

SINGTEL MOBILE SINGAPORE PTE LTD

**RESPONSE TO PUBLIC CONSULTATION ON THE REVIEW OF THE CODE OF
PRACTICE FOR INFO-COMMUNICATION FACILITIES IN BUILDINGS
("COPIF")**

1. INTRODUCTION

- 1.1. SingTel Mobile Singapore Pte Ltd (**SingTel Mobile**) is a leading provider of mobile telecommunications services over 2G and 3G networks, high speed data services through General Packet Radio Service (**GPRS**) and High-Speed Packet Access (**HSPA**) technology and wireless services on our WiFi platform.
- 1.2. SingTel Mobile is committed to the provision of state-of-the-art telecommunications technologies and services in Singapore and welcomes the opportunity to respond to the consultation paper issued by the Info-communications Development Authority of Singapore (**IDA**) in relation to the review of the Code of Practice for Info-Communication Facilities In Buildings (**COPIF**) (**Consultation Paper**).
- 1.3. This submission is structured as follows:

Section 1 – Introduction
Section 2 – Executive Summary
Section 3 – General Comments
Section 4 – Specific Comments

2. EXECUTIVE SUMMARY

2.1. SingTel Mobile's view on the Consultation Paper can be summarised as follows:

General Comments

2.2. SingTel Mobile submits that the COPIF should be amended to:

- (a) grant MTOs a right of access to Developments for the purpose of installing plant and equipment in order to provide mobile coverage and/or improve mobile coverage to that Development; and
- (b) require Development owners or developers to provide MTOs with such space and facilities as is necessary to provide mobile coverage and/or improve mobile coverage.

2.3. A Development owner or developer should only be exempted from the obligations proposed in Section 1 of the Consultation Paper where:

- (a) the IDA expressly exempts the MTO from providing mobile coverage and/or improving mobile coverage to that Development; or
- (b) the Development owner or developer declares to the IDA and the MTO that it does not require the provision of mobile coverage and/or improvement of mobile coverage.

2.4. SingTel Mobile submits that new and additional space should be set aside specifically for the MTOs' equipment.

2.5. SingTel Mobile submits that MTOs be granted equal priority of access as with all FBOs (except PTLs).

2.6. In the event that there is a space constraint, SingTel Mobile submits that priority between FBOs (non-PTL) and MTOs be assigned in the following order:

- (a) regulatory obligation to provide the service; and /or
- (b) end-user demand for the service in the Development.

2.7. SingTel Mobile also submits that any dispute between FBOs (non-PTL) and MTOs should be referred to the IDA for determination.

- 2.8. SingTel Mobile submits that for Developments with existing contracts for lease of space, the revised requirement should commence within one (1) year from the revision of the COPIF.
- 2.9. SingTel Mobile supports the proposal in the Consultation Paper that, similar to the terms and conditions governing the use of the MDF Room/ TER, Development owners and developers should not levy rental or related access charges such as escort charges for the use of the PMDS. SingTel Mobile believes that the same policy should apply to the space that is set aside for MTOs.
- 2.10. SingTel Mobile submits that where an MTO installs equipment in a Development to serve that Development as well as the outdoor areas and any areas beyond the Development, there should be no charges levied at all given that the MTO is basically complying with its licence obligation to provide mobile coverage and to comply with the stringent QOS standards set by the IDA.
- 2.11. However, where charges are levied for use of the space in Developments to provide outdoor coverage and areas beyond that Development, SingTel Mobile would support the proposal to formulate a set of comprehensive dispute resolution guidelines for the rental of space used in the provision of outdoor, street-level mobile coverage and any areas beyond the Development itself including any other Developments beyond the Development itself [excluding Developments within the same cluster¹].
- 2.12. SingTel Mobile submits that the dispute resolution guidelines should only apply to instances where both the MTO and the Development owner or developer have attempted to negotiate a fair rental value in good faith; this should preclude the use of a commercial tender to compel MTOs to compete for space thereby artificially increasing the rental rate of that space. SingTel Mobile also proposes that the monthly rate takes into consideration the past and current rental rates in the area for similar use of space. SingTel Mobile requests that the IDA consult the MTOs prior to determining an appropriate rate.

