## Conformity and Interoperability Training for AMS Region on Type Approval testing for Mobile Terminals, Homologation Procedures, C&I Regimes and Market Surveillance

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# Conformity and Interoperability regimes of Telecommunication/ICT equipment in Costa Rica

Homologation of telecommunication equipment experience in Costa Rica(SUTEL)

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TELECOMUNICACIONES

### Agenda

- Legal Framework of the C&I Regime for telecommunication/ICT equipment in the country Laws, Rules and Regulations, etc.
- Common problems faced due the lack of conformity and interoperability in your country
- Conformity assessment processes in place (if any)
- ICT Reference standards
- Institutions responsible for C&I activities
  - Institutions: ministry, regulator, certification and Accreditation Bodies,
    Laboratories
  - Responsibilities: who certifies, accept certificates, enforce the law, control borders, executes market-surveillance, etc.
- Vision of the future
  - Harmonization of C&I procedures, Capacity building needs, regional collaboration/integration, etc.

## Legal Framework of the C&I Regime ICT equipment in Costa Rica

- SUTEL-RCS-332-2013: Type approval testing & homologation for mobile network terminals.
  - Define admission pre-requisites (International certifications, data sheets, manufacturer authorization, etc.)
  - Define the test protocol.
  - Accredit two laboratories for performing the tests.
- SUTEL-RCS-431-2010: Homologation for equipment which operates in "free bands" (Wi-Fi, Bluetooth, etc.)
  - Define homologation requirements (International certification, max.
    Power transmission, which bands could be used)

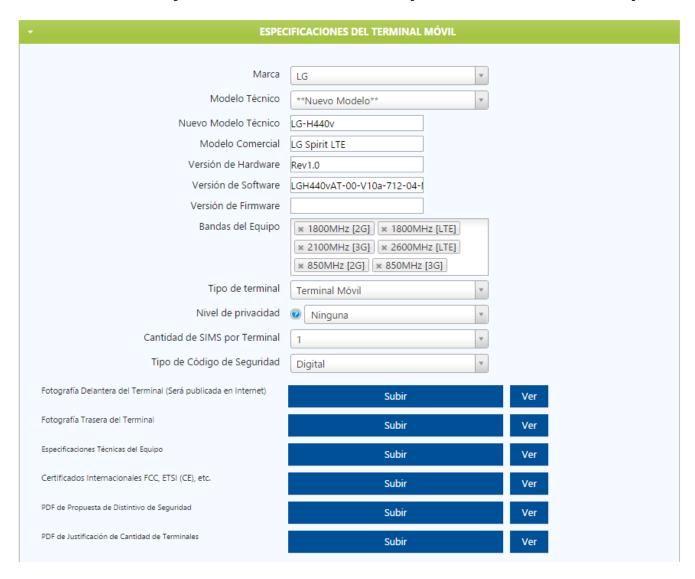
## Common problems faced due the lack of conformity and interoperability in Costa Rica

- For mobile terminals.
  - Stores selling terminals without conformity tests. SUTEL regulation is 100% effective only with service operators.
  - Laboratories lack equipment for performing the complete LTE test protocol.
- For equipment which operates in "free bands" (Wi-Fi, Bluetooth, etc.)
  - A big part of the market doesn't apply for the homologation.
  - Costumer doesn't seek for homologated product.

#### Conformity assessment processes in place

- SUTEL provides a WEB tool for terminal type approval / homologation process management: <a href="http://homologacion.sutel.go.cr/">http://homologacion.sutel.go.cr/</a>
- Requests, admissions, test results and certifications are made using the WEB tool.
- General public can search for SUTEL homologated models using the same WEB page.

#### Conformity assessment processes in place



#### Conformity assessment processes in place

Consulta de terminales móviles homologadas por IMEI



#### ICT Reference standards

- Mobile terminals (according with SUTEL-RCS-332-2013)
  - GSM Technical Specification (ETSI)
  - Battery Life Measurement and Current Consumption Technique Version
    6.0 22nd December 2010" (GSM association)
- "Free bands" equipment (wi-fi, bluetooth, etc.)
  - Plan Nacional de Asignación de Frecuencias (national plan for frecuency assigment) defines bands and power outputs for "free bands" equipment.

#### Institutions responsible for C&I activities

#### Institutions:

- Ministerio de Ciencia, Tecnología y Telecomunicaciones: Defines PNAF for "free band" equipments.
- SUTEL: Regulator, certification and accreditation body. Certifies, accept certificates, enforce the law, control borders, executes market-surveillance, etc.
- Laboratories: FRUNO and CETCA

#### Vision of the future

- Improve laboratory's capacity for performing LTE test protocols.
- Enforce users knowledge about conformity importance.
- Continuous integration with the latest international standards.