The ITU Conformity & Interoperability Programme beyond WTSA-12
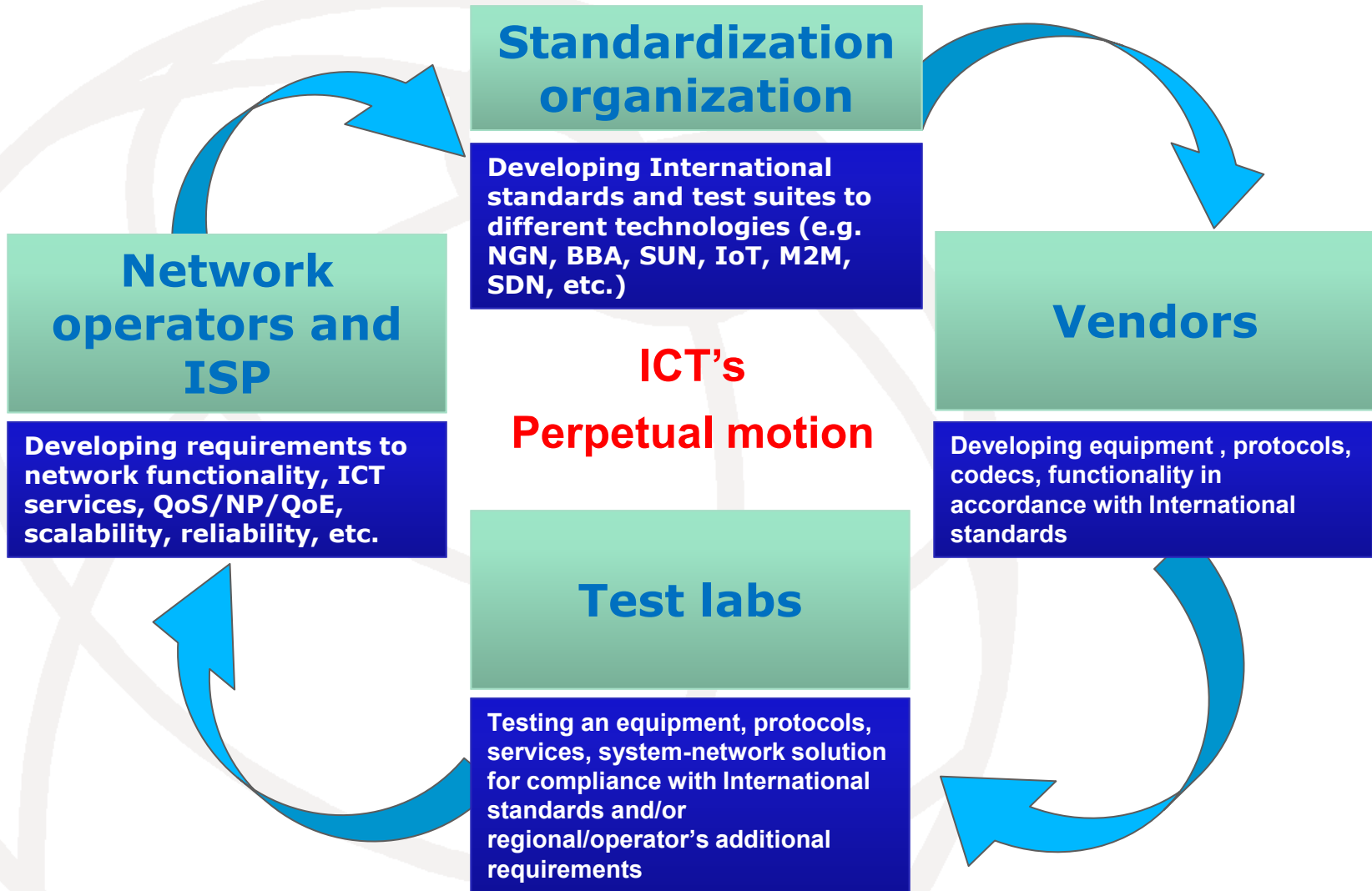
Issues raised

- **Lack of compliance to standards**

- **Counterfeit products**

- **Impact of non conformities on the market**

- **Vendors-locked Developing Countries**

The present ICT Market state

- **Increasing number of ICT vendors (software plays the main role in ICT products)**

- **Reducing the period of the development and implementation of new technologies and services (standardization remains behind)**

- **Lack of unified standards - high probability of increasing barriers of trade**

- **The increasing probability of incompatibility of equipment from different vendors**

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ITU C&I Action plan

The approaches to solving issues

Standardization organization

Developing International standards and test suites to different technologies (e.g. NGN, BBA, SUN, IoT, M2M, SDN, etc.)

Network operators and ISP

Developing requirements to network functionality, ICT services, QoS/NP/QoE, scalability, reliability, etc.

