|  |  |
| --- | --- |
| **World Radiocommunication Conference (WRC-15) Geneva, 2–27 November 2015** |  |
| **INTERNATIONAL TELECOMMUNICATION UNION** |  |
|  |  |
| **PLENARY MEETING** | **Addendum 1 to Document 9(Add.9)-E** |
|  | **24 June 2015** |
|  | **Original: English** |
|  | |
| European Common Proposals | |
| Proposals for the work of the conference | |
|  | |
| Agenda item 1.9.1 | |

1.9 to consider, in accordance with Resolution **758 (WRC‑12)**:

1.9.1 possible new allocations to the fixed-satellite service in the frequency bands 7 150-7 250 MHz (space-to-Earth) and 8 400-8 500 MHz (Earth-to-space), subject to appropriate sharing conditions;

Introduction

The frequency bands 7 250-7 750 MHz (space-to-Earth) and 7 900-8 400 MHz (Earth-to-space) are currently allocated worldwide to the fixed-satellite service (FSS) on a primary basis. Regarding the FSS, some administrations have reported a shortfall of spectrum available for their current and future applications in these bands. FSS additional bandwidth requirements for data transmission on the next-generation satellites are estimated to be of 100 MHz in each direction of transmission.

Europe supports new primary worldwide FSS allocations of 2x100 MHz in the bands 7 150-7 250 MHz (space-to-Earth) and 8 400-8 500 MHz (Earth-to-space) under the following conditions:

– The allocation is limited to geostationary FSS networks.

– FSS space station emissions in the band 7150-7235 shall comply with the e.i.r.p. density mask described in the new No. 5.B191.

Europe proposes that a commitment to meet this e.i.r.p. density mask be inserted in Appendix 4 in order for the Radiocommunication Bureau (BR) to issue a finding related to this requirement but remains open to alternative methods to allow the BR to verify compliance with this power requirement. In cases where the e.i.r.p. density mask is not sufficient to ensure the desired level of protection of a space research service (SRS) deep space mission when operated in the near-Earth region, a proposed new Resolution [EUR-A191] contains a procedure for operational consultation between FSS and SRS system operators in the 7 150-7 190 MHz band. Regarding the time periods proposed in the Resolution, Europe is open to further discussions about the most appropriate values to cover the various cases of concern.

– FSS earth stations in the band 7 150-7 235 MHz shall not claim protection from, nor constrain the use and development of earth stations in the space research service (Earth-to-space) allocated worldwide, and the space operation service (Earth-to-space) allocated in the Russian Federation under No. 5.459. Furthermore, Nos. 5.43A and 22.2 do not apply.

– FSS earth stations in the band 8 400-8 500 MHz shall operate at specified fixed points with a minimum antenna diameter of 3.5 m. Coordination under Nos. 9.17 and 9.17A and notification under No. 11.2 will apply.

– FSS space stations in the band 8 400-8 500 MHz shall not claim protection from space stations in the space research service. Furthermore, Nos. 5.43A and 22.2 do not apply.

– FSS earth stations in the band 8 400-8 500 MHz shall not constrain the use and development of earth stations in the space research service.

Proposals

ARTICLE 5

Frequency allocations

Section IV – Table of Frequency Allocations  
(See No. 2.1)

MOD EUR/9A9A1/1

5 570-7 250 MHz

|  |  |  |
| --- | --- | --- |
| Allocation to services | | |
| Region 1 | Region 2 | Region 3 |
| 7 145-7 150 FIXED  MOBILE  SPACE RESEARCH (Earth-to-space) 5.460  5.458 5.459 | | |
| 7 150-7 235 FIXED  FIXED-SATELLITE (space-to-Earth) ADD 5.A191 ADD 5.B191 ADD 5.C191  MOBILE  SPACE RESEARCH (Earth-to-space) 5.460  5.458 5.459 | | |
| 7 235-7 250 FIXED  FIXED-SATELLITE (space-to-Earth) ADD 5.A191  MOBILE  5.458 | | |

ADD EUR/9A9A1/2

5.A191 The use of the bands 7 150-7 250 MHz and 8 400-8 500 MHz by the fixed-satellite service is limited to geostationary satellite networks.     (WRC‑15)

**Reasons:** To limit the new allocation to GSO satellites because no studies have been performed regarding possible non-GSO FSS satellites.

