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4 November 2011

To: Distribution List

Dear Sirs

**PUBLIC CONSULTATION ON THE REVIEW OF THE CODE OF PRACTICE FOR
INFO-COMMUNICATIONS FACILITIES IN BUILDINGS**

1. IDA has today released a public consultation document to solicit feedback on the proposed changes to be made to the COPIF. Some of the key changes include the replacement of the existing requirements for in-building copper cabling with fibre cables, and the provision of greater access and space within buildings for telecommunication system licensees to provide mobile coverage. More details can be found in the attached consultation document, which can also be downloaded from IDA's website at:

<http://www.ida.gov.sg> >> Policies & Regulation >> Consultation Papers & Decisions >>

2. IDA invites the industry to provide feedback and comments on the proposed changes to the COPIF.
3. All submissions should be submitted in writing, in soft copy (preferably in Microsoft Word format) and to reach IDA **before 12 noon, 16 December 2011**. Respondents' personal or company particulars, correspondence address, contact number and email address must be included in the submissions. IDA will make public all or parts of any written submissions made in response to the consultation paper, and will disclose the identity of the source. Any part of the submission which is considered commercially confidential must be clearly marked and placed as an annex to the submission.
4. We would greatly appreciate it if you could disseminate this information to members in your association/institution/organisation.
5. If you require further information on the matter, please contact Mr Chiam Choong Juke at telephone number 6211-1830.

Yours faithfully



Aileen Chia

Deputy Director-General (Telecoms & post)

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INFOCOMM DEVELOPMENT
AUTHORITY OF SINGAPORE
www.ida.gov.sg

10 Pasir Panjang Road
#10-01 Mapletree Business City
Singapore 117438

T +65 6211 0888
F +65 6211 2222
E info@ida.gov.sg

Distribution List

President

Real Estate Developers' Association of Singapore
190 Clemenceau Avenue
#07-01 Singapore Shopping Centre
Singapore 239924
Attn.: Mr Wong Heang Fine

Fax: 6337-2217

Chairman

Association of Consulting Engineers Singapore
18 Sin Ming Lane
#06-01 Midview City
Singapore 573960
Attn.: Er Toh Han Lin

Fax: 6324-2581

President

Institution of Engineers, Singapore
70 Bukit Tinggi Road
Singapore 289758
Attn.: IES Secretariat

Fax: 6467-1108

President

Singapore Institute of Architects
79 Neil Road
Singapore 088904
Attn.: Mr Ashvinkumar

Fax: 6226-2663

President

The Singapore Contractors Association Ltd
1 Bukit Timah Lane 2
Construction House
Singapore 159760
Attn.: Mr Ho Nyok Yong

Fax: 6273-3977

President

Society of Project Managers
MacPherson Road P.O. Box 1083
Singapore 913412
Attn.: Mr Seah Choo Meng

Fax: 6748-8305



**CONSULTATION PAPER ISSUED BY
THE INFO-COMMUNICATIONS DEVELOPMENT AUTHORITY OF SINGAPORE
PUBLIC CONSULTATION ON THE REVIEW OF THE CODE OF PRACTICE FOR
INFO-COMMUNICATION FACILITIES IN BUILDINGS (“COPIF”)**

