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| **World Radiocommunication Conference (WRC‑15) Geneva, 2–27 November 2015** | |  |
| **INTERNATIONAL TELECOMMUNICATION UNION** | |  |
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| PLENARY MEETING | **Addendum 3 to Document 6(Add.23)(Add.2)-E** | | |
|  | **14 October 2015** | |
|  | **Original: English** | |
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| United States of America | | |
| Proposals for the work of the conference | | |
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| Agenda item 9.2 | | |

9 to consider and approve the Report of the Director of the Radiocommunication Bureau, in accordance with Article 7 of the Convention:

9.2 on any difficulties or inconsistencies encountered in the application of the Radio Regulations; and

**Issue:** *Section 3.2.2.4.3 Coordination between non-GSO FSS systems*

Background information

The Director’s report states that the Bureau has been requested to clarify the procedure of coordination between non-GSO systems, in terms of establishing a list of regulatory coordination requirements and the interrelationship among involved systems and networks. The Director’s report cites the Rule of Procedure regarding No. 9.6, which states that the intent of No. 9.6 is to identify to which administrations a request for coordination is to be addressed and not to state the order of priorities for rights to a particular orbital position and that the coordination process is a two-way process and that no administration obtains any particular priority as a result of being the first to start either the advance publication phase or the request for coordination procedure.

The Director’s report notes that coordination of newly submitted non-GSO FSS systems is based on frequency overlap only and that, although ITU‑R Recommendations were developed providing examples of interference calculations involving non-GSO systems and describing different FSS protection criteria, no methodology to assess compatibility between non-GSO FSS systems has so far been agreed within ITU‑R.

Further, the Bureau is being increasingly solicited with requests for information on possible methodologies and approaches to conduct coordination among non-GSO FSS systems. The Bureau has so far recommended that involved parties agree on a bilateral basis on the methodology to be used. However, the nature of the non-GSO FSS systems filed so far containing large numbers of satellites with a wide diversity of orbital characteristics and global visible Earth coverage may require innovative approaches for coordination.

The Bureau suggests that administrations may agree on a more dynamic coordination approach, e.g. taking into account orbit synchronization, technologies, and the use of the systems in real time for all non-GSO FSS systems in operation.

Proposal objective

The recent filings regarding non-GSO FSS satellite systems are extensive and may require the ability of administrations to resolve intersystem compatibility among NGSO FSS satellite systems on a real time dynamic basis that may not be accommodated under the current bilateral coordination process. A more collaborative approach among involved Administrations/operators on the coordination of non-GSO FSS systems, beyond the traditional bilateral approach, could be made available as an option for the involved Administrations to coordinate on a multilateral basis. This may result in completing coordination in a faster manner.

Any administration may request the assistance of the Bureau or the Board in the application of the procedures for coordination, notification, and recording of frequency assignments under the Radio Regulations (e.g. Nos. 7.5, 9.5B, 9.33, etc.). Recognizing the number of recent filings, it may be advisable to provide the authority to the Director of Radiocommunication Bureau to convene voluntary multilateral coordination meetings for NGSO FSS operators.

The United States cautions, however, that NGSO FSS to NGSO FSS coordination cannot be addressed in isolation. Many of the bands of interest are shared with operating and planned GSO satellite networks, NGSO FSS feeder link stations supporting MSS, and incumbent terrestrial services.

ADD USA/6A23A2A3/1

Draft New Resolution [USA-A92-NON-GSO FSS] (WRC‑15)

Studies relating to coordination among non-geostationary fixed-satellite service   
systems in certain frequency bands and means to facilitate multilateral   
coordination meetings among administrations

The World Radiocommunication Conference (Geneva, 2015),

considering

*a)* that, to date, non-geostationary (non-GSO) fixed-satellite service (FSS) systems have been able to resolve intersystem incompatibility issues on a bilateral basis under Sections I and II of Article **9**;

