|  |  |  |
| --- | --- | --- |
| APTlogogreen3 | ASIA-PACIFIC TELECOMMUNITY | **Document No:**  |
| **The 4th Meeting of the APT Conference Preparatory Group for WRC-19 (APG19-4)** | **APG19-4/INP-92** |
| 7 – 12 January 2019, Busan, Republic of Korea | **31 December 2018** |

Singapore

**preliminary views on WRC-19 agenda items 1.4, 1.5, 1.6, 7 (Issues A, E, F, G, K)**

**Agenda Item 1.4:**

*to consider the results of studies in accordance with Resolution* ***557 (WRC-15)****, and review, and revise if necessary, the limitations mentioned in Annex 7 to Appendix* ***30 (Rev.WRC-15)****, while ensuring the protection of, and without imposing additional constraints on, assignments in the Plan and the List and the future development of the broadcasting-satellite service within the Plan, and existing and planned fixed-satellite service networks*

**1. Background**

WRC-15 adopted a new Resolution (Resolution 557 (WRC-15)) to study possible revisions of the limitations mentioned in Annex 7 to RR Appendix 30 (Rev.WRC-12).

Historically the limitations were developed to facilitate the sharing of the band 11.7 – 12.7 GHz across the different regions taking into account state-of-the-art at the time. Satellite technology has developed further, and removal of some or all of these limitations could provide for more efficient overall use of the band. However, some operational networks which have been developed within the ecosystem of the current limitations may need specific protection should the current limits be relaxed.

All technical studies done by ITU-R WP4A with respect to WRC-19 agenda item 1.4 demonstrate that such initial limitations are not required anymore. The deletion of the majority of the Annex 7 of Appendix 30 limitations with some specific measures in some cases will not impact other services, and will permit to unfreeze some spectrum and improve the spectrum efficiency of the frequency band 11.7-12.7 GHz in all 3 Regions.

However, based on the latest studies within the CPM text, in specific cases, the suppression of Limitations A1a and A2a without additional measures could require FSS networks to modify their service area and/or decrease their maximum e.i.r.p. over the area close to Region 1 or 2. For such specific cases administrations concerned with such coordination problems would need to make additional efforts to overcome coordination problems to find a mutually acceptable solution.

The deletion of limitations “A1a” and “A2a” as accompanied by Resolutions [C14-LIMITA1A2] (WRC-19) with revised criteria for protection of future BSS networks with respect to limitations “A1a” and “A2a” includes the necessary regulatory measures to still allow the expansion of the Region 2 and Region 1 BSS Networks located within new arcs following the removal of imitation A1a and A2a in Annex 7 of Appendix 30 and without imposing additional constraints to future FSS networks in line with Resolution 557 (WRC-15).

**2. Sharing Studies and Methods**

During the 6th meeting of WP4A focussed on reducing the number of methods in the draft CPM text of this agenda item. The number of methods now consists of following:

The first method, **Method A**, is the NOC method.

The second method, **Method B**, proposes to retain limitations “A1b”, “A2c” and “B” and delete the following limitations of Annex 7:

* limitations “A1a”, “A2a”, “A2b”, “A3b”, and “A3c”;
* limitation “A3a” accompanied by Resolution [A14-LIMITA3] to guarantee the protection of frequency assignments with earth station receiving antenna size smaller than 60 cm (40 cm and 45 cm), in accordance with the criteria of RR Appendix 30 (Rev.WRC-15).

The third method, **Method C**, proposes to retain limitations “A1b”, “A2c” and “B” and delete the following limitations of Annex 7:

* limitations “A1a” and “A2a” and the application of Resolution [C14-LIMITA1A2] with the revised criteria for the protection of future BSS networks;
* limitations “A2b”, “A3b”, “A3c”;
* limitations “A3a” accompanied by Resolution [A14-LIMITA3] to guarantee the protection of frequency assignments with earth station receiving antenna size smaller than 60 cm (40 cm and 45 cm), in accordance with the criteria of RR Appendix 30 (Rev.WRC-15).

