List of ITU-R Recommendations on DVD
2010 Edition 2

Series BO : Satellite delivery

Number	Approval Date	Recommendation Title	Status
BO.566-3	1990-06	Terminology relating to the use of space communication techniques for broadcasting	Withdrawn
BO.600-1	1986-07	Standardized set of test conditions and measurement procedures for the subjective and objective determination of protection ratios for television in the terrestrial broadcasting and the broadcasting-satellite services	In force
BO.650-2	1992-03	Standards for conventional television systems for satellite broadcasting in the channels defined by Appendix 30 of the Radio Regulations	In force
BO.651	1986-07	Digital PCM coding for the emission of high-quality sound signals in satellite broadcasting (15 kHz nominal bandwidth)	In force
BO.652-1	1992-03	Reference patterns for Earth-station and satellite antennas for the broadcasting satellite service in the 12 GHz band and for the associated feeder links in the 14 GHz and 17 GHz bands	In force
BO.712-1	1992-03	High-quality sound/data standards for the broadcasting-satellite service in the 12 GHz band	In force
BO.786	1992-03	MUSE system for HDTV broadcasting-satellite services	In force
BO.787	1992-03	MAC/packet based system for HDTV broadcasting-satellite services	Withdrawn
BO.788-1	1994-08	Coding rate for virtually transparent studio quality HDTV emissions in the broadcasting-satellite service	Withdrawn
BO.789-2	1995-10	Service for digital sound broadcasting to vehicular, portable and fixed receivers for broadcasting-satellite service (sound) in the frequency range 1 400-2 700 MHz	In force
BO.790	1992-03	Characteristics of receiving equipment and calculation of receiver figure-of-merit (G/T) for the broadcasting-satellite service	In force
BO.791	1992-03	Choice of polarization for the broadcasting-satellite service	In force
BO.792	1992-03	Interference protection ratios for the broadcasting-satellite service (television) in the 12 GHz band	In force
BO.793	1992-03	Partitioning of noise between feeder links for the broadcasting-satellite service (BSS) and BSS downlinks	In force
BO.794	1992-03	Techniques for minimizing the impact on the overall BSS system performance due to rain along the feeder-link path	In force
BO.795	1992-03	Techniques for alleviating mutual interference between feeder links to the BSS	In force
BO.1130-4	2001-04	Systems for digital satellite broadcasting to vehicular, portable and fixed receivers in the bands allocated to BSS (sound) in the frequency range 1 400-2 700 MHz	In force
BO.1211	1995-10	Digital multi-programme emission systems for television, sound and data services for satellites operating in the 11/12 GHz frequency range	Withdrawn
BO.1212	1995-10	Calculation of total interference between geostationary-satellite networks in the broadcasting-satellite service	In force
BO.1213-1	2005-11	Reference receiving Earth station antenna pattern for the broadcasting-satellite service in the 11.7-12.75 GHz band	In force
BO.1293-2	2002-04	Protection masks and associated calculation methods for interference into broadcast-satellite systems involving digital emissions	In force

BO.1294	1997-10	Common functional requirements for the reception of digital multiprogramme television emissions by satellites operating in the 11/12 GHz frequency range	Withdrawn
BO.1295	1997-10	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	In force
BO.1296	1997-10	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	In force
BO.1297	1997-10	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	In force
BO.1373-2	2005-07	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	In force
BO.1383	1998-12	Introduction of the broadcasting-satellite service (sound) in the same frequency bands as used by mobile aeronautical telemetry systems in the frequency range 1-3 GHz	In force
BO.1408-1	2002-04	Transmission system for advanced multimedia services provided by integrated services digital broadcasting in a broadcasting-satellite channel	In force
BO.1443-2	2006-05	Reference BSS earth station antenna patterns for use in interference assessment involving non-GSO satellites in frequency bands covered by RR Appendix 30	In force
BO.1444	2000-03	Protection of the BSS in the 12 GHz band and associated feeder links in the 17 GHz band from interference caused by non-GSO FSS systems	In force
BO.1445	2000-03	Improved patterns for fast roll-off satellite transmit antennas of the Regions 1 and 3 BSS plans of RR Appendix S30	In force
BO.1503-1	2005-04	Functional description to be used in developing software tools for determining conformity of non-geostationary-satellite orbit fixed-satellite system networks with limits contained in Article 22 of the Radio Regulations	Withdrawn
BO.1504	2000-07	Effective utilization of spectrum assigned to the broadcasting-satellite service (sound)	In force
BO.1505	2000-07	Coordination procedure for assignments of space operation service in the guardbands of Appendices S30 and S30A Plans of the Radio Regulations	Withdrawn
BO.1506	2000-07	A methodology to evaluate the impact of solar interference on GSO BSS link performance	In force
BO.1516	2001-04	Digital multiprogramme television systems for use by satellites operating in the 11/12 GHz frequency range	In force
BO.1517	2001-04	Equivalent power flux-density limits, epfddown, to protect the broadcasting-satellite service in the 12 GHz band from interference caused by non-geostationary fixed-satellite service systems	In force
BO.1597	2002-10	Methodology for the calculation of the worst-case interference levels between non-geostationary broadcasting-satellite service (sound) systems using highly-elliptical orbit and geostationary orbit satellite networks operating in the band 2 630-2 655 MHz	In force
BO.1658	2003-12	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	In force

BO.1659	2003-12	Mitigation techniques for rain attenuation for broadcasting-satellite service systems in frequency bands between 17.3 GHz and 42.5 GHz	In force
BO.1696	2005-02	Methodologies for determining the availability performance for digital multi-programme BSS systems, and their associated feeder links operating in the planned bands	In force
BO.1697	2005-02	Power flux-density values in the band 11.7-12.7 GHz and associated calculation methodology which may be used for bilateral coordination when the power flux-density values in Section 3 of Annex 1 to Appendix 30 or Annex 4 to Appendix 30 of the Radio Regulations are exceeded	In force
BO.1724-1	2007-01	Interactive satellite broadcasting systems (television, sound and data)	In force
BO.1773	2006-07	Criterion to assess the impact of interference to the broadcasting-satellite service from emissions of devices without a corresponding frequency allocation in the Radio Regulations, that produce fundamental emissions in the frequency bands allocated to the broadcasting satellite service	In force
BO.1774-1	2007-04	Use of satellite and terrestrial broadcast infrastructures for public warning, disaster mitigation and relief	In force
BO.1776	2006-07	Reference power flux-density for the broadcasting-satellite service in the band 21.4-22.0 GHz in Regions 1 and 3	In force
BO.1784	2007-01	Digital satellite broadcasting system with flexible configuration (television, sound and data)	In force
BO.1785	2007-04	Intra-service sharing criteria for GSO BSS systems in the band 21.4-22.0 GHz in Regions 1 and 3	In force
BO.1834	2007-12	Coordination between geostationary-satellite orbit fixed-satellite service networks and broadcasting-satellite service networks in the band 17.3-17.8 GHz and among the broadcasting-satellite service and associated feeder-link networks serving Region 2 in the bands 17.3-17.8 GHz and 24.75-25.25 GHz	In force
BO.1835	2007-12	Sharing between broadcasting-satellite service (BSS) networks using the Region 2 17.3-17.8 GHz BSS allocation and feeder links of BSS networks using the worldwide 17.3-17.8 GHz fixed-satellite service (FSS) (Earth-to-space) allocation	In force

Recommendation count: 50

Series BR : Recording for production, archival and play-out; film for television

Number	*Approval Date*	*Recommendation Title*	*Status*
BR.265-9	2004-02	Operating practices for the international exchange of programmes on film for television use	In force
BR.407-4	1990-06	International exchange of sound programmes recorded in analogue form	Withdrawn
BR.408-7	2001-04	International exchange of sound programmes recorded in analogue form	In force
BR.469-7	2002-06	Analogue composite television tape recording	In force
BR.501-2	1990-06	Appraisal of programmes on colour film intended for television use	Withdrawn
BR.602-5	2004-02	Exchange of standard definition television recordings for programme content evaluation	In force
BR.648	1986-07	Digital recording of audio signals	Withdrawn
BR.649-1	1992-03	Measuring methods for analogue audio tape recordings	In force
BR.657-2	1992-03	Digital television tape recording	Withdrawn
BR.713-1	1997-10	Recording of high definition television (HDTV) images on film	Withdrawn
BR.714-2	2001-12	International exchange of programmes produced by means of high-definition television	In force
BR.715-1	2001-04	International exchange of analogue electronic news gathering recordings	In force
BR.716-2	1994-08	Area of 35 mm motion picture film used in HDTV telecines	Withdrawn
BR.777-3	2001-04	International exchange of two-channel digital audio recordings	In force
BR.778-1	1994-08	Analogue component television tape recording. Standards for the international exchange of television programmes on magnetic tapes	In force
BR.779-2	2003-01	Operating practices for digital television recording	In force
BR.780-2	2005-04	Time and control code standards, for production applications in order to facilitate the international exchange of television programmes on magnetic tapes	In force
BR.781-1	1994-08	HDTV telecine colour balance for film programmes	Withdrawn
BR.782-1	1994-08	Area of 35 mm print film used for 4:3 conventional television systems	Withdrawn
BR.783-1	1994-08	Area of 35 mm release print film used for conventional 16:9 television systems	Withdrawn
BR.784	1992-03	Exchange of television programmes on 16-mm film with two synchronous sound tracks on a separate support	Withdrawn
BR.785-1	2001-04	The release of programmes in a multiple release media environment	In force
BR.1214	1995-10	Studio recording of sound-broadcasting programmes on magnetic tape for release on multi-programme digital channels	Withdrawn
BR.1215	1995-10	Handling and storage of television and sound recordings on magnetic tape	In force
BR.1216-1	2001-04	Recording of television or sound programmes on magnetic tape in the case when several programmes are intended for broadcasting in the same digital multiplex	In force

BR.1217	1995-10	Recording of pan-scan data of 16:9 recordings within the user bits of the longitudinal time code	Withdrawn
BR.1218-1	2001-04	Recording of ancillary data on digital recorders for consumer use	In force
BR.1219	1995-10	Handling and storage of cinematographic film recording	In force
BR.1220-1	2001-04	Requirements for the generation, recording and presentation of high definition television programmes intended for release in the "electronic cinema"	In force
BR.1287-1	2001-04	Broadcasting of programmes on film with multichannel sound	In force
BR.1288	1997-10	Scanned area of 16 mm and 35 mm release film used for 4:3 conventional television systems	Withdrawn
BR.1289	1997-10	Scanned area of 16 mm and 35 mm release film used for 16:9 conventional television systems	Withdrawn
BR.1290	1997-10	Use of television disk recording in broadcasters' operations	In force
BR.1291	1997-10	Scanned area of Super 16 mm film for production and post-production in 16:9 television systems	Withdrawn
BR.1292	1997-10	Engineering guidelines for video recording in standard definition television production and post-production chains	In force
BR.1351	1998-02	Requirements for the application of digital technology to audio archiving systems for radio broadcasting	In force
BR.1352-3	2007-12	File format for the exchange of audio programme materials with metadata on information technology media	In force
BR.1353	1998-02	Recording of data in the user bits of the longitudinal time code	Withdrawn
BR.1354	1998-02	Transfer of film programmes to video tape for programme exchange and for preservation of endangered films	Withdrawn
BR.1355-2	2004-09	Viewing conditions for the assessment of telecine transfers of film images on a television display	In force
BR.1356	1998-02	User requirements for application of compression in mainstream standard definition television production and archival	In force
BR.1357	1998-02	Use of wrappers and metadata in television production	Withdrawn
BR.1374-1	2001-06	Scanned area dimensions from 16 mm and 35 mm cinematographic film used in television	In force
BR.1375-3	2007-01	High-definition television (HDTV) digital recording formats	In force
BR.1376	1998-11	Compression families for use in recording and networked standard definition television production	In force
BR.1384-1	2005-04	Parameters for international exchange of multi-channel sound recordings with or without accompanying picture	In force
BR.1385	1998-12	Exchange of sound programmes on recordable compact discs (CD-R)	In force
BR.1422	1999-12	Operational practices for television use of film soundtracks encoded with noise reduction and matrix surround	In force
BR.1440	2000-03	16:9 video images transferred to 35 mm film for optical projection	In force
BR.1441	2000-03	Compromise scanned area dimensions for television from 35 mm wide-screen films	In force

BR.1442	2000-03	User's requirements for digital HDTV tape cassette recorders	In force
BR.1515	2001-04	International exchange of digital electronic news gathering recordings	In force
BR.1530	2001-06	Guide to Recommendations on the use of film in television	In force
BR.1531	2001-06	Exchange of sound programmes for broadcast use recorded as broadcast wave format files on compact and digital versatile recordable data disks	In force
BR.1574	2002-06	Archival of sound-program material in the form of files recorded on information technology media	In force
BR.1575	2002-06	Guide to the selection of digital video tape recording formats for studio production in the standard definition television (SDTV) environment based on production requirements	In force
BR.1684	2004-09	Recording of 5.1-channel audio programmes on video tape recorders	In force
BR.1694	2004-09	Videocassette recording formats for international exchange of large-screen digital imagery programmes intended for presentation in a theatrical environment	In force
BR.1695	2004-09	Recording formats for international exchange for the evaluation of high-definition television programmes	In force
BR.1725	2005-04	Handling, restoration and storage of programme material that broadcasters have archived in the form of cinematographic film	In force
BR.1733	2005-08	Broadcasters' use of digital television recording formats designed for semi-professional or consumer applications	In force

Recommendation count: 61

Series BS : Broadcasting service (sound)

Number	*Approval Date*	*Recommendation Title*	*Status*
BS.48-2	1986-07	Choice of frequency for sound broadcasting in the Tropical Zone	In force
BS.80-3	1990-06	Transmitting antennas in HF broadcasting	In force
BS.139-3	1990-06	Transmitting antennas for sound broadcasting in the Tropical Zone	In force
BS.215-2	1982-07	Maximum transmitter powers for broadcasting in the Tropical Zone	In force
BS.216-2	1982-07	Protection ratio for sound broadcasting in the Tropical Zone	In force
BS.411-4	1990-06	Fading allowances in HF broadcasting	In force
BS.412-9	1998-12	Planning standards for terrestrial FM sound broadcasting at VHF	In force
BS.415-2	1986-07	Minimum performance specifications for low-cost sound-broadcasting receivers	In force
BS.450-3	2001-11	Transmission standards for FM sound broadcasting at VHF	In force
BS.467	1970-07	Technical characteristics to be checked for frequency-modulation stereophonic broadcasting	In force
BS.468-4	1986-07	Measurement of audio-frequency noise voltage level in sound broadcasting	In force
BS.498-2	1990-06	Ionospheric cross-modulation in the LF and MF broadcasting bands	In force
BS.559-2	1990-06	Objective measurement of radio-frequency protection ratios in LF, MF and HF broadcasting	In force
BS.560-4	1997-10	Radio-frequency protection ratios in LF, MF and HF broadcasting	In force
BS.561-2	1986-07	Definitions of radiation in LF, MF and HF broadcasting bands	In force
BS.562-3	1990-06	Subjective assessment of sound quality	Withdrawn
BS.597-1	1986-07	Channel spacing for sound broadcasting in band 7 (HF)	In force
BS.598-1	1990-06	Factors influencing the limits of amplitude-modulation sound-broadcasting coverage in band 6 (MF)	In force
BS.599	1982-07	Directivity of antennas for the reception of sound broadcasting in band 8 (VHF)	In force
BS.638	1986-07	Terms and definitions used in frequency planning for sound broadcasting	In force
BS.639	1986-07	Necessary bandwidth of emission in LF, MF and HF broadcasting	In force
BS.640-3	1997-10	Single sideband (SSB) system for HF broadcasting	In force
BS.641	1986-07	Determination of radio-frequency protection ratios for frequency-modulated sound broadcasting	In force
BS.642-1	1990-06	Limiters for high-quality sound-programme signals	In force
BS.643-2	1995-10	System for automatic tuning and other applications in FM radio receivers for use with the pilot-tone system	In force
BS.644-1	1990-06	Audio quality parameters for the performance of a high-quality sound-programme transmission chain	In force

BS.645-2	1992-03	Test signals and metering to be used on international sound programme connections	In force
BS.646-1	1992-03	Source encoding for digital sound signals in broadcasting studios	In force
BS.647-2	1992-03	A digital audio interface for broadcasting studios	In force
BS.702-1	1992-03	Synchronization and multiple frequency use per programme in HF broadcasting	In force
BS.703	1990-06	Characteristics of AM sound broadcasting reference receivers for planning purposes	In force
BS.704	1990-06	Characteristics of FM sound broadcasting reference receivers for planning purposes	In force
BS.705-1	1995-10	HF transmitting and receiving antennas characteristics and diagrams	In force
BS.706-2	1998-02	Data system in monophonic AM sound broadcasting (AMDS)	In force
BS.707-5	2005-08	Transmission of multisound in terrestrial television systems PAL B, B1, D1, G, H and I, and SECAM D, K, K1 and L	In force
BS.708	1990-06	Determination of the electro-acoustical properties of studio monitor headphones	In force
BS.773	1992-03	Radio-frequency protection ratios required by FM sound broadcasting in the band between 87.5 MHz and 108 MHz against interference from D/SECAM television transmissions	In force
BS.774-2	1995-10	Service requirements for digital sound broadcasting to vehicular, portable and fixed receivers using terrestrial transmitters in the VHF/UHF bands	In force
BS.775-2	2006-07	Multichannel stereophonic sound system with and without accompanying picture	In force
BS.776	1992-03	Format for user data channel of the digital audio interface	Withdrawn
BS.1114-6	2007-01	Systems for terrestrial digital sound broadcasting to vehicular, portable and fixed receivers in the frequency range 30-3 000 MHz	In force
BS.1115-1	2005-04	Low bit-rate audio coding	Withdrawn
BS.1116-1	1997-10	Methods for the subjective assessment of small impairments in audio systems including multichannel sound systems	In force
BS.1194-2	1998-12	System for multiplexing frequency modulation (FM) sound broadcasts with a sub-carrier data channel having a relatively large transmission capacity for stationary and mobile reception	In force
BS.1195	1995-10	Transmitting antenna characteristics at VHF and UHF	In force
BS.1196-2	2010-03	Audio coding for digital broadcasting	In force
BS.1283-1	2003-12	A guide to ITU-R Recommendations for subjective assessment of sound quality	In force
BS.1284-1	2003-12	General methods for the subjective assessment of sound quality	In force
BS.1285	1997-10	Pre-selection methods for the subjective assessment of small impairments in audio systems	In force
BS.1286	1997-10	Methods for the subjective assessment of audio systems with accompanying picture	In force
BS.1348-1	2001-02	Service requirements for digital sound broadcasting at frequencies below 30 MHz	In force

BS.1349	1998-02	Implementation of digital sound broadcasting to vehicular, portable and fixed receivers using terrestrial transmitters in the LF, MF and HF bands	In force
BS.1350-1	1998-12	Systems requirements for multiplexing (FM) sound broadcasting with a sub-carrier data channel having a relatively large transmission capacity for stationary and mobile reception	In force
BS.1386-1	2001-04	LF and MF transmitting antennas characteristics and diagrams	In force
BS.1387-1	2001-11	Method for objective measurements of perceived audio quality	In force
BS.1423	1999-12	Guidelines for producing multichannel soundtracks using surround matrix techniques	In force
BS.1514-1	2002-10	System for digital sound broadcasting in the broadcasting bands below 30 MHz	In force
BS.1534-1	2003-01	Method for the subjective assessment of intermediate quality levels of coding systems	In force
BS.1547	2001-11	Terrestrial component of systems for hybrid satellite-terrestrial digital sound broadcasting to vehicular, portable and fixed receivers in the frequency range 1 400-2 700 MHz	In force
BS.1548-2	2006-02	User requirements for audio coding systems for digital broadcasting	In force
BS.1596	2002-10	Guide to ITU-R Recommendations for broadcast sound production	In force
BS.1615	2003-06	"Planning parameters" for digital sound broadcasting at frequencies below 30 MHz	In force
BS.1657	2003-08	Procedure for the performance test of automated audio identification systems	In force
BS.1660-3	2006-07	Technical basis for planning of terrestrial digital sound broadcasting in the VHF band	In force
BS.1661	2003-12	'Signal-on-the-air' specifications of the digital system described in Annex 1 to Recommendation ITU-R BS.1514 for digital sound broadcasting in the broadcasting bands below 30 MHz	In force
BS.1679	2004-03	Subjective assessment of the quality of audio in large screen digital imagery applications intended for presentation in a theatrical environment	In force
BS.1688	2004-09	Baseband sound system and audio source-coding at delivery interfaces of large-screen digital imagery applications	In force
BS.1693	2004-09	Procedure for the performance test of automated query-by-humming systems	In force
BS.1698	2005-02	Evaluating fields from terrestrial broadcasting transmitting systems operating in any frequency band for assessing exposure to non-ionizing radiation	In force
BS.1726	2005-04	Signal level of digital audio accompanying television in international programme exchange	In force
BS.1734	2005-08	Basic performance requirements for the sound components of large-screen digital imagery applications for presentation in a theatrical environment	In force
BS.1738	2007-09	Identification and ordering of multiple audio channels carried on international contribution circuits	In force
BS.1770-1	2007-09	Algorithms to measure audio programme loudness and true-peak audio level	In force
BS.1771	2006-07	Requirements for loudness and true-peak indicating meters	In force

BS.1786	2007-04	Criterion to assess the impact of interference to the terrestrial broadcasting service (BS)	In force
BS.1864	2010-03	Operational practices for loudness in the international exchange of digital television programmes	In force
BS.1873	2010-03	Serial multichannel audio digital interface for broadcasting studios	In force

Recommendation count: 77

Series BT : Broadcasting service (television)

Number	*Approval Date*	*Recommendation Title*	*Status*
BT.266-1	1992-03	Phase pre-correction of television transmitters	In force
BT.417-5	2002-10	Minimum field strengths for which protection may be sought in planning an analogue terrestrial television service	In force
BT.419-3	1990-06	Directivity and polarization discrimination of antennas in the reception of television broadcasting	In force
BT.470-7	2005-02	Conventional analogue television systems	In force
BT.471-1	1986-07	Nomenclature and description of colour bar signals	In force
BT.472-3	1990-06	Video-frequency characteristics of a television system to be used for the international exchange of programmes between countries that have adopted 625-line colour or monochrome systems	In force
BT.500-12	2009-09	Methodology for the subjective assessment of the quality of television pictures	In force
BT.565	1978-07	Protection ratios for 625-line television against radionavigation transmitters operating in the shared bands between 582 and 606 MHz	In force
BT.601-6	2007-01	Studio encoding parameters of digital television for standard 4:3 and wide screen 16:9 aspect ratios	In force
BT.653-3	1998-02	Teletext systems	In force
BT.654	1986-07	Subjective quality of television pictures in relation to the main impairments of the analogue composite television signal	In force
BT.655-7	2004-02	Radio-frequency protection ratios for AM vestigial sideband terrestrial television systems interfered with by unwanted analogue vision signals and their associated sound signals	In force
BT.656-5	2007-12	Interface for digital component video signals in 525-line and 625-line television systems operating at the 4:2:2 level of Recommendation ITU-R BT.601	In force
BT.709-5	2002-04	Parameter values for the HDTV standards for production and international programme exchange	In force
BT.710-4	1998-11	Subjective assessment methods for image quality in high-definition television	In force
BT.711-1	1992-09	Synchronizing reference signals for the component digital studio	In force
BT.796	1992-03	Parameters for enhanced compatible coding systems based on 625-line PAL and SECAM television systems	In force
BT.797-1	1994-07	Parameters for 4:3 enhanced television systems that are NTSC-compatible	In force
BT.798-1	1994-07	Digital television terrestrial broadcasting in the VHF/UHF bands	In force
BT.799-4	2007-12	Interface for digital component video signals in 525-line and 625 line television systems operating at the 4:4:4 level of Recommendation ITU-R BT.601	In force
BT.800-2	1995-10	User requirements for the transmission through contribution and primary distribution networks of digital television signals defined according to the 4:2:2 standard of Recommendation ITU-R BT.601 (Part A)	Withdrawn

BT.801-1	1995-10	Test signals for digitally encoded colour television signals conforming with Recommendations ITU-R BT.601 and ITU-R BT.656	In force
BT.802-1	1994-07	Test pictures and sequences for subjective assessments of digital codecs conveying signals produced according to Recommendation ITU-R BT.601	In force
BT.803	1992-03	The avoidance of interference generated by digital television studio equipment	In force
BT.804	1992-03	Characteristics of TV receivers essential for frequency planning with PAL/SECAM/NTSC television systems	In force
BT.805	1992-03	Assessment of impairment caused to television reception by a wind turbine	In force
BT.806	1992-03	Common channel raster for the distribution of D-MAC, D2-MAC and HD-MAC signals in collective antenna and cable distribution systems	In force
BT.807	1992-03	Reference model for data broadcasting	In force
BT.808	1992-03	The broadcasting of time and date information in coded form	In force
BT.809	1992-03	Programme delivery control (PDC) system for video recording	Withdrawn
BT.810	1992-03	Conditional-access broadcasting systems	Withdrawn
BT.811-1	1994-07	The subjective assessment of enhanced PAL and SECAM systems	In force
BT.812	1992-03	Subjective assessment of the quality of alphanumeric and graphic pictures in Teletext and similar services	In force
BT.813	1992-03	Methods for objective picture quality assessment in relation to impairments from digital coding of television signals	In force
BT.814-2	2007-09	Specifications and alignment procedures for setting of brightness and contrast of displays	In force
BT.815-1	1994-07	Specification of a signal for measurement of the contrast ratio of displays	In force
BT.1117-2	1997-10	Studio format parameters for enhanced 16:9 aspect ratio 625-line television systems (D- and D2-MAC, PALplus, enhanced SECAM)	In force
BT.1118-1	1997-10	Enhanced compatible widescreen television based on conventional television systems	In force
BT.1119-2	1998-02	Wide-screen signalling for broadcasting (Signalling for wide-screen and other enhanced television parameters)	In force
BT.1120-7	2007-12	Digital interfaces for HDTV studio signals	In force
BT.1121-1	1995-10	User requirements for the transmission through contribution and primary distribution networks of digital HDTV signals	Withdrawn
BT.1122-1	1995-10	User requirements for emission and secondary distribution systems for SDTV, HDTV and hierarchical coding schemes	In force
BT.1123	1994-07	Planning methods for 625-line terrestrial television in VHF/UHF bands	In force
BT.1124-3	2001-06	Reference signals for ghost cancelling in analogue television systems	In force
BT.1125	1994-07	Basic objectives for the planning and implementation of digital terrestrial television broadcasting systems	In force
BT.1126	1994-07	Data transmission protocols and transmission control scheme for data broadcasting systems using a data channel in satellite television broadcasting	In force
BT.1127	1994-07	Relative quality requirements of television broadcast systems	In force

