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**PRELIMINARY VIEWS FOR WRC-19
AGENDA ITEM 7**

(Item on the Agenda: 3.1 (SGT 3.3))

(Document submitted by the Coordinator)

SGT3 – Satellite services

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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*

BACKGROUND

Resolution 86 (Rev. Marrakesh, 2002) requested that the 2003 World Radio Conference (WRC-03) and subsequent Conferences review the regulatory procedures associated with the advance publication of information (API), coordination and notification and recording of satellite network filings. The objective is to simplify the process and provide the BR and administrations with cost savings while maintaining the guiding principles outlined in the Constitution and the Radio Regulations.

WRC-03 identified in Resolution **86 (WRC-03)** the scope and the criteria to be used for the implementation of Resolution 86 (Rev. Marrakesh, 2002). WRC-07 amended Resolution **86 (WRC-03)** to simplify and eliminate redundant elements. Resolution **86 (Rev.WRC-07)** invites future Conferences to consider any proposals which deal with deficiencies and improvements in the relevant 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 the Radiocommunication Bureau, as appropriate. Future Conferences should ensure that these procedures and the related appendices of the Radio Regulations reflect the latest technologies.

ISSUE A - Clarify the concept of bringing into use of frequency assignments for non-GSO satellite systems in the Radio Regulations

BACKGROUND

During WRC-15, there were a lot of discussions with respect to the bringing into use of frequency assignments for non-GSO FSS/MSS systems. However, WRC-15 was not able to conclude on any specific provision in the Radio Regulations. As there are an increasing number of Non-GSO FSS/MSS satellite filings within the ITU, there is a need to specify in the Radio Regulations (RR) the requirements for the bringing into use of frequency assignments to a non-GSO satellite system to be considered completed.

PRELIMINARY VIEWS

CAN

Canada is of the view that the current seven-year period may not be enough to deploy a “mega” non-GSO constellation. In trying to address this issue, it is important to adopt a balanced approach, taking into account the financial, technological and planning challenges posed by the multiple launches required to deploy this type of constellation but also the need to prevent any abuse that may lead to spectrum reservation. In this context, a milestone approach appears to be an appropriate solution.

Canada is of the view that any options considered under Issue A reflect the following principles:

1. the BIU process should be separate from any milestones established to maintain the rights and protections for the recorded frequency assignments to non-GSO satellite system;

2. the successful completion of the BIU process for non-GSO satellite systems does not require the deployment of all satellites in the system by the end of the regulatory period;
3. appropriate time should be given to allow the completion of the deployment of non-GSO satellites in constellations;
4. appropriate transitional measures should be considered for the non-GSO satellite system's BIU prior to WRC-19;
5. the procedures adopted under Issue A should be applied to specific services in specific bands;
6. concurrently with the development of a milestone-based approach, methodologies should be developed for the implementation of RR Nos. **9.58/11.43A/11.43B** relating to the regulatory treatment of the adjustments to the characteristics of frequency assignments to non-GSO satellite systems.

ISSUE B - Application of the coordination arc approach in some portions of the Ka-band for the determination of the coordination requirements between GSO MSS and FSS networks

BACKGROUND

To be developed

PRELIMINARY VIEWS

To be developed

ISSUE C1 - Alignment of the wording of §8.13~~2~~ of the Appendix 30B and No. 11.43A of Article 11 dealing with modifications to the characteristics of a recorded assignment

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BACKGROUND

It is generally recognized that provisions in Appendix **30B** relating to coordination and notification were actually written on the model of provisions in Article **9** and **11**. In particular, we note that paragraph §8.13 of Article 8 in Appendix **30B** is similar to No. **11.43A** except for the use of the word “notified” instead of “recorded” although both provisions deal with modifications to frequency assignments in the MIFR. The differences between the two terms was deemed significant enough to create an issue under agenda item 7.

In response to this issue, the ITU-R developed [Preliminary draft] CPM Report with a single Method for the alignment of §8.13 of Article 8 in Appendix **30B** with No. **11.43A**.

PRELIMINARY VIEWS

To be developed

ISSUE C2 - Modification to Appendix 30B to explicitly allow the possibility to submit the Appendix 4 data elements for frequency assignments for only one of the following blocks/sub-bands, 10.70-10.95 GHz and 11.2-11.45 GHz

BACKGROUND

To be developed

PRELIMINARY VIEWS

To be developed

ISSUE C3 - Modification to Appendix 30B to prevent an inappropriate use of the existing provisions (§6.13, 6.14, 6.14bis and 6.15) relating to seeking the assistance of the Bureau for requests made under §6.5 (agreement required from administrations with allotments in the plan, assignments in the List or any pending assignments affected) to requests made under §6.6 (agreement required from administrations which territories are included in the service area of an Appendix 30B satellite network)

BACKGROUND

Under the current regulatory framework, special sections in the BR IFIC relating to the conversion of an Appendix 30B allotment into an assignment, introduction of an additional system¹ or modification of the characteristics of assignments in the RR Appendix 30B List can contain two types of requirements to seek and obtain the agreement of those administrations whose:

- allotments in the Appendix 30B or assignments in the Appendix 30B List or those already examined by the Bureau (requirements identified under § 6.5 of Appendix 30B) are affected, or
- territories have been included in the service area of the assignment under consideration (requirements associated with §6.6 of Appendix 30B).