Methods B & C also address concern express by 16 African Administrations to improve equitable access to satellite orbit resources by providing priority to Administrations with a degraded reference situation, should WRC-19 decide to suppress the relevant limits in Annex 7 of the RR Appendix 30 (Rev.WRC-15). See Resolution [B14-PRIORITY].

**3. Preliminary View**

Singapore recognizes that the removal of the limitations will allow access to more orbital positions and its associated spectrum. However, existing and future FSS networks operating in the frequency bands 12.5-12.75 GHz in Region 1, 11.7-12.2 GHz in Region 2 and 12.2-12.75 GHz in Region 3 and BSS networks implemented in accordance with the current provisions of Annex 7 to Appendix 30 should continue to be protected.

Singapore is of the view that Method C includes the necessary regulatory measures to still allow the expansion of the Region 2 and Region 1 BSS Networks located within new arcs following the removal of imitation A1a and A2a in Annex 7 of Appendix 30 and without imposing additional constraints to future FSS networks in line with Resolution **557 (WRC-15).**

Singapore invite APT members to consider the deletion of Method B and to support Method C which includes the necessary regulatory measures to take into account concerns of all interested parties.

Annex 1 to this document proposes edits to the current version of the CPM text reflecting the discussion in this document.



\_\_\_\_\_\_\_\_\_\_\_\_

**Agenda Item 1.5:**

*to consider the use of the frequency bands 17.7-19.7 GHz (space-to-Earth) and 27.5-29.5 GHz (Earth-to-space) by earth stations in motion communicating with geostationary space stations in the fixed-satellite service and take appropriate action, in accordance with Resolution* ***158 (WRC-15)***

1. **Background**

Resolution **158 (WRC-15)** *resolves to invite ITU-R*:

1. “to study the technical and operational characteristics and user requirements of different types of earth stations in motion that operate or plan to operate within geostationary FSS allocations in the frequency bands 17.7-19.7 GHz and 27.5-29.5 GHz, including the use of spectrum to provide the envisioned services to various types of earth station in motion and the degree to which flexible access to spectrum can facilitate sharing with services identified in recognizing further a) to n)”;
2. “to study sharing and compatibility between earth stations in motion operating with geostationary FSS networks and current and planned stations of existing services allocated in the frequency bands 17.7-19.7 GHz and 27.5-29.5 GHz to ensure protection of, and not impose undue constraints on, services allocated in those frequency bands, and taking into account recognizing further a) to n)”
3. “to develop, for different types of earth stations in motion and different portions of the frequency bands studied, technical conditions and regulatory provisions for their operation, taking into account the results of the studies above”

Resolution **158 (WRC-15)** *resolves to further invite the 2019 World Radiocommunication Conference*

* “to consider the results of the above studies and take necessary actions, as appropriate, provided that the results of the studies referred to in resolves to invite ITU-R are complete and agreed by ITU-R study groups.”

This agenda item follows on from the actions taken at WRC-15 which agreed to new regulations for the operation of earth stations in motion (“ESIM”) in the bands 19.7-20.2 GHz and 29.5-30 GHz. WRC-15 adopted Resolution **156 (WRC-15)** which sets out technical and operational requirements to allow for the operation of ESIM in FSS networks in these bands. The Resolution is largely based on Reports ITU-R S.2223 and IT-R S.2357, which study technical and operational use of ESIM.

WRC-19 agenda item 1.5 seeks to consider whether regulations may be introduced to enable similar ESIM operations in the bands 17.7-19.7 GHz and 27.5-29.5 GHz. These bands include allocations to a number of services, as identified in *recognizing further* a) to m) of Resolution **158** **(WRC-15)**.

The growing demand for broadband satellite communications to mobile platforms has led several satellite operators to develop systems to address the need. There are some services provided in C‑band (ESVs) and Ku-band (ESVs and AMSS), but the Ka-band frequencies have been identified by several systems focused on the provision of ESIM services and some of the Ka-band frequencies are the subject of WRC-19 agenda item 1.5 (in particular the bands 17.7-19.7 GHz and 27.5‑29.5 GHz).