4 November 2011

PART I: INTRODUCTION

PART II: IDA’S PROPOSED KEY CHANGES TO COPIF 2008

PART III: PROCEDURE AND TIMEFRAME FOR SUBMITTING COMMENTS

CONSULTATION PAPER

**PUBLIC CONSULTATION ON THE
REVIEW OF THE CODE OF PRACTICE FOR INFO-COMMUNICATION
FACILITIES IN BUILDINGS**

4 November 2011

PART I: INTRODUCTION

- 1 The Code of Practice for Info-communication Facilities in Buildings (“**COPIF**”) first came into effect on 15 September 2000 and superseded the earlier Code of Practice for Telecommunication Facilities in Buildings (“**COP-TEL**”) published in March 1997. The purpose of the COPIF is to ensure that developers or owners of buildings provide adequate space and facilities, to enable the deployment and operation of installation and plant to be used in providing info-communication services to their buildings. The COPIF also specifies the duties to be observed by developers, owners of buildings and telecommunication licensees in relation to the provision, maintenance and utilisation of the relevant space and facilities provided pursuant to the COPIF.
- 2 Since coming into effect in 2000 after the liberalisation of the telecommunication industry from 1 April in that year, the COPIF has been reviewed and revised¹ when appropriate, to ensure its continued relevance in light of the evolving requirements for info-communication facilities, brought about by the ever-changing technologies underpinning the info-communication landscape in Singapore. For example, in the last COPIF review in 2008, updates were made to the COPIF to include additional facilities to facilitate the then-upcoming deployment of the Next Generation Nationwide Broadband Network (“**Next Gen NBN**”) in Singapore.
- 3 IDA notes that the info-communication services market has seen several significant developments following the publication of COPIF 2008. First, the deployment of the Next Gen NBN is well underway and is expected to attain a level of 95% coverage of Singapore by mid-2012. Second, the unabated growth in the usage of mobile services has seen the mobile penetration rate increase to almost 150% by end June 2011. Coupled with the increasing pervasiveness of smartphones and other mobile broadband-enabled devices, IDA believes that there will be greater expectations by end users for better and more expansive mobile coverage, especially within their homes and offices.

¹ The COPIF was revised in 2000, 2006 (with addendum) and 2008.

- 4 Given the above considerations, IDA has reviewed and identified several changes that IDA believes should be made to the COPIF. IDA is of the view that the proposed changes will be necessary to ensure that the info-communication facilities provided within buildings, pursuant to the COPIF, continue to keep pace with the advances in telecommunication infrastructure technology and to support the evolving info-communication needs of users. That being said, recognising that the proposed changes will have impact on developers, owners of buildings, telecommunication licensees and other stakeholders, IDA would like to solicit views and comments on the proposed changes, before IDA proceeds to revise COPIF 2008.
- 5 For the avoidance of doubt, IDA will conduct a further public consultation on the final proposed revised COPIF upon taking in views from this consultation.

PART II: IDA'S PROPOSED KEY CHANGES TO COPIF 2008

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

- 6 Pursuant to COPIF 2008, Facilities-based Operators who are licensed to provide telecommunication services via fixed-line or fixed-wireless methods (hereafter referred to as Fixed Operators) are eligible to use the relevant in-building space and facilities². In contrast, Facilities-based Operators providing public mobile telecommunication services using technologies like 2G and 3G (hereafter referred to as Mobile Telecommunication Operators or MTOs), are not eligible to deploy their installation or plant in the relevant space and facilities of any Development for the purpose of providing mobile telephony services, unless otherwise permitted by IDA³. A Development will be defined in the revised COPIF to mean a single project consisting of 1 or more buildings and includes all parcels of land comprised within the same project.
- 7 In addition, if there is insufficient space or facilities to accommodate all concurrent installations and deployment of plant to a Development, COPIF 2008 stipulates that priority will be given to public telecommunications licensees (“**PTLs**”) who require the relevant space and facilities to serve their basic service obligations to that Development.
- 8 IDA notes that mobile telephony usage is on the rise and mobile services are seen as complementary or even a viable substitute for fixed-line telephony services. Furthermore, with the increasingly pervasive usage of mobile broadband services brought about by smartphones and other mobile broadband-enabled devices, IDA believes that end users will increasingly expect and require better mobile coverage, especially within building compounds. IDA has been enhancing its quality of service standards imposed on MTOs, for both in-building and outdoor mobile coverage. In this regard, IDA views that it would be an appropriate time now to ensure that the COPIF reflects the evolving needs of end users. In particular, IDA would like to propose changes to the COPIF to allow MTOs to deploy installation and plant in the relevant space and facilities of Developments for the provision of better mobile coverage within these Developments.