Appendix 30B does contain specific provisions for seeking the assistance of the Bureau (§ 6.13) with associated consequences (§ 6.14 to 6.15) in absence of a response to letters from the Bureau for requirements identified under § 6.5 of Appendix 30B. However, it is not the case for requirements associated with §6.6 of Appendix 30B. In fact, in this case, the assistance of the Bureau can only be sought through the generic provision, No. 13.1 with no associated consequence in absence of a response to the Bureau's correspondences. Some administrations wanted to reinforce the fact that none of the consequences (§ 6.14 to 6.15) associated with an absence of response to a correspondence from the Bureau initiated under § 6.13.

PRELIMINARY VIEWS

CAN

Canada is of the view that the only procedure applicable for seeking the assistance of the Bureau in the case of requests for the inclusion of the territory of an administration within the service area of an Appendix 30B satellite network is provided in No. 13.1. We also note that an absence of response to correspondences from the Bureau initiated under No. 13.1 for this type of request cannot be considered as an implicit agreement to be included in the service area. In this context, Canada is not convinced of the need to modify Appendix 30B and does not support the modification of §6.10 in article 6 of Appendix 30B.

ISSUE C5 - Modification to Article 11 to instruct the Radiocommunication Bureau to send a reminder to notifying administration before the end of the six-month period provided in No. 11.46 for the resubmission of a notice without a change to the original date of receipt

BACKGROUND

Under the current regulatory framework, for any return of notice following an unfavorable finding from the Bureau following consideration under No. 11.32, 11.32A or No. 11.33, the notifying administration

¹ See §2.6 of Appendix 30B.

has six months to resubmit its notice without a change to the date of the original submission of the notice. However, there is no reminder sent by the Bureau during the six-month period. Consideration has been given to requiring the Bureau to send a reminder.

PRELIMINARY VIEWS

B, CAN

These administrationsCanada supports adding to the relevant provision of Article 11 the obligation for the Bureau to send a reminder to notifying administrations before the end of the six-month period provided in No. 11.46 for the resubmission of notice initially returned by the Bureau without a change to its original date of receipt.

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ISSUE C6 - Modification to Appendix 30B to allow a simultaneous submission of the Appendix 4 data elements for the purposes of entering the frequency assignments in the List (§6.17) and recording them (§8.1)

BACKGROUND

Under the current satellite regulatory framework, the request by a notifying administration to have its new or modified assignments entered into the Appendix 30B List and the request to have them recorded in the MIFR are done through two different submissions to the Bureau. The ITU-R investigates the possibility to allow the submission of a single request to the Bureau for both entering into the Appendix 30B List and into the MIFR.

PRELIMINARY VIEWS

B, CAN

These administrationsCanada supports allowing notifying administrations to submit simultaneously the Appendix 4 data elements for the purposes of entering the frequency assignments in the List (§6.17) and recording these frequency assignments (§8.1).

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ISSUE D - Bureau identification and publication of specific satellite networks or systems to be considered when effecting coordination under Nos. 9.12, 9.12A and 9.13 as appropriate

BACKGROUND

Under the current satellite regulatory framework, the Bureau identifies potentially affected administrations but not the potentially affected satellite networks or systems for coordination under Nos. 9.12, 9.12A and 9.13. As a result, The ITU-R investigates whether the burden currently borne by administrations may be eased by extending the existing requirement to publish a list of satellite networks or systems as for coordination under Nos. 9.7 and 9.7A.

PRELIMINARY VIEWS

B, CAN

These administrationsCanada supports extending the current Bureau identification and publication of the satellite networks or systems to be considered when effecting coordination under No. 9.7 and 9.7A to other types of coordination, namely coordination under No. 9.12, 9.12A or 9.13 as appropriate.

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ISSUE E - Harmonization of RR Appendix 30B with RR Appendices 30 and 30A

BACKGROUND

To be developed

PRELIMINARY VIEWS

CAN

Canada is of the view that the specifics of the Region 2 Plan for BSS and its associated feeder links should be maintained.