**2. Sharing Studies and Methods**

Within the ITU-R, Working Party 4A (“WP 4A”) is the responsible group on this agenda item. At its June 2018 meeting, WP4A completed the draft CPM text on this agenda item. The draft CPM text provides two methods to satisfy the agenda item.

* Method A is no change to the RR and suppression of Resolution **158** **(WRC-15)**
* Method B proposes the addition of a new footnote in RR Article **5** that refers to a new WRC Resolution with technical, operational and regulatory conditions for the operation of ESIM while ensuring protection of allocated services and consequential suppression of Resolution **158 (WRC-15)**.

The CPM report provided an Example Resolution to address WRC-19 agenda item 1.5, however it is noted that WP4A did not reach full agreement on all aspects of the sharing studies and elements in the example Resolution. The views of different administrations are represented through options in the example Resolution.

With regard to terrestrial services, WP4A concluded that in the band 27.5-29.5 GHz, terrestrial fixed and mobile service stations can be protected as follows:

* Maritime ESIM (M-ESIM) should comply with a minimum distance from the low-water mark of a coastal state and an associated maximum e.i.r.p spectral density limit towards that coastal state. The same principle for the protection of terrestrial service stations is applied to operation of Earth Stations on Vessels (ESV) in the bands 5 925-6 425 GHz and 14.0-14.5 GHz. Distances in the range 60 to 120 km have been proposed by different administrations.
* Aeronautical ESIM (A-ESIM) should comply with PFD limits at the surface of the Earth, when in line-of-sight of a territory of an administration. The same principle for the protection of terrestrial service stations is applied to aircraft earth station operation in the band 14-14.5 GHz. Different PFD masks have been proposed and one option in the example Resolution also proposes to combine an altitude limit with one of the PFD limits on A-ESIM.
* Land ESIM (L-ESIM) should operate under the condition of no interference into terrestrial stations in neighbouring countries

**2. Preliminary Views**

Singapore supports ITU-R studies to develop the regulatory framework for ESIM operations in the bands 17.7-19.7GHz and 27.5-29.5GHz. However, given that Singapore has plans to deploy mobile services within the 27.5 – 29.5GHz band, guidelines within the regulatory framework should take into consideration both the current use and future availability of other services that are operating in the same frequency band.

It is noted that the ITU-R has examined sharing conditions between ESIM and terrestrial services in the 27.5-29.5 GHz frequency band and concluded that there would be potential interference to receiving stations of terrestrial services from ESIM transmitters. Therefore, aeronautical and maritime ESIM should operate under the specified technical, operational and regulatory conditions to avoid causing unacceptable interference to receiving stations of terrestrial services. In view of the above, Singapore supports Method B of the draft CPM Report.

\_\_\_\_\_\_\_\_\_\_\_\_

**Agenda Item 1.6:**

*to consider the development of a regulatory framework for non-GSO FSS satellite systems that may operate in the frequency bands 37.5-39.5 GHz (space-to-Earth), 39.5-42.5 GHz (space-to-Earth), 47.2-50.2 GHz (Earth-to-space) and 50.4-51.4 GHz (Earth-to-space), in accordance with Resolution* ***159*** *(****WRC-15****)*

**1. Background**

There is a growing demand for global satellite broadband services, thanks to the advancements made in the design of satellites, launch service capabilities and user terminal technology. In addition to geostationary-satellite orbit (“GSO”) satellites, Non-GSO systems are playing an increasing role in fulfilling the needs for such broadband satellite communications. By spurring the development of non-GSO systems in the frequency bands above 30 GHz, this could potentially unlock a new and promising source of global broadband communications in these higher frequency ranges. The benefits of such non-GSO satellite systems include providing worldwide connectivity, high capacity and low cost means of communication, even to the most isolated regions. By developing a regulatory framework in the 50/40 GHz band, this will provide regulatory certainty to allow non-GSO satellite systems to efficiently operate in these existing fixed-satellite service (“FSS”) frequency bands, while protecting the GSO satellites and other existing services.