BT.1128-2	1997-10	Subjective assessment of conventional television systems	In force
BT.1129-2	1998-02	Subjective assessment of standard definition digital television (SDTV) systems	In force
BT.1197-1	1998-02	Enhanced wide-screen PAL TV transmission system (the PALplus system)	In force
BT.1198	1995-10	Stereoscopic television based on R-and L-eye two channel signals	In force
BT.1199-1	2010-03	Use of bit-rate reduction in the HDTV studio environment	In force
BT.1200-1	1998-02	Target standard for digital video systems for the studio and for international programme exchange	Withdrawn
BT.1201-1	2004-03	Extremely high resolution imagery	In force
BT.1202	1995-10	Displays for future television systems	Withdrawn
BT.1203-1	2007-01	User requirements for generic video bit-rate reduction coding of digital TV signals for an end-to-end television system	In force
BT.1204	1995-10	Measuring methods for digital video equipment with analogue input/output	In force
BT.1205	1995-10	User requirements for the quality of baseband SDTV and HDTV signals when transmitted by digital Satellite News Gathering (SNG)	Withdrawn
BT.1206	1995-10	Spectrum shaping limits for digital terrestrial television broadcasting	In force
BT.1207-1	1997-10	Data access methods for digital terrestrial television broadcasting	In force
BT.1208-1	1997-10	Video coding for digital terrestrial television broadcasting	Withdrawn
BT.1209-1	1997-10	Service multiplex methods for digital terrestrial television broadcasting	In force
BT.1210-3	2004-02	Test materials to be used in subjective assessment	In force
BT.1298	1997-10	Enhanced wide-screen NTSC TV transmission system	In force
BT.1299-1	2010-03	The basic elements of a worldwide common family of systems for digital terrestrial television broadcasting	In force
BT.1300-3	2005-08	Service multiplex, transport, and identification methods for digital terrestrial television broadcasting	In force
BT.1301	1997-10	Data services in digital terrestrial television broadcasting	In force
BT.1302	1997-10	Interfaces for digital component video signals in 525-line and 625-line television systems operating at the 4:2:2 level of Recommendation ITU-R BT.601 (Part B)	Withdrawn
BT.1303	1997-10	Interfaces for digital component video signals in 525-line and 625-line television systems operating at the 4:4:4 level of Recommendation ITU-R BT.601 (Part B)	Withdrawn
BT.1304	1997-10	Checksum for error detection and status information in interfaces conforming with Recommendations ITU-R BT.656 and ITU-R BT.799	In force
BT.1305-1	2010-03	Digital audio and auxiliary data as ancillary data signals in interfaces conforming to Recommendations ITU-R BT.656 and ITU-R BT.799	In force
BT.1306-4	2009-09	Error correction, data framing, modulation and emission methods for digital terrestrial television broadcasting	In force
BT.1358-1	2007-09	Studio parameters of 625 and 525 line progressive television systems	In force
BT.1359-1	1998-11	Relative timing of sound and vision for broadcasting	In force

BT.1360	1998-02	Capture characteristics for high-definition images	Withdrawn
BT.1361	1998-02	Worldwide unified colorimetry and related characteristics of future television and imaging systems	In force
BT.1362	1998-02	Interfaces for digital component video signals in 525- and 625-line progressive scan television systems	Withdrawn
BT.1363-1	1998-11	Jitter specifications and methods for jitter measurements of bit-serial signals conforming to Recommendations ITU-R BT.656, ITU-R BT.799 and ITU-R BT.1120	In force
BT.1364-2	2010-03	Format of ancillary data signals carried in digital component studio interfaces	In force
BT.1365-1	2010-03	24-bit digital audio format as ancillary data signals in HDTV serial interfaces	In force
BT.1366-2	2009-01	Transmission of time code and control code in the ancillary data space of a digital television stream according to Recommendations ITU-R BT.656, ITU-R BT.799 and ITU-R BT.1120	In force
BT.1367-1	2007-12	Serial digital fibre transmission system for signals conforming to Recommendations ITU-R BT.656, ITU-R BT.799 and ITU-R BT.1120	In force
BT.1368-8	2009-05	Planning criteria for digital terrestrial television services in the VHF/UHF bands	In force
BT.1369	1998-02	Basic principles for a worldwide common family of systems for the provision of interactive television services	In force
BT.1377	1998-11	Labelling of video and audio apparatus throughput (processing) delay	In force
BT.1378	1998-11	Basic requirements for multimedia-hypermedia broadcasting	Withdrawn
BT.1379-2	2007-09	Safe areas of wide-screen 16:9 and standard 4:3 aspect ratio productions to achieve a common format during a transition period to wide screen 16:9 broadcasting	In force
BT.1380-1	2006-07	Standards for bit rate reduction coding systems for SDTV	In force
BT.1381-3	2007-12	Serial digital interface-based transport interface for compressed television signals and packetized data in networked television production based on Recommendation ITU-R BT.656	In force
BT.1382	1998-11	Assessment of the picture quality of multi-programme services	In force
BT.1434	2000-03	Network independent protocols for interactive systems	In force
BT.1435	2000-03	Digital sound and television broadcasting interaction channel through the PSTN/ISDN	In force
BT.1436	2000-03	Transmission systems for interactive cable television services	In force
BT.1437	2000-03	User requirements for digital coding for multi-programme television transmission	Withdrawn
BT.1438	2000-03	Subjective assessment of stereoscopic television pictures	In force
BT.1439-1	2006-02	Measurement methods applicable in the analogue television studio and the overall analogue television system	In force
BT.1507	2000-10	Interaction channel using digital enhanced cordless telecommunications (DECT) system	In force
BT.1508	2000-10	Interaction channel using global system for mobile communications (GSM)	In force

BT.1532	2001-06	The MPEG-2 recoding data set for the preservation of picture quality in cascade of MPEG-2 codecs	Withdrawn
BT.1533	2001-06	Editing information for MPEG-2 video elementary streams for applications in television production	Withdrawn
BT.1543	2001-08	1 280 720, 16:9 progressively-captured image format for production and international programme exchange in the 60 Hz environment	In force
BT.1549	2001-11	Data link protocol for interaction channel	In force
BT.1550	2001-12	MPEG-2 recoding data set for the preservation of picture quality in cascade of MPEG-2 codecs compressed stream format	Withdrawn
BT.1551	2001-12	Transport of MPEG-2 recoding data set as ancillary data packets	Withdrawn
BT.1562	2002-04	Consistency in the alignment of displays in production rooms and control rooms	In force
BT.1563	2002-04	Data encoding protocol using key-length-value	In force
BT.1564	2002-04	Interaction channel using local multipoint distribution systems	In force
BT.1576	2002-06	Transport of alternate source formats through Recommendation ITU-R BT.1120	In force
BT.1577	2002-06	Serial digital interface-based transport interface for compressed television signals in networked television production based on Recommendation ITU-R BT.1120	In force
BT.1578	2002-06	Content package format, elements, and metadata definition for applications in television production utilizing interfaces based on Recommendation ITU-R BT.1381	In force
BT.1614	2003-01	Video payload identification for digital television interfaces	In force
BT.1616	2003-05	Data stream format for the exchange of DV-based audio, data and compressed video over interfaces complying with Recommendation ITU-R BT.1381	In force
BT.1617	2003-05	Format for transmission of DV compressed video, audio and data over interfaces complying with Recommendation ITU-R BT.1381	In force
BT.1618	2003-05	Data structure for DV-based audio, data and compressed video at data rates of 25 and 50 Mbit/s	In force
BT.1619	2003-05	Vertical ancillary data mapping for serial digital interface	In force
BT.1620-1	2010-03	Data structure for DV-based audio, data and compressed video at a data rate of 100 Mbit/s	In force
BT.1662	2003-12	General reference chain and management of post-processing headroom for programme essence in large screen digital imagery applications	In force
BT.1663	2003-12	Expert viewing methods to assess the quality of systems for the digital display of large screen digital imagery in theatres	In force
BT.1664	2003-12	Representation of various image aspect ratios into the image of large screen digital imagery applications that use a 16:9 raster	In force
BT.1665	2003-12	Considerations for colour encoding and spatial resolution for large screen digital imagery display	In force
BT.1666	2003-12	User requirements for large screen digital imagery applications intended for presentation in a theatrical environment	In force

BT.1667	2003-12	Terrestrial return channel for interactive broadcasting services operating in the VHF/UHF broadcast band based on Recommendation ITU-R BT.1306	In force
BT.1674	2004-02	Metadata requirements for production and post-production in broadcasting	In force
BT.1675	2004-02	System design and operational practices for minimizing disturbance from loop delay in broadcast systems	In force
BT.1676	2004-02	Methodological framework for specifying accuracy and cross-calibration of video quality metrics	In force
BT.1680	2004-03	Baseband imaging format for distribution of large screen digital imagery applications intended for presentation in a theatrical environment	In force
BT.1683	2004-06	Objective perceptual video quality measurement techniques for standard definition digital broadcast television in the presence of a full reference	In force
BT.1685	2004-09	Structure of inter-station control data conveyed by ancillary data packets	In force
BT.1686	2004-09	Methods of measurement of image presentation parameters for large screen digital imagery programme presentation in a theatrical environment	In force
BT.1687-1	2006-02	Video bit-rate reduction for real-time distribution of large-screen digital imagery applications for presentation in a theatrical environment	In force
BT.1689	2004-09	Guidelines on the presentation in large-screen digital imagery environments of programmes that are provided in image formats conforming to Recommendation ITU-R BT.601	In force
BT.1690	2004-09	Assumed characteristics of venues intended for large-screen digital imagery programme presentation in a theatrical environment	In force
BT.1691-1	2009-09	Adaptive image quality control in digital television systems	In force
BT.1692-1	2009-09	Optimization of the quality of colour reproduction in digital television	In force
BT.1699-1	2009-09	Harmonization of declarative application formats for interactive TV	In force
BT.1700	2005-02	Characteristics of composite video signals for conventional analogue television systems	In force
BT.1701-1	2005-08	Characteristics of radiated signals of conventional analogue television systems	In force
BT.1702	2005-02	Guidance for the reduction of photosensitive epileptic seizures caused by television	In force
BT.1720	2005-07	Quality of service ranking and measurement methods for digital video broadcasting services delivered over broadband Internet protocol networks	In force
BT.1721	2005-07	Objective measurement of perceptual image quality of large screen digital imagery applications for theatrical presentation	In force
BT.1722-1	2007-12	Harmonization of the instruction set for the execution engine for interactive TV applications	In force
BT.1727	2005-04	Terrestrial and satellite delivery of programme material to large screen digital imagery venues	In force
BT.1728-1	2010-03	Guidance on the use of flat panel displays in television production and postproduction	In force
BT.1729	2005-04	Common 16 x 9/4 x 3 aspect ratio digital television reference test pattern	In force
BT.1735	2005-08	Methods for objective quality coverage assessment of digital terrestrial television broadcasting signals of System B specified in Recommendation ITU-R BT.1306	In force

BT.1736	2006-02	Broadcasting of redistribution signalling for television	In force
BT.1737	2006-02	Use of the ITU-T Recommendation H.264 (MPEG-4/AVC) video source-coding method to transport high definition TV programme material	In force
BT.1769	2006-07	Parameter values for an expanded hierarchy of LSDI image formats for production and international programme exchange	In force
BT.1774-1	2007-04	Use of satellite and terrestrial broadcast infrastructures for public warning, disaster mitigation and relief	In force
BT.1775	2006-07	File format with editing capability, for the exchange of metadata, audio, video, data essence and ancillary data for use in broadcasting	In force
BT.1786	2007-04	Criterion to assess the impact of interference to the terrestrial broadcasting service (BS)	In force
BT.1788	2007-01	Methodology for the subjective assessment of video quality in multimedia applications	In force
BT.1789	2007-04	A method to reconstruct received video using transmission error information for packet video transmission	In force
BT.1790	2007-01	Requirements for monitoring of broadcasting chains during operation	In force
BT.1832	2007-12	Digital video broadcast-return channel terrestrial (DVB-RCT) deployment scenarios and planning considerations	In force
BT.1833	2007-12	Broadcasting of multimedia and data applications for mobile reception by handheld receivers	In force
BT.1845-1	2010-03	Guidelines on metrics to be used when tailoring television programmes to broadcasting applications at various image quality levels, display sizes and aspect ratios	In force
BT.1846	2008-10	Notations for video systems	In force
BT.1847	2009-01	1 280 × 720, 16:9 progressively-captured image format for production and international programme exchange in the 50 Hz environment	In force
BT.1848	2009-05	Safe areas of wide-screen 16:9 aspect ratio digital productions	In force
BT.1852	2009-09	Conditional-access systems for digital broadcasting	In force
BT.1865	2010-03	Metadata to monitor errors of SDTV and HDTV signals in the broadcasting chain	In force
BT.1866	2010-03	Objective perceptual video quality measurement techniques for broadcasting applications using low definition television in the presence of a full reference signal	In force
BT.1867	2010-03	Objective perceptual visual quality measurement techniques for broadcasting applications using low definition television in the presence of a reduced bandwidth reference	In force
BT.1868	2010-03	User requirements for codecs for transmission of television signals through contribution, primary distribution, and SNG networks	In force
BT.1869	2010-03	Multiplexing scheme for variable-length packets in digital multimedia broadcasting systems	In force
BT.1870	2010-03	Video coding for digital television broadcasting emission	In force
BT.1871	2010-03	User requirements for wireless microphones	In force
BT.1872	2010-03	User requirements for digital electronic news gathering	In force

BT.1877	2010-05	Error-correction, data framing, modulation and emission methods for second generation of digital terrestrial television broadcasting systems	In force

Recommendation count: 170

Series F : Fixed service

Number	*Approval Date*	*Recommendation Title*	*Status*
F.106-2	1999-05	The use of diversity for voice-frequency telegraphy on HF radio circuits	In force
F.162-3	1992-03	Use of directional transmitting antennas in the fixed service operating in bands below about 30 MHz	In force
F.240-7	2006-02	Signal-to-interference protection ratios for various classes of emission in the fixed service below about 30 MHz	In force
F.246-3	1974-07	Frequency-shift keying	In force
F.268-1	1970-07	Interconnection at audio frequencies of radio-relay systems for telephony	Withdrawn
F.270-2	1978-07	Interconnection at video signal frequencies of radio-relay systems for television	Withdrawn
F.275-3	1982-07	Pre-emphasis characteristic for frequency modulation radio-relay systems for telephony using frequency-division multiplex	Withdrawn
F.276-2	1974-07	Frequency deviation and the sense of modulation for analogue radio-relay systems for television	Withdrawn
F.283-5	1990-06	Radio-frequency channel arrangements for low and medium capacity analogue or digital fixed wireless systems operating in the 2 GHz band	Withdrawn
F.290-3	1978-07	Maintenance measurements on radio-relay systems for telephony using frequency-division multiplex	Withdrawn
F.302-3	1997-05	Limitation of interference from trans-horizon radio-relay systems	In force
F.305	1959-07	Stand-by arrangements for radio-relay systems for television and telephony	Withdrawn
F.306	1959-07	Procedure for the international connection of radio-relay systems with different characteristics	Withdrawn
F.335-2	1970-07	Use of radio links in international telephone circuits	Withdrawn
F.338-2	1970-07	Bandwidth required at the output of a telegraph or telephone receiver	In force
F.339-7	2006-02	Bandwidths, signal-to-noise ratios and fading allowances in complete systems	In force
F.342-2	1970-07	Automatic error-correcting system for telegraph signals transmitted over radio circuits	Withdrawn
F.345	1963-07	Telegraph distortion	Withdrawn
F.347	1963-07	Classification of multi-channel radiotelegraph systems for long-range circuits operating at frequencies below about 30 MHz and the designation of the channels in these systems	Withdrawn
F.348-4	1990-06	Arrangement of channels in multi-channel single-sideband and independent-sideband transmitters for long-range circuits operating at frequencies below about 30 MHz	In force
F.349-5	1999-05	Frequency stability required for systems operating in the HF fixed service to make the use of automatic frequency control superfluous	Withdrawn
F.380-4	1986-07	Interconnection at baseband frequencies of radio-relay systems for telephony using frequency-division multiplex	Withdrawn

F.381-2	1970-07	Conditions relating to line regulating and other pilots and to limits for the residues of signals outside the baseband in the interconnection of radio-relay and line systems for telephony	Withdrawn
F.382-8	2006-04	Radio-frequency channel arrangements for fixed wireless systems operating in the 2 and 4 GHz bands	In force
F.383-8	2007-09	Radio-frequency channel arrangements for high-capacity fixed wireless systems operating in the lower 6 GHz (5 925 to 6 425 MHz) band	In force
F.384-10	2007-09	Radio-frequency channel arrangements for medium- and high-capacity digital fixed wireless systems operating in the upper 6 GHz (6 425-7 125 MHz) band	In force
F.385-9	2007-09	Radio-frequency channel arrangements for fixed wireless systems operating in the 7 GHz (7 110-7 900 MHz) band	In force
F.386-8	2007-09	Radio-frequency channel arrangements for fixed wireless systems operating in the 8 GHz (7 725 to 8 500 MHz) band	In force
F.388	1963-07	Radio-frequency channel arrangements for trans-horizon radio-relay systems	Withdrawn
F.389-2	1974-07	Preferred characteristics of auxiliary radio-relay systems operating in the 2, 4, 6 or 11 GHz bands	Withdrawn
F.390-4	1982-07	Definitions of terms and references concerning hypothetical reference circuits and hypothetical reference digital paths for radio-relay systems	Withdrawn
F.391	1963-07	Hypothetical reference circuit for radio-relay systems for telephony using frequency-division multiplex with a capacity of 12 to 60 telephone channels	Withdrawn
F.392	1963-07	Hypothetical reference circuit for radio-relay systems for telephony using frequency-division multiplex with a capacity of more than 60 telephone channels	Withdrawn
F.393-4	1982-07	Allowable noise power in the hypothetical reference circuit for radio-relay systems for telephony using frequency-division multiplex	Withdrawn
F.395-2	1978-07	Noise in the radio portion of circuits to be established over real radio-relay links for FDM telephony	Withdrawn
F.396-1	1966-07	Hypothetical reference circuit for trans-horizon radio-relay systems for telephony using frequency-division multiplex	Withdrawn
F.397-3	1978-07	Allowable noise power in the hypothetical reference circuit of trans-horizon radio-relay systems for telephony using frequency-division multiplex	Withdrawn
F.398-3	1974-07	Measurements of noise in actual traffic over radio-relay systems for telephony using frequency-division multiplex	Withdrawn
F.399-3	1978-07	Measurement of noise using a continuous uniform spectrum signal on frequency-division multiplex telephony radio-relay systems	Withdrawn
F.400-2	1970-07	Service channels to be provided for the operation and maintenance of radio-relay systems	Withdrawn
F.401-2	1970-07	Frequencies and deviations of continuity pilots for frequency modulation radio-relay systems for television and telephony	Withdrawn
F.402-2	1978-07	The preferred characteristics of a single sound channel simultaneously transmitted with a television signal on an analogue radio-relay system	Withdrawn
F.403-3	1978-07	Intermediate-frequency characteristics for the interconnection of analogue radio-relay systems	Withdrawn
F.404-2	1970-07	Frequency deviation for analogue radio-relay systems for telephony using frequency-division multiplex	Withdrawn

F.405-1	1970-07	Pre-emphasis characteristics for frequency modulation radio-relay systems for television	Withdrawn
F.436-5	1999-05	Arrangement of voice-frequency, frequency-shift telegraph channels over HF radio circuits	Withdrawn
F.444-3	1982-07	Preferred characteristics for multi-line switching arrangements of analogue radio-relay systems	Withdrawn
F.454-1	1978-07	Pilot carrier level for HF single-sideband and independent-sideband reduced-carrier systems	In force
F.455-2	1992-03	Improved transmission system for HF radiotelephone circuits	Withdrawn
F.463-1	1978-07	Limits for the residues of signals outside the baseband of radio-relay systems for television	Withdrawn
F.480	1974-07	Semi-automatic operation on HF radiotelephone circuits. Devices for remote connection to an automatic exchange by radiotelephone circuits	Withdrawn
F.497-7	2007-09	Radio-frequency channel arrangements for fixed wireless systems operating in the 13 GHz (12.75-13.25 GHz) frequency band	In force
F.518-1	1994-09	Single-channel simplex ARQ telegraph system	Withdrawn
F.519	1978-07	Single-channel duplex ARQ telegraph system	Withdrawn
F.520-2	1992-03	Use of high frequency ionospheric channel simulators	Withdrawn
F.555-1	1997-05	Permissible noise in the hypothetical reference circuit of radio-relay systems for television	Withdrawn
F.556-1	1986-07	Hypothetical reference digital path for radio-relay systems which may form part of an integrated services digital network with a capacity above the second hierarchical level	In force
F.557-4	1997-09	Availability objective for radio-relay systems over a hypothetical reference circuit and a hypothetical reference digital path	In force
F.592-4	2007-09	Vocabulary of terms for the fixed service	In force
F.593	1982-07	Noise in real circuits of multi-channel trans-horizon FM radio-relay systems of less than 2 500 km	Withdrawn
F.594-4	1997-09	Error performance objectives of the hypothetical reference digital path for radio-relay systems providing connections at a bit rate below the primary rate and forming part or all of the high grade portion of an integrated services digital network	In force
F.595-9	2006-02	Radio-frequency channel arrangements for fixed wireless systems operating in the 18 GHz frequency band	In force
F.596-1	1994-09	Interconnection of digital radio-relay systems	Withdrawn
F.612	1986-07	Measurement of reciprocal mixing in HF communication receivers in the fixed service	In force
F.613	1986-07	The use of ionospheric channel sounding systems operating in the fixed service at frequencies below about 30 MHz	In force
F.634-4	1997-09	Error performance objectives for real digital radio-relay links forming part of the high-grade portion of international digital connections at a bit rate below the primary rate within an integrated services digital network	In force
F.635-6	2001-05	Radio-frequency channel arrangements based on a homogeneous pattern for fixed wireless systems operating in the 4 GHz band	In force

F.636-3	1994-09	Radio-frequency channel arrangements for fixed wireless systems operating in the 15 GHz band (14.4-15.35 GHz) band	In force
F.637-3	1999-02	Radio-frequency channel arrangements for fixed wireless systems operating in the 23 GHz band	In force
F.695	1990-06	Availability objectives for real digital radio-relay links forming part of a high-grade circuit within an integrated services digital network	In force
F.696-2	1997-09	Error performance and availability objectives for hypothetical reference digital sections forming part or all of the medium-grade portion of an ISDN connection at a bit rate below the primary rate utilizing digital radio-relay systems	In force
F.697-2	1997-09	Error performance and availability objectives for the local-grade portion at each end of an ISDN connection at a bit rate below the primary rate utilizing digital radio-relay systems	In force
F.698-2	1994-09	Preferred frequency bands for trans-horizon radio-relay systems	In force
F.699-7	2006-04	Reference radiation patterns for fixed wireless system antennas for use in coordination studies and interference assessment in the frequency range from 100 MHz to about 70 GHz	In force
F.700-2	1994-09	Error performance and availability measurement algorithm for digital radio-relay links at the system bit-rate interface	Withdrawn
F.701-2	1997-09	Radio-frequency channel arrangements for digital point-to-multipoint radio systems operating in frequency bands in the range 1 350 to 2 690 MHz (1.5, 1.8, 2.0, 2.2, 2.4 and 2.6 GHz)	In force
F.745-1	2002-02	Certain ITU-R Recommendations for analogue radio-relay systems, including those which have been deleted	Withdrawn
F.746-9	2007-09	Radio-frequency arrangements for fixed service systems	In force
F.747	1992-03	Radio-frequency channel arrangements for fixed wireless systems operating in the 10 GHz band	In force
F.748-4	2001-05	Radio-frequency arrangements for systems of the fixed service operating in the 25, 26 and 28 GHz bands	In force
F.749-2	2001-05	Radio-frequency arrangements for systems of the fixed service operating in the 38 GHz band	In force
F.750-4	2000-05	Architectures and functional aspects of radio-relay systems for synchronous digital hierarchy (SDH)-based network	In force
F.751-2	1997-09	Transmission characteristics and performance requirements of radio-relay systems for SDH-based networks	In force
F.752-2	2006-02	Diversity techniques for point-to-point fixed wireless systems	In force
F.753	1992-03	Preferred methods and characteristics for the supervision and protection of digital radio-relay systems	Withdrawn
F.754	1992-03	Radio-relay systems in bands 8 and 9 for the provision of telephone trunk connections in rural areas	Withdrawn
F.755-2	1999-05	Point-to-multipoint systems in the fixed service	In force
F.756	1992-03	TDMA point-to-multipoint systems used as radio concentrators	Withdrawn
F.757-3	2003-02	Basic system requirements and performance objectives for fixed wireless access using mobile-derived technologies offering telephony and data communication services	In force

