M1'S RESPONSE TO IMDA'S SECOND PUBLIC CONSULTATION ON THE REVIEW OF THE CODE OF PRACTICE FOR INFO-COMMUNICATION FACILITIES IN BUILDINGS ("COPIF")



This paper is prepared in response to IMDA's Public Consultation document dated 20 April 2018 and represents M1's views on the subject matter. Unless otherwise noted, M1 makes no representation or warranty, expressed or implied, as to the accuracy of the information and data contained in this paper nor the suitability of the said information or data for any particular purpose otherwise than as stated above. M1 or any party associated with this paper or its content assumes no liability for any loss or damage resulting from the use or misuse of any information contained herein or any errors or omissions and shall not be held responsible for the validity of the information contained in any reference noted herein nor the misuse of information nor any adverse effects from use of any stated materials presented herein or the reliance thereon.



Introduction

1. M1 is Singapore's most vibrant and dynamic communications company, providing mobile and fixed services to over 2 million customers. With a continual focus on network quality, customer service, value and innovation, M1 links anyone and anything; anytime, anywhere.

M1's view on the Regulatory Environment

- 2. The provision of info-communication services in Singapore is regulated under the Telecommunications Act. The Info-communication Media Development Authority ("**IMDA**") is the regulatory authority and has powers to establish standards, codes and regulations to be observed by operators of info-communication systems and services and to regulate the conduct of licensees.
- 3. M1 supports the development of a proportionate and stable regulatory environment as it will catalyse a sustainable and growing info-communication industry where long term planning and decisions can be undertaken.
- 4. M1 welcomes the opportunity to submit our comments to IMDA on the second review of the COPIF. The COPIF is an essential set of regulations towards ensuring that building developers/owners provide adequate space and facilities (including access) to enable operators to deploy and operate their equipment for the provision of info-communication services.
- 5. With the increasing reliance on info-communication services and the Government's push for Singapore to be a Smart Nation, it is critical that the COPIF requirements address the technical and operational needs of the operators to facilitate the provision of connectivity and services expediently. To be effective, the COPIF must also be binding, with strict enforcement mechanism by the relevant authorities to ensure compliance by various stakeholders. The COPIF can then be implemented effectively to achieve its policy intent and the desired outcomes.



PART II: IMDA'S POSITION ON KEY ISSUES IN THE PROPOSED REVISED COPIF

<u>Section 1 – Use and Scope of Mobile Deployment Space provided within a development to provide mobile coverage</u>

Designation of rooftops as preferred location for MDS

- 1. In the revised COPIF document, the location of MDS to be provided shall be determined by the mobile operator in consultation with the building developer/owner. Where feasible, the MDS space shall be located on the rooftops of buildings to optimise the coverage of the installation, plant or systems to be deployed by the mobile operator.
- 2. While we welcome IMDA's move to designate rooftops as the preferred location for MDS to facilitate the provision of mobile coverage, we want to highlight that the location of MDS would largely depend on the type of building development and corresponding network solution required to provide mobile coverage. Therefore, rooftops may not always be the ideal location for MDS. It is important that building developers/owners recognise the factors and considerations involved and be open to the operators' recommendations on the location of MDS.
- 3. We also noted that there is no prescribed process that mobile operators and developers/owners can follow in the revised COPIF. The use of the terms 'where feasible' and 'where practicable' in Section 2.2.9(a) and Section 2.2.9(c) in the revised COPIF does not provide clear directions that the relevant parties can take reference from. Similarly, IMDA has not provided any guidance on the requirement of 'timely' in Section 2.2.11, Section 2.2.12 and Section 2.2.13. These ambiguities may result in protracted negotiations and potential disputes between the mobile operators and developers/owners.

Treatment of existing agreements for use of rooftop MDS

- 4. IMDA is of the view that existing commercial agreements for the use of rooftop MDS should continue to run their course until their expiration, unless the mobile operator and developer or owner are able to reach an alternative arrangement. However, IMDA also recognises that there may be agreements with unique considerations, and flexibility may be required to cater to such considerations when the parties work on the arrangements for use of rooftop MDS.
- 5. M1 is aware that there are existing commercial agreements with no expiry date. While there is a need to respect the parties' contracting rights, in order to provide regulatory certainty, such perpetual agreements should be reviewed and brought in line with the revised COPIF framework.

