Summary
A series of consultation meetings on Conformity and Interoperability were organized based on PP-10 Resolution 177, the objectives of both Resolution 76 (Johannesburg, 2008) and Resolution 47 (Rev. Hyderabad, 2010), and the recommendations of the Director of TSB endorsed by the Council at its 2009 session and in its resolve 2. The latter instructs, among others, that “that this programme of work be implemented in parallel without any delay”. In addition it instructs the Director of TSB “to continue the consultation with all stakeholders in all regions, taking into consideration the needs of each region, on implementation of the recommendations endorsed by the Council, including, in collaboration with the Director of BDT, the recommendations on human capacity building and assistance in the establishment of test facilities in developing countries”.

The ITU Forum on C&I is the last of this series of consultation meetings held in the regions. This document presents the report on the event in Brasilia and is submitted to Council 2012 session as requested by TSAG (Geneva, 2-4 July 2012).

Action required
The Council is invited to take note of the present document.

References
Resolution 177 (Guadalajara, 2010)
Resolution 76 (Johannesburg, 2008)
Resolution 47 (Hyderabad, 2010)
Event web site: http://www.itu.int/ITU-D/tech/events/index.html
Other C&I events web site: http://www.itu.int/ITU-T/worksem/wtsa-08/res76/index.html
ITU C&I Forum for the Americas region
Brasilia 12 – 15 June 2012
Report: Riccardo Passerini (BDT) and Paolo Rosa (TSB)

All the presentations are available at:
http://www.itu.int/ITUD/tech/events/2012/CI_AMS_Brasilia_June12/ForumCI_2012_AMS_Program.html

General remarks: the competence and quality of the participants and speakers helped discussing in depth critical issues such as MRAs, certification, conformity assessment and views from various stakeholders. It can be considered one of the best events on C&I.

Statistics: 43 Participants from 7 countries. Conformity assessment and accreditation bodies were represented, as well as regulators and administrations and industries and operators such as: CISCO, ERICSSON, ISATEL, ZTE, EMBRATEL, SAMSUNG, ADVANCE WIRE AND WIRELESS, PRECISION SOLUTIONS and QUALCOMM.

Speakers and audience: There was a high standard of speakers. Their thorough knowledge of the subject, as well as their experience and clarity of delivery highly contributed to better understand the various topics and to clarify the need and topics of the next steps. The audience was made by experts in the field and it contributed to the high level of discussions especially in the interactive sessions. The format of this event is definitively to be repeated.

Main issues discussed:

- Importance of accreditation and certification. Mutual Recognition Agreements (MRAs) and Multilateral Arrangements (MLAs) to increase confidence in conformity assessment, decreasing the need of repeated testing in order to reduce costs and time to market especially for new technologies.

- Regional experiences, activities of various regional and international institutions, standards organizations, test labs, views from industries (UNIDO, ILAC/IAF, COPANT, INMETRO, ICONTEC, OHN, ANATEL, ERICSSON, CISCO, CpQD, NYCE).

- Organization of training activities on C&I to be performed, preferably, in labs for experts from the Region.

- Opportunity to identify Regional/Subregional test labs serving as reference points for C&I issues in the Region.

- Highlighted the need of developing countries to create/improve their own certification schemes and accreditation infrastructures.

Interactive sessions: two working groups, managed by Nigel Croft, chair of ISO TC 176/SC 2 Quality Systems (ISO 9001), discussed in parallel sessions of three hours on the following questions concerning the four pillars of the ITU C&I Programme:

1. Main Obstacles to be overcome
2. Local and regional strategies/actions needed
3. Strategies/actions/assistance from international organizations
4. Any other consideration

The separation in groups was made to optimize exchange of views while maintaining the needed critical mass of participants and level of competence. Discussions were very intense and considered many aspects from different points of view.

Results of interactive groups, shown in annex A, were discussed in the last plenary. It was noted that the results were very similar to the conclusions of the C&I event organized by UNIDO in Dhaka, Bangladesh, in February 2012, showing how the main elements are very common worldwide.

Main results:

• UNIDO is strongly interested in starting a close cooperation with ITU on C&I issues in the region. **Action:** TSB/BDT need to discuss details with UNIDO for activities and funding.

