INTERNATIONAL TELECOMMUNICATION UNION

Radiocommunication Bureau
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Administrative Circular
CAR/245

12 July 2007

To Administrations of Member States of the ITU

Subject: **Radiocommunication Study Group 1**

– **Proposed approval of 3 draft revised Questions**

At the meeting of Radiocommunication Study Group 1 held on 18 and 19 June 2007, 3 draft revised Questions were adopted and it was agreed to apply the procedure of Resolution ITU-R 1-4 (see § 3) for approval of Questions in the interval between Radiocommunication Assemblies.

Having regard to the provisions of § 3.4 of Resolution ITU-R 1-4, you are requested to inform the Secretariat (brsgd@itu.int) by 12 October 2007, 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 1 (see: http://www.itu.int/pub/R-QUE-SG01/en).

Valery Timofeev
Director, Radiocommunication Bureau

Annexes: 3

– 3 draft revised ITU-R Questions

Distribution:
– Administrations of Member States of the ITU
– Radiocommunication Sector Members participating in the work of Radiocommunication Study Group 1
– ITU-R Associates participating in the work of Radiocommunication Study Group 1

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Annex 1

Source: Document 1/144

Changes in this Draft Revision of Question ITU-R 210-1/1 are proposed to remove the ambiguity with the references to "Wireless Power Transmission". Further changes are proposed to better reflect the issue under consideration and actual technological developments, as well as to ensure that the Question covers all services potentially impacted, including the radio astronomy service.

DRAFT REVISION OF QUESTION ITU-R 210-1/1*

Power transmission via radio frequency beam~~Wireless power transmission~~

(1997-2006)

The ITU Radiocommunication Assembly,

considering

a) ~~that there is an increasing global need for renewable energy resources~~that technology is under development to transfer power efficiently from one location to another via radio frequency beams;

b) ~~that the longevity of airborne and satellite platforms is dependent on the available fuel resources~~that such power transmission via radio frequency beam (PTRFB) may be useful in some applications including solar power, airborne platforms and lunar stations;

~~c) that technology is in development to transfer power efficiently from one location to another via radio frequency beam~~;

~~d~~c) that no frequency bands have been specifically ~~designated for this~~ associated with PTRFB~~purpose~~;

~~e) that critical radiocommunication services may operate or be planned to operate in bands useful for wireless power transmission;~~

~~f~~d) that the use of ~~wireless power transmission~~PTRFB may have a significant impact on the operation of radiocommunication services including the radio astronomy service~~systems~~;

~~g~~e) that issues of non-ionizing radiation exposure~~s~~ related to ~~wireless power transmission~~ systems employing PTRFB will be dealt with by such organizations as the World Health Organization (WHO) and the International Radiation Protection Association (IRPA)/International Commission on Non-ionizing Radiation Protection (ICNIRP),

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* This Question should be brought to the attention of the International Maritime Organization (IMO), the International Civil Aviation Organization (ICAO), the International Electrotechnical Commission (IEC), the International Special Committee on Radio Interference (CISPR), the Inter-Union Commission on Allocation of Frequencies for Radio Astronomy and Space Science (IUCAF) and Radiocommunication Study Group 3.

decides that the following information be gathered

1 What applications have been developed for use of PTRFB~~wireless power transmission~~?

2 What are the technical characteristics of the radiation~~signal~~ employed in or incidental to applications using ~~wireless power transmission~~PTRFB?

decides that the following Question should be studied

1 Under what category of spectrum use should administrations consider PTRFB~~wireless power transmission~~: ISM, or other?

2 What radio frequency bands are most suitable for ~~this type of operation~~PTRFB?

3 What steps are required to ensure that radiocommunication services, including the radio astronomy service, are protected from ~~power transmission~~PTRFB operations?

~~**4** What effects would wireless power transmission have on radio propagation?~~

further decides

1 that the results of the above studies should be included in ~~(a)~~ Report or Recommendation~~(s)~~, as appropriate ~~and/or (a) Report(s)~~;

2 that the above studies should be completed by ~~2010~~ 2012 at the latest.

Category: S3

Annex 2

Source: Document 1/159

Changes in this Draft Revision of Question ITU-R 218/1 are proposed to reflect the decision to develop a Report on this subject, as well as the changes proposed in the Draft Revision of Question ITU-R 221/1 (see Annex 3).

QUESTION ITU-R 218/1[*]

Techniques for measurement of radiation from high data rate telecommunication systems using wired electrical~~ity~~ power supply ~~of telephone distribution wiring~~

(2000)

The ITU Radiocommunication Assembly,

considering

a) that electricity power supply continues to be used for low data rate telemetry or control purposes in LF bands;

b) that electricity power supply is generally not designed or installed in such a way that radio frequency (RF) radiation will be minimised;

c) that new telecommunication systems are being designed which will operate with data rates exceeding 1 Mb/s, with carrier frequencies in the HF band;

~~d) that telephone wiring is usually installed as balanced groups of conductors, but that no special provisions are made to minimise RF radiation;~~

e~~d~~) that any ~~unwanted~~ radiation from such systems may affect the use of radiocommunication systems, particularly at LF, MF, HF and VHF,

decides that the following Question shall be studied

1 What techniques are appropriate for the measurement of radiation from telecommunication systems utilising wired electrical ~~ity~~ power supply ~~or telephone distribution wiring radiation sources~~?

further decides

1 that the results of the above studies should be included in ~~(a)~~ Recommendation~~(s)~~ or a Report;

2 that the above studies should be completed by 2010~~2005~~.

NOTE 1 – See also Question ITU-R 221-1/1.

Category: S2

~~[*] This Question should be brought to the attention of Telecommunication Standardization Study Group 5 and the International Special Committee on Radio Interference (CISPR).~~

Annex 3

Source: Document 1/151

Changes in this Draft Revision of Question ITU-R 221/1 are proposed to better describe the focus of the efforts on the matter of Power Line Telecommunications, as the subject of compatibility between radiocommunication systems and high data rate telecommunication systems using telephone wiring is not currently being addressed. Also, it should be noted that this Question has been brought to the attention of the specified Study Groups and CISPR.

DRAFT REVISION OF QUESTION ITU-R 221/1*

Compatibility between radiocommunication systems and high data rate telecommunication systems using wired electricality power supply ~~or telephone distribution wiring~~

(2000)

The ITU Radiocommunication Assembly,

considering

a) that electricity power supply continues to be used for low data rate telemetry or control purposes in LF bands;

b) that electricity power supply is generally not designed or installed in such a way that RF radiation will be minimised;

c) that new telecommunication systems are being designed which will operate with data rates exceeding 1 Mb/s, with carrier frequencies in the HF band;

~~d) that telephone wiring is usually installed as balanced groups of conductors, but that no special provisions are made to minimise RF radiation;~~

de) that any ~~unwanted~~ radiation from such systems may affect the use of radiocommunication systems, particularly at LF, MF, HF and VHF,

decides that the following Question shall be studied

1 What are the acceptable levels of radiation from ~~wired~~ telecommunication systems utilising wired electricality power supply ~~or telephone distribution wiring~~ so as not to impair the performance of radiocommunication systems?

~~* This Question should be brought to the attention of Telecommunication Standardization Study Group 5 and Radiocommunication Study Groups 3, 6, 7, 8 and 9 and the International Special Committee on Radio Interference (CISPR).~~

further decides

1 that the results of the above studies should be included in ~~(a)~~ Recommendation~~(s)~~ or a Report;

2 that the studies should be completed by 2010~~2005~~.

NOTE 1 – See also Question ITU-R 218-1/1.

Category: S2