Internet access services, external telecommunications services (“ETS”) and mobile virtual network operator (“MVNO”) services.

9. WTT Holding Corp., the acquiree, indirectly wholly owns WTT, which holds a UCL to provide internal and external fixed telecommunications services. WTT Holding Corp., through WTT and other wholly-owned subsidiaries, also indirectly holds a number of SBO licences for the provision of various telecommunications services, such as local voice telephony services, Internet access services, ETS and MVNO services. After completion of the Proposed Transaction, WTT Holding Corp., together with its subsidiaries, will be wholly-owned by HKBN Ltd.

### **Competition Assessment Approach**

10. The Merger Guideline sets out how the CA would interpret and give effect to the Merger Rule. In general, a competition assessment of a merger would entail the identification of the relevant market(s), followed by an assessment of whether the merger has, or is likely to have, SLC Effect in the identified relevant market(s).

11. The delimitation of relevant market(s) has two basic dimensions: product/service scope and geographic scope. An explanation

of the CA’s approach for identifying the scope of the relevant product and geographic markets is set out in the Guideline on the Second Conduct Rule (“Second Conduct Rule Guideline”)<sup>8</sup>. Such approach is a conceptual framework and is not intended to be applied mechanically<sup>9</sup>. In relation to telecommunications markets specifically, the Merger Guideline states that such markets “*may be characterised by dynamic and rapid technological changes. In such circumstances, market boundaries are not likely to remain constant*”<sup>10</sup>. With regard to the service/product dimension of the Proposed Transaction, the CA has identified each of the relevant service markets taking into account, *inter alia*, the services offered by either or both of the merging parties. With regard to the geographical dimension of the Proposed Transaction, the CA considers that the geographical scope of all such markets is the territory of Hong Kong.

12. The Proposed Transaction, involving two rivals competing in various service markets, is in nature primarily a horizontal merger<sup>11</sup>. According to the Merger Guideline, a horizontal merger may lessen competition in two ways, by unilateral effects and coordinated effects. Unilateral effects may arise in a merger when one firm merges with a competitor that previously provided a competitive constraint, allowing the merged firm profitably to raise prices or to reduce output or otherwise exercise market power it has gained, even given the expected responses of other market participants to the resulting change in market condition. Coordinated effects take place where the merger increases, enables or encourages post-merger coordinated interaction among the firms in the market. Mutually accommodating conduct elicited by the coordinated effects may enhance a firm’s incentive to raise prices, by assuaging the fear that such a move would lose customers to rivals<sup>12</sup>.

13. The Merger Guideline provides guidance as to which mergers are unlikely to have SLC Effect<sup>13</sup>. Two indicative safe harbour measures of market concentration are set out in the Merger Guideline, namely the four-firm concentration ratio test (“CR4”) and the Herfindahl-Hirschman Index (“HHI”) –

(a) CR4 is calculated by summing the market shares of the four

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<sup>8</sup> The Second Conduct Rule Guideline is available at: [https://www.coms-auth.hk/filemanager/en/content\\_923/comp\\_guide2\\_en.pdf](https://www.coms-auth.hk/filemanager/en/content_923/comp_guide2_en.pdf).

<sup>9</sup> See paragraph 3.11 of the Merger Guideline.

<sup>10</sup> See paragraph 3.12 of the Merger Guideline.

<sup>11</sup> See paragraph 34 below for consideration of the potential vertical issue the Proposed Transaction may cause in the relevant downstream markets.

<sup>12</sup> See paragraphs 3.32 – 3.34 of the Merger Guideline.

<sup>13</sup> See paragraphs 3.15 – 3.19 of the Merger Guideline.

(or fewer) largest firms in the relevant market. A merger is considered to be within this safe harbour if –

- (i) the post-merger CR4 is less than 75% and the merged entity has a market share of less than 40%; or
  - (ii) the post-merger CR4 is 75% or more and the merged entity has a market share of less than 15%;
- (b) HHI measures market concentration and is calculated by summing the squares of the market shares of all the firms operating in the relevant market. Both the absolute level of the HHI, which provides a gauge of the market concentration, and the change in HHI resulting from the merger, which measures the impact of a merger on market concentration, provide an indication of whether a merger is likely to raise competition concerns. A merger is considered to be within this safe harbour if –
- (i) the post-merger HHI of a market is less than 1,000;
  - (ii) for a market with a post-merger HHI of between 1,000 and 1,800, the increase in the HHI is less than 100; or
  - (iii) for a market with a post-merger HHI of more than 1,800, the increase in the HHI is less than 50.

14. A merger that meets either one of the safe harbour measures will fall within the safe harbour. That said, the safe harbour measures are indicative in nature. The Merger Guideline expressly recognises that a merger falling outside the safe harbour thresholds is not necessarily an indication that the transaction would have SLC Effect in a market. It merely indicates that further inquiry may be made by the CA to assess the extent of any potential anti-competitive effects<sup>14</sup>. The CA has carried out this further inquiry in relation to the relevant markets, with a view to ensuring any potential anti-competitive effects are adequately addressed.

### **CA's Competition Assessment of Each of the Relevant Markets**

15. In its competition assessment of the Proposed Transaction, the CA has considered the following relevant markets in Hong Kong -

- (a) Local fixed network access services;
- (b) Retail local fixed voice services;

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<sup>14</sup> See paragraph 3.13 of the Merger Guideline.

- (c) Retail local fixed Internet access services;
- (d) Retail mobile telecommunications services;
- (e) Retail multiple play services;
- (f) Wholesale market for interconnection with fixed networks;
- (g) ETS;
- (h) Fixed external telecommunications facilities; and
- (i) Information technology (“IT”) services.

### ***Analytical Framework Underpinning the Competition Assessment***

16. The Proposed Transaction entails a horizontal merger between two fixed network operators (“FNOs”) with their respective fixed network infrastructures. In that context, the CA considers that an important way of conducting a competition assessment of the present merger is to consider the effect of the merger from the facilities-based competition perspective. That is to say, competition among rivals in all the relevant fixed telecommunications markets occurs first and foremost at the fixed network infrastructure level. Competition at the facilities-based level in turn underpins competition in all retail fixed telecommunications services markets. This is the case because the provision of any retail fixed telecommunications services ultimately requires fixed network infrastructure as necessary inputs. Accordingly, competition in retail fixed telecommunications services markets is basically a reflection of the outcome of the rivalry at the facilities-based level. So long as competition at the facilities-based level remains robust, the competitiveness of retail fixed telecommunications services markets would be ensured. In Hong Kong, local fixed telecommunications market has been fully liberalised since 2003. As at 31 March 2019, there were 27 carrier licensees authorised to roll out local fixed networks in Hong Kong, demonstrating a vibrant competitive landscape at the facilities-based level. Among these carrier licensees, HGC Global Communications Limited (“HGC”), HKBN, Hong Kong Telecommunications (HKT) Limited (“HKT”) and WTT have extensive network coverage in the relevant facilities-based market in Hong Kong<sup>15</sup>.

17. The fixed network infrastructure broadly consists of two main components, namely the core network and the access network. FNOs in Hong Kong, at least the major ones like HKT, HGC and the merging parties, operate their own fixed network infrastructure including both components. The Proposed Transaction would result in extended coverage on the part of the merged entity, an important dimension in which competition among

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<sup>15</sup> Apart from the four FNOs mentioned above, Hong Kong Cable Television Limited has also rolled out its own fixed network, but it is mainly for the provision of residential services.

facilities-based FNOs occurs. Depending on the magnitude of that extension, and if such extension is unmatched by similar extension on the part of the merged entity's rivals, both extant and potential, competition risk might arise following completion of the Proposed Transaction as a result of the enhanced market power conferred to the merged entity in the form of extended coverage.

18. In addition, potential competition issue may arise from the Proposed Transaction especially in relation to coverage in those buildings where both merging parties have presence. The CA notes that there would be one less competitor in such overlapping buildings post-merger. The outcome of one less competitor, in and of itself, would not pose any competition risk so long as rivals, extant or potential ones, would be able to extend their fixed network infrastructure to such overlapping buildings for service provision without significant difficulties. The reason is that rivals' entry, or the threat of entry, should be sufficient to counteract any exercise of potential market power on the part of the merged entity gained through the merger in those overlapping buildings. However, if rivals encounter difficulties in extending their fixed network infrastructure to such overlapping buildings, and the number of such overlapping buildings is not insignificant, there is a likelihood that market power in terms of coverage would be conferred to the merged entity.

19. Regarding the ease of expansion of fixed network infrastructure, generally speaking, there is little information indicating that market participants encounter significant difficulties in extending their core networks. On the other hand, based on available information, the CA notes that market participants sometimes do encounter difficulties in gaining access to buildings for installing in-building telecommunications systems for the purpose of service provision. For example, where there is insufficient physical space within the buildings and/or the property management office or owner(s) refuse to grant access ("Building Access Constraints").