ADD EUR/9A9A1/3

5.B191 In the band 7 150-7 235 MHz, the e.i.r.p. density of emissions from any space station in the fixed-satellite service shall not exceed:

  dBW/Hz for 0° ≤  φ  ≤  8°

−46  dBW/Hz for 8° <  φ  ≤  19.6°

  dBW/Hz for 19.6° <  φ  ≤  64.9°

−59  dBW/Hz for 64.9° <  φ  ≤  180°

where φ is the off-axis angle in degrees of the antenna. The pointing direction of the maximum e.i.r.p. density is limited to within ±8° with respect to the sub-satellite point.

In the case that the e.i.r.p. density mask above is considered not sufficient to ensure the desired level of protection of a deep-space mission in the space research service when operated in the near‑Earth region, Resolution **[EUR-A191]** **(WRC‑15)** provides the procedure for involved parties to follow in pursuing operational consultation between operators of systems in the fixed-satellite service and in the space research service in the 7 150-7 190 MHz band.     (WRC‑15)

**Reasons:** To ensure the protection of SRS spacecraft receivers.

ADD EUR/9A9A1/4

5.C191 In the band 7 150-7 235 MHz, earth stations in the fixed-satellite service shall not claim protection from, nor constrain the use and development of earth stations in the space research service (Earth-to-space) allocated worldwide, and the space operation service (Earth-to-space) allocated in the Russian Federation under No. **5.459**. Nos. **5.43A** and **22.2** do not apply.     (WRC‑15)

**Reasons:** To ensure that the FSS does not claim protection from the SRS or SOS.

MOD EUR/9A9A1/5

7 250-8 500 MHz

|  |  |  |
| --- | --- | --- |
| Allocation to services | | |
| Region 1 | Region 2 | Region 3 |
| 8 400-8 500 FIXED  FIXED-SATELLITE (Earth-to-space) ADD 5.A191 ADD 5.D191 ADD 5.E191  MOBILE except aeronautical mobile  SPACE RESEARCH (space-to-Earth) 5.465 5.466 | | |

ADD EUR/9A9A1/6

5.D191 The use of the band 8 400-8 500 MHz by stations of the fixed-satellite service (Earth-to-space) is limited to networks operating with specific earth stations at fixed known locations and with a minimum antenna diameter of 3.5 m.     (WRC‑15)

**Reasons:** To avoid VSAT earth station and to ensure the operation of the FSS earth station from a fixed known location.

ADD EUR/9A9A1/7

5.E191 In the band 8 400-8 500 MHz, geostationary space stations in the fixed-satellite service shall not claim protection from space stations in the space research service. Nos. **5.43A** and **22.2** do not apply. Earth stations in the fixed-satellite service shall not constrain the use and development of earth stations in the space research service.     (WRC‑15)

**Reasons:** To ensure that the FSS does not claim protection from the SRS.

ARTICLE 21

Terrestrial and space services sharing frequency bands above 1 GHz

Section II − Power limits for terrestrial stations

MOD EUR/9A9A1/8

TABLE **21-2**     (Rev.WRC‑15)

|  |  |  |
| --- | --- | --- |
| Frequency band | Service | Limit as specified in Nos. |
| 1 427-1 429 MHz 1 610-1 645.5 MHz (No. 5.359) 1 646.5-1 660 MHz (No. 5.359) 1 980-2 010 MHz 2 010-2 025 MHz (Region 2) 2 025-2 110 MHz 2 200-2 290 MHz 2 655-2 670 MHz5 (Regions 2 and 3) 2 670-2 690 MHz5 (Regions 2 and 3) 5 670-5 725 MHz (Nos. 5.453 and 5.455) 5 725-5 755 MHz5 (Region 1 countries listed in Nos. 5.453 and 5.455) 5 755-5 850 MHz5 (Region 1 countries listed in Nos. 5.453, 5.455 and 5.456) 5 850-7 075 MHz 7 145-7 250 MHz[[1]](#footnote-1)\* 7 900-8 500 MHz | Fixed-satellite Meteorological-satellite Space research Space operation Earth exploration-satellite Mobile-satellite | 21.2, 21.3, 21.4 and 21.5 |