² Relevant space and facilities refers to the Main Distribution Frame (“**MDF**”) Room, Telecom Equipment Room (“**TER**”), underground pipeline systems, risers and cable trays/metal trunking associated with a development.

³ For the avoidance of doubt, pursuant to paragraph 14.3 of COPIF 2008, any Facilities-based Operator seeking to access the relevant space and facilities of any Development must first notify and obtain the permission of the developer or owner of that Development.

- 9 For the avoidance of doubt, “Developments” and “buildings” mentioned in Section 1 of this consultation paper will refer to both existing and upcoming Developments and buildings, unless otherwise stated. For existing Developments, if there are contractual arrangements between owners of those Developments and MTOs for leasing of space, the revised requirement will only apply after such contractual arrangements have expired.

Proposed Changes

- a) Provisioning of Additional Space for MTOs
- (i) It is proposed that developers and owners of Developments be required to ensure that space, over and above that currently specified in COPIF 2008, is set aside to cater for the deployment of installation and plant required by MTOs to provide coverage within their Developments. This space will be referred to as **Potential Mobile Deployment Space (“PMDS”)**. The space requirements will be dependent on various factors such as the type of use and the number of units within the Development. The proposed additional space requirements are shown in Tables 1 and 2 for multi-storey residential and non-residential Developments respectively.
- (ii) Developers and owners of Developments may choose to construct or expand existing MDF rooms and/or TERs to meet the PMDS requirements. Should developers and owners of Developments choose to do this, MTOs will be allowed access to the MDF rooms and/or TERs for the deployment of installation and plant to provide mobile coverage within the Development. In the event of concurrent deployments by Facilities-based Operators, the following access priority is proposed:
1. PTLs;
 2. Other FBOs providing fixed-line services to the Development; and
 3. MTOs.
- (iii) Alternatively, developers and owners of Developments may provide other spaces within their Developments to meet the PMDS requirements. For instance, a developer may choose to allocate space on the rooftop or in car parks of the Development as opposed to increasing the size of the MDF Room/TER.
- (iv) It is proposed that similar terms and conditions to those governing the usage of the MDF Room / TER should apply to the PMDS. For the avoidance of doubt, rental charges and related access charges such as escort fees shall not be levied for the usage of PMDS. The provisioning of PMDS should not prejudice or in any way affect existing contractual obligations between owners of Developments and MTOs over the usage of space.

- (v) Should the provided PMDS be disaggregated into several smaller lots, each individual lot shall have a minimum size of 2 metres by 2 metres. For the avoidance of doubt, where the developer or owner of a Development opts to provide PMDS outside of an MDF Room or TER, the developer or owner of that Development should be responsible for providing the necessary facilities, such as telecommunication risers and cable trays, to that PMDS. Lastly, the MTOs, developers and owners of Developments may enter into commercial negotiations for space requirements beyond the minimum space specified in Tables 1 and 2.

Total number of residential units in the Development	Minimum PMDS (m ²)	Minimum height clearance (m)
80 – 200	12	3.0
201 – 600	24	
> 600	36	

Table 1: Size of space to be set aside for MTOs in Residential Developments Comprising One or More Multi-storey Residential Buildings⁴

Total Usable Floor Area ('000 m ²)	Minimum PMDS (m ²)	Minimum height clearance (m)
2 - <6	12	3.0
6 - <20	24	
20 – 100	36	
>100	48	

Table 2: Size of space to be set aside for MTOs in Non-residential Developments

- b) Access to Telecommunication Risers, Cable Trays and Underground Pipeline Systems

It is proposed that MTOs also be allowed to access and use the telecommunication risers, cable trays/metal trunking and underground pipeline systems within a Development, for the purpose of providing mobile telecommunication services to that Development. Priority for access and use would be similar to that proposed for the MDF room

