|  | **Conformity and Interoperability** |  |
| :---: | :---: | :---: |
|  | **Workshop on the C&I Assessment Study for South America** |  |
|  | **Training for AMS Region** |  |
|  | **C&I Infrastructure and Virtual Laboratory Services** |  |
|  | Campinas/Brazil, 03 – 07 July 2017 |  |

### Annex 1 - Programme

**(03-04/July) Workshop on the C&I Assessment study for South America: establishment of infrastructure, collaboration and regional integration**

The Workshop aims to present the results of the Conformity and Interoperability Assessment Study in South America conducted during the period March – June 2017 and to create proposals on ways forward to improve the C&I status in the region. The study is part of a broader objective of and the ITU mandate to assist developing countries in capacity building to perform context-appropriate conformance testing of equipment and systems in accordance with relevant Recommendations. More details on these objectives are provided in the website https://www.itu.int/en/ITU-D/Technology/Pages/CI_AssessmentStudyRegional.aspx, which includes the Terms of Reference (TOR) of relevant studies.

- ITU C&I Programme
  - The 4 Pillars, status of the Action Plan implementation
- Conformity and Interoperability Aspects
  - C&I Regimes
  - Enforcement and market surveillance
  - Laboratories establishment and testing centers
  - Collaboration and sharing of C&I resources
  - Innovative approaches (e.g. Virtual Laboratories, regional certification body)
  - Summary Report on the current Conformity Assessment for ICT equipment
- Assessment Results in South America
  - Share of infrastructure
  - Collaboration benefits
- Discussions on the Ways Forward

**(5-7/July) Training for AMS Region C&I Infrastructure and Virtual Laboratory Services**

Participants will attend testing sessions prepared and visit at testing laboratoriesThe C&I Training will provide concepts and practical experience, providing hands-on exercises on real testing laboratories. The testing domains covered are type approval of mobile terminal and interoperability testing for NGN provisional. A virtual testing will be demonstrated in one of the labs showing how a remote testing of services can be conducted for conformance and interoperability.

- **Virtual Laboratory Concepts and Framework**
  - Concepts
  - Framework
  - Kind of services
  - Requirements

- Note: Participants will attend theoretical classes prepared and visit the testing laboratories. The practical demonstration about Virtual Laboratory Concepts and Framework will occur during the presentation about SAR measurements

- **Laboratory service examples**
  - Testing Laboratories – General Aspects  (Overview)
    - Lab accreditation according to ISO/IEC 17025;
    - Test uncertainty;
    - Calibration.

  - Type Approval of ICT products
    - Testing for ICT products (ex.: Mobile Terminals)
    - Overview on IMT technology and standards;

    - *SAR measurements;*
    **Virtual Laboratory service examples: Demonstration using camera for remote transmission. Test transmission (test environment) plus computer screen transmission (measurement and results)**
      - Instrumentation and devices for testing and measurement;
      - Equipment Under Test (EUT) configuration.
      - Visit to the test lab (SAR Lab).

    - *EMC requirements and measurements;*
      - Instrumentation and devices for testing and measurement;
      - Equipment Under Test (EUT) configuration.
      - Visit to the test lab (EMC Labs).

    - *Safety requirements and measurements;*
      - Instrumentation and devices for testing and measurement;
      - Equipment Under Test (EUT) configuration.
      - Visit to the test lab (Safety Lab).

    - *Embedded technologies on mobiles: IMT, Wi-Fi, Bluetooth, etc.;*
      - Instrumentation and devices for testing and measurement;
      - Equipment Under Test (EUT) configuration.
      - Visit to the test lab (Radiolab Lab).

  - Next-generation Networks (NGN) integration and interoperability testing aspects
    - Overview on NGN principles
    - NGN architecture and technologies;
    - Migration from existing networks to NGN networks;
    - NGN interoperability aspects (protocols);

- *Instrumentation and devices for testing and measurement;*
  - Equipment Under Test (EUT) configuration.
  - Visit to the test lab (LCT Lab).