ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

WORLD TELECOMMUNICATION STANDARDIZATION
ASSEMBLY
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Resolution 76 – Studies related to conformance and interoperability testing, assistance to developing countries, and a possible future ITU Mark programme

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications, information and communication technologies (ICTs). The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

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RESOLUTION 76

Studies related to conformance and interoperability testing, assistance to developing countries[1], and a possible future ITU Mark programme

(Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

recognizing

a)   that interoperability of international telecommunication networks was the main reason to create ITU in the year 1865 (International Telegraph Union), and that this remains one of the main goals in the ITU strategic plan;

b)   that conformity assessment is the accepted way of demonstrating that a product adheres to an international standard and is increasingly important in the context of World Trade Organization members' international standardization commitments under the Agreement on Technical Barriers to Trade;

c)   that Recommendations ITU-T X.290 to X.296 specify a general methodology for conformance testing of equipment to Recommendations of the ITU Telecommunication Standardization Sector (ITU-T);

d)   that conformance testing would increase the chance of interoperability of equipment conforming to ITU standards;

e)   that very few of the current ITU-T Recommendations identify interoperability or conformance testing requirements;

f)   that Resolution 123 (Rev. Antalya, 2006) of the Plenipotentiary Conference instructs the Secretary-General and the Directors of the three Bureaux to work closely with each other in pursuing initiatives that assist in bridging the standardization gap between developing and developed countries;

g)   that technical training and institutional capacity development for testing and certification are essential issues for countries to improve their conformity assessment processes, to promote the deployment of advanced telecommunication networks and to increase global connectivity;

h)   that it is not appropriate for ITU itself to enter into certification and testing of equipment and services that many regional and national standards bodies also provide for conformance testing;

i)   that Article 17 of the ITU Constitution, while providing that the functions of ITU-T shall fulfil the purposes of the Union relating to telecommunication standardization, stipulates that such functions are to be performed "bearing in mind the particular concerns of the developing countries";

j)   the excellent results achieved by ITU in implementing the mark for Global Mobile Personal Communications Systems (GMPCS),

further recognizing

that providing for interoperability should be the ultimate aim of future ITU-T Recommendations,

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[1] These include the least developed countries, small island developing states and countries with economies in transition.

considering

a)   that there is an increasing number of complaints that equipment is often not fully interoperable with other equipment;

b)   that some countries, especially the developing countries, have not yet acquired the capacity to test equipment and provide assurance to consumers in their countries;

c)   that increased confidence in the conformance of information and communication technologies (ICT) equipment with ITU-T Recommendations would increase the chances of end-to-end interoperability of equipment from different manufacturers, and would assist developing countries in the choice of solutions,

noting

a)   that conformance and interoperability requirements to support testing are essential components for developing interoperable equipment that is based on ITU-T Recommendations;

b)   that considerable practical experience exists within the ITU-T membership regarding the production of relevant testing standards and the testing procedures on which the actions proposed in this resolution are based;

c)   the need to assist developing countries in facilitating solutions which will exhibit interoperability and reduce the cost of systems and equipment procurement by operators, particularly in the developing countries, whilst improving product quality;

d)   that when interoperability experiments or testing have not been performed, users may have suffered from the lack of interconnection performance between equipment from different manufacturers,

taking into account

a)   that ITU-T has in the past occasionally initiated conformity and interoperability tests, as reported in ITU-T A-series Recommendation, Supplement 2;

b)   that the ITU standardization resources are limited and interoperability testing requires specific technical infrastructure;

c)   that a different set of experts is required for interoperability testing standardization, product development, and product testing;

d)   that it is of advantage if interoperability testing is done by users of the standard who were not involved in the standardization process itself, rather than the standardization experts who have written the specifications;

e)   that collaboration with external testing bodies is therefore necessary,

resolves

1   that ITU-T study groups develop the necessary conformance testing Recommendations for telecommunication equipment as soon as possible;

2   that ITU-T Recommendations to address interoperability testing shall be progressed as quickly as possible;

3   that ITU-T, in collaboration with the other Sectors as appropriate, shall develop a programme to:

i)   assist developing countries in identifying human and institutional capacity-building and training opportunities in conformity and interoperability testing;

ii)   assist developing countries in establishing regional or subregional conformity and interoperability centres suitable to perform conformity and interoperability testing as appropriate;

4   that conformance and interoperability testing requirements shall provide for verification of the parameters defined in the current and future ITU-T Recommendations for telecommunication/ICT equipment and services, and for interoperability testing to ensure full compatibility,

instructs the Director of the Telecommunication Standardization Bureau

1   in cooperation with the Radiocommunication Bureau and the Telecommunication Development Bureau, to conduct exploratory activities in each region in order to identify and prioritize the problems faced by developing countries related to achieving interoperability of ICT equipment and services;

2   based on results of *instructs the Director of the Telecommunication Standardization Bureau* 1 above, to study the following items:

i)   the overall effect on ITU and manufacturers

ii)   legal and national and international regulatory implications

iii)   cost of set-up of facility

iv)   location of testing facility

v)   measures to be taken to build the necessary human-resource capacities;

3   to carry out the necessary studies with a view to introducing the use of ITU Mark for a possible future ITU Mark programme as a voluntary programme permitting manufacturers and service providers to make a visible declaration that their equipment conforms to ITU-T Recommendations, and to increasing the probability of interoperability, and to consider its possible application as an indication of a degree of interoperability capability in the future;

4   to study the financial and legal implications for ITU-T and for ICT industries, and all other concerns raised with regard to this proposal on the possible introduction of the ITU Mark for a possible future ITU Mark programme;

5   to involve experts and external entities as appropriate;

6   to submit the results of these studies to the 2009 session of the ITU Council for its consideration and required actions,

instructs the study groups

1   to identify as soon as possible existing and future ITU-T Recommendations that would be candidates for interoperability, taking into account the needs of the membership (e.g. interoperability of next-generation network (NGN) equipment, terminals, audio/video codecs, access and transport network), that are capable of providing end-to-end interoperable services on a global scale, adding to their content, if necessary, specific requirements within their scope;

2   to prepare those ITU-T Recommendations, identified in *instructs the study groups* 1 above, with a view to conducting conformity and interoperability tests as appropriate,

invites the Council

1   to consider the Director's report referred to in *instructs the Director of the Telecommunication Standardization Bureau* 6 above;

2   to report as appropriate on this matter to the 2010 plenipotentiary conference, taking into account Resolution 158 (Antalya, 2006) of the Plenipotentiary Conference on financial issues for consideration by the Council,

invites Member States and Sector Members

1   to contribute to the implementation of this resolution;

2   to encourage national and regional testing entities to assist ITU-T in implementing this resolution.