Section III − Power limits for earth stations

MOD EUR/9A9A1/9

TABLE **21-3**     (Rev.WRC‑15)

|  |  |  |
| --- | --- | --- |
| Frequency band | | Services |
| 2 025-2 110 MHz  5 670-5 725 MHz  5 725-5 755 MHz6 | (for the countries listed in No. 5.454 with respect to the countries listed in Nos. 5.453 and 5.455)  (for Region 1 with respect to the countries listed in Nos. 5.453 and 5.455) | Fixed-satellite  Earth-exploration-satellite  Meteorological-satellite  Mobile-satellite  Space operation |
| 5 755-5 850 MHz6 | (for Region 1 with respect to the countries listed in Nos. 5.453, 5.455 and 5.456) | Space research |
| 5 850-7 075 MHz |  |  |
| 7 190-7 235 MHz |  |  |
| 7 900-8 500 MHz |  |  |

Section V − Limits of power flux-density from space stations

MOD EUR/9A9A1/10

TABLE **21-4**  (*continued*)     (Rev.WRC‑15)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Frequency band | Service\* | Limit in dB(W/m2) for angles of arrival (δ) above the horizontal plane | | | Reference bandwidth |
| 0°-5° | 5°-25° | 25°-90° |
| 4 500-4 800 MHz  5 670-5 725 MHz (Nos. **5.453** and **5.455**)  7 150-7 900 MHz | Fixed-satellite (space-to-Earth)  Meteorological-satellite  (space-to-Earth)  Mobile-satellite  Space research | −152 | −152 + 0.5(δ − 5) | −142 | 4 kHz |

MOD EUR/9A9A1/11

APPENDIX 4 (REV.WRC‑15)

Consolidated list and tables of characteristics for use in the  
application of the procedures of Chapter III

ANNEX 2

Characteristics of satellite networks, earth stations  
or radio astronomy stations2     (Rev.WRC‑15)

MOD EUR/9A9A1/12

**TABLE A**

GENERAL CHARACTERISTICS OF THE SATELLITE NETWORK, EARTH STATION OR RADIO ASTRONOMY STATION

| **Items in Appendix** | ***A \_ GENERAL CHARACTERISTICS OF THE SATELLITE NETWORK,  EARTH STATION OR RADIO ASTRONOMY STATION*** | **Advance publication of a geostationary-satellite network** | **Advance publication of a non-geostationary-satellite network subject to coordination under Section II of Article 9** | **Advance publication of a non-geostationary-satellite network not subject to coordination under Section II of Article 9** | **Notification or coordination of a geostationary-satellite network (including space operation functions under Article 2A of Appendices 30 or 30A)** | **Notification or coordination of a non-geostationary-satellite network** | **Notification or coordination of an earth station (including notification under Appendices 30A or 30B)** | **Notice for a satellite network in the broadcasting-satellite service under Appendix 30 (Articles 4 and 5)** | **Notice for a satellite network (feeder-link) under Appendix 30A  (Articles 4 and 5)** | **Notice for a satellite network in the fixed-satellite service under Appendix 30B (Articles 6 and 8)** | **Items in Appendix** | **Radio astronomy** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A.7** | **SPECIFIC EARTH STATION OR RADIO ASTRONOMY STATION SITE CHARACTERISTICS** |  | | | | | | | | | **A.7** |  |
| **...** |  |  | | | | | | | | |  |  |
| A.7.f | the antenna diameter, in metres  Required only for fixed-satellite service earth stations operating in the frequency bands 13.75-14 GHz, 8 400-8 500 MHz, 24.65-25.25 GHz (Region 1) and 24.65-24.75 GHz (Region 3) |  |  |  |  |  | **+ 1** |  |  |  | A.7.f |  |
| **...** |  |  |  |  |  |  |  |  |  |  |  |  |
| A.17.e.2 | the calculated power flux-density produced at the site of a radio astronomy station in the band 42.5-43.5 GHz, as defined in No. **5.551I**  Required only for geostationary-satellite systems operating in the fixed-satellite service and broadcasting-satellite service in the band 42-42.5 GHz |  |  |  | **+** |  |  |  |  |  | A.17.e.2 |  |
| **A.17*bis*** | **COMPLIANCE WITH SPACE STATION E.I.R.P. LIMITS** |  |  |  |  |  |  |  |  |  | **A.17*bis*** |  |
| A.17*bis*.a | a commitment of compliance with space station e.i.r.p. density levels contained in No. **5.B191**.  Required only for satellite systems operating in the fixed-satellite service in the band 7 150-7 235 MHz |  |  |  | **+** |  |  |  |  |  | A.17*bis*.a |  |
| **A.18** | **COMPLIANCE WITH NOTIFICATION OF AIRCRAFT EARTH STATION(S)** |  | | | | | | | | | **A.18** |  |