Charges incurred in connection with access to rooftop MDS

6. Section 2.2.12 of the revised COPIF document indicates that the mobile operators shall bear the cost and expense for the provision of the necessary lighting and ventilation to be provided at a MDS. IMDA explained that since developers/owners already pay for the construction costs of the development and its facilities, if subsequent changes to any of these facilities are required



specifically due to the MNO's choice of MDS location and thereby incurring costs, the MNO ought to bear any such costs which otherwise would not have been incurred by the developer/owner.

7. We are of the view that the original provisions in Section 2.2.7, Section 2.3.1, Section 2.3.3 and Section 2.3.4 of COPIF 2013 should be retained. We wish to highlight that the developer/owner stands to benefit from the enhancement of mobile coverage and network performance in their developments, and the installation and operating costs of the equipment and utility charges are already borne by the mobile operators. As such, it would be reasonable for the developer/owner to bear the cost and expense for the provision of lighting and ventilation at a MDS, as part of their obligation to provide MDS.



Section 2 – Requirements of Space and Facilities to be provided to MNOs

Size of MDS

- 8. IMDA intends to retain the current MDS size in buildings, as the existing mobile operators have ceased operating their 2G mobile networks and not every mobile operator may require the use of the same location in every development. We would like to clarify the following:
 - a. The cessation of 2G mobile networks does not mean that physical space has been freed up, as the space is still required for provision and/or enhancement of 3G/4G services;
 - b. The current MDS size does not cater for future expansion. Additional equipment space will be required for the provision of 5G services and the requirements would depend on the number of frequency bands which IMDA plans to allocate for 5G. As we expect 5G services to operate in higher frequency bands, additional base stations and amplifiers would be required to provide better signal propagation and mobile coverage. Furthermore, mobile equipment for 5G services would likely be co-located with the existing 3G/4G equipment to minimise the duplication of resources, as power and transmission equipment can be shared; and
 - c. With the entry of a 4th MNO, retaining the current MDS requirements will not only be inadequate to meet all MNOs' requirements, but will also potentially lead to competition for MDS.
- 9. While we acknowledge that not every mobile operator may require the use of the same location in every development, whenever a mobile operator approaches a building developer or owner for MDS, sufficient space must be given to facilitate the provision of mobile coverage. Each MNO would typically require a MDS of 12 m^2 where the mobile equipment are to be installed within the building premise, and a MDS of 18 m^2 where mobile equipment are to be installed on building rooftop (due to floor loading requirements)¹.

Ancillaries and associated installation, plant or system

- 10. IMDA has stated that the general guiding principle to be followed is that ancillaries should be wall-mounted wherever possible, for optimum use of allocated space. Where ancillaries are floor-standing and take up footprint, these would be counted towards the MDS while ceiling space taken up by ceiling-mounted installations such as indoor cones would be excluded.
- 11. M1 is concerned that ancillaries that are floor-standing would be counted towards the MDS. So far, we have been receiving an increasing number of requests from building developers or owners to deploy floor-standing ancillaries due to:
 - a. Concerns over the aesthetics and radiation; and

¹ These requirements do not take into account other installations such as the cabling, antennae and camouflage panels.



- b. The need to keep the roof parapet clear so as to facilitate cleaning works (i.e. deployment of gondolas).
- 12. As the deployment of floor-standing ancillaries is to address the conditions/requirements of building developers/owners, we believe it is only fair that the space occupied by these ancillaries should not be counted towards the MDS and should be provided without any additional charge².

<u>Definition of Mobile Coverage Area: Gross Floor Area ("GFA") + Land/Site area</u>

- 13. M1 agrees with IMDA's clarification that the Mobile Coverage Area should not just be based on the built-up areas purely with GFA, but also the adjoining open land/site area within the property boundary, i.e. GFA plus land/site area.
- 14. However, we have encountered cases where the building developer/owner is unwilling to share the GFA information. There are also challenges to obtain and verify this information from other sources. Therefore, we propose that IMDA requires the building developer/owner to provide the information on the GFA, including land/site area, as part of the building plans.