ICT's
Perpetual motion

Vendors

Developing equipment , protocols, codecs, functionality in accordance with International standards

Test labs

Testing an equipment, protocols, services, system-network solution for compliance with International standards and/or regional/operator's additional requirements

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ITU role

"Interoperability of international telecommunication networks was the main reason to create the International Telegraph Union in the year 1865, and that this remains one of the main goals in the ITU strategic plan"

WTSA-12 Resolution 76

ITU business plan

Conformity and Interoperability Programme implementation in ITU
ITU PP-10 (Res.177). Tender was issued after Council-11 (INF/14)

The main reasons of implementation of ITU C&I Programme were:

- **towards knowledge and capacity enhancement in C&I activity worldwide**

- **better usages of ICT equipment in developing countries**

- **creating higher corporate incomes which enable more investment, in turn generating better communications**

- **beginning of a virtuous development circle, in which the returns on members' investment are found in every facet of ITU's mandate**

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The Business Plan for the ITU C&I Programme in 4 "Pillars"

The Standardization Sector side

❖ Pillar 1: Conformity Assessment

❖ Pillar 2: Interoperability Events

The Development Sector side

❖ Pillar 3: Capacity building

❖ Pillar 4: Establishment of test centres and C&I programmes in developing countries

Authority for Action:
ITU's highest decision making bodies

Resolution 76: ITU World Telecommunication Standardization Assembly (WTSA-12)

Resolution 47: ITU World Telecommunication Development Conference (WTDC-10)

Resolution 177: ITU Plenipotentiary Conference (PP-10)

Resolution 62: Radiocommunication Assembly 2012

Council Decisions: (2009, 2010, 2011, 2012)
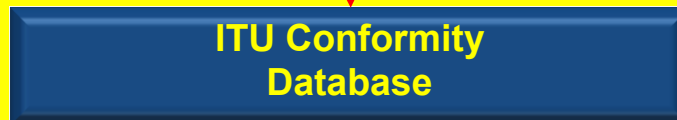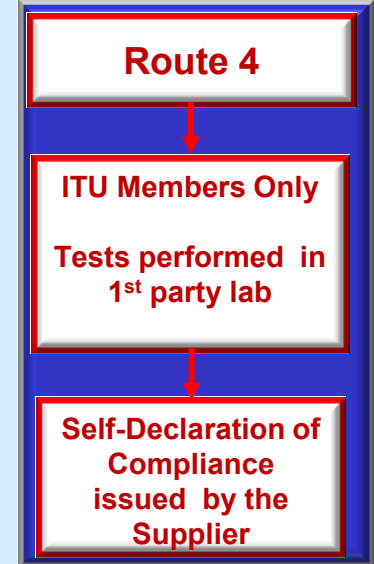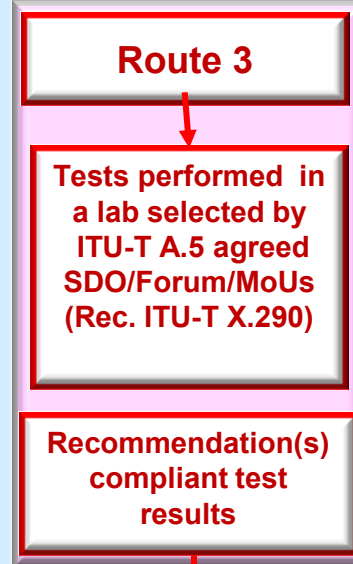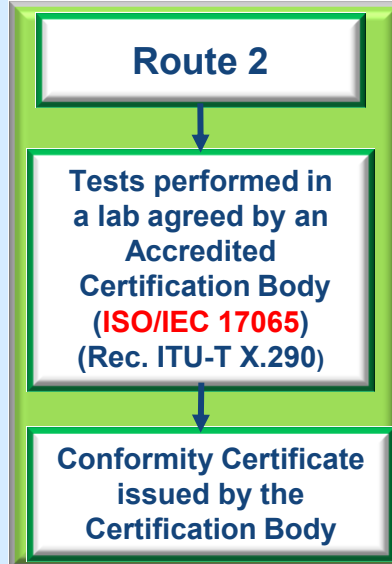
Four routes to populate conformity DB

ISO/IEC Assessment Procedures | Recognized SDOs | Self-assessment

Conformity Assessment & Certification

Route 1
Tests performed by an accredited lab **(ISO/IEC 17025)** (Rec. ITU-T X.290)

Recommendation(s) compliant test results

Route 2
Tests performed in a lab agreed by an Accredited Certification Body **(ISO/IEC 17065)** (Rec. ITU-T X.290)

Conformity Certificate issued by the Certification Body

Route 3
Tests performed in a lab selected by ITU-T A.5 agreed SDO/Forum/MoUs (Rec. ITU-T X.290)

Recommendation(s) compliant test results

Route 4
ITU Members Only

Tests performed in 1st party lab

Self-Declaration of Compliance issued by the Supplier

ITU On-line Form

ITU C&I services

ITU Conformity Database

0

KPMG business plan
Expected results of C&I Programme

C&I Programme)

Pillar 1
Conformance assessment

In the period covered by the resource plan the following results will be achieved (base scenario/ progressive scenario):
- the preparation of **36/ 55 tests suites**;
- population of the CDB with an **unlimited number of products**;
- analysis of approximately **180/ 715 ITU Mark applications**.

