

**Mediacorp Pte. Ltd.  
Response to**

**CONSULTATION PAPER ISSUED BY  
THE INFO-COMMUNICATIONS MEDIA DEVELOPMENT AUTHORITY**

**SECOND PUBLIC CONSULTATION ON THE REVIEW OF THE CODE OF PRACTICE FOR  
INFO-COMMUNICATION FACILITIES IN BUILDINGS (“COPIF”)**

Responded by:

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**A. Introduction and Background**

- a. Mediacorp welcomes the opportunity to respond to IMDA's second public consultation on the review of the code of practice for info-communication facilities in buildings ("COPIF"). We are grateful for the points raised and considered by IMDA during the first public consultation.
- b. We note that IMDA is strongly discouraging parties from repeating representations that have been made in the first public consultation. However, given the gravity of the matters raised by Mediacorp during the first public consultation, we will be repeating some of the points made earlier and especially given developments that have arisen since the first public consultation. We hope that IMDA will weigh these developments in its consideration and not dismiss any of the repeated representations outright.

**B. Response to IMDA**

**1. Rooftop Spaces**

1.1 Referring to Section 9 in Part II of the Second Consultation Paper, and against the background and concerns raised above, Mediacorp would like to reiterate and repeat our earlier representations that:

- a. Mediacorp, as the National Broadcaster, should also be included in COPIF and be provided with the treatment of preferred rooftop spaces as those offered to MNOs as MDS; or
- b. if despite all of the concerns raised and highlighted, IMDA maintains its position as set out in the Second Consultation Paper, Mediacorp would like to request that the National Broadcaster be provided with rooftop access before the building's TOP;

and

- c. that in either of the above cases, that Mediacorp be provided with free access to the rooftop space.

Our explanation is set out below.

1.2 IMDA had explained its position as follows:

9. *Separately, one respondent suggested that the treatment of preferred rooftop spaces to be used as MDS by MNOs should similarly be offered to the national broadcaster for broadcasting services. IMDA has since studied the needs and requirements of the national broadcaster. Unlike telecommunication services which require deployments in nearly every building, be it within the building or on the rooftops, the national broadcaster's deployment is more limited and mainly confined to public housing estates. Given the increasing and competing demand for rooftop use due to other services e.g. solar panels, green spaces etc., it would not be reasonable for IMDA to require all buildings to comply with the COPIF to provide rooftop spaces to meet the limited request from the national broadcaster. IMDA has considered that a more effective approach to facilitate the national broadcaster's requirements would be for IMDA to work with the Housing Development Board and the respective Town Councils directly to facilitate the provision of suitable spaces at the identified buildings. Hence, IMDA will not be incorporating the respondent's proposed suggestion for same treatment as MDS, for the use of preferred rooftop spaces.*

1.3 While it may be correct that the MNOs requires more rooftop spaces than the National Broadcaster, similar to the National Broadcaster's deployment, the MNOs do not install equipment at **all** buildings too. Thus, the same principle would apply being that all buildings comply with COPIF.

1.4 We would also like to point out that while the equipment installed by the National Broadcaster is mostly in public housing estate presently, they are not all located in public

- housing estates only, nor would the needs or requirements of the National Broadcast Network always be limited only to public housing estates only. With the ever growing and changing infrastructure facing Singapore, there is a constant need to monitor the broadcast network and coverage to ensure coverage is maintained. With the nature of the network coupled with the changing landscape and geography, it should not be assumed that the National Broadcast Network would be limited to deployment in public housing estates only. On the contrary, coverage issues arising from, for example, Compass Green, at Tanah Merah, had been highlighted and raised to IMDA previously together with the proposed solutions, none of which involved public estates.
- 1.5 Accordingly, as the National Broadcast Network is provided for all public and private residential estates, we would be hesitant to assume that the facilitation with the Housing Development Board (“HDB”) and the respective Town Councils (“TCs”) would be sufficient, given the context.
- 1.6 With respect to the issue of facilitation with HDB and TCs, while we appreciate the efforts made by IMDA to-date, which have improved the previous procedure slightly, it still does not address the inherent problem. As IMDA is aware, under the previous procedure, the National Broadcaster cannot submit the application for roof access before HDB/TCs takes-over the HDB buildings. With IMDA’s facilitation, the National Broadcaster is now permitted to submit the technical application for approval before TOP. However, even with this new procedure, installation still cannot start until after HDB/TCs takes-over the buildings. This only shortens the lead-time for the processing of application process. We would also add that there are timing requirements relating to the build time, NEA’s certification and the obtaining of IMDA licences. All of these will add to the roll-out time and it means that there is a potential and real possibility that residents may not have access to any FTA services when they collect their keys / move in.
- 1.7 May we also add that, coupled with StarHub’s announced decision that there will be no further rollout of HFC network to housing having TOP after 30<sup>th</sup> April 2018, in the event that the household is not a Pay TV subscriber, in the above scenario, such household(s) will not have any access to any FTA services at all.
- 1.8 We would also add that should the COPIF proceed in its current proposition with no priority or access being given to the National Broadcaster, with priority being given to all the other services, the choice of buildings is limited to the “left overs”. This will affect coverage and the number of solutions that may be applied would be compromised and weakened. Given the nature of the broadcast network and infrastructure, we would also ask IMDA to seriously consider if it would actually be reasonable to ask or expect households to move their TV sets and/or antenna just to be able to receive FTA services. That harkens back to a different television age and would not be the productive or efficient manner in which to deploy and realise the full potential of the National Broadcast Network.