¹ We note that the IDA clarification that where the Developments are part of the same cluster (e.g. a group of HDB or private residential blocks belonging to the same estate). The proposed dispute resolution guideline should not fall under the purview of paragraph 9(c) i.e. the use of space in one (1) Development to provide coverage to other Developments within the cluster will not be considered as providing coverage to surrounding areas and another Development(s) beyond the Development itself.

- 2.13. SingTel Mobile also requests that the IDA consult the MTOs and Development owners and developers on its proposed dispute resolution guidelines before finalisation.

Specific Comments

- 2.14. SingTel Mobile supports the proposed amendment to allow MTOs to deploy installation and plant in the PMDS of a Development for the purpose of providing public mobile telecommunication services such as 2G and 3G services to that Development.
- 2.15. SingTel Mobile supports the proposed amendment to allow MTOs to deploy installation and plant in the telecommunication risers, cable trays/metal trunking and underground pipeline systems within a Development for the purpose of providing public mobile telecommunication services, such as 2G and 3G services, to that Development.
- 2.16. SingTel Mobile requests the IDA's clarification as to whether the PMDS in Tables 1 and 2 of the Consultation are intended for each MTO or to be shared by all MTOs.
- 2.17. If the PMDS is intended to be shared by all the MTOs, SingTel Mobile submits that the proposed space is grossly insufficient and inadequate for the MTOs to accommodate 2G, 3G, and 4G equipment.
- 2.18. SingTel Mobile proposes the minimum space required by each MTO depending on the type of Development in Section 4.
- 2.19. SingTel Mobile submits that the Development owner or developer could allocate a PMDS for MTOs on the rooftop, which is preferred; or as an alternative one (1) storey below the topmost level of an above ground multi-storey carpark [where available].
- 2.20. SingTel Mobile submits that any space allocated for the PMDS should be in a publicly accessible area i.e. the MTOs should not have to request for access to that area from any other party.
- 2.21. SingTel Mobile submits that there should be a cap on the amount of floor area occupied by each FBO.

- 2.22. SingTel Mobile submits that the existing requirements regarding number of pipes, size of risers and cable trays/ metal trunkings should cater for increase; specifically for new Developments, SingTel Mobile submits that an additional 200mm tray per MTO will be required. In addition, cable trays / trunking should extend to the individual units and all the way to where the mobile equipment installed.
- 2.23. For existing Developments, SingTel Mobile proposes that any dispute between operators arising from the use of the existing space should be referred to the IDA for determination.
- 2.24. SingTel Mobile generally supports sharing our installation and plant in the event of a space constraint except that this sharing cannot apply to the MTO's own base stations and outdoor antennae.
- 2.25. SingTel Mobile submits that the MTOs involved in the sharing should be exempted from compliance with the applicable QOS requirements / standards (if any).
- 2.26. SingTel Mobile request the IDA's confirmation that the proposed changes in the Consultation Paper [except where otherwise stated in Section 5] will apply to all existing Developments.
- 2.27. SingTel Mobile request the IDA's confirmation that the proposed amendments to the COPIF will also apply to all government, military and HDB Developments.
- 2.28. SingTel Mobile submits that the Development owner should be the rightful party to apply for the Change of Use of Premises, and bear the cost of the initial application and subsequent application renewals. We request the IDA's confirmation that the Development owner will bear the cost of the initial application and subsequent application renewals.
- 2.29. SingTel Mobile also request the IDA's confirmation that the cost of the PMDS space, cabling tray(s), trunking, riser access, and any additional trunking and cabling work should be borne by Development owner.
- 2.30. SingTel Mobile submits that for existing Developments, there should be a fixed timeline for such infrastructure to be made available by the Development owner.