20. In addition to the above, the CA also notes that some service providers may require FNOs' network infrastructure as inputs to enable them to provide retail fixed telecommunications services downstream. Following completion of the Proposed Transaction, a concern may arise that the merged entity might gain market power vis-à-vis such customers due to the expansion of its network coverage. The merged entity may raise input prices, which may in turn weaken competition in the relevant downstream markets. However, the CA considers that so long as the

competition at the facilities-based level will remain robust, such potential competition concern would only be transitory in nature.

*(A) Local Fixed Network Access Services*

21. The local fixed network access services market covers all kinds of fixed network access services, which may include but not limited to the provision of dark fibre, leased lines, backhaul services for mobile network operators (“MNOs”), wholesale inputs for SBO licensees to offer retail services of various kinds. The CA has given consideration to whether there should be separate markets for this service based on technologies and the type of customers.

22. In terms of technology, no evidence available to the CA suggests that the underlying technologies deployed by various FNOs are sufficiently different in terms of their capability in supplying services in this market to warrant a market delineation based on technologies.

23. Regarding the type of customers, the CA notes that customers in this market are all business entities. There is a question of whether to further distinguish between retail and wholesale business customers. An example of retail customers is businesses which rely on leased lines for connecting their offices at different locations across the territory. An example of wholesale customers is MNOs which acquire backhaul services as inputs for their provision of downstream mobile voice and broadband services. Another example of wholesale customers is those service providers which acquire wholesale inputs for their provision of downstream fixed voice and/or Internet access services. The CA notes that suppliers in this market are generally able to serve both retail and wholesale customers as the underlying fixed network infrastructure which underpins this market is basically the same. The CA thus considers that it is not appropriate to define separate markets for retail and wholesale customers among business customers<sup>16</sup>.

24. Having carefully considered the above, the CA considers that the relevant market for local fixed network access services in Hong Kong should be defined as one single market, with no distinction made between the technologies deployed or the type of business customers (namely retail

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<sup>16</sup> However, for the purpose of the assessment of possible vertical concerns in paragraph 34 below, the CA considers it appropriate to examine whether the merger would have impact on the supply of fixed network access services by the merging parties to wholesale customers (in the upstream market), since these customers make use of the wholesale inputs provided by the merging parties to provide local fixed telecommunications services for the business segment in competition with the merging parties in that relevant market.



or wholesale). Having considered carefully all the available evidence and information, the CA's view is that competition issues are unlikely to arise in any other possible market segmentations.

### Competition Assessment

25. The local fixed network access services market is a facilities-based market, where market participants compete at the fixed network level. Accordingly, the discussions about facilities-based competition in paragraphs 16 to 20 above are directly applicable to this market. Both HKBN and WTT are suppliers in this market. There are also other large and small FNOs competing in this market. Given the wide range of services that may be covered, there is no direct quantitative data available to measure the market share of each of the participants in this market for the purpose of calculating the CR4 and HHI values. The CA considers it prudent to further assess the potential competition issues which might arise in this market following completion of the Proposed Transaction, as detailed in the following paragraphs. Furthermore, this market is of particular importance as competitiveness in the local fixed network access services market (i.e. at facilities-based level) would in turn ensure competitiveness in the retail local fixed voice services market and the retail local fixed Internet access services market to be discussed below.

### Unilateral effects

26. Unilateral effects may arise in a merger where one firm merges with a competitor that previously provided a competitive constraint, allowing the merged entity profitably to increase prices or reduce output or otherwise exercise power it has gained post-merger<sup>17</sup>.

27. Section 21(3) of the CO sets out a non-exhaustive list of the matters that may be taken into consideration in determining whether an undertaking has a substantial degree of market power<sup>18</sup>. This comprises an analysis of several factors including market share, countervailing buyer power, barriers to entry or expansion, and market-specific characteristics<sup>19</sup>. These points are, however, not exhaustive and there may be other considerations that the CA will take into account in its assessment of

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<sup>17</sup> See paragraph 3.33 of the Merger Guideline.

<sup>18</sup> In the context of the Second Conduct Rule.

<sup>19</sup> See paragraphs 3.7 and 3.8 of the Second Conduct Rule Guideline.

market power in a given case. It is not necessarily the case that a high market share equates directly to a substantial degree of market power<sup>20</sup>.

28. For the present case, the CA notes that network coverage in the present context, and the buildings that network coverage encompasses, refers to buildings which are not exclusively for residential use as the merging parties' businesses overlap only in the business segment. Based on the building access information available to the CA, the Proposed Transaction, if completed, would expand the network coverage of the merged entity by about [5% to 10%] of the buildings which are not exclusively for residential use across Hong Kong. The CA does not consider that a coverage extension of [5% to 10%] would be of such magnitude sufficient to generate any competition risk in the form of unilateral effects by conferring market power to the merged entity at the fixed network infrastructure level, taking into account also the similarly extensive network coverage of HGC and HKT<sup>21</sup>.

29. Another potential competition issue which may arise in relation to coverage concerns the buildings which are not exclusively for residential use and where both the merging parties have installed their own in-building telecommunications systems for provision of services within the concerned buildings. The direct result of the merger is the reduction of one competitor in this group of buildings. If the number of this group of buildings is not insignificant, and the Building Access Constraints exist in these buildings to prevent further FNOs' access to install their own in-building telecommunications systems for service provision, meaning that there is little likelihood of new entry, or threat of new entry to provide services in those buildings, the overall competitive landscape at the facilities level would likely be significantly altered, giving rise to a potential competition risk in the form of unilateral effects, namely enhancement of the market power of the merged entity in the local fixed network access services market (viz. at the fixed network infrastructure level).

30. Based on the available information, the CA notes that HKBN's and WTT's in-building telecommunications systems overlap in

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<sup>20</sup> Paragraph 3.40 of the Merger Guideline states that “[h]igh market shares and concentration levels as a result of a merger are generally necessary but not sufficient conditions for the creation or enhancement of market power that may lead to a contravention of the Merger Rule”. In the context of the Second Conduct Rule, the Second Conduct Rule Guideline also states that “[u]ndertakings are more likely to have a substantial degree of market power where they have high market shares. However, a high market share does not necessarily imply a substantial degree of market power”. (paragraph 3.10 of the Second Conduct Rule Guideline)

<sup>21</sup> Even assuming that Building Access Constraints might be present in some, or all of the newly added buildings.

[15% to 20%] of the buildings which are not exclusively for residential use. The CA considers that this is not an insignificant number and therefore might give rise to competition concerns if the Building Access Constraints also exist in those buildings.

### Coordinated Effects

31. Coordinated effects may arise if market participants find themselves in a market environment more conducive for them to coordinate their actions. The CA must therefore assess the extent to which a merger is likely to create and/or enhance conditions conducive to enabling market participants to reach and enforce coordinated outcomes (including, coordinated price rises or coordinated strategies such as marginalisation of smaller competitors). Such coordination group must involve at least one firm other than the merging parties. For coordinated effects to be a concern, the coordinating competitor(s) would need to have large market share in the same market. Furthermore, the enhanced ease for the merged entity and its coordinating competitor(s) to attain a coordinated outcome must be attributable directly to changes in market circumstances brought about by the Proposed Transaction.

32. The CA considers that in general, two considerations can serve to indicate whether any potential risk of coordinated effects may arise from the Proposed Transaction, if completed -

- (a) the first consideration relates to the structure of the relevant market pre- and post-merger. A coordinated outcome is unlikely to arise post-merger unless only a few very similar firms remain in the market. The CA notes that while there will be one less participant in the market post-merger, the remaining participants cannot be regarded as very similar to the extent that would heighten the risk of coordinated effects post-merger. Generally speaking, the CA notes that there are various degrees of differences among the commercial strategies, market positioning and/or service offerings among the main FNOs in Hong Kong. In particular, the main FNOs would most likely have different cost structures as they entered this market at different times, with different network configurations and equipment. Such cost differences in turn suggest likely divergent interests among the potential participants of a colluding group, e.g. they are likely to have different expectations on the level of coordinated prices,

rendering it more difficult for them to agree on the terms of coordination;

- (b) the second consideration relates to whether there is any history of collusion in the relevant market. Relevant factors which have to be considered may include whether market participants have close relationships (such as joint ventures or cross-directorates), whether there is systematic exchange of information, whether there is effective mechanism for monitoring each other's behaviour and punishing defectors who do not adhere to the coordinated behaviour. In this regard, based on the information available, the CA has not observed any signs of collusive behaviour in the market.

33. Analysis of the two considerations above does not appear to point to any potential risk of coordinated effects that may arise from the Proposed Transaction. Furthermore, normally members of a coordinated group would need to monitor each other's behaviour to ensure that the terms of the coordinated arrangement are being adhered to by all involved. In the local fixed network access services market, the terms and conditions of the contracts concluded between the suppliers and their customers are far from standardised and are generally not transparent. Many of the contracts are in fact tailor-made to suit particular clients' needs. This would render it more difficult for members of a coordinated group to police adherence to a coordinated arrangement, and members would have more incentive to cheat, thereby precipitating the collapse of such coordinated arrangement. This in turn would serve as a disincentive to attempt any coordination in the first place.