## 2. Broadband Co-Axial System

- 2.1 Referring to Section 7 of the Proposed Revised Code where IMDA states:

*73. It has recently been brought to IMDA’s attention that StarHub Cable Vision has plans to cease its Hybrid Fibre Co-axial (“HFC”) infrastructure installation to new residential buildings, come May 2018. It follows that IMDA will need to assess whether the existing co-axial cabling obligation ought to be retained or modified in the Proposed Revised Code.*

*74. IMDA has explored the possible uses and modification of the co-axial cabling for Free-To-Air (“FTA”) TV, in support of Mediacorp Digital TV (“DTV”), to allow residential units to continue the use of co-axial cabling for the distribution of DTV signals. One of the options that IMDA has considered is to allow the home owners to attach an antenna to one of the newly-required TV inlets to distribute TV signals within the home. With this in mind, IMDA is seeking feedback on the proposed re-configuration or modification to the in-home co-axial cabling to support distribution of DTV signals within the residential unit as prescribed in the Proposed Revised Code.*

75. *IMDA proposes the solution, in support of Mediacorp's DTV, as illustrated in Diagram C with the black dotted lines representing a possible connection of indoor antenna, set-top box and TV set to television outlets and connection points for end-users' in-home co-axial cabling.*

### **Maintaining In-Home Co-Axial System**

- 2.2 Mediacorp is fully and wholly supportive of the retention of the existing co-axial cabling obligation in the Proposed Revised Code to serve as a distribution system for DTV signals within the home. We believe and submit that the in-home co-axial cabling network is crucial and part of critical infrastructure that, in the near-to-mid future, cannot and should not be done away with unless and until technology, infrastructure and audience profile shifts completely to support an infrastructure where the in-home co-axial cabling infrastructure can be done away with. This is particularly so given Singapore's residential profile and the current television viewing habits.
- 2.3 We would add that with modern day architecture and interior designs, buildings' infrastructure / designs are becoming less traditional / conservative with much more innovative use of space and placements. We have seen buildings where what would have been living rooms are differently configured. Living rooms may not be facing the transmitting sites, instead, other rooms (e.g. bed rooms) could be facing the transmitting sites. This will result in differing signal strengths in the household and placement of receptors (for example, an indoor antenna) may conflict with the households' designs / furnishing.
- 2.4 By maintaining the in-home co-axial network, it would introduce some flexibility in the placement of the indoor antenna. Each household could, in theory, only need one singular indoor antenna for the entire housing unit and there may be more locations available for the placement of that one singular indoor antenna. The in-home co-axial network could provide each household with the flexibility of receiving the DTV signal at more locations and the in-home co-axial network would allow that signal to be injected into all the other outlets in the entire housing unit.
- 2.5 An additional benefit and advantage to each household is that each household will only need to purchase **ONE** in-door antenna (thereby saving costs and expenses) instead of having to buy 1 antenna for **each** television set that they own.
- 2.6 With the existing DTV network and indoor reception methods that are in place, looking towards ASO, we strongly submit that the in-home co-axial network must be maintained and continued.
- 2.7 However, notwithstanding the points above, we would caution that even with the in-home co-axial network being maintained, while it **may help** address some of the issues related to indoor antenna, there are inherent issues that will still not be resolved because of the fundamental nature of the indoor antenna. As the indoor antenna is household based, i.e. each household must still have one, the signal reception for a household on the top floor would be very different from the signal reception for a household on a bottom floor. The facing of the housing units may also be different as between housing units and that too could have an impact on signal reception. Thus, while it is imperative to retain the requirement of maintaining the in-home co-axial network in COPIF, it will not be a comprehensive solution. We have proposed a comprehensive solution in the next section below.

### **An Alternative – Outdoor Antenna**

- 2.14 Alternatively, while less convenient and potentially requiring more coordination and efforts (including possible cost considerations in view of the potential scale) and is not the preferred solution, instead of an MATV System, developers and building owners should, together with the maintenance or installation of the in-home co-axial cabling system, provide and incorporate outdoor antennas outside of each household unit and

connect them to the in-home co-axial network. This will also ready all households to be DTV signal receipt ready.

- 2.15 As these are outdoor antennas that are installed outside of the home, it would also mean that residents would not need to sacrifice any of their living spaces or furnishings, or be mindful of additional design considerations to have indoor antennas installed. More importantly, an outdoor antenna would alleviate issues caused by interference emitting from electrical appliances in the home. By installing the DTV receiving antenna outside of the HDB unit, the influence of such interference could be avoided effectively.
- 2.16 With this, it would also ensure that residents and citizens will be able to receive stable DTV immediately.
- 2.17 We would however highlight and caution that while this is an *alternative solution*, it will still not address the matters and issues raised in paragraphs 2.8 to 2.13 above and is therefore **not** the preferred solution. Thus, the solution proposed in paragraphs 2.8 to 2.13 above is still the ideal.

#### **4. Conclusion**

4.1 We would summarise our responses above as the following critical components:

- (a) it is important and imperative that the in-home co-axial system be maintained;
- (b) MATV systems should and must be upgraded, reintroduced and maintained to be connected to these in-home co-axial systems;
- (c) early and free access to rooftop of buildings should be provided to the National Broadcaster.

We repeat that FTA DTV services and FM reception are a critical public service and infrastructure and play a broader role in the Nation and against the background and concerns arising from ASO as explained above, these are critical considerations and issues that IMDA should consider very seriously as the implications of the loss of the households' ability to receive FTA would be grave and should not be taken lightly.

- 4.2 High operating costs (resulting from space rental) will be an obstacle to the goal of maximizing coverage. In fact, there are some rental costs that are so prohibitive that certain pockets are not being served as a result. Timing for access is equally important to ensure that new households are ready to receive FTA DTV services before TOP.
- 4.3 We remain ready to discuss any of the matters raised herein with IMDA and would be happy to provide any more or additional information as may be required by IMDA in its consideration of the matters herein. Please let us know if IMDA requires any further or additional information to any of the matters herein.