



Radiocommunication Bureau

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**Administrative Circular
CACE/460**

2 September 2008

**To Administrations of Member States of the ITU and
Radiocommunication Sector Members participating in the
work of the Radiocommunication Study Groups and the Special
Committee on Regulatory/Procedural Matters**

Subject: Radiocommunication Study Group 5

- **Approval of 2 new ITU-R Questions and 2 revised ITU-R Questions**
- **Suppression of 16 ITU-R Questions**

By Administrative Circular CAR/252 of 18 April 2008, 2 draft new and 2 draft revised ITU-R Questions were submitted for approval by correspondence in accordance with Resolution ITU-R 1-5 (§ 3.4). In addition, the Study Group proposed the suppression of 16 ITU-R Questions.

The conditions governing these procedures were met on 18 July 2008.

The texts of the approved Questions are attached for your reference (Annexes 1 to 4) and will be published in Revision 1 to [Document 5/1](#) which contains the ITU-R Questions approved by the 2007 Radiocommunication Assembly and assigned to Radiocommunication Study Group 5. The suppressed ITU-R Questions are indicated in Annex 5.

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Annexes: 5

Distribution:

- Administrations of Member States and Radiocommunication Sector Members
- ITU-R Associates in the work of Radiocommunication Study Group 5
- Chairmen and Vice-Chairmen of Radiocommunication Study Groups and Special Committee on Regulatory/Procedural Matters
- Chairman and Vice-Chairmen of the Conference Preparatory Meeting
- Members of the Radio Regulations Board
- Secretary-General of the ITU, Director of the Telecommunication Standardization Bureau, Director of the Telecommunication Development Bureau

Annex 1

QUESTION ITU-R 247/5

Radio-frequency arrangements for fixed wireless systems

(2008)

The ITU Radiocommunication Assembly,

considering

- a) that radio-frequency (RF) channel or frequency block-based arrangements for certain fixed service applications may need to be optimized within the available band;
- b) that administrations may wish to utilize flexible RF arrangements for fixed wireless systems (FWS) including frequency block-based arrangements;
- c) that studies on preferred RF channel or frequency block-based arrangements could contribute to efficient deployment of FWS or facilitate frequency compatibility between such systems and other radio services,

decides that the following Question should be studied

What are the preferred radio-frequency channel or frequency block-based arrangements for fixed wireless systems operating in various frequency bands?

further decides

- 1** that the results of the above studies should be included in one or more Recommendation(s) or Report(s);
- 2** that the results of the above studies should be prepared by 2011.

Category: S2

Annex 2

QUESTION ITU-R 248/5

Technical and operational characteristics for systems in the fixed service used for disaster mitigation and relief

(2008)

The ITU Radiocommunication Assembly,

considering

- a) that rapid and reliable telecommunication measures are required during the event of natural disasters and/or other emergencies for the relief operation as well as mitigation of the effects of these events;
- b) that systems in the fixed service could play a relevant role in disaster mitigation and relief operations,

recognizing

- a) Resolution 644 (Rev.WRC-07) on radiocommunication resources for early warning, disaster mitigation and relief operations;
- b) Resolution 646 (WRC-03) on public protection and disaster relief;
- c) Resolution 647 (WRC-07) on spectrum management guidelines for emergency and disaster relief radiocommunication;
- d) Resolution ITU-R 53 on the use of radiocommunications in disaster response and relief;
- e) Resolution ITU-R 55 on ITU studies of disaster prediction, detection, mitigation and relief,

decides that the following Questions should be studied

- 1** What are the preferred technical and operational characteristics for systems in the fixed service which are used for disaster mitigation and relief operations?
- 2** What are the preferred requirements for these systems that could assist in the interoperability between such systems operated by different agencies?

further decides

- 1** that the results of the above studies should be included in one or more Recommendation(s) or Report(s);
- 2** that the above studies should be completed by 2010.

Category: S1

Annex 3

QUESTION ITU-R 110-2/5*

Antenna radiation diagrams of point-to-point fixed wireless stations for use in sharing studies

(1990-2003-2008)

The ITU Radiocommunication Assembly,

considering

- a) that determination of criteria for frequency sharing between point-to-point fixed wireless systems and systems in the space radiocommunication services requires a knowledge of the antenna gains of the point-to-point fixed wireless stations along all possible interfering paths;
- b) that the reference diagrams for large earth station antennas may not be applicable for antennas of point-to-point fixed wireless systems;
- c) that the use of reference radiation patterns for point-to-point fixed wireless antennas would facilitate interference calculations;
- d) that different reference radiation patterns may be required for the various types of antennas in use,

decides that the following Questions should be studied

- 1 What are the measured radiation patterns in the vertical and horizontal planes for both polarizations of typical antennas used in point-to-point fixed wireless systems, including passive reflector (i.e. periscope) antennas, and passive repeaters?
- 2 What reference radiation patterns can be defined for the different types of antennas?

further decides

- 1 that the results of the above studies should be included in one or more Recommendation(s) or Report(s);
- 2 that the above studies should be completed by 2011.

NOTE 1 – See Recommendations ITU-R F.699 and ITU-R F.1245.

Category: S2

* Former Question ITU-R 110-1/9.