#### Transitional Vertical Issue

34. HKBN and WTT currently provide wholesale services to service providers, who in turn make use of those wholesale inputs to provide local fixed telecommunications services for the business segment in competition with them ("Downstream Rivals"). Even assuming that competition at the facilities-based level will remain robust post-merger, given that service providers who are using the merging parties' wholesale services may not be able to find and migrate to a new supplier of such wholesale services within a short period of time, there may be a risk of transitional market power being conferred to the merged entity vis-à-vis these existing wholesale customers. The merged entity may then make use of such transitional market power to raise wholesale prices, thereby increasing the Downstream Rivals' costs of providing retail services

downstream, which in turn would weaken their ability to compete with the merged entity post-merger unless and until they are able to source alternative supply and complete migration. The Proposed Transaction therefore has the potential to give rise to transitional input foreclosure concerns.

### Conclusion

35. In the market for local fixed network access services, the CA is of the view that the presence of Building Access Constraints at buildings which are not exclusively for residential use and where both merging parties are present may give rise to competition issue in the form of unilateral effects following completion of the Proposed Transaction. On the other hand, as discussed above, the CA considers it unlikely that the Proposed Transaction will give rise to any competition issue in the form of coordinated effects in this market.

36. In addition, the CA considers that there may be a transitional competition issue in this market. As mentioned above, there is a risk that the Proposed Transaction would have the effect of conferring transitional market power to the merged entity vis-à-vis its existing wholesale customers, the exercise of which would raise wholesale prices substantially or lower service quality, etc. post-merger, thereby giving rise to potential transitional input foreclosure concerns.

### ***(B) Retail Local Fixed Voice Services***

37. Both HKBN and WTT provide retail local fixed voice services in Hong Kong. Retail local fixed voice services encompass the supply of fixed voice services to business and residential customers for making local voice calls based on different technologies such as public switched telecommunications network (“PSTN”) and voice over Internet Protocol (“VoIP”). Consideration has been given to whether there should be separate markets for this service based on technologies and the type of customers, as well as whether the market boundary should be expanded to include other voice services, such as mobile voice services and/or ETS.

38. The CA considers that retail local fixed voice services provided through the deployment of different technologies, whether PSTN or VoIP, should be included in the same relevant market as retail customers generally treat them as close substitutes.

39. Noting that HKBN provides retail local fixed voice services to both residential and business customers while WTT focuses solely on business customers, the CA considers that the question of whether the relevant market should include both types of customers or whether they belong to separate markets can be left open. As there is basically no overlap of the merging parties in the residential segment of the retail local fixed voice services market, for the purpose of the Statement, the CA's analysis below will focus on the business segment of the market where their businesses overlap.

40. The CA has also given consideration to whether the relevant market should also include mobile voice services and/or ETS, and concludes that mobile voice services are not yet close enough substitutes for fixed voice services, at least for certain business customers, and thus should not be included in the same market. As for ETS, the CA's view is that the competitive landscape governing the ETS segment is distinct from that of the local retail fixed voice services, therefore ETS should not form part of the relevant market. Retail mobile telecommunications services and ETS will be considered separately later in this Statement.

41. Overall, the CA considers that for the market of the provision of retail local fixed voice services in Hong Kong, given that the merging parties' businesses do not overlap in the residential segment, the CA sets out its analysis on the business segment of the market in the Statement. The CA does not consider it appropriate to draw a distinction between the technologies deployed for the purpose of defining the relevant market. Having considered carefully all the available evidence and information, the CA's view is that competition issues are unlikely to arise in any other possible market segmentations; and mobile voice services and ETS are not part of this relevant market.

### Competition Assessment

42. At present, there are four main FNOs providing retail local fixed voice services in Hong Kong, namely HGC, HKBN, HKT and WTT. All of them serve business customers. There are also a few smaller FNOs and a number of SBO licensees competing in this market. The Proposed Transaction, if completed, will result in the exit of one main FNO from this market.

43. **Table 1** and **Table 2** below show that the corresponding calculated values of both CR4 and HHI exceed the safe harbour thresholds.

**Table 1: Market share of the business segment of retail local fixed voice services<sup>22</sup>**

Operator	Market Share (%)
HKBN	█
WTT	█
<b>Merged Entity</b>	<b>[20% - 25%]</b>
HKT	█
HGC	█
Others	█
<b>CR4 post-merger</b>	█

Source: Consultancy Report, based on CA data as of October 2018

**Table 2: HHI for the business segment of retail local fixed voice services**

	Pre-merger	Post-merger	Increase in HHI
HHI	█	█	[250 - 300]

Source: Consultancy Report, based on CA data as of October 2018

The CA therefore considers it prudent to further assess the potential competition issues which might arise in this market following completion of the Proposed Transaction, as detailed in the following paragraphs.

### Unilateral Effects

44. **Table 1** shows that the Proposed Transaction, if completed, would result in the merged entity having a share of [20% to 25%] in the business segment of the market. HKT would remain the largest player in the market post-merger, with a market share at █%. As such, the CA considers that the Proposed Transaction, if completed, would unlikely enhance any market power of the merged entity to a degree that would enable it to raise prices post-merger because of the significant competitive constraints from HKT. More importantly, as discussed in paragraph 16 above, competition in any retail fixed telecommunications services markets is basically a reflection of the outcome of the rivalry at the facilities-based level, hence market share in the retail markets in and of itself should not be placed too much weight. Competitiveness of this market (which is a retail

<sup>22</sup> Market shares of exchange lines are based on number of telephone lines whereas market shares of non-exchange lines (e.g. VoIP) are based on number of subscribers. The CA does not collect market share data in revenue terms.

market) depends ultimately on the competition at the facilities-based level. So long as competition at the facilities-based level remains robust, competitiveness of this market would be ensured.

45. The CA therefore considers it unlikely for the Proposed Transaction, if completed, to give rise to any competition issue in the form of unilateral effects in this market, considering especially the level of competition at the underlying facilities-based level. This view is, however, subject to the caveat that the merged entity's rivals (including existing players and new entrants), in the course of their network rollout, would not encounter Building Access Constraints in buildings which are not exclusively for residential use and where both merging parties are present as discussed above.

### Coordinated Effects

46. The two considerations on coordinated effects discussed in paragraph 32 also apply here. Furthermore, so long as no issue arises from the Building Access Constraints in the buildings concerned that might hinder new entry as discussed above, new entrants or the threat of entry could also serve as a deterrent to any attempt of the existing market participants to attain a coordinated outcome. The CA therefore considers it unlikely for the Proposed Transaction to give rise to any competition issue in the form of coordinated effects in this market.

### ***(C) Retail Local Fixed Internet Access Services***

47. Both HKBN and WTT provide retail local fixed Internet access services in Hong Kong. In defining this market, the CA has considered whether there should be separate markets for this service based on technologies (such as fibre-based and copper-based networks) and the type of customers.

48. In terms of technology, the rationale for local fixed network access services as explained in paragraph 22 above also applies here, that there is no available evidence to suggest a market definition based on technologies.

49. Regarding the type of customers, as explained in relation to retail local fixed voice services (in paragraph 39 above), the CA notes that the merging parties overlap in the business segment only, as WTT does not directly offer any retail local fixed internet access services to residential customers in Hong Kong.



50. In the light of the above, for the purpose of the Statement, the CA sets out its analysis on the business segment of the market in retail local fixed Internet access services in Hong Kong. The CA does not consider it appropriate to draw a distinction between the technologies deployed. Having considered carefully all the available evidence and information, the CA's view is that competition issues are unlikely to arise in any other possible market segmentations.

### Competition Assessment

51. Similar to retail local fixed voice services, the four main FNOs participate in this market. All of them serve business customers. There are also smaller FNOs and SBO licensees competing in this market.

52. **Table 3** and **Table 4** below show that the corresponding calculated values of both CR4 and HHI exceed the safe harbour thresholds.

**Table 3: Market share by number of subscribers in the business segment of retail local fixed Internet access services**

Operator	Market Share (%)
HKBN	█
WTT	█
<b>Merged Entity</b>	<b>[35% - 40%]</b>
HKT	█
HGC	█
Others	█
<b>Post-merger CR4</b>	█

Source: Consultancy Report, based on CA data as of October 2018.

**Table 4: HHI for the business segment of retail local fixed Internet access services**

	Pre-merger	Post-merger	Increase in HHI
HHI	█	█	[700 – 750]

Source: Consultancy Report, based on CA data as of October 2018.

The CA therefore considers it prudent to further assess the potential competition issues which might arise in this market following completion of the Proposed Transaction, as detailed in the following paragraphs.

### Unilateral Effects

53. **Table 3** shows that the Proposed Transaction, if completed, would result in the merged entity having a share of [35% to 40%] in the business segment of the market. HKT would remain the largest player with a market share of around █████%, suggesting a continued capability of providing significant competitive constraints on the merged entity's pricing decisions.

