



PLENARY MEETING

**Addendum 25 to
Document 6239-E
9 October 2023
Original: English**

African Common Proposals

PROPOSALS FOR THE WORK OF THE CONFERENCE

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 ITU Convention;

9.2 on any difficulties or inconsistencies encountered in the application of the Radio Regulations;¹ and

¹ This agenda sub-item is strictly limited to the Report of the Director on any difficulties or inconsistencies encountered in the application of the Radio Regulations and the comments from administrations. Administrations are invited to inform the Director of the Radiocommunication Bureau of any difficulties or inconsistencies encountered in the Radio Regulations.

AFCP/6239A25/1

Proposals related to section 3.3.1, of Addendum 2 to Document 4

Introduction

ATU has reviewed the Report of the Director and provides herein specific proposals and comments/views related to Part 2 as contained in Addendum 2 to Document 4, The Radiocommunication Bureau, acting under the auspices of No. **11.50**, and with a view to improving the accuracy of the data recorded in the Master Register undertook a review of satellite networks recorded in the Master Register.

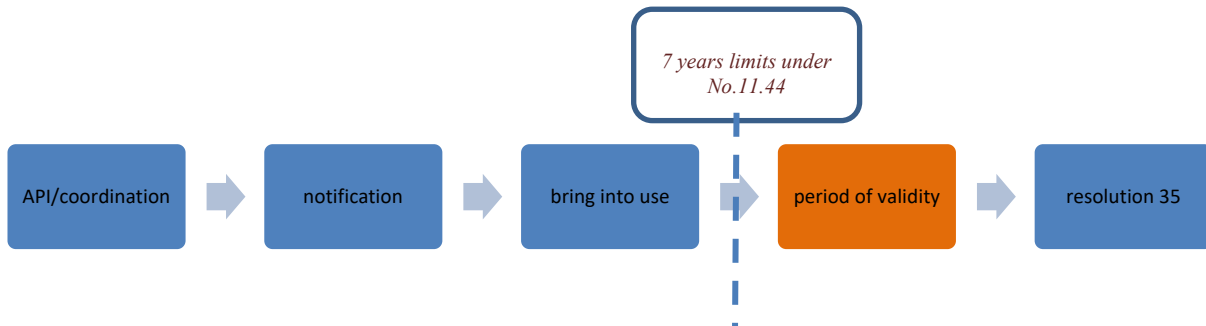
The Bureau noted that the frequency assignments to some satellite networks were recorded in the Master Register without any period of validity indicated. The Bureau therefore requested the concerned Administrations to indicate the intended period of validity for these frequency assignments.

Proposal:

ATU of a view that the missed period of validity for some concerned administration satellite networks should be revised and included in their frequency assignments as this will make some ambiguity into understanding the operational lifetime of the satellite systems, including space and earth stations, and the type of service provided.

Under No. **11.50**, a view to improving the accuracy of the data recorded in the Master Register undertook a review of satellite networks recorded in the Master Register, The Bureau noted that the frequency assignments to some satellite networks were recorded in the Master Register without any period of validity indicated. The Bureau therefore requested the concerned Administrations to indicate the intended period of validity for these frequency assignments.

According LIFE SPAN OF A SATELLITE NETWORK FILING (Non-planned bands), we can see that the period of validity is an essential part into the life cycle of the satellite fillings.



Therefore, it is crucial to request for the concerned administration to indicate the intended period of validity for these frequency assignments.

AFCP/6239A25/2

Proposals related to 3.3.3.2 Modification of notified characteristics in accordance with resolves 11, of Addendum 2 to Document 4

Introduction

ATU has reviewed the Report of the Director and provides herein specific proposals and comments/views related to Part 2 as contained in Addendum 2 to Document 4, When, in application of resolves 11 of Resolution **35 (WRC-19)**, a notifying administration submits to the Bureau the modifications to the characteristics of the notified or recorded frequency assignments of the non-GSO satellite system in order to reduce the maximum number of satellites to the values computed in accordance with resolves 11 a), b) or c), the question was raised whether it is necessary to keep among the remaining satellites at least the orbital characteristics corresponding to the satellite(s), which was or were used for the bringing into use of the frequency assignments to this satellite system or for the completion of a previous milestone of Resolution **35 (WRC-19)**.

The current wording of Resolution **35 (WRC-19)** does not impose to retain these characteristics: the modification consisting in reducing the maximum number of satellites under resolves 11 does not require the retention of the orbital plane(s) that was or were used for bringing into use or completing previous milestones. However, satellites previously deployed on a plane subsequently deleted by such a modification cannot be counted any longer during the following steps of Resolution **35 (WRC-19)**.

Proposal:

ATU is a view of delete and not keep the remaining satellite that are not included in the modification as not to impose any misleading while taking the resolution within and subsequent actions like for example interference analysis calculations.