Pillar 2
Interoperability events

Base scenario: **22 interoperability events** in the period covered by the resource plan, under the assumption that all of them will be hosted in Geneva.

Progressive scenario: **37 interoperability events** in the period covered by the resource plan

Pillar 3
Human resource capacity building

Base scenario: Conducting of **25 courses** over the period 2012-2016 under consideration and working with **12 partners**.

Progressive scenario: **35 courses** and **15 partners** over the same period.

Pillar 4
Assistance in the establishment of test facilities in developing countries

Base scenario: **8 test lab** developments and **4 MRA** support activities over the period 2012-2016 under consideration.

Progressive scenario: **10 test lab** developments and **6 MRA** support activities over the same period.

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- **ITU Council decided to postpone route 4 (self-declaration SDoC)**

  Result: WP4/11 is going to discuss the approach of SDoC at the next meeting (November 2013)

- **ITU-T study Groups to identify further technologies for which there is a market demand for a C&I programme**

  Result: ITU-T SG11 prepared a living list of key technologies suitable for conformity and interoperability testing and requested all SGs to contribute to it

- **ITU-T to run a pilot of the C&I programme for key technologies**

  Result: ITU-T SG11 requested (March 2013) all ITU-T SGs to contribute to a living list of possible pilot projects of conformity assessment against ITU-T Recommendations

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- **ITU Secretariat invite labs/forums/consortia/SDOs to join the C&I Programme**

  Result: ITU secretariat participated in meetings of the most relevant standardization bodies in the field of the conformity assessment (ISO, IECEE, DCMAS, ILAC, IAF, etc.). SG11 (March 2013) encouraged the TSB Director to explore possibilities to cooperate with IECEE

- **TSB to produce a report on measures against counterfeiting**

  Result: SG11 discussed a draft report on counterfeit equipment, suggested started new work item on Counterfeiting and organizing a workshop on best practice to combat counterfeiting

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Action Plan (Council-13)
Pillar 2 – Interoperability

- **ITU Secretariat to consult study groups towards identifying and suggesting topics for future events**
  Result: Several interop events were organized for NGN, IPTV. In discussion are: G.9903, P.1100, P.1110, e-health (in partnership with Continua)

- **ITU-T Study Groups to develop system roadmaps, identify and define the interfaces across which interoperability is needed**

- **ITU-T Study Groups should identify or develop use cases, application profiles and test plans to use for interoperability testing for Recommendations**

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Action Plan (Council-13)
Pillar 3 – Capacity building

- **BDT, in collaboration with TSB, to continue to offer C&I training courses for testing key technologies**

- **BDT in cooperation with TSB to train technical staff and policy makers**

Result: several training events which are devoted to different testing technologies and general approaches to set up of test labs in the regions were conducted during 2012-2013 (Tunis, Brasilia).

The ITU Secretariat continues to offer C&I training courses, workshops and forums possibly back to back with events of the regional organizations

Action Plan (Council-13)

Pillar 4 – Establishment of Test centres

- **The ITU Secretariat to continue to promote partnerships with external organizations for assisting countries to establish an appropriate C&I programme**

  Result: signed MoUs with TL (CERT, APqD, Sintesio, TiLab, ZNIIS), AB (IAF, ILAC)

- **Establishment of an appropriate C&I Programme in developing countries**
  Result: developed guidelines on building testing labs for C&I of equipment and systems in developing countries, drafted a feasibility study for a conformance testing center

- **Establishment, when possible, of MRAs (Mutual Recognition Agreements) to be discussed at regional and sub-regional levels**
  Result: The ITU Secretariat is providing a set of Guidelines for the development, implementation and management of MRAs

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Conclusions

- **Conformance testing to verify the compliance with ITU-T Recommendations**

- **Conformance: a corner stone to increase the probability of interoperability of ICTs products in a multivendor/multiuser environment**

- **ITU Databases as a tool to facilitate identification of ICT products, Test Labs and NCBs working on ITU-T Recommendations**

- **Need a network of test centres in the regions able to cover most technologies, to decrease the digital divide and increase awareness about standards and testing**

- **MRAs (Mutual Recognition Arrangements) and MLAs (Multi Lateral Agreements) among Accreditation Bodies may facilitate market penetration, reduce costs, and reduce time to market in the respect of the TBT agreement**

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TSB contacts

Conformity: conformity@itu.int
Interoperability: interop@itu.int
JCA-CIT: tsbjcacit@itu.int

ITU C&I resources

C&I Portal - http://www.itu.int/en/ITU-T/C-I/Pages/default.aspx

JCA-CIT - http://www.itu.int/en/ITU-T/jca/cit/Pages/default.aspx

SG11 (lead group on testing) - http://www.itu.int/en/ITU-T/studygroups/2013-2016/11/Pages/default.aspx