

Provision	Licensees' Comment	MDA's Response
Service Coverage Requirements		
2.2.2(b) – DTV service coverage	<p>A Licensee proposed the following amendments to Para 2.2.2(b):</p> <p>“A Licensee providing free-to-air DTV service shall ensure that the indoor reception of such service is enabled for at least 98% of all-present residential properties in Singapore.”</p>	<p>MDA will maintain the current provision to require a Licensee providing free-to-air DTV service to provide a nationwide coverage of 98% for all residential properties and not just present residential properties.</p>
2.2.2(c) – Terrestrial TV service coverage	<p>A Licensee proposed the following amendments to Para 2.2.2(c):</p> <p>“A Licensee shall make best efforts to provide <u>or recommend</u> solutions to any residential or non-residential property that is unable to receive such services.”</p>	<p>MDA will amend the provision to provide the flexibility to provide or recommend solutions to residential properties. However, for HDB residential properties, a Licensee shall use its best efforts to provide solutions to enable reception of the service.</p> <p>MDA will also remove the requirement on non-residential properties in view that they are generally handled independently by the management of such properties.</p> <p>MDA will revise the provision to the following:</p> <p>A Licensee shall use its best efforts to provide solutions for any Housing and Development Board (HDB) residential property, or recommend solutions to private residential properties, that are unable to receive such services.</p>

2.4.2 – IPTV service coverage	<p>A Licensee sought clarification on whether an area “where the NGNBN has been rolled out” refers to a property that is installed with a NGNBN connection (e.g. functioning fibre termination point inside the home). The Licensee also commented that a property in an area where the NGNBN has been rolled-out may not have an NGNBN connection installed, and hence it would not be possible for the Licensee(s) to provide the IPTV services to the customer. The Licensee thus sought confirmation that the obligation to provide IPTV services would apply only to properties within the specified area where there would be a functioning fibre termination point inside the home.</p>	<p>MDA wishes to clarify that Licensees would not be required to provide their IPTV service if the terminating point/connection has not been installed within the home by Netlink Trust. However, where the NGNBN has been rolled out and where properties are homepassed, Licensees should, to their best efforts, facilitate the installation of the TP/connection (i.e. to arrange for Netlink Trust to install the TP), and thereafter provide the IPTV service.</p>
	<p>A Licensee commented that there were situations where IDA exempted properties from the NGNBN rollout because of access problems (e.g. the ongoing “spring-boarding” problem). It added that even if the property was within an area where the NGNBN has been rolled out, it will not be possible to provide IPTV services to the property in question.</p>	<p>MDA wishes to clarify that for properties that are exempted from NGNBN rollout by IDA, Licensees would not be required to provide IPTV services to such properties.</p>
TV Signal Strength Requirements		
3.2.2 (b) and 3.2.3(b) – DTV signal strength	<p>A Licensee proposed the following amendments to Para 3.2.2(b):</p> <p>3.2.2(b): “A Licensee providing free-to-air DTV service shall ensure that the minimum indoor-outdoor TV signal strength within the required coverage area for such services shall be in accordance with Recommendation ITU-R BT.2254 based on Singapore transmission parameters.”</p> <p>The Licensee commented that it was more practical to measure outdoor TV signal strength rather than indoor TV signal strength for compliance purpose as indoor measurement could only be taken upon entry into homes. This in turn would require residents’ cooperation to allow its engineers to enter into homes which would be impractical and even if entry was gained, only limited samples could be collected and that may not be representative of the signal strength. It added that outdoor signal strength required for indoor reception was well documented in ITU-R BT.2254 and that the outdoor measurement couldn’t be conducted with mobile measurement equipment in residential estates.</p>	<p>MDA will retain the term “indoor”. MDA wishes to clarify that the provision does not prescribe the measurement approach for Licensees in fulfilling the signal strength requirements as long as the Licensee is in compliance with the minimum indoor signal strength per the BT.2254 standard. However, MDA may from time to time, require Licensees to collect samples of indoor signal strength measurement for verification purposes.</p>

Reliability Requirements		
5.1 (c) – Outage definition	Licensees commented that the term “degradation of service to below a normal or acceptable level of quality” is subjective and should be excluded.	<p>MDA will retain the term “degradation of service to below a normal or acceptable level of quality” for reasons explained in the Closing Note. However, MDA will include the term “significant” to point (c) of the definition to highlight MDA’s emphasis on service degradation that will cause an impact and not on minor glitches.</p> <p>The updated definition of outage is as follows:</p> <p>An outage is considered to have occurred when:</p> <ul style="list-style-type: none"> a) there is an absence of channel or service; b) there is an intermittent or persistent loss of audio or video for one or more channels; or c) there is significant degradation of service to below a normal or acceptable level of quality. <p>MDA will also include some examples of “degradation of service” that affects the overall viewing experience of TV to provide further clarity, such as:</p> <ul style="list-style-type: none"> i) pixelation of pictures; ii) picture freezing; iii) audio synchronisation issues <p>With this amendment, the outage definition will be aligned with that of the Service Difficulty Reporting Framework.</p>

<p>5.2.3(f) – Terrestrial Broadcast TV Service – Compliance with obligation for ORI requirement</p>	<p>A Licensee proposed the following amendments to Para 5.2.3(f): “The Channel ORI and Network ORI results should take into account, <u>where applicable</u>, loss of video or sound or control data essential to view the services due to any cause under the control, either directly or through contract arrangements, of the Licensee...”</p> <p>The Licensee commented that Channel ORI measures the reliability of the playout system whereas Network ORI measures the transmission network, and proposed to include “where applicable” for clarity purpose. For example, if the fault is at playout system, it should affect only the Channel ORI and not the Network ORI.</p>	<p>MDA will maintain the current phrasing. MDA wishes to clarify that the Code already makes clear about how Channel and Network ORI would be computed. Please refer to para 5.1 of the Code.</p>
<p>Computation of Channel ORI</p>	<p>A Licensee sought clarification on how the Channel ORI is to be computed, and if Channel ORI would only include channel outages that apply to all customers subscribing to that channel.</p>	<p>MDA wishes to clarify that in determining if an outage should be included for Channel ORI computation, it is not based on number of affected customers, but rather whether the outage occurred due to failure of components in the broadcast transmission chain that are prior to the transmission network.</p>

Reporting Requirements		
2.4.3 (a), 4.2.3 (d), 6.2.3 (g) – Submission of quarterly complaints report	A Licensee requested for MDA to provide the proposed format of the quarterly reports so that it can review and assess the proposed format and provide its views and comments accordingly.	MDA has excluded the format from the Code to allow flexibility for changes in the future. MDA will provide the reporting format to Licensees upon the effecting of the Code.
5.4.3 (g) – Submission of ORI report	A Licensee requested for MDA to provide the proposed format of the monthly reports so that it can review and assess the proposed format and provide its views and comments accordingly.	MDA has excluded the format from the Code to allow flexibility for changes in the future. MDA will provide the reporting format to Licensees upon the effecting of the Code.
Submission of Written Description of Licensees' Procedures for Ensuring Compliance		
4.2.3 (a) and 6.2.3 (a) – Submission of written description of procedure	A Licensee sought confirmation on the timeframe by which it is required to submit the written description of the procedure to MDA.	MDA wishes to clarify that the written description is intended to be submitted six (6) months after the Code is effected.