


Testing laboratory experience in the AMS Region, case studies and practices, way forward and recommendations

Brazil

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TURNING INTO REALITY



Agenda

- Country Profile – Brazil
- Regulatory Framework
- The Brazilian Scenario
- Challenges
- Final Remarks

Country Profile – Brazil



- **Location:** South America
- **Population:** over 200 million
- **Size:** 8,514,215.3 km²
- **Bordering:** 10 countries
- **Per Capita Income:** USD 11,142
- **Official Language:** Portuguese

Source: IBGE, Teleco and ITU

Country Profile – Brazil

2013	Subscribers/ connections [million]
Mobile phones	271.1
Fixed phones	44.8
Broadband	21.3
Pay TV	18.0
Internet users	85.6

Ranking in the World [2013]	Access	Density
Mobile phones	5°	55°
Fixed phones	6°	81°
Broadband	9°	88°

2013	Households with
TV	97.2 %
Phone (Mobile or Fixed)	92.5 %
Radio	75.7 %
Computer	48.9 %
Computer with Internet access	42.4 %
Total Households (thousands)	65,130

Source: IBGE, Teleco and ITU



Regulatory Framework

- Law 9472 (July, 1997) – General Telecommunications Law

- ANATEL, the National Telecommunications Agency, is responsible for issuing or recognizing telecommunication product certification and for issuing norms and standards regarding equipment utilization.



Agência Nacional de Telecomunicações

- Resolution 242 (November, 2000) – Regulation on the Certification and Authorization of Telecommunications Products

- Any telecommunications products, before they are commercialized or used in Brazil, must have a conformity certificate issued by a Designated Certification Body (OCD) and approved/homologated by ANATEL.
- ANATEL can sign Mutual Recognition Agreements (MRA) for conformity assessment of telecommunication products, recognizing foreign certification bodies and laboratories as part of the conformity assessment process.



Regulatory Framework

- ANATEL establishes which types of products are subject to mandatory certification and in which category they should be included
- ANATEL publishes the list of technical requirements and test procedures for the certification of telecommunications products (functional, EMC and safety)
- Standards and old regulations are being replaced or updated to include new types of products and technologies
- Priority order in the implementation of Rules and Regulations
 - 1st) Rules and Regulations issued by ANATEL
 - 2nd) Regulations issued by the Ministry of Communications before the creation of ANATEL
 - 3rd) Old standards issued before the creation of ANATEL
 - 4th) International standards/ITU Recommendations



The Brazilian Scenario

- ANATEL has 12 designated certification bodies (OCDs)
- Currently available in Brazil for testing telecommunications products
 - 23 third-party labs
 - 18 accredited by INMETRO
 - 5 evaluated by OCD
 - 5 laboratories not operated by third parties that have been evaluated by OCD
- Priority order for choosing a test laboratory
 - 1st) Brazilian independent laboratories accredited by INMETRO and recognized by MRAs foreign laboratories
 - 2nd) Third-party laboratories that have been evaluated by OCD
 - 3rd) Laboratories not operated by third parties that have been evaluated by OCD
 - 4th) Foreign laboratories accredited by the official member body of the ILAC



The Brazilian Scenario

- Number of homologation/approval certificates issued by ANATEL from 2001 to April/2014
 - Category I products: 9,078
 - Category II products: 15,911
 - Category III products: 5,245



Source: ANATEL

Challenges

- **Fast development of technologies**
 - High investment to maintain laboratories infrastructure updated
 - Difficulty in maintaining standards and technical requirements updated
 - Difficulty in maintaining technical knowledge updated
- **Surveillance to avoid the use of counterfeits or products not homologated/approved by ANATEL.**



Final Remarks

- **Main benefits of test laboratories**
 - Ensures that products commercialized or used in the country meet the minimum quality requirements
 - Enhances user safety
 - Makes the entry of counterfeit products in the country more difficult
 - Increases product quality
 - Provides knowledge acquisition (technologies, testing methodologies, equipment configuration)
 - Contributes to knowledge exchange with government agencies, universities and R&D centres
 - Invitation for partnership with CPqD

