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| **World Radiocommunication Conference (WRC-19) Sharm el-Sheikh, Egypt, 28 October – 22 November 2019** |  |
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| PLENARY MEETING | **Addendum 8 to Document 16(Add.22)-E** |
|  | **7 October 2019** |
|  | **Original: English** |
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| European 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 Convention:

9.2 on any difficulties or inconsistencies encountered in the application of the Radio Regulations[[1]](#footnote-1)\*; and

Part 8 – Section 3.2.4.6 of the Report of the BR Director

Introduction

This Addendum presents the European Common Proposal with respect to Section 3.2.4.6 of the Report of the Director of the Radiocommunication Bureau under WRC-19 agenda item 9.2. The Section 3.2.4.6 deals with the Rules of Procedure on RR No. **5.510** concerning the sharing between FSS feeder-link networks for the broadcasting-satellite service (BSS) in Region 2 and the Region 1 and Region 3 BSS feeder-link Plan and List (outside Europe) in the 14.5-14.8 GHz band.

WRC-15, under agenda item 1.6, introduced a new allocation to the fixed-satellite service (FSS) in the frequency band 14.5-14.8 GHz. At the same time, the Conference reconfirmed the use of this frequency band for BSS feeder-links in the FSS (Earth-to-space) in Region 2, in accordance with the Table of Frequency Allocations of RR Article **5**. Consequently, a new Rule of Procedure was created on RR No. **5.510** to cover this particular issue.

The footnote RR No. **5.510** clearly states that except for use in accordance with Resolution **163 (WRC**-**15)** and Resolution **164 (WRC**-**15)**, the use of the frequency band 14.5-14.8 GHz by the fixed-satellite service (Earth-to-space) is limited to feeder links for the broadcasting-satellite service and that this use is reserved for countries outside Europe in all 3 Regions.

As this Rule has been stable since its creation, it is proposed to introduce the corresponding provisions into the RR Appendix **30A**. Consequently, changes to Articles 4 and 7 of RR Appendix **30A**, as well as to Section 6 of Annex 1 to RR Appendix **30A** are proposed.

Proposals

APPENDIX 30A (REV.WRC‑15)[[2]](#footnote-2)\*

Provisions and associated Plans and List[[3]](#footnote-3)1 for feeder links for the broadcasting-satellite service (11.7-12.5 GHz in Region 1, 12.2-12.7 GHz  
in Region 2 and 11.7-12.2 GHz in Region 3) in the frequency bands  
14.5-14.8 GHz[[4]](#footnote-4)2 and 17.3-18.1 GHz in Regions 1 and 3,  
and 17.3-17.8 GHz in Region 2     (WRC‑03)

ARTICLE 4     (Rev.WRC‑15)

Procedures for modifications to the Region 2 feeder-link Plan   
or for additional uses in Regions 1 and 3

## 4.1 Provisions applicable to Regions 1 and 3

MOD EUR/16A22A8/1

4.1.1 An administration proposing to include a new or modified assignment in the feeder-link List shall seek the agreement of those administrations whose services are considered to be affected, i.e. administrations[[5]](#footnote-5)4, [[6]](#footnote-6)5:

*a)* of Regions 1 and 3 having a feeder-link frequency assignment in the fixed-satellite service (Earth-to-space) to a space station in the broadcasting-satellite service which is included in the Regions 1 and 3 feeder-link Plan with a necessary bandwidth, any portion of which falls within the necessary bandwidth of the proposed assignment; *or*

*b)* of Regions 1 and 3 having a feeder-link frequency assignment included in the feeder-link List or for which complete Appendix **4** information has been received by the Radiocommunication Bureau in accordance with the provisions of § 4.1.3, and any portion of which falls within the necessary bandwidth of the proposed assignment; *or*

*c)* of Region 2 having a feeder-link frequency assignment in the fixed-satellite service (Earth-to-space) to a space station in the broadcasting-satellite service which is in conformity with the Region 2 feeder-link Plan, or in respect of which proposed modifications to that Plan have already been received by the Bureau in accordance with the provisions of § 4.2.6 with a necessary bandwidth, any portion of which falls within the necessary bandwidth of the proposed assignment; *or*

*d)* having a feeder-link frequency assignment in the frequency band 14.5-14.8 GHz or 17.8-18.1 GHz in Region 2 in the fixed-satellite service (Earth-to-space) to a space station in the broadcasting-satellite service, or a frequency assignment in the frequency band 14.5‑14.75 GHz in countries listed in Resolution **163 (WRC‑15)** and in the frequency band 14.5-14.8 GHz in countries listed in Resolution **164** **(WRC‑15)**, in the fixed-satellite service (Earth-to-space) not subject to a Plan, which is recorded in the Master Register or which has been coordinated or is being coordinated under the provisions of No. 9.7, or under § 7.1 of Article 7, with a necessary bandwidth, any portion of which falls within the necessary bandwidth of the proposed assignment.     (WRC‑19)

**Reasons:** As the current Rules of Procedure on RR No. **5.510** is stable since its approval, it is suggested to reflect this sharing situation into the Radio Regulations and suppress this Rules of Procedure.