To address these issues, WRC-15 established Agenda Item 1.6 for WRC-19: “to consider the development of a regulatory framework for non-GSO FSS satellite systems that may operate in the frequency bands 37.5-39.5 GHz (space-to-Earth), 39.5-42.5 GHz (space-to-Earth), 47.2-50.2 GHz (Earth-to-space) and 50.4-51.4 GHz (Earth-to-space), in accordance with Resolution **159 (WRC-15)**”.

Working Party 4A (WP 4A) is the responsible group for conducting the sharing studies under this Agenda Item. In the sixth meeting of WP 4A (3-14 July 2018), updates to the following documents were made:

* preliminary draft new Recommendation ITU-R S.[50/40 GHZ FSS SHARING METHODOLOGY] - Maximum permissible levels of interference in a satellite network (GSO and non-GSO) in the fixed-satellite service caused by other co-directional FSS networks operating in the 50/40 GHz frequency bands;
* preliminary draft New Report ITU-R S.[50/40 GSO-NGSO SHARING] on sharing between 50/40 GHz GSO FSS networks and non-GSO FSS systems;
* working document towards preliminary draft new Recommendation ITU-R S.[50/40 REFERENCE LINKS]
* working document towards a preliminary draft New Report ITU-R S.[50/40 NGSO-NGSO SHARING] on study of mitigation techniques between non-GSO FSS systems.
* working document towards a preliminary draft New Report ITU-R S.[50/40 GHz ADJACENT BAND STUDIES] on the protection of EESS (passive) and RAS systems from non-GSO fixed satellite systems operating in the 37.5-42.5 GHz, 47.2-50.2 GHz and 50.4-51.4 GHz frequency bands;
* draft CPM text

**2. Preliminary Views**

Singapore supports studies under WRC-19 Agenda Item 1.6 with a view to develop a regulatory framework and technical conditions for non-GSO satellite systems in the existing FSS allocations in the 37.5-39.5 GHz (space-to-Earth), 39.5-42.5 GHz (space-to-Earth), 47.2-50.2 GHz (Earth-to-space) and 50.4-51.4 GHz (Earth-to-space) frequency bands under the terms of Resolution **159 (WRC-15)**. Singapore is of the view that Method A with the following modifications to the Radio Regulations could be supported.

With regard to the modification of unwanted emission limits for the FSS in Resolution **750 (Rev.WRC-15)** to protect EESS (passive) systems operating in the band 50.2-50.4 GHz from harmful interference from non-GSO FSS systems operating in the adjacent frequency bands, the unwanted emission limits of −13 and −23 dBW/200 MHz (depending on antenna diameter) for non-GSO FSS systems should be introduced, as proposed in Option 4. However, there should not be any modification to the limits for GSO networks in Resolution **750 (Rev.WRC-15)** since this is outside the scope of agenda item 1.6. On this point, Option 2 is supported for the GSO satellite networks.

\_\_\_\_\_\_\_\_\_\_\_

**Agenda Item 7:**

*to consider possible changes, and other options, in response to Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference, an advance publication, coordination, notification and recording procedures for frequency assignments pertaining to satellite networks, in accordance with Resolution 86 (Rev.WRC‑07) to facilitate rational, efficient, and economical use of radio frequencies and any associated orbits, including the geostationary‑satellite orbit.*

**1. Background**

Resolution **86 (Rev. WRC-07)** resolves that WRC should consider any proposals which deal with deficiencies and improvements in the advance publication, coordination, notification and recording procedures of the Radio Regulations for frequency assignments pertaining to space services which have either been identified by the Board and included in the Rules of Procedure or which have been identified by Administrations or by the Radiocommunication Bureau, as appropriate. The Resolution also resolves to invite WRC to ensure that these procedures and the related appendices of the Radio Regulations reflect the latest technologies, as far as possible. Currently, 13 issues (Issues A to M) are considered under this Agenda item by the responsible group, Working Party 4A (WP 4A).

This input provides Singapore’s preliminary views on Issues A, E, F, G and K.