Annex 4

QUESTION ITU-R 229-2/5*,**

Future development of the terrestrial component of IMT

(2000-2003-2008)

The ITU Radiocommunication Assembly,

considering

- a) that ever increasing demands for mobile radiocommunications requires the continual evolution of systems, and development of new systems where required, for multimedia applications such as high speed data, IP-packet and video;
- b) that future mobile radiocommunications systems' users will continue to require higher data rates;
- c) that for international operation, economy of scale and interoperability it is desirable to agree on the system technical, operational and spectrum related parameters;
- d) that the initial standardization of IMT-2000 radio specifications was completed by the end of 1999 and that ongoing enhancements have been and will continue to be accommodated and the specifications for IMT-Advanced are being developed and will be enhanced over time;
- e) that the implementation of IMT-2000 systems is expanding and that these systems are being continuously enhanced in line with user and technology trends;
- f) ITU-T Recommendations and associated activities that are relevant to this work;
- g) Question ITU-R 77/8 on consideration of the needs of developing countries in the development and implementation of mobile radiocommunication technology;
- h) that the cost of radio technology equipment is continually decreasing, thus making the radio approach an increasingly attractive access option for all mobile and many fixed applications;
- j) that Resolution ITU-R 50 addresses the role of the Radiocommunication Sector in the ongoing development of IMT;
- k) that Resolution ITU-R 56 specifies the nomenclature for the future development of IMT-2000 and systems beyond IMT-2000 through names uniquely associated with the advancement and continuation of International Mobile Telecommunication (IMT) and that the term "IMT" is the root name that encompasses both IMT-2000 and IMT-Advanced collectively;
- l) that Resolution ITU-R 57 specifies the principles for the process for the development of IMT-Advanced,

* Former Question ITU-R 229-1/8.

** This Question should be brought to the attention of the relevant Telecommunication Standardization Sector Study Groups and Radiocommunication Study Group 4.

recognizing

- a) that IMT encompasses both a terrestrial component and a satellite component;
- b) the timescales necessary to develop and agree on the technical, operational and spectrum related issues associated with the ongoing evolution and development of future mobile systems;
- c) that service functionalities in fixed and mobile networks are increasingly converging;
- d) that higher data rates, greater than those associated with enhanced IMT-2000 systems are expected to be required to meet future needs;
- e) the needs of the developing countries;
- f) that the characteristics of IMT systems, with significantly high data rates, will require the adoption of more spectrally efficient techniques,

decides that the following Questions should be studied

Part A – Future development of the terrestrial component of IMT

- 1** What are the overall objectives and user needs for ongoing enhancement of:
 - a) the IMT-2000 terrestrial components, beyond that defined in Recommendation ITU-R M.1457, building upon service capabilities as defined in Recommendations ITU-R M.687, ITU-R M.816 and ITU-R M.1645; and
 - b) IMT-Advanced terrestrial components, building upon service capabilities as defined in Recommendations ITU-R M.1645 and ITU-R M.1822?
- 2** What are the applications and service requirements associated with ongoing enhancement of IMT, including the provision of further enhanced IP based applications?
- 3** What are the technical, operational and identified spectrum related issues for the ongoing enhancement of IMT?
- 4** What are the technical and operational characteristics needed to meet the requirements (such as utilization of identified frequency bands) for ongoing enhancement of IMT?
- 5** What are the optimum arrangements required to facilitate harmonized use of the spectrum identified for IMT-2000 and IMT by WARC-92, WRC-2000 and WRC-07?
- 6** What factors need to be considered in developing a migration strategy to facilitate transition from enhanced IMT-2000 to IMT-Advanced?
- 7** What are the issues concerning the facilitation of global circulation of terminals, mutual recognition agreements and other related aspects regarding the continued deployment of IMT-2000 and the success of IMT-Advanced?
- 8** What are the impacts of convergence of fixed and mobile networks, convergence of technology platforms and convergence of services to the ongoing enhancement and evolution of IMT, taking into consideration work progress on Agenda item 1.2 (Resolution 951(WRC-07)) towards WRC-11?

Part B – Long-term development of IMT

1 What might be the overall objectives for the long-term development of IMT?

further decides

1 that the results of the above studies should be included in one or more Report(s) and/or Recommendation(s);

2 that the studies IMT, as described in Part A above, should be completed by 2011;

3 that studies as described in Part B may extend beyond the 2011 time-frame.

Category: S1

Annex 5

Questions proposed for suppression

Question ITU-R	Title
221/8	Use of the frequencies between 2.8-22 MHz by the aeronautical mobile (R) service for data transmissions using class of emission J2DEN
234/8	Compatibility of radionavigation and radiolocation services operating in the bands 9 000-9 200 MHz and 9 300-9 500 MHz
107-2/9	Characteristics of fixed wireless systems operating in frequency bands above about 17 GHz
108-2/9	Radio-frequency channel arrangements for fixed wireless systems operating in frequency bands above about 17 GHz
125-7/9	Point-to-multipoint fixed wireless systems used in access or back-haul networks
136-2/9	Radio-frequency channel arrangements for digital fixed wireless systems operating in frequency bands below about 17 GHz
209-1/9	Technical criteria for frequency sharing between the fixed service and the fixed-satellite service using highly elliptical orbits as they affects the fixed service
212-2/9	System characteristics and frequency bands for fixed service systems utilizing high altitude platform stations
218-1/9	Frequency sharing criteria for systems in the fixed service using high altitude platform stations and systems in the fixed-satellite service
226-1/9	Sharing feasibility of stations in the fixed service with earth stations on board vessels operating in the fixed-satellite service in the band 5 925-6 425 MHz and other uplink frequency bands at 6 GHz and 14 GHz
229-1/9	Frequency arrangements based on frequency blocks for systems in the fixed service
234/9	Technical and operational characteristics of fixed wireless systems operating in frequency bands allocated to the fixed service above 57 GHz
236/9	Fixed wireless systems providing broadband wireless access
238/9	Technical and operational characteristics of systems in the fixed service operating in the MF/HF band used for disaster mitigation and relief
239/9	Technical and operational characteristics of disaster relief wireless communication systems in the fixed service
240/9	Error performance and availability objectives for digital HF fixed systems