|  |  |
| --- | --- |
| **Radiocommunication Advisory GroupGeneva, 25-27 June 2012** |  |
|  |  |
|  |  |
|  | **Addendum 1 to** |
|  | **Document RAG12-1/5-E** |
| **15 June 2012** |
| **Original: English only** |

|  |
| --- |
| Chairman of the Correspondence Group on BR Information Systems |
| REPORT OF THE CORRESPONDENCE GROUP ONBR INFORMATION SYSTEMS |

**ITU-R Recommendations for which software should be developed/regularly updated**

**Fixed-satellite service**

| Rec. ITU-R | Title |
| --- | --- |
| S.465 | Reference radiation pattern for earth station antennas in the fixed-satellite service for use in coordination and interference assessment in the frequency range from 2 to 31 GHz |
| S.580 | Radiation diagrams for use as design objectives for antennas of earth stations operating with geostationary satellites |
| S.672 | Satellite antenna radiation pattern for use as a design objective in the fixed-satellite service employing geostationary satellites |
| S.731 | Reference earth-station cross-polarized radiation pattern for use in frequency coordination and interference assessment in the frequency range from 2 to about 30 GHz |
| S.1150 | Technical criteria to be used in examinations relating to the probability of harmful interference between frequency assignments in the fixed-satellite service as required in No. 11.32A.1 of the Radio Regulations |
| S.1428 | Reference FSS earth-station radiation patterns for use in interference assessment involving non-GSO satellites in frequency bands between 10.7 GHz and 30 GHz |
| S.1503 | Functional description to be used in developing software tools for determining conformity of non-geotationary-satellite orbit fixed-satellite system networks with limits contained in Article 22 of the Radio Regulations |
| S.1526 | Methodology to assess the interference environment in relation to Nos. 9.12, 9.12A and 9.13 of the Radio Regulations when non-geostationary-satellite orbit fixed-satellite service systems are involved |
| S.1528 | Satellite antenna radiation patterns for non-geostationary orbit satellite antennas operating in the fixed-satellite service below 30 GHz |
| Rec. ITU-R | Title |
| S.1558 | Methodologies for measuring epfddown caused by a non‑geostationary-satellite orbit space station to verify compliance with operational epfdown limits |
| S.1559 | Methodology for computing the geographical distribution of maximum downlink equivalent power flux-density levels generated by non-geostationary fixed-satellite service systems using circular orbits |
| S.1589 | Continuous curves of epfd↓ versus geostationary fixed-satellite service earth station antenna diameter and epfd↑ versus geostationary fixed-satellite service space station antenna beamwidth to indicate the protection afforded by systems complying with the limits to antennas with diameters other than those in Article 22 of the Radio Regulations |
| S.1592 | Methodology to assess compliance of non-geostationary fixed-satellite service satellite systems in circular orbits with the additional operational limits on downlink equivalent power flux-density in Article 22 of the Radio Regulations |
| S.1656 | Outline of a software specification for automating the examination of satellite network filings for compliance with Article 5 of the Radio Regulations |
| S.1672 | Guidelines to be used in the event of non-compliance with single-entry operational and/or additional operational limits in Section II of Article 22 of the Radio Regulations |
| **S.1714** | Static methodology for calculating epfd↓ to facilitate coordination of very large antennas under Nos. 9.7A and 9.7B of the Radio Regulations  |
| **S.1715** | Guidelines developed in response to the studies requested in Resolution 140 (WRC-03) |
| S.1844 | Cross-polarization reference gain pattern for linearly polarized very small aperture terminals (VSAT) for frequencies in the range 2 to 31 GHz |
| S.1855 | Alternative reference radiation pattern for earth-station antennas used with satellites in the geostationary-satellite orbit for use in coordination and/or interference assessment in the frequency range from 2 to 31 GHz |

**Frequency sharing between the fixed-satellite service and the fixed service**

| Rec. ITU-R | Title |
| --- | --- |
| SF.675 | Calculation of the maximum power density (averaged over 4 kHz or 1 MHz) of angle-modulated and digital carriers |

**Broadcasting-satellite service**

| Rec. ITU-R | Title |
| --- | --- |
| **BO.1212** | Calculation of total interference between geostationary-satellite networks in the broadcasting-satellite service |
| BO.1213 | Reference receiving Earth station antenna pattern for the broadcasting-satellite service in the 11.7-12.75 GHz band   |
| BO.1293 | Protection masks and associated calculation methods for interference into broadcast-satellite systems involving digital emissions |
| **BO.1295** | Reference transmit Earth station antenna off-axis e.i.r.p. patterns for planning purposes to be used in the revision of the Appendix 30A (Orb-88) Plans of the Radio Regulations at 14 GHz and 17 GHz in Regions 1 and 3 |
| **BO.1296** | Reference receive space station antenna patterns for planning purposes to be used for elliptical beams in the revision of the Appendix 30A (Orb-88) Plans of the Radio Regulations at 14 GHz and 17 GHz in Regions 1 and 3 |
| **BO.1297** | Protection ratios to be used for planning purposes in the revision of the Appendices 30 (Orb-85) and 30A (Orb-88) Plans of the Radio Regulations in Regions 1 and 3 |
| BO.1373 | Use of broadcasting-satellite service assignments and of the associated feeder link assignments for fixed-satellite service transmissions in bands subject to Appendices 30 and 30A of the Radio Regulations   |
| BO.1443 | Reference BSS earth station antenna patterns for use in interference assessment involving non-GSO satellites in frequency bands covered by RR Appendix 30   |
| **BO.1445** | Improved patterns for fast roll-off satellite transmit antennas of the Regions 1 and 3 BSS plans of RR Appendix S30   |
| BO.1658 | Continuous curves of epfddown versus the geostationary broadcasting-satellite service Earth station antenna diameter to indicate the protection afforded by systems complying with the limits of antennas with diameters other than those in Article 22 of the Radio Regulations   |
| BO.1776 | Maximum power flux-density for the broadcasting-satellite service in the band 21.4-22.0 GHz in Regions 1 and 3 |
| BO.1785 | Intra-service sharing criteria for GSO BSS systems in the band 21.4‑22.0 GHz in Regions 1 and 3 |
| BO.1898 | Power flux-density value required for the protection of receiving earth stations in the broadcasting-satellite service in Regions 1 and 3 from emissions by a station in the fixed and/or mobile services in the band 21.4-22 GHz |
| BO.1900 | Reference receive earth station antenna pattern for the broadcasting-satellite service in the band 21.4-22 GHz in Regions 1 and 3 |