F.758-4	2005-01	Considerations in the development of criteria for sharing between the terrestrial fixed service and other services	In force
F.759	1992-03	The use of frequencies in the band 500 to 3 000 MHz for radio-relay systems	Withdrawn
F.760-1	1994-09	Protection of terrestrial line-of-sight radio-relay systems against interference from the broadcasting-satellite service in the bands near 20 GHz	In force
F.761	1992-03	Frequency sharing between the fixed service and passive sensors in the band 18.6 to 18.8 GHz	Withdrawn
F.762-2	1995-10	Main characteristics of remote control and monitoring systems for HF receiving and transmitting stations	Withdrawn
F.763-5	2005-01	Data transmission over HF circuits using phase shift keying or quadrature amplitude modulation	In force
F.764-1	1994-09	Minimum requirements for HF radio systems using a packet transmission protocol	In force
F.1092-1	1997-09	Error performance objectives for constant bit rate digital path at or above the primary rate carried by digital radio-relay systems which may form part of the international portion of a 27 500 km hypothetical reference path	Withdrawn
F.1093-2	2006-04	Effects of multipath propagation on the design and operation of line-of-sight digital fixed wireless systems	In force
F.1094-2	2007-09	Maximum allowable error performance and availability degradations to digital fixed wireless systems arising from radio interference from emissions and radiations from other sources	In force
F.1095	1994-09	A procedure for determining coordination area between radio-relay stations of the fixed service	In force
F.1096	1994-09	Methods of calculating line-of-sight interference into radio-relay systems to account for terrain scattering	In force
F.1097-1	2000-05	Interference mitigation options to enhance compatibility between radar systems and digital radio-relay systems	In force
F.1098-1	1995-10	Radio-frequency channel arrangements for fixed wireless systems in the 1 900-2 300 MHz band	In force
F.1099-4	2007-09	Radio-frequency channel arrangements for high- and medium-capacity digital fixed wireless systems in the upper 4 GHz (4 400-5 000 MHz) band	In force
F.1100	1994-09	Radio-frequency channel arrangements for radio-relay systems operating in the 55 GHz band	Withdrawn
F.1101	1994-09	Characteristics of digital fixed wireless systems below about 17 GHz	In force
F.1102-2	2005-01	Characteristics of fixed wireless systems operating in frequency bands above about 17 GHz	In force
F.1103-1	2007-09	Basic requirements and technologies for fixed wireless access systems operating in bands below 3 GHz for the provision of wireless subscriber connections in rural areas	In force
F.1104	1994-09	Requirements for point-to-multipoint radio systems used in the local grade portion of an ISDN connection	Withdrawn
F.1105-2	2006-02	Fixed wireless systems for disaster mitigation and relief operations	In force
F.1106	1994-09	Effects of propagation on the design and operation of trans-horizon radio-relay systems	In force

F.1107-1	2002-05	Probabilistic analysis for calculating interference into the fixed service from satellites occupying the geostationary orbit	In force
F.1108-4	2005-01	Determination of the criteria to protect fixed service receivers from the emissions of space stations operating in non-geostationary orbits in shared frequency bands	In force
F.1109	1994-09	ITU-Recommendations relating to systems in the fixed service operating at frequencies below about 30 MHz which are not reprinted	Withdrawn
F.1110-3	2003-02	Adaptive radio systems for frequencies below about 30 MHz	In force
F.1111-1	1995-10	Improved Lincompex system for HF radiotelephone circuits	In force
F.1112-1	1995-10	Digitized speech transmissions for systems operating below about 30 MHz	In force
F.1113	1994-09	Radio systems employing meteor-burst propagation	In force
F.1189-1	1997-09	Error performance objectives for constant bit rate digital paths at or above the primary rate carried by digital radio-relay systems which may form part or all of the national portion of a 27 500 km hypothetical reference path	Withdrawn
F.1190	1995-10	Protection criteria for digital radio-relay systems to ensure compatibility with radar systems in the radiodetermination service	In force
F.1191-2	2001-05	Bandwidths and unwanted emissions of digital fixed service systems	In force
F.1192	1995-10	Traffic capacity of automatically controlled radio systems and networks in the HF fixed service	In force
F.1241	1997-05	Performance degradation due to interference from other services sharing the same frequency bands on a primary basis with digital radio-relay systems operating at or above the primary rate and which may form part of the international portion of a 27 500 km hypothetical reference path	Withdrawn
F.1242	1997-05	Radio-frequency channel arrangements for digital radio systems operating in the range 1 350 MHz to 1 530 MHz	In force
F.1243	1997-05	Radio-frequency channel arrangements for digital radio systems operating in the range 2 290-2 670 MHz	In force
F.1244	1997-05	Radio local area networks (RLANs)	Withdrawn
F.1245-1	2000-05	Mathematical model of average radiation patterns for line-of-sight point-to-point radio-relay system antennas for use in certain coordination studies and interference assessment in the frequency range from 1 GHz to about 70 GHz	In force
F.1246	1997-05	Reference bandwidth of receiving stations in the fixed service to be used in coordination of frequency assignments with transmitting space stations in the mobile-satellite service in the 1-3 GHz range	In force
F.1247-2	2009-06	Technical and operational characteristics of systems in the fixed service to facilitate sharing with the space research, space operation and Earth exploration-satellite services operating in the bands 2 025-2 110 MHz and 2 200-2 290 MHz	In force
F.1248	1997-05	Limiting interference to satellites in the space science services from the emissions of trans-horizon radio-relay systems in the bands 2 025-2 110 MHz and 2 200-2 290 MHz	In force
F.1249-2	2009-10	Technical and operational requirements that facilitate sharing between point to point systems in the fixed service and the inter-satellite service in the band 25.25-27.5 GHz	In force
F.1330-2	2006-04	Performance limits for bringing into service the parts of international plesiochronous digital hierarchy and synchronous digital hierarchy paths and sections implemented by digital fixed wireless systems	In force

F.1331	1997-09	Performance degradation due to interference from other services sharing the same frequency bands on a primary basis with analogue radio-relay systems for television	Withdrawn
F.1332-1	1999-05	Radio-frequency signal transport through optical fibres	In force
F.1333-1	1999-05	Estimation of the actual elevation angle from a station in the fixed service towards a space station taking into account atmospheric refraction	In force
F.1334	1997-09	Protection criteria for systems in the fixed service sharing the same frequency bands in the 1 to 3 GHz range with the land mobile service	In force
F.1335	1997-09	Technical and operational considerations in the phased transitional approach for bands shared between the mobile-satellite service and the fixed service at 2 GHz	In force
F.1336-2	2007-01	Reference radiation patterns of omnidirectional, sectoral and other antennas in point-to-multipoint systems for use in sharing studies in the frequency range from 1 GHz to about 70 GHz	In force
F.1337	1997-09	Frequency management of adaptive HF radio systems and networks using FMCW oblique-incidence sounding	In force
F.1338	1997-10	Threshold levels to determine the need to coordinate between particular systems in the broadcasting-satellite service (sound) in the geostationary-satellite orbit for space-to-Earth transmissions and the fixed service in the band 1 452-1 492 MHz	In force
F.1397-2	2002-05	Error performance objectives for real digital radio links used in the international portion of a 27 500 km hypothetical reference path at or above the primary rate	Withdrawn
F.1398	1999-05	Performance degradation due to interference from other services sharing the same frequency bands on a primary basis with digital radio-relay systems operating at or above the primary rate and which may form part of the national portion of a 27 500 km hypothetical reference path	Withdrawn
F.1399-1	2001-05	Vocabulary of terms for wireless access	In force
F.1400	1999-05	Performance and availability requirements and objectives for fixed wireless access to public switched telephone network	In force
F.1401-1	2004-01	Considerations for the identification of possible frequency bands for fixed wireless access and related sharing studies	In force
F.1402	1999-05	Frequency sharing criteria between a land mobile wireless access system and a fixed wireless access system using the same equipment type as the mobile wireless access system	In force
F.1403	1999-05	Power flux-density criteria in ITU-R Recommendations for protection of systems in the fixed service in frequency bands shared with space stations of various space services	In force
F.1404-1	2002-05	Minimum propagation attenuation due to atmospheric gases for use in frequency sharing studies between systems in the fixed service and systems in the broadcasting-satellite, mobile-satellite and space science services	In force
F.1405	1999-05	Guidance to facilitate coordination and use of frequency bands shared between the fixed service and mobile-satellite service in the frequency range 1-3 GHz	Withdrawn
F.1487	2000-05	Testing of HF modems with bandwidths of up to about 12 kHz using ionospheric channel simulators	In force
F.1488	2000-05	Frequency block arrangements for fixed wireless access systems in the range 3 400-3 800 MHz	In force

F.1489	2000-05	A methodology for assessing the level of operational compatibility between fixed wireless access and radiolocation systems when sharing the band 3.4-3.7 GHz	In force
F.1490-1	2007-09	Generic requirements for fixed wireless access systems	In force
F.1491-2	2002-05	Error performance objectives for real digital radio links used in the national portion of a 27 500 km hypothetical reference path at or above the primary rate	Withdrawn
F.1492	2000-05	Availability objectives for real digital radio-relay links forming part of international portion constant bit rate digital path at or above the primary rate	Withdrawn
F.1493	2000-05	Availability objectives for real digital radio-relay links forming part of national portion constant bit rate digital path at or above the primary rate	Withdrawn
F.1494	2000-05	Interference criteria to protect the fixed service from time varying aggregate interference from other services sharing the 10.7-12.75 GHz band on a co-primary basis	In force
F.1495-1	2007-09	Interference criteria to protect the fixed service from time varying aggregate interference from other radiocommunication services sharing the 17.7-19.3 GHz band on a co-primary basis	In force
F.1496-1	2002-02	Radio-frequency channel arrangements for fixed wireless systems operating in the band 51.4-52.6 GHz	In force
F.1497-1	2002-02	Radio-frequency channel arrangements for fixed wireless systems operating in the band 55.78-59 GHz	In force
F.1498-1	2002-05	Deployment characteristics of fixed service systems in the band 37-40 GHz for use in sharing studies	In force
F.1499	2000-05	Radio transmission systems for fixed broadband wireless access based on cable modem standard	In force
F.1500	2000-05	Preferred characteristics of systems in the fixed service using high altitude platforms operating in the bands 47.2-47.5 GHz and 47.9-48.2 GHz	In force
F.1501	2000-05	Coordination distance for systems in the fixed service (FS) involving high-altitude platform stations (HAPSS) sharing the frequency bands 47.2-47.5 GHz and 47.9-48.2 GHz with other systems in the fixed service	In force
F.1502	2000-05	Protection of the fixed service in the frequency band 8 025-8 400 MHz sharing with geostationary-satellite systems of the Earth exploration-satellite service (space-to-Earth)	In force
F.1509-1	2009-10	Technical and operational requirements that facilitate sharing between point to multipoint systems in the fixed service and the inter-satellite service in the band 25.25-27.5 GHz	In force
F.1518	2001-05	Spectrum requirement methodology for fixed wireless access and mobile wireless access networks using the same type of equipment, when coexisting in the same frequency band	In force
F.1519	2001-05	Guidance on frequency arrangements based on frequency blocks for systems in the fixed service	In force
F.1520-2	2003-02	Radio-frequency arrangements for systems in the fixed service operating in the band 31.8-33.4 GHz	In force
F.1565	2002-05	Performance degradation due to interference from other services sharing the same frequency bands on a co-primary basis with real digital fixed wireless systems used in the international and national portions of a 27 500 km hypothetical reference path at or above the primary rate	In force

F.1566-1	2007-01	Performance limits for maintenance of digital fixed wireless systems operating in plesiochronous and synchronous digital hierarchy-based international paths and sections	In force
F.1567	2002-05	Radio-frequency channel arrangement for digital fixed wireless systems operating in the frequency band 406.1-450 MHz	In force
F.1568-1	2005-01	Radio-frequency block arrangements for fixed wireless access systems in the range 10.15-10.3/10.5-10.65 GHz	In force
F.1569	2002-05	Technical and operational characteristics for the fixed service using high altitude platform stations in the bands 27.5-28.35 GHz and 31-31.3 GHz	In force
F.1570-2	2010-04	Impact of uplink transmission in the fixed service using high altitude platform stations on the Earth exploration-satellite service (passive) in the 31.3-31.8 GHz band	In force
F.1571	2002-05	Mitigation techniques for use in reducing the potential for interference between airborne stations in the radionavigation service and stations in the fixed service in the band 31.8-33.4 GHz	In force
F.1605	2003-02	Error performance and availability estimation for synchronous digital hierarchy terrestrial fixed wireless systems	In force
F.1606	2003-02	Interference criteria to protect fixed wireless systems from time varying aggregate interference produced by non-geostationary satellites operating in other services sharing the 37-40 GHz and 40.5-42.5 GHz bands on a co-primary basis	In force
F.1607	2003-02	Interference mitigation techniques for use by high altitude platform stations in the 27.5-28.35 GHz and 31.0-31.3 GHz bands	In force
F.1608	2003-02	Frequency sharing between systems in the fixed service using high altitude platform stations and conventional systems in the fixed service in the bands 47.2-47.5 and 47.9-48.2 GHz	In force
F.1609-1	2006-04	Interference evaluation from fixed service systems using high altitude platform stations to conventional fixed service systems in the bands 27.5-28.35 GHz and 31-31.3 GHz	In force
F.1610	2003-02	Planning, design and implementation of HF fixed service radio systems	In force
F.1611	2003-02	Prediction methods for adaptive HF system planning and operation	In force
F.1612	2003-02	Interference evaluation of the fixed service using high altitude platform stations to protect the radio astronomy service from uplink transmission in high altitude platform station systems in the 31.3-31.8 GHz band	In force
F.1613	2003-02	Operational and deployment requirements for fixed wireless access systems in the fixed service in Region 3 to ensure the protection of systems in the Earth exploration-satellite service(active) and the space research service (active) in the band 5 250-5 350 MHz	In force
F.1668-1	2007-01	Error performance objectives for real digital fixed wireless links used in 27 500 km hypothetical reference paths and connections	In force
F.1669-1	2007-09	Interference criteria of fixed wireless systems operating in the 37-40 GHz and 40.5-42.5 GHz bands with respect to satellites in the geostationary orbit	In force
F.1670-1	2006-02	Protection of fixed wireless systems from terrestrial digital video and sound broadcasting systems in shared VHF and UHF bands	In force
F.1671	2004-01	Guidelines for a process to address the deployment of area-licensed fixed wireless systems operating in neighbouring countries	In force
F.1703	2005-01	Availability objectives for real digital fixed wireless links used in 27 500 km hypothetical reference paths and connections	In force

F.1704	2005-01	Characteristics of multipoint-to-multipoint fixed wireless systems with mesh network topology operating in frequency bands above about 17 GHz	In force
F.1705	2005-01	Analysis and optimization of the error performance of digital fixed wireless systems for the purpose of bringing into service and maintenance	In force
F.1706	2005-01	Protection criteria for point-to-point fixed wireless systems sharing the same frequency band with nomadic wireless access systems in the 4 to 6 GHz range	In force
F.1760	2006-02	Methodology for the calculation of aggregate equivalent isotropically radiated power (a.e.i.r.p.) distribution from point-to-multipoint high-density applications in the fixed service operating in bands above 30 GHz identified for such use	In force
F.1761	2006-02	Characteristics of HF fixed radiocommunication systems	In force
F.1762	2006-02	Characteristics of enhanced applications for high frequency (HF) radiocommunication systems	In force
F.1763	2006-04	Radio interface standards for broadband wireless access systems in the fixed service operating below 66 GHz	In force
F.1764	2006-04	Methodology to evaluate interference from fixed service systems using high altitude platform stations to fixed wireless systems in the bands above 3 GHz	In force
F.1765	2006-04	Methodology for determining the aggregate equivalent isotropically radiated power from point-to-point high-density applications in the fixed service operating in bands above 30 GHz	In force
F.1766	2006-04	Methodology to determine the probability of a radio astronomy observatory receiving interference based on calculated exclusion zones to protect against interference from point-to-multipoint high-density applications in the fixed service operating in bands around 43 GHz	In force
F.1777	2007-01	System characteristics of television outside broadcast, electronic news gathering and electronic field production in the fixed service for use in sharing studies	In force
F.1778	2007-01	Channel access requirements for HF adaptive systems in the fixed service	In force
F.1819	2007-09	Protection of the radio astronomy service in the 48.94-49.04 GHz band from unwanted emissions from HAPS in the 47.2-47.5 GHz and 47.9-48.2 GHz bandss	In force
F.1820	2007-09	Power flux-density at international borders for high altitude platform stations providing fixed wireless access services to protect the fixed service in neighbouring countries in the 47.2-47.5 GHz and 47.9-48.2 GHz bands	In force
F.1821	2007-09	Characteristics of advanced digital high frequency (HF) radiocommunication systems	In force

Recommendation count: 205

Series M : Mobile, radiodetermination, amateur and related satellite services

Number	*Approval Date*	*Recommendation Title*	*Status*
M.218-2	1990-06	Prevention of interference to radio reception on board ships	Withdrawn
M.219-1	1966-07	Alarm signal for use on the maritime radiotelephony distress frequency of 2 182 kHz	Withdrawn
M.257-3	1995-10	Sequential Single Frequency selective-calling system for use in the maritime mobile service	In force
M.428-3	1990-06	Direction-finding and/or homing in the 2 MHz band on board ships	Withdrawn
M.441-1	1982-07	Signal-to-interference ratios and minimum field strengths required in the aeronautical mobile (R) service above 30 MHz	In force
M.476-5	1995-10	Direct-printing telegraph equipment in the maritime mobile service	In force
M.478-5	1995-10	Technical characteristics of equipment and principles governing the allocation of frequency channels between 25 and 3 000 MHz for the FM land mobile service	In force
M.488-1	1990-06	Equivalent powers of double-sideband and single-sideband radiotelephone emissions in the maritime mobile service	In force
M.489-2	1995-10	Technical characteristics of VHF radiotelephone equipment operating in the maritime mobile service in channels spaced by 25 kHz	In force
M.490	1974-07	The introduction of direct-printing telegraph equipment in the maritime mobile service. Equivalence of terms	Withdrawn
M.491-1	1986-07	Translation between an identity number and identities for direct-printing telegraphy in the maritime mobile service	In force
M.492-6	1995-10	Operational procedures for the use of direct-printing telegraph equipment in the maritime mobile service	In force
M.493-13	2009-10	Digital selective-calling system for use in the maritime mobile service	In force
M.494	1974-07	Technical characteristics of single-sideband equipment in the MF and HF land mobile radiotelephone service	Withdrawn
M.496-3	1992-03	Limits of power flux-density of radionavigation transmitters to protect space station receivers in the fixed-satellite service in the 14 GHz band	In force
M.539-3	1994-09	Technical and operational characteristics of international radio-paging systems	Withdrawn
M.540-2	1990-06	Operational and technical characteristics for an automated direct-printing telegraph system for promulgation of navigational and meteorological warnings and urgent information to ships	In force
M.541-9	2004-05	Operational procedures for the use of digital selective-calling equipment in the maritime mobile service	In force
M.542-1	1982-07	On-board communications by means of portable radiotelephone equipment	Withdrawn
M.546-2	1990-06	Hypothetical telephone reference circuit in the aeronautical, land and maritime mobile-satellite services	Withdrawn
M.547	1978-07	Noise objectives in the hypothetical reference circuit for systems in the maritime mobile-satellite service	Withdrawn

M.548	1978-07	Overall transmission characteristics of telephone circuits in the maritime mobile-satellite service	Withdrawn
M.549-1	1982-07	Side tone reference equivalent of handset used on board a ship in the maritime mobile-satellite service and in automated VHF/UHF maritime mobile radiotelephone systems	Withdrawn
M.550-1	1986-07	Use of echo suppressors in the maritime mobile-satellite service	Withdrawn
M.552	1978-07	Quality objectives for 50-baud start-stop telegraph transmission in the maritime mobile-satellite service	Withdrawn
M.553	1978-07	Interface requirements for 50-baud start-stop telegraph transmission in the maritime mobile-satellite service	Withdrawn
M.584-2	1997-11	Codes and formats for radio paging	In force
M.585-5	2009-10	Assignment and use of maritime mobile service identities	In force
M.586-1	1986-07	Automated VHF/UHF maritime mobile telephone system	In force
M.587-1	1986-07	Coast station identities and initiation of location registration in an automated VHF/UHF maritime mobile telephone system	In force
M.588	1982-07	Characteristics of maritime radio beacons (Region 1)	In force
M.589-3	2001-08	Technical characteristics of methods of data transmission and interference protection for radionavigation services in the frequency bands between 70 and 130 kHz	In force
M.622	1986-07	Technical and operational characteristics of analogue cellular systems for public land mobile telephone use	Withdrawn
M.623	1986-07	Data transmission bit rates and modulation techniques in the land mobile service	Withdrawn
M.624	1986-07	Public land mobile communication systems location registration	Withdrawn
M.625-3	1995-10	Direct-printing telegraph equipment employing automatic identification in the maritime mobile service	In force
M.626	1986-07	Evaluation of the quality of digital channels in the maritime mobile service	In force
M.627-1	1995-10	Technical characteristics for HF maritime radio equipment using narrow-band phase-shift keying (NBPSK) telegraphy	In force
M.628-4	2006-03	Technical characteristics for search and rescue radar transponders	In force
M.629	1986-07	Use of the radionavigation service of the frequency bands 2 900-3 100 MHz, 5 470-5 650 MHz, 9 200-9 300 MHz, 9 300-9 500 MHz and 9 500-9 800 MHz	In force
M.630	1986-07	Main characteristics of two frequency shipborne interrogator transponders (SIT)	Withdrawn
M.631-1	1992-03	Use of hyperbolic maritime radionavigation systems in the band 283.5-315 kHz	In force
M.632-3	1997-02	Transmission characteristics of a satellite emergency position-indicating radio beacon (satellite EPIRB) system operating through geostationary satellites in the 1.6 GHz band	In force
M.633-3	2004-05	Transmission characteristics of a satellite emergency position-indicating radio beacon (satellite EPIRB) system operating through a satellite system in the 406 MHz band	In force
M.687-2	1997-02	International Mobile Telecommunications-2000 (IMT-2000)	In force

M.688	1990-06	Technical characteristics for a high frequency direct-printing telegraph system for promulgation of high seas and NAVTEX-type maritime safety information	In force
M.689-2	1994-09	International maritime VHF radiotelephone system with automatic facilities based on DSC signalling format	In force
M.690-1	1995-10	Technical characteristics of emergency position-indicating radio beacons (EPIRBs) operating on the carrier frequencies of 121.5 MHz and 243 MHz	In force
M.691-1	1992-03	Technical characteristics and compatibility criteria of maritime radiolocation systems operating in the medium frequency band and using spread-spectrum techniques	Withdrawn
M.692	1990-06	Narrow-band direct-printing telegraph equipment using a single-frequency channel	Withdrawn
M.693	1990-06	Technical characteristics of VHF emergency position-indicating radio beacons using digital selective calling (DSC VHF EPIRB)	In force
M.694-1	2005-06	Reference radiation pattern for ship earth station antennas	In force
M.816-1	1997-10	Framework for services supported on International Mobile Telecommunications-2000 (IMT-2000)	In force
M.817	1992-03	International Mobile Telecommunications-2000 (IMT-2000). Network architectures	In force
M.818-2	2003-06	Satellite operation within International Mobile Telecommunications-2000 (IMT-2000)	In force
M.819-2	1997-02	International Mobile Telecommunications-2000 (IMT-2000) for developing countries	In force
M.820	1992-03	Use of 9-digit identities for narrow-band direct-printing telegraphy in the maritime mobile service	In force
M.821-1	1997-02	Optional expansion of the digital selective-calling system for use in the maritime mobile service	In force
M.822-1	1994-09	Calling-channel loading for digital selective calling (DSC) for the maritime mobile service	In force
M.823-3	2006-03	Technical characteristics of differential transmissions for global navigation satellite systems from maritime radio beacons in the frequency band 283.5-315 kHz in Region 1 and 285-325 kHz in Regions 2 and 3	In force
M.824-3	2007-03	Technical parameters of radar beacons (racons)	In force
M.825-3	1998-10	Characteristics of a transponder system using digital selective calling techniques for use with vessel traffic services and ship-to-ship identification	In force
M.826	1992-03	Transmission of information for updating electronic chart display and information systems (ECDIS)	In force
M.827	1992-03	Hypothetical reference digital path for systems in the mobile-satellite service using feeder links	In force
M.828-2	2006-03	Definition of availability for radiocommunication circuits in the mobile-satellite service	In force
M.829-1	1994-09	Frequency sharing in the 1 660-1 660.5 MHz band between the mobile-satellite service and the radioastronomy service	Withdrawn
M.830-1	2005-06	Operational procedures for mobile-satellite networks or systems in the bands 1 530-1 544 MHz and 1 626.5-1 645.5 MHz which are used for distress and safety purposes as specified for the GMDSS	In force

M.831	1992-03	Frequency sharing between services in the band 4-30 MHz	Withdrawn
M.1032	1994-03	Technical and operational characteristics of land mobile systems using multi-channel access techniques without a central controller	In force
M.1033-1	1997-02	Technical and operational characteristics of cordless telephones and cordless telecommunication systems	In force
M.1034-1	1997-02	Requirements for the radio interface(s) for International Mobile Telecommunications-2000 (IMT-2000)	In force
M.1035	1994-03	Framework for the radio interface(s) and radio sub-system functionality for International Mobile Telecommunications-2000 (IMT-2000)	In force
M.1036-3	2007-07	Frequency arrangements for implementation of the terrestrial component of International Mobile Telecommunications-2000 (IMT 2000) in the bands 806-960 MHz, 1 710-2 025 MHz, 2 110-2 200 MHz and 2 500-2 690 MHz	In force
M.1037	1994-03	Bit error performance objectives for aeronautical mobile-satellite (R) service (AMS(R)S) radio link	In force
M.1038	1994-03	Efficient use of the geostationary-satellite orbit and spectrum in the 1-3 GHz frequency range by mobile-satellite systems	In force
M.1039-3	2006-03	Co-frequency sharing between stations in the mobile service below 1 GHz and mobile earth stations of non-geostationary mobile-satellite systems (Earth-space) using frequency division multiple access (FDMA)	In force
M.1040	1994-03	Public mobile telecommunication service with aircraft using the bands 1 670-1 675 MHz and 1 800-1 805 MHz	Withdrawn
M.1041-2	2003-06	Future amateur radio systems	In force
M.1042-3	2007-03	Disaster communications in the amateur and amateur-satellite services	In force
M.1043-2	2003-06	Use of the amateur and amateur-satellite services in developing countries	In force
M.1044-2	2003-06	Frequency sharing criteria in the amateur and amateur-satellite services	In force
M.1072	1994-09	Interference due to intermodulation products in the land mobile service between 25 and 3 000 MHz	In force
M.1073-2	2005-06	Digital cellular land mobile telecommunication systems	In force
M.1074	1994-09	Integration of public mobile radiocommunication systems	In force
M.1075	1994-09	Leaky feeder systems in the land mobile services	In force
M.1076	1994-09	Wireless communication systems for persons with impaired hearing	In force
M.1077	1994-09	Multi-transmitter radio systems using quasi-synchronous (simulcast) transmission for analogue speech	Withdrawn
M.1078	1994-09	Security principles for International Mobile Telecommunications-2000 (IMT-2000)	In force
M.1079-2	2003-06	Performance and quality of service requirements for International Mobile Telecommunications-2000 (IMT-2000) access networks	In force
M.1080	1994-09	Digital selective calling system enhancement for multiple equipment installations	In force
M.1081	1994-09	Automatic HF facsimile and data system for maritime mobile users	In force
M.1082-1	1997-10	International maritime MF/HF radiotelephone system with automatic facilities based on DSC signalling format	In force