54. As discussed in paragraph 16 above, competition in any retail fixed telecommunications services markets is basically a reflection of the outcome of the rivalry at the facilities-based level, hence market share in the retail markets in and of itself should not be placed too much weight. This market (which is a retail market) would remain competitive so long as the competition at the facilities-based level remains robust.

55. The CA therefore considers it unlikely for the Proposed Transaction, if completed, to give rise to any competition issue in the form of unilateral effects in this market, subject to the caveat that the merged entity's rivals, in the course of their network rollout, would not encounter Building Access Constraints in buildings which are not exclusively for residential use and where both merging parties are present as discussed above.

### Coordinated Effects

56. The two considerations on coordinated effects discussed in paragraph 32 above also apply here. Again, so long as no issue arises from the Building Access Constraints in the buildings concerned, new entrants or the threat of entry could also serve as a deterrent to any attempt of the existing market participants to attain a coordinated outcome in the first place. The CA therefore considers it unlikely for the Proposed Transaction to give rise to any competition issue in the form of coordinated effects in this market.

### ***(D) Retail Mobile Telecommunications Services***

57. In the retail mobile telecommunications services market, despite the fact that both HKBN and WTT hold SBO licences for the provision of MVNO services, at present only HKBN (but not WTT) provides mobile voice and data services in the market. As the businesses of HKBN and WTT do not overlap in retail mobile telecommunications services, the CA is of the view that the Proposed Transaction will not give

rise to competition concerns in this market, and it is not necessary to come to a view on market definition.

***(E) Retail Multiple Play Services***

58. Retail multiple play services bundle different telecommunications services such as fixed voice, fixed Internet access, mobile services, online streaming services, etc. into one service package. Of the merging parties, only HKBN (but not WTT) offers multiple play services to retail customers. As the businesses of HKBN and WTT do not overlap in retail multiple play services, the CA is of the view that the Proposed Transaction will not give rise to competition concerns in this market, and it is not necessary to come to a view on market definition.

***(F) Wholesale Market for Interconnection with Fixed Networks***

59. At present, there is no regulatory guidance on interconnection charges between fixed carriers or interconnection charges between fixed carriers and mobile carriers. Whether interconnection is subject to any charges, and if so the level, are subject to commercial negotiations. While there may be a concern that the merged entity might raise its interconnection charges, the carrier(s) concerned would likely demand correspondingly higher interconnection charges from the merged entity. The CA considers that such market dynamics would likely be sufficient to deter the merged entity from raising its interconnection charges in the first place. In any case, if interconnecting parties fail to reach any commercial agreement on the terms and conditions of interconnection, either party may request a determination under section 36A of the TO. The CA therefore considers that the Proposed Transaction, if completed, would not raise any competition concerns in this market, and it is not necessary to come to a view on market definition.

***(G) ETS***

60. Both HKBN and WTT offer ETS. There are also a large number of other carriers and SBO licensees competing in the ETS market. Market rivalry among providers of ETS is intense as presently there are over 200 licensees eligible to provide ETS. Currently, HKBN and WTT have a combined market share of [5% to 10%]. In the light of the relatively small market share of the merging parties, and the highly competitive nature of this market, the CA considers that the Proposed Transaction, if completed, would not raise any competition concern in this market, and it is not necessary to come to a view on market definition.

## ***(H) Fixed External Telecommunications Facilities***

61. The market of fixed external telecommunications facilities covers operation of submarine cables, overland cables and satellites. While both HKBN and WTT are participants in this market, their combined market share in terms of external capacity is [less than 5%]. The CA considers that the Proposed Transaction would not raise any competition concern in this market, and it is not necessary to come to a view on market definition.

## ***(I) IT Services***

62. Both HKBN and WTT are providers of a range of IT services, including but not limited to data centre services, cloud services and system integration services. Provision of IT services without any establishment or maintenance of any means of telecommunications in general does not require a telecommunications licence under the TO. In fact, there are many large scale participants competing in this market, some of them are telecommunications carriers in Hong Kong and some are not. Given the presence of strong rivals in this market, both local and global ones, together with the fact that the merging parties have a very small combined presence in this market, the CA considers that the Proposed Transaction would not raise any competition concern in this market, and it is not necessary to come to a view on market definition.

## ***Summary of Competition Issues Identified***

63. Based on the above assessment, the CA has identified two potential competition issues which would likely arise from the Proposed Transaction, if completed, namely the difficulties of competing FNOs in accessing those buildings which are not exclusively for residential use and where both HKBN and WTT have installed their own in-building telecommunications systems therein (“Issue One”); and the risk of the Downstream Rivals becoming captive customers of the merged entity during a transitional period thereby weakening the Downstream Rival’s ability to compete with the merged entity post-merger (“Issue Two”).

## **Economic Efficiencies**

64. Section 8(1) of Schedule 7 to the CO provides that the Merger Rule does not apply to a merger if the economic efficiencies that arise or may arise from the merger outweigh the adverse effects caused by any lessening of competition in Hong Kong.

65. The Merger Guideline expressly recognises that efficiencies are often difficult to verify and quantify, in part because much of the information relating to efficiencies is uniquely in the possession of the merging parties. Moreover, efficiencies projected reasonably and in good faith by the merging parties may not be realised. Therefore, merging parties must do more than assert the claimed efficiencies. They must be able to demonstrate that the efficiencies are timely, likely and sufficient to outweigh the adverse effects caused by any lessening of competition<sup>23</sup>.

66. For the present case, the merging parties have made claims about various efficiencies which would be generated following completion of the Proposed Transaction. For example, the merging parties claim that cost savings may be achieved after merger through staff reduction and optimisation of network usage. However, the CA considers that the merging parties have failed to provide sufficient evidence, qualitative or quantitative, to demonstrate or substantiate any of their efficiency claims. Hence, there is no need for the CA to consider any further the question of whether the economic efficiencies claimed by the merging parties may or may not outweigh the adverse effects which may be caused by the two competition issues identified above.

## **COMMITMENTS PROPOSED BY THE MERGING PARTIES**

67. After the CA has communicated the two competition issues identified to them, HKBN and WTT offered the Proposed Commitments to the CA under section 60 of the CO in return for the CA not commencing an investigation in relation to the Proposed Transaction. Section 60 of the CO provides that the CA may accept from a person a commitment to take any action or refrain from taking action that the CA considers appropriate to address its concerns about a possible contravention of, *inter alia*, the Merger Rule, in return for the CA's agreement not to commence an investigation or bring proceedings in the Tribunal, or to terminate any investigation that has been commenced or proceedings that have been brought.

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<sup>23</sup> See paragraph 4.9 of the Merger Guideline.

68. The Proposed Commitments mainly include the following two components –

- (a) ***In-building Interconnection Commitment:*** For any building which is not exclusively for residential use and where both HKBN and WTT have installed their own blockwiring circuits therein, in the circumstances where a competing FNO is not providing fixed telecommunications services to any end-customer (residential or non-residential) at the building concerned and encounters difficulties in accessing that building for installation of blockwiring circuits for the provision of fixed telecommunications services to non-residential end-customers within that building, the merged entity will facilitate access by such FNO to its blockwiring circuits of that building for the purpose of enabling such FNO to provide fixed telecommunications services to non-residential end-customers in that building; and
- (b) ***Wholesale Access Commitment:*** the merged entity will continue to provide wholesale services to the Downstream Rivals who have existing wholesale agreements with HKBN and/or WTT, on existing or no less favourable terms and conditions for two years from the effective date of the commitments.

69. The CA considered that the Proposed Commitments, specifically the In-building Interconnection Commitment and the Wholesale Access Commitment, were sufficient to effectively address Issue One and Issue Two. On 13 February 2019, the CA issued the Notice to seek representations from the industry and interested parties on the CA's proposed acceptance of the Proposed Commitments. By the extended deadline of 7 March 2019, four representations were received from the following respondents -

- HGC
- HKT
- SmarTone Mobile Communications Limited (“SmarTone”)
- an HKBN employee

70. Having carefully considered all the representations, the CA sets out in this Statement its responses to the representations and decisions regarding acceptance of the commitments offered by the merging parties.

For the avoidance of doubt, the CA has taken into account and given thorough consideration to all of the representations before arriving at the decisions, even though not all of the issues raised are specifically mentioned or addressed herein.

## **REPRESENTATIONS RECEIVED AND CA'S RESPONSES**

### **Comments on In-Building Interconnection Commitment (“IB Commitment”)<sup>24</sup>**

#### *Scope*

71. In light of Issue One referred to in paragraph 63 above, the IB Commitment under the Proposed Commitments applies specifically to those buildings which are not exclusively for residential use and where both HKBN and WTT have installed their own in-building telecommunications systems (the term “blockwiring circuits” was used in the Notice and Proposed Commitments)<sup>25</sup>.

