INTERNATIONAL TELECOMMUNICATION UNION

RADIOCOMMUNICATION SECTOR

RADIOCOMMUNICATION ASSEMBLY

Geneva, 8-16 November 1993

Book 5

Resolution ITU-R 18

Provisions of Radio Regulations including references to relevant ITU-R Recommendations

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ITU RADIOCOMMUNICATION SECTOR

The functions of the ITU Radiocommunication Sector are to fulfil the purposes of the Union, as stated in Article 1 of the International Telecommunication Constitution, Geneva, 1992, relating to radiocommunication:

- by ensuring the rational, equitable, efficient and economical use of the radio-frequency spectrum by all radiocommunication services, including those using the geostationary-satellite orbit;

- by carrying out studies without limit of frequency range and adopting Recommendations on radiocommunication matters.

Radiocommunication Study Groups make Recommendations on the following*:

a) use of the radio-frequency spectrum in terrestrial and space radiocommunication (and of the geostationary-satellite orbit);

b) characteristics and performance of radio systems**;

c) operation of radio stations;

d) radiocommunication aspects of distress and safety matters.

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* *Article 11, International Telecommunication Convention, Geneva, 1992.*

** *The ITU Telecommunication Standardization Study Groups make Recommendations on the interconnection of radio systems in public communication networks and on the performance required for these interconnections.*

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RESOLUTION ITU-R 18*

LIST OF PROVISIONS OF RADIO REGULATIONS WHICH INCLUDE REFERENCES TO RELEVANT ITU-R RECOMMENDATIONS

(Resolution No. 65 (WARC-79))

(1982-1986-1990-1993)

The ITU Radiocommunication Assembly,

considering

a) that reference is made in the Radio Regulations to specific CCIR Recommendations as well as to "relevant CCIR Recommendations";

b) that a correct application of the Radio Regulations requires the identification by administrations of the relevant CCIR Recommendations to be taken into account;

c) that Resolution No. 65 of the World Administrative Radio Conference (Geneva, 1979) (WARC-79) relating to the circulation of current information on CCIR Recommendations referred to in the Radio Regulations, invites the CCIR:

"1. to identify and list those provisions of the Radio Regulations containing a reference to a specific CCIR Recommendation or to a "relevant CCIR Recommendation" together with the reference numbers and titles of those Recommendations;

2. to instruct the Director of the CCIR to provide the Secretary-General with the information required to update the list;"

d) that Resolution No. 65 (WARC-79) further requests the Secretary-General to communicate to all administrations the list of those Recommendations as well as any subsequent updating thereof,

resolves

1. that the ITU-R Recommendations listed in Appendix 1 to this Resolution are considered to be relevant texts for the purpose of Resolution No. 65 (WARC-79);

2. that the list of these Recommendations should be disseminated by the Director, Radiocommunication Bureau, as an informative text for use in the application of the pertinent provisions of the Radio Regulations;

3. that the Radiocommunication Study Groups, in preparing ITU-R Recommendations considered relevant to one or more provisions of the Radio Regulations, should list in the *considerings* the pertinent numbers of the Radio Regulations;

4. that the appended list should be updated at the next ITU-R Radiocommunication Assembly.

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* Revision of former CCIR Resolution 87-3.

APPENDIX 1

List of provisions of the Radio Regulations which include references to relevant ITU-R Recommendations (1993)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
ARTICLE 1	**Terms and definitions**			
15 15.1	Coordinated Universal Time (UTC)	460-4	VII	Standard-frequency and time-signal emissions
147	Occupied bandwidth	328-7	I	Spectra and bandwidth of emissions
150	Power (relations between peak envelope power, mean power and carrier power)	326-6	I	Determination and measurement of the power of radio transmitters
161	Permissible interference	216-2	X-1	Protection ratio for sound broadcasting in the Tropical Zone
		240-6	RF	Signal-to-interference protection ratios for various classes of emission in the fixed service below about 30 MHz
		302-2	IX-1	Limitation of interference from trans-horizon radio-relay systems
		356-4	IV/IX-2	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
		357-3	IV/IX-2	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
		412-5	X-1	Planning standards for FM sound broadcasting at VHF
		441-1	VIII	Signal-to-interference ratios and minimum field strengths required in the aeronautical mobile (R) service above 30 MHz
		466-6	RS	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
		483-2	RS	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
		496-3	RM	Limits of power-flux density of radionavigation transmitters to protect space station receivers in the fixed-satellite service in the 14 GHz band

* Five former CCIR Reports and one book explicitly cited in the Radio Regulations are included.

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
161	Permissible interference *(continued)*	510-1	II	Feasibility of frequency sharing between the space research service and other services in band 10. *Potential interference from data relay satellite systems*
		514-1	II	Telecommunication links for Earth exploration satellites. *Frequencies, bandwidths and criteria for protection from interference*
		523-4	RS	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
		558-2	IV/IX-2	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
		560-3	X-1	Radio-frequency protection ratios in LF, MF and HF broadcasting
		565	XI-1	Protection ratios for 625-line television against radionavigation transmitters operating in the shared bands between 582 and 606 MHz
		615	IV/IX-2	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
		641	X-1	Determination of radio-frequency protection ratios for frequency-modulated sound broadcasting
		655-2	RBT	Radio-frequency protection ratios for AM vestigial sideband television systems
		669	I	Protection ratios for spectrum sharing investigations
		671-2	S	Necessary protection ratios for narrow-band single channel-per-carrier transmissions interfered with by analogue television carriers
		735-1	S	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
		758	RF	Considerations in the development of criteria for sharing between the terrestrial fixed service and other services
		760	RF	Protection of terrestrial line-of-sight radio-relay systems against interference from the broadcasting-satellite service in the band 22.5 to 23 GHz
ARTICLE 4	**Designation of emissions**			
265	Further examples of designation of emissions	None		

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
ARTICLE 5	**Technical characteristics of stations**			
300	Choice of transmitting, receiving and measuring equipment	139-3	X-1	Transmitting antennas for sound broadcasting in the Tropical Zone
		162-3	RF	Use of directional antennas in the fixed service operating in bands below about 30 MHz
		239-2	I	Spurious emissions from sound and television broadcast receivers
		246-3	III	Frequency-shift keying
		266-1	RBT	Phase pre-correction of television transmitters
		328-7	I	Spectra and bandwidth of emissions *Note* – Recommendation 328 is referred to in Recommendation 329.
		329-6	I	Spurious emissions
		331-4	I	Noise and sensitivity of receivers
		332-4	I	Selectivity of receivers
		338-2	III	Bandwidth required at the output of a telegraph or telephone receiver
		343-1	III	Facsimile transmission of meteorological charts over radio circuits
		344-2	III	Standardization of phototelegraph systems for use on combined radio and metallic circuits
		346-1	III	Four-frequency diplex systems
		348-4	III	Arrangement of channels in multi-channel single-sideband and independent-sideband transmitters for long-range circuits operating at frequencies below about 30 MHz
		349-4	III	Frequency stability required for systems operating in the HF fixed service to make the use of automatic frequency control superfluous
		415-2	X-1	Minimum performance specifications for low-cost sound-broadcasting receivers
		436-2	III	Arrangement of voice-frequency telegraph channels working at a modulation rate of about 100 bauds over HF radio circuits
		450-1	X-1	Transmission standards for FM sound broadcasting at VHF
		454-1	III	Pilot carrier level for HF single-sideband and independent-sideband reduced-carrier systems
		467	X-1	Technical characteristics to be checked for frequency-modulation stereophonic broadcasting. *Pilot-tone system*
		599	X-1	Directivity of antennas for the reception of sound broadcasting in band 8 (VHF)
		705	X-1	HF transmitting antenna characteristics and diagrams