MOD EUR/9A9A1/13

**TABLE C**

CHARACTERISTICS TO BE PROVIDED FOR EACH GROUP OF FREQUENCY ASSIGNMENTS FOR A SATELLITE ANTENNA BEAM OR AN EARTH STATION OR RADIO ASTRONOMY ANTENNA

| **Items in Appendix** | ***C \_ CHARACTERISTICS TO BE PROVIDED FOR EACH GROUP OF FREQUENCY  ASSIGNMENTS FOR A SATELLITE ANTENNA BEAM OR AN EARTH STATION  OR RADIO ASTRONOMY ANTENNA*** | **Advance publication of a geostationary-satellite network** | **Advance publication of a non-geostationary-satellite network subject to coordination under Section II of Article 9** | **Advance publication of a non-geostationary-satellite network not subject to coordination under Section II  of Article 9** | **Notification or coordination of a geostationary-satellite network (including space operation functions under Article 2A of Appendices 30 or 30A)** | **Notification or coordination of a non-geostationary-satellite network** | **Notification or coordination of an earth station (including notification under Appendices 30A or 30B)** | **Notice for a satellite network in the broadcasting-satellite service under Appendix 30 (Articles 4 and 5)** | **Notice for a satellite network (feeder-link) under Appendix 30A  (Articles 4 and 5)** | **Notice for a satellite network in the fixed-satellite service under Appendix 30B (Articles 6 and 8)** | **Items in Appendix** | **Radio astronomy** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **C.10** | **TYPE AND IDENTITY OF THE ASSOCIATED STATION(S)**  *(the associated station may be another space station, a typical earth station of the network or a specific earth station)*  *For all space applications except active or passive sensors* |  | | | | | | | | | **C.10** |  |
| **...** |  |  | | | | | | | | |  |  |
| C.10.d.7 | the antenna diameter, in metres  In cases other than Appendix **30A**, required for fixed-satellite service networks operating in the frequency bands 8 400-8 500 MHz, 13.75-14 GHz, 24.65-25.25 GHz (Region 1) and 24.65-24.75 GHz (Region 3) and for maritime mobile-satellite service networks operating in the frequency band 14-14.5 GHz |  |  |  | **+** | **+** |  |  | **X** |  | C.10.d.7 |  |

MOD EUR/9A9A1/14

APPENDIX 7 (REV.WRC‑15)

Methods for the determination of the coordination area around an earth  
station in frequency bands between 100 MHz and 105 GHz

ANNEX 7

System parameters and predetermined coordination distances for determination of the coordination area around an earth station

# 3 Horizon antenna gain for a receiving earth station with respect to a transmitting earth station

MOD EUR/9A9A1/15

TABLE 7b    (Rev.WRC‑15)

Parameters required for the determination of coordination distance for a transmitting earth station