1. **Issue A: Bringing into use of frequency assignments to NGSO satellite systems, and consideration of a milestone-based deployment approach for NGSO FSS satellite systems in certain bands**

**Background**

The issue aims at bringing more clarity to the Bringing Into Use (“BIU”) of frequency assignments to non-GSO satellite systems by developing the appropriate regulatory provisions which cover the aspects of clarifying the BIU requirements, deployment of constellation and maintenance of the frequency assignments in the MIFR.

WRC-15 recognised that there was a lack of specific provisions for the BIU for frequency assignments to space stations in non-GSO satellite systems. Based on the current Rules of Procedure (“ROP”), the Bureau considers that a frequency assignment to a space station of a non-GSO system as having been brought into use when there is at least one satellite deployed for a continuous period of 90 days, capable of transmitting and/or receiving that assignment – irrespective of the number of satellites or orbital planes indicated in the notification information provided under RR No. **11.2**.

In the sixth meeting of WP 4A (3-14 July 2018), the discussions were focused on addressing the BIU of frequency assignments to non-GSO satellite systems, as well as developing a milestone-based deployment approach for maintenance of the MIFR for frequency assignments to non-GSO satellite systems in specific bands and services.

Concerning the continuous period for confirming the BIU of non-GSO systems, there are 3 options being considered as described below:

|  |  |
| --- | --- |
| Options | Descriptions |
| A | A continuous period of at least ninety days in a notified orbital plane of a satellite with the capability of transmitting or receiving the frequency assignments. *Applicable to some non-GSO systems based on RoP on RR No.****11.44*** *(Ed. of 2017).* |
| B | A continuous period of X (one day to ninety days) of deployment in a notified orbital plane of a satellite with the capability of transmitting or receiving the frequency assignments may be sufficient. *The ninety-day duration may not be required for the non-GSO administration/operator to determine that a space station with the capabili*ty *has been deployed in a notified orbital plane.* |
| C | No fixed period. *Administration informs the Bureau of BIU once it confirms deployment of a space station with the capability of transmitting/receiving the frequency assignments into one of the notified orbital planes* |

On the aspect of deployment of constellation and maintenance of frequency assignments in the MIFR, a milestone-based approach gives recognition that constellations of non-GSO satellites may generally take more time than seven years to be fully deployed in accordance with the notified characteristics of the frequency assignments. If a milestone is not met, the frequency assignments in the MIFR will be aligned with the numbers of planes and satellites per plane deployed into the system at the expiry of the deadline for the milestone in question, while preserving the rights of the already in-orbit satellites. A “Deployment Factor” (DF) could be considered in order to “scale up” the constellation based on the number of actual satellites launched. This means if a milestone is missed, the penalty would be a reduction in the number of satellites the administration could deploy in the next milestone which is based on the number of satellites launched x DF.

All seven milestone-based approach options in the draft CPM text have three milestones, with variations in the number of minimum satellites to be deployed, DF and commencement date of milestone.

The milestone-based methodology should be implemented in such a way that systems brought into use before and after the end of WRC-19 be treated equitably. The adoption of transitional measures would avoid an unequitable treatment among all the NGSO satellite systems by recognising the requirement for all these systems, including those brought into use prior to WRC-19, to operate their recorded frequency assignments in accordance with their recorded characteristics. Failure to meet this requirement should lead to the adjustments to the characteristic of the recorded assignments to reflect the actual capability of the NGSO satellite system.

A new WRC Resolution would be adopted to specify the bands and services to which the milestone approach applies, the characteristics and implementation of the milestones, consequences of failing to meet a milestone, as well as the appropriate transitional arrangements.

**Preliminary Views**

In consideration of Issue A, Singapore has the following preliminary views:

1. concerning the continuous period for confirming the BIU of frequency assignments to a NGSO system, Singapore could accept all three options.
2. Regarding milestone timing and minimum required percentage of satellites to be deployed to meet the milestone, Singapore could support Options for which there exists a balance between the need to prevent warehousing of the orbital/spectrum resource and the operational requirements related to the deployment of a non-GSO satellite system.