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
300	Choice of transmitting, receiving and measuring equipment *(continued)*	852	RSM	Sensitivity of radio receivers for class of emissions F3E
302	Signal processing methods for most efficient use of the frequency spectrum	455-2	RF	Improved transmission system for HF radio-telephone circuits
		601-3	RBT	Encoding parameters of digital television for studios
		640-1	X-1	Single sideband (SSB) system for HF broadcasting
		646-1	RBS	Source encoding for digital sound signals in broadcasting studios
305	Maximum permitted power levels for out-of-band emissions	328-7	I	Spectra and bandwidth of emissions
312	Technique of measurements and the intervals of measurements to be employed when checking the compliance with the Radio Regulations	182-4	RSM	Automatic monitoring of occupancy of the radio-frequency spectrum
		377-2	I	Accuracy of frequency measurements at stations for international monitoring
		378-5	RSM	Field-strength measurements at monitoring stations
		443-1	I	Bandwidth measurements at monitoring stations
ARTICLE 8	**Frequency allocations**			
524	Use of band 6 765-6 795 kHz for ISM	433-5	RSM	Methods for the measurement of radio interference and the determination of tolerable levels of interference
661	Use of bands 433.05-434.79 MHz for ISM	Same as No. 524		
824A Mob-87	Use of band 9 200-9 500 MHz for search and rescue transponders (SART)	628-2	RM	Technical characteristics for search and rescue radar transponders
911	Use of band 61-61.5 GHz for ISM	Same as No. 524		
916	Use of band 122-123 GHz for ISM	Same as No. 524		
922	Use of band 244-246 GHz for ISM	Same as No. 524		
ARTICLE 11	**Coordination of frequency assignments to stations in a space radiocommunication service except stations in the broadcasting-satellite service and to appropriate terrestrial stations**			
Section II (Orb-88)	*Coordination of frequency assignments to a space station on a geostationary satellite or an earth station communicating with such a space station using frequency bands other than those covered by the fixed-satellite service allotment plan in relation to stations of other geostationary-satellite networks*			
1084 Orb-88 1084.1 Orb-88	Calculation methods and criteria to be employed in evaluating interference	452-5	RPN	Prediction procedure for the evaluation of microwave interference between stations on the surface of the Earth at frequencies above about 0.7 GHz
		465-5	S	Reference earth-station radiation pattern for use in coordination and interference assessment in the frequency range from 2 to about 30 GHz

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
1084 Orb-88 1084.1 Orb-88	Calculation methods and criteria to be employed in evaluating interference *(continued)*	466-6	RS	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
		483-2	RS	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
		509-1	II	Generalized space research earth station antenna radiation pattern for use in interference calculations, including coordination procedures
		523-4	RS	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
		524-4	RS	Maximum permissible levels of off-axis e.i.r.p. density from earth stations in the fixed-satellite service transmitting in the 6 and 14 GHz frequency band
		580-4	S	Radiation diagrams for use as design objectives for antennas of earth stations operating with geostationary satellites
		619-1	RPN	Propagation data required for the evaluation of interference between stations in space and those on the surface of the Earth
		620-1	RPN	Propagation data required for the calculation of coordination distances in the frequency range 1-40 GHz
		671-2	S	Necessary protection ratios for narrow-band single channel-per-carrier transmissions interfered with by analogue television carriers
		672-2	S	Satellite antenna radiation pattern for use as a design objective in the fixed-satellite service employing geostationary satellites
		727	RS	Cross-polarization isolation from very small aperture terminals
		731	RS	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
		735-1	S	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
		736	RS	Estimation of polarization discrimination in the interference calculations between geostationary-satellite networks in the fixed-satellite service

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
1084 Orb-88 1084.1 Orb-88	Calculation methods and criteria to be employed in evaluating interference *(continued)*	737	RS	Relationship of technical coordination methods within the fixed-satellite service
		739	RS	Additional methods for determining if detailed coordination is necessary between geostationary-satellite networks in the fixed-satellite service sharing the same frequency bands
		740	RS	Technical coordination methods for fixed-satellite networks
		741-1	S	Carrier-to-interference calculations between networks in the fixed-satellite service
		744	RS	Orbit/spectrum improvement measures for satellite networks having more than one service in one or more frequency bands
		766	RSF	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
Section III (Orb-88)	*Coordination of frequency assignments to an earth station operating in a geostationary or non-geostationary satellite network in relation to terrestrial stations*			
1107 Mob-87 1107.1	Criteria to be employed in evaluating interference between earth stations and stations in terrestrial radiocommunication services	355-4	RSF	Frequency sharing between systems in the fixed-satellite service and radio-relay systems in the same frequency bands
		356-4	IV/IX-2	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
		357-3	IV/IX-2	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
		358-4	SF	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
		406-8	SF	Maximum equivalent isotropically radiated power of radio-relay system transmitters operating in the frequency bands shared with the fixed-satellite service
		452-5	RPN	Prediction procedure for the evaluation of microwave interference between stations on the surface of the Earth at frequencies above about 0.7 GHz
		465-5	S	Reference earth-station radiation pattern for use in coordination and interference assessment in the frequency range from 2 to about 30 GHz

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
1107 Mob-87 1107.1	Criteria to be employed in evaluating interference between earth stations and stations in terrestrial radiocommunication services *(continued)*	509-1	II	Generalized space research earth station antenna radiation pattern for use in interference calculations, including coordination procedures
		558-2	IV/IX-2	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
		580-4	S	Radiation diagrams for use as design objectives for antennas of earth stations operating with geostationary satellites
		615	IV/IX-2	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
		620-1	RPN	Propagation data required for the calculation of coordination distances in the frequency range 1-40 GHz
		766	RSF	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
		1004	SF	Maximum equivalent isotropically radiated power transmitted towards the horizon by earth stations of the fixed-satellite service sharing frequency bands with the fixed service
		1006	SF	Determination of the interference potential between earth stations of the fixed-satellite service and stations in the fixed service
1118 Orb-88 1118.1 Orb-88	Calculation methods and criteria to be employed in evaluating interference which would be caused to terrestrial services by earth stations	355-4	RSF	Frequency sharing between systems in the fixed-satellite service and radio-relay systems in the same frequency bands
		357-3	IV/IX-2	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
		452-5	RPN	Prediction procedure for the evaluation of microwave interference between stations on the surface of the Earth at frequencies above about 0.7 GHz
		465-5	S	Reference earth-station radiation pattern for use in coordination and interference assessment in the frequency range from 2 to about 30 GHz
		509-1	II	Generalized space research earth station antenna radiation pattern for use in interference calculations, including coordination procedures

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
1118 Orb-88 1118.1 Orb-88	Calculation methods and criteria to be employed in evaluating interference which would be caused to terrestrial services by earth stations *(continued)*	580-4	S	Radiation diagrams for use as design objectives for antennas of earth stations operating with geostationary satellites
		615	IV/IX-2	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
		619-1	RPN	Propagation data required for the evaluation of interference between stations in space and those on the surface of the Earth
		620-1	RPN	Propagation data required for the calculation of coordination distances in the frequency range 1-40 GHz
		731	RS	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
		766	RSF	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
		1004	SF	Maximum equivalent isotropically radiated power transmitted towards the horizon by earth stations of the fixed-satellite service sharing frequency bands with the fixed service
		1006	SF	Determination of the interference potential between earth stations of the fixed-satellite service and stations in the fixed service
1119 1119.1 Orb-88	Calculation methods and criteria to be employed in evaluating interference which would be caused to reception at the earth station by terrestrial services	355-4	RSF	Frequency sharing between systems in the fixed-satellite service and radio-relay systems in the same frequency bands
		356-4	IV/IX-2	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
		406-8	SF	Maximum equivalent isotropically radiated power of radio-relay system transmitters operating in the frequency bands shared with the fixed-satellite service
		452-5	RPN	Prediction procedure for the evaluation of microwave interference between stations on the surface of the Earth at frequencies above about 0.7 GHz
		465-5	S	Reference earth-station radiation pattern for use in coordination and interference assessment in the frequency range from 2 to about 30 GHz