*b)* that several non-GSO systems are being planned and implemented as fixed-satellite service (FSS) in the frequency bands 10.7-13.25 GHz, 13.75-14.5 GHz, 17.3-17.7 GHz, 17.7-20.2 GHz and 27.5-30 GHz containing large numbers of satellites with a wide diversity of orbital characteristics;

*c)*  that the Bureau has received coordination requests for these non-GSO FSS systems in the frequency bands mentioned in *considering b)*;

*d)*  that the ITU‑R Director’s Report to WRC‑15 states that the Bureau is increasingly being solicited with requests for information on possible methodologies and approaches to conduct coordination between non-GSO FSS systems,

considering further

*a)* that administrations operating or planning to operate non‑GSO FSS systems and networks in the bands mentioned in *considering b)* may need a more dynamic coordination approach through orbit synchronization, usage of systems and technologies to take into account all non-GSO FSS systems on a real-time basis;

*b)* that it may be advisable to provide for the Director of the Radiocommunication Bureau the authority to convene voluntary multilateral coordination meetings to facilitate the completion of coordination among notifying administrations,

recognizing

*a)* that many of the non-GSO FSS systems may be able to deploy satellites in a relatively short period of time;

*b)* that there is a need for study to determine technical requirements, regulations and procedures to facilitate the coordination and co-frequency sharing of non-GSO FSS systems in the frequency bands mentioned in *considering b)*;

*c)* that the coordination requirements of Nos. **9.7A**, **9.7B**, **9.11A**, **9.12**, **9.12A**, **9.13**, **9.14**, **9.15** and **9.16** apply to non-GSO systems in the fixed-satellite service in certain bands;

*d)* that Articles **21** and **22** contain power limits applicable to non-GSO FSS systems to ensure protection of terrestrial services and GSO FSS and broadcasting-satellite service (BSS) networks;

*e)* that in many frequency bands allocated to the FSS, including some bands where non-GSO FSS systems are subject to coordination requirements of No. **9.12**, non-GSO FSS systems are obligated by No. **22.2** to not cause unacceptable interference to or claim protection from GSO FSS and GSO BSS networks;

*f)* that Nos. **5.523D** and **5.535A** apply in the bands 19.3-19.7 GHz and 29.1-29.5 GHz respectively;

*g)* that Nos. **5.502** and **5.503** apply to non-GSO systems in the band 13.75-14 GHz,

resolves to invite ITU‑R

to carry out studies on the effectiveness of the current procedures for coordination between non-geostationary FSS satellite systems in the frequency bands mentioned in *considering b)* in order to identify possible mechanisms to facilitate coordination and co-frequency sharing among non-geostationary FSS satellite systems,

further resolves to invite WRC‑19

to consider, under Agenda item 7, the results of the above studies and take any appropriate actions,

instructs the Director of the Radiocommunication Bureau

1 to convene, upon request of a notifying administration, voluntary multilateral meetings with the goal of facilitating the completion of coordination among non-GSO FSS systems in the bands mentioned in *considering b)*, while recognizing that participation in these meetings shall not confer, to non-GSO FSS systems involved, any additional status other than that conferred by the Radio Regulations, with respect to non-GSO FSS systems not involved, and that participation on the part of notifying administrations and their operators is completely voluntary;

2 to include in the Director’s Report to WRC‑19 an assessment of the efficacy of the multilateral meetings referred to in *instructs* 1 above;

3 to bring this Resolution to the attention of the ITU‑R Study Groups as an activity of the Radiocommunication Sector,

invites administrations

1 to participate actively in these studies by submitting contributions to the ITU‑R; and

2 to participate in voluntary meetings as may be convened by the Director of the Radiocommunication Bureau to address coordination and co-frequency sharing among non-geostationary FSS satellite systems in the bands mentioned in *considering b)*.

**Reasons:** To study the current procedures for coordination between non-geostationary FSS satellite systems and provide the Director of the Radiocommunication Bureau a mechanism to conduct, upon request from an administration, voluntary multilateral meetings with the goal of facilitating the completion of coordination.

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