A notifying administration submits to the Bureau the modifications to the characteristics of the notified or recorded frequency assignments of the non-GSO satellite system in order to reduce the maximum number of satellites, the question was raised whether it is necessary to keep among the remaining satellites at least the orbital characteristics corresponding to the satellite(s), which was or were used for the bringing into use of the frequency assignments to this satellite system or for the completion of a previous milestone of Resolution **35 (WRC-19)**.

As find below, a List of the orbital planes which indicated that the orbital planes are published and taking into account with and subsequent actions related to BR if any needed measure related to Resolution **35 (WRC-19)**

ORBITAL PARAMETERS IN THE NOTIFICATION							DATA FROM THE RES 35 SUBMISSION
BR6a/BR6b Id no.	BR93 Orbital plane id no.	A4b4a Inclination angle	A4b4d Apogee	A4b4e Perigee	A4b4i Arg. of perigee	A4b4b No. of space stations in this plane	BR111 Number of space stations deployed in this plane
118500298	1	99.5	1000	1000	0	12	0
118500298	2	99.5	1000	1000	0	12	0
118500298	3	99.5	1000	1000	0	12	0
118500298	4	99.5	1000	1000	0	12	0
118500298	5	99.5	1000	1000	0	12	0
118500298	6	99.5	1000	1000	0	12	0
118500298	7	37.4	1248	1248	0	9	0
118500298	8	37.4	1248	1248	0	9	0
118500298	9	37.4	1248	1248	0	9	0
118500298	10	37.4	1248	1248	0	9	0
118500298	11	37.4	1248	1248	0	9	0
118500298	12	99.5	1003.8	996.4	344.6	1	1
BR112 Total number of space stations notified / BR113 Total number of space stations deployed						118	1

Based on the above, the list should be modified and delete any non-used orbital planes in order not to cause any misleading during the interference analysis or any subsequent resolutions that are related to Resolution **35 (WRC-19)**.

AFCP/6239A25/3

Introduction

In accordance with Resolution **559 (WRC-19)** and the associated instructions to the Bureau (BR) from WRC-19, the Bureau has identified 55 Administrations eligible to apply the Special Procedure described in the said Resolution. These 55 Administrations have been listed in Circular Letter CR/455 of 21 February 2020 on the implementation of Resolution **559 (WRC-19)**.

45 Administrations out of the 55 eligible Administrations applied the above-mentioned Special Procedure by sending a request together with a submission¹, consisting of one notice for downlink and another notice for feeder-link.

90 Part A Special Sections corresponding to the 45 Res.559 submissions were published by the Bureau in BR IFIC 2932 of 27 October 2020.

The coordination process with affected Administrations begun on 27 February 2021 after the end of the four-month commenting period.

In order to be on time for consideration of WRC-23, 41 of out the 45 Administrations have submitted Part B of their Res.559 submissions before end of January 2023. 82 Part B Special Sections were published by the Bureau in BR IFIC 2993 of 4 April 2023 for the inclusion of frequency assignments of these Res.559 submissions in the List of additional uses of Appendices **30** and **30A**.

Frequency Coordination of Res.559 submissions

Based on the technical examination of the Bureau as published in the Part A Special Sections in BR IFIC 2932 of 27 October 2020, there are total of 100 potentially affected Administrations involving 1459 frequency coordination cases.

The Res.559 Administrations have not only actively carried out the frequency coordination but also submitted various proposals to the Radio Regulations Board (RRB) and ITU-R Working Party 4A (WP4A) in order to facilitate the required frequency coordination.

For the 41 Res.559 submissions for which Part B have been submitted, there are a total of 1393 frequency coordination cases involved. Thanks to the decisions of RRB, the technical advice of WP4A, the active roles of Res.559 Administrations and the assistance of the Bureau, 87.08% of the frequency coordination cases have been completed. Nevertheless, there are 180 frequency coordination cases which are yet to be completed. Statistics of major remaining coordination cases are as follows:

Total	Coordination under	Coordination under	Coordination under
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¹ Submissions under Resolution 559 (WRC-19) and under Article 4 of RR Appendices 30 and 30A from the Administrations of Mauritius, Madagascar and Seychelles. They are referred to as Res.559 submissions.

	A30#4.1.1b)	A30#4.1.1e)	A30A#4.1.1b)
180	87	60	26
Percentage	48.3%	33.3%	14.4%

With respect to the remaining coordination cases under A30A#4.1.1b), the issue is due to the fact that the potentially affected Appendix 30A Article 4 submissions have global coverage leading to very high receiving sensitivity over the national territories of the concerned Res.559 Administrations. This issue is being addressed under Topic F of Agenda item 7 of WRC-23.

With respect to remaining coordination cases under A30#4.1.1b) and A30#4.1.1e), the main issue is relating to two Administrations, which account for 64.4 % of the total number of frequency coordination cases.