- 2.31. SingTel Mobile proposes that the COPIF require Development owners or developers to allow various antenna installation modes [subject to the MTO complying with all safety requirements] which will facilitate the provision of mobile coverage.
- 2.32. SingTel Mobile generally supports the proposal to locate MDF rooms and TERs on the first story (street level).
- 2.33. Where the Development is more than twenty (20) storeys high, SingTel Mobile submits that a second PMDS should be located above the 20th floor to serve the upper storeys.
- 2.34. SingTel Mobile submits that aside from locating the MDF room or TER on the first storey (street-level), the Development owner or developer could allocate a PMDS for MTOs on the rooftop which is preferred; or as an alternative one (1) storey below the topmost level of an above ground multi-storey carpark [where available].
- 2.35. SingTel Mobile submits that the Development owner or developers should provide separate trays for each type of cable as a precaution to ensure that the fibre cable [which is more fragile than the other cables] is protected from accidental damage that may occur in the course of carrying out maintenance works.
- 2.36. SingTel Mobile supports the proposal for the Development owner or developer of an existing Development to provide, install and test electrical distribution panels and accessories, in the event that charges for utility usage in the MDF room and TER are to be borne by telecommunication licensees.
- 2.37. SingTel Mobile also provides general comments and specific comments on this in Sections 3 and 4 below. For the avoidance of doubt, SingTel Mobile's references to Developments, owners of Developments, developers and buildings are based on the IDA definitions and / or usage in the Consultation.

3. GENERAL COMMENTS

MTOs should be granted rights of access equivalent to FBOs (non-PTLs)

- 3.1. Mobile Telecommunication Operators (**MTOs**) in Singapore are required to comply with stringent Quality of Service (**QOS**) requirements set by the IDA for both 2G and 3G services. To illustrate, the in-building service coverage QOS indicator requires that MTOs cover more than 85% of public access areas within the building.
- 3.2. Although the IDA has acknowledged, that the mobile market in Singapore is mature and competitive², it continues to impose stringent QOS requirements on the MTOs notwithstanding its public comments:

Consistent with its market-based allocation approach for 3G spectrum, IDA believes that the form and quality of a service should be left to competitive market forces. The operators have commercial incentive to define and expand the experience of its 3G customers, and ensure a good service outcome according to their own business strategy. IDA also expects that as 3G adoption grows, the operators will need to make improvements and refinements at the technical and service levels.³ [emphasis ours]

- 3.3. SingTel Mobile notes that the continued imposition of QOS requirements on the MTOs is inconsistent with international best practices in similarly mature and competitive mobile markets such as those in Australia, Hong Kong and UK which rely on market competition to drive service standards.
- 3.4. Further, the imposition of QOS requirements on MTOs is contrary to the Regulatory Principle of Reliance on Market Forces outlined in Section 1.5.1 of the Code of Practice for Competition in the Provision of Telecommunication Services 2010 (**Code**):

Reliance on Market Forces

Market forces are generally far more effective than regulation in promoting consumer welfare. Competitive markets are most likely to provide consumers with a wide choice of services at just and reasonable prices. Therefore, to the

² Singapore's Mobile Market Gets New Impetus for Growth, 3 January 2005 – www.ida.gov.sg

³ Ibid

extent that markets or market segments are competitive, IDA will place primary reliance on private negotiations and industry self-regulation, subject to minimum requirements designed to protect consumers and prevent anti-competitive conduct. [emphasis ours]

- 3.5. The QOS requirements imposed on MTOs are also disproportionate with the market landscape and conflict with the Regulatory Principle on Proportionate Regulation outlined in Section 1.5.4 of the Code of Practice for Competition in the Provision of Telecommunication Services 2010 (**Code**):

Proportionate Regulation

To the extent that a given market is not yet competitive, significant ex ante regulatory intervention is likely to remain necessary. Where this is the case, IDA will seek to impose regulatory requirements that are carefully crafted to achieve clearly articulated results. Such requirements will be no broader than necessary to achieve IDA's stated goals. [emphasis ours]

- 3.6. SingTel Mobile notes that the IDA continues to impose QOS requirements, including stringent standards for in-building and outdoor coverage despite the fact that there is extensive market competition and the fact that the QOS requirements are disproportionate. However, the regulatory framework thus far does not provide sufficient support for MTOs like SingTel Mobile to meet such stringent requirements, particularly where access is concerned.
- 3.7. SingTel Mobile (and the other MTOs) face increasing difficulties in providing and/or improving service coverage due to an inability to access and/or prohibitive rental rates being sought by Development owners or developers for the provision of such access. SingTel Mobile often experiences:

(a) Refusal of access

- military camps e.g. access to perform maintenance or change of equipment often takes months to approve or is rejected;
- shopping malls e.g. SingTel Mobile is required to install equipment in the retail areas before renovations are carried out; subsequently SingTel Mobile is not allowed to check or retrofit the equipment once the tenant(s)

has moved in even if subsequent coverage tests in the area indicate that the equipment could be faulty.