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Transmitting space radiocommunication  service designation | Fixed-satellite, mobile-satellite | Aero-nautical mobile-satellite (R) service | Aero-nautical mobile-satellite (R) service | Fixed- satellite | Fixed- satellite | Fixed- satellite | Fixed- satellite | Space  operation, space  research | Fixed-satellite, mobile-satellite, meteorological- satellite | Fixed- satellite | Fixed- satellite | Fixed- satellite | Fixed- satellite 3 | Fixed- satellite | Fixed- satellite 3 |
| Frequency bands (GHz) | 2.655-2.690 | 5.030-5.091 | 5.030-5.091 | 5.091-5.150 | 5.091-5.150 | 5.725-5.850 | 5.725-7.075 | 7.100-7.235 5 | 7.900-8.50006 | 10.7-11.7 | 12.5-14.8 | 13.75-14.3 | 15.43-15.65 | 17.7-18.4 | 19.3-19.7 |
| Receiving terrestrial service designations | Fixed, mobile | Aeronautical radio- navigation | Aeronautical mobile (R) | Aeronautical radio- navigation | Aeronautical mobile (R) | Radiolocation | Fixed, mobile | Fixed, mobile | Fixed, mobile | Fixed, mobile | Fixed, mobile | Radiolocation radionavigation (land only) | Aeronautical radionavigation | Fixed, mobile | Fixed, mobile |

...

6 The operation of the fixed-satellite earth stations in the band 8 400-8 500 MHz is limited to specific earth stations at fixed known locations and with a minimum antenna diameter of 3.5 m.

MOD EUR/9A9A1/16

TABLE 8c    (Rev.WRC‑15)

Parameters required for the determination of coordination distance for a receiving earth station

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Receiving space radiocommunication service designation | Fixed-satellite | Fixed-satellite, radio- determination satellite | Fixed-satellite | Fixed- satellite | Meteorological-satellite7, 8 | Meteorological-satellite9 | Earth exploration- satellite7 | Earth exploration- satellite9 | Space research10 | | Fixed-satellite | Broadcasting-satellite | Fixed- satellite9 | Broadcasting-satellite | Fixed-satellite7 |
|  |  |  |  |  |  |  |  |  | Deep space |  |  |  |  |  |  |
| Frequency bands (GHz) | 4.500-4.800 | 5.150-5.216 | 6.700-7.075 | 7.150-7.75013 | 7.450-7.550 | 7.750-7.900 | 8.025-8.400 | 8.025-8.400 | 8.400-8.450 | 8.450-8.500 | 10.7-12.75 | 12.5-12.7512 | 15.4-15.7 | 17.7-17.8 | 17.7-18.8 19.3-19.7 |

...

13 Fixed-satellite earth stations in the band 7 150-7 250 MHz operate only with geostationary satellites.

MOD EUR/9A9A1/17

TABLE 9a    (Rev.WRC‑15)

Parameters required for the determination of coordination distance for a transmitting earth station  
in bands shared bidirectionally with receiving earth stations