72. HGC submits that the IB Commitment should cover all blockwiring circuits owned by either or both of the merging parties in all buildings (including exclusively residential buildings), and in particular, where the merging parties are the only providers of fibre blockwiring circuits in a building. HKT submits that once the merger has taken place, one “close competitor” will disappear from the entire Hong Kong market. Therefore, it would not be reasonable for the CA to conclude that the merger cannot impact buildings where only one of the merging parties is active. HKT considers that the IB Commitment should cover all buildings (including exclusively residential buildings) where either HKBN or WTT, or the merged entity in future, is the only provider of blockwiring circuits in a building.

73. In response to HGC’s and HKT’s representations, the CA reiterates that, underpinned by the facilities-based competition perspective as outlined in preceding paragraphs, the rationale behind the IB

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<sup>24</sup> In the Revised Commitments, the term “In-building Interconnection Commitment” is revised to “In-building System Commitment” which better reflects the scope of the commitment.

<sup>25</sup> Further to the issue of the Notice, and having considered carefully the representations received, the CA considers that “in-building telecommunications system” should be a more appropriate term to describe the telecommunications systems that FNOs install within buildings for the provision of telecommunications services. However, this Statement will continue to refer to the term “blockwiring circuits” where the context requires, such as when it was used by the respondents in their representations.

Commitment is to enable rivals to be able to compete with the merged entity post-merger at any locations across Hong Kong where there is one less competitor as a direct result of the merger, and where the Building Access Constraints exist. The scope of the IB Commitment does not cover exclusively residential buildings because HKBN's and WTT's businesses do not overlap there. For buildings not exclusively for residential use and where only either HKBN's or WTT's in-building telecommunications systems exist, as discussed in paragraphs 17 and 28 above, since the extension of the overall network coverage of the merged entity in the business segment post-merger would not be of such magnitude that would give rise to competition concerns at the fixed network infrastructure level, the CA does not consider that there is any need to expand the scope of the IB Commitment to cover that type of buildings. As such, and having considered carefully the representations received, the CA does not agree with HGC and HKT that the IB Commitment should be extended to cover exclusively residential buildings as well as buildings where either HKBN's or WTT's in-building telecommunications systems exist.

74. The CA notes that HGC and HKT specifically raise the point that the IB Commitment should be extended to buildings where either HKBN, WTT or the merged entity in future is the only provider of (fibre) blockwiring circuits. For buildings which are not exclusively for residential use and where either HKBN or WTT is the only provider of the in-building telecommunications systems (fibre and/or copper), given that any competition issue will unlikely arise at the fixed network infrastructure level, the CA considers that such buildings should not fall within the scope of the IB Commitment. For buildings where both HKBN's and WTT's in-building telecommunications systems (fibre and/or copper) exist pre-merger, regardless of whether the merged entity becomes the only provider of the in-building telecommunications systems post-merger, those buildings which are not exclusively for residential use and have no other feasible means of access (i.e. Building Access Constraints) will be subject to the IB Commitment.

75. HKT submits that some customers may use their homes as home office, and club houses and shops may exist in buildings which are classified as "exclusively for residential use". Therefore, HKT considers that it should be the activity of the customers, rather than the classification of buildings, which is relevant for the purpose of defining the scope of the IB Commitment.

76. For the purpose of the IB Commitment, the term "building which is not exclusively for residential use" would include within its scope



buildings where usually non-residential premises (e.g. shops, club houses or premises for any other non-residential purposes) are located in the lower floors and residential premises are located in the upper floors. Deeds of mutual covenant in Hong Kong generally provide that residential premises in a building are not allowed to be used for non-residential activities. While it is noted that some occupiers may use residential premises as home office or for non-residential purposes, the CA does not consider it reasonable to mandate the merged entity to offer access to a requesting operator for provision of non-residential services to premises which are supposed to be used for residential purposes.

77. HGC submits that the IB Commitment should cover both vertical and horizontal blockwiring circuits, and the merged entity should commit to provide interconnection at the lead-in junction before entering the building. HKT submits that apart from blockwiring circuits, the IB Commitment should also cover other elements which may be needed in order for other FNOs to have access to serve their customers in the building concerned, including but not limited to underground lead-in ducts, telecommunications and broadcasting equipment (“TBE”) room cabinet space, vertical cabling riser/trunking space and horizontal conduits.

78. The CA clarifies that the reference to “any in-situ blockwiring circuits” in the IB Commitment under the Proposed Commitments covers in-situ blockwiring circuits irrespective of whether they are copper-based or fibre-based, or vertical or horizontal in nature. However, the CA recognises that an FNO may not necessarily pre-install fibre-based blockwiring circuits at each of the premises until there is customer demand, and agrees that only interconnection with in-situ blockwiring circuits of the merged entity may not be sufficient to facilitate new entry or threat of new entry. Accordingly, apart from interconnection with in-situ blockwiring circuits of the merged entity, **the CA considers that the merged entity should also make available other elements of its in-building telecommunications systems (including but not limited to lead-in ducts/cables for accessing a building, cabinet space in the TBE room, vertical cable risers and horizontal conduits) of the buildings concerned to the requesting operator** for the latter to install its own blockwiring circuits if the in-situ blockwiring circuits of the merged entity are not available at the time at which a request for access is made by the requesting operator. With regard to interconnection with the merged entity’s network at a connection point prior to the in-building telecommunications system, this should be subject to the commercial arrangements between the merged entity and the requesting operator, and should not form part of the IB Commitment.

79. In addition to the comments mentioned above, both HGC and HKT also comment that the scope of the IB Commitment should be extended to cover the following situations –

- (a) for a building which is not exclusively for residential use, even if an operator is currently leasing blockwiring circuit from a third party FNO for provision of residential services, such operator should be eligible to seek access from the merged entity under the IB Commitment for provision of non-residential services, as there may be different access paths or blockwiring systems for accessing residential and non-residential customers even within one building;
- (b) an FNO which is providing services at a building via copper blockwiring circuits should be eligible to seek access to the merged entity's fibre blockwiring circuits under the IB Commitment in order to ensure effective competition within the building concerned;
- (c) for an FNO which is able to access certain floors/sections of a building but not other floors/sections of that building because of closed ceilings, interior decoration, different access paths or blockwiring systems, such FNO should be eligible to seek access from the merged entity under the IB Commitment;
- (d) an FNO which is providing services to an end-customer at the building concerned via the merged entity's blockwiring circuits should be eligible to seek access from the merged entity under the IB Commitment for the purpose of serving additional customer(s); and
- (e) for an existing customer which is using the merged entity's blockwiring circuits and wishes to switch to another operator, the merged entity should share the existing blockwiring circuits under the IB Commitment when that customer ports out to the operator concerned and should not refuse interconnection on the basis that there is no "in situ" wiring available.

80. The CA has considered carefully the above comments and would like to respond as follows –

- (a) having considered that there may be different access paths or blockwiring systems for accessing residential and non-residential premises even within one building, the CA agrees that even if an operator is currently leasing blockwiring circuit from a third party FNO for providing services to residential end-customers, it does not automatically mean that such operator can provide services to non-residential end-customers via the blockwiring circuit of that third party FNO. As such, **the CA agrees that an operator which is currently leasing blockwiring circuit from a third party FNO for provision of services to residential end-customers should be eligible to seek access from the merged entity under the IB Commitment for provision of services to non-residential end-customers**, on the condition that such operator encounters difficulties of access to the building concerned for serving non-residential end-customers;
- (b) as explained above, the CA is concerned about the potential competition issue at the fixed network infrastructure level post-merger in those buildings where the Building Access Constraints exist. The merger will directly result in one less competitor within these buildings. The IB Commitment aims at facilitating entry or threat of new entry to provide services in these buildings to counteract any exercise of potential market power in terms of coverage gained on the part of the merged entity from this group of buildings due to the Building Access Constraints. Accordingly, under the IB Commitment, any FNOs which are not providing any fixed services to any non-residential end-customer(s) within the building concerned (“New Competitors”) and encounter the Building Access Constraints may request access from the merged entity and compete with the merged entity in the provision of fibre-based services to non-residential end-customers in the building. On the other hand, if an FNO is already providing services to non-residential end-customers within any of such buildings via copper blockwiring circuits, it should not be entitled to benefit from the IB Commitment as allowing it to

do so will not facilitate new entry or threat of new entry to those buildings;

- (c) in the situation where an FNO is already providing services to non-residential end-customer(s) at certain floors/sections of the building concerned but not others floors/sections, given that the IB Commitment would enable any New Competitor(s) to request access from the merged entity and compete with the merged entity whenever the Building Access Constraints exist, the CA considers that such new entry or the threat of it should be sufficient to constrain any enhancement of market power of the merged entity;
- (d) in the situation where an FNO is already providing services to a non-residential end-customer at the building concerned via the merged entity's blockwiring circuits and would like to seek access to the merged entity's blockwiring circuits under the IB Commitment for serving additional non-residential end-customer(s), applying the same argument in (c) above, given that the IB Commitment would enable any New Competitor(s) to request access from the merged entity and compete with the merged entity whenever the Building Access Constraints exist, the CA considers that such new entry or the threat of it should be sufficient to constrain any enhancement of market power of the merged entity; and
- (e) given that the scope of the IB Commitment will be expanded to cover other elements of the merged entity's overlapping in-building telecommunications systems in the building concerned such that the requesting operator may make use of the merged entity's systems to install its own blockwiring circuits if the in-situ blockwiring circuits of the merged entity are not available at the time at which a request for access is made by the requesting operator, the CA does not consider it necessary to specifically require the merged entity to share with an FNO the blockwiring circuits being deployed for serving an existing customer when that customer ports out to such FNO.