(b) Rejection of installation of equipment due to aesthetics

- condominiums;
- industrial Developments;
- shopping malls.

(c) Prohibitive rental rates for access or arbitrary increases in rental rates

- condominiums;
- commercial properties.

(d) Damaged equipment during construction/ renovation or difficulty in repairing damaged or faulty equipment

- shopping malls;
- commercial properties e.g. the Development owner requires that equipment is installed before construction of the Development is completed but does not take any precaution to protect the equipment or ensure that the equipment is not damaged by the on-going construction works.

3.8. Accordingly, SingTel Mobile submits that the COPIF should be amended to:

- (a) grant MTOs a right of access for the purpose of installing plant and equipment in order to provide mobile coverage and/or improve mobile coverage to that Development; and
- (b) require Development owners or developers to provide MTOs with such space and facilities as is necessary to provide mobile coverage and/or improve mobile coverage.

3.9. A Development owner or developer should only be exempted from the obligations proposed in Section 1 of the Consultation Paper where:

- (a) the IDA expressly exempts the MTO from providing mobile coverage and/or improving mobile coverage to that Development; or

- (b) the Development owner or developer declares to the IDA and the MTO that it does not require the provision of mobile coverage and/or improvement of mobile coverage.

Specific space allotment for mobile equipment

- 3.10. The Consultation Paper indicates that Development owners or developers may choose to expand existing MDF rooms and /or TERs to meet the Potential Mobile Deployment Space (**PMDS**) requirements but where there are concurrent deployments by FBOs, then PTLs and FBOs deploying fixed services should still have 1st and 2nd priority of access.
- 3.11. Alternatively, Development owners or developers may choose to set aside space over and above that already specified in the COPIF 2008 (i.e. space they have already allotted to PTLs and other FBOs) in order to meet the PMDS requirements.
- 3.12. SingTel Mobile submits that a superior approach is for new and additional space to be set aside specifically for the MTOs' equipment. This ensures that there is no ambiguity or uncertainty over the space allotment requirement and MTOs are assured that they will be provided space in order to provide mobile coverage to the Development. Further, any space allocated for the PMDS should be in a publicly accessible area i.e. the MTOs should not have to request for access to that area from any other party.
- 3.13. As indicated above, SingTel Mobile notes that where Development owners or developers expand existing MDF rooms and /or TERs to meet the PMDS requirements but where there are concurrent deployments by FBOs, PTLs and FBOs deploying fixed services should still have 1st and 2nd priority of access.
- 3.14. Whilst SingTel Mobile agrees that PTLs have to fulfil their Universal Service Obligation (**USO**), the IDA proposal leaves MTOs at the bottom of the list, i.e. there is a high risk that MTOs will still not be able to access the Development and/or obtain the required space.
- 3.15. SingTel Mobile would note that the mobile penetration rate in Singapore is 148.5%⁴. This clearly indicates a substantial customer demand for mobile services. Coupled

⁴ As at October 2011 – www.ida.gov.sg

with the IDA QOS requirements for mobile coverage, it is not reasonable that MTOs be granted the lowest priority in terms of access and space.

- 3.16. SingTel Mobile submits that MTOs be granted equal priority as with all FBOs (except PTLs).
- 3.17. Alternatively, in the event that there is a space constraint [in view of the limited space available for telecom equipment], SingTel Mobile submits that priority between FBOs (non-PTL) and MTOs be assigned in the following order:
 - (a) regulatory obligation to provide the service – specifically, whether the licensee has a regulatory obligation to provide the service in the Development and the regulatory deadline by which the licensee is required to meet this obligation; and /or
 - (b) end-user demand for the service in the Development.
- 3.18. SingTel Mobile also submits that any dispute between FBOs (non-PTL) and MTOs should be referred to the IDA for determination.

Developments with existing contracts for space rentals

- 3.19. SingTel Mobile submits that for Developments with existing contracts for lease of space, the revised requirement should commence within one (1) year from the revision of the COPIF. This means that Developments with existing contracts will have a regulatory obligation to set aside space for MTOs to install their mobile equipment within one (1) year from the revision of the COPIF.

