

Chairman, Study Group 1

COOPERATION BETWEEN ITU-R STUDY GROUP 1 AND ITU-T STUDY GROUP 15 ON STUDIES RELATED TO POWER LINE TELECOMMUNICATION SYSTEMS

1 Background

ITU-R Study Group 1 has been conducting studies related to power line telecommunications under Question ITU-R 221-1/1, *Compatibility between radiocommunication systems and high data rate telecommunication systems using wired electrical power supply*.

At its September 2009 meeting, Study Group 1 approved Report ITU-R SM.2158, *Impact of power line telecommunication systems on radiocommunication systems operating in the LF, MF, HF and VHF bands below 80 MHz*. The studies were based on CISPR 22 radiation limits.

In ITU-R Document 1/86, ITU-R Working Party 6A (terrestrial broadcasting delivery) has made ITU-R Study Group 1 aware of its concerns regarding the recently-approved Recommendation ITU-T G.9960, *Next generation home networking transceivers*. Working Party 6A is concerned about levels of radiated power that would be allowed under this Recommendation, and the interference these levels could cause to analogue and digital broadcasting. It notes that the Recommendation is based on devices with higher power, and operating in higher frequency ranges, than those considered in Report ITU-R SM.2158. Recognizing that ITU-R Study Group 1 was not consulted before Study Group 15 approved its Recommendation, Working Party 6A is calling for a coordination procedure between ITU-R Study Group 1 and ITU-T Study Group 15 on this issue.

In ITU-R Document 1/90, copied to Study Group 1 for information, ITU-R Study Group 5 (terrestrial services) expressed concern to ITU-T Study Group 15 about radiocommunication services—especially safety-of-life services—that could be adversely affected by the extended frequency ranges and the higher radiation levels described in Recommendation ITU-T G.9960. It asked that Study Group 15 seek advice from the appropriate Working Parties of the ITU-R on radio interference issues.

2 Actions taken in response to the concerns

ITU-R Working Party 1A recently approved a draft revision to Question ITU-R 221/1 (Document 1A/TEMP/77), which recognizes that PLT devices can operate with data rates up to 1 gigabit per second and can operate in the VHF and UHF bands. Study Group 1 will consider this revision for adoption at its September 2010 meeting.

Working Party 1A established a Rapporteur Group on *High Data Rate Power Line Telecommunications* to continue studies and prepare contributions for the Working Party. It prepared a liaison statement to ITU-T Study Group 15 (Document 1A/TEMP/87) informing them of the Rapporteur Group and inviting them to provide representatives to participate in the Rapporteur Group and to attend the June 2010 meeting of Working Party 1A. Through this cooperation, we hope to enhance the mutual understanding of the PLT issues and the responsibilities of the respective groups.

Working Party 1A also prepared a separate liaison statement to the relevant Working Parties of ITU-R Study Groups 4, 5, 6 and 7 (Document 1A/TEMP/88), requesting that they provide further information regarding protection criteria for radiocommunication services, in particular for those operating above 80 MHz. Working Party 1A is asking that these groups provide their input in time for the June 2010 meeting, so that Working Party 1A can consolidate the information and begin work toward a new Report or Recommendation dealing with frequency bands above 80 MHz.

The Chairman of ITU-R Study Group 1 presented this information to the 8-11 February 2010 meeting of the Telecommunication Standardization Advisory Group (TSAG) as Document TD124. During the same discussion, Mr. Yoichi Maeda, Chairman of ITU-T Study Group 15, presented Document TD122, which welcomed collaboration with Study Group 1 and stated that Study Group 15 would specify power levels in Recommendation ITU-T G.9960 "in accordance with guidance provided by ITU-R and CISPR." Mr. Maeda accepted the invitation from Study Group 1 to provide experts to the Rapporteur Group and to the June 2010 meeting of Working Party 1A. The TSAG responded enthusiastically to the plan for coordination of PLT work between the Study Groups without the need to create an inter-Sector group.

3 Further action

ITU-R Study Group 1 and ITU-T Study Group 15 will cooperate, through the means described above, to ensure that radio interference concerns are taken into consideration in the further development of Recommendation ITU-T G.9960 and other PLT standards.