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
1119 1119.1 Orb-88	Calculation methods and criteria to be employed in evaluating interference which would be caused to reception at the earth station by terrestrial services *(continued)*	558-2	IV/IX-2	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
		580-4	S	Radiation diagrams for use as design objectives for antennas of earth stations operating with geostationary satellites
		620-1	RPN	Propagation data required for the calculation of coordination distances in the frequency range 1-40 GHz
		731	RS	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
		766	RSF	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
		1006	SF	Determination of the interference potential between earth stations of the fixed-satellite service and stations in the fixed service
Section IV	*Coordination of frequency assignments to a terrestrial station for transmission in relation to an earth station*			
1148 1148.1 and 1164 Orb-88 1164.1	Calculation methods and the criteria in evaluating interference relating to coordination between terrestrial stations and earth stations	355-4	RSF	Frequency sharing between systems in the fixed-satellite service and radio-relay systems in the same frequency bands
		356-4	IV/IX-2	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
		406-8	SF	Maximum equivalent isotropically radiated power of radio-relay system transmitters operating in the frequency bands shared with the fixed-satellite service
		452-5	RPN	Prediction procedure for the evaluation of microwave interference between stations on the surface of the Earth at frequencies above about 0.7 GHz
		465-5	S	Reference earth-station radiation pattern for use in coordination and interference assessment in the frequency range from 2 to about 30 GHz
		558-2	IV/IX-2	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
		580-4	S	Radiation diagrams for use as design objectives for antennas of earth stations operating with geostationary satellites

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
1148 1148.1 and 1164 Orb-88 1164.1	Calculation methods and the criteria in evaluating interference relating to coordination between terrestrial stations and earth stations *(continued)*	620-1	RPN	Propagation data required for the calculation of coordination distances in the frequency range 1-40 GHz
		731	RS	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
		765	RSF	Intersection of radio-relay antenna beams with orbits used by space stations in the fixed-satellite service
		766	RSF	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
ARTICLE 12 (Orb-85)	**Notification and recording in the Master International Frequency Register of frequency assignments to terrestrial radiocommunication stations**			
Section VIII	*Miscellaneous provisions*			
1454	Technical standards of IFRB should be based, amongst other things, on CCIR Recommendations	240-6	RF	Signal-to-interference protection ratios for various classes of emission in the fixed service below about 30 MHz
		314-8	RRA	Preferred frequency bands for radio-astronomical measurements
		339-6	III	Bandwidths, signal-to-noise ratios and fading allowances in complete systems
		355-4	RSF	Frequency sharing between systems in the fixed-satellite service and radio-relay systems in the same frequency bands
		356-4	IV/IX-2	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
		357-3	IV/IX-2	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
		358-4	SF	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
		364-5	RSA	Preferred frequencies and bandwidths for manned and unmanned near-Earth research satellites
		368-7	RPN	Ground-wave propagation curves for frequencies between 10 kHz and 30 MHz
		370-5	V	VHF and UHF propagation curves for the frequency range from 30 MHz to 1000 MHz. *Broadcasting services*

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
1454	Technical standards of IFRB should be based, amongst other things, on CCIR Recommendations *(continued)*	371-6	VI	Choice of indices for long-term ionospheric predictions
		372-5	VI	Use of data on radio noise
		406-8	SF	Maximum equivalent isotropically radiated power of radio-relay system transmitters operating in the frequency bands shared with the fixed-satellite service
		412-5	X-1	Planning standards for FM sound broadcasting at VHF
		434-5	RPI	CCIR reference of ionospheric characteristics and methods of basic MUF, operational MUF and ray-path prediction
		435-7	RPI	Sky-wave field strength prediction method for the broadcasting service in the frequency range 150 to 1600 kHz
		441-1	VIII	Signal-to-interference ratios and minimum field strengths required in the aeronautical mobile (R) service above 30 MHz
		450-1	X-1	Transmission standards for FM sound broadcasting at VHF
		452-5	RPN	Prediction procedure for the evaluation of microwave interference between stations on the surface of the Earth at frequencies above about 0.7 GHz
		465-5	S	Reference earth-station radiation pattern for use in coordination and interference assessment in the frequency range from 2 to about 30 GHz
		496-3	RM	Limits of power flux-density of radionavigation transmitters to protect space station receivers in the fixed-satellite service in the 14 GHz band
		509-1	II	Generalized space research earth station antenna radiation pattern for use in interference calculations, including coordination procedures
		527-3	RPN	Electrical characteristics of the surface of the Earth
		528-2	V	Propagation curves for aeronautical mobile and radionavigation services using the VHF, UHF and SHF bands
		529-1	V	VHF and UHF propagation data and prediction methods required for the terrestrial band mobile services
		530-4	RPN	Propagation data and prediction methods required for the design of terrestrial line-of-sight systems
		532-1	RPI	Ionospheric effects and operational considerations associated with artificial modification of the ionosphere and the radio-wave channel
		533-3	RPI	CCIR HF propagation prediction method

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
1454	Technical standards of IFRB should be based, amongst other things, on CCIR Recommendations *(continued)*	534-3	VI	Method for calculating sporadic-E field strength
		558-2	IV/IX-2	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
		578	II	Protection criteria and sharing considerations relating to deep-space research
		580-4	S	Radiation diagrams for use as design objectives for antennas of earth stations operating with geostationary satellites
		589-2	RM	Interference to radionavigation services from other services in the frequency bands between 70 kHz and 130 kHz
		597-1	X-1	Channel spacing for sound broadcasting in band 7 (HF)
		598-1	X-1	Factors influencing the limits of amplitude-modulation sound-broadcasting coverage in band 6 (MF)
		599	X-1	Directivity of antennas for the reception of sound broadcasting in band 8 (VHF)
		615	IV/IX-2	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
		617-1	RPN	Propagation prediction techniques and data required for the design of trans-horizon radio-relay systems
		619-1	RPN	Propagation data required for the evaluation of interference between stations in space and those on the surface of the Earth
		620-1	RPN	Propagation data required for the calculation of coordination distances in the frequency range 1-40 GHz
		638	X-I	Terms and definitions used in frequency planning for sound broadcasting
		765	RSF	Intersection of radio-relay antenna beams with orbits used by space stations in the fixed-satellite service
		766	RSF	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
		831	RM	Frequency sharing between services in the band 4-30 MHz
		832	RPN	World atlas of ground conductivities
		837	RPN	Characteristics of precipitation for propagation modelling
		842	RPI	Computation of reliability of HF radio systems

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
1454	Technical standards of IFRB should be based, amongst other things, on CCIR Recommendations *(continued)*	844	RPI	Ionospheric factors affecting frequency sharing in the VHF (30-300 MHz) band
		1006	SF	Determination of the interference potential between earth stations of the fixed-satellite service and stations in the fixed service
ARTICLE 13 (Orb-88)	**Notification and recording in the Master International Frequency Register of frequency assignments to radioastronomy and space radiocommunication stations except stations in the broadcasting-satellite service**			
Section VIII	*Miscellaneous provisions*			
1582	Technical standards of IFRB should be based, amongst other things, on CCIR Recommendations	314-8	RRA	Preferred frequency bands for radio-astronomical measurements
		355-4	RSF	Frequency sharing between systems in the fixed-satellite service and radio-relay systems in the same frequency bands
		356-4	IV/IX-2	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
		358-4	SF	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
		364-5	RSA	Preferred frequencies and bandwidths for manned and unmanned near-Earth research satellites
		368-7	RPN	Ground-wave propagation curves for frequencies between 10 kHz and 30 MHz
		370-5	V	VHF and UHF propagation curves for the frequency range from 30 MHz to 1000 MHz. *Broadcasting services*
		373-6	VI	Definitions of maximum and minimum transmission frequencies
		452-5	RPN	Prediction procedure for the evaluation of microwave interference between stations on the surface of the Earth at frequencies above about 0.7 GHz
		465-5	S	Reference earth-station radiation pattern for use in coordination and interference assessment in the frequency range from 2 to about 30 GHz
		466-6	RS	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
		479-3	II	Protection of frequencies for radioastronomical measurements in the shielded zone of the Moon