⁴ Developments consisting solely of two or more strata landed dwelling-houses are not required to provide PMDS. However, Developments consisting of both strata landed housing and multi-storey residential buildings are required to provide PMDS as per Table 1.

and TER. For the avoidance of doubt, it is proposed that owners of existing buildings, who have already provided the necessary facilities according to the prevailing COPIF, need not provide additional underground pipeline systems should the existing facilities be insufficient. However, owners of Developments should assist the MTOs to identify suitable and reasonable alternative facilities.

c) Dispute Resolution Guidelines for the Usage of Building Space in Provisioning Outdoor Mobile Coverage

IDA understands that MTOs may enter into commercial arrangements with owners of Developments for the usage of space, typically rooftop space, to locate their equipment for the provision of outdoor or street-level mobile coverage beyond such Developments. IDA notes that protracted negotiations for such commercial arrangements may lead to delays in the provisioning of adequate mobile coverage, particularly in areas of poor coverage and where there are limited alternatives for MTOs to install their equipment. To facilitate the prompt resolution of any disagreement which may hold up the parties' negotiations, IDA believes there are merits in formulating a set of dispute resolution guidelines to accompany the revised proposed COPIF.

(1) IDA invites views and comments on:

- 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;*
- 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;*
- 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;*

- iv. *What other space could be considered as PMDS and what criteria should be used in designating a space as PMDS;*
- 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;*
- 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;*
- 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;*
- 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;*
- 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;*
- 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;

- xi. Any other considerations that IDA should take into account in its review of this section.*

SECTION 2 – Provision of Cables for Telecommunication (Non-Broadband Coaxial Cable) System in all Residential Properties

- 10 Currently, for all residential properties, i.e., landed dwelling houses, strata landed dwelling-houses and multi-storey residential buildings, a minimum of 2 twisted copper 4-pair cables (Category 3 or better) are required to be provided in each residential unit of such developments. The cables will run from the telecommunication risers or gate pillars (whichever applicable) and terminate into a block terminal (which may be located in a utility room or closet). In addition, within each residential unit, 1 twisted copper 4-pair cable (Category 3 or better) is required to be terminated into the above-mentioned block terminal at one end and into an RJ11 outlet in the living room and each of the bedrooms at the other end. Lastly, COPIF 2008 also stipulates that there should be 1 unshielded twisted pair cable (Category 6 or better), complying with TIA/EIA 568-B specifications, from an RJ45 outlet in the living room or any bedroom of the residential property, terminating into another RJ45 outlet (which may be located in a utility room or closet).
- 11 Info-communication services nowadays may be provided to end users over a variety of platforms and technologies, including the Next Gen NBN. In this regard, IDA is of the view that COPIF 2008's requirements for twisted copper 4-pair cables (Cat 3 or better) to a residential unit are no longer necessary and could be removed. Instead, the copper 4-pair cables should be replaced with two strands of optical fibre cable from the distribution point to a termination point in each residential unit. This revision to the COPIF would provide end users with greater convenience in enjoying Next Gen NBN services by eliminating the hassle of fibre installation after occupying the unit and potentially reducing service provisioning times.
- 12 Similarly, IDA is also of the view that COPIF 2008's requirement for twisted copper 4-pair cables within a residential unit, i.e., to be terminated in a block terminal at one end and into an RJ11 outlet in the living room and each of the bedrooms at the other end, should be revised. This is in consideration that it would be more practical and forward looking for in-unit cabling to be capable of supporting a wider range of services rather than simply plain telephony service.

Proposed Changes

- (a) Requirement to provide optical fibre cables from gate pillar or telecommunication riser into each residential unit (See Figure 1)

It is proposed that the requirement to provide a minimum of 2 twisted copper 4-pair cables from the gate pillar or telecommunication riser, which terminates in a block terminal in each residential unit, be replaced with a two-core optical fibre cable terminating in a fibre

termination point within the unit. For high rise residential buildings, building developers/owners would also be required to provide a fibre distribution box at the telecommunication riser. The fibre distribution box (“FDB”) will be a small metallic box with two separate compartments. Fibre from the MDF Room will terminate in one compartment of the box that is accessible only by Next Gen NBN operators, while fibre from the other compartment will be provided by developers/owners and terminate in a fibre termination point in each residential premise. Further specifications will be made available later.