M.1083	1994-09	Interworking of maritime radiotelephone systems	Withdrawn
M.1084-4	2001-08	Interim solutions for improved efficiency in the use of the band 156-174 MHz by stations in the maritime mobile service	In force
M.1085-1	1997-02	Technical and operational characteristics of wind profiler radars for bands in the vicinity of 400 MHz	Withdrawn
M.1086-1	2006-03	Determination of the need for coordination between geostationary mobile satellite networks sharing the same frequency bands	In force
M.1087	1994-09	Methods for evaluating sharing between systems in the land mobile service and spread-spectrum low-Earth orbit (LEO) systems in the mobile-satellite service (MSS) below 1 GHz	Withdrawn
M.1088	1994-09	Considerations for sharing with systems of other services operating in the bands allocated to the radionavigation satellite service	In force
M.1089-1	2002-07	Technical considerations for the coordination of mobile-satellite systems relating to the aeronautical mobile satellite (R) service (AMS(R)S) in the bands 1 545 to 1 555 MHz and 1 646.5 to 1 656.5 MHz	In force
M.1090	1994-09	Frequency plans for satellite transmission of single channel per carrier (SCPC) carriers using non-linear transponders in the mobile-satellite service	In force
M.1091	1994-09	Reference off-axis radiation patterns for mobile eath station antennas operating in the land mobile-satellite service in the frequency range 1 to 3 GHz	In force
M.1141-2	2005-06	Sharing in the 1-3 GHz frequency range between non-geostationary space stations operating in the mobile-satellite service and stations in the fixed service	In force
M.1142-2	2005-06	Sharing in the 1-3 GHz frequency range between geostationary space stations operating in the mobile satellite service and stations in the fixed service	In force
M.1143-3	2005-06	System specific methodology for coordination of non-geostationary space stations (space-to-Earth) operating in the mobile-satellite service with the fixed service	In force
M.1167	1995-10	Framework for the satellite component of International Mobile Telecommunications-2000 (IMT-2000)	In force
M.1168	1995-10	Framework of International Mobile Telecommunications-2000 (IMT-2000)	In force
M.1169	1995-10	Hours of service of ship stations	In force
M.1170	1995-10	Morse telegraphy procedures in the maritime mobile service	In force
M.1171	1995-10	Radiotelephony procedures in the maritime mobile service	In force
M.1172	1995-10	Miscellaneous abbreviations and signals to be used for radiocommunications in the maritime mobile service	In force
M.1173	1995-10	Technical characteristics of single-sideband transmitters used in the maritime mobile service for radiotelephony in the bands between 1 606.5 kHz (1 605 kHz Region 2) and 4 000 kHz and between 4 000 kHz and 27 500 kHz	In force
M.1174-2	2004-05	Technical characteristics of equipment used for on-board vessel communications in the bands between 450 and 470 MHz	In force
M.1175	1995-10	Automatic receiving equipment for radiotelegraph and radiotelephone alarm signals	In force
M.1176	1995-10	Technical parameters of radar target enhancers	In force

M.1177-3	2003-06	Techniques for measurement of unwanted emissions of radar systems	In force
M.1178	1995-10	Use of the maritime radionavigation band 283.5-315 kHz (Region 1) and 285-325 kHz (Regions 2 and 3)	In force
M.1179	1995-10	Procedures for determining the interference coupling mechanisms and mitigation options for systems operating in bands adjacent to and in harmonic relationship with radar stations in the radiodetermination service	In force
M.1180	1995-10	Availability of communication circuits in the aeronautical mobile-satellite (R) services (AMS(R)S)	In force
M.1181	1995-10	Minimum performance objectives for narrow-band digital channels using geostationary satellites to serve transportable and vehicular mobile earth stations in the 1-3 GHz range, not forming part of the ISDN	In force
M.1182-1	2003-06	Integration of terrestrial and satellite mobile communication systems	In force
M.1183	1995-10	Permissible levels of interference in a digital channel of a geostationary network in mobile-satellite service in 1-3 GHz caused by other networks of this service and fixed-satellite service	In force
M.1184-2	2003-06	Technical characteristics of mobile satellite systems in the frequency bands below 3 GHz for use in developing criteria for sharing between the mobile-satellite service (MSS) and other services	In force
M.1185-1	1997-10	Method for determining coordination distance between ground based mobile earth stations and terrrestrial stations operating in the 148.0-149.9 MHz band	Withdrawn
M.1186-1	2006-03	Technical considerations for the coordination between mobile-satellite service networks utilizing code division multiple access and other spread spectrum techniques in the 1-3 GHz band	In force
M.1187-1	2006-03	A method for the calculation of the potentially affected region for a mobile-satellite service network in the 1-3 GHz range using circular orbits	In force
M.1188-1	2006-03	Impact of propagation on the design of non-GSO mobile-satellite systems not employing satellite diversity which provide service to handheld equipment	In force
M.1221	1997-02	Technical and operational requirements for cellular multimode mobile radio stations	Withdrawn
M.1222	1997-02	Transmission of data messages on shared private land mobile radio channels	In force
M.1223	1997-02	Evaluation of security mechanisms for IMT-2000	In force
M.1224	1997-02	Vocabulary of terms for International Mobile Telecommunications-2000 (IMT-2000)	In force
M.1225	1997-02	Guidelines for evaluation of radio transmission technologies for IMT-2000	In force
M.1226	1997-02	Technical and operational characteristics of wind profiler radars in bands in the vicinity of 50 MHz	In force
M.1227-2	2001-08	Technical and operational characteristics of wind profiler radars in bands in the vicinity of 1 000 MHz	In force
M.1228	1997-02	Methodology for determining performance objectives for narrow-band channels in mobile satellite systems using geostationary satellites not forming part of the ISDN	In force
M.1229	1997-02	Performance objectives for the digital aeronautical mobile-satellite service (AMSS) channels operating in the bands 1 525 to 1 559 MHz and 1 626.5 to 1 660.5 MHz not forming part of the ISDN	In force

M.1230	1997-02	Performance objectives for space-to-Earth links operating in the mobile-satellite service with non-geostationary satellites in the 137-138 MHz band	In force
M.1231	1997-02	Interference criteria for space-to-Earth links operating in the mobile-satellite service with non-geostationary satellites in the 137-138 MHz band	In force
M.1232	1997-02	Sharing criteria for space-to-Earth links operating in the mobile-satellite service with non-geostationary satellites in the 137-138 MHz band	In force
M.1233-1	2006-03	Technical considerations for sharing satellite network resources between the mobile-satellite service (MSS) (other than the aeronautical mobile-satellite (R) service (AMS(R)S)) and AMS(R)S	In force
M.1234-1	2006-03	Permissible level of interference in a digital channel of a geostationary satellite network in the aeronautical mobile-satellite (R) service (AMS(R)S) in the bands 1 545 to 1 555 MHz and 1 646.5 to 1 656.5 MHz and its associated feeder links caused by other networks of this service and the fixed-satellite service	In force
M.1307	1997-10	Automatic determination of location and guidance in the land mobile services	In force
M.1308	1997-10	Evolution of land mobile systems towards IMT-2000	In force
M.1309	1997-10	Digitally coded speech in the land mobile service	Withdrawn
M.1310	1997-10	Transport information and control systems (TICS) - Objectives and requirements	In force
M.1311	1997-10	Framework for modularity and radio commonality within IMT-2000	In force
M.1312	1997-10	A long-term solution for improved efficiency in the use of the band 156-174 MHz by stations in the maritime mobile service	In force
M.1313-1	2000-05	Technical characteristics of maritime radionavigation radars	Withdrawn
M.1314-1	2005-06	Reduction of unwanted emissions of radar systems operating above 400 MHz	In force
M.1315	1997-10	Methodology for evaluating interference from narrow-band mobile-satellite networks to spread-spectrum direct-sequence mobile-satellite networks operating with space stations in low-Earth orbit at frequencies below 1 GHz	In force
M.1316-1	2005-06	Principles and a methodology for frequency sharing in the 1 610.6-1 613.8 MHz and 1 660-1 660.5 MHz bands between the mobile-satellite service (Earth-to-space) and the radio astronomy service	In force
M.1317	1997-10	Considerations for sharing between systems of other services operating in bands allocated to the radionavigation-satellite and aeronautical radionavigation services and the global navigation satellite system (GLONASS-M)	Withdrawn
M.1318-1	2007-10	Evaluation model for continuous interference from radio sources other than in the radionavigation-satellite service to the radionavigation-satellite service systems and networks operating in the 1 164-1 215 MHz, 1 215-1 300 MHz, 1 559-1 610 MHz and 5 010-5 030 MHz bands	In force
M.1319-3	2010-01	The basis of a methodology to assess the impact of interference from a time division multiple access/frequency division multiple access (TDMA/FDMA) mobile-satellite service (MSS) space-to-Earth transmissions on the performance of line-of-sight fixed service receivers in the frequency range 1-3 GHz	In force
M.1343-1	2005-06	Essential technical requirements of mobile earth stations for global non-geostationary mobile-satellite service systems in the band 1-3 GHz	In force

M.1371-4	2010-04	Technical characteristics for an automatic identification system using time-division multiple access in the VHF maritime mobile band	In force
M.1372-1	2003-06	Efficient use of the radio spectrum by radar stations in the radiodetermination service	In force
M.1388	1999-01	Threshold levels to determine the need to coordinate between space stations in the broadcasting-satellite service (sound) and particular systems in the land mobile service in the band 1 452-1 492 MHz	In force
M.1389	1999-01	Methods for achieving coordinated use of spectrum by multiple non-geostationary mobile-satellite service systems below 1 GHz and sharing with other services in existing mobile-satellite service allocations	In force
M.1390	1999-01	Methodology for the calculation of IMT-2000 terrestrial spectrum requirements	In force
M.1391-1	2006-03	Methodology for the calculation of IMT-2000 satellite spectrum requirements	In force
M.1450-4	2010-04	Characteristics of broadband radio local area networks	In force
M.1451	2000-05	Transport information and control systems: functionalities	Withdrawn
M.1452-1	2009-10	Millimetre wave radiocommunication systems for intelligent transport system applications	In force
M.1453-2	2005-06	Intelligent transport systems - Dedicated short range communications at 5.8 GHz	In force
M.1454	2000-05	E.i.r.p. density limit and operational restrictions for RLANS or other wireless access transmitters in order to ensure the protection of feeder links of non-geostationary systems in the mobile-satellite service in the frequency band 5 150-5 250 MHz	In force
M.1455-2	2003-06	Key characteristics for the International Mobile Telecommunications-2000 (IMT-2000) radio interfaces	Withdrawn
M.1456	2000-05	Minimum performance characteristics and operational conditions for high altitude platform stations providing IMT-2000 in the bands 1 885-1 980 MHz, 2 010-2 025 MHz and 2 110-2 170 MHz in Regions 1 and 3 and 1 885-1 980 MHz and 2 110-2 160 MHz in Region 2	In force
M.5/BL/5	2010-05	Draft revision of Recommendation ITU-R M.1457-8 - Detailed specifications of the terrestrial radio interfaces of International Mobile Telecommunications 2000 (IMT-2000)	Pre-publishe
M.1458	2000-05	Use of the frequency bands between 2.8-22 MHz by the aeronautical mobile (R) service for data transmission using class of emission J2D	In force
M.1459	2000-05	Protection criteria for telemetry systems in the aeronautical mobile service and mitigation techniques to facilitate sharing with geostationary broadcasting-satellite and mobile-satellite services in the frequency bands 1 452-1 525 MHz and 2 310-2 360 MHz	In force
M.1460-1	2006-03	Technical and operational characteristics and protection criteria of radiodetermination radars in the 2 900-3 100 MHz band	In force
M.1461-1	2003-06	Procedures for determining the potential for interference between radars operating in the radiodetermination service and systems in other services	In force
M.1462	2000-05	Characteristics of and protection criteria for radars operating in the radiolocation service in the frequency range 420-450 MHz	In force
M.1463-1	2007-03	Characteristics of and protection criteria for radars operating in the radiodetermination service in the frequency band 1 215-1 400 MHz	In force

M.1464-1	2003-06	Characteristics of radiolocation radars, and characteristics and protection criteria for sharing studies for aeronautical radionavigation and meteorological radars in the radiodetermination service operating in the frequency band 2 700-2 900 MHz	In force
M.1465-1	2007-03	Characteristics of and protection criteria for radars operating in the radiodetermination service in the frequency band 3 100-3 700 MHz	In force
M.1466	2000-05	Characteristics of and protection criteria for radars operating in the radionavigation service in the frequency band 31.8-33.4 GHz	In force
M.1467-1	2006-03	Prediction of sea area A2 and NAVTEX ranges and protection of the A2 global maritime distress and safety system distress watch channel	In force
M.1468	2000-05	Technical characteristics and sharing scenarios of satellite systems offering multiple services	Withdrawn
M.1469-2	2010-01	Methodology for evaluating potential for interference from time division multiple access/frequency division multiple access (TDMA/FDMA) mobile satellite service (MSS) Earth-to-space transmissions into line-of-sight (LoS) fixed service receivers in the frequency range 1-3 GHz	In force
M.1470	2000-05	Methodology of sharing between MSS systems (Earth-to-space) and existing RNSS systems (space-to-Earth) in frequency bands 149.9-150.05 MHz and 399.9-400.05 MHz	In force
M.1471-1	2010-01	Guide to the application of the methodologies to facilitate coordination and use of frequency bands shared between the mobile-satellite service and the fixed service in the frequency range 1-3 GHz	In force
M.1472-1	2010-01	Methodology to evaluate the impact of interference from time division multiple access/frequency division multiple access (TDMA/FDMA) mobile-satellite service (MSS) space-to-Earth transmissions on baseband performance in frequency division multiplexing-frequency modulation (FDM-FM) analogue line-of-sight (LoS) fixed service receivers in the frequency range 1-3 GHz	In force
M.1473-1	2010-01	Methodology to evaluate the impact of interference from time division multiple access/frequency division multiple access (TDMA/FDMA) mobile-satellite service (MSS) space-to-Earth transmissions on video baseband performance in TV-FM analogue line-of-sight fixed service receivers in the frequency range 1-3 GHz	In force
M.1474-1	2010-01	Methodology to evaluate the impact of interference from time division multiple access/frequency division multiple access (TDMA/FDMA) mobile-satellite service (MSS) systems on baseband performance in digital line-of-sight fixed service receivers based on statistics of radio-frequency interference in the frequency range 1-3 GHzbased on statistics of radio-frequency interference in the frequency range 1-3 GHz	In force
M.1475	2000-05	Methodology for derivation of performance objectives of non-geostationary mobile-satellite service systems operating in the 1-3 GHz band not using satellite diversity	In force
M.1476	2000-05	Performance objectives for narrow-band digital channels using geostationary satellites to serve transportable and mobile Earth stations in the 1-3 GHz range forming part of the integrated services digital network	In force
M.1477	2000-05	Technical and performance characteristics of current and planned radionavigation-satellite service (space-to-Earth) and aeronautical radionavigation service receivers to be considered in interference studies in the band 1 559-1 610 MHz	In force
M.1478-1	2004-05	Protection criteria for Cospas-Sarsat search and rescue instruments in the band 406-406.1 MHz	In force

M.1479	2000-05	Technical characteristics and performance requirements of current and planned radionavigation-satellite service (space-to-space) receivers to be considered in interference studies in the frequency bands 1 215-1 260 MHz and 1 559-1 610 MHz	In force
M.1480	2000-05	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	In force
M.1544	2001-08	Minimum qualifications of radio amateurs	In force
M.1545	2001-08	Measurement uncertainty as it applies to test limits for the terrestrial component of International Mobile Telecommunications-2000	In force
M.1579	2002-07	Global circulation of IMT-2000 terminals	In force
M.1580-3	2009-10	Generic unwanted emission characteristics of base stations using the terrestrial radio interfaces of IMT- 2000	In force
M.1581-3	2009-10	Generic unwanted emission characteristics of mobile stations using the terrestrial radio interfaces of IMT 2000	In force
M.1582	2002-07	Method for determining coordination distances, in the 5 GHz band, between the international standard microwave landing system stations operating in the aeronautical radionavigation service and stations of the radionavigation-satellite service (Earth-to-space)	In force
M.1583-1	2007-10	Interference calculations between non-geostationary mobile-satellite service or radionavigation-satellite service systems and radio astronomy telescope sites	In force
M.1584	2002-07	Methodology for computation of separation distances between earth stations of the radionavigation-satellite service (Earth-to-space) and radars of the radiolocation service and the aeronautical radionavigation service in the frequency band 1 300-1 350 MHz	In force
M.1634	2003-06	Interference protection of terrestrial mobile service systems using Monte Carlo simulation with application to frequency sharing	In force
M.1635	2003-06	General methodology for assessing the potential for interference between IMT-2000 or systems beyond IMT-2000 and other services	In force
M.1636	2003-06	Basic reference models and performance parameters of Internet Protocol packet network transmission in the mobile-satellite service	In force
M.1637	2003-06	Global cross-border circulation of radiocommunication equipment in emergency and disaster relief situations	In force
M.1638	2003-06	Characteristics of and protection criteria for sharing studies for radiolocation, aeronautical radionavigation and meteorological radars operating in the frequency bands between 5 250 and 5 850 MHz	In force
M.1639-1	2005-06	Protection criterion for the aeronautical radionavigation service with respect to aggregate emissions from space stations in the radionavigation-satellite service in the band 1 164-1 215 MHz	In force
M.1640	2003-06	Characteristics of, and protection criteria for sharing studies for radars operating in the radiodetermination service in the frequency band 33.4-36 GHz	In force
M.1641-1	2006-03	A methodology for co-channel interference evaluation to determine separation distance from a system using high-altitude platform stations to a cellular system to provide IMT-2000 service	In force

M.1642-2	2007-10	Methodology for assessing the maximum aggregate equivalent power flux-density at an aeronautical radionavigation service station from all radionavigation-satellite service systems operating in the 1 164-1 215 MHz band	In force
M.1643	2003-06	Technical and operational requirements for aircraft earth stations of aeronautical mobile-satellite service including those using fixed-satellite service network transponders in the band 14-14.5 GHz (Earth-to-space)	In force
M.1644	2003-06	Technical and operational characteristics, and criteria for protecting the mission of radars in the radiolocation and radionavigation service operating in the frequency band 13.75-14 GHz	In force
M.1645	2003-06	Framework and overall objectives of the future development of IMT-2000 and systems beyond IMT-2000	In force
M.1646	2003-06	Parameters to be used in co-frequency sharing and pfd threshold studies between terrestrial IMT-2000 and BSS (sound) in the 2 630-2 655 MHz band	In force
M.1651	2003-06	A method for assessing the required spectrum for broadband nomadic wireless access systems including radio local area networks using the 5 GHz band	In force
M.1652	2003-06	Dynamic frequency selection (DFS) in wireless access systems including radio local area networks for the purpose of protecting the radiodetermination service in the 5 GHz band	In force
M.1653	2003-06	Operational and deployment requirements for wireless access systems including radio local area networks in the mobile service to facilitate sharing between these systems and systems in the Earth exploration-satellite service (active) and the space research service (active) in the band 5 470-5 570 MHz within the 5 460 5 725 MHz range	In force
M.1654	2003-06	A methodology to assess interference from broadcasting-satellite service (sound) into terrestrial IMT-2000 systems intending to use the band 2 630-2 655 MHz	In force
M.1677-1	2009-10	International Morse code	In force
M.1678	2004-05	Adaptive antennas for mobile systems	In force
M.1730-1	2009-10	Characteristics of and protection criteria for the radiolocation service in the frequency band 15.4 -17.3 GHz	In force
M.1731	2005-06	Protection criteria for Cospas-Sarsat local user terminals in the band 1 544-1 545 MHz	In force
M.1732	2005-06	Characteristics of systems operating in the amateur and amateur-satellite services for use in sharing studies	In force
M.1739	2006-03	Protection criteria for wireless access systems, including radio local area networks, operating in the mobile service in accordance with Resolution 229 (WRC-03) in the bands 5 150-5 250 MHz, 5 250-5 350 MHz and 5 470-5 725 MHz	In force
M.1740	2006-03	Guide to the application of ITU-R texts related to the amateur and amateur-satellite services	In force
M.1741	2006-03	Methodology for deriving performance objectives and its optimization for IP packet applications in the mobile-satellite service	In force
M.1746	2006-03	Harmonized frequency channel plans for the protection of property using data communication	In force

M.1747	2006-03	Protection of the Earth exploration-satellite service (passive) in the band 1 400-1 427 MHz from unwanted emissions of mobile satellite service feeder links that may operate in the bands 1 390-1 392 MHz (Earth-to-space) and 1 430-1 432 MHz (space-to-Earth)	In force
M.1748	2006-03	Protection of the radio astronomy service in the band 1 400-1 427 MHz from unwanted emissions of MSS feeder links that may operate in the bands 1 390-1 392 MHz (Earth-to-space) and 1 430-1 432 MHz (space-to-Earth)	In force
M.1767	2006-03	Protection of land mobile systems from terrestrial digital video and audio broadcasting systems in the VHF and UHF shared bands allocated on a primary basis	In force
M.1768	2006-03	Methodology for calculation of spectrum requirements for the future development of the terrestrial component of IMT-2000 and systems beyond IMT-2000	In force
M.1787	2009-08	Description of systems and networks in the radionavigation-satellite service (space-to-Earth and space-to-space) and technical characteristics of transmitting space stations operating in the bands 1 164-1 215 MHz, 1 215-1 300 MHz and 1 559-1 610 MHz	In force
M.1795	2007-03	Technical and operational characteristics of land mobile MF/HF systems	In force
M.1796	2007-03	Characteristics of and protection criteria for terrestrial radars operating in the radiodetermination service in the frequency band 8 500-10 500 MHz	In force
M.1797	2007-03	Vocabulary of terms for the land mobile service	In force
M.1798-1	2010-04	Characteristics of HF radio equipment for the exchange of digital data and electronic mail in the maritime mobile service	In force
M.1799	2007-03	Sharing between the mobile service and the mobile-satellite service in the band 1 668.4-1 675 MHz	In force
M.1800	2007-03	Protection of the fixed, mobile and radiolocation services from MSS feeder links that may operate in the bands 1 390-1 392 MHz (Earth-to-space) and 1 430-1 432 MHz (space-to-Earth)	In force
M.1801-1	2010-04	Radio interface standards for broadband wireless access systems, including mobile and nomadic applications, in the mobile service operating below 6 GHz	In force
M.1802-1	2010-04	Characteristics and protection criteria for radars operating in the radiolocation service in the frequency band 30-300 MHz	In force
M.1808	2007-06	Technical and operational characteristics of conventional and trunked land mobile systems operating in the mobile service allocations below 869 MHz to be used in sharing studies	In force
M.1822	2007-10	Framework for services supported by IMT	In force
M.1823	2007-10	Technical and operational characteristics of digital cellular land mobile systems for use in sharing studies	In force
M.1824	2007-10	System characteristics of television outside broadcast, electronic news gathering and electronic field production in the mobile service for use in sharing studies	In force
M.1825	2007-10	Guidance on technical parameters and methodologies for sharing studies related to systems in the land mobile service	In force
M.1826	2007-10	Harmonized frequency channel plan for broadband public protection and disaster relief operations at 4 940-4 990 MHz in Regions 2 and 3	In force

M.1827	2007-10	Technical and operational requirements for stations of the aeronautical mobile (R) service (AM(R)S) limited to surface application at airports and for stations of the aeronautical mobile service (AMS) limited to aeronautical security (AS) applications in the band 5 091-5 150 MHz	In force
M.1828	2007-10	Technical and operational requirements for aircraft stations of aeronautical mobile service limited to transmissions of telemetry for flight testing in the bands around 5 GHz	In force
M.1829	2007-10	Method for determining the necessary geographical separation distances, in the 5 GHz band, between the international standard microwave landing system (MLS) stations operating in the aeronautical radionavigation service and transmitters operating in the aeronautical mobile service (AMS) to support telemetry	In force
M.1830	2007-10	Technical characteristics and protection criteria of aeronautical radionavigation service systems in the 645-862 MHz frequency band	In force
M.1831	2007-10	A coordination methodology for RNSS inter-system interference estimation	In force
M.1841	2008-01	Compatibility between FM sound-broadcasting in the band of about 87-108 MHz and the aeronautical ground-based augmentation system in the band about 108-117.975 MHz	In force
M.1842-1	2009-06	Characteristics of VHF radio systems and equipment for the exchange of data and electronic mail in the maritime mobile service RR Appendix 18 channels	In force
M.1849	2009-06	Technical and operational aspects of ground-based meteorological radars	In force
M.1850	2010-01	Detailed specifications of the radio interfaces for the satellite component of International Mobile Telecommunications-2000 (IMT-2000)	In force
M.1851	2009-06	Mathematical models for radiodetermination radar systems antenna patterns for use in interference analyses	In force
M.1854	2010-01	Use of mobile-satellite service in disaster response and relief	In force
M.1874	2010-04	Technical and operational characteristics of oceanographic radars operating in sub-bands within the frequency range 3 50 MHz	In force

