# INTERNATIONAL TELECOMMUNICATION UNION

*Radiocommunication Bureau*
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Administrative Circular
**CAR/252**

18 April 2008

**To Administrations of Member States of the ITU**

**Subject**: **Radiocommunication Study Group 5**

– **Proposed approval of 2 draft new ITU-R Questions and 2 draft revised ITU-R Questions**

– **Proposed suppression of 16 ITU-R Questions**

At the meeting of Radiocommunication Study Group 5 held on 18 and 19 February 2008, 2 draft new ITU-R Questions and 2 draft revised ITU-R Questions were adopted and it was agreed to apply the procedure of Resolution ITU-R 1-5 (see § 3.4) for approval of Questions in the interval between Radiocommunication Assemblies. Furthermore, the Study Group proposed the suppression of 16 ITU-R Questions.

Having regard to the provisions of § 3.4 of Resolution ITU-R 1-5, you are requested to inform the Secretariat (brsgd@itu.int) by 18 July 2008, whether your Administration approves or does not approve these Questions.

After the above-mentioned deadline, the results of this consultation will be notified in an Administrative Circular. If the Questions are approved, they will have the same status as Questions approved at a Radiocommunication Assembly and will become official texts attributed to Radiocommunication Study Group 5 (see: http://www.itu.int/pub/R-QUE-SG05/en).

Valery Timofeev
Director, Radiocommunication Bureau

**Annexes**: 5

– 2 draft new ITU-R Questions, 2 draft revised ITU-R Questions and proposed suppression of 16 ITU-R Questions

Distribution:
– Administrations of Member States of the ITU
– Radiocommunication Sector Members participating in the work of Radiocommunication Study Group 5
– ITU-R Associates participating in the work of Radiocommunication Study Group 5

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# Annex 1

(Source: Document 5/31)

## DRAFT NEW QUESTION ITU-R [RF_ARRANGE]/5

## Radio-frequency arrangements for fixed wireless systems

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

(Source: Document 5/33)

## DRAFT NEW QUESTION ITU-R [DISAST]/5

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

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

(Source: Document 5/30)

## DRAFT REVISION OF QUESTION ITU-R 110-1/9

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

(1990-2003)

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

# Annex 4

(Source: Document 5/19)

## DRAFT REVISION OF QUESTION ITU-R 229-1/8*

## Future development of the terrestrial component of IMT-~~2000~~ ~~and systems beyond IMT-2000~~

(2000-2003)

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 ~~than those planned in the initial implementation of IMT-2000~~;

c) that for international operation, ~~and~~ economy of scale and interoperability it is desirable to agree on the system technical, operational and spectrum related parameters~~, including interoperability standards~~;

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 ~~has commenced~~ is expanding and that these systems are being continuously enhanced in line with ~~market~~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;

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

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,

*recognizing*

a) that IMT encompasses both a terrestrial component and a satellite component;

b~~a~~) 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~~b~~) that service functionalities in fixed and mobile networks are increasingly converging;

d~~c~~) that higher data rates, greater than those associated with ~~initially implemented~~ enhanced IMT-2000 systems are expected to be required to meet future needs;

e~~d~~) the needs of the developing countries;

f~~e~~) that the characteristics of ~~future systems beyond IMT-2000~~ IMT systems, with ~~data rates~~ significantly high~~er than 2 Mbit/s~~ data rates, will require the adoption of more spectrally efficient techniques ~~and may be best accommodated in frequency bands above 3 GHz~~,

*decides* that the following Questions should be studied

**Part A – Future development of the terrestrial component of IMT ~~2000~~**

**1** What are the overall objectives and user needs for ongoing enhancement of:

a) the IMT-2000 terrestrial ~~and satellite~~ components, beyond that defined in Recommendation ITU-R M.1457, building upon service capabilities as defined in Recommendations ITU-R M.687, ~~and~~ 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 ~~2000~~, 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 ~~2000~~?

**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 ~~2000~~?

**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 ~~systems beyond this~~?

**7** What are the issues concerning the facilitation of global circulation of terminals, mutual recognition agreements and other related aspects regarding the ~~successful~~ continued deployment of IMT-2000 and the success of ~~introduction of~~ IMT-Advanced~~2000~~?

**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 – ~~Systems beyond IMT-2000~~Long-term development of IMT**

**1** What ~~are~~ might be the overall objectives for ~~future systems beyond IMT-2000~~the long-term development of IMT?

~~**2** What are the service applications associated with these systems?~~

~~**3** What are the technical, operational and spectrum related issues and associated studies as necessary, to meet the objectives of these future systems?~~

~~**4** What are the issues concerning the facilitation of global circulation of terminals, mutual recognition agreements and other related aspects regarding the successful introduction of systems beyond IMT-2000?~~

*further decides*

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

**2** that the studies ~~of future development of IMT-2000~~IMT, as described in Part A above, should be completed by ~~2005~~2011;

~~**3** that studies of systems beyond IMT-2000, as described in Part B 1, 3 and 4 above, should be completed by 2005;~~

~~**4** that the essential part of studies of systems beyond IMT-2000, as described in Part B 2 above, should be completed by 2005.~~

**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 |