## ***Implementation***

81. Under the IB Commitment, the merged entity, after receiving a request, may require the requesting operator to provide evidence to demonstrate that there are no other feasible means of access to the building concerned for the purpose of installing any blockwiring circuits for the provision of fixed telecommunications services to end-customers occupying premises which are not for residential use within that building.

82. HGC suggests that the “no other feasible means of access” criterion should be removed or refined, and proposes to replace it with other grounds of access, namely economic inefficiency in replication, impractical physical replication as well as inefficient or impractical offers of alternative access made by other FNO.

83. As explained in the Notice, for buildings where the Building Access Constraints do not exist and other FNOs are hence able to install their own in-building telecommunications systems therein if they commercially decide to compete in this way, the CA does not consider that the competition at the fixed network infrastructure level would be significantly altered post-merger. As such, the CA considers that an FNO should not be eligible for seeking access from the merged entity under the IB Commitment if the Building Access Constraints do not exist at a particular building and it is simply the case that the FNO commercially considers that it is economically inefficient to install its own in-building telecommunications system or a third party FNO’s terms of offer of alternative access are too expensive or unreasonable. For the purpose of the IB Commitment, “no other feasible means of access” should include but not limited to scenarios where there is no physical space within that building for installing any elements of an in-building telecommunications system, or the property management office or owner(s) of that building is/are not willing to accommodate the installation of new in-building telecommunications systems.

84. Both HGC and HKT do not agree with the requirement that the requesting operator should provide evidence to demonstrate that there are no other feasible means of access to the building concerned, as such requirement will delay the offer of access under the IB Commitment. HKT expresses concerns over the need for a written confirmation from the requesting operator’s senior management as not all requesting operators involve their senior management in such business requests, and such need is not proportionate. HGC also queries that such written confirmation is not included in the text of the IB Commitment. Moreover, HKT raises the

risk that the requesting operator and the merged entity may directly communicate with each other more than is strictly necessary which could lead to unwarranted collusion. Instead, HKT suggests that a requesting operator should automatically be granted access upon submitting a request to the merged entity, unless the merged entity can provide evidence that there are other feasible means of access to the building.

85. With a view to facilitating the commercial negotiation among relevant parties, the CA proposed in the Notice that the requesting operator, in making a request, should provide to the merged entity a written confirmation made by its senior management that: (a) for a building that has common parts, there are no other feasible means of access to that building despite holding a certificate issued by the CA under section 14(9) of the TO; and (b) for a building that has no common parts, there are no other feasible means of access to that building. Whilst such proposed arrangement is not part of the IB Commitment offered by the merging parties, the CA would expect the merged entity and the requesting operator to follow it for the implementation of the IB Commitment. In case of any disputes in relation to the IB Commitment (including but not limited to the situation where the requesting operator refuses to provide the written confirmation made by its senior management, or the merged entity refuses to accept the written confirmation provided by the requesting operator as evidence of no other feasible means of access to the building concerned, etc.), either the merged entity or the requesting operator may refer the matter to the CA for determination, provided that the requesting operator agrees in writing to be bound by the CA's determination. With the CA's determination as a safeguard, the CA does not consider that the requirement to provide evidence (i.e. the written confirmation) will delay the offer of access under the IB Commitment.

86. As the requesting operator only needs to provide the written confirmation from its senior management to the merged entity as evidence to demonstrate that there are no other feasible means of access to the building concerned, the CA does not consider that such arrangement would provide opportunity for the requesting operator and the merged entity to directly communicate commercially sensitive information leading to collusion. In case the CA is to make a determination on a dispute under the IB Commitment, the requesting operator may be required to provide evidence to the CA demonstrating that it does not have access to the building concerned. If access is not granted because the building management office or owner(s) is/are not willing to grant access, the requesting operator may tender to the CA documents such as correspondence or emails from the building management office or owner(s)

of that building rejecting access by the requesting operator, or information showing the lack of responses from the building management office or owner(s) of that building to the request of building access made by the requesting operator.

87. The CA notes, and has considered carefully, HKT's suggestion that a requesting operator should automatically be granted access upon submitting a request to the merged entity. In order to differentiate from the situation where a requesting operator does not encounter any difficulties of access to a particular building but commercially decides not to install its own in-building telecommunications system therein, the CA maintains its view that it is reasonable for the requesting operator to provide evidence to demonstrate that there are no other feasible means of access to the building concerned. The CA reiterates that so far as communications between the merged entity and the requesting operator are concerned, a written confirmation from the requesting operator's senior management should suffice as evidence of no other feasible means of access. Regarding HKT's concern over the need to involve the requesting operator's senior management in providing the written confirmation, the CA considers that it is necessary to strike a balance between facilitating a requesting operator and ensuring a valid request, and maintains its view that it would be reasonable for the written confirmation to be made by the requesting operator's senior management.

88. HKT considers that the wording of "*fair and reasonable terms and conditions and in line with normal commercial practice*" under the IB Commitment is vague and may be manipulated by the merged entity to levy high prices.

89. The wording of "*fair and reasonable terms and conditions and in line with normal commercial practice*" under the IB Commitment aims at providing high level guidance for the parties to conduct commercial negotiations on the terms and conditions of access. In light of the fact that FNOs from time to time conduct commercial negotiations among themselves on access issues, the CA does not consider it appropriate to set out any prescriptive terms and conditions in the text of the IB Commitment. In any event, if the merged entity and the requesting operator fail to reach agreement on the terms of access (including but not limited to the level of charges), they may refer the matter to the CA for determination, provided that the requesting operator agrees in writing to be bound by the CA's determination. The CA will determine the terms and conditions that it considers fair and reasonable. In determining the level, or method of

calculation of the relevant charges, the CA may select from among alternative costing methods what it considers to be fair and reasonable.

90. HKT is concerned that the CA may not have the resources to immediately rule upon the disputes, and suggests that an independent third party, bound by confidentiality obligations, should be retained to assess the terms offered by the merged entity based on the objective benchmarks pre-defined by the CA. HGC considers that the referral of disputes to the CA will add complexity and delay to the operation of the IB Commitment. HKT also proposes that a prescribed timeframe should be stipulated for the operation of the IB Commitment to avoid any undue delay, including the timeframe for (a) the merged entity to respond to the requesting operator's request; (b) the requesting operator to accept or counter-propose terms; (c) the parties to further negotiate; and (d) the CA to make a determination.

91. With the CA's determination as a safeguard, and having considered carefully the representations made, the CA does not agree that there is a need for an independent third party to take up the monitoring and supervisory role. The CA has considered carefully HKT's concern that the CA may not have the resources to immediately rule upon the disputes. First, if the CA is to make a determination, it will endeavour to process the case as expeditiously as possible. Second, it is expected that once the terms and conditions for access have been made for a particular building, such terms and conditions should serve as a reference for the parties to enter into access agreements regarding other buildings, and hence facilitate the commercial negotiations. Regarding the suggestion that a prescribed timeframe should be stipulated for the operation of the IB Commitment, the CA considers that sufficient flexibility should be allowed for the merged entity and the requesting operator to conduct commercial negotiations with regard to requests for access under the IB Commitment. If a requesting operator considers that the merged entity has unduly delayed the negotiation process, it may refer the matter to the CA for determination.

## **Comments on Wholesale Access Commitment (“WA Commitment”)<sup>26</sup>**

### ***Scope***

92. In light of Issue Two as referred to in paragraph 63 above, the WA Commitment under the Proposed Commitments requires the merged entity to continue to provide wholesale inputs to its Downstream Rivals

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<sup>26</sup> In the Revised Commitments, the term “Wholesale Access Commitment” is revised to “Wholesale Services Commitment”.



which have existing wholesale agreements with HKBN and/or WTT, on existing or no less favourable terms and conditions for two years from the effective date of the commitment.

93. HGC suggests that the WA Commitment should be extended to cover residential services in addition to non-residential services, and should be available to any requesting parties rather than just existing customers. SmarTone also submits that the WA Commitment should apply to any existing wholesale agreements entered into by HKBN and/or WTT.