Recommendation count: 256

Series P : Radiowave propagation

Number	*Approval Date*	*Recommendation Title*	*Status*
P.310-9	1994-08	Definitions of terms relating to propagation in non-ionized media	In force
P.311-13	2009-10	Acquisition, presentation and analysis of data in studies of tropospheric propagation	In force
P.313-10	2005-03	Exchange of information for short-term forecasts and transmission of ionospheric disturbance warnings	In force
P.341-5	1999-10	The concept of transmission loss for radio links	In force
P.368-9	2007-02	Ground-wave propagation curves for frequencies between 10 kHz and 30 MHz	In force
P.369-6	1994-08	Reference atmosphere for refraction	Withdrawn
P.370-7	1995-10	VHF and UHF propagation curves for the frequency range from 30 MHz to 1 000 MHz. Broadcasting services	Withdrawn
P.371-8	1999-07	Choice of indices for long-term ionospheric predictions	In force
P.372-10	2009-10	Radio noise	In force
P.373-8	2007-01	Definitions of maximum and minimum transmission frequencies	In force
P.434-6	1995-10	ITU-R reference ionospheric characteristics and methods of basic MUF, operational MUF and ray-path prediction	Withdrawn
P.452-14	2009-10	Prediction procedure for the evaluation of interference between stations on the surface of the Earth at frequencies above about 0.1 GHz	In force
P.453-9	2003-04	The radio refractive index: its formula and refractivity data	In force
P.525-2	1994-08	Calculation of free-space attenuation	In force
P.526-11	2009-10	Propagation by diffraction	In force
P.527-3	1992-03	Electrical characteristics of the surface of the Earth	In force
P.528-2	1986-07	Propagation curves for aeronautical mobile and radionavigation services using the VHF, UHF and SHF bands	In force
P.529-3	1999-10	Prediction methods for the terrestrial land mobile service in the VHF and UHF bands	Withdrawn
P.530-13	2009-10	Propagation data and prediction methods required for the design of terrestrial line-of-sight systems	In force
P.531-10	2009-10	Ionospheric propagation data and prediction methods required for the design of satellite services and systems	In force
P.532-1	1992-03	Ionospheric effects and operational considerations associated with artificial modification of the ionosphere and the radio-wave channel	In force
P.533-10	2009-10	Method for the prediction of the performance of HF circuits	In force
P.534-4	1999-10	Method for calculating sporadic-E field strength	In force
P.581-2	1990-06	The concept of "worst month"	In force
P.616	1986-07	Propagation data for terrestrial maritime mobile services operating at frequencies above 30 MHz	Withdrawn

P.617-1	1992-03	Propagation prediction techniques and data required for the design of trans-horizon radio-relay systems	In force
P.618-10	2009-10	Propagation data and prediction methods required for the design of Earth-space telecommunication systems	In force
P.619-1	1992-03	Propagation data required for the evaluation of interference between stations in space and those on the surface of the Earth	In force
P.620-6	2005-03	Propagation data required for the evaluation of coordination distances in the frequency range 100 MHz to 105 GHz	In force
P.676-8	2009-10	Attenuation by atmospheric gases	In force
P.678-1	1992-03	Characterization of the natural variability of propagation phenomena	In force
P.679-3	2001-02	Propagation data required for the design of broadcasting-satellite systems	In force
P.680-3	1999-10	Propagation data required for the design of Earth-space maritime mobile telecommunication systems	In force
P.681-7	2009-10	Propagation data required for the design of Earth-space land mobile telecommunication systems	In force
P.682-2	2007-02	Propagation data required for the design of Earth-space aeronautical mobile telecommunication systems	In force
P.684-5	2009-10	Prediction of field strength at frequencies below about 150 kHz	In force
P.832-2	1999-07	World Atlas of Ground Conductivities	In force
P.833-6	2007-02	Attenuation in vegetation	In force
P.834-6	2007-01	Effects of tropospheric refraction on radiowave propagation	In force
P.835-4	2005-03	Reference Standard Atmospheres	In force
P.836-4	2009-10	Water vapour: surface density and total columnar content	In force
P.837-5	2007-08	Characteristics of precipitation for propagation modelling	In force
P.838-3	2005-03	Specific attenuation model for rain for use in prediction methods	In force
P.839-3	2001-02	Rain height model for prediction methods	In force
P.840-4	2009-10	Attenuation due to clouds and fog	In force
P.841-4	2005-03	Conversion of annual statistics to worst-month statistics	In force
P.842-4	2007-02	Computation of reliability and compatibility of HF radio systems	In force
P.843-1	1997-08	Communication by meteor-burst propagation	In force
P.844-1	1994-08	Ionospheric factors affecting frequency sharing in the VHF and UHF bands (30 MHz-3 GHz)	In force
P.845-3	1997-08	HF field-strength measurement	In force
P.846-1	1995-10	Measurements of ionospheric and related characteristics	In force
P.1057-2	2007-08	Probability distributions relevant to radiowave propagation modelling	In force
P.1058-2	1999-10	Digital topographic databases for propagation studies	In force
P.1060	1994-08	Propagation factors affecting frequency sharing in HF terrestrial systems	In force

P.1144-5	2009-10	Guide to the application of the propagation methods of Radiocommunication Study Group 3	In force
P.1145	1995-10	Propagation data for the terrestrial land mobile service in the VHF and UHF bands	Withdrawn
P.1146	1995-10	The prediction of field strength for land mobile and terrestrial broadcasting services in the frequency range from 1 to 3 GHz	Withdrawn
P.1147-4	2007-08	Prediction of sky-wave field strength at frequencies between about 150 and 1 700 kHz	In force
P.1148-1	1997-05	Standardized procedure for comparing predicted and observed HF sky-wave signal intensities and the presentation of such comparisons	In force
P.1238-6	2009-10	Propagation data and prediction methods for the planning of indoor radiocommunication systems and radio local area networks in the frequency range 900 MHz to 100 GHz	In force
P.1239-2	2009-10	ITU-R reference ionospheric characteristics	In force
P.1240-1	2007-02	ITU-R methods of basic MUF, operational MUF and ray-path prediction	In force
P.1321-3	2009-10	Propagation factors affecting systems using digital modulation techniques at LF and MF	In force
P.1322	1997-08	Radiometric estimation of atmospheric attenuation	In force
P.1406-1	2007-08	Propagation effects relating to terrestrial land mobile and broadcasting services in the VHF and UHF bands	In force
P.1407-4	2009-10	Multipath propagation and parameterization of its characteristics	In force
P.1409	1999-10	Propagation data and prediction methods required for the design of systems using high altitude platform stations at about 47 GHz	In force
P.1410-4	2007-02	Propagation data and prediction methods required for the design of terrestrial broadband radio access systems operating in a frequency range from 3 to 60 GHz	In force
P.1411-5	2009-10	Propagation data and prediction methods for the planning of short-range outdoor radiocommunication systems and radio local area networks in the frequency range 300 MHz to 100 GHz	In force
P.1412	1999-10	Propagation data for the evaluation of coordination between Earth stations working in the bidirectionally allocated frequency bands	In force
P.1510	2001-02	Annual mean surface temperature	In force
P.1511	2001-02	Topography for Earth-to-space propagation modelling	In force
P.1546-4	2009-10	Method for point-to-area predictions for terrestrial services in the frequency range 30 MHz to 3 000 MHz	In force
P.1621-1	2005-03	Propagation data required for the design of Earth-space systems operating between 20 THz and 375 THz	In force
P.1622	2003-04	Prediction methods required for the design of Earth-space systems operating between 20 THz and 375 THz	In force
P.1623-1	2005-03	Prediction method of fade dynamics on Earth-space paths	In force
P.1791	2007-01	Propagation prediction methods for assessment of the impact of ultra-wideband devices	In force
P.1812-1	2009-10	A path-specific propagation prediction method for point-to-area terrestrial services in the VHF and UHF bands	In force

P.1814	2007-08	Prediction methods required for the design of terrestrial free-space optical links	In force
P.1815-1	2009-10	Differential rain attenuation	In force
P.1816	2007-08	The prediction of the time and the spatial profile for broadband land mobile services using UHF and SHF bands	In force
P.1817	2007-08	Propagation data required for the design of terrestrial free-space optical links	In force
P.1853	2009-10	Tropospheric attenuation time series synthesis	In force

Recommendation count: 83

Series RA : Radio astronomy

Number	*Approval Date*	*Recommendation Title*	*Status*
RA.314-10	2003-06	Preferred frequency bands for radio astronomical measurements	In force
RA.479-5	2003-05	Protection of frequencies for radioastronomical measurements in the shielded zone of the Moon	In force
RA.517-4	2006-05	Protection of the radio astronomy service from transmitters operating in adjacent bands	In force
RA.611-4	2006-03	Protection of the radio astronomy service from spurious emissions	In force
RA.769-2	2003-05	Protection criteria used for radio astronomical measurements	In force
RA.1031-2	2007-06	Protection of the radio astronomy service in frequency bands shared with other services	In force
RA.1237-2	2010-01	Protection of the radio astronomy service from unwanted emissions resulting from applications of wideband digital modulation	In force
RA.1272-1	2002-02	Protection of radio astronomy measurements above 60 GHz from ground based interference	In force
RA.1417	1999-10	A radio-quiet zone in the vicinity of the L2 Sun-Earth Lagrange point	In force
RA.1513-1	2003-05	Levels of data loss to radio astronomy observations and percentage-of-time criteria resulting from degradation by interference for frequency bands allocated to the radio astronomy on a primary basis	In force
RA.1630	2003-05	Technical and operational characteristics of ground-based astronomy systems for use in sharing studies with active services between 10 THz and 1 000 THz	In force
RA.1631	2003-05	Reference radio astronomy antenna pattern to be used for compatibility analyses between non-GSO systems and radio astronomy service stations based on the epfd concept	In force
RA.1750	2006-03	Mutual planning between the Earth exploration-satellite service (active) and the radio astronomy service in the 94 GHz and 130 GHz bands	In force
RA.1860	2010-01	Preferred frequency bands for radio astronomical measurements in the range 1-3 THz	In force

Recommendation count: 14

Series RS : Remote sensing systems

Number	*Approval Date*	*Recommendation Title*	*Status*
RS.515-4	2003-05	Frequency bands and bandwidths used for satellite passive sensing	In force
RS.516-1	1994-03	Feasibility of sharing between active sensors used on Earth exploration and meteorological satellites and the radiolocation service	Withdrawn
RS.577-7	2009-02	Frequency bands and required bandwidths used for spaceborne active sensors operating in the Earth exploration-satellite (active) and space research (active) services	In force
RS.1028-2	2003-05	Performance criteria for satellite passive remote sensing	In force
RS.1029-2	2003-05	Interference criteria for satellite passive remote sensing	In force
RS.1165-2	2006-03	Technical characteristics and performance criteria for systems in the meteorological aids service in the 403 MHz and 1 680 MHz bands	In force
RS.1166-4	2009-02	Performance and interference criteria for active spaceborne sensors	In force
RS.1259	1997-06	Feasibility of sharing between spaceborne passive sensors and the fixed service from 50 to 60 GHz	In force
RS.1260-1	2003-05	Feasibility of sharing between active spaceborne sensors and other services in the range 420-470 MHz	In force
RS.1261	1997-06	Feasibility of sharing between spaceborne cloud radars and other services in the range of 92-95 GHz	In force
RS.1262	1997-06	Sharing and coordination criteria for meteorological aids in the 400.15-406 MHz and 1 668.4-1 700 MHz bands	In force
RS.1263-1	2010-01	Interference criteria for meteorological aids operated in the 400.15-406 MHz and 1 668.4-1 700 MHz bands	In force
RS.1264-1	2003-05	Feasibility of frequency sharing between the meteorological aids service and the mobile-satellite service (Earth-to-space) in the 1 668.4-1 700 MHz band	In force
RS.1279	1997-10	Spectrum sharing between spaceborne passive sensors and inter-satellite links in the range 50.2-59.3 GHz	In force
RS.1280	1997-10	Selection of active spaceborne sensor emission characteristics to mitigate the potential for interference to terrestrial radars operating in frequency bands 1-10 GHz	In force
RS.1281	1997-10	Protection of stations in the radiolocation service from emissions from active spaceborne sensors in the band 13.4-13.75 GHz	In force
RS.1282	1997-10	Feasibility of sharing between wind profiler radars and active spaceborne sensors in the vicinity of 1 260 MHz	In force
RS.1346	1998-02	Sharing between the meteorological aids service and medical implant communication systems (MICS) operating in the mobile service in the frequency band 401-406 MHz	In force
RS.1347	1998-02	Feasibility of sharing between radionavigation-satellite service receivers and the Earth exploration-satellite (active) and space research (active) services in the 1 215-1 260 MHz band	In force
RS.1416	1999-10	Sharing between spaceborne passive sensors and the inter-satellite service operating near 118 and 183 GHz	In force

RS.1449	2000-05	Feasibility of sharing between the FSS (space-to-Earth) and the Earth exploration-satellite (passive) and space research (passive) services in the band 18.6-18.8 GHz	In force
RS.1624	2003-05	Sharing between the Earth exploration satellite (passive) and airborne altimeters in the aeronautical radionavigation service in the band 4 200-4 400 MHz	In force
RS.1628	2003-05	Feasibility of sharing in the band 35.5 36 GHZ between the Earth exploration-satellite service (active) and space research service (active), and other services allocated in this band	In force
RS.1632	2003-06	Sharing in the band 5 250-5 350 MHz between the Earth exploration-satellite service (active) and wireless access systems (including radio local area networks) in the mobile service	In force
RS.1744	2006-03	Technical and operational characteristics of ground-based meteorological aids systems operating in the frequency range 272-750 THz	In force
RS.1745	2006-03	Use of the band 1 668.4 1 710 MHz by the meteorological aids service and meteorological-satellite service (space-to-Earth)	In force
RS.1749	2006-03	Mitigation technique to facilitate the use of the 1 215-1 300 MHz band by the Earth exploration-satellite service (active) and the space research service (active)	In force
RS.1803	2007-06	Technical and operational characteristics for passive sensors in the Earth exploration-satellite (passive) service to facilitate sharing of the 10.6-10.68 GHz and 36-37 GHz bands with the fixed and mobile services	In force
RS.1804	2007-06	Technical and operational characteristics of Earth exploration-satellite service (EESS) systems operating above 3 000 GHz	In force
RS.1813	2009-02	Reference antenna pattern for passive sensors operating in the Earth exploration-satellite service (passive) to be used in compatibility analyses in the frequency range 1.4-100 GHz	In force
RS.1858	2010-01	Characterization and assessment of aggregate interference to the Earth exploration-satellite service (passive) sensor operations from multiple sources of man made emissions	In force
RS.1859	2010-01	Use of remote sensing systems for data collection to be used in the event of natural disasters and similar emergencies	In force
RS.1861	2010-01	Typical technical and operational characteristics of Earth exploration-satellite service (passive) systems using allocations between 1.4 and 275 GHz	In force

Recommendation count: 33

Series S : Fixed-satellite service

Number	*Approval Date*	*Recommendation Title*	*Status*
S.352-4	1982-07	Hypothetical reference circuit for systems using analogue transmission in the fixed-satellite service	In force
S.353-8	1994-09	Allowable noise power in the hypothetical reference circuit for frequency-division multiplex telephony in the fixed-satellite service	In force
S.354-2	1974-07	Video bandwidth and permissible noise level in the hypothetical reference circuit for the fixed-satellite service	In force
S.446-4	1993-04	Carrier energy dispersal for systems employing angle modulation by analogue signals or digital modulation in the fixed-satellite service	In force
S.464-2	1992-03	Pre-emphasis characteristics for frequency-modulation systems for frequency-division multiplex telephony in the fixed-satellite service	In force
S.465-6	2010-01	Reference radiation pattern of earth station antennas in the fixed-satellite service for use in coordination and interference assessment in the frequency range from 2 to 31 GHz	In force
S.466-6	1992-03	Maximum permissible level of interference in a telephone channel of a geostationary-satellite network in the fixed-satellite service employing frequency modulation with frequency-division multiplex, caused by other networks of this service	In force
S.481-2	1986-07	Measurement of noise in actual traffic for systems in the fixed-satellite service for telephony using frequency-division multiplex	In force
S.482-2	1986-07	Measurement of performance by means of a signal of a uniform spectrum for systems using frequency-division multiplex telephony in the fixed-satellite service	In force
S.483-3	1997-05	Maximum permissible level of interference in a television channel of a geostationary-satellite network in the fixed-satellite service employing frequency modulation, caused by other networks of this service	In force
S.484-3	1992-03	Station-keeping in longitude of geostationary satellites in the fixed-satellite service	In force
S.521-4	2000-01	Hypothetical reference digital paths for systems using digital transmission in the fixed-satellite service	In force
S.522-5	1994-09	Allowable bit error ratios at the output of the hypothetical reference digital path for systems in the fixed-satellite service using pulse-code modulation for telephony	In force
S.523-4	1992-03	Maximum permissible levels of interference in a geostationary-satellite network in the fixed-satellite service using 8-bit PCM encoded telephony, caused by other networks of this service	In force
S.524-9	2006-01	Maximum permissible levels of off-axis e.i.r.p. density from earth stations in geostationary-satellite orbit networks operating in the fixed-satellite service transmitting in the 6 GHz, 13 GHz, 14 GHz and 30 GHz frequency bands	In force
S.579-6	2005-04	Availability objectives for a hypothetical reference circuits and hypothetical reference digital paths when used for telephony using pulse code modulation, or as part of an integrated services digital network hypothetical reference connection, in the fixed-satellite service operating below 15 GHz	In force
S.580-6	2004-01	Radiation diagrams for use as design objectives for antennas of earth stations operating with geostationary satellites	In force

S.614-4	2005-02	Allowable error performance for a satellite hypothetical reference digital path in the fixed-satellite service operating below 15 GHz when forming part of an international connection in an integrated services digital network	In force
S.670-1	1992-03	Flexibility in the positioning of satellites as a design objective	In force
S.671-3	1994-09	Necessary protection ratios for narrow-band single channel-per-carrier transmissions interfered with by analogue television carriers	In force
S.672-4	1997-09	Satellite antenna radiation pattern for use as a design objective in the fixed-satellite service employing geostationary satellites	In force
S.673-2	2002-03	Terms and definitions relating to space radiocommunications	In force
S.725	1992-03	Technical characteristics for very small aperture terminals (VSATs)	In force
S.726-1	1993-04	Maximum permissible level of spurious emissions from very small aperture terminals (VSATs)	In force
S.727-2	2007-01	Cross-polarization isolation from very small aperture terminals (VSATs)	Withdrawn
S.728-1	1995-10	Maximum permissible level of off-axis e.i.r.p. density from very small aperture terminals (VSATs)	In force
S.729	1992-03	Control and monitoring function of very small aperture terminals (VSATs)	In force
S.730	1992-03	Compensation of the effects of switching discontinuities for voice band data and of doppler frequency-shifts in the fixed-satellite service	In force
S.731-1	2005-04	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	In force
S.732	1992-03	Method for statistical processing of earth-station antenna side-lobe peaks	In force
S.733-2	2000-01	Determination of the G/T ratio for Earth stations operating in the fixed-satellite service	In force
S.734	1992-03	The application of interference cancellers in the fixed-satellite service	In force
S.735-1	1993-04	Maximum permissible levels of interference in a geostationary-satellite network for an HRDP when forming part of the ISDN in the fixed-satellite service caused by other networks of this service below 15 GHz	In force
S.736-3	1997-05	Estimation of polarization discrimination in calculations of interference between geostationary-satellite networks in the fixed-satellite service	In force
S.737	1992-03	Relationship of technical coordination methods within the fixed-satellite service	In force
S.738	1992-03	Procedure for determining if coordination is required between geostationary-satellite networks sharing the same frequency bands	In force
S.739	1992-03	Additional methods for determining if detailed coordination is necessary between geostationary-satellite networks in the fixed-satellite service sharing the same frequency bands	In force
S.740	1992-03	Technical coordination methods for fixed-satellite networks	In force
S.741-2	1994-09	Carrier-to-interference calculations between networks in the fixed- satellite service	In force
S.742-1	1993-04	Spectrum utilization methodologies	In force
S.743-1	1994-09	The coordination between satellite networks using slightly inclined geostationary-satellite orbits (GSOs) and between such networks and satellite networks using non-inclined GSO satellites	In force

S.744	1992-03	Orbit/spectrum improvement measures for satellite networks having more than one service in one or more frequency bands	In force
S.1001-2	2010-01	Use of systems in the fixed-satellite service in the event of natural disasters and similar emergencies for warning and relief operations	In force
S.1002	1993-04	Orbit management techniques for the fixed-satellite service	In force
S.1003-1	2004-01	Environmental protection of the geostationary-satellite orbit	In force
S.1061-1	2007-01	Utilization of fade countermeasure strategies and techniques in the fixed-satellite service	In force
S.1062-4	2007-01	Allowable error performance for a satellite hypothetical reference digital path operating below 15 GHz	In force
S.1063	1994-09	Criteria for sharing between BSS feeder links and other Earth-to-space or space-to-Earth links of the FSS	In force
S.1064-1	1995-10	Pointing accuracy as a design objective for earthward antennas on board geostationary satellites in the fixed-satellite service	In force
S.1065	1994-09	Power flux-density values to facilitate the application of RR Article 14 for the FSS in Region 2 in relation to the BSS in the band 11.7-12.2 GHz	Withdrawn
S.1066	1994-09	Ways of reducing the interference from the broadcasting-satellite service of one Region into the fixed-satellite service of another Region around 12 GHz	Withdrawn
S.1067	1994-09	Ways of reducing the interference from the broadcasting-satellite service into the fixed-satellite service in adjacent frequency bands around 12 GHz	Withdrawn
S.1068	1994-09	Fixed-satellite and radiolocation/radionavigation services sharing in the band 13.75-14 GHz	In force
S.1069	1994-09	Compatibility between the fixed-satellite service and the space science services in the band 13.75-14 GHz	In force
S.1149-2	2005-02	Network architecture and equipment functional aspects of digital satellite systems in the fixed-satellite service forming part of synchronous digital hierarchy transport networks	In force
S.1150	1995-10	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. S11.32A.1 of the Radio Regulations	In force
S.1151	1995-10	Sharing between the inter-satellite service involving geostationary satellites in the fixed-satellite service and the radionavigation service at 33 GHz	In force
S.1250	1997-05	Network management architecture for digital satellite systems forming part of SDH transport networks in the fixed-satellite service	In force
S.1251	1997-07	Network management - Performance management object class definitions for satellite systems network elements forming part of SDH transport networks in the fixed-satellite service	In force
S.1252	1997-05	Network management - Payload configuration object class definitions for satellite system network elements forming part of SDH transport networks in the fixed-satellite service	In force
S.1253	1997-05	Technical options to facilitate coordination of fixed-satellite service networks in certain orbital arc segments and frequency bands	In force
S.1254	1997-05	Best practices to facilitate the coordination process of fixed-satellite service satellite networks	In force

S.1255	1997-05	Use of adaptive uplink power control to mitigate codirectional interference between geostationary satellite orbit/fixed-satellite service (GSO/FSS) networks and feeder links of non-geostationary satellite orbit/mobile satellite service (non-GSO/MSS) networks and between GSO/FSS networks and non-GSO/FSS networks	In force
S.1256	1997-05	Methodology for determining the maximum aggregate power flux-density at the geostationary-satellite orbit in the band 6 700-7 075 MHz from feeder links of non-geostationary satellite systems in the mobile-satellite service in the space-to-Earth direction	In force
S.1257-3	2002-03	Analytical method to calculate short-term visibility and interference statistics for non-geostationary satellite orbit satellites as seen from a point on the Earth's surface	In force
S.1323-2	2002-09	Maximum permissible levels of interference in a satellite network (GSO/FSS; non-GSO/FSS; non-GSO/MSS feeder links) in the fixed-satellite service caused by other codirectional FSS networks below 30 GHz	In force
S.1324	1997-09	Analytical method for estimating interference between non-geostationary mobile-satellite feeder links and geostationary fixed-satellite networks operating co-frequency and codirectionally	In force
S.1325-3	2003-10	Simulation methodologies for determining statistics of short-term interference between co-frequency, codirectional non-geostationary-satellite orbit fixed-satellite service systems in circular orbits and other non-geostationary fixed-satellite service systems in circular orbits or geostationary-satellite orbit fixed-satellite service networks	In force
S.1326	1997-09	Feasibility of sharing between the inter-satellite service and the fixed-satellite service in the frequency band 50.4-51.4 GHz	In force
S.1327	1997-09	Requirements and suitable bands for operation of the inter-satellite service within the range 50.2-71 GHz	In force
S.1328-4	2002-09	Satellite system characteristics to be considered in frequency sharing analyses within the fixed-satellite service	In force
S.1329	1997-09	Frequency sharing of the bands 19.7-20.2 GHz and 29.5-30.0 GHz between systems in the mobile-satellite service and systems in the fixed-satellite service	In force
S.1339-1	1999-11	Sharing between spaceborne passive sensors of the Earth exploration-satellite service and inter-satellite links of geostationary-satellite networks in the range 54.25 to 59.3 GHz	In force
S.1340	1997-10	Sharing between feeder links for the mobile-satellite service and the aeronautical radionavigation service in the Earth-to-space direction in the band 15.4-15.7 GHz	In force
S.1341	1997-10	Sharing between feeder links for the mobile-satellite service and the aeronautical radionavigation service in the space-to-Earth direction in the band 15.4-15.7 GHz and the protection of the radio astronomy service in the band 15.35-15.4 GHz	In force
S.1342	1997-10	Method for determining coordination distances, in the 5 GHz band, between the international standard microwave landing system stations operating in the aeronautical radionavigation service and non-geostationary mobile-satellite service stations providing feeder uplink services	In force
S.1418	1999-11	Method for calculating single entry carrier-to-interference ratios for links in inter-satellite service using geostationary orbit	In force
S.1419	1999-11	Interference mitigation techniques to facilitate coordination between non-geostationary-satellite orbit mobile-satellite service feeder links and geostationary-satellite orbit fixed-satellite service networks in the bands 19.3-19.7 GHz and 29.1-29.5 GHz	In force