• First proposal: investigate viability to start a pilot project in Honduras/Suriname to establish national certification and accreditation schemes. The project could be used as test bed for other countries. ITU AMS RO will be involved and ITU HQ will provide content/experts. **Action:** TSB/BDT to prepare a Questionnaire to clarify the status in Mexico, Central and South America.

• CISCO and Ericsson are interested in certain participation to create an environment that facilitates capacity building opportunities and to create test labs. Concerning pillars 1 and 2 need to clarify roles and possible ways forward to face/solve interop problems in the region. **Action:** TSB/BDT to maintain contacts with Ericsson and Cisco in the region.

• Highlighted the importance of MRAs/MLAs and the role that ILAC & IAF may have in the activities of ITU for the establishment of test centres and accreditation/certification schemes. **Action:** TSB/BDT to coordinate with these organizations to create conformity assessment and accreditation schemes applicable to ITU Recs, that can be “recognized” by the ITU.

• Anatel and CPqD to share test suites applicable to ITU Recommendations and to cooperate with the creation of certification and accreditation schemes and capacity building opportunities. A draft MoU has been agreed with CPqD and is under internal evaluation. It is expected to be signed during Connect Americas event in Panama. **Action:** TSB/BDT to finalize the MoU with the intention to establish Cooperation Agreements and to negotiate training modules for different C&I domains (e.g. NGN, Wireless, Broadcasting, EMC, etc..) to be proposed to countries in the Region.
• Honduras + Mexico willing to adopt ITU Recs as national standards possibly using a format for easy relationship with ITU Recs, e.g. OHN H.264, OHN G.654 etc... is it possible?

**Action:** TSB to consult with LAU.

• Highlighted the need to focus on capacity building with regulators to better address C&I infrastructures in interested countries and to build customer confidence.

• Impressive first experience with the “Interactive Groups” with strong participation in the discussions by all the participants.

  **Action 1:** the interactive groups methods need to be implemented at next C&I events and may be in other ITU similar events when discussions among participants may contribute to the success of events.

  **Action 2:** TSB/BDT to analyze results as contribution to be considered when refining/implementing to the ITU C&I Action Plan.

• Many participants were non members and showed interest in the topics addressed by ITU. **Action:** TSB/BDT to contact newcomers to explore possibilities for collaboration/membership

**Acknowledgments:**

We would like to express our gratitude to ITU AMS Regional Office for their collaboration, full support, availability, dedication and initiatives taken for the realization and success of this event.

**Action:** ANATEL and EMBRATEL: a letter of thanks should be prepared to thank them for the support provided in hosting the event (ANATEL) and in offering WiFi Services (EMBRATEL).
ANNEX A
Interactive sessions: Conclusions

Pillar 1: Conformity Assessment

- Main obstacles to be overcome:
  - Government’s commitment / political will
  - Lack of Regulatory Framework with lack of clear and unambiguous national standards
  - Need to establish minimum technical requirements
  - Lack of national Conformity Assessment schemes, national bodies and expertise
  - Availability of test suites (e.g. new tech)
  - Inadequate legal framework
  - Lack of awareness at the policy level
  - Setting priorities
  - Lack of skills
  - National priorities
  - Lack of market surveillance and enforcement
  - Gap in the infrastructure

- LOCAL or REGIONAL strategies/actions needed?
  - Encourage participation and discussion of Governments in C&A meetings
  - Create Vendors/Regulators/labs/operators/conf & accred ´n bodies/standard bodies/end-users discussion forums
  - Govs to consult stakeholders in the establishment of national C&A schemes and establish milestones and time schedule
  - Share experiences in the region on best practices
  - Institutions commitment
  - Identification of needs
  - Mapping to available infrastructure
  - Communication of “rules” (regulations, test methods to be used, etc.)

- Strategies/actions/assistance from international organizations?
  - Supply expertise / capacity building
  - Promote knowledge of C&A approaches from different vendors
  - Suggest minimum technical requirements when studying standards
  - Assist in the establishment of national C&A schemes
  - Continue holding C&I events in the regions
- Facilitation of partnerships
- Sharing global initiatives
- Strategies preparation and participation from developing countries
- ITU to produce harmonized protocol specifications and test specifications in a timely manner and develop ITU Recommendations in view of interoperability requirements for new technologies, applications and services.