MOD EUR/16A22A8/2

ARTICLE 7     (Rev.WRC‑19)

Coordination, notification and recording in the Master International   
Frequency Register of frequency assignments to stations in the fixed-satellite service (space-to-Earth) in Region 1 in the frequency band 17.3-18.1 GHz and   
in Regions 2 and 3 in the frequency band 17.7-18.1 GHz, to stations in the fixed‑satellite service (Earth-to-space) in Region 2 in the frequency bands 14.5‑14.8 GHz and 17.8‑18.1 GHz, to stations in the fixed-satellite service (Earth-to-space) in countries listed in Resolution 163 (WRC‑15) in the frequency band 14.5‑14.75 GHz and in countries listed in Resolution 164 (WRC‑15) in the frequency band 14.5-14.8 GHz where those stations are not for feeder links for the broadcasting-satellite service, and to stations in the broadcasting-satellite service in Region 2 in the frequency band 17.3-17.8 GHz when frequency assignments to feeder links for broadcasting-satellite stations in the frequency bands 14.5-14.8 GHz and 17.3-18.1 GHz in Regions 1 and 3 or   
in the band 17.3-17.8 GHz in Region 2 are involved[[7]](#footnote-7)28

**Reasons:** As the current Rules of Procedure on RR No. **5.510** is stable since its approval, it is suggested to reflect this sharing situation into the Radio Regulations and suppress this Rules of Procedure.

Section I – Coordination of transmitting space or earth stations in the fixed-satellite   
service or transmitting space stations in the broadcasting-satellite service  
with assignments to broadcasting-satellite service feeder links

MOD EUR/16A22A8/3

7.1 The provisions of No. 9.7[[8]](#footnote-8)29and the associated provisions under Articles 9 and 11 are applicable to transmitting space stations in the fixed-satellite service in Region 1 in the frequency band 17.3-18.1 GHz, to transmitting space stations in the fixed-satellite service in Regions 2 and 3 in the frequency band 17.7-18.1 GHz, to transmitting earth stations in the fixed-satellite service in Region 2 in the frequency bands 14.5-14.8 GHz and 17.8‑18.1 GHz, to transmitting earth stations in the fixed-satellite service in countries listed in Resolution **163 (WRC‑15)** in the frequency band 14.5-14.75 GHz and in countries listed in Resolution **164 (WRC‑15)** in the frequency band 14.5-14.8 GHz where those stations are not for feeder links for the broadcasting-satellite service, and to transmitting space stations in the broadcasting-satellite service in Region 2 in the frequency band 17.3-17.8 GHz.     (WRC‑19)

**Reasons:** As the current Rules of Procedure on RR No. **5.510** is stable since its approval, it is suggested to reflect this sharing situation into the Radio Regulations and suppress this Rules of Procedure.

ANNEX 1

Limits for determining whether a service of an administration is considered  
to be affected by a proposed modification to the Region 2 feeder-link Plan  
or by a proposed new or modified assignment in the Regions 1 and 3  
feeder-link List or when it is necessary under this Appendix to seek  
the agreement of any other administration     (Rev.WRC‑03)

MOD EUR/16A22A8/4

# 6 Limits applicable to protect a frequency assignment in the bands 14.5-14.8 GHz and17.8-18.1 GHz (Region 2) to a receiving feeder-link space station in the fixed-satellite service (Earth-to-space) or a frequency assignment in the frequency bands 14.5-14.75 GHz (in countries listed in Resolution 163 (WRC‑15)) and 14.5-14.8 GHz (in countries listed in Resolution 164 (WRC‑15)) to a receiving space station in the fixed‑satellite service (Earth-to-space) not subject to a Plan     (WRC‑19)