S.1420	1999-11	Performance for broadband integrated services digital network asynchronous transfer mode via satellite	In force
S.1424	2000-01	Availability objectives for a hypothetical reference digital path when used for the transmission of B-ISDN asynchronous transfer mode in the fixed-satellite service by geostationary orbit satellite systems using frequencies below 15 GHz	In force
S.1425	2000-01	Transmission considerations for digital carriers using higher levels of modulation on satellite circuits	In force
S.1426	2000-01	Aggregate power flux-density limits, at the FSS satellite orbit for radio local area network (RLAN) transmitters operating in the 5 150-5 250 MHz band sharing frequencies with the FSS (RR No. S5.447A)	In force
S.1427-1	2006-01	Methodology and criterion to assess interference from terrestrial wireless access system/radio local area network transmitters to non-geostationary-satellite orbit mobile-satellite service feeder links in the band 5 150-5 250 MHz	In force
S.1428-1	2001-02	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	In force
S.1429	2000-01	Error performance objectives due to internetwork interference between GSO and non-GSO FSS systems for hypothetical reference digital paths operating at or above the primary rate carried by systems using frequencies below 15 GHz	In force
S.1430	2000-01	Determination of the coordination area for Earth stations operating with non-geostationary space stations with respect to Earth stations operating in the reverse direction in frequency bands allocated bidirectionally to the fixed-satellite service	In force
S.1431	2000-01	Methods to enhance sharing between non-GSO FSS systems (except MSS feeder links) in the frequency bands between 10-30 GHz	In force
S.1432-1	2006-01	Apportionment of the allowable error performance degradations to fixed-satellite service (FSS) hypothetical reference digital paths arising from time invariant interference for systems operating below 30 GHz	In force
S.1433	2000-01	Uplink and inter-satellite equivalent power flux-density radiated by non-GSO FSS Systems	In force
S.1503-1	2005-04	Functional description to be used in developing software tools for determining conformity of non-geostationary-satellite orbit fixed-satellite system networks with limits contained in Article 22 of the Radio Regulations	In force
S.1512	2001-02	Measurement procedure for determining non-geostationary satellite orbit satellite equivalent isotropically radiated power and antenna discrimination	In force
S.1521-1	2010-01	Allowable error performance for a hypothetical reference digital path based on synchronous digital hierarchy	In force
S.1522-1	2005-02	Impact of loss of synchronization recovery time on availability in hypothetical reference digital paths	In force
S.1523	2001-06	Methodology for performing parametric evaluation studies of interference sensitivity for geostationary-satellite orbit fixed-satellite service systems sharing spectrum in bands above 10 GHz	In force
S.1524	2001-06	Coordination identification between geostationary-satellite orbit fixed-satellite service networks	In force
S.1525-1	2002-09	Impact of interference from the Sun into a geostationary-satellite orbit fixed-satellite service link	In force

S.1526-1	2002-09	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	In force
S.1527	2001-06	Procedure for the identification of non-geostationary-satellite orbit satellites causing interference into an operating geostationary-satellite orbit earth station	In force
S.1528	2001-06	Satellite antenna radiation patterns for non-geostationary orbit satellite antennas operating in the fixed-satellite service below 30 GHz	In force
S.1529	2001-06	Analytical method for determining the statistics of interference between non-geostationary-satellite orbit fixed-satellite service systems and other non-geostationary-satellite orbit fixed-satellite service systems or geostationary-satellite orbit fixed-satellite service networks	In force
S.1553	2002-03	A possible method to account for environmental and other effects on satellite antenna patterns	In force
S.1554	2002-03	Methodology for determining the overall accuracy of epfddown measurements	In force
S.1555	2002-03	Aggregate interference levels between closely spaced dual circularly and dual linearly polarized geostationary-satellite networks in the fixed-satellite service operating in the 6/4 GHz frequency bands	In force
S.1556	2002-03	Methodology to determine the epfddown level corresponding to the loss of synchronization in geostationary fixed satellite service networks caused by interference from non-geostationary-satellite systems	In force
S.1557	2002-03	Operational requirements and characteristics of fixed-satellite service systems operating in the 50/40 GHz bands for use in sharing studies between the fixed-satellite service and the fixed service	In force
S.1558	2002-03	Methodologies for measuring epfddown caused by a non-geostationary-satellite orbit space station to verify compliance with operational epfdown limits	In force
S.1559	2002-03	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	In force
S.1560	2002-03	Methodology for the calculation of the worst-case interference levels from a particular type of non-geostationary fixed-satellite service system using highly-elliptical orbits into geostationary fixed-satellite service satellite networks operating in the 4/6 GHz frequency bands	In force
S.1586-1	2007-01	Calculation of unwanted emission levels produced by a non geostationary fixed-satellite service system at radio astronomy sites	In force
S.1587-2	2007-10	Technical characteristics of earth stations on board vessels communicating with FSS satellites in the frequency bands 5 925-6 425 MHz and 14-14.5 GHz which are allocated to the fixed-satellite service	In force
S.1588	2002-09	Methodologies for calculating aggregate downlink equivalent power flux-density produced by multiple non-geostationary fixed-satellite service systems into a geostationary fixed-satellite service network	In force
S.1589	2002-09	Continuous curves of epfddown versus geostationary fixed-satellite service earth station antenna diameter and epfdup 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	In force
S.1590	2002-09	Technical and operational characteristics of satellites operating in the range 20-375 THz	In force

S.1591	2002-09	Sharing of inter-satellite link bands around 23, 32.5 and 64.5 GHz between non-geostationary/geostationary inter-satellite links and geostationary/geostationary inter-satellite links	In force
S.1592	2002-09	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	In force
S.1593	2002-09	Methodology for frequency sharing between certain types of homogeneous highly-elliptical orbit non-geostationary fixed-satellite service systems in the 4/6 GHz and 11/14 GHz frequency bands	In force
S.1594	2002-09	Maximum emission levels and associated requirements of high density fixed-satellite service earth stations transmitting towards geostationary fixed-satellite service space stations in the 30 GHz range	In force
S.1595	2002-09	Interference mitigation techniques to facilitate coordination between non-geostationary fixed-satellite service systems in highly elliptical orbit and non-geostationary fixed-satellite service systems in low and medium Earth orbit	In force
S.1647	2004-01	Methodology to determine the worst-case interference among certain types of non-GSO FSS systems in situations where no in-line interference exists	In force
S.1655	2003-10	Interference mitigation techniques and frequency sharing in the bands 37.5-42.5 GHz and 47.2-50.2 GHz between geostationary-satellite fixed-satellite service networks and non-geostationary-satellite fixed-satellite service systems	In force
S.1656	2004-01	Outline of a software specification for automating the examination of satellite network filings for compliance with Article 5 of the Radio Regulations	In force
S.1672	2004-01	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	In force
S.1673-1	2010-01	Methodologies for the calculation of the worst-case interference levels from a non geostationary HEO-type fixed-satellite service system into geostationary fixed-satellite service satellite networks operating in the 10 to 30 GHz frequency bands	In force
S.1709-1	2007-01	Technical characteristics of air interfaces for global broadband satellite systems	In force
S.1711-1	2010-01	Performance enhancements of transmission control protocol over satellite networks	In force
S.1712	2005-04	Methodologies for determining whether an FSS earth station at a given location could transmit in the band 13.75-14 GHz without exceeding the pfd limits in No. 5.502 of the Radio Regulations, and guidelines to mitigate excesses	In force
S.1713-1	2007-01	Methodology to calculate the minimum separation angle at the Earth's surface between a non-geostationary HEO-type FSS satellite in its "active" arc and a geostationary satellite	In force
S.1714	2005-04	Static methodology for calculating epfddown to facilitate coordination of very large antennas under Nos. 9.7A and 9.7B of the Radio Regulations	In force
S.1715	2005-04	Guidelines developed in response to the studies requested in Resolution 140 (WRC-03)	In force
S.1716	2005-02	Performance and availability objectives for fixed-satellite service telemetry, tracking and command systems	In force
S.1717	2005-02	Electronic data file format for earth station antenna patterns	In force

S.1718	2005-02	Power flux-density values in the band 11.7-12.7 GHz and associated calculation methodology which may be used when the power flux-density values in § 6 of Annex 1 to Appendix 30 of the Radio Regulations are exceeded	In force
S.1758	2006-01	Characterization of HEO-type systems in the fixed-satellite service	In force
S.1759	2006-01	Analysis of interference from HEO system space operation transmissions in FSS bands into GSO networks and corresponding guidelines to be used for designing and operating TT&C for HEO-type FSS system	In force
S.1779	2007-01	Characteristics of fixed-satellite service systems using wideband spreading signals	In force
S.1780	2007-01	Coordination between geostationary-satellite orbit fixed satellite service networks and broadcasting-satellite service networks in the band 17.3-17.8 GHz	In force
S.1781	2007-01	Possible methodology for frequency sharing between bidirectional geostationary fixed-satellite service networks comprising ubiquitously deployed earth stations	In force
S.1782	2007-01	Possibilities for global broadband Internet access by fixed-satellite service systems	In force
S.1783	2007-01	Technical and operational features characterizing high-density applications in the fixed-satellite service	In force
S.1806	2008-08	Availability objectives for hypothetical reference digital paths in the fixed-satellite service operating below 15 GHz	In force
S.1844	2009-02	Cross-polarization reference gain pattern for linearly polarized very small aperture terminals (VSAT) for frequencies in the range 2 to 31 GHz	In force
S.1855	2010-01	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	In force
S.1856	2010-01	Methodologies for determining whether an IMT station at a given location operating in the band 3 400-3 600 MHz would transmit without exceeding the power flux-density limits in the Radio Regulations Nos. 5.430A, 5.432A, 5.432B and 5.433A	In force
S.1857	2010-01	Methodologies to estimate the off-axis e.i.r.p. density levels and to assess the interference towards adjacent satellites resulting from pointing errors of vehicle mounted earth stations in the 14 GHz frequency band	In force

Recommendation count: 144

Series SA : Space applications and meteorology

Number	*Approval Date*	*Recommendation Title*	*Status*
SA.362-2	1982-07	Frequencies technically suitable for meteorological satellites	Withdrawn
SA.363-5	1994-03	Space operation systems	In force
SA.364-5	1992-03	Preferred frequencies and bandwidths for manned and unmanned near-Earth research satellites	In force
SA.509-2	1998-02	Space research earth station and radio astronomy reference antenna radiation pattern for use in interference calculations, including coordination procedures	In force
SA.510-2	1997-10	Feasibility of frequency sharing between the space research service and other services in bands near 14 and 15 GHz - Potential interference from data relay satellite systems	In force
SA.513-1	1986-07	Preferred frequency bands for spacecraft transmitters used as beacons	Withdrawn
SA.514-3	1997-10	Interference criteria for command and data transmission systems operating in the Earth exploration-satellite and meteorological-satellite services	In force
SA.578	1982-07	Protection criteria and sharing considerations relating to deep-space research	Withdrawn
SA.609-2	2006-03	Protection criteria for radiocommunication links for manned and unmanned near-Earth research satellites	In force
SA.1012	1994-03	Preferred frequency bands for deep-space research in the 1-40 GHz range	In force
SA.1013	1994-03	Preferred frequency bands for deep-space research in the 40-120 GHz range	In force
SA.1014-1	2006-03	Telecommunication requirements for manned and unmanned deep-space research	In force
SA.1015-1	2007-06	Bandwidth requirements for deep-space research	In force
SA.1016	1994-03	Sharing considerations relating to deep-space research	In force
SA.1017	1994-03	Preferred method for calculating link performance in the space research service	In force
SA.1018	1994-03	Hypothetical reference system for systems comprising data relay satellites in the geostationary orbit and user spacecraft in low Earth-orbits	In force
SA.1019	1994-03	Preferred frequency bands and transmission directions for data relay satellite systems	In force
SA.1020	1994-03	Hypothetical reference system for the Earth exploration-satellite and meteorological satellite services	In force
SA.1021	1994-03	Methodology for determining performance objectives for systems in the Earth exploration-satellite and meteorological-satellite services	In force
SA.1022-1	1999-10	Methodology for determining interference criteria for systems in the Earth exploration-satellite and meteorological-satellite services	In force
SA.1023	1994-03	Methodology for determining sharing and coordination criteria for systems in the Earth exploration-satellite and meteorological-satellite services	In force

SA.1024-1	1997-06	Necessary bandwidths and preferred frequency bands for data transmission from Earth exploration satellites (not including meteorological satellites)	In force
SA.1025-3	1999-10	Performance criteria for space-to-Earth data transmission systems operating in the Earth exploration-satellite and meteorological-satellite services using satellites in low-Earth orbit	In force
SA.1026-4	2009-02	Aggregate interference criteria for space-to-Earth data transmission systems operating in the Earth exploration-satellite and meteorological-satellite services using satellites in low-Earth orbit	In force
SA.1027-4	2009-02	Sharing criteria for space-to-Earth data transmission systems in the Earth exploration-satellite and meteorological-satellite services using satellites in low-Earth orbit	In force
SA.1030	1994-03	Telecommunication requirements of satellite systems for geodesy and geodynamics	In force
SA.1071	1994-07	Use of the 13.75 to 14.0 GHz band by the space science services and the fixed satellite service	Withdrawn
SA.1154	1995-10	Provisions to protect the space research (SR), space operations (SO) and Earth exploration-satellite services (EESS) and to facilitate sharing with the mobile service in the 2 025-2 110 MHz and 2 200-2 290 MHz bands	In force
SA.1155	1995-10	Protection criteria related to the operation of data relay satellite systems	In force
SA.1156	1995-10	Methods of calculating low-orbit satellite visibility statistics	Withdrawn
SA.1157-1	2006-03	Protection criteria for deep-space research	In force
SA.1158-3	2003-05	Feasibility of frequency sharing in the 1 670-1 710 MHz band between the meteorological-satellite service (space-to-Earth) and the mobile-satellite service (Earth-to-space)	In force
SA.1159-3	2006-03	Performance criteria for data dissemination, data collection and direct data readout systems in the Earth exploration-satellite service and meteorological-satellite service	In force
SA.1160-2	1999-10	Interference criteria for data dissemination and direct data readout systems in the earth exploration-satellite and meteorological-satellite services using satellites in the geostationary orbit	In force
SA.1161-1	1999-10	Sharing and coordination criteria for data dissemination and direct data readout systems in the Earth exploration-satellite and meteorological-satellite services using satellites in geostationary orbit	In force
SA.1162-2	2003-05	Performance criteria for service links in data collection and platform location systems in the Earth exploration- and meteorological-satellite services	In force
SA.1163-2	1999-10	Interference criteria for service links in data collection systems in the Earth exploration-satellite and meteorological-satellite services	In force
SA.1164-2	1999-10	Sharing and coordination criteria for service links in data collection systems in the Earth exploration-satellite and meteorological-satellite services	In force
SA.1236	1997-02	Frequency sharing between space research service extra-vehicular activity (EVA) links and fixed and mobile service links in the 410-420 MHz band	In force
SA.1258-1	1999-10	Sharing of the frequency band 401-403 MHz between the meteorological-satellite service, Earth exploration-satellite service and meteorological Aids service	In force

SA.1273	1997-10	Power flux-density levels from the space research, space operation and Earth exploration-satellite services at the surface of the Earth required to protect the fixed service in the bands 2 025-2 110 MHz and 2 200-2 290 MHz	In force
SA.1274	1997-10	Criteria for data relay satellite networks to facilitate sharing with systems in the fixed service in the bands 2 025-2 110 MHz and 2 200-2 290 MHz	In force
SA.1275-2	2009-02	Orbital locations of data relay satellites to be protected from the emissions of fixed service systems operating in the band 2 200-2 290 MHz	In force
SA.1276-2	2009-02	Orbital locations of data relay satellites to be protected from the emissions of fixed service systems operating in the band 25.25-27.5 GHz	In force
SA.1277	1997-10	Sharing in the 8 025-8 400 MHz frequency band between the Earth exploration-satellite service and the fixed, fixed-satellite, meteorological-satellite and mobile services in Regions 1, 2 and 3	In force
SA.1278	1997-10	Feasibility of sharing between the Earth exploration-satellite service (space-to-Earth) and the fixed, inter-satellite, and mobile services in the band 25.5-27.0 GHz	In force
SA.1344-1	2009-02	Preferred frequency bands and bandwidths for the transmission of space VLBI data within existing space research service (SRS) allocations	In force
SA.1345-1	2010-01	Methods for predicting radiation patterns of large antennas used for space research and radio astronomy	In force
SA.1396	1999-04	Protection criteria for the space research service in the 37-38 and 40-40.5 GHz bands	In force
SA.1414	1999-10	Characteristics of data relay satellite systems	In force
SA.1415	1999-10	Sharing between inter-satellite service systems in the frequency band 25.25-27.5 GHz	In force
SA.1625	2003-05	Feasibility of sharing between the space research service (space-to-Earth) and the fixed, inter-satellite, and mobile services in the band 25.5-27 GHz	In force
SA.1626	2003-05	Feasibility of sharing between the space research service (space-to-Earth) and the fixed and mobile services in the band 14.8-15.35 GHz	In force
SA.1627	2003-05	Telecommunication requirements and characteristics of EESS and MetSat service systems for data collection and platform location	In force
SA.1629	2003-05	Sharing between command links in the space research and space operation services with the fixed, mobile and mobile-satellite services in the frequency band 257-262 MHz	In force
SA.1742	2006-03	Technical and operational characteristics of interplanetary and deep-space systems operating in the space-to-Earth direction around 283 THz	In force
SA.1743	2006-03	Maximum allowable degradation to radiocommunication links of the space research and space operation services arising from interference from emissions and radiations from other radio sources	In force
SA.1745	2006-03	Use of the band 1 668.4 1 710 MHz by the meteorological aids service and meteorological-satellite service (space-to-Earth)	In force
SA.1805	2007-06	Technical and operational characteristics of space-to-space telecommunication systems operating around 354 THz and 366 THz	In force
SA.1807	2007-06	System characteristics and interference criteria for meteorological satellite systems operating around 18 GHz	In force
SA.1810	2007-06	System design guidelines for Earth exploration-satellites operating in the band 8 025-8 400 MHz	In force

SA.1811	2007-06	Reference antenna patterns of large-aperture space research service earth stations to be used for compatibility analyses involving a large number of distributed interference entries in the bands 31.8-32.3 GHz and 37.0-38.0 GHz	In force
SA.1862	2010-01	Guidelines for efficient use of the band 25.5-27.0 GHz by the Earth exploration-satellite service (space-to-Earth) and space research service (space-to-Earth)	In force
SA.1863	2010-01	Radiocommunications used for emergency in manned space flight	In force

Recommendation count: 64

Series SF : Frequency sharing and coordination between fixed-satellite and fixed service systems

Number	*Approval Date*	*Recommendation Title*	*Status*
SF.355-4	1992-03	Frequency sharing between systems in the fixed-satellite service and radio-relay systems in the same frequency bands	Withdrawn
SF.356-4	1978-07	Maximum allowable values of interference from line-of-sight radio-relay systems in a telephone channel of a system in the fixed-satellite service employing frequency modulation, when the same frequency bands are shared by both systems	In force
SF.357-4	1997-05	Maximum allowable values of interference in a telephone channel of an analogue angle-modulated radio-relay system sharing the same frequency bands as systems in the fixed-satellite service	In force
SF.358-5	1995-10	Maximum permissible values of power flux-density at the surface of the Earth produced by satellites in the fixed-satellite service using the same frequency bands above 1 GHz as line-of-sight radio-relay systems	Withdrawn
SF.406-8	1993-04	Maximum equivalent isotropically radiated power of radio-relay system transmitters operating in the frequency bands shared with the fixed-satellite service	Withdrawn
SF.558-2	1986-07	Maximum allowable values of interference from terrestrial radio links to systems in the fixed-satellite service employing 8-bit PCM encoded telephony and sharing the same frequency bands	Withdrawn
SF.615-1	1997-05	Maximum allowable values of interference from the fixed-satellite service into terrestrial radio-relay systems which may form part of an ISDN and share the same frequency band below 15 GHz	Withdrawn
SF.674-2	2002-05	Determination of the impact on the fixed service operating in the 11.7-12.2 GHz band when geostationary fixed-satellite service networks in Region 2 exceed power flux-density thresholds in Resolution 77 (WRC-2000)	In force
SF.675-3	1994-08	Calculation of the maximum power density (averaged over 4 kHz) of an angle-modulated carrier	In force
SF.765-1	2003-02	Intersection of radio-relay antenna beams with orbits used by space stations in the fixed-satellite service	In force
SF.766	1992-03	Methods for determining the effects of interference on the performance and the availability of terrestrial radio-relay systems and systems in the fixed-satellite service	In force
SF.1004	1993-04	Maximum equivalent isotropically radiated power transmitted towards the horizon by earth stations of the fixed-satellite service sharing frequency bands with the fixed service	Withdrawn
SF.1005	1993-04	Sharing between the fixed service and the fixed-satellite service with bidirectional usage in bands above 10 GHz currently unidirectionally allocated	Withdrawn
SF.1006	1993-04	Determination of the interference potential between earth stations of the fixed-satellite service and stations in the fixed service	In force
SF.1008-1	1995-10	Possible use by space stations in the fixed-satellite service of orbits slightly inclined with respect to the geostationary-satellite orbit in bands shared with the fixed service	Withdrawn
SF.1193	1995-10	Carrier-to-interference calculations between earth stations in the fixed-satellite service and radio-relay systems	Withdrawn

SF.1320	1997-08	Maximum allowable values of power flux-density at the surface of the Earth produced by non-geostationary satellites in the fixed-satellite service used in feeder links for the mobile-satellite service and sharing the same frequency bands with radio-relay systems	Withdrawn
SF.1395	1999-03	Minimum propagation attenuation due to atmospheric gases for use in frequency sharing studies between the fixed-satellite service and the fixed service	In force
SF.1481-1	2002-02	Frequency sharing between systems in the fixed service using high-altitude platform stations and satellite systems in the geostationary orbit in the fixed-satellite service in the bands 47.2-47.5 and 47.9-48.2 GHz	In force
SF.1482	2000-05	Maximum allowable values of power flux-density (pfd) produced at the Earth's surface by non-GSO satellites in the fixed-satellite service (FSS) operating in the 10.7-12.75 GHz band	In force
SF.1483	2000-05	Maximum allowable values of power flux-density (pfd) produced at the Earth's surface by non-GSO satellites in the fixed-satellite service (FSS) operating in the 17.7-19.3 GHz band	In force
SF.1484-1	2002-05	Maximum allowable values of power flux-density at the surface of the Earth produced by non-geostationary satellites in the fixed-satellite service operating in the 37.5-42.5 GHz band to protect the fixed service	In force
SF.1485	2000-05	Determination of the coordination area for earth stations operating with non-geostationary space stations in the fixed-satellite service in frequency bands shared with the fixed service	In force
SF.1486	2000-05	Sharing methodology between fixed wireless access systems in the fixed service and very small aperture terminals in the fixed-satellite service in the 3 400-3 700 MHz band	In force
SF.1572	2002-05	Methodology to evaluate the impact of space-to-Earth interference from the fixed-satellite service to the fixed service in frequency bands where precipitation is the predominant fade mechanism	In force
SF.1573	2002-05	Maximum allowable values of power flux-density at the surface of the Earth by geostationary satellites in the fixed-satellite service operating in the 37.5-42.5 GHz band to protect the fixed service	In force
SF.1585	2002-09	Example approach for determination of the composite area within which interference to fixed service stations from earth stations on board vessels when operating in motion near a coastline would need to be evaluated	In force
SF.1601-2	2007-02	Methodologies for interference evaluation from the downlink of the fixed service using high altitude platform stations to the uplink of the fixed-satellite service using the geostationary satellites within the band 27.5-28.35 GHz	In force
SF.1602	2003-02	Methodology for determining power flux-density statistics for use in sharing studies between fixed wireless systems and multiple fixed-satellite service satellites	In force
SF.1648	2003-06	Use of frequencies by earth stations on board vessels transmitting in certain bands allocated to the fixed-satellite service	In force
SF.1649-1	2008-08	Guidance for determination of interference from earth stations on board vessels to stations in the fixed service when the earth station on board vessels is within the minimum distance	In force
SF.1650-1	2005-02	The minimum distance from the baseline beyond which in-motion earth stations located on board vessels would not cause unacceptable interference to the terrestrial service in the bands 5 925-6 425 MHz and 14-14.5 GHz	In force
SF.1707	2005-04	Methods to facilitate the implementation of large numbers of earth stations in the FSS in areas where terrestrial services are also deployed	In force

SF.1719	2005-02	Sharing between point-to-point and point-to-multipoint fixed service and transmitting earth stations of GSO and non-GSO FSS systems in the 27.5-29.5 GHz band	In force
SF.1843	2007-10	Methodology for determining the power level for high altitude platform stations ground terminals to facilitate sharing with space station receivers in the bands 47.2-47.5 GHz and 47.9-48.2 GHz	In force