For the avoidance of doubt, ownership and responsibility for maintenance of the optical fibre cables, the fibre termination point and the FDB (where applicable) will remain with the building developers/owners. This will be consistent with the existing COPIF requirement for copper cabling within residential buildings. Licensees, who seek to connect to the pre-wired optical fibre cables, will be required to provide end-to-end testing at the point of connection. These licensees shall also provide maintenance services when contacted by end users.

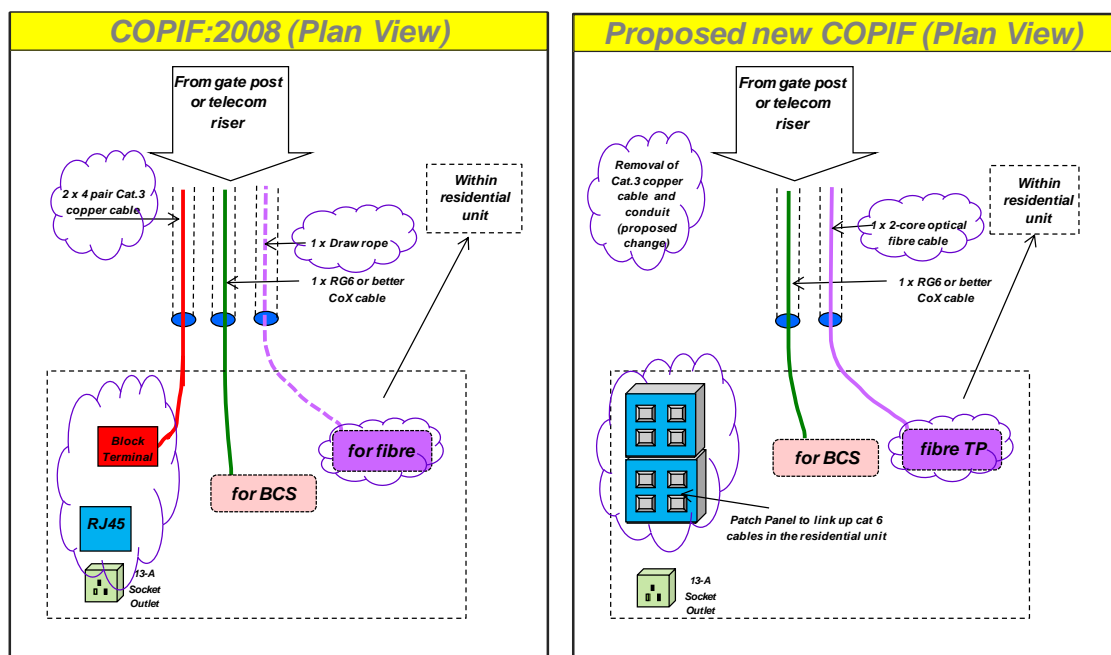


Figure 1: Comparison of existing and proposed configuration of cables from gate pillar or telecommunication riser into each residential unit

(b) Provision of cables and outlets within each residential unit (See Figure 2)

It is proposed that the requirement for twisted copper 4-pair cables (Category 3 or better) within a residential unit, i.e., to be terminated in a block terminal at one end and into an RJ11 outlet in the living room and each of the bedrooms at the other end, be removed. Instead, the COPIF would specify that a minimum of 1 unshielded twisted pair cable

(Category 6 or better) complying with TIA/EIA 568-B specifications, be provided for the living room and each of the bedrooms, with the cables terminating in an RJ45 patch panel at one end (which may be located in a utility room or closet) and in an RJ11/45 combination outlet⁵ in the living room and each of the bedrooms at the other end (as specified in Figure 2).