ISSUE F - Concerns with the lack of implementation of certain provisions of the Radio Regulations that can lead to difficulties during the process of entering an assignment into the RR Appendix 30B list

BACKGROUND

To be developed

PRELIMINARY VIEWS

To be developed

ISSUE G - Updating the reference situation for networks under RR Appendices 30 and 30A when provisional recording is used

BACKGROUND

§ 4.1.18 of Appendices 30 and 30A of the Radio Regulations prescribes that in the case of recording of broadcasting-satellite service (BSS) and associated feeder link assignments in the Regions 1 and 3 List with outstanding coordination requirements this recording shall be provisional. The entry shall be changed from provisional to a definitive recording in the List if the Bureau is informed that the new assignment in the Regions 1 and 3 List has been in use, together with the assignment which was the basis for the disagreement, for at least four months without any complaint of harmful interference being made. When the provisional recording becomes definitive, the reference situation of the interfered-with network will be updated. This could severely affect the reference situation of the interfered-with network.

In preparations for WRC-15, this issue was brought to the attention of RRB-70 meeting in October 2015 (Document RRB-70/10), requesting that a Rule of Procedure 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 **resulteonsist** in a change of the Radio Regulations and therefore was outside the authority of the RRB. WRC-15 decided, then, 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."

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

The corresponding provisions for the Region 2 BSS and associated feeder link Plans **are inis** § 4.2.21A of Appendices 30 and 30A. There are a number of differences in Appendices 30 and 30A for Region 2 as

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compared to Regions 1 and 3. One significant difference is the existence of a List in Regions 1 and 3; modifications or new assignments become part of a separate List, not part of the Regions 1 and 3 Plan itself. In Region 2, modifications actually become a part of the Plan (and hence enjoy the same status as the Plan) and not a separate List. Similarly, there are notable differences between the application of the procedures § 4.2.21A for the Region 2 BSS and feeder-link Plans and the application of § 4.1.18 for the Regions 1 and 3 List. For example, for Regions 1 and 3, § 4.1.18 may be applied to List assignments and pending modifications to the List, while in Region 2, § 4.2.21A is applied in a much more limited fashion, solely to terrestrial services or fixed-satellite service (FSS) or unplanned BSS systems serving another Region. As a result, the concerns that led to Issue G in Regions 1 and 3 – concern with degrading a List assignment’s reference situation – do not exist in Region 2, as § 4.2.21A cannot be applied to BSS Plan assignments, modifications to the Plan or pending modifications to the Plan. As a result, the issue is somewhat academic in Region 2 and no change is needed to the Radio Regulations.

PRELIMINARY VIEWS

B, CAN

These administrations Brazil is are of the view that the specifics of the Region 2 Plan for BSS and its associated feeder links should be maintained, thus, no modification to § 4.2.21A of Appendices 30 and 30A is needed. There are notable differences between the application of the procedures § 4.2.21A for the Region 2 BSS and feeder-link Plans and the application of § 4.1.18 for the Regions 1 and 3 List. Therefore Issue G should be limited to Regions 1 and 3.

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ISSUES H and I - Modifications to the Appendix 4 data elements to be provided in filings for non-GSO satellite networks/systems

BACKGROUND

The RR Appendix 4 data elements provided in the Advance Publication Information (API) or the Coordination Request (CR/C) for satellite networks or systems are used initially by administrations to identify potential interference scenarios to their existing and planned systems and to formulate their comments under No. 9.3 or No. 9.52 as appropriate. Recent analysis performed for frequency assignments to NGSO satellite networks or systems has shown that in some instances, there is a need for additional information to accomplish these tasks.

PRELIMINARY VIEWS

CAN:

Issue H: - For NGSO systems not subject to the procedures of Section II of RR Article 9

editorial note: this paragraph is relocated below Canada supports the addition of the following data elements in Appendix 4 for frequency assignments to non-GSO satellite systems with multiple planes and multiple satellites:

-number of configurations for the non-GSO satellite systems described in the API or the CR/C as appropriate;

-identification of orbital planes associated with each configuration identified above.

Issue I

Canada supports also the addition of the following data elements in Appendix 4 for frequency assignments to non-GSO satellite service not subject to section II of Article 9:

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- For elliptical orbit, the argument of the perigee;
- For constellation, the angular separation between two consecutive ascending nodes, the angular separation between two consecutive satellites in the same orbital plane, both angles measured from the centre of the Earth, and the angular separation between two satellites in two adjacent planes measured from the centre of the Earth in the ascending direction.

Issue I – For NGSO systems with multiple orbital planes

Canada supports the addition of the following data elements in Appendix 4 for frequency assignments to non-GSO satellite systems with multiple planes and multiple satellites:

- number of configurations for the non-GSO satellite systems described in the API or the CR/C as appropriate;
- identification of orbital planes associated with each configuration identified above.

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