Charges

- 3.20. SingTel Mobile supports the proposal in the Consultation that, similar to the terms and conditions governing the use of the MDF Room/ TER, Development owners and developers should not levy rental or related access charges such as escort charges for the use of the PMDS.
- 3.21. The same Development owners and developers currently do not charge the PTLs for the space that is set aside for PTLs. SingTel Mobile therefore believes that the same policy should apply to the space that is set aside for MTOs, i.e. that Development owners and developers should not charge for this space.

- 3.22. Further, SingTel Mobile notes that the Consultation is silent on the charges that Development owners levy for use of their space to provide outdoor coverage or any coverage that may serve areas beyond the Development itself. SingTel Mobile submits that the same approach should be used, i.e. that where an MTO installs equipment in a Development to serve that Development as well as the outdoor areas and any areas beyond the Development, there should be no charges levied at all given that the MTO is basically complying with its licence obligation to provide mobile coverage and to comply with the stringent QOS standards set by the IDA.
- 3.23. Without prejudice to our views above, where charges are levied for use of the space in Developments to provide outdoor coverage and coverage of areas beyond that Development, SingTel Mobile would support the proposal to formulate a set of comprehensive dispute resolution guidelines for the rental of space used in the provision of outdoor, street-level mobile coverage and any areas beyond the Development itself including any other Developments beyond the Development itself [excluding Developments within the same cluster⁵].

⁵ We note that the IDA clarification that where the Developments are part of the same cluster (e.g. a group of HDB or private residential blocks belonging to the same estate). The proposed dispute resolution guideline should not fall under the purview of paragraph 9(c) i.e. the use of space in one (1) Development to provide coverage to other Developments within the cluster will not be considered as providing coverage to surrounding areas and another Development(s) beyond the Development itself.

4. SPECIFIC COMMENTS

Section 1: Provision of Space and Facilities to Facilities-Based Operators who are Licensed to Provide Public Mobile Telecommunication Services

Question (i): Whether the COPIF should be amended to allow MTOs to deploy installation and plant in the PMDS of a Development for the purpose of providing public mobile telecommunication services such as 2G and 3G services to that Development. If not, what are the practical and economically viable alternatives to ensure mobile coverage within that Development;

- 4.1. SingTel Mobile supports the proposed amendment. Designating a space in the Development (i.e. the PMDS) will ensure that sufficient equipment space is allocated to the MTOs in order to meet increasing end-user expectations for greater mobile coverage within the Development.

Question (ii): Whether the COPIF should be amended to allow MTOs to deploy installation and plant in the telecommunication risers, cable trays/metal trunking and underground pipeline systems within a Development for the purpose of providing public mobile telecommunication services, such as 2G and 3G services, to that Development. If not, what are the practical and economically viable alternatives to ensure mobile coverage within that Development;

- 4.2. SingTel Mobile supports the proposed amendment. Extensive cabling is required within the Development to provide mobile coverage to all parts of the Development and it is essential that MTOs be allowed to deploy installation and plant in the Development owners or developers telecommunication risers, cable trays/metal trunking and underground pipeline systems.

Question (iii): Whether the proposed space requirements (in Tables 1 and 2) to be set aside for MTOs are sufficient, and whether the basis of determining the space requirements (i.e. total number of units or total usable floor area) is appropriate. If not, what should the basis for the determination of space requirements be and why;

- 4.3. SingTel Mobile requests the IDA's clarification as to whether the PMDS in Tables 1 and 2 are intended for each MTO or to be shared by all MTOs.

- 4.4. If the PMDS is intended to be shared by all the MTOs, SingTel Mobile submits that the proposed space is grossly insufficient and inadequate for the MTOs to accommodate 2G, 3G, and 4G equipment. SingTel Mobile submits that the space for each MTO be defined as follows:
- (a) Residential Development of up to twenty (20) floors: each individual block shall require a space measuring 3m x 4m x 3m (length x width x height);
 - (b) Residential Development of more than twenty (20) floors: two (2) PMDS measuring 3m x 4m x 3m; where the second PMDS should be located above the 20th floor to serve the upper storeys; and
 - (c) Non-Residential Development: one (1) PMDS measuring 3m x 4m x 3m for every 20,000m²; where each PMDS should be located within the 20,000m² area it is serving.