**Mobile-satellite service**

| Rec. ITU-R | Title |
| --- | --- |
| M.694 | Reference radiation pattern for ship earth station antennas |
| M.1091 | Reference off-axis radiation patterns for mobile earth station antennas operating in the land mobile-satellite service in the frequency range 1 to 3 GHz |
| M.1343 | Essential technical requirements of mobile earth stations for global non-geostationary mobile satellite service systems in the bands 1‑3 GHz |
| M.1480 | Essential technical requirements of mobile earth stations of geostationary mobile-satellite systems that are implementing the Global mobile personal communications by satellite (GMPCS) - Memorandum of understanding arrangements in parts of the frequency band 1-3 GHz |
| M.2014 | Global circulation of IMT-2000 satellite terminals  |

WRC Resolutions for which software should be developed/regularly updated

| **WRC Resolution** | **Title** |
| --- | --- |
| Resolution **33 (Rev.WRC-03)** | Bringing into use of space stations in the broadcasting-satellite service, prior to the entry into force of agreements and associated plans for the broadcasting-satellite service |
| Resolution **42 (Rev.WRC-12)** | Use of interim systems in Region 2 in the broadcasting-satellite and fixed-satellite (feeder-link) services in Region 2 for the bands covered by Appendices 30 and 30A |
| Resolution **49 (Rev.WRC-12)** | Administrative due diligence applicable to some satellite radiocommunication services |
| Resolution **55 (Rev.WRC-12)** | Electronic submission of notice forms for satellite networks, earth stations and radio astronomy stations |
| Resolution **80** (**Rev.WRC‑07**) | Due diligence in applying the principles embodied in the Constitution |
| Resolution **86** (**Rev.WRC‑07**) | Implementation of Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference |
| Resolution **144 (Rev.WRC-07)** | Special requirements of geographically small or narrow countries operating earth stations in the fixed-satellite service in the band 13.75-14 GHz |
| Resolution **149 (Rev.WRC-12)** | Submissions from new Member States of the Union relating to Appendix 30B of the Radio Regulations |
| Resolution **151 (WRC‑12)** | Additional primary allocations to the fixed-satellite service in frequency bands between 10 and 17 GHz in Region 1 |
| Resolution **152 (WRC‑12)** | Additional primary allocations to the fixed-satellite service in the Earth‑to‑space direction in frequency bands between 13-17 GHz in Region 2 and Region 3 |
| Resolution **215 (Rev.WRC-12)** | Coordination process among mobile-satellite systems and efficient use of the allocations to the mobile-satellite service in the 1-3 GHz range |
| Resolution **548 (Rev.WRC-12)** | Application of the grouping concept in Appendices 30 and 30A in Regions 1 and 3 |
| Resolution **552 (WRC-12)** | Long-term access to and development in the band 21.4-22 GHz in Regions 1 and 3 |
| Resolution **553 (WRC-12)** | Additional regulatory measures for broadcasting-satellite networks in the band 21.4-22 GHz in Regions 1 and 3 for the enhancement of equitable access to this band |
| Resolution **554 (WRC-12)** | Application of pfd masks to coordination under No. 9.7 for broadcasting-satellite service networks in the band 21.4-22 GHz in Regions 1 and 3 |
| Resolution **716 (Rev.WRC-12)** | Use of the frequency bands 1 980-2 010 MHz and 2 170-2 200 MHz in all three Regions and 2 010-2 025 MHz and 2 160-2 170 MHz in Region 2 by the fixed and mobile-satellite services and associated transition arrangements |
| Resolution **755 (WRC-12)** | Power flux-density limits for transmitting stations in the 21.4-22 GHz band |
| Resolution **756 (WRC-12)** | Studies on possible reduction of the coordination arc and technical criteria used in application of No. 9.41 in respect of coordination under No. 9.7 |
| Resolution **901 (Rev.WRC-07)** | Determination of the orbital arc separation for which coordination would be required between two satellite networks operating in a space service not subject to a Plan |
| Resolution **907 (WRC-12)** | Use of modern electronic means of communication for administrative correspondence related to advance publication, coordination and notification of satellite networks including that related to Appendices 30, 30A and 30B, earth stations and radio astronomy stations |
| Resolution **908 (WRC-12)** | Electronic submission and publication of advance publication information |
| Resolution **909 (WRC‑12)** | Provisions relating to earth stations located on board vessels which operate in fixed-satellite service networks in the uplink bands 5 925‑6 425 MHz and 14-14.5 GHz |

\_\_\_\_\_\_\_\_\_\_\_\_\_\_