With respect to § 4.1.1 *d)* of Article 4, an administration is considered affected by a proposed new or modified assignment in the Regions 1 and 3 feeder-link List when the power flux-density arriving at the receiving space station of a broadcasting-satellite feeder link in Region 2 or the receiving space station of the fixed-satellite service uplinks not subject to a Plan in all Regions of that administration would cause an increase in the noise temperature of the receiving uplink space station which exceeds the threshold value of Δ*T*/*T* corresponding to 6%, where Δ*T*/*T* is calculated in accordance with the method given in Appendix 8, except that the maximum power densities per hertz averaged over the worst 1 MHz are replaced by power densities per hertz averaged over the necessary bandwidth of the feeder-link carriers.     (WRC‑15)

**Reasons:** As the current Rules of Procedure on RR No. **5.510** is stable since its approval, it is suggested to reflect this sharing situation into the Radio Regulations and suppress this Rules of Procedure.

ANNEX 4     (Rev.WRC‑15)

Criteria for sharing between services

MOD EUR/16A22A8/5

# 2 Threshold values for determining when coordination is required between transmitting feeder-link earth stations in the fixed-satellite service in Region 2 and a receiving space station in the Regions 1 and 3 feeder-link Plan or List or a proposed new or modified receiving space station in the List, in the frequency bands 14.5-14.8 GHz and 17.8‑18.1 GHz     (WRC‑19)

With respect to § 7.1, Article 7, coordination of a transmitting feeder-link earth station in the fixed-satellite service with a receiving space station in a broadcasting-satellite feeder link in the Regions 1 and 3 feeder-link Plan or List, or a proposed new or modified receiving space station in the List, is required when the power flux density arriving at the receiving space station of a broadcasting-satellite service feeder link of another administration would cause an increase in the noise temperature of the feeder-link space station which exceeds a threshold value of Δ*T*/*T* corresponding to 6%, where Δ*T*/*T* is calculated in accordance with the method given in Appendix 8, except that the maximum power densities per hertz averaged over the worst 1 MHz are replaced by power densities per hertz averaged over the necessary bandwidth of the feeder-link carriers.     (WRC‑03)

**Reasons:** As the current Rules of Procedure on RR No. **5.510** is stable since its approval, it is suggested to reflect this sharing situation into the Radio Regulations and suppress this Rules of Procedure.

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1. \* This agenda 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. [↑](#footnote-ref-1)
2. \* The expression “frequency assignment to a space station”, wherever it appears in this Appendix, shall be understood to refer to a frequency assignment associated with a given orbital position.     (WRC‑03) [↑](#footnote-ref-2)
3. 1 The Regions 1 and 3 feeder-link List of additional uses is annexed to the Master International Frequency Register (see Resolution **542 (WRC‑2000**)\*\*).     (WRC‑03)

   \*\* *Note by the Secretariat*: This Resolution was abrogated by WRC‑03. [↑](#footnote-ref-3)
4. 2 This use of the band 14.5-14.8 GHz is reserved for countries outside Europe.

   *Note by the Secretariat*: Reference to an Article with the number in roman is referring to an Article in this Appendix. [↑](#footnote-ref-4)
5. 4 Agreement with administrations having a frequency assignment in the bands 14.5-14.8 GHz or 17.7-18.1 GHz to a terrestrial station, or having a frequency assignment in the band 17.7-18.1 GHz to an earth station in the fixed-satellite service (space-to-Earth), or having a frequency assignment in the band 17.3-17.8 GHz in the broadcasting-satellite service shall be sought under No. **9.17**, No. **9.17A** or No. **9.19**, respectively. [↑](#footnote-ref-5)
6. 5 Coordination under Nos. **9.17** or **9.17A** is not required for an earth station of an administration on the territory of which this earth station is located and for which the procedures of former § 4.2.1.2 and 4.2.1.3 of Appendix **30A (WRC‑97)** have been successfully applied by that administration before 3 June 2000 in respect of terrestrial stations or earth stations operating in the opposite direction of transmission.     (WRC‑03) [↑](#footnote-ref-6)
7. 28 These provisions do not replace the procedures prescribed in Articles **9** and **11** when stations other than those for feeder links in the broadcasting-satellite service subject to a Plan are involved.     (WRC‑03) [↑](#footnote-ref-7)
8. 29 The provisions of Resolution **33 (Rev.WRC‑97)**\* are applicable to space stations in the broadcasting-satellite service for which the advance publication information or the request for coordination has been received by the Bureau prior to 1 January 1999.

   \* *Note by the Secretariat*: This Resolution was revised by WRC‑03 and WRC-15. [↑](#footnote-ref-8)