Charging for use of space outside the MDS

15. We have also encountered instances where M1 was charged rates that were significantly higher than the prevailing commercial rental rates for the use of space outside the MDS. Such a practice is unreasonable and runs counter to the objectives of the COPIF. We propose that IMDA mandates that building developers/owners are not allowed to impose discriminatory prices on the mobile operators when the parties commercially negotiate for any additional space beyond the MDS.

² Due to floor-mounted panel antennae, the total space required for an outdoor base station can be up to about 38 sqm.



Section 3 – Use of and Access to Space and Facilities by Licensees

Use of COPIF Space and Facilities: Rules of Usage

16. Under the revised COPIF, building developers/owners should not require the inclusion of insurance co-naming or additional take-up of insurance as conditions for access to space and facilities. We seek IMDA's confirmation that the above requirement will similarly apply in the case of contractors' access to space and facilities on behalf of the mobile operators.

Access to COPIF Space and Facilities - emergencies

- 17. IMDA has proposed that for manned buildings, access should be granted for emergency cases two (2) hours from notice. For unmanned buildings, emergency access ought to be granted as soon as reasonably possible but in any case not more than eight (8) hours from notice.
- 18. M1 is of the view that it is important for telecommunication services to be accorded the same priority and treatment as with other essential services. For example, if other utility providers are granted emergency access through a different access arrangement (e.g. if access can be granted through the withdrawal of keys from town councils by authorised personnel), the same arrangements should logically be extended to telecommunication operators. This will allow the telecommunication operators to attend to service cases expeditiously and minimise any inconvenience to the public.
- 19. IMDA has also stated that it would be reasonable to allow recovery of costs for emergency access where additional resources are incurred (for example, the hire of a security escort, out of pocket expenses). We request that IMDA specifies the type of additional resources building developers/owners may incur for providing emergency access and the acceptable level of charges for these additional resources. This would minimise any abuse or dispute between the parties.



Other Comments

Definition of non-residential building

20. Under the revised COPIF document, IMDA has specified a list building structures as non-residential building. We would like to seek IMDA's confirmation that the definition of non-residential building would also include power sub-stations and ventilation buildings.

<u>Provision of lead-in pipes, underground pipes and manholes</u>

21. Under Section 9.3.1 of the revised COPIF document, it is stated that:

A minimum of 6 continuous lead-in pipes and underground pipes shall be provided for the relevant development as follows –

- (a) the lead-in pipes shall extend from the boundary of the development to the abutting road, to a point Im beyond the roadside drain located immediately outside the development; and
- (b) the underground pipes shall connect from the lead-in pipes at the boundary of the development and run to the main distribution frame room.
- 22. There has been an increase in the number of FBOs and many are keen to deploy their own networks into buildings. As such, for developments consisting of 1 or more non-residential buildings, based on a total usable floor area of up to and including 2,000 m², we like to propose that IMDA increases the minimum number of continuous lead-in pipes and underground pipes to eight (8).
- 23. M1 has also encountered situations where there were difficulties locating the lead-in pipes and underground pipes provided by the development. To facilitate deployment, we propose that IMDA requires the building developer/owner to record and provide the GPS coordinates of the lead-in pipes and underground pipes when requested by the FBOs. This requirement should thereafter be included in the relevant sections concerning underground pipes and manholes in the revised COPIF document (Section 9.3.4, Section 11.5 and Section 11.6).

Connections to lead-in pipes

24. Under Section 16.8.2 of revised COPIF document, it is stated that where a licensee has connected its pipes to the lead-in pipes of any development but is not using any of its pipes ("Unused Pipe") or is using less than 50% of the space in any of its pipes ("Partially Used Pipe"), and the Requesting Licensee requires the use of the licensee's Unused Pipe or the space in the licensee's Partially Used Pipe, that licensee shall allow the Requesting Licensee to use the licensee's Unused Pipe or the space in the licensee's Partially Used Pipe, including the use of the associated lead-in manholes, at cost-based prices.



25. It will be clearer if IMDA further defines, in the revised COPIF document, the term "50% of the space in any of its pipes". For example, this could be based on the number of cables that are laid in a Partially Used Pipe.