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
1582	Technical standards of IFRB should be based, amongst other things, on CCIR Recommendations *(continued)*	483-2	RS	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
		496-3	RM	Limits of power flux-density of radionavigation transmitters to protect space station receivers in the fixed-satellite service in the 14 GHz band
		509-1	II	Generalized space research earth station antenna radiation pattern for use in interference calculations, including coordination procedures
		510-1	II	Feasibility of frequency sharing between the space research service and other services in band 10. *Potential interference from data relay satellite systems*
		514-1	II	Telecommunication links for Earth exploration satellites. *Frequencies, bandwidths and criteria for protection from interference*
		517-2	RRA	Protection of the radioastronomy service from transmitters in adjacent bands
		523-4	RS	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
		524-4	RS	Maximum permissible levels of off-axis e.i.r.p. density from earth stations in the fixed-satellite service transmitting in the 6 GHz and 14 GHz frequency band
		527-3	RPN	Electrical characteristics of the surface of the Earth
		528-2	V	Propagation curves for aeronautical mobile and radionavigation services using the VHF, UHF and SHF bands
		529-1	V	VHF and UHF propagation data and prediction methods required for the terrestrial band mobile services
		530-4	RPN	Propagation data and prediction methods required for the design of terrestrial line-of-sight systems
		531-2	RPI	Ionospheric effects influencing radio systems involving spacecraft
		558-2	IV/IX-2	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
		578	II	Protection criteria and sharing considerations relating to deep-space research
		580-4	S	Radiation diagrams for use as design objectives for antennas of earth stations operating with geostationary satellites

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
1582	Technical standards of IFRB should be based, amongst other things, on CCIR Recommendations *(continued)*	611-2	RRA	Protection of the radioastronomy service from spurious emissions
		617-1	RPN	Propagation prediction techniques and data required for the design of trans-horizon radio-relay systems
		618-2	RPN	Propagation data and prediction methods required for the design of Earth-space telecommunication systems
		619-1	RPN	Propagation data required for the evaluation of interference between stations in space and those on the surface of the Earth
		620-1	RPN	Propagation data required for the calculation of coordination distances in the frequency range 1-40 GHz
		671-2	S	Necessary protection ratios for narrow-band single channel-per-carrier transmissions interfered with by analogue television carriers
		672-2	S	Satellite antenna radiation pattern for use as a design objective in the fixed-satellite service employing geostationary satellites
		680-1	RPN	Propagation data required for the design of Earth-space maritime-mobile telecommunication systems
		681	V	Propagation data required for the design of Earth-space land mobile telecommunication systems
		682-1	RPN	Propagation data required for the design of Earth-space aeronautical mobile telecommunication systems
		731	RS	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
		735-1	S	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
		736	RS	Estimation of polarization discrimination in the interference calculations between geostationary-satellite networks in the fixed-satellite service
		744	RS	Orbit/spectrum improvement measures for satellite networks having more than one service in one or more frequency bands
		765	RSF	Intersection of radio-relay antenna beams with orbits used by space stations in the fixed-satellite service
		766	RSF	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

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
1582	Technical standards of IFRB should be based, amongst other things, on CCIR Recommendations *(continued)*	828	RM	Definition of availability for communication circuits in the mobile-satellite services
		829	RM	Frequency sharing in the 1660-1660.5 MHz band between the mobile-satellite service and the radioastronomy service
		832	RPN	World atlas of ground conductivities
		837	RPN	Characteristics of precipitation for propagation modelling
		844	RPI	Ionospheric factors affecting frequency sharing in the VHF (30-300 MHz) band
		1006	SF	Determination of the interference potential between earth stations of the fixed-satellite service and stations in the fixed service
ARTICLE 14	**Supplementary procedure to be applied in cases where a footnote in the Table of Frequency Allocations requires an agreement with an administration**			
1620 and 1630	Technical criteria to be used in order to facilitate the application of Article 14	674	IV/IX-2	Power flux-density values to facilitate the application of Article 14 for FSS in relation to the fixed-satellite service in the 11.7-12.2 GHz band in Region 2
		744	RS	Orbit/spectrum improvement measures for satellite networks having more than one service in one or more frequency bands
ARTICLE 18	**Interference**			
1812	Receiver characteristics	331-4	I	Noise and sensitivity of receivers
		332-4	I	Selectivity of receivers
		478-4	VIII	Technical characteristics of equipment and principles governing the allocation of frequency channels between 25 and 1000 MHz for the land mobile service
		489-1	VIII	Technical characteristics of VHF radio-telephone equipment operating in the maritime mobile service in channels spaced by 25 kHz
		494	VIII	Technical characteristics of single-sideband equipment in the MF and HF land mobile radiotelephone service
		539-2	VIII	Technical and operational characteristics of future international radio-paging systems
		726-1	S	Maximum permissible level of spurious emissions from very small aperture terminals (VSATs)
1814 1814.1	Interference from technical apparatus (except ISM)	433-5	RSM	Methods for the measurement of radio interference and the determination of tolerable levels of interference
1815 1815.1	Interference from ISM equipment	Same as No. 1814		
ARTICLE 20	**International monitoring**			
1878	Standards on monitoring stations	182-4	RSM	Automatic monitoring of occupancy of the radio-frequency spectrum

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
1878	Standards on monitoring stations *(continued)*	328-7	I	Spectra and bandwidth of emissions *Note* - Recommendation 328 is referred to in Recommendation 443.
		377-2	I	Accuracy of frequency measurements at stations for international monitoring
		378-5	RSM	Field-strength measurements at monitoring stations
		443-1	I	Bandwidth measurements at monitoring stations
		575	I	Protection of fixed monitoring stations against radio-frequency interference
		854	RSM	Direction finding at monitoring stations of signals below 30 MHz
ARTICLE 25	**Identification of stations**			
Section I	*General provisions*			
2057	Identification signals	493-5	RM	Digital selective-calling system for use in the maritime mobile service
		585-2	VIII	Assignment and use of maritime mobile service identities
		587-1	VIII	Coast station identities and initiation of location registration in an automated VHF/UHF maritime mobile telephone system
		625-2	RM	Direct-printing telegraph equipment employing automatic identification in the maritime mobile service
		820	RM	Use of 9-digit identities for narrow-band direct-printing telegraphy in the maritime mobile service
		821	RM	Optional expansion of the digital selective-calling system for use in the maritime mobile service
		823	RM	Technical characteristics of differential transmissions for Global Navigation Satellite Systems (GNSS) from maritime radio beacons in the frequency band 285-325 kHz (283.5-315 kHz in Region 1)
		825	RM	Characteristics of a transponder system using digital selective-calling techniques for use with vessel traffic services and ship-to-ship identification
2075	Forms of identification signals	Same as No. 2057		
2076	Transmission of identification signals	Same as No. 2057		
2077	Identification methods	585-2	VIII	Assignment and use of maritime mobile service identities
		587-1	VIII	Coast station identities and initiation of location registration in an automated VHF/UHF maritime mobile telephone system

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation(1) relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
Section VI	*Maritime mobile service identities in the maritime mobile service and the maritime mobile-satellite service*			
2149 Mob-87	Identity assignments	493-5	RM	Digital selective-calling system for use in the maritime mobile service
		585-2	VIII	Assignment and use of maritime mobile service identities
		587-1	VIII	Coast station identities and initiation of location registration in an automated VHF/UHF maritime mobile telephone system
		820	RM	Use of 9-digit identities for narrow-band direct-printing telegraphy in the maritime mobile service
		821	RM	Optional expansion of the digital selective-calling system for use in the maritime mobile service
		825	RM	Characteristics of a transponder system using digital selective-calling techniques for use with vessel traffic services and ship-to-ship identification
ARTICLE 27	**Terrestrial radiocommunication services sharing frequency bands with space radiocommunication services above 1 GHz**			
Section I	*Choice of sites and frequencies*			
2501	Selection of sites and frequencies for terrestrial stations	452-5	RPN	Prediction procedure for the evaluation of microwave interference between stations on the surface of the Earth at frequencies above about 0.7 GHz
		619-1	RPN	Propagation data required for the evaluation of interference between stations in space and those on the surface of the Earth
		620-1	RPN	Propagation data required for the calculation of coordination distances in the frequency range 1-40 GHz
2502 2502.2	Direction of maximum radiation in the frequency bands between 1 and 10 GHz	406-8	SF	Maximum equivalent isotropically radiated power of radio-relay system transmitters operating in the frequency bands shared with the fixed-satellite service
		765	RSF	Intersection of radio-relay antenna beams with orbits used by space stations in the fixed-satellite service
		Rep. 393-4	IV/IX-2 (Annex)	Intersections of radio-relay antenna beams with orbits used by space stations in the fixed-satellite service
2503 2503.2	Direction of maximum radiation in the frequency bands 10-15 GHz	Same as No. 2502		
2504 2504.1	Direction of maximum radiation in the frequency bands above 15 GHz	406-8	SF	Maximum equivalent isotropically radiated power of radio-relay system transmitters operating in the frequency bands shared with the fixed-satellite service
Section II	*Power limits*			
2506 2506.1	Power limits where compliance with No. 2502 is impracticable	Same as No. 2502		