94. As HKBN's and WTT's businesses do not overlap in the residential segment of the provision of fixed telecommunications services, the Proposed Transaction, if completed, would not have impact on such market segment. The CA therefore considers that there is no base for the WA Commitment to apply to residential services. As Issue Two concerns the risk of Downstream Rivals becoming captive customers of the merged entity, the CA does not consider it relevant to extend the scope of the WA Commitment to include parties which are not HKBN's and/or WTT's existing customers. While there may be a concern that MNOs which are using HKBN's and/or WTT's services for mobile backhaul may become captive customers of the merged entity after completion of the Proposed Transaction and higher costs of mobile backhaul may arguably have impact on the retail mobile telecommunications services market, the CA is of the view that MNOs in general should have sufficient bargaining power in negotiating with FNOs (including the merged entity) on the terms and conditions for mobile backhaul, and will therefore unlikely become captive customers of the merged entity.

95. HKT considers that there may be a loophole under the WA Commitment since the merged entity, as a wholesale service provider, may discriminate its Downstream Rivals by upgrading its own services (e.g. from Metro-Ethernet to Carrier Ethernet 2.0) without offering the same upgrade to their wholesale customers.

96. The WA Commitment serves as a safeguard against the risk of Downstream Rivals becoming captive customers of the merged entity and therefore concerns the provision of wholesale services by the merged entity based on existing or no less favourable terms and conditions. Any upgrade of the wholesale services, which results in the provision of services with different terms and conditions, should be subject to commercial negotiations between the Downstream Rivals concerned and the merged entity. The CA does not agree with HKT that the service upgrade by the merged entity would create a loophole under the WA

Commitment. In fact, it may be unreasonable to mandate the merged entity to provide the upgraded wholesale services to Downstream Rivals at the existing charges.

### ***Implementation***

97. HGC considers that the WA Commitment appears to do little to ensure continued competition in the enterprise services market, and suggests that the commitment should be perpetual, possibly subject to a 5-yearly review of competition in the market. HKT considers that the WA Commitment should be subject to a 3-year timeframe, in view of the lengthy process of switching wholesale service providers. It also submits that a 3-year timeframe for the WA Commitment is consistent with the timeframe under which HKT was required to continue to provide wholesale network access to mobile virtual network operators based on existing or no less favourable terms and conditions, as one of the measures to eliminate or avoid any SLC Effect in the telecommunications markets arising from the proposed acquisition by HKT Limited of CSL New World Mobility Limited in 2014.

98. The WA Commitment aims specifically at addressing Issue Two which is a transitional issue, and therefore should be subject to a pre-defined timeframe rather than on a perpetual basis, as proposed by HGC. Having considered carefully HKT's comments on the time needed for switching wholesale service providers, **the CA agrees that the WA Commitment should be subject to a 3-year timeframe.** For the avoidance of doubt, the duration of timeframe of any commitment/remedy for any merger case should be considered on a case-by-case basis. Hence, the reference to the HKT/CSL merger in 2014 quoted by HKT is not a relevant consideration for determining the timeframe of the WA Commitment in this case.

99. HKT considers that an independent monitoring trustee should be appointed to ensure proper implementation of the WA Commitment. Otherwise, the CA will rely almost exclusively on claims made by the merged entity to ensure compliance with the WA Commitment.

100. As the WA Commitment concerns the provision of wholesale services based on existing or no less favourable terms and conditions, it is expected that the implementation of the WA Commitment should not be complicated. In case any Downstream Rival considers that the merged entity fails to comply with the WA Commitment, it may submit the relevant

details of its case to the CA. The CA will consider all relevant information from the Downstream Rival concerned as well as the merged entity. The CA does not agree with HKT that there is a need to engage an independent monitoring trustee for ensuring proper implementation of the WA Commitment.

### **Other Comments**

101. In addition to the Proposed Commitments, HGC suggests three further commitments -

- (a) HKBN and WTT should be required to release all their existing customers from long-term contracts immediately before completion of the Proposed Transaction, such that other competitors can compete for these customers after completion;
- (b) the merged entity should be required to maintain prices above the regulated price floor set by the CA; and
- (c) the merged entity should be required to make all offers available generally and be prohibited from making targeted “switching offers” to customers of specific competitors.

102. Based on the competition assessment conducted, the CA has identified Issue One and Issue Two which would likely arise from the Proposed Transaction. Any commitments offered by the merging parties must be relevant to, and be able to sufficiently address, the two issues identified. The CA does not consider that the three further commitments proposed by HGC are relevant to Issue One or Issue Two.

103. HGC and HKT also question why the CA does not conduct an investigation on the Proposed Transaction pursuant to section 39 of the CO<sup>27</sup>. HKT further states that it is recognised that “structural commitments” are considered to be preferable in “Hong Kong and the majority of mature antitrust regimes” and comments that the Proposed Commitments, being behavioural commitments, will have limited effect.

104. Whilst section 39 of the CO confers power on the CA to conduct investigations, the CO also provides other enforcement tools to the CA to facilitate the performance of its functions under the CO, including

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<sup>27</sup> Under section 39 of the CO, if the CA has reasonable cause to suspect that contravention of, *inter alia*, the Merger Rule, has taken place, is taking place or is about to take place, it may conduct an investigation.

section 60 of the CO, under which the CA may accept from a person a commitment to take any action or refrain from taking action that **the CA considers appropriate to address its concerns about a possible contravention of the Merger Rule, in return for the CA's agreement not to commence an investigation.** Having conducted a competition assessment based on the information available not only from the merging parties but also from other relevant third parties, and taking into account all relevant circumstances of the case, the CA has analysed all potential competition concerns that are likely to arise from the Proposed Transaction and considers that it is appropriate to address the competition concerns identified in relation to the Proposed Transaction via acceptance of commitments under section 60 of the CO.

105. On the issue of structural or behavioural commitments, the CA considers that ultimately it depends on individual circumstances of each case as to what commitments are most appropriate to address the competition concerns identified. The Merger Guideline notes that behavioural remedies may be accepted in appropriate cases, where the CA wishes to ensure that the merged entity does not behave in an anti-competitive way after the merger<sup>28</sup>. The key principle is that the remedies offered by parties to a proposed merger as commitments should be able to eliminate or avoid the SLC Effect in a relevant market that is, or is likely to be, brought about by the proposed merger<sup>29</sup>. In the light of the analysis given in this Statement, the CA is of the view that the Proposed Commitments, as revised in accordance with paragraphs 78, 80(a) and 98 above, are sufficient to effectively address its competition concerns in relation to the Proposed Transaction.

106. The CA notes that to the extent the representations discuss any competition concerns that may arise from the Proposed Transaction, they have been taken into account in the CA's competition assessment.

## **CA'S ACCEPTANCE OF THE REVISED COMMITMENTS**

107. The Office of the Communications Authority communicated to the merging parties that the Proposed Commitments should be revised in accordance with paragraphs 78, 80(a) and 98 above to address the points raised by the respondents to the Notice, together with necessary consequential changes and changes to address some drafting points. On 26

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<sup>28</sup> See paragraph 5.14 of the Merger Guideline.

<sup>29</sup> See paragraph 5.11 of the Merger Guideline.

March 2019, HKBN and WTT offered to the CA the Revised Commitments, set out at the **Annex** to this statement, which fully respond to the CA's views. Accordingly and for the reasons given in this Statement, the CA considers that the Revised Commitments are sufficient to effectively address its competition concerns in relation to the Proposed Transaction and **decides to accept the Revised Commitments under section 60 of the CO and not to commence an investigation into the Proposed Transaction under section 39 of the CO.**

**Communications Authority**  
**17 April 2019**

**Commitments given by Hong Kong Broadband Network Limited,  
HKBN Enterprise Solutions Limited and WTT HK Limited to the  
Communications Authority pursuant to section 60  
of the Competition Ordinance (Cap. 619)**

Pursuant to section 60 of the Competition Ordinance (Cap. 619), regarding the proposed acquisition of the entire issued share capital of WTT Holding Corp. by HKBN Ltd. (the “**Transaction**”), Hong Kong Broadband Network Limited (“**HKBN**”), HKBN Enterprise Solutions Limited (“**HKBNES**”) and WTT HK Limited (“**WTT**”) hereby enter into the following commitments with a view to addressing concerns about a possible contravention of the merger rule under section 3 of Schedule 7 to the Competition Ordinance. HKBN and HKBNES are indirectly wholly-owned subsidiaries of HKBN Ltd. whereas WTT is an indirectly wholly-owned subsidiary of WTT Holding Corp.

**1. Effective date of the commitments**

These commitments, signed by the Parties, shall take effect from the date on which the Authority accepts them or the date on which the Transaction completes, whichever is the later (“**Effective Date**”).

