



Radiocommunication Study Group 4

SATELLITE SERVICES

QUESTIONS ASSIGNED TO RADIOCOMMUNICATION STUDY GROUP 4

Attached please find the list of Questions assigned to Radiocommunication Study Group 4. The following extract from Resolution ITU-R 5-8 gives the definition of categories of Questions:

C: Conference-oriented Questions associated with work related to specific preparations for, and decisions of, world and regional radiocommunication conferences:

C1: very urgent and priority studies, required for the next World Radiocommunication Conference;

C2: urgent studies, expected to be required for other radiocommunication conferences.

S: Questions which are intended to respond to:

– matters referred to the Radiocommunication Assembly by the Plenipotentiary Conference, any other conference, the Council, the Radio Regulations Board;

– advances in radiocommunication technology or spectrum management;

– changes in radio usage or operation:

S1: urgent studies which are intended to be completed within two years;

S2: important studies, necessary for the development of radiocommunications;

S3: required studies, expected to facilitate the development of radiocommunications.

NOC = Maintained	MOD = Revised	SUP = Deleted	ADD = New text	UNA = Undergoing approval
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QUESTIONS ASSIGNED TO RADIOCOMMUNICATION STUDY GROUP 4

Satellite services

Question ITU-R	Title	Status	Category	Proposed target date	Comments
42-1/4	Characteristics of antennas at earth stations in the fixed-satellite service	NOC	S1	2025	
46-3/4	Preferred multiple-access characteristics in the fixed-satellite service	NOC	S2	2027	
70-1/4	Protection of the geostationary-satellite orbit against unacceptable interference from transmitting earth stations in the fixed-satellite service at frequencies above 15 GHz	NOC	S3	2027	
73-2/4	Availability and interruptions to traffic on digital paths in the fixed-satellite service	NOC	S2	2027	
83-6/4	Efficient use of the radio spectrum and frequency sharing within the mobile-satellite service	NOC	S1	2025	
84-4/4	Use of non-geostationary-satellite orbits in mobile-satellite services	NOC	S2	2027	
87-4/4	Transmission characteristics for a mobile-satellite communication system	NOC	S2	2027	
88-1/4	Propagation and mobile earth station antenna characteristics for mobile-satellite services	NOC	S3	2027	
91-1/4	Technical and operating characteristics of the radiodetermination-satellite service	NOC	S2	2027	
109-1/4	Global Maritime Distress and Safety System requirements for mobile-satellite systems operating in the bands 1 530-1 544 MHz and 1 626.5-1 645.5 MHz	NOC	S1	2025	
110-1/4	Interference to the aeronautical mobile-satellite (R) service	NOC	S2	2027	
201-1/4	Frequency sharing between mobile-satellite services and other services	NOC	S2	2027	
203-1/4	The impact of using small antennas on the efficient use of the geostationary-satellite orbit	NOC	S2	2027	
205-1/4	Frequency sharing between non-geostationary satellite feeder links in the fixed-satellite service used by the mobile-satellite service	NOC	S2	2027	
208/4	Use of statistical and stochastic methods in evaluation of interference between satellite networks in the fixed-satellite service	NOC	S3	2027	
209/4	The use of frequency bands allocated to the fixed-satellite service for both the up and down links of geostationary-satellite systems	NOC	S2	2027	
210-1/4	Technical characteristics for mobile earth stations operating with global non-geostationary-satellite systems in the mobile-satellite service in the band 1-3 GHz	NOC	S1	2025	