1. Regarding the transitional measures, Singapore supports Option 1 which applies identical milestones, associated timelines and required levels of deployment for all non-GSO systems brought into use before and after the end of WRC-19. For non-GSO systems with frequency assignments reaching the end of their seven-year regulatory period after a date to be set by the Conference, the commencement of the milestone period will be the actual date of the end of the seven-year regulatory period. For the non-GSO systems with a regulatory period that ends before the date to be set by the Conference, the commencement of the milestone process is based on that date.
2. **Issue E: Resolution related to RR Appendix 30B**

**Background**

ITU-R considered studies relating to the enhancement of regulatory provisions of RR Appendix 30B to observe the principles based on which it was initially established.

An administration which decides to convert its national allotment into assignments in an economically viable manner very often needs to modify the initial characteristics of its national allotments, taking into account the latest available development and advancement in technology as well as the most economically viable solution.

In so doing, a) when the request for conversion is submitted, the application would be queued at the end of the last submission received before it and b) once its turn to be processed is reached, due to the nature of those additional systems/uses it would be extremely difficult, if not totally impossible, to succeed coordination within the regulatory deadline. In summary, as it could be noted from the above, the probability that an administration could successfully complete coordination for the conversion of its national allotment to assignments with characteristics beyond the initial allotment within that regulatory period is very low.

In the sixth WP 4A meeting, this issue was further developed and agreed as the possible alternative solution to the former Issues E and F. With that agreement, the meeting agreed to suppress the previous Issues E and F and replace the former Issue E with this new solution. This new solution involves developing a draft new WRC Resolution:

* along the lines of Resolution **553 (WRC-15)** to address a similar issue for the 21.4‑22 GHz BSS band for Regions 1 and 3.
* containing special procedures that could be applied once for conversion of an allotment into assignment with changes which are outside the envelope of the initial allotment while restricted to provide service to its national territory, or for submission of an additional system with service area restricted to national territory.

**Preliminary Views**

Singapore supports the draft new Resolution containing a special one-time applied measure and procedure as an enhancement of equitable access to spectrum/orbital resources for developing countries to facilitate the processing of their submission in RR Appendix 30B.

1. **Issue F: Measures to facilitate entering new assignments into the RR Appendix 30B List**

**Background**

An administration which wants to convert its national allotment of RR Appendix **30B** into assignments in an economically viable manner very often needs to modify the initial characteristics of its national allotments, taking into account the latest available development and advancement in technology. For this purpose, the administration will make a submission and follow the procedures of Article 6 of RR Appendix **30B**.

In so doing:

a) when the submission is examined and published by the Bureau, the submission would need to coordinate with affected networks with higher priority;

b) due to the conservative criteria used in RR Appendix **30B**, a large number of coordination requirements will be identified;

c) networks can be designed with combinations of characteristics, possibly unrealistic, to obtain a high sensitivity to interference from later submissions of other administrations.

As a result, it may be difficult for an administration to successfully complete the coordination within the regulatory period.

In the sixth WP4A meeting, there was agreement to replace the former Issue F with the previously identified Issue N. One of the methods to satisfy this current issue, ie Method F1, proposes the following changes:

* + Adopting the structure decided by WRC-2000 for RR Appendices 30 and 30A, i.e. a reduced coordination arc and mechanisms to remove unnecessary coordination requirements inside the coordination arc.
	+ Align the AP30B Annex 3 limits to newly established coordination arcs i.e. 7° for C-band and 6° for Ku-band
	+ Propose values for pfd masks such as those developed in preparation for WRC-15 Issue 9.1.2, to remove unnecessary coordination and prevent combinations of technical parameters leading to unrealistic links from hindering introduction of new networks.

**Preliminary Views**

Singapore supports Method F1 as it helps to facilitate coordination of networks for newcomers by alleviating difficulties due to the conservative criteria used in RR Appendix **30B** and from networks with unrealistic characteristics which are highly sensitive to interference from later submissions.