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
2509[1] 2509.1[1]	Application of the limits concerning interregional interference	355-4	RSF	Frequency sharing between systems in the fixed-satellite service and radio-relay systems in the same frequency bands
		356-4	IV/IX-2	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
		357-3	IV/IX-2	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
		358-4	SF	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
		406-8	SF	Maximum equivalent isotropically radiated power of radio-relay system transmitters operating in the frequency bands shared with the fixed-satellite service
		558-2	IV/IX-2	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
		615	IV/IX-2	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
2510 Orb-88[1] 2510.1[1]	Application of the limits concerning interregional interference	Same as No. 2509.1		
2511 Orb-88[1] 2511.2[1]	Application of the limits concerning interregional interference	Same as No. 2509.1		
ARTICLE 28	**Space radiocommunication services sharing frequency bands with terrestrial radiocommunication services above 1 GHz**			
Section I	*Choice of sites and frequencies*			
2539	Selection of sites and frequencies for earth stations	355-4	RSF	Frequency sharing between systems in the fixed-satellite service and radio-relay systems in the same frequency bands
		356-4	IV/IX-2	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

[1] The Recommendations referred to are of a general nature and are not limited to interregional sharing and interference.

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
2539	Selection of sites and frequencies for earth stations *(continued)*	357-3	IV/IX-2	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
		358-4	SF	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
		363-4	II	Space operation systems. *Frequencies, bandwidths and protection criteria*
		406-8	SF	Maximum equivalent isotropically radiated power of radio-relay system transmitters operating in the frequency bands shared with the fixed-satellite service
		452-5	RPN	Prediction procedure for the evaluation of microwave interference between stations on the surface of the Earth at frequencies above about 0.7 GHz
		465-5	S	Reference earth-station radiation pattern for use in coordination and interference assessment in the frequency range from 2 to about 30 GHz
		558-2	IV/IX-2	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
		580-4	S	Radiation diagrams for use as design objectives for antennas of earth stations operating with geostationary satellites
		615	IV/IX-2	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
		619-1	RPN	Propagation data required for the evaluation of interference between stations in space and those on the surface of the Earth
		620-1	RPN	Propagation data required for the calculation of coordination distances in the frequency range 1-40 GHz
		699-1	RF	Reference radiation patterns for line-of-sight radio-relay system antennas for use in coordination studies and interference assessment in the frequency range from 1 to about 40 GHz
		731	RS	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

(1) The Recommendations referred to are of a general nature and are not limited to interregional sharing and interference.

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
2539	Selection of sites and frequencies for earth stations *(continued)*	1004	SF	Maximum equivalent isotropically radiated power transmitted towards the horizon by earth stations of the fixed-satellite service sharing frequency bands with the fixed service
Section II	*Power limits*			
2547[1] 2547.1[1]	Application of the limits concerning interregional interference (earth stations)	Same as No. 2539		
2548[1] 2548.1[1]	Application of the limits concerning interregional interference (earth stations)	Same as No. 2539		
Section IV	*Limits of power-flux density from space stations*			
2559 Mob-87[1] 2559.1[1]	Application of the limits concerning interregional interference	Same as No. 2539		
2576[1] 2576.1[1]	Application of the limits concerning interregional interference	Same as No. 2539		
2580[1] 2580.1[1]	Application of the limits concerning interregional interference	Same as No. 2539		
2582 2582.1	Power-flux-density limits	358-4	SF	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
ARTICLE 29	**Special rules relating to space radiocommunication services**			
Section II	*Control of interference to geostationary-satellite systems*			
2613 2613.1	Accepted level of interference	514-1	II	Telecommunication links for Earth exploration satellites. *Frequencies, bandwidths and criteria for protection from interference*
		609-1	RSA	Protection criteria for telecommunication links for manned and unmanned near-Earth research satellites
		743	RS	The coordination of satellite networks using slightly inclined geostationary-satellite orbits and between such networks and satellite networks using non-inclined GSO satellites
2614 2614.1	Accepted level of interference	Same as No. 2613 2613.1		
Section III	*Station keeping of space stations*			
2619 2619.1	Accepted level of interference	Same as No. 2613		
		484-3	RS	Station-keeping in longitude of geostationary satellites in the fixed-satellite service

[1] The Recommendations referred to are of a general nature and are not limited to interregional sharing and interference.

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
2619 2619.1	Accepted level of interference *(continued)*	509-1	II	Generalized space research earth station antenna radiation pattern for use in interference calculations, including coordination procedures
		514-1	II	Telecommunication links for Earth exploration satellites. *Frequencies, bandwidths and criteria for protection from interference*
2623 2623.1	Accepted level of interference			*Note* - Nos. 2623/2623.1 of the Radio Regulations concern space stations on board geostationary satellites which do not use any frequency bands allocated to the FSS or BSS. Therefore no ITU-R Recommendation in Volumes IV-1 and IV/IX-2 is connected.
		509-1	II	Generalized space research earth station antenna radiation pattern for use in interference calculations, including coordination procedures
		514-1	II	Telecommunication links for Earth exploration satellites. *Frequencies, bandwidths and criteria for protection from interference*
		609-1	RSA	Protection criteria for telecommunication links for manned and unmanned near-Earth research satellites
2627 2627.1	Accepted level of interference	Same as No. 2613 2613.1		
Section IV	*Pointing accuracy of antennae on geostationary satellites*			
2630 2630.1	Accepted level of interference	Same as No. 2613 2613.1		
Section VI	*Radio astronomy in the shielded zone of the Moon*			
2632 2632.2	Level of interference	314-8	RRA	Preferred frequency bands for radioastronomical measurements
		479-3	II	Protection of frequencies for radioastronomical measurements in the shielded zone of the Moon
		514-1	II	Telecommunication links for Earth exploration satellites. *Frequencies, bandwidths and criteria for protection from interference*
		515-1	II	Frequency bands and performance requirements for satellite passive sensing
		517-2	RRA	Protection of the radioastronomy service from transmitters in adjacent bands
		580-4	S	Radiation diagrams for use as design objectives for antennas of earth stations operating with geostationary satellites
		611-2	RRA	Protection of the radioastronomy service from spurious emissions

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
Section VII	*Earth station off-axis power limitations*			
2636	Limitation of off-axis radiation	509-1	II	Generalized space research earth station antenna radiation pattern for use in interference calculations, including coordination procedures
		514-1	II	Telecommunication links for Earth exploration satellites. *Frequencies, bandwidths and criteria for protection from interference*
2636	Limitation of off-axis radiation	524-4	RS	Maximum permissible levels of off-axis e.i.r.p. density from earth stations in the fixed-satellite service transmitting in the 6and 14 GHz frequency band
		728	RS	Maximum permissible level of off-axis e.i.r.p. density from very small aperture terminals (VSATs)
ARTICLE 33	**Standard frequency and time signal service**			
2770	Interference reduction	374-3	VII	Standard-frequency and time-signal emissions
		376-1	VII	Avoidance of external interference with emissions of the standard-frequency service in the bands allocated to that service
		537	VII	Reduction of mutual interference between emissions of the standard-frequency and time-signal service on the allocated frequencies in bands 6 and 7
2772	Standard frequency and time signals. Technical characteristics	375-2	VII	Standard-frequency and time-signal emissions in additional frequency bands
		460-4	VII	Standard-frequency and time-signal emissions
		583-1	VII	Time codes
		685	VII	International synchronization of UTC time scale
ARTICLE 36	**Radio astronomy service**			
Section III	*Protection of the radio astronomy service*			
2904	Level of interference	314-8	RRA	Preferred frequency bands for radioastronomical measurements
		479-3	II	Protection of frequencies for radioastronomical measurements in the shielded zone of the Moon
		517-2	RRA	Protection of the radioastronomy service from transmitters in adjacent bands
		611-2	RRA	Protection of the radioastronomy service from spurious emissions