Question ITU-R	Title	Status	Category	Proposed target date	Comments
211-2/4	Interference criteria and calculation methods for the mobile-satellite service	NOC	S2	2027	
214/4	Technical implications of steerable and reconfigurable satellite beams	NOC	S1	2025	
217-2/4	Interference to the radionavigation-satellite service in the ICAO global navigation satellite system	NOC	S1	2025	
218-2/4	On-board processing in mobile-satellite service and fixed-satellite service systems	NOC	S2	2027	
227/4	Technical and operational characteristics of emergency communications in the mobile-satellite service	NOC	S1	2025	
231/4	Sharing between networks of the fixed-satellite service using non-geostationary satellites and other networks of the fixed-satellite service	NOC	S2	2027	
233/4	Dedicated user digital satellite communications systems and their associated architectures	NOC	S2	2027	
236/4	Interference criteria and calculation methods for the fixed-satellite service	NOC	S2	2027	
245-1/4	Out-of-band and spurious emission limits	NOC	S1	2025	
248/4	Frequency sharing between systems in the fixed-satellite service and wireless digital networks around 5 GHz	NOC	S3	2027	
263-1/4	Performance objectives of digital links in the fixed-satellite service for transmission of Internet or higher layer Protocol packets	NOC	S1	2025	
264/4	Technical and operational characteristics of networks of the fixed-satellite service operating above 275 GHz	NOC	S2	2027	
266/4	Technical characteristics of high-density fixed-satellite service earth stations operating with geostationary satellite orbit fixed-satellite service networks in the 20/30 GHz bands	NOC	S2	2027	
267/4	Technical and operational considerations relating to the advance publication, coordination and notification of fixed-satellite networks	NOC	S2	2027	
268/4	Development of methodologies for the assessment of satellite unwanted emission levels before launch	NOC	S3	2027	
270-1/4	Fixed-satellite service systems using very wideband spreading signals	NOC	S2	2027	
271/4	Interference between satellite news gathering (SNG) carriers by unintentional access	NOC	S1	2025	
272/4	Frequency sharing between the FSS and the space research service in the 37.5-38 GHz and 40-40.5 GHz bands	NOC	S2	2027	

Question ITU-R	Title	Status	Category	Proposed target date	Comments
<u>273/4</u>	Support of the modernization of civil aviation telecommunication systems and the extension of telecommunication systems to remote and developing regions with current and planned satellite networks	NOC	S1	2025	
<u>274/4</u>	Technical methods for improving the spectrum/orbit utilization	NOC	S1	2025	
<u>275/4</u>	Performance objectives of digital links in the fixed-satellite and mobile-satellite services forming elements of the Next Generation Network	NOC	S2	2027	
<u>276/4</u>	Availability of digital paths in mobile-satellite services	NOC	S2	2027	
<u>277-1/4</u>	Performance objectives for digital fixed-satellite and mobile-satellite services with variable bit-rate paths	NOC	S2	2027	
<u>278/4</u>	Use of operational measures to meet power flux-density limitation under Article 21 of the Radio Regulations	NOC	S1	2025	
<u>279/4</u>	Satellite broadcasting of high-definition television	NOC	S1	2025	
<u>280/4</u>	Receiving earth station antennas for the broadcasting-satellite service	NOC	S1	2025	
<u>281/4</u>	Digital techniques in the broadcasting-satellite service (sound and television)	NOC	S1	2025	
<u>282/4</u>	Frequency sharing issues related to the introduction of the broadcasting-satellite service (sound) in the frequency range 1-3 GHz	NOC	S1	2025	
<u>283/4</u>	Sharing studies between high-definition television in the broadcasting-satellite service and other services	NOC	S1	2025	
<u>284/4</u>	Spectrum management issues related to the introduction of the broadcasting-satellite service (sound) in the frequency range 1-3 GHz	NOC	S1	2025	
<u>285/4</u>	Digital broadcasting of multiple services and programmes in the broadcasting-satellite service	NOC	S1	2025	
<u>286/4</u>	Contributions of the mobile and amateur services and associated satellite services to the improvement of disaster communications	NOC	S2	2027	
<u>287/4</u>	Technical and operational characteristics for packet network transmission in mobile-satellite services	NOC	S1	2025	
<u>288/4</u>	Characteristics and operational requirements of radionavigation-satellite service (space-to-Earth, space-to-space, Earth-to-space) systems	NOC	S2	2027	
<u>289/4</u>	Interactive satellite broadcasting systems (television, sound and data)	NOC	S1	2025	

Question ITU-R	Title	Status	Category	Proposed target date	Comments
<u>290/4</u>	Broadcasting-satellite means for public warning, disaster mitigation and relief	NOC	S1	2025	
<u>291/4</u>	System architecture and performance aspects on integrated MSS systems	NOC	S2	2027	
<u>292/4</u>	UHDTV satellite broadcasting systems	NOC	S1	2025	
<u>293/4</u>	Antenna radiation diagrams/patterns for small (D/λ around 30) earth station antennas used in fixed-satellite and broadcasting-satellite systems	NOC	S2	2027	