Any other considerations?
- Any CA scheme to be based on real needs of a country and be a “live” approach, stable enough for vendors/users interests and in the framework of international common understanding

Pillar 2: Interoperability Events

- Main obstacles to be overcome
  - Bureaucracy in national organization
  - Regulatory framework
  - Costs and complexity of testing in presence of very different network scenarios/configurations
  - Evolution of technology vs legacy in a regulatory environment
  - Understanding complexity
  - Dealing with multiplicity of standards -> define a set of minimum parameters
  - Understanding what interoperability means
  - Preparation of precise RFP (Request for Proposal)
  - Establishing vendor trust

- LOCAL or REGIONAL strategies/actions needed?
  - Regulatory decisions compatible with evolution of technology
  - Compatible regulatory decisions within a region to minimize interoperability problems
  - Establishment of Regional Interoperability Forums (RIF)
  - Operators offering
  - Identify test labs capable to foster interoperability events
  - Identify market needs

- Strategies/actions/assistance from international organizations?
  - Supply expertise / capacity building
  - Assist in the establishment of the RIF
  - Continue holding C&I events in the regions
– Minimize technology options when studying standards for same purpose
– Support to spread interoperability culture/awareness
– ITU to define a minimum mandatory set of requirements for quality of services for ensuring interoperable services

Pillar 3: Capacity Building

• Main obstacles to be overcome
  – Availability of local experts
  – Costs => logistics & duration & hosts
  – Availability of infrastructures/resources for “practical” training
  – Definition of the scope => conformity assessment (tech and testing)
  – Weakness of local Conformity Assessment “culture” infrastructures (labs, CABs, NABs, Metrology / Calibration institutions
  – C&I is not a high priority for government
  – Lack of opportunity to get expertise
  – Lack of people awareness of scholarships

• LOCAL or REGIONAL strategies/actions needed?
  – Participation in national / international technical committees
  – Academia courses on standards and CA w/stakeholders
  – Coordination of regional events on CA
  – Courses made by vendors included in Supply Contracts
  – Regional cooperation institutions to share expertise

• Strategies/actions/assistance from international organizations?
  – Assist the regions in holding CA regional events
  – Promote Public-Private partnership
  – Encourage long-term funding
  – Ensure continuous learning strategies
  – E-learning packages
  – ITU to assess the type of training needed and provide the training including hands-on training,
  – ITU negotiating partnership with regional laboratories and other institutions in the position to deliver training for specialists from the region
  – Strategies to engage private companies in training activities

• Any other considerations?
— Any CA scheme to be based on real needs of a country and be a “live” approach, stable enough for vendors/users interests and in the framework of international common understanding

Pillar 4: regional test centres

• Main obstacles to overcome
  — Lack of information on regional existing facilities
  — Financial viability
  — Political will
  — Acceptance of test results from other countries/labs
  — High cost of building a test lab (premises, human resources, accreditation, maintenance....)
  — Lack of awareness of priority of domain (e.g., wireless, broadcasting, NGN, EMC, safety, ....)
  — Government and private funding accessibility
  — Availability of competent expertise, including language skills

• LOCAL or REGIONAL strategies/actions needed?
  — Build-up on existing infrastructures
  — Need of regional agreements
  — Creation of regional test centers
  — Business Plan / Promotion / Marketing / choice of technologies
  — Scan of available services in local or region
  — Establishment of competitive fee structure for services
  — Encouraging the signature of MRA with other countries to avoid unnecessary duplication of testing services

• Strategies/actions/assistance from international organizations?
  — Assisting in the implementation of existing guidelines
  — Continue procuring MRAs
  — ITU, and other partners, in cooperation with membership to identify policy and regulatory imperatives to accelerate the creation of C&I test centers and/or facilitate the establishment of MRAs in order to put in place the more appropriate C&I regime for each country. Propose and facilitate MRA signature between countries based on regional framework for MRAs according to ITU guidelines on C&I.
  — ITU, in cooperation with other international organizations (e.g. UNIDO) and other partners (e.g. CPqD, CERT, SINTESIO, etc.), to support development/strengthening of calibration and ICT test labs