**2. Definitions**

For the purpose of these commitments, the following terms shall have the following meanings:

**Authority** means the Communications Authority established under the Communications Authority Ordinance (Cap. 616) or its successor;

**Effective Date** has the meaning given in section 1;

**Group** means, in relation to an entity, that entity, together with any other entity which controls, is controlled by or is under common control with that entity;

<b>HKBN</b>	means Hong Kong Broadband Network Limited, holder of UCL 045 (as of the Effective Date);
<b>HKBNES</b>	means HKBN Enterprise Solutions Limited, holder of UCL 022 (as of the Effective Date);
<b>Hong Kong</b>	means Hong Kong Special Administrative Region of the People's Republic of China;
<b>In-building Telecommunications System</b>	includes but not limited to (a) any in-situ blockwiring circuits, be they copper-based or fibre-based, vertical or horizontal; (b) lead-in ducts/cables for accessing a Relevant Building; (c) cabinet space in the telecommunications and broadcasting equipment (TBE) room; (d) vertical cable risers; and (e) horizontal conduits, used or capable of being used at the point in time at which a request pursuant to section 3.1 is made for the provision of fixed telecommunications services and which is owned by any of the Parties, or any entities within the Group to which the Parties belong, within a Relevant Building and which is available having regard to the reasonable needs of any of the Parties (or any other person who has obtained rights to use it from a Party);
<b>Interconnection</b>	means any connection between systems or services of a Party and a Requesting Operator or elements of such systems or services for the delivery of any communication, message or signal over the connection and, without limiting the generality of the foregoing, includes interconnection to a system, to a service, between systems, between services and between a system and a service;
<b>Network</b>	of a Party means the fixed telecommunications network operated, established and maintained by that Party in accordance with its UCL;
<b>OFCA</b>	means the Office of the Communications Authority of Hong Kong;

<b>Parties</b>	means HKBN, HKBNES and WTT, each a “Party”;
<b>Requesting Operator</b>	has the meaning given in section 3.2;
<b>Relevant Building</b>	means any building located in Hong Kong which is not exclusively for residential use and which satisfies both of the following conditions: <ul style="list-style-type: none"> <li>• immediately prior to the Effective Date, either HKBN or HKBNES and WTT have installed and own In-building Telecommunications System within that building; and</li> <li>• after the Effective Date, the In-building Telecommunications System so installed and owned by either HKBN or HKBNES and WTT within that building is connected to the Network of any of the Parties.</li> </ul>
<b>Relevant Wholesale Customer</b>	means a person, other than a Party, who is party to a Wholesale Agreement (as defined below) and who holds a valid UCL with authorisation to provide public internal fixed telecommunications services and/or SBO Licence;
<b>SBO Licence</b>	means Services-Based Operator Licence issued under the Telecommunications Ordinance (Cap. 106) with authorisation to provide Class 1 service, Class 2 service and/or Class 3 for Internet Access Services;
<b>UCL</b>	means Unified Carrier Licence issued under the Telecommunications Ordinance (Cap. 106);
<b>Wholesale Agreement</b>	means an agreement entered into by HKBN, HKBNES or WTT with a Relevant Wholesale Customer which is still in force as at the Effective Date for the provision of telecommunications services to a Relevant Wholesale Customer for the purposes of enabling the Relevant Wholesale Customer to provide retail fixed telecommunications services



to non-residential end-customers in Hong Kong;  
and

**WTT** means WTT HK Limited, holder of UCL 028 (as of the Effective Date).

### **3. In-building System Commitment**

3.1 Upon the written request of a Requesting Operator with reasonably sufficient details of its requirements, the Parties (or any one Party that the Parties may between themselves agree) will facilitate access by the Requesting Operator to any element(s) of the In-building Telecommunications System of a Relevant Building on fair and reasonable terms and conditions and in line with normal commercial practice for the purposes of enabling such Requesting Operator to provide fixed telecommunications services to end-customers occupying premises which are not for residential use within the Relevant Building (the “**In-building System Commitment**”).

3.2 For the purposes of the In-building System Commitment, a **Requesting Operator** is a person (a) who holds a UCL with authorisation to provide public internal fixed telecommunications services; and (b) who, at the time at which a request pursuant to section 3.1 is made, is not providing fixed telecommunications services to any non-residential end-customers within the Relevant Building to which access has been requested from any of the Parties. For these purposes, the Party who receives the request may require the Requesting Operator to provide evidence to demonstrate that there are no other feasible means of access to that Relevant Building for the purposes of installing any elements of an in-building telecommunications system for the provision of fixed telecommunications services to non-residential end-customers within that building.

3.3 Any disputes regarding the application of the In-building System Commitment or the terms and conditions of access to In-building Telecommunications System may be referred by any of the Parties or the purported Requesting Operator to the Authority for determination, provided that such purported Requesting Operator agrees in writing to be bound by the Authority’s determination. If the Authority accepts such request for determination, such

dispute will be determined by the Authority and shall be binding on the relevant Party, without prejudice to the rights of a Party or the purported Requesting Operator from exercising any other legal right or remedy that may be available to it. The relevant Party shall provide all relevant financial and/or technical information to facilitate the Authority to make the determination.

3.4 The terms and conditions in a determination made pursuant to section 3.3 of these commitments may include any technical, commercial and financial terms and conditions that the Authority considers fair and reasonable, including (without limitation):

- (i) the level of, and the method of calculating, the charges that the Requesting Operator will pay to the relevant Party for the access to the elements of the In-building Telecommunications System;
- (ii) the lead time for making the elements of the In-building Telecommunications System available to the Requesting Operator; and
- (iii) in case of Interconnection, the points at which Interconnection is to be made as well as the technical standards and the lead time for effecting the Interconnection.

3.5 The charges referred to in section 3.4(i) above shall be based on the relevant reasonable costs attributable to the access to the elements of the In-building Telecommunications System. In determining the level, or method of calculation, of the relevant reasonable costs, the Authority may select from among alternative costing methods what it considers to be a fair and reasonable costing method.

3.6 The In-building System Commitment shall continue in force until it is varied or released pursuant to section 62 of the Competition Ordinance.

#### **4. Wholesale Services Commitment**

4.1 The Parties will continue to provide fixed telecommunications services under the Wholesale Agreements to Relevant Wholesale

Customers for three years from the Effective Date, as follows:

- (i) the Parties shall continue to comply with the terms and conditions of the Wholesale Agreements and keep the material terms and conditions unchanged, or no less favourable than those in the existing Wholesale Agreements, until the expiry date of each relevant Wholesale Agreement (subject to the proper exercise by any party to a Wholesale Agreement of any enforcement, variation or termination right under that Wholesale Agreement); and
- (ii) if any Wholesale Agreement expires within three years from the Effective Date, the relevant Party shall, if requested in writing by the Relevant Wholesale Customer concerned, enter into a new agreement on terms and conditions no less favourable than those in the existing Wholesale Agreement for a term expiring no earlier than the date falling three years from the Effective Date (the “**Wholesale Services Commitment**”).

4.2 For the avoidance of doubt:

- (i) section 4.1 does not prohibit the Parties from offering terms and conditions that are more favourable (to the Relevant Wholesale Customer) than those in the existing Wholesale Agreements; and
- (ii) to the extent that any Party may have any unilateral right of termination on notice without cause under a Wholesale Agreement, it would not be “proper” for the purposes of section 4.1 (i) for that Party to exercise that right.

4.3 The Wholesale Services Commitment shall expire three years from the Effective Date.

## **5. Procurement Commitment**

5.1 The Parties will use their best endeavours to procure that all entities within their Group:

- (i) act in accordance with the commitments in sections 3 and 4;

- (ii) provide all such assistance to the Parties to enable the Parties to comply with their commitments in sections 3 and 4; and
  - (iii) not take any action that would be inconsistent with the Parties' commitments in sections 3 and 4.
- 5.2 The Procurement Commitment with respect to each of the commitments will expire upon the expiry of the relevant commitment as the case may be.

## **6. Reporting Commitment**

- 6.1 The Parties (or another entity on the Parties' behalf) will submit to OFCA written reports on their compliance with each of the above commitments every six months, with the first such report to be submitted six months from the Effective Date and the last such report to be submitted upon the expiration of the last of the above commitments.
- 6.2 The Reporting Commitment with respect to each of the above commitments will expire upon the expiry of the relevant commitment as the case may be.

## **7. General provisions**

- 7.1 Any notice delivered pursuant to these commitments shall be delivered by hand, or sent by email, facsimile, registered post or pre-paid post. Any notice shall be deemed to have been received: (i) if delivered by hand, when delivered; (ii) if sent by email or facsimile, on receipt of confirmation of transmission or delivery; or (iii) if sent by pre-paid post, (in the absence of evidence of earlier receipt) three business days after posting from within Hong Kong. Any notice received on a day which is not a business day shall be deemed to be received on the next following business day.
- 7.2 These commitments are governed by the laws of Hong Kong and subject to the jurisdiction of the Hong Kong courts.

For and on behalf of  
Hong Kong Broadband Network Limited

*[Signed]*

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Name:

Title:

Date: 26 March 2019

For and on behalf of  
HKBN Enterprise Solutions Limited

*[Signed]*

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Name:

Title:

Date: 26 March 2019

For and on behalf of  
WTT HK Limited

*[Signed]*

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Name:

Title:

Date: 26 March 2019