Question (iv): What other space could be considered as PMDS and what criteria should be used in designating a space as PMDS;

- 4.5. SingTel Mobile submits that the Development owner or developer could allocate a PMDS for MTOs on the rooftop, which is preferred; or as an alternative one (1) storey below the topmost level of an above ground multi-storey carpark [where available].
- 4.6. Any space allocated for the PMDS should be in a publicly accessible area i.e. the MTOs should not have to request for access to that area from any other party.
- 4.7. Each PMDS should include access to a 40Amp 3-phase power supply, and a transmission link for each operator. The Development owner or developer should ensure that MTOs have easy access to these utilities i.e. access to these utilities should not require coring/ drilling works through the floor or ceiling etc.

Question (v): Whether a cap should be placed on the amount of floor area that a single or a group of similarly-situated Facilities-based Operators may occupy in the MDF Room, TER and PMDS. If so, what would be the reasonable cap(s) and why;

- 4.8. SingTel Mobile submits that there should be a cap on the amount of floor area occupied by each FBO. A reasonable cap per MTO would be an area of 3m x 4m x 3m (length x width x height). We are unable to comment on the appropriate cap for other FBOs.

Question (vi): Whether the existing requirements (e.g. number of pipes, size of telecommunication risers and cable trays/metal trunking) in COPIF 2008 for telecommunication risers, cable trays/metal trunking and underground pipeline systems within a Development, should be increased for new Developments going forward, to facilitate the deployment of installation and plant by MTOs. If so, what would be a reasonable increase, in terms of absolute size and/or expressed as a percentage of existing requirements. For existing Developments where the necessary increases may not be possible or feasible, what are the possible measures that could be put in place to ensure that PTLs, other Fixed Operators and MTOs efficiently use the limited existing space within telecommunication risers, cable trays/metal trunking and underground pipeline systems within Developments;

- 4.9. SingTel Mobile submits that the existing requirements should cater for increase; specifically for new Developments, SingTel Mobile submits that an additional 200mm tray per MTO will be required.
- 4.10. In addition, cable trays / trunking should extend to the individual units and all the way to the where the mobile equipment installed.
- 4.11. For existing Developments, SingTel Mobile proposes that any dispute between operators arising from the use of the existing space should be referred to the IDA for determination.

Question (vii): Whether the proposed priority order for access to MDF rooms and TERs amongst the PTLs, other Fixed Operators and MTOs (where applicable) is reasonable. If not, what would be the alternatives to ensure that the reasonable requirements and obligations of all relevant parties can be met;

- 4.12. SingTel Mobile refers to our comments outlined in Section 3.

Question (viii): Whether the proposed priority order for access to telecommunication risers, cable trays/metal trunking and underground pipeline systems within a Development is reasonable. If not, what would be the alternatives to ensure that the reasonable requirements and obligations of all relevant parties can be met;

- 4.13. SingTel Mobile submits that our proposal in Section 3 above will also apply here.

Question (ix): In the event of insufficient space in the relevant space and facilities and there being no other practicable alternatives, should similarly-situated Facilities-based Operators be required to share their installation and plant where feasible to do so. If so, what would be the reasonable basis for sharing and why;

- 4.14. SingTel Mobile generally supports sharing our installation and plant in the event of a space constraint except that this sharing cannot apply to the MTO's own base stations and outdoor antennae. However, we caution that such a policy may have a detrimental impact on the services available to end-users in the Development. As indicated in our response to Question (iii), the MTOs require sufficient space to accommodate 2G, 3G, and 4G equipment. A lack of space for the necessary equipment may mean having to forgo the provision of a particular service(s), or if all services are provisioned, then the quality of service may not be optimal. SingTel Mobile submits that under such circumstances, the MTOs involved in the sharing should be exempted from compliance with the applicable QOS requirements / standards (if any).

Question (x): Whether a set of dispute resolution guidelines will facilitate negotiations between a MTO and an owner of a Development for the rental of building space used in the provision of outdoor mobile coverage beyond the Development itself. If so, what should the scope of the guidelines be and what are the potentially contentious issues that should be addressed? For example, should the Guidelines address disagreements relating to monthly rental rates through the engagement of an independent valuer;

- 4.15. SingTel Mobile refers to our comments outlined in Section 3.
- 4.16. Without prejudice to our views above, where charges are levied for use of the space in Developments to provide outdoor coverage and areas beyond that Development, SingTel Mobile would support the proposal to formulate a set of comprehensive dispute resolution guidelines for the rental of space used in the provision of outdoor, street-level mobile coverage and any areas beyond the Development itself including any other Developments beyond the Development itself [excluding Developments within the same cluster⁶].