Recommendation count: 35

Series SM : Spectrum management

Number	*Approval Date*	*Recommendation Title*	*Status*
SM.182-5	2007-02	Automatic monitoring of occupancy of the radio-frequency spectrum	In force
SM.239-2	1978-07	Spurious emissions from sound and television broadcast receivers	Withdrawn
SM.326-7	1998-11	Determination and measurement of the power of amplitude-modulated radio transmitters	In force
SM.328-11	2006-05	Spectra and bandwidth of emissions	In force
SM.329-10	2003-02	Unwanted emissions in the spurious domain	In force
SM.331-4	1978-07	Noise and sensitivity of receivers	In force
SM.332-4	1978-07	Selectivity of receivers	In force
SM.337-6	2008-10	Frequency and distance separations	In force
SM.377-4	2007-02	Accuracy of frequency measurements at stations for international monitoring	In force
SM.378-7	2007-02	Field-strength measurements at monitoring stations	In force
SM.433-5	1992-03	Methods for the measurement of radio interference and the determination of tolerable levels of interference	Withdrawn
SM.443-4	2007-02	Bandwidth measurement at monitoring stations	In force
SM.508	1978-07	Use of radio-noise data in spectrum utilization studies	Withdrawn
SM.575-1	2007-02	Protection of fixed monitoring stations against interference	In force
SM.667	1990-06	National spectrum management data	In force
SM.668-1	1997-03	Electronic exchange of information for spectrum management purposes	In force
SM.669-1	1994-07	Protection ratios for spectrum sharing investigations	Withdrawn
SM.851-1	1993-04	Sharing between the broadcasting service and the fixed and/or mobile services in the VHF and UHF bands	In force
SM.852	1992-03	Sensitivity of radio receivers for class of emissions F3E	In force
SM.853-1	1997-10	Necessary bandwidth	In force
SM.854-2	2007-02	Direction finding and location determination at monitoring stations	In force
SM.855-1	1997-10	Multi-service telecommunication systems	In force
SM.856-1	1997-03	New spectrally efficient techniques and systems	In force
SM.1009-1	1995-10	Compatibility between the sound-broadcasting service in the band of about 87-108 MHz and the aeronautical services in the band 108-137 MHz	In force
SM.1045-1	1997-07	Frequency tolerance of transmitters	In force
SM.1046-2	2006-05	Definition of spectrum use and efficiency of a radio system	In force
SM.1047-1	2001-07	National spectrum management	In force

SM.1048	1994-07	Design guidelines for a basic automated spectrum management system (BASMS)	In force
SM.1049-1	1995-10	A method of spectrum management to be used for aiding frequency assignment for terrestrial services in border areas	In force
SM.1050-2	2004-01	Tasks of a monitoring service	In force
SM.1051-2	1997-07	Priority of identifying and eliminating harmful interference in the band 406-406.1 MHz	In force
SM.1052	1994-07	Automatic identification of radio stations	In force
SM.1053	1994-07	Methods of improving HF direction-finding accuracy at fixed stations	Withdrawn
SM.1054	1994-07	Monitoring of radio emissions from spacecraft at monitoring stations	In force
SM.1055	1994-07	The use of spread spectrum techniques	In force
SM.1056-1	2007-04	Limitation of radiation from industrial, scientific and medical (ISM) equipment	In force
SM.1131	1995-10	Factors to consider in allocating spectrum on a worldwide basis	In force
SM.1132-2	2001-07	General principles and methods for sharing between radiocommunication services or between radio stations	In force
SM.1133	1995-10	Spectrum utilization of broadly defined services	In force
SM.1134-1	2007-02	Intermodulation interference calculations in the land-mobile service	In force
SM.1135	1995-10	SINPO and SINPFEMO codes	In force
SM.1138-2	2008-10	Determination of necessary bandwidths including examples for their calculation and associated examples for the designation of emission	In force
SM.1139	1995-10	International monitoring system	In force
SM.1140	1995-10	Test procedures for measuring aeronautical receiver characteristics used for determining compatibility between the sound-broadcasting service in the band of about 87-108 MHz and the aeronautical services in the band 108-118 MHz	In force
SM.1235	1997-03	Performance functions for digital modulation systems in an interference environment	In force
SM.1265-1	2001-07	National alternative allocation methods	In force
SM.1266	1997-07	Adaptive MF/HF systems	In force
SM.1267	1997-07	Collection and publication of monitoring data to assist frequency assignment for geostationary satellite systems	In force
SM.1268-1	1999-01	Method of measuring the maximum frequency deviation of FM broadcast emissions at monitoring stations	In force
SM.1269	1997-07	Classification of direction finding bearings	Withdrawn
SM.1270	1997-07	Additional information for monitoring purposes related to classification and designation of emission	In force
SM.1271	1997-10	Efficient spectrum utilization using probabilistic methods	In force
SM.1370-1	2001-07	Design guidelines for developing advanced automated spectrum management systems	In force

SM.1392-1	2000-04	Essential requirements for a spectrum monitoring station for developing countries	In force
SM.1393	1999-01	Common formats for the exchange of information between monitoring stations	In force
SM.1394	1999-01	Common format for Memorandum of Understanding between the agreeing countries regarding cooperation in spectrum monitoring matters	In force
SM.1413-2	2005-06	Radiocommunication Data Dictionary for notification and coordination purposes	In force
SM.1446	2000-04	Definition and measurement of intermodulation products in transmitter using frequency, phase, or complex modulation techniques	In force
SM.1447	2000-04	Monitoring of the radio coverage of land mobile networks to verify compliance with a given licence	In force
SM.1448	2000-05	Determination of the coordination area around an earth station in the frequency bands between 100 MHz and 105 GHz	In force
SM.1448 Corrigendum 1	2000-05	Corrigendum to Rec. ITU-R.SM.1448	In force
SM.1535	2001-07	The protection of safety services from unwanted emissions	In force
SM.1536	2001-07	Frequency channel occupancy measurements	In force
SM.1537	2001-07	Automation and integration of spectrum monitoring systems with automated spectrum management	In force
SM.1538-2	2006-05	Technical and operating parameters and spectrum requirements for short range radiocommunication devices	Withdrawn
SM.1539-1	2002-11	Variation of the boundary between the out-of-band and spurious domains required for the application of Recommendations ITU-R SM.1541 and ITU-R SM.329	In force
SM.1540	2001-07	Unwanted emissions in the out-of-band domain falling into adjacent allocated bands	In force
SM.1541-2	2006-05	Unwanted emissions in the out-of-band domain	In force
SM.1542	2001-07	The protection of passive services from unwanted emissions	In force
SM.1598	2002-10	Methods of radio direction finding and location on time division multiple access and code division multiple access signals	In force
SM.1599-1	2007-02	Determination of the geographical and frequency distribution of the spectrum utilization factor for frequency planning purposes	In force
SM.1600	2002-11	Technical identification of digital signals	In force
SM.1603	2003-02	Spectrum redeployment as a method of national spectrum management	In force
SM.1604	2003-02	Guidelines for an upgraded spectrum management system for developing countries	In force
SM.1633	2003-06	Compatibility analysis between a passive service and an active service allocated in adjacent and nearby bands	In force
SM.1681	2004-05	Measuring of low-level emissions from space stations at monitoring earth stations using noise reduction techniques	In force
SM.1682	2004-05	Methods for measurements on digital broadcasting signals	In force
SM.1708	2005-04	Field-strength measurements along a route with geographical coordinate registrations	In force

SM.1723-1	2008-12	Automated mobile spectrum monitoring unit	In force
SM.1751	2006-05	An additional methodology for the evaluation of the effect of interference between radiocommunication networks operating in a shared frequency band	In force
SM.1752	2006-05	Limits for unwanted emissions under free-space condition	In force
SM.1753-1	2010-04	Methods for measurements of radio noise	In force
SM.1754	2006-05	Measurement techniques of ultra-wideband transmissions	In force
SM.1755	2006-05	Characteristics of ultra-wideband technology	In force
SM.1756	2006-05	Framework for the introduction of devices using ultra-wideband technology	In force
SM.1757	2006-05	Impact of devices using ultra-wideband technology on systems operating within radiocommunication services	In force
SM.1792	2007-02	Measuring sideband emissions of T-DAB and DVB-T transmitters for monitoring purposes	In force
SM.1793	2007-02	Measuring frequency channel occupancy using the technique used for frequency band measurement	In force
SM.1794	2007-02	Wideband instantaneous bandwidth spectrum monitoring systems	In force
SM.1809	2007-04	Standard data exchange format for frequency band registrations and measurements at monitoring stations	In force
SM.1836	2007-12	Test procedure for measuring the properties of the IF filter of radio monitoring receivers	In force
SM.1837	2007-12	Test procedure for measuring the 3rd order intercept point (IP3) level of radio monitoring receivers	In force
SM.1838	2007-12	Test procedure for measuring the noise figure of radio monitoring receivers	In force
SM.1839	2007-12	Test procedure for measuring the scanning speed of radio monitoring receivers	In force
SM.1840	2007-12	Test procedure for measuring the sensitivity of radio monitoring receivers using analogue-modulated signals	In force
SM.1875	2010-04	DVB T coverage measurements and verification of planning criteria	In force

Recommendation count: 96

Series SNG : Satellite news gathering

Number	*Approval Date*	*Recommendation Title*	*Status*
SNG.722-1	1992-03	Uniform technical standards (analogue) for satellite news gathering (SNG)	In force
SNG.770-1	1994-09	Uniform operational procedures for satellite news gathering (SNG)	In force
SNG.771-1	1993-04	Auxiliary coordination satellite circuits for SNG terminals	In force
SNG.1007-1	1995-10	Uniform technical standards (digital) for satellite news gathering (SNG)	In force
SNG.1070	1994-09	An automatic transmitter identification system (ATIS) for analogue-modulation transmissions for satellite news gathering and outside broadcasts	In force
SNG.1152	1995-10	Use of digital transmission techniques for Satellite News Gathering (SNG) (sound)	In force
SNG.1421	1999-11	Common operating parameters to ensure interoperability for transmission of digital television news gathering	In force
SNG.1561	2002-03	Digital transmission of high-definition television for satellite news gathering and outside broadcasting	In force
SNG.1710	2005-04	Satellite news gathering carriers universal access procedures	In force

Recommendation count: 9

Series TF : Time signals and frequency standards emissions

Number	*Approval Date*	*Recommendation Title*	*Status*
TF.374-5	1999-04	Precise frequency and time-signal transmissions	In force
TF.375-2	1982-07	Standard-frequency and time-signal emissions in additional frequency bands	Withdrawn
TF.376-1	1966-07	Avoidance of external interference with emissions of the standard-frequency service in the bands allocated to that service	Withdrawn
TF.457-2	1997-10	Use of the modified Julian date by the standard-frequency and time-signal services	In force
TF.458-3	1998-02	International comparisons of atomic time scales	In force
TF.460-6	2002-02	Standard-frequency and time-signal emissions	In force
TF.485-2	1990-06	Use of time scales in the field of standard-frequency and time services	Withdrawn
TF.486-2	1998-02	Use of UTC frequency as reference in standard frequency and time signal emissions	In force
TF.535-2	1998-02	Use of the term UTC	In force
TF.536-2	2003-05	Time-scale notations	In force
TF.537	1978-07	Reduction of mutual interference between emissions of the standard-frequency and time-signal service on the allocated frequencies in bands 6 and 7	Withdrawn
TF.538-3	1994-03	Measures for random instabilities in frequency and time (phase)	In force
TF.582-2	1998-02	Time and frequency reference signal dissemination and coordination using satellite methods	In force
TF.583-6	2003-05	Time codes	In force
TF.685	1990-06	International synchronization of UTC time scale	Withdrawn
TF.686-2	2002-02	Glossary and definitions of time and frequency terms	In force
TF.767-2	2001-03	Use of global navigation satellite systems for high-accuracy time transfer	In force
TF.768-6	2003-05	Standard frequencies and time signals	In force
TF.1010-1	1997-10	Relativistic effects in a coordinate time system in the vicinity of the Earth	In force
TF.1011-1	1997-10	Systems, techniques and services for time and frequency transfer	In force
TF.1153-3	2010-04	The operational use of two-way satellite time and frequency transfer employing pseudorandom noise codes	In force
TF.1552	2002-02	Time scales for use by standard-frequency and time-signal services	In force
TF.1876	2010-04	Trusted time source for Time Stamp Authority	In force

Recommendation count: 23

Series V : Vocabulary and related subjects

Number	*Approval Date*	*Recommendation Title*	*Status*
V.430-3	1990-06	Use of the international system of units (SI)	In force
V.431-7	2000-05	Nomenclature of the frequency and wavelength bands used in telecommunications	In force
V.461-5	1993-04	Graphical symbols and rules for the preparation of documentation in telecommunications	In force
V.573-5	2007-09	Radiocommunication vocabulary	In force
V.574-4	2000-05	Use of the decibel and the neper in telecommunications	In force
V.607-3	2000-05	Terms and symbols for information quantities in telecommunications	In force
V.608-2	1993-04	Letter symbols for telecommunications	Withdrawn
V.662-3	2000-05	Terms and definitions	In force
V.663-1	1990-06	Use of certain terms linked with physical quantities	In force
V.664	1986-07	Adoption of the CCITT Specification and Description Language (SDL)	Withdrawn
V.665-2	2000-05	Traffic intensity unit	In force
V.666-2	1993-04	Abbreviations and initials used in telecommunications	In force

Recommendation count: 12

Total Recommendation count: 1332

List of ITU-R Reports on DVD
2010 Edition 2

Series BO : Satellite delivery

Number	Approval Date	Recommendation Title	Status
BO.215-7	1990	Systems for the broadcasting satellite service (sound and television)	In force
BO.473-5	1990	Characteristics of receiving equipment for the broadcasting-satellite service	In force
BO.631-4	1990	Frequency sharing between the broadcasting-satellite service (sound and television) and terrestrial services	In force
BO.632-4	1990	Technically suitable methods of modulation	In force
BO.633-3	1986	Orbit and frequency planning in the broadcasting-satellite service	In force
BO.634-4	1990	Measured interference protection ratios for planning television broadcasting systems	In force
BO.807-3	1990	Unwanted emissions from broadcasting-satellite space stations	In force
BO.808-3	1990	Space segment technology	In force
BO.809-3	1990	Inter-regional sharing of the 11.7 to 12.75 GHz frequency band between the broadcasting-satellite service and the fixed-satellite service	In force
BO.810-4	1994	Transmitting and receiving antenna technology and reference patterns for the BSS	In force
BO.811-2	1986	Planning elements including those used in the establishment of plans of frequency assignements and orbital positions for the broadcasting-satellite service in the 12 GHz band	In force
BO.812-4	1994	Computer programs for planning broadcasting-satellite services in the 12 GHz band	In force
BO.814-2	1986	Factors to be considered in the choice of polarization for planning the broadcasting-satellite service	In force
BO.951	1982	Sharing between the inter-satellite service and the broadcasting-satellite service in the vicinity of 23 GHz	Withdrawn
BO.952-2	1990	Technical characteristics of feeder links to broadcasting satellites	In force
BO.953-2	1990	Digital coding for the emission of high-quality sound signals in satellite broadcasting (15 kHz nominal bandwidth)	In force
BO.954-2	1990	Multiplexing methods for the emission of several digital audio signals and also data signals in broadcasting	In force
BO.955-3	1994	Satellite sound broadcasting to vehicular, portable and fixed receivers in the range 500-3 000 MHz	Withdrawn
BO.1073-1	1990	Television standards for the broadcasting-satellite service	In force
BO.1074-1	1990	Satellite transmission of multiplexed analogue component (MAC) vision signals	Withdrawn
BO.1075-2	1994	High-definition television by satellite	In force
BO.1076	1986	Considerations affecting the accomodation of spacecraft service functions (TTC) within the broadcasting-satellite and feeder-link service bands	Withdrawn
BO.1227-2	1998	Satellite broadcasting systems of integrated services digital broadcasting	In force

BO.1228	1990	High quality sound/data standards for the broadcasting satellite service in the 12 GHz band	In force
BO.2006	1995	Introduction of satellite and complementary terrestrial digital sound broadcasting in the WARC-92 frequency allocations	In force
BO.2007-1	1998	Considerations for the introduction of broadcasting satellite service high definition television systems	In force
BO.2008-1	1998	Digital multiprogramme broadcasting by satellite	In force
BO.2016	1997	BSS systems for the 40.5-42.5 GHz band	In force
BO.2019	1999	Interference calculation methods	In force
BO.2029	2002	Broadcasting-satellite service earth station antenna pattern measurements and related analyses	In force
BO.2071	2006	System parameters of BSS between 17.3 GHz and 42.5 GHz and associated feeder links	In force
BO.2101	2007	Digital satellite broadcasting system (television, sound and data) with flexible configuration	In force
BO.2102	2007	Multiple-feed BSS receiving antennas	In force

Recommendation count: 33

Series BR : Recording for production, archival and play-out; film for television

Number	*Approval Date*	*Recommendation Title*	*Status*
BR.1229	2000	Recording of high-definition televison programmes on cinematographic film	Withdrawn

Recommendation count: 1

Series BS : Broadcasting service (sound)

Number	*Approval Date*	*Recommendation Title*	*Status*
BS.300-7	1990	Stereophonic or multi-dimensional sound in frequency-modulation sound	In force
BS.302-1	1978	Interference to sound broadcasting in the shared bands in the Tropical Zone	In force
BS.303-3	1986	Determination of the effects of atmospheric noise on the grade of reception in the Tropical Zone	In force
BS.304-3	1990	Fading characteristics for sound broadcasting in the Tropical Zone	In force
BS.401-6	1990	Transmitting antennas in LF and MF broadcasting	In force
BS.458-5	1990	Characteristics of systems in LF, MF and HF broadcasting	In force
BS.463-5	1990	Transmission of several sound programmes or other signals with a single transmitter in frequency-modulation sound broadcasting	In force
BS.464-5	1990	Polarization of emissions in frequency-modulation broadcasting in band 8 (VHF)	In force
BS.472-2	1990	Single-sideband reception for re-broadcasting applications within the Tropical Zone	In force
BS.516-4	1990	Field strength resulting from several electromagnetic fields	In force
BS.795-3	1990	Transmission of two or more sound programmes or information channels in television	In force
BS.799-2	1986	Subjective assessment of quality of sound in broadcasting using digital techniques	In force
BS.943-1	1986	Protection of sound-broadcasting stations against atmospheric electricity	In force
BS.944	1982	Theoretical network planning	In force
BS.945-2	1990	Methods for the assessment of multiple interference	In force
BS.946-1	1990	Frequency-planning constraints of FM sound broadcasting in band 8 (VHF)	In force
BS.1058	1986	Minimum AF and RF signal-to-noise ratio required for broadcasting in band 7 (HF)	In force
BS.1059-1	1990	Characteristics of single-sideband systems in HF broadcasting	In force
BS.1060-1	1990	Energy saving methods in amplitude modulation broadcasting and their influence on reception quality	In force
BS.1063	1986	Prediction and control of re-radiation in MF broadcasting	In force
BS.1065	1986	The RF spectrum of frequency-modulation sound-broadcasting transmitters	In force
BS.1067	1986	Improvement of the reception quality in automobiles for frequency modulation sound broadcasts in band 8 (VHF)	In force
BS.1071	1986	Sampling frequency conversion and synchronization of digital sound signals	In force
BS.1200	1990	The effect of delay in sound-programme operations	In force
BS.1201	1990	Number of HF sound broadcasting transmitters using a single channel	In force

BS.1203-1	1994	Digital sound broadcasting to vehicular, portable and fixed receivers using terrestrial transmitters in the UHF/VHF bands	In force
BS.1204	1990	Automatic synchronization of video and audio after transmission	In force
BS.2001	1994	Ancillary services for the visually impaired and hearing impaired in multi-channel sound systems	In force
BS.2002	1994	Introduction of satellite and complementary terrestrial digital sound broadcasting in the WARC-92 frequency allocations	In force
BS.2004	1995	Digital broadcasting systems intended for AM bands	In force
BS.2037	2004	Evaluating fields from terrestrial broadcasting transmitting systems operating in any frequency band for assessing exposure to non-ionizing radiation	In force
BS.2054-1	2008	Audio levels and loudness	In force
BS.2103-1	2008	Short-term loudness metering	In force
BS.2104	2007	FM modulator interference to broadcast services	In force
BS.2105	2007	Information relating to the HF broadcasting service	In force
BS.2144	2009	Planning parameters and coverage for Digital Radio Mondiale (DRM) broadcasting at frequencies below 30 MHz	In force
BS.2159	2009	Multichannel sound technology in home and broadcasting applications	In force
BS.2161	2009	Low delay audio coding for broadcasting applications	In force

Recommendation count: 38

Series BT : Broadcasting service (television)

Number	*Approval Date*	*Recommendation Title*	*Status*
BT.311-6	1986	The present position of standards conversion	In force
BT.312-5	1990	Constitution of a system of stereoscopic television	Withdrawn
BT.476-1	1974	Colorimetric standards in colour television	In force
BT.482-1	1986	Recommended characteristics for collective and individual antenna systems for domestic reception of signal from terrestrial transmitters	In force
BT.484-2	1986	Ratio of picture-signal to synchronizing-signal	In force
BT.485-1	1982	Contribution to the planning of broadcasting services	In force
BT.624-4	1990	Characteristics of television systems	In force
BT.626-1	1978	Simplification of synchronizing signals in television	In force
BT.628-4	1990	Automatic monitoring and control of television operation	In force
BT.629-4	1990	Digital coding of colour television signals	In force
BT.801-4	1990	The present state of high-definition television	In force
BT.802-3	1990	Additional services using broadcasting channels	In force
BT.804	1978	Definitions of parameters for automatic measurement of televison insertion test signals	In force
BT.956-2	1990	Data broadcasting systems: signal and service quality field trials and theoretical studies	In force
BT.958-1	1986	Possibilities for incorporating the sound information in the video signal in terrestrial television	In force
BT.959-2	1990	Experimental results relating picture quality to objective magnitude of impairment	In force
BT.961-2	1994	Terrestrial television broadcasting in bands above 2 GHz	In force
BT.962-2	1990	The filtering, sampling and multiplexing for digital encoding of colour television signals	In force
BT.1077-1	1990	Enhanced 4:3 aspect ratio television systems	In force
BT.1079-1	1990	General characteristics of a conditional-access broadcasting system	In force
BT.1080-1	1990	International exchange of television programmes with data-encoded captions (sub-titles)	In force
BT.1081-1	1990	The relative timing of sound and picture signals	In force
BT.1082-1	1990	Studies toward the unification of picture assessment methodology	In force
BT.1088-2	2009	Interfaces for digital video signals in 525-line and 625-line television systems	In force
BT.1206	1990	Methods for picture quality assessment in relation to impairments from digital coding of television signals	In force
BT.1207	1990	Reference model for data broadcasting	In force

BT.1208	1990	Telesoftware Services	In force
BT.1209	1990	Measures for the avoidance of possible interference generated by digital television studio equipment	In force
BT.1210	1990	Error-protection strategies for data broadcasting services	In force
BT.1212	1990	Measurements and test signals for digitally encoded colour television signals	In force
BT.1213	1990	Test pictures and sequences for subjective assessments of digital codecs	In force
BT.1217	1990	Future development of HDTV	In force
BT.1218	1990	Measurements in HDTV	In force
BT.1219	1990	Synchronizing signals for the component digital studio	In force
BT.1220	1990	Wider aspect ratio television systems	In force
BT.1223	1990	A layered model approach for digital television	In force
BT.1225	1990	Data broadcasting systems and services in an HDTV environment	In force
BT.1226	1990	Characteristic of a programme delivery control (PDC) system for video recording	In force
BT.1237	1990	Satellite news gathering	In force
BT.2003	1994	The harmonization of HDTV standards between broadcast and non-broadcast applications	In force
BT.2005	1995	Bit-rate reduction for digital TV signals	Withdrawn
BT.2017	1998	Stereoscopic television MPEG-2 multi-view profile	In force
BT.2018	1998	Study of the system C ghost cancelling reference signal for the evaluation and correction of linear distortion in the television chain	In force
BT.2020-1	2000	Objective quality assessment technology in a digital environment	In force
BT.2025	2000	Progress on development and implementation of interactivity broadcasting systems and services	In force
BT.2035-2	2008	Guidelines and techniques for the evaluation of digital terrestrial television broadcasting systems including assessment of their coverage areas	In force
BT.2036	2003	The problem of unauthorized redistribution of broadcast content via the Internet	In force
BT.2042-3	2009	Technologies in the area of extremely high resolution imagery	In force
BT.2043	2004	Analogue television systems currently in use throughout the world	In force
BT.2044	2004	Tolerable round-trip time delay for sound-programme and television broadcast programme inserts - Context and rationale	In force
BT.2049-3	2009	Broadcasting of multimedia and data applications for mobile reception	In force
BT.2052	2005	Protection of end-users' privacy in interactive broadcasting systems	In force
BT.2053-2	2009	Large screen digital imagery	In force
BT.2069-4	2009	Tuning ranges and operational characteristics of terrestrial electronic news gathering (ENG), television outside broadcast (TVOB) and electronic field production (EFP) systems	In force

BT.2070-1	2009	Broadcasting of content protection signalling for television	In force
BT.2075	2006	Protection requirements for terrestrial television broadcasting services in the 620-790 MHz band against potential interference from GSO and non-GSO broadcasting-satellite systems and networks	In force
BT.2088	2006	Stereoscopic television	In force
BT.2129	2008	User requirements for a Flat Panel Display (FPD) as a Master monitor in an HDTV programme production environment	In force
BT.2137	2009	Coverage prediction methods and planning software for digital terrestrial television broadcasting (DTTB) networks	In force
BT.2138	2009	Radiation pattern characteristics of UHF television receiving antennas	In force
BT.2139	2009	Diversity reception of digital terrestrial television broadcasting signals	In force
BT.2140-1	2009	Transition from analogue to digital terrestrial broadcasting	In force
BT.2142	2009	The effect of the scattering of digital television signals from a wind turbine	In force
BT.2143-1	2009	Boundary coverage assessment of digital terrestrial television broadcasting signals	In force
BT.2160	2009	Features of three-dimensional television video systems for broadcasting	In force