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
ARTICLE 37	**General provisions**			
2937A Mob-87	Using digital selective calling and satellite techniques and/or direct-printing telegraphy	476-4	VIII	Direct-printing telegraph equipment in the maritime mobile service
		490	VIII	The introduction of direct-printing telegraph equipment in the maritime mobile service. *Equivalence of terms*
		491-1	VIII	Translation between an identity number and identities for direct-printing telegraphy in the maritime mobile service
		492-5	RM	Operational procedures for the use of direct-printing telegraph equipment in the maritime mobile service
		493-5	RM	Digital selective-calling system for use in the maritime mobile service
		541-4	RM	Operational procedures for the use of digital selective-calling (DSC) equipment in the maritime mobile service
		625-2	RM	Direct-printing telegraph equipment employing automatic identification in the maritime mobile service
		627	VIII	Technical characteristics for HF maritime radio equipment using narrow-band phase-shift keying (NBPSK) telegraphy
		821	RM	Optional expansion of the digital selective-calling system for use in the maritime mobile service
ARTICLE 41	**Alarm and warning signals**			
Section I (Mob-87)	*Emergency Position-Indicating Radiobeacon (EPIRB) and satellite Emergency Position-Indicating Radiobeacon signals*			
3259A Mob-87	Characteristics of signals in the bands 406-406.1 MHz and 1 645.5-1 646.5 MHz	632-1	VIII	Transmission characteristics of a satellite emergency position-indicating radiobeacon (satellite EPIRB) system operating through geostationary satellites in the 1.6 GHz band
		633-1	VIII	Transmission characteristics of a satellite emergency position-indicating radiobeacon (satellite EPIRB) system operating through a low polar-orbiting satellite system in the 406 MHz band
CHAPTER N IX (Mob-87)	DISTRESS AND SAFETY COMMUNICATIONS FOR THE GMDSS			
ARTICLE N 37 (Mob-87)	**General provisions**			
N 2940 Mob-87	Using Morse telegraphy and radiotelephony techniques for distress, urgency and safety transmissions.	219-1	VIII	Alarm signal for use on the maritime radio-telephony distress frequency of 2 182 kHz
		489-1	VIII	Technical characteristics of VHF radio-telephone equipment operating in the maritime mobile service in channels spaced by 25 kHz

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
ARTICLE N 39 (Mob-87)	**Operational procedures for distress and safety communications in the Global Maritime Distress and Safety System (GMDSS)**			
N 3110 Mob-87	Digital selective calling	493-5	RM	Digital selective-calling systems for use in the maritime mobile service
		541-4	RM	Operational procedures for the use of digital selective-calling (DSC) equipment in the maritime mobile service
		821	RM	Optional expansion of the digital selective-calling system for use in the maritime mobile service
		822	RM	Calling-channel loading for digital selective-calling (DSC) for the maritime mobile service
N 3112.3 Mob-87	The format of distress calls and distress messages	493-5	RM	Digital selective-calling system for use in the maritime mobile service
		541-4	RM	Operational procedures for the use of digital selective-calling (DSC) equipment in the maritime mobile service
N 3124 Mob-87	Acknowledgement of receipt of distress alert	493-5	RM	Digital selective-calling system for use in the maritime mobile service
		541-4	RM	Operational procedures for the use of digital selective-calling (DSC) equipment in the maritime mobile service
N 3167 Mob-87	Locating signals	628-2	RM	Technical characteristics for search and rescue radar transponders
		633-1	VIII	Transmission characteristics of a satellite emergency position-indicating radiobeacon (satellite EPIRB) system operating through a low polar-orbiting satellite system in the 406 MHz band
ARTICLE N 40 (Mob-87)	**Operational procedures for urgency and safety communications in the Global Maritime Distress and Safety System (GMDSS)**			
Section II (Mob-87)	*Urgency communications*			
N 3212 Mob-87	Error correction techniques	476-4	VIII	Direct-printing telegraph equipment in the maritime mobile service
		625-2	RM	Direct-printing telegraph equipment employing automatic identification in the maritime mobile service
		820	RM	Use of 9-digit identities for narrow-band direct-printing telegraphy in the maritime mobile service
Section V (Mob-87)	*Transmission of maritime safety information*			
N 3236 Mob-87	Mode and format of the transmissions	476-4	VIII	Direct-printing telegraph equipment in the maritime mobile service
		625-2	RM	Direct-printing telegraph equipment employing automatic identification in the maritime mobile service
		820	RM	Use of 9-digit identities for narrow-band direct-printing telegraphy in the maritime mobile service

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
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ARTICLE N 41 (Mob-87)	**Alerting signals**			
Section I (Mob-87)	*Emergency Position-Indicating Radiobeacon (EPIRB) and satellite Emergency Position-Indicating Radiobeacon signals*			
N 3276 Mob-87	Characteristics of EPIRB signals	632-1	VIII	Transmission characteristics of a satellite emergency position-indicating radiobeacon (satellite EPIRB) system operating through geostationary satellites in the 1.6 GHz band
		633-1	VIII	Transmission characteristics of a satellite emergency position-indicating radiobeacon (satellite EPIRB) system operating through a low polar-orbiting satellite system in the 406 MHz band
Section II (Mob-87)	*Digital selective calling*			
N 3277 Mob-87	Characteristics of the "distress call"	493-5	RM	Digital selective-calling system for use in the maritime mobile service
		541-4	RM	Operational procedures for the use of digital selective-calling (DSC) equipment in the maritime mobile service
ARTICLE 59	**Conditions to be observed in the maritime mobile service and in the maritime mobile-satellite service**			
4123A Mob-87	Characteristics of the digital selective calling equipment (Frequency bands between 4 000 kHz and 27 500 kHz)	493-5	RM	Digital selective-calling system for use in the maritime mobile service
		541-4	RM	Operational procedures for the use of digital selective-calling (DSC) equipment in the maritime mobile service
ARTICLE 60	**Special rules relating to the use of frequencies in the maritime mobile service**			
Section III A (Mob-87)	*Use of frequencies for digital selective calling*			
4323C Mob-87	Characteristics of the digital selective-calling equipment	493-5	RM	Digital selective-calling system for use in the maritime mobile service
		541-4	RM	Operational procedures for the use of digital selective-calling (DSC) equipment in the maritime mobile service
		821	RM	Optional expansion of the digital selective-calling system for use in the maritime mobile service
ARTICLE 62	**Selective calling procedure in the maritime mobile service**			
Section III	*Digital selective calling system*			
4681 Mob-87	Technical characteristics of digital selective-calling equipment	493-5	RM	Digital selective-calling system for use in the maritime mobile service
4686D Mob-87	Technical format of the call sequence	493-5	RM	Digital selective-calling system for use in the maritime mobile service
		541-4	RM	Operational procedures for the use of digital selective-calling (DSC) equipment in the maritime mobile service
4687C Mob-87	Acknowledgement of call	493-5	RM	Digital selective-calling system for use in the maritime mobile service