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Space service designation in which the transmitting  earth station operates | | Land mobile-satellite | Mobile-satellite | Land mobile-satellite | Earth  exploration-satellite, meteorological-satellite | Mobile-satellite | | Fixed-satellite, mobile-satellite | Aeronautical mobile-satellite (R) service | | Fixed- satellite3 | | Fixed-satellite | Fixed-satellite, meteorological-satellite | Fixed-satellite | Fixed-satellite | Fixed-satellite |
| Frequency bands (GHz) | | 0.1499-0.15005 | 0.272-0.273 | 0.3999-0.40005 | 0.401-0.402 | 1.670‑1.675 | | 2.655-2.690 | 5.030-5.091 | | 5.150-5.216 | | 6.700-7.075 | 8.025-8.400 | 8.025-8.400 | 8.400-8.450 | 8.450-8.500 |
| Space service designation in which the *receiving* earth station operates | | Radio-navigation-satellite | Space operation | Radio-navigation-satellite | Space operation | Meteorological-satellite | | Fixed-satellite, broadcasting-satellite | Aeronautical mobile-satellite (R) service | | Fixed-satellite | Radiodetermination-satellite | Fixed-satellite | Earth  exploration- satellite | Earth exploration- satellite | Space research satellite (deep space) | Space research satellite |
| Orbit6 | |  | Non-GSO |  | Non-GSO | Non-GSO | GSO |  | Non-GSO | GSO | Non-GSO |  |  |  | GSO |  |  |
| Modulation at *receiving* earth station1 | |  | N |  | N | N | N |  |  |  |  |  | N | N | N | N | N |
| Receiving earth station interference parameters and criteria | *p*0 (%) |  | 1.0 |  | 0.1 | 0.006 | 0.011 |  |  |  |  |  | 0.005 | 0.011 | 0.083 | 0.001 | 0.1 |
| *n* |  | 1 |  | 2 | 3 | 2 |  |  |  |  |  | 3 | 2 | 2 | 1 | 2 |
| *p* (%) |  | 1.0 |  | 0.05 | 0.002 | 0.0055 |  |  |  |  |  | 0.0017 | 0.0055 | 0.0415 | 0.001 | 0.05 |
| *NL* (dB) | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |  |  | 1 | 0 | 1 | 0 | 0 |
| *Ms* (dB) | 2 | 1 | 2 | 1 | 2.8 | 0.9 | 2 |  |  | 2 | 2 | 2 | 4.7 | 2 | 0.5 | 1 |
| *W* (dB) | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |  |  | 0 | 0 | 0 | 0 | 0 |
| Receiving earth station parameters | *Gm* (dBi)2 | 0 | 20 | 0 | 20 | 30 | 45 |  | 45 | 45 | 48.5 |  | 50.7 |  |  |  |  |
| *Gr* (dBi)4 | 0 | 19 | 0 | 19 | 19 9 | 8 |  | 8 | 8 | 10 |  | 10 | 10 | 8 |  |  |
| ε*min* 5 | 3° | 10° | 3° | 10° | 5° | 3° | 3° | 10° | 10° | 3° | 3° | 3° | 5° | 3° | 10° | 5° |
| *Te* (K)7 | 200 | 500 | 200 | 500 | 370 | 118 | 75 | 340 | 340 | 75 | 75 | 75 |  |  |  |  |
| Reference bandwidth | *B* (Hz) | 4 × 103 | 103 | 4 × 103 | 1 | 106 | 4 × 103 |  | 37.5 × 103 | 37.5 × 103 |  |  | 106 | 106 | 106 | 1 | 1 |
| Permissible interference power | *Pr*( *p*) (dBW) in *B* | −172 | −177 | −172 | −208 | −145 | −178 |  | −163.5 | −163.5 |  |  | −151 | −142 | −154 | −221 | −216 |

ADD EUR/9A9A1/18

Draft New Resolution [EUR-A191] (WRC-15)

Operational consultation procedure for ensuring compatibility between the fixed-satellite service (space-to-Earth) and the space research service (Earth‑to‑space) in the frequency band 7 150-7 190 MHz

The World Radiocommunication Conference (Geneva, 2015),

considering

*a)* that the frequency band 7 150-7 190 MHz is allocated, *inter alia*, to the space research (Earth-to-space) and the fixed-satellite (space-to-Earth) services on a primary basis;

*b)* that No. **5.460** restricts the use of the band 7 150-7 190 MHz by the space research service (SRS) (Earth-to-space) to deep space;

*c)* that these deep space missions include transitional near-Earth phases, such as launch and early operation phases, Earth fly-bys or sample returns, where the spacecraft is operated at less than 2 × 106 km from the Earth;

*d)* that No. **5.A191** limits the use of the band 7 150-7 190 MHz by the fixed-satellite service (FSS) to geostationary satellite networks;

*e)* that No. **5.B191** sets e.i.r.p. density limits to emissions from any FSS space station,

noting

*a)* that the transitional near-Earth phases referred to in *considering c)* are critical for deep-space missions and have a limited duration;

*b)* that SRS deep-space transmissions in the frequency band 7 150-7 190 MHz use predetermined channels with bandwidths ranging from 2.5 MHz to 10 MHz at predetermined times,

recognizing

that, in some cases, during the transitional near-Earth phases referred to in *considering c)*, operational measures may be required in addition to the e.i.r.p. density limits set forth in No. **5.B191**, in order to ensure that transmissions of FSS space stations do not cause harmful interference to SRS deep-space spacecraft receivers,

resolves

that the procedure described in Annex 1 to this Resolution shall apply between the notifying administrations of SRS and FSS satellite networks in the band 7 150-7 190 MHz.