Proposals

In view of the above and noting the intention of WRC-19 while adopting Resolution **559 (WRC-19)**, the following proposals are submitted for the consideration of WRC-23.

- 1 The submitting Administrations propose WRC-23 to endorse all the suggestions made by RRB and BR relating to the implementation of Resolution **559 (WRC-19)** as contained in their reports to WRC-23.
- 2 With respect to the remaining coordination cases under § 4.1.1 b) of Appendix **30**, the submitting Administrations propose WRC-23 to approve the following measures/proposals:
 - a) The notifying Administration of an additional use (i.e. assignments in the List and/or pending Article 4 networks) to accept possible interference produced to its test-points located within - 3 dB antenna gain contour of the Res.559 submission concerned due to the fact that the ellipse is already the minimum one validated by the Bureau;
 - b) The notifying Administration of an additional use (i.e. assignments in the List and/or pending Article 4 networks) to accept possible interference produced to its test-points located beyond - 20 dB antenna gain contour of the Res.559 submission concerned;
 - c) If the Equivalent protection margin (EPM) of a test-point of an additional use network is less than -10 dB at the time of examination by the Bureau of Part A of Res.559 submissions, that test-point should not be considered by the Bureau in reviewing the finding of the Res.559 submission concerned;
 - d) A coordination is deemed to be completed if the nominal orbital separation between a Res.559 submission and an additional use network is equal to or greater than 6 degrees.
- 3 With respect to the remaining coordination cases under § 4.1.1 e) of Appendix **30**, the submitting Administrations propose WRC-23 to approve the following measures/proposals:
 - a) A coordination is deemed to be completed if the nominal orbital separation between a Res.559 submission and non-planned satellite network concerned is equal to or greater than 6 degrees;

- b) The service area of a non-planned satellite network to be considered shall be on land and located within – 3 dB antenna gain contour of that non-planned satellite network instead of the submitted service area which may include the area with very low relative antenna gain contour. It is noted that the non-planned satellite network only protects a Res.559 submission in a service area on land and situated within its – 3 dB antenna gain contour;
- c) If an Administration agrees not to protect the area, situated inside its national territory, in which the pfd (power-flux density) limit is exceeded, that part of the service area shall not be considered by the Bureau in reviewing the remaining coordination requirements of a Res.559 submission;
- d) The notifying Administration of a non-planned satellite network to accept possible interference produced to its service area located beyond - 20 dB antenna gain contour of the Res.559 submission concerned.

4 With respect to the remaining coordination cases under § 4.1.1 b) of Appendix **30A**, the submitting Administrations propose WRC-23 to approve that the remaining coordination cases are deemed to be completed due to the fact that:

- a) The Article 4 satellite networks have very large coverage with very high receiving sensitivity over the national territory of the Res.559 Administration concerned;
- b) The coverage areas of those Article 4 satellite networks extend far beyond the national territory of the notifying Administrations whereas feeder-link earth stations of the Res.559 submission concerned are only located inside the national territory and that cannot be further reduced;
- c) The objective of Resolution **2 (Rev.WRC-03)** and Topic F of WRC-23 Agenda item 7.

5 With respect to the remaining coordination cases under § 4.1.1 a) of Appendices **30** and **30A**, the submitting Administrations propose WRC-23 to approve the following measures/proposals:

- a) For multi-beam Plan assignments, if downlink single-entry C/I values are above 21 dB except for one test-point where single-entry C/I is greater than 18 dB, Res. 559 submissions and the corresponding Regions 1 and 3 Plan frequency assignments are considered compatible. In order to preserve the same level of protection for such compatible cases of those Regions 1 and 3 Plan frequency assignments from incoming Article 4 submissions, the reference situation of those Regions 1 and 3 Plan frequency assignments shall not be updated when the Res. 559 frequency assignments in the List are included in the Plans.
- b) For multi-beam Plan assignments, if feeder-link single-entry C/I values are above 27 dB, Res. 559 submissions and the corresponding Regions 1 and 3 Plan frequency assignments are considered compatible. In order to preserve the same level of protection for such compatible cases of those Regions 1 and 3 Plan frequency assignments from incoming Article 4 submissions, the reference situation of those Regions 1 and 3 Plan frequency assignments shall not be updated when the Res. 559 frequency assignments in the List are included in the Plans.

6 The Bureau shall:

- a) review the status of all the remaining coordination cases taking into account all the above-mentioned proposals including those of the RRB and BR. In this

connection, for the remaining coordination cases under § 4.1.1 b) of Appendix **30**, if after taking into account all the above-mentioned proposals, there is only one remaining test-point potentially affected, the coordination is deemed to be completed;

- b) apply all the measures endorsed by WRC-23 to the Res.559 submissions of the Administrations of AFG, GNE, MLT and SEY and to the future applications of § 4.1.26 or § 4.1.27 of Article 4 of Appendices **30** and **30A**, which has the same nature as Resolution **559 (WRC-19)**.