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
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4687C Mob-87	Acknowledgement of call *(continued)*	541-4	RM	Operational procedures for the use of digital selective-calling (DSC) equipment in the maritime mobile service
4687E Mob-87	Technical format of the acknowledgement sequence	493-5	RM	Digital selective-calling system for use in the maritime mobile service
		541-4	RM	Operational procedures for the use of digital selective-calling (DSC) equipment in the maritime mobile service
4687J Mob-87	Transmission of acknowledgement (automatic)	493-5	RM	Digital selective-calling system for use in the maritime mobile service
		541-4	RM	Operational procedures for the use of digital selective-calling (DSC) equipment in the maritime mobile service
4687K Mob-87	Transmission of acknowledgement (time limit)	493-5	RM	Digital selective-calling system for use in the maritime mobile service
		541-4	RM	Operational procedures for the use of digital selective-calling (DSC) equipment in the maritime mobile service
4688A Mob-87	Operation of DSC VHF or UHF systems	493-5	RM	Digital selective-calling system for use in the maritime mobile service
		541-4	RM	Operational procedures for the use of digital selective-calling (DSC) equipment in the maritime mobile service
ARTICLE 64	**General procedures for narrow-band direct-printing telegraphy in the maritime mobile service**			
4873 Mob-87	Message format in the ship-to-shore direction	476-4	VIII	Direct-printing telegraph equipment in the maritime mobile service
		490	VIII	The introduction of direct-printing telegraph equipment in the maritime mobile service. *Equivalence of terms*
		491-1	VIII	Translation between an identity number and identities for direct-printing telegraphy in the maritime mobile service
		492-5	RM	Operational procedures for the use of direct-printing telegraph equipment in the maritime mobile service
		625-2	RM	Direct-printing telegraph equipment employing automatic identification in the maritime mobile service
		820	RM	Use of 9-digit identities for narrow-band direct-printing telegraphy in the maritime mobile service
APPENDIX 1				
Section A	*Basic characteristics to be furnished for notification under Nos. 1214 to 1217 of the Radio Regulations*			
Column 9j	Type of antenna CCIR Book of Antenna Diagrams (Geneva, 1978) and Recommendation ITU-R BS.705: HF transmitting antennas characteristics and diagrams			
Section D	*Information to be furnished for notification under No. 1218 of the Radio Regulations*			
Column 9j	Type of antenna CCIR Book of Antenna Diagrams (Geneva, 1978) and Recommendation ITU-R BS.705			

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
Section F.II	*Notes concerning information to be entered in the Notice pertaining to specific columns of the Master Register*			
Column 9j	Type of antenna CCIR Book of Antenna Diagrams (Geneva, 1978) and Recommendation ITU-R BS.705			
APPENDIX 3 (Orb-88)	**Notices relating to space radiocommunications and radio astronomy stations**			
Section II	*Notices relating to coordination under No. 1060 of satellite networks, and notification of space stations*			
2.B.12	Power characteristics of the earth station transmission			
b) Note 4	Maximum power density	675-2	SF	Calculation of the maximum power density (averaged over 4 kHz) of an angle modulated carrier
d) Note 4	Maximum power density	675-2	SF	Calculation of the maximum power density (averaged over 4 kHz) of an angle modulated carrier
d) Note 8	Carrier type	739	RS	Additional methods for determining if detailed coordination is necessary between geostationary-satellite networks in the fixed-satellite service sharing the same frequency bands
2.C.8	Power characteristics of the space station transmission			
b) Note 4	Maximum power density	675-2	SF	Calculation of the maximum power density (averaged over 4 kHz) of an angle modulated carrier
e) Note 4	Maximum power density	675-2	SF	Calculation of the maximum power density (averaged over 4 kHz) of an angle modulated carrier
e) Note 8	Carrier type	739	RS	Additional methods for determining if detailed coordination is necessary between geostationary-satellite networks in the fixed-satellite service sharing the same frequency bands
Section III	*Notices relating to coordination under No. 1107 and notification of earth stations*			
3.B.6	Power characteristics of the transmission			
b) Note 4	Maximum power density	675-2	SF	Calculation of the maximum power density (averaged over 4 kHz) of an angle modulated carrier
d) Note 4	Maximum power density	675-2	SF	Calculation of the maximum power density (averaged over 4 kHz) of an angle modulated carrier
d) Note 8	Carrier type	739	RS	Additional methods for determining if detailed coordination is necessary between geostationary-satellite networks in the fixed-satellite service sharing the same frequency bands
3.C.5	Power characteristics of the space station transmission			
b) Note 4	Maximum power density	675-2	SF	Calculation of the maximum power density (averaged over 4 kHz) of an angle modulated carrier

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
e) Note 4	Maximum power density	675-2	SF	Calculation of the maximum power density (averaged over 4 kHz) of an angle modulated carrier
e) Note 8	Carrier type	739	RS	Additional methods for determining if detailed coordination is necessary between geostationary-satellite networks in the fixed-satellite service sharing the same frequency bands
APPENDIX 4 (Orb-88)	**Advance publication information to be furnished for a satellite network**			
Section C	*Characteristics of the satellite network in the Earth-to-space direction*			
C.4 *a)*	Maximum spectral power density calculation	675-2	SF	Calculation of the maximum power density (averaged over 4 kHz) of an angle modulated carrier
Section D	*Characteristics of the satellite network in the space-to-Earth direction*			
D.4 *a)*	Maximum spectral power density calculation	Same as Section C, C.4 *a)*		
APPENDIX 6	**Additional characteristics for the classification of emissions; determination of necessary bandwidth including examples for their calculation and associated examples for the designation of emissions**			
Part B	*Determination of necessary bandwidths including examples for their calculation and associated examples for the designation of emissions*			
Item 2)	Computation of necessary bandwidth	328-7	I	Spectra and bandwidth of emissions
		338-2	III	Bandwidth required at the output of a telegraph or telephone receiver
		853	RSM	Necessary bandwidth
APPENDIX 7 (HFBC-87) (Mob-87)	**Table of transmitter frequency tolerances**			
Note 36)	Frequency tolerances	478-4	VIII	Technical characteristics of equipment and principles governing the allocation of frequency channels between 25 and 1 000 MHz for the land mobile service
APPENDIX 8	**Table of maximum permitted spurious emission power levels**			
Note 12) Note 13)	Spurious emissions	329-6	I	Spurious emissions
		726-1	S	Maximum permissible level of spurious emissions from very small aperture terminals (VSATs)
APPENDIX 9 (Mob-87)	**Service documents**			
List VIII	*List of International Monitoring Stations*			
Part II	*Monitoring of emissions from stations of terrestrial radiocommunication services*			
Section D	Particulars of monitoring stations carrying out bandwidth measurements	443-1	I	Bandwidth measurements at monitoring stations
		Rep. 275-5	I (Annex)	Bandwidth measurements at monitoring stations

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
Part III	*Monitoring of emissions from stations of space radiocommunication services* Particulars of monitoring stations carrying out measurements related to stations in the space radiocommunication services			
Note 1	Information available for bandwidth measurements	Same as Section D above		
APPENDIX 19 (Mob-87)	**Technical characteristics for transmitters and receivers used in the maritime mobile service in the band 156-174 MHz**			
Item 8	Characteristics of transmitters and receivers	489-1	VIII	Technical characteristics of VHF radio-telephone equipment operating in the maritime mobile service in channels spaced by 25 kHz
APPENDIX 28 (Orb-88)	**Method for the determination of the coordination area around an earth station in frequency bands between 1 GHz and 40 GHz shared between space and terrestrial radiocommunication services**			
2.3.1 Note 2	Permissible level of the interfering emission	356-4	IV/IX-2	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
		357-3	IV/IX-2	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
3.2.2 Footnote	Calculation of coordination distance. Numerical method	452-5	RPN	Prediction procedure for the evaluation of microwave interference between stations on the surface of the Earth at frequencies above about 0.7 GHz
		465-5	S	Reference earth-station radiation pattern for use in coordination and interference assessment in the frequency range from 2 to about 30 GHz
		580-4	S	Radiation diagrams for use as design objectives for antennas of earth stations operating with geostationary satellites
		620-1	RPN	Propagation data required for the calculation of coordination distances in the frequency range 1-40 GHz
		731	RS	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
		847-1	IS	Determination of the coordination area of an earth station operating with a geostationary space station and using the same frequency band as a system in a terrestrial service
		848-1	IS	Determination of the coordination area of a transmitting earth station using the same frequency band as receiving earth stations in bidirectionally allocated frequency bands