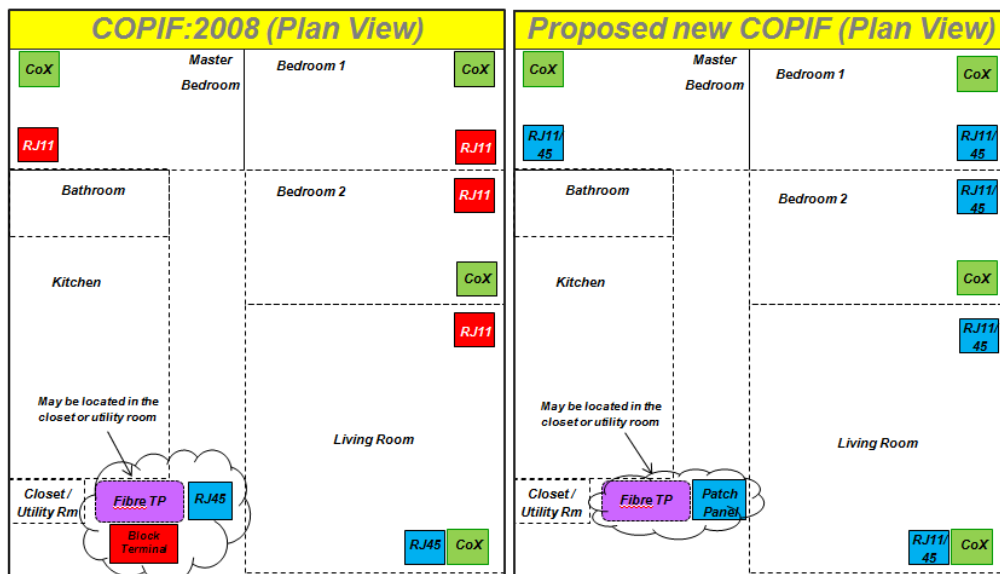


Figure 2: Revised configuration of cables and outlets within each new residential unit

(2) IDA invites views and comments on:

- i. The proposed replacement of the twisted copper 4-pair cables from the telecommunication riser/gate pillar to each residential unit with a two-core optical fibre cable to a fibre termination point within the residential unit;
- ii. The proposed installation of a fibre distribution box at the telecommunication riser on each residential floor of high-rise residential buildings;
- iii. The proposed replacement of twisted copper 4-pair cables (Category 3 or better) to each living room and bedroom with the provision of 1 unshielded twisted pair cable (Category 6 or better) to the living room and each of the bedrooms;
- iv. The proposed installation of RJ11/45 combination outlets instead of RJ11 outlets;

⁵ A RJ11/45 combination outlet allows a cable with either an RJ11 or RJ45 plug to be connected at any one time.

- v. *The proposed replacement of the block terminal with an RJ45 patch panel;*
- vi. *Whether the COPIF should require cabling and RJ11/45 combination outlets in addition to those proposed. If so, where should these be located and why; and*
- vii. *Any other relevant considerations that IDA should take into account in its review of this section.*

SECTION 3 – Location of Main Distribution Frame Room and Telecommunication Equipment Room

- 13 COPIF 2008 stipulates that the MDF room and TER shall be located on the first storey of the relevant development. The MDF room and TER may however be located in the basement of a development which has multiple basement levels, provided that they are sited on the uppermost basement level.
- 14 During the flooding incidents in Singapore in 2010, IDA was informed that there had been a number of cases where the MDF rooms and TERs located in the basements of buildings were flooded. As a result, severe damage was caused to telecommunication licensees' installation and plant that was placed inside the flooded MDF rooms and TERs, and telecommunication services to the affected buildings' residents and tenants were disrupted. The risk of disruptions could possibly extend to mobile services in the future, should the MTOs similarly site their installation and plant in the MDF rooms and TERs if changes are made to the COPIF as proposed in Section 1 above.