⁶ We note that the IDA clarification that where the Developments are part of the same cluster (e.g. a group of HDB or private residential blocks belonging to the same estate). The proposed dispute resolution guideline

- 4.17. SingTel Mobile also notes that it is a common practice of the IDA to consult the industry where it issues guidelines, including dispute resolution guidelines. Given that disputes on charges are often contentious, it would therefore be prudent for the IDA to consult the MTOs and Development owners and developers on its proposed dispute resolution guidelines before finalisation.
- 4.18. To ensure that dispute resolution does not become the immediate fall-back when there is a disagreement on rental rates, SingTel Mobile submits that the dispute resolution guidelines should only apply to instances where both the MTO and the Development owner or developer have attempted to negotiate a fair rental value in good faith; this should preclude the use of a commercial tender to compel MTOs to compete for space thereby artificially increasing the rental rate of that space.
- 4.19. We recognise that determining a reasonable rental rate for the space may be a contentious issue. An independent valuer will not be privy to the public/social value of the space from the perspective of providing mobile coverage and therefore cannot be expected to ably determine a reasonable rental rate. In the same vein, MTOs may also place different values on each space [which may differ between MTOs even for the same Development] depending on how the space is used; especially if the equipment is used to serve both the Development and outdoor space. Therefore SingTel Mobile does not support the use of an independent valuer to determine the rental rate.
- 4.20. SingTel Mobile proposes that the monthly rental rate take into consideration past and current rental rates in the area for similar use of space. SingTel Mobile requests that the IDA consult the industry prior to determining an appropriate rate.

Question (xi): Any other considerations that IDA should take into account in its review of this section.

- 4.21. SingTel Mobile notes that the IDA has defined “Developments” as referring to both existing and upcoming Developments. We request the IDA’s confirmation that the proposed changes in the Consultation Paper [except where otherwise stated in Section 5] will apply to all existing Developments.

should not fall under the purview of paragraph 9(c) i.e. the use of space in one (1) Development to provide coverage to other Developments within the cluster will not be considered as providing coverage to surrounding areas and another Development(s) beyond the Development itself.

- 4.22. SingTel Mobile request the IDA's confirmation that the proposed amendments to the COPIF will also apply to all government, military and HDB Developments.
- 4.23. In the event that a Development owner wishes to allocate space to the MTOs in, for example a carpark, the Development owner may be required to apply to the Urban Redevelopment Authority (**URA**) for a Change of Use of Premises [as required under Planning Act (Cap 323)] for the carpark. SingTel Mobile submits that the Development owner should be the rightful party to apply for the Change of Use of Premises, and bear the cost of the initial application and subsequent application renewals. We request the IDA's confirmation that the Development owner will bear the cost of the initial application and subsequent application renewals. For the IDA's information, the application will need to be renewed each time the lease agreement between the Development owner and the MTO is renewed.
- 4.24. SingTel Mobile also request the IDA's confirmation that the cost of the PMDS space, cabling tray(s), trunking, riser access, and any additional trunking and cabling work should be borne by Development owner. Further, the necessary infrastructure should be laid by the Development owner or developer and be made available to the MTOs during the construction of the Development to expedite the provision of mobile coverage within the Development. SingTel Mobile submits that for existing Developments, there should be fixed timeline for such infrastructure to be made available by the Development owner.
- 4.25. SingTel Mobile also refers to our comments in Sections 3 and 4 in relation to the installation of equipment in a Development in order to provide coverage to another Development [excluding Developments within the same cluster⁷] as well as outdoor or street coverage; this is especially common in HDB and private residential Developments. SingTel Mobile submits that such installations should not be subject to commercial charges as proposed in paragraph 9(c) of the Consultation Paper. SingTel Mobile refers the IDA to our proposals to address these in Sections 3 and 4 of our response.

⁷ We note that the IDA clarification that where the Developments are part of the same cluster (e.g. a group of HDB or private residential blocks belonging to the same estate), this arrangement would not fall under the purview of paragraph 9(c) i.e. the use of space in one (1) Development to provide coverage to other Developments within the cluster will not be considered outdoor or street-level mobile coverage beyond the Development.