ANNEX 1 TO RESOLUTION [EUR-A191] (WRC-15)

Operational consultation procedure between the fixed-satellite service (space‑to‑Earth) and the space research service (Earth-to-space) in the frequency band 7 150-7 190 MHz

1 In the event that the notifying administration of an SRS (deep space) satellite network in the band 7 150-7 190 MHz determines that, during its transitional near-Earth phases, this network may suffer harmful interference from overlapping frequency assignments of an FSS satellite network, it shall contact the notifying administration of the FSS satellite network and provide it with the following information:

a) ITU publication references of the SRS satellite network;

b) beginning and end dates of the transitional near-Earth phase of concern;

c) detailed orbital parameters of the transitional near-Earth phase of concern;

d) SRS spacecraft antenna pattern and pointing direction;

e) centre frequencies and bandwidths used during the transitional near-Earth phase of concern;

f) polarization used;

g) possible solutions to avoid the occurrence of harmful interference;

h) details (including email address) of relevant point(s) of contact for the conduct of the procedure of this Annex.

2 The notifying administration of the SRS satellite network shall provide the information mentioned in § 1 as early as possible and not less than 180 days prior to the beginning of the transitional near-Earth phase in question.

3 The notifying administration of the FSS satellite network shall acknowledge receipt of the communication mentioned in § 1 above within 15 days and provide the details of relevant point(s) of contact for the conduct of the procedure of this Annex. In the absence of such an acknowledgement of receipt of its communication and details of the point(s) of contact within these [15 days], the notifying administration of the SRS satellite network may seek the assistance of the Bureau.

4 The notifying administration of the FSS satellite network shall analyse the information provided according to § 1 as well as the feasibility of the possible solutions proposed by the notifying administration of the SRS satellite network.

5 The notifying administration of the FSS satellite network shall respond to the notifying administration of the SRS satellite network within 90 days from the date of receipt of the communication mentioned in § 1 above by either agreeing to the possible solutions proposed under item h) of § 1 or proposing alternative solutions.

6 Both administrations shall thereafter cooperate to the maximum extent possible to reach a mutually acceptable solution, which minimizes constraints on both the SRS and FSS satellite networks, at least [30 days] prior to the beginning of the SRS spacecraft transitional near-Earth phase that triggered the application of the procedure contained in this Annex.

7 If no other operational measure is agreed between the notifying administrations of the SRS and FSS satellite networks to avoid harmful interference to the SRS spacecraft receiver, the notifying administration of the FSS satellite network shall not operate any FSS assignments within the channel, defined by the characteristics provided in item e) of § 1, that will be used during the transitional near-Earth phase, as described in items b) of § 1. The notifying administration of the SRS satellite network shall minimize the time period associated with its request to the minimum necessary, in order to minimize the constraints on the FSS satellite network.

8 In order to expedite the application of the procedure contained in this Annex, administrations are encouraged to ensure that the operating agencies of the FSS or SRS satellite networks directly participates in the application of this procedure.

**Reasons:** Regarding the time periods proposed in the Resolution, Europe is open to further discussions about the most appropriate values to cover the various cases of concern.

SUP EUR/9A9A1/19

RESOLUTION 758 (WRC‑12)

Allocation to the fixed-satellite service and the maritime-  
mobile satellite service in the 7/8 GHz range

**Reasons:** This Resolution is proposed to be suppressed considering the finalization of the studies on WRC-15 agenda item 1.9.1. The parts of this resolution that are relevant to WRC-15 agenda item 1.9.2 are considered in the European Proposals related to this agenda item.

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1. \* For this frequency band only the limits of Nos. **21.3** and **21.5** apply. [↑](#footnote-ref-1)