Proposed Change

It is proposed that MDF rooms and TERs for new buildings should be located on the first storey (street-level) in buildings, notwithstanding that these buildings may have basement levels.

(3) *IDA invites views and comments on:*

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

SECTION 4 – Usage of Cable Trays/Metal Trunking in Buildings

- 15 COPIF 2008 stipulates that cable trays/metal trunking of specific sizes are to be provided by the developer or owner of a building to house cables necessary for the installation of telecommunication network systems in buildings. These cable trays/metal trunking can be classified into two categories as follows:
- (i) For installation of cables for broadband coaxial cable system; and
 - (ii) For installation of cables for telecommunication (non-broadband coaxial cable) systems.
- 16 While telecommunication services to residents and tenants in buildings today are generally provided via the systems mentioned above, IDA notes that there could increasingly be other alternative systems, given the dynamism of the ever-evolving telecommunication technologies. Moreover, the current designation of cable trays/metal trunking for specific telecommunication systems could lead to inefficient use of the cable trays/metal trunking, especially if the utilisation levels for cable trays/metal trunking today are uneven between the telecommunication systems.

Proposed Changes

- (a) It is proposed that existing and future cable trays/metal trunking provided by the developer or owner of a building, for the purpose of providing telecommunication services to that building, need not be designated for use by any particular telecommunication system(s).
- (b) In addition, it is proposed that the 2 cable trays/metal trunking to be provided in the telecommunication risers should follow the specifications for such facilities, as stated in COPIF 2008, for telecommunication (non-broadband coaxial cable) system. This is to cater not only for current but also future requirements, such as the deployment of cables to connect to installation and plant necessary for enhancing mobile coverage within the development.

(4) *IDA invites views and comments on:*

- 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;*
- 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;*
- 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*
- 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.*

SECTION 5 – Sealing of underground pipes entering the Main Distribution Frame Rooms, Telecommunication Equipment Rooms and Telecommunication Risers

- 17 COPIF 2008 stipulates that the developer is required to provide underground pipes to the MDF rooms, TERs and telecommunication risers, where applicable. In addition, since debris or unwanted foreign particles may enter these pipes during or after construction, the developer is also required to provide caps to cover all unused pipes as a preventive measure.
- 18 IDA understands that there have been a number of flash fire incidents due to foreign gases entering the MDF rooms, TERs and telecommunication risers through the underground pipes, which resulted not only in damage to installation and plant housed in the said facilities, but also in human casualties. IDA is greatly concerned with the issue of safety and in this regard, IDA views that additional measures may be necessary to address the issue of foreign gases possibly entering MDF rooms, TERs and telecommunication risers.

Proposed Changes

For new Developments, it is proposed that all underground pipes provided by a developer, leading to the MDF rooms, TERs and telecommunication risers, should be sealed by that developer prior to the handing over of such underground pipes to telecommunication licensees. For subsequent usage of the underground pipes by telecommunication licensees in their cable deployment works, the telecommunication licensees carrying out such works should promptly re-seal the used underground pipes after completion of their works.

For existing Developments, where the underground pipes have already been handed over to the telecommunication licensees, it is proposed that the telecommunication licensees should seal their respective underground pipes, and that such works should be completed by a specified reasonable timeframe.

In addition, the material to be used for the sealing of pipes should not only be effective in preventing ingress of foreign gases into these rooms or telecommunication risers, but should also be removable for the laying of new cables or replacement of old or faulty cables, and not cause damage to the existing cables in the pipes. Examples of such materials are removable plugs and petrolatum tape for the sealing of unused pipes, and foam seals for the sealing of occupied pipes.