- 4.26. We note that many Development owners or developers do not allow certain antenna installation modes due to aesthetics or on the basis of perceived radiation fears. Instead, the Development owners or developers require that the MTO install the antenna and/or cable in the false ceiling, however this is not only difficult to install, it also compromises coverage which defeats the purpose of installing additional equipment in the location.
- 4.27. SingTel Mobile therefore proposes that the COPIF require Development owners or developers to allow the following antenna installation modes [subject to the MTO complying with all safety requirements] which will facilitate the provision of mobile coverage:
- (a) antenna and/or cable to be attached to the ceiling [even if there is no false ceiling in the installation location(s)] to minimize losses due to ceiling structure;
 - (b) antenna to be installed up to three (3) metres above the highest point of the rooftop;
 - (c) antenna to be installed at the edge of the roof; and
 - (d) antenna to be hung from the roof.

Section 3: Location of Main Distribution Frame Room and Telecommunication Equipment Room

Question (i): The proposal to locate MDF rooms and TERs on the first storey (street-level) in buildings; and

- 4.28. SingTel Mobile generally supports the proposal to locate MDF rooms and TERs on the first story (street level). However, where the Development is more than twenty (20) storeys high, SingTel Mobile submits that a second PMDS should be located above the 20th floor to serve the upper storeys.

Question (ii): What are the alternatives or measures that should be implemented by the developers or owner of buildings, in the event that it is not possible to locate the MDF room or TER on the first storey (street-level) of the buildings.

- 4.29. SingTel Mobile refers to our response to Section 1 Question (iii).

- 4.30. SingTel Mobile submits that aside from locating the MDF room or TER on the first storey (street-level), the Development owner or developer could allocate a PMDS for MTOs on the rooftop which is preferred; or as an alternative one (1) storey below the topmost level of an above ground multi-storey carpark [where available].

Section 4: Usage of Cable Trays/Metal Trunking in Buildings

Question (i): The proposed removal of the designation of cable trays/metal trunking in telecommunication risers for either telecommunication (non-broadband coaxial cable) system or broadband coaxial cable system;

- 4.31. SingTel Mobile has no comments or views on the above.

Question (ii): The proposed revision that cable trays/metal trunking in telecommunication risers should be of equal size, and follow the specifications for such facilities as stated in COPIF 2008, for telecommunication (non-broadband coaxial cable) systems;

- 4.32. SingTel Mobile refers to our response to Section 1, Question (vi).

Question (iii): Whether the existing cable tray/metal trunking size requirements for telecommunication (non-broadband coaxial cable) systems should be increased in view of potential additional systems that may be deployed to provide telecommunication services to Developments, such as better mobile coverage; and

- 4.33. SingTel Mobile refers to our response to Section 1, Question (vi).
- 4.34. SingTel Mobile submits that the Development owner or developers should provide separate trays for each type of cable as a precaution to ensure that the fibre cable [which is more fragile than the other cables] is protected from accidental damage that may occur in the course of carrying out maintenance works.
- 4.35. In addition, MTOs should be allowed to install coupler/ splitter [which are passive devices] together with the respective cable in the individual trays. This is again a precaution to ensure that the fibre cable is not unnecessarily disturbed.

Question (iv): Whether there are any issues that may arise following the removal of the designation of cable trays for specific systems, such as possible interference issues arising from sharing of cable trays/metal trunking, priority of access to the cable trays/metal trunking amongst the various types of licensees, or measures to ensure efficient use of the cable trays/metal trunking. If so, what are the measures that may be implemented to address these issues.

- 4.36. SingTel Mobile has no comments or views on the above.

Section 7: Provision of electrical distribution panels and accessories in the relevant space and facilities

Question (i): The proposed requirement for the developer or owner of an existing Development to provide, install and test electrical distribution panels and accessories, in the event that charges for utility usage in the MDF room and TER are to be borne by telecommunication licensees.

- 4.37. SingTel Mobile supports the proposal for the Development owner or developer of an existing Development to provide, install and test electrical distribution panels and accessories, in the event that charges for utility usage in the MDF room and TER are to be borne by telecommunication licensees.