



Question(s): 2/5 Geneva, 29 January - 7 February 2013

Ref. : TD 91rev1 (GEN/5)

Source: ITU-T Study Group 5 (Geneva, 29 January - 7 February 2013)

Title: Liaison statement on Ethernet port isolation from ITU-T SG5 Q2 to the IEEE 802.3 Group

LIAISON STATEMENT

For action to:

For comment to:

For information to: IEEE 802.3 Working Group Chair

Approval: Agreed to at ITU-T SG5 meeting

Deadline:

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ITU-T Study Group 5 Study Period 2009-2012

During the ITU-T Study Group 5 Study Period 2009-2012 a request was made for a liaison on Ethernet port isolation between ITU-T SG5 Home Networks Special Group and the IEEE 802.3 Group (ITU-T reference TD 958 2011-09-26).

The IEEE 802.3 responded

IEEE 802.3 Group advised SG 5 that it would like to share information between the two groups on the topic of protection of Ethernet ports and that the possible issuance of new ITU-T K-series Recommendations, is of great interest to the IEEE 802.3 Ethernet Working Group.

The IEEE 802.3 Ethernet Working Group would like to request that any draft material of ITU-T K-series Recommendations concerning Ethernet port protection be made available for comment by the group.

At the end of the Study Period 2009-2012 the ITU-T SG5 Home Networks Special Group was disbanded having done its work. Several of the draft documents mentioned in the Home Networks Special Group letter are now in force or due to be published:

Recommendation ITU-T K.85 (11/2011) Requirements for the mitigation of lightning effects on home networks installed in customer premises. <<http://www.itu.int/rec/T-REC-K.85-201111-I>>

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Recommendation ITU-T K.85 gives the requirements for home network equipment and installations in customer premises. It covers the classification of interfaces, resistibility of equipment, impact of installation practices, installation of surge protective devices (SPDs) and a risk assessment of equipment damage according to IEC 62305-2. The risk assessment of user injury will be covered by a separate Recommendation.

Recommendation ITU-T K.44 (05/2012) (In pre-publication) Resistibility tests for telecommunication equipment exposed to overvoltages and overcurrents – Basic Recommendation

Recommendation ITU-T K.44 seeks to establish fundamental test methods and criteria for the resistibility of telecommunication equipment to overvoltages and overcurrents. Overvoltages or overcurrents covered by this Recommendation include surges due to lightning on or near the line plant, short-term induction of alternating voltages from adjacent electric power lines or electrified railway systems, earth potential rise due to power faults, and direct contacts between telecommunication lines and power lines.

Major changes compared with the 2008 version of Recommendation ITU-T K.44 include:

- updating the references;
- amended Criterion A;
- revision of the test schematics to improve clarity;
- adding test schematics for external coaxial cable ports;
- adding multi conductor test schematics for internal unshielded cables;
- adding tolerances for waveform generation.
- addition of ports that rely on insulation coordination for surge protection.

The last change item is relevant to Ethernet equipment signal and power ports using an isolation transformer.

ITU-T Study Group 5 Study Period 2013-2016

In the ITU-T SG5 Study Period of 2013-2016, Question 2, Protective components and assemblies, has been tasked with producing a test and application guides for Lightning Isolation Transformers, LITs, used in telecommunications systems. The broadband signal and power transformers as used in Ethernet equipment are forms of LIT.

ITU-T SG5 knows that the IEC SC 37B has also initiated work on LITs in the newly formed IEC SC 37B WG3, Performance requirements, test methods and application principles for Lightning Isolation Transformers.

<http://www.iec.ch/dyn/www/f?p=103:14:0:::FSP_ORG_ID,FSP_LANG_ID:9126,25>.

Some members of IEC SC 37B WG3 are also members of ITU-T SG5 Q2 ensuring harmonisation in areas of overlap.

ITU-T SG5 will keep IEEE 802.3 informed on the progress of these new ITU-T SG5 Q2 LIT documents and any other related matters.