- (5) *IDA invites views and comments on:*
- i. For new Developments, the proposed sealing of all underground pipes by developers prior to the handing over of such pipes to telecommunication licensees;*
 - ii. For new Developments, the proposed sealing of underground pipes by telecommunication licensees after cable installation works in buildings;*
 - iii. For existing Developments, the proposed sealing by telecommunication licensees of their respective underground pipes and the timeframe for which such works shall be completed;*
 - iv. Whether there are other effective measures to address the leakage of foreign gases into MDF rooms, TERs and telecommunication risers; and*
 - v. The materials to be used for the sealing of both unused and occupied pipes to prevent gas leakage to MDF rooms, TERs and telecommunication risers.*

SECTION 6 – Removal of Requirement for Cable Readiness Certification by StarHub Cable Vision Ltd

- 19 Cable Readiness Certification (“**CRC**”) by StarHub Cable Vision Ltd (“**SCV**”) is required to be obtained by developers or owners of multi-unit residential buildings, before obtaining the Certification of Statutory Completion from the Building and Construction Authority. IDA notes that as developers or owners of residential buildings are already required to comply with the technical specifications stated in the COPIF on the provision of broadband coaxial cable system (“**BCS**”), it may not be necessary for them to obtain further certification by SCV.

Proposed Changes

It is proposed that the developers or owners of new multi-unit residential buildings no longer be required to submit the CRC to the Building and Construction Authority for its Certification of Statutory Completion.

- (6) *IDA invites views and comments on:*
- i. The proposed removal of the CRC requirement; and*
 - ii. Any other relevant considerations that IDA should take into account in its review of this section*

SECTION 7 – Provision of electrical distribution panels and accessories in the relevant space and facilities

- 20 COPIF 2008 specifies that the developer or owner of a Development shall not be required to bear the utility charges for the operation of any installation or plant deployed by any telecommunication licensee in the relevant space and facilities. However, COPIF 2008 does not specify whether the developer/owner of a Development or telecommunication licensee should bear the cost of providing the electrical distribution panels and the related accessories necessary for the determination of utility charges, should the developer or owner of a building wish to pass the utility costs on to telecommunication licensees.
- 21 To this end, COPIF 2008 has specified that for every new Development, the developer or owner of a building is required to provide 3 sets of electrical distribution panels and accessories in the MDF room and/or TER for use by telecommunication licensees. In this respect, IDA views that the responsibility for the cost of the electrical distribution panels and related accessories for existing Developments should be similarly borne by the developers or owners.

Proposed Changes

It is proposed that the developer or owner of any existing Developments should be responsible for providing, installing and testing, at its expense, any electrical distribution panels or accessories necessary for the determination of utility charges, should the developer or owner of that building require any telecommunication licensee to bear the cost of electricity consumed by its installation or plant in the relevant space and facilities.

(7) *IDA invites views and comments on:*

- 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.*

PART III: PROCEDURE AND TIMEFRAME FOR SUBMITTING COMMENTS

- 22 IDA would like to seek views and comments on the proposals in Sections 1 to 7 of Part II.
- 23 All submissions should be clearly and concisely written, and should provide a reasoned explanation for any proposed revisions. Parties should also clearly identify the specific Section on which they are commenting.
- 24 All submissions should reach IDA by 12:00 p.m., 16 December 2011. Comments must be submitted in soft copy (preferably in Microsoft Word or PDF format) with the email header "Public Consultation on the Review of COPIF", to this e-mail: **IDA_Consultation@ida.gov.sg**. All comments should be addressed to our Ms Aileen Chia, Deputy Director-General (Telecoms & Post).
- 25 IDA reserves the right to make public all or parts of any written submission and to disclose the identity of the source. Commenting parties may request confidential treatment for any part of the submission that the commenting party believes to be proprietary, confidential or commercially sensitive. Any such information should be clearly marked and placed in a separate annex. If IDA grants confidential treatment, it will consider (but will not publicly disclose) the information. If IDA rejects the request for confidential treatment, it will return the information to the party that submitted it and will not consider this information as part of its review. As far as possible, parties should limit any request for confidential treatment of information submitted. IDA will not accept any submission that requests confidential treatment of all, or a substantial part, of the submission.