

INTERNATIONAL TELECOMMUNICATION UNION



Radiocommunication Bureau
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Administrative Circular CACE/550

10 October 2011

**To Administrations of Member States of the ITU, Radiocommunication Sector Members,
ITU-R Associates participating in the work of Radiocommunication Study Group 1
and ITU-R Academia**

Subject: Radiocommunication Study Group 1 (Spectrum management)

- **Approval of 1 new ITU-R Question and 1 revised ITU-R Question**
- **Suppression of 5 ITU-R Questions**

By Administrative Circular CAR/317 of 23 June 2011, 1 draft new ITU-R Question and 1 draft revised ITU-R Question 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 5 ITU-R Questions.

The conditions governing this procedure were met on 23 September 2011.

The texts of the approved Questions are attached for your reference (Annexes 1 and 2) and will be published in Revision 3 to [Document 1/1](#) which contains the ITU-R Questions approved by the 2007 Radiocommunication Assembly and assigned to Radiocommunication Study Group 1. The suppressed ITU-R Questions are indicated in Annex 3.

François Rancy
Director, Radiocommunication Bureau

Annexes: 3

Distribution:

- Administrations of Member States of the ITU and Radiocommunication Sector Members participating in the work of Radiocommunication Study Group 1
- ITU-R Associates in the work of Radiocommunication Study Group 1
- ITU-R Academia
- 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

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Annex 1

QUESTION ITU-R 236/1¹

Impact on radiocommunication systems from wireless and wired data transmission technologies used for the support of power grid management systems²

(2011)

The ITU Radiocommunication Assembly,

considering

- a) that there is increasing demand for and use of power grid and power usage management and sensing for efficiency, reliability and economic purposes;
- b) that data transmission capability is an essential element of power grid management systems;
- c) that the physical design, data rate, bandwidth and frequency requirements for such data transmission capability may vary according to the physical design and operational requirements of the power grid;
- d) that such data transmission capability may be satisfied by telecommunication systems, including Power Line Telecommunication (PLT) systems;
- e) that radiation from such wireless or wired communication systems may cause interference to radiocommunication services;
- f) that power grid management systems may deploy remote sensors on a widespread basis,

decides that the following Questions should be studied

- 1** What are the technical and operating features and the characteristics of wireless technologies and devices in support of power grid management systems?

¹ This Question should be brought to the attention of ITU-R Study Groups 4, 5, 6 and 7 and ITU-T Study Group 15.

² The “power grid” in this case is the electricity distribution network that delivers electricity to individual customers in local areas. Power grid management systems are high-capacity, two-way communications networks with embedded sensing that are installed on existing electric distribution networks to transform them into interactive, automated, self-healing smart grids. These grids are managed by monitoring and controlling network elements.

2 What are the data rates, bandwidths, frequency bands and spectrum requirements needed in support of power grid management systems?

3 What are the interference considerations to radiocommunications associated with the implementation of wireless and wired technologies and devices used in support of power grid management systems?

4 How will spectrum availability be affected by interference associated with widespread deployment of such technologies and devices?

further decides

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

2 that the above studies should be completed by 2016.

Category: S3

Annex 2

QUESTION ITU-R 233-1/1

Measurement of spectrum occupancy

(2007-2011)

The ITU Radiocommunication Assembly,

considering

- a) that frequency management is providing theoretical values, retrieved from planning software regarding field strength values, produced by users of the frequency spectrum;
- b) that monitoring services are tasked to measure the frequency spectrum and compare those values with the theoretical values from the frequency management;
- c) that different types of occupancy measurements are performed worldwide and that it is often difficult to compare the results of those different methods,

decides that the following Questions should be studied

- 1** What techniques could be used to perform frequency channel occupancy measurements, including processing and presentation methods?
- 2** What techniques could be used to perform frequency band occupancy measurements, including processing and presentation methods?
- 3** How can “occupancy” defined for both, frequency channel as well as for frequency band measurements, also taking into account, the size of the used filter and the values measured in adjacent channels?
- 4** How can threshold levels be defined and applied in practical situations including dynamic threshold levels?

further decides

- 1** that the above studies should be included in Recommendation(s) and/or Report(s);
- 2** that the above studies should be completed by 2015.

Category: S3

Annex 3

Suppressed ITU-R Questions

Question ITU-R	Title	Category	Date of last approval
206/1	Strategies for economic approaches to national spectrum management and their financing	S2	1995
209-1/1	Parameters of radio systems and equipment required for spectrum management and the efficient use of the radio spectrum	S2	2004
218-1/1	Techniques for measurement of radiation from high data rate telecommunication systems using wired electrical power supply	S2	2007
230/1	Improved measurement methods for unwanted emissions of primary radars using magnetrons	S2	2004
234/1	Alternative techniques for radiolocation determination	S2	2007