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
3.2.2 Footnote	Calculation of coordination distance. Numerical method *(continued)*	849-1	IS	Determination of coordination area for earth stations operating with non-geostationary spacecraft in bands shared with terrestrial services
		850	RIS	Coordination areas using predetermined coordination distances
Table 1 Footnote 5	Parameters required for determination of coordination distances in satellite communications	452-5	RPN	Prediction procedure for the evaluation of microwave interference between stations on the surface of the Earth at frequencies above about 0.7 GHz
		465-5	S	Reference earth-station radiation pattern for use in coordination and interference assessment in the frequency range from 2 to about 30 GHz
		580-4	S	Radiation diagrams for use as design objectives for antennas of earth stations operating with geostationary satellites
		620-1	RPN	Propagation data required for the calculation of coordination distances in the frequency range 1-40 GHz
		731	RS	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
		847-1	IS	Determination of the coordination area of an earth station operating with a geostationary space station and using the same frequency band as a system in a terrestrial service
		848-1	IS	Determination of the coordination area of a transmitting earth station using the same frequency band as receiving earth stations in bidirectionally allocated frequency bands
		849-1	IS	Determination of coordination area for earth stations operating with non-geostationary spacecraft in bands shared with terrestrial services
		850	RIS	Coordination areas using predetermined coordination distances
APPENDIX 29 (Orb-88)	**Method of calculation for determining if coordination is required between geostationary-satellite networks sharing the same frequency bands**			
2. *Calculation of the apparent increase in equivalent noise temperature of the satellite link subject to an interfering emission*				
2.2.1	*Case I – Wanted and interfering networks sharing the same frequency band in the same direction of transmission*			
	Radiation patterns for earth station antennas	465-5	S	Reference earth-station radiation pattern for use in coordination and interference assessment in the frequency range from 2 to about 30 GHz
		580-4	S	Radiation diagrams for use as design objectives for antennas of earth stations operating with geostationary satellites

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
2.2.1	*Case I – Wanted and interfering networks sharing the same frequency band in the same direction of transmission*	731	RS	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
	Radiation patterns for earth station antennas *(continued)*	738	RS	Procedure for determining if coordination is required between geostationary-satellite networks sharing the same frequency bands
ANNEX III	*Radiation patterns for earth station antennae to be used when they are not published*	Same as § 2.2.1 above		
APPENDIX 30 (Orb-85)	**Provisions for all services and associated Plans for the broadcasting-satellite service in the frequency bands 11.7-12.2 GHz (In Region 3), 11.7-12.5 GHz (In Region 1) and 12.2-12.7 GHz (In Region 2)**			
ARTICLE 6	*Section I. Coordination procedure to be applied*			
6.1.3 Footnote 1	Criteria of evaluation of interference in satellite communications			*Note* – Item AP30, Article 6, footnote to 6.1.3 concerns criteria of evaluation of interference which would be caused to terrestrial stations by the BSS around 12 GHz. No specific Recommendation in Volumes IV-1 and IV/IX-2 is relevant for the time being
		452-5	RPN	Prediction procedure for the evaluation of microwave interference between stations on the surface of the Earth at frequencies above about 0.7 GHz
		619-1	RPN	Propagation data required for the evaluation of interference between stations in space and those on the surface of the Earth
		620-1	RPN	Propagation data required for the calculation of coordination distances in the frequency range 1-40 GHz
		679-1	RPN	Propagation data required for the design of broadcasting-satellite systems
		744	RS	Orbit/spectrum improvement measures for satellite networks having more than one service in one or more frequency bands
ARTICLE 7	*Section II. Coordination procedure to be applied in appropriate cases*			
7.2.5 Footnote 1	Criteria of evaluation of interference in satellite communications	Same as AP30, Article 6, § 6.1.3		*Note* - Item AP30, Article 7, Section II, footnote 1 concerns criteria of evaluation of interference which would be caused to stations in the FSS by the BSS around 12 GHz. No specific Recommendation in Volumes IV-1 and IV/IX-2 is relevant for the time being
ANNEX 5	*Technical data used in establishing the provisions and associated Plans and which should be used for their application*			*Note* – Numbers of Annexes changed by the WARC ORB-85.
3. *Basic technical characteristics*				
3.1	Pre-emphasis characteristics in satellite broadcasting	405-1	IX-1	Pre-emphasis characteristics for frequency modulation radio-relay systems for television

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
3.6	Figure of merit (*G/T*) of receiving installations	Rep. 473-5	X/XI-2 (Annex)	Characteristics of ground receiving equipment for the broadcasting-satellite service
		790	RBO	Characteristics of receiving equipment and calculation of receiver figure-of-merit (*G/T*) for the broadcasting-satellite service
3.9.3	Spurious emissions	329-6	I	Spurious emissions
ANNEX 6	*Criteria for sharing between services*			
1.1 Note 5 to the Table	Protection requirements for sharing between services	483-2	RS	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
1.6 *b)* Footnote 1	Quality of the wanted service (grade 4.5)	500-5	RBT	Method for the subjective assessment of the quality of television pictures
2.1	Reference antenna	465-5	S	Reference earth-station radiation pattern for use in coordination and interference assessment in the frequency range from 2 to about 30 GHz
		580-4	S	Radiation diagrams for use as design objectives for antennas of earth stations operating with geostationary satellites
		731	RS	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
3.3	Use of energy dispersion	Rep. 631-4	X/XI-2 (Annex)	Frequency sharing between the broadcasting-satellite service (sound and television) and terrestrial services
APPENDIX 30B (Orb-88)	**Provisions and associated Plans for the fixed-satellite service in the frequency bands 4 500-4 800 MHz, 6 725-7 025 MHz, 10.70-10.95 GHz, 11.20-11.45 GHz and 12.75-13.25 GHz**			
ANNEX 1	*Section A. Technical data used in establishing the allotment plan and the associated provisions*			
1.2 *f)*	Rain attenuation model	Rep. 564-3	V (1986)	Propagation data and prediction methods required for Earth-space telecommunication systems
		618-2	RPN	Propagation data and prediction methods required for the design of Earth-space telecommunication systems
APPENDIX 37 (Mob-83)	**Technical characteristics of emergency position-indicating radiobeacons operating on the carrier frequency 2182 kHz**			
c)	Emergency position-indicating radio beacons	None		
APPENDIX 38 (Mob-87)	**Narrow-band direct-printing telegraph equipment in the maritime mobile service using error detection and correction methods**			
Item *d)* Note 2	Necessary bandwidth of receiving equipment	476-4	VIII	Direct-printing telegraph equipment in the maritime mobile service
		625-2	RM	Direct-printing telegraph equipment employing automatic identification in the maritime mobile service

APPENDIX 1 *(continued)*

Radio Regulations No.	Subject	ITU-R Recommendation relevant to the provisions		
		No.	Volume or Fascicle	Title
1	2	3	4	5
Item *d)* Note 2	Necessary bandwidth of receiving equipment *(continued)*	627	VIII	Technical characteristics for HF maritime radio equipment using narrow-band phase-shift keying (NBPSK) telegraphy
Item *e)*	Frequency shift keying ("space" and "mark")	490	VIII	The introduction of direct-printing telegraph equipment in the maritime mobile service. *Equivalence of terms*
Item *f)*	Characteristics of the error-detecting and correcting equipment	476-4	VIII	Direct-printing telegraph equipment in the maritime mobile service
		625-2	RM	Direct-printing telegraph equipment employing automatic identification in the maritime mobile service
Item *i)*	Conversion of call signal	476-4	VIII	Direct-printing telegraph equipment in the maritime mobile service
		625-2	RM	Direct-printing telegraph equipment employing automatic identification in the maritime mobile service
APPENDIX 41	**Procedure for obtaining radio direction-finding bearings and positions**			
Section II	*Rules of procedure*			
8. (4)	Position classification for frequencies above 3 000 kHz	None		
APPENDIX 43 (Mob-83) (Mob-87)	**Maritime mobile service identities**			
2.1	Maritime identification digits	491-1	VIII	Translation between an identity number and identities for direct-printing telegraphy in the maritime mobile service
		585-2	VIII	Assignment and use of maritime mobile service identities
3.1.1	Ship station identities	491-1	VIII	Translation between an identity number and identities for direct-printing telegraphy in the maritime mobile service
		585-2	VIII	Assignment and use of maritime mobile service identities
APPENDIX 45 (HFBC-87)	**Double-sideband (DSB) and single-sideband (SSB) system specifications in the HF bands allocated exclusively to the broadcasting service**			
Part B	*Single-sideband system (SSB)*			
3.	Characteristics of the reference receiver	640-1	X-1	Single-sideband (SSB) system for HF broadcasting

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