Recommendation count: 65

Series F : Fixed service

Number	*Approval Date*	*Recommendation Title*	*Status*
F.2047	2005	Technology developments and application trends in the fixed service	In force
F.2058	2006	Design techniques applicable to broadband fixed wireless access systems conveying Internet protocol packets or asynchronous transfer mode cells	In force
F.2059	2005	Antenna characteristics of point-to-point fixed wireless systems to facilitate coordination in high spectrum use areas	In force
F.2060	2006	Fixed service use in the IMT-2000 transport network	In force
F.2061	2006	HF fixed radiocommunications systems	In force
F.2062	2005	Enhanced high frequency digital radiocommunication systems capable of providing enhanced applications	In force
F.2086	2006	Technical and operational characteristics and applications of broadband wireless access in the fixed service	In force
F.2087	2006	Requirements for high frequency (HF) radiocommunication systems in the fixed service	In force
F.2106	2007	Fixed service applications using free-space optical links	In force
F.2107-1	2009	Characteristics and applications of fixed wireless systems operating in the 57 GHz to 130 GHz bands	In force
F.2108	2007	Fixed service system parameters for different frequency bands	In force

Recommendation count: 11

Series M : Mobile, radiodetermination, amateur and related satellite services

Number	*Approval Date*	*Recommendation Title*	*Status*
M.319-7	1990	Characteristics of equipment and principles governing the assignment of frequency channels between 25 and 100 MHz for land mobile services	In force
M.358-5	1986	Protection ratios and minimum field strengths required in the mobile services	Withdrawn
M.499-5	1990	Radio-paging systems	Withdrawn
M.501-5	1990	Digital selective-calling systems for future operational requirements of the maritime mobile service	Withdrawn
M.509-5	1990	Modulation and coding technique for mobile satellite service	Withdrawn
M.585-4	1990	Introduction of direct-printing telegraph equipment in the maritime mobile service	Withdrawn
M.588-1	1978	Black and white facsimile transmissions over combined metallic and radio circuits in the maritime mobile service and in the maritime mobile-satellite service	In force
M.739-1	1986	Interference due to intermodulation products in the land mobile service between 25 and 100 MHz	In force
M.740-2	1986	General aspects of cellular systems	Withdrawn
M.741-3	1990	Multi-channel land mobile systems for dispatch traffic (with or without PSTN interconnection)	In force
M.742-4	1995	Public land mobile telephone systems	Withdrawn
M.743-1	1982	Transmission quality assessment of digital channels in maritime mobile services	Withdrawn
M.744-2	1986	Use of class J3E emissions for distress and safety purposes	Withdrawn
M.751	1978	Methods for the subjective assessment of speech quality in the maritime mobile-satellite service	Withdrawn
M.760-3	2004	Link power budgets for a maritime mobile-satellite service	In force
M.761-3	1990	Technical and operating characteristics of distress systems in the mobile-satellite service	Withdrawn
M.762-2	1986	Effects of multipath on digital transmission overlinks in the maritime mobile-satellite service	Withdrawn
M.763-3	1990	Signal level variation due to multipath effects and blockage by ship's superstructure in maritime mobile-satellite service links	Withdrawn
M.764-3	2006	Interference and noise problems for maritime mobile-satellite systems using frequencies in the region of 1.5 and 1.6 GHz	Withdrawn
M.766-2	1990	Feasibility of frequency sharing between the GPS and other services	In force
M.778-2	1990	Wireless communication systems for persons with impaired hearing	In force
M.899-1	1990	Systems of modulation with high spectrum efficiency for the land mobile service	Withdrawn
M.900-2	1990	Radio-paging systems - Standardization of code and format	Withdrawn

M.901-2	1990	Frequency assignement methods for trunked mobile radio systems	In force
M.902-1	1990	Leaky-feeder systems in the land mobile service	In force
M.903-2	1990	Digital transmission in the land mobile service	Withdrawn
M.904-2	1990	Automatic determination of location and guidance in the land mobile service	In force
M.908-1	1986	Channel requirements for a digital selective-calling system	In force
M.910-1	1986	Sharing between the maritime mobile service and the aeronautical radionavigation service in the band 415-526.5 kHz	In force
M.914-2	1990	Efficient use of the radio spectrum by radar stations in the radiodetermination service	In force
M.917-2	1990	Permissible levels of interference into telephone channels in the maritime mobile-satellite service	Withdrawn
M.918-1	1990	Availability of communications circuits in the maritime mobile-satellite service	In force
M.919-2	1990	Performance of a low-altitude, polar-orbiting satellite EPIRB system	Withdrawn
M.920-2	1990	Maritime satellite system performance at low elevation angles	Withdrawn
M.921-3	2006	Fundamental design examples of digital ship earth stations	Withdrawn
M.922-1	1986	Reference radiation pattern for ship Earth-station antennas	Withdrawn
M.923-1	1986	Design of frequency plans for satellite transmission of SCPC carriers using non-linear transponders	Withdrawn
M.926	1982	Factors that should be considered when establishing protection criteria for aeronautical safety services	Withdrawn
M.927-2	1990	General considerations relative to harmful interference from the viewpoint of the aeronautical mobile service and the aeronautical radionavigation service	In force
M.929-2	1990	Compatibility between the broadcasting service in the band of about 87-108 MHz and the aeronautical services in the band 108-136 MHz	In force
M.1018-1	1990	Co-channel and adjacent-channel coordination criteria for simultaneous use of different modulation techniques in the mobile service	Withdrawn
M.1019	1986	Sources of unwanted signals in multiple base station sites in the land mobile service	Withdrawn
M.1020	1986	Adaptation of system specification to ease the practical implementation of radio equipment	Withdrawn
M.1021	1986	Equipment characteristics for digital transmission in the land mobile services	In force
M.1022-1	1990	Multi-transmitter radio systems using quasi-synchronous (simulcast) transmission in the land mobile service	Withdrawn
M.1023-1	1990	Frequency sharing between the land mobile service dans the broadcasting service (television) below 1 GHz	In force
M.1024	1986	Personal radio system	Withdrawn
M.1025-1	1990	Technical and operating characteristics of cordless telephones	In force

M.1026-1	1990	Use of narrow-band direct-printing telegraph equipment on a single-frequency radio channel	Withdrawn
M.1027-1	1990	Adaptive coding/decoding methods for narrow-band direct-printing equipment	Withdrawn
M.1028	1986	3 kHz duplex separation for DSC channels in the band 435-526.5 kHz	Withdrawn
M.1030	1986	Use of directional antennas in the MF band allocated to the maritime mobile service to improve spectrum efficiency	Withdrawn
M.1032-1	1990	Radio noise environment on board vessels	Withdrawn
M.1033-1	1990	VHF radiotelephone systems with automatic facilities for the maritime mobile service	Withdrawn
M.1035	1986	Minimum required frequency separation between receive and transmit frequencies use for duplex MF/HF radiotelephony	Withdrawn
M.1036-1	1990	Frequencies for homing and locating in the global maritime distress and safety system (GMDSS)	Withdrawn
M.1039	1986	Present and expected use of the band 9 320-9 500 MHz by mobile radars of the radionavigation service	Withdrawn
M.1042	1986	Compatibility between satellite EPIRBs using the band 406-406.1 MHz and other radio services using adjacent bands	Withdrawn
M.1045-1	1986	Satellite EPIRB coordinated trials programme and pre-operational demonstrations using the INMARSAT geostationary space segment operating in the 1.6 GHz band	Withdrawn
M.1047-1	1990	Compact antennas for mobile satellite communication	Withdrawn
M.1048-1	1990	Fading reduction techniques applicable to ship earth-stations antennas	Withdrawn
M.1049-1	1990	Control of passive intermodulation products	In force
M.1050-1	1990	Technical and operational considerations for a radio-determination satellite service in bands 9 and 10	Withdrawn
M.1051-1	1990	Public mobile telephone service with aircraft	In force
M.1153	1990	Future public land mobile telecommunication systems	In force
M.1155	1990	Adaptation of mobile radiocommunication technology to the needs of developing countries	In force
M.1156	1990	Digital cellular public land mobile telecommunication systems (DCPLMTS)	In force
M.1157	1990	Integration of public mobile radiocommunication systems	In force
M.1158	1990	Data communication in the maritime mobile services using MF, HF and VHF frequencies	In force
M.1159	1990	Characteristics of an automatic identification system for VHF and UHF transmitting stations in the maritime mobile service	In force
M.1160	1990	Operational and technical characteristics of the system for the promulgation of maritime safety information using HF narrow-band direct-printing systems	Withdrawn
M.1161	1990	Use of MF/HF DSC for automatic connection of calls in the maritime-mobile service MF and HF bands to the public switched network	In force
M.1163	1990	Coordination area of an earth station of the fixed-satellite service sharing the same frequency band with the radionavigation service	In force

M.1165	1990	Transmission of digital data for the updating of electronic chart display systems (ECDIS)	In force
M.1166	1990	Technical characteristics of GPS differential transmissions from maritime radiobeacons	In force
M.1167	1990	Study on general questions relating to the global maritime distress and safety system	Withdrawn
M.1169	1990	Sea surface multipath effects in the aeronautical mobile-satellite service	In force
M.1170	1990	Mobile satellite communication systems using highly inclined elliptical orbits	Withdrawn
M.1172	1990	Intersystem frequency sharing and reuse in the mobile-satellite services operating at mid to high portions of band 9	Withdrawn
M.1173	1990	Technical and operational considerations for aeronautical mobile-satellite communications	Withdrawn
M.1175	1990	406 MHz Geostationary satellite distress alerting experiment	Withdrawn
M.1176	1990	Interworking between the mobile satellite systems and the terrestrial networks for data transmission services	Withdrawn
M.1178	1990	Efficient use of the bands 1 544-1 545 and 1 645.5-1 646.5 MHz	Withdrawn
M.1179-1	2004	Methodology for the derivation of interference and sharing criteria for the mobile-satellite services	Withdrawn
M.1180	1990	Design of mobile satellite systems providing aeronautical, land and maritime services using shared resources	Withdrawn
M.1181	1990	Microwave landing system (MLS) spectrum requirements and signal protection criteria	Withdrawn
M.1184	1990	Pre-operational demonstrations of the 1.6 GHz satellite EPIRB system using the INMARSAT geostationary space segment	Withdrawn
M.1185-1	2006	Technical aspects of coordination among mobile satellite systems using the geostationary satellite orbit	Withdrawn
M.1186	1990	Use of frequency band 4 200 MHz to 4 400 MHz by radio altimeters	In force
M.2009	1995	Direct-dial telephone systems for the maritime mobile service	In force
M.2010-1	1997	Improved efficiency in the use of the band 156-174 MHz by stations in the maritime mobile service	In force
M.2013	1997	Wind Profiler Radars	In force
M.2014-1	2006	Digital land mobile systems for dispatch traffic	In force
M.2023	2000	Spectrum requirements for International Mobile Telecommunications-2000 (IMT-2000)	In force
M.2024	2000	Summary of spectrum usage survey results	In force
M.2026	2001	Adaptability of real zero single sideband technology to HF data communications	In force
M.2027	2001	Engineering guidance for operators to upgrade shore based facilities to operate the global maritime distress and safety system in the A1, A2 and A3/A4 sea areas	In force
M.2030	2003	Coexistence between IMT-2000 time division duplex and frequency division duplex terrestrial radio interface technologies around 2 600 MHz operating in adjacent bands and in the same geographical area	In force

M.2031	2003	Compatibility between WCDMA 1800 downlink and GSM 1900 uplink	In force
M.2032	2003	Tests illustrating the compatibility between maritime radionavigation radars and emissions from radiolocation radars in the band 2 900-3 100 MHz	In force
M.2033	2003	Radiocommunication objectives and requirements for public protection and disaster relief	In force
M.2034	2003	Impact of radar detection requirements of dynamic frequency selection on 5 GHz wireless access system receivers	In force
M.2038	2004	Technology trends	In force
M.2039-1	2009	Characteristics of terrestrial IMT-2000 systems for frequency sharing/interference analyses	In force
M.2040	2004	Adaptive antennas concepts and key technical aspects	In force
M.2041	2003	Sharing and adjacent band compatibility in the 2.5 GHz band between the terrestrial and satellite components of IMT-2000	In force
M.2045	2004	Mitigating techniques to address coexistence between IMT-2000 time division duplex and frequency division duplex radio interface technologies within the frequency range 2 500-2 690 MHz operating in adjacent bands and in the same geographical area	In force
M.2050	2004	Test results illustrating the susceptibility of maritime radionavigation radars to emissions from digital communication and pulsed systems in the bands 2 900-3 100 MHz and 9 200-9 500 MHz	In force
M.2063	2005	Software defined radio in IMT-2000, the future development of IMT-2000 and systems beyond IMT-2000	Withdrawn
M.2064	2005	Software-defined radio in the land mobile service	Withdrawn
M.2072	2006	World mobile telecommunication market forecast	In force
M.2073	2006	Feasibility and practicality of prioritization and real-time pre emptive access between different networks of mobile-satellite service in the bands 1 525-1 559 MHz and 1 626.5-1 660.5 MHz	In force
M.2074	2006	Radio aspects for the terrestrial component of IMT-2000 and systems beyond IMT-2000	In force
M.2076	2006	Factors that mitigate interference from radiolocation and Earth exploration-satellite service/space research service (active) radars to maritime and aeronautical radionavigation radars in the 9.0-9.2 and 9.3-9.5 GHz bands and between Earth exploration-satellite service/ space research service (active) radars and radiolocation radars in the 9.3-9.5 and 9.8-10.0 GHz bands	In force
M.2077	2006	Traffic forecasts and estimated spectrum requirements for the satellite component of IMT 2000 and systems beyond IMT-2000 for the period 2010 to 2020	In force
M.2078	2006	Estimated spectrum bandwidth requirements for the future development of IMT-2000 and IMT-Advanced	In force
M.2079	2006	Technical and operational information for identifying Spectrum for the terrestrial component of future development of IMT-2000 and IMT-Advanced	In force
M.2080	2006	Consideration of sharing conditions and usage in the 4-10 MHz band	In force
M.2081	2006	Test results illustrating compatibility between representative radionavigation systems and radiolocation and EESS systems in the band 8.5-10 GHz	In force

M.2082	2006	Modifications of Appendix 17 of the Radio Regulations (Frequencies and channelling arrangements in the high-frequency bands for the maritime mobile service) for a possible solution of agenda item 1.13 (Resolution 351 (WRC-03))	In force
M.2083	2006	Level of unwanted emissions of mobile-satellite service feeder links operating in the bands 1 390-1 392 MHz (Earth-to-space) and 1 430-1 432 MHz (space-to-Earth)	In force
M.2084	2007	Satellite detection of automatic identification system messages	In force
M.2085	2006	Role of the amateur and amateur-satellite services in support of disaster mitigation and relief	In force
M.2109	2007	Sharing studies between IMT Advanced systems and geostationary satellite networks in the fixed-satellite service in the 3 400-4 200 and 4 500-4 800 MHz frequency bands	In force
M.2110	2007	Sharing studies between radiocommunication services and IMT systems operating in the 450-470 MHz band	In force
M.2111	2007	Sharing studies between IMT-Advanced and the radiolocation service in the 3 400-3 700 MHz bands	In force
M.2112	2007	Compatibility/sharing of airport surveillance radars and meteorological radar with IMT systems within the 2 700-2 900 MHz band	In force
M.2113-1	2009	Sharing studies in the 2 500-2 690 MHz band between IMT-2000 and fixed broadband wireless access systems including nomadic applications in the same geographical area	In force
M.2114	2007	Key technical and operational characteristics for access technologies to support IP applications over land mobile systems	In force
M.2115-1	2009	Testing procedures for implementation of dynamic frequency selection	In force
M.2116	2007	Characteristics of broadband wireless access systems operating in the land mobile service for use in sharing studies	In force
M.2117	2007	Software defined radio in the land mobile, amateur and amateur satellite services	In force
M.2118	2007	Compatibility between proposed systems in the aeronautical mobile service and the existing fixed-satellite service in the 5 091-5 250 MHz band	In force
M.2119	2007	Sharing between aeronautical mobile telemetry systems for flight testing and other systems operating in the 4 400-4 940 and 5 925-6 700 MHz bands	In force
M.2120	2007	Initial estimate of new aviation AM(R)S spectrum requirements	In force
M.2121	2007	Guidelines for AM(R)S sharing studies in the 960-1 164 MHz band	In force
M.2122	2007	EMC assessment of shore-based electronic navigation (eNAV) infrastructure and new draft Standards for data exchange in the VHF maritime mobile band (156-174 MHz)	In force
M.2123	2007	Long range detection of automatic identification system (AIS) messages under various tropospheric propagation conditions	In force
M.2124	2007	Interference calculations to assess sharing between the mobile-satellite service and space research (passive) service in the band 1 668-1 668.4 MHz	In force
M.2127	2008	Example of maritime wideband VHF data system	In force

M.2128	2008	Test results and simulations illustrating the effective duty cycle of frequency modulated pulsed radiolocation and EESS system waveforms in marine radionavigation receivers	In force
M.2133	2008	Requirements, evaluation criteria and submission templates for the development of IMT-Advanced	In force
M.2134	2008	Requirements related to technical performance for IMT-Advanced radio interface(s)	In force
M.2135-1	2009	Guidelines for evaluation of radio interface technologies for IMT-Advanced	In force
M.2136	2009	Theoretical analysis and testing results pertaining to the determination of relevant interference protection criteria of ground-based meteorological radars	In force
M.2141	2009	Study of the isolation between VHF land mobile radio antennas in close proximity	In force
M.2146	2009	Coexistence between IMT-2000 CDMA-DS and IMT-2000 OFDMA TDD WMAN in the 2 500-2 690 MHz band operating in adjacent bands in the same area	In force
M.2147	2009	Assessment of potential interference between FM broadcasting stations operating in the band around 87-108 MHz and aeronautical VDL Mode 4 systems in the band 112-117.975 MHz operating in the AM(R)S	In force
M.2149	2009	Use and examples of mobile-satellite service systems for relief operation in the event of natural disasters and similar emergencies	In force
M.2169	2009	Improved satellite detection of AIS	In force
M.2170	2009	Compatibility analysis and results for radiolocation systems planned to operate in the 15.4 to 17.3 GHz band and aircraft landing system operating in the 15.4-15.7 GHz band as well as the radio astronomy service operating in the adjacent band 15.35-15.40 GHz, FSS systems and aeronautical radionavigation systems	In force
M.2171	2009	Characteristics of unmanned aircraft systems and spectrum requirements to support their safe operation in non-segregated airspace	In force
		Characteristics of unmanned aircraft systems and spectrum requirements to support their safe operation in non-segregated airspace	
		Characteristics of unmanned aircraft systems and spectrum requirements to support their safe operation in non-segregated airspace	
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Recommendation count: 152

Series P : Radiowave propagation

Number	*Approval Date*	*Recommendation Title*	*Status*
P.227-3	1982	General methods of measuring the field strength and related parameters	In force
P.228-3	1986	Measurement of field strength for VHF (metric) and UHF (decimetric) broadcast services, including television	In force
P.229-6	1990	Electrical characteristics of the surface of the Earth	Withdrawn
P.239-7	1990	Propagation statistics required for broadcasting services using the frequency range 30 to 1 000 MHz	In force
P.249-7	1990	The use of oblique sounding for propagation analysis and optimization	Withdrawn
P.259-7	1990	VHF ionospheric propagation	Withdrawn
P.262-7	1990	ELF, VLF and LF propagation in and through the ionosphere	Withdrawn
P.266-7	1990	Ionospheric propagation and noise characteristics pertinent to terrestrial radiocommunication systems design and service planning (Fading)	Withdrawn
P.336-3	1990	Propagation on the Moon and the definition of its radio-quiet area	Withdrawn
P.562-4	1990	Propagation data required for terrestrial broadcasting and point-to-multipoint communication systems in the frequency bands above 10 GHz	Withdrawn
P.714-2	1990	Ground-wave propagation in an exponential atmosphere	Withdrawn
P.716-3	1990	The phase of the ground wave	Withdrawn
P.727-3	1990	Short-term prediction of solar-induced variations of operational parameters for ionospheric propagation	Withdrawn
P.879-1	1986	Methods for estimating effective electrical characteristics of the surface of the Earth	Withdrawn
P.880-2	1990	Short distance radiowave propagation in special environements	In force
P.888-2	1990	Short-term forecasting of critical frequencies, operational maximum usable frequencies and total electron content	Withdrawn
P.889-2	1990	Real-time channel evaluation of HF ionospheric radio circuits	Withdrawn
P.895-2	1990	Radio propagation and circuit performance at frequencies below about 30 kHz	Withdrawn
P.1008-1	1990	Reflection from the surface of the Earth	Withdrawn
P.1012-1	1990	Operational modelling of HF radio propagation conditions at high latitudes	Withdrawn
P.1145	1990	Propagation over irregular terrain with and without vegetation	Withdrawn
P.2011-1	1999	Propagation at frequencies above the basic MUF	In force
P.2089	2006	The analysis of radio noise data	In force
P.2090	2006	Measuring the input parameters for the radiative energy transfer model of vegetation attenuation	In force
P.2097	2007	Transionospheric radio propagation – The Global Ionospheric Scintillation Model (GISM)	In force

Recommendation count: ***25***

Series RA : Radio astronomy

Number	*Approval Date*	*Recommendation Title*	*Status*
RA.2099	2007	Radio observations of pulsars for precision timekeeping	In force
RA.2126	2007	Techniques for mitigation of radio frequency interference in radio astronomy	In force
RA.2131	2009	Supplementary information on the detrimental threshold levels of interference to radio astronomy observations in Recommendation ITU-R RA.769	In force
RA.2163	2009	Astronomical use of frequency band 50-350 THz and coexistence with other applications	In force

Recommendation count: 4

Series RS : Remote sensing systems

Number	*Approval Date*	*Recommendation Title*	*Status*
RS.2068	2006	Current and future use of the band near 13.5 GHz by spaceborne active sensors	In force
RS.2094	2007	Studies related to the compatibility between Earth exploration-satellite service (active) and the radiodetermination service in the 9 300-9 500 MHz and 9 800-10 000 MHz bands and between Earth exploration-satellite service (active) and the fixed service in the 9 800-10 000 MHz band	In force
RS.2095	2007	Sharing of the 36-37 GHz band by the fixed and mobile services and the Earth exploration-satellite service (passive)	In force
RS.2096	2007	Sharing of the 10.6-10.68 GHz band by the fixed and mobile services and the Earth exploration-satellite service (passive)	In force

Recommendation count: 4

Series S : Fixed-satellite service

Number	*Approval Date*	*Recommendation Title*	*Status*
S.2148	2009	Transmission control protocol (TCP) over satellite networks	In force
S.2150	2009	An interference reduction technique by adaptive-array earth station antennas for sharing between the fixed-satellite service and fixed/mobile services	In force
S.2151	2009	Use and examples of systems in the fixed-satellite service in the event of natural disasters and similar emergencies for warning and relief operations	In force

Recommendation count: 3

Series SA : Space applications and meteorology

Number	*Approval Date*	*Recommendation Title*	*Status*
SA.2065	2006	Protection of the space VLBI telemetry link	In force
SA.2066	2006	Means of calculating low-orbit satellite visibility statistics	In force
SA.2067	2005	Use of the 13.75 to 14.0 GHz band by the space research service and the fixed-satellite service	In force
SA.2098	2007	Mathematical gain models of large-aperture space research service earth station antennas for compatibility analysis involving a large number of distributed interference sources	In force
SA.2132	2009	Telecommunication characteristics and requirements for space VLBI systems	In force
SA.2162	2009	Sharing conditions between space research service extra vehicular activities (EVA) links and fixed and mobile service links in the 410-420 MHz band	In force
SA.2164	2009	Compatibility between the meteorological satellite and the fixed services in the band 7 850-7 900 MHz	In force
SA.2167	2009	Factors affecting the choice of frequency bands for space research service deep-space (space-to-Earth) telecommunication links	In force

Recommendation count: 8

Series SF : Frequency sharing and coordination between fixed-satellite and fixed service systems

Number	*Approval Date*	*Recommendation Title*	*Status*
SF.2046	2005	Determination of the interference potential, and its possible reduction by mitigation techniques, between earth stations in the fixed-satellite service operating with non-geostationary satellites and stations in the fixed service in the 18/19 GHz band	In force

Recommendation count: 1

Series SM : Spectrum management

Number	*Approval Date*	*Recommendation Title*	*Status*
SM.2012-2	2005	Economic aspects of spectrum management	In force
SM.2015	1998	Methods for determining national long-term strategies for spectrum utilization	In force
SM.2021	2000	Production and mitigation of intermodulation products in the transmitter	In force
SM.2022-1	2005	The effect on digital communications systems of interference from other modulation schemes	In force
SM.2028-1	2002	Monte Carlo simulation methodology for the use in sharing and compatibility studies between different radio services or systems	In force
SM.2048	2006	Use of the x dB bandwidth criterion for determination of spectral properties of a transmitter in the out-of-band domain	In force
SM.2055	2006	Radio noise measurements	In force
SM.2056	2006	Airborne verification of antenna patterns of broadcasting stations	In force
SM.2057	2005	Studies related to the impact of devices using ultra-wideband technology on radiocommunication services	In force
SM.2091	2007	Studies related to the impact of active space services allocated in adjacent or nearby bands on radio astronomy service	In force
SM.2092	2007	Studies related to the impact of active services allocated in adjacent or nearby bands on Earth exploration-satellite service (passive)	In force
SM.2093	2007	Guidance on the regulatory framework for national spectrum management	In force
SM.2125	2007	Parameters of and measurement procedures on H/V/UHF monitoring receivers and stations	In force
SM.2130	2008	Inspection of radio stations	In force
SM.2152	2009	Definitions of Software Defined Radio (SDR) and Cognitive Radio System (CRS)	In force
SM.2153	2009	Technical and operating parameters and spectrum use for short range radiocommunication devices	In force
SM.2154	2009	Short-range radiocommunication devices spectrum occupancy measurement techniques	In force
SM.2155	2009	Man-made noise measurements in the HF range	In force
SM.2156	2009	The role of spectrum monitoring in support of inspections	In force
SM.2157	2009	Measurement methods for power line high data rate telecommunication systems	In force
SM.2158	2009	Impact of power line telecommunication systems on radiocommunication systems operating in the LF, MF, HF and VHF bands below 80 MHz	In force

Recommendation count: 21

Total Recommendation count: 366