QUESTION ITU-R 230-3/3[[1]](#footnote-1)\*

Prediction methods and models applicable to power line
telecommunication systems

(2005-2009-2012)

The ITU Radiocommunication Assembly,

considering

*a)* that power line telecommunication systems (PLT) and other wired telecommunication systems may use base-band frequencies up to 200 MHz, and that a wide variety of PLT architectures and components will be present, even in one administrative jurisdiction;

*b)* that radio-frequency energy will be radiated by a number of mechanisms and in several modes, particularly from unbalanced, variable impedance and poorly terminated lines,

decides that the following Questions should be studied

1 What are the mechanisms that cause radio-frequency radiation from PLT systems and how can they be modelled? What are the salient features of the topology (ground plane location, spatial distribution, etc.) that are most important for accurate estimation of emissions?

2 What techniques are most appropriate in aggregating the total radiated energy in space from such a system or multitude of systems?

3Which signal level propagation models are most appropriate in the determination of interference?

4What advice may be given to enable practical measurement of radiating fields at short distances (within the near field)?

further decides

1 that appropriate information shall be included in a Recommendation or a Handbook;

2 that the above studies should be completed by 2027.

Category: S2

1. \* This Question should be brought to the attention of Radiocommunication Study Group 1 (Working Party 1A). [↑](#footnote-ref-1)