Annex 1

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DRAFT NEW QUESTION ITU-R [PWRGRD]/1[1]

Impact on radiocommunication systems from wireless and wired data transmission technologies used for the support of power grid management systems[2]

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?

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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