1. **Issue G: Updating the reference situation for Regions 1 and 3 networks under RR Appendices 30 and 30A when provisionally recorded assignments are converted into definitive recorded assignments**

**Background**

The paragraphs 4.1.18 to 4.1.20 were included in the RR based on WRC-2000 decision, to be used in exceptional cases to overcome continuing disagreement of administrations of the affected networks to enter provisionally into the List and after being four months in use without complaint of harmful interference to give a chance to new or modified Article 4 networks to enter definitively in the Lists of RR Appendices **30** and **30A**.

The issue of updating the reference situation for Regions 1 and 3 networks under RR Appendices **30** and **30A** when provisionally recorded assignments are converted into definitive assignments was first raised during the CPM15-2 meeting. It was therefore too late to have this issue captured in the CPM Report. Subsequently, this issue was brought to the attention of RRB-70 meeting in October 2015 (Document RRB-70/10), requesting that a Rule of Procedure (RoP) be prepared to outline the desired practice to be followed by the Bureau. RRB-70 however was of the view that such a ROP would consist in a change of the Radio Regulations and therefore was outside the authority of the RRB.

Following this decision, a proposal on this issue was submitted to WRC-15, which has the authority to make changes to the Radio Regulations (Document WRC-15/169). Since this proposal was made directly to the Conference with no previous ITU-R studies, WRC-15 decided that:

 *“….it was felt that further study of this issue is required if this current practice is to be changed. ITU-R is therefore invited to study this issue under the standing agenda item 7 with the aim of finding an appropriate regulatory and technical solution to this issue**.”*

This Issue G is in response to these activities before and during the last WRC and the decision of WRC-15.

To avoid administrations from receiving a reduced protection due to a network to which they have not given their agreement, one of the methods, ie Method G1, prescribes that when a network has entered into the List using § 4.1.18, and when the recording of the associated assignments transitions from provisional to definitive while there is still disagreement, the reference situation of the interfered-with network should be updated in consultation with, and only with the agreement of, the affected administration. To this effect, this method proposes to modify § 4.1.18*bis* of RR Appendices **30** and **30A** as shown in Section 3/7/7.5.1 of Annex 36 to Document 4A/826.

In the sixth WP4A meeting, improvement/clarifications were made to the methods and to resolve the various editor’s notes and conflicting points of view found in the draft CPM texts.

**Preliminary Views**

Singapore supports Method G1 which proposes to update the AP30 and 30A List reference situation only after reaching agreements in Regions 1 and 3.

1. **Issue K: Difficulties for Part B examinations under § 4.1.12 or 4.2.16 of RR Appendices 30 and 30A and § 6.21 c) of RR Appendix 30B**

**Background**

Examination under RR Appendix **30B** § 6.21 c) is based on the assignments for which the Bureau has previously received complete information in accordance with § 6.1 (i.e. Network SR-Part A) even though the Network SR-Part B has already been published under § 6.23 or § 6.25 with much reduced characteristics (e.g. reduced service area and coverage area) and from that Part B publication, Network SR-Part A no longer exists in the AP**30B** databases.

This creates difficulties to the notifying administration and may prevent its notice submitted under § 6.17 (Network JR-Part B) from entering into the List with favourable findings as the examination of its submission in respect of the senior network (Network SR-Part A) is unfavourable even though in reality, its network (Network JR-Part B) can co-exist with the senior network in the List (Network SR-Part B) and if examination in respect of Network SR is based on its Part B, examination result will become favourable.

**Preliminary Views**

Singapore supports the only Method which is to add one more examination under § 6.21 c) for AP30B and under § 4.1.12, §4.2.16 for AP30/30A such that should any remaining affected networks whose assignments have been entered in the List before the submission under § 6.17 for AP30B and under §4.1.12, §4.2.16 of AP30/30A, the Bureau shall further examine if these assignments in the List are still being affected, using its Part B characteristics. This method avoids overprotection of networks based on characteristics that are no longer valid and could potentially reduce the application of provisions for provisional recording in the List.

\_\_\_\_\_\_\_\_\_\_\_\_