

# Conformity and Interoperability regimes of Telecommunication/ICT equipment in Bangladesh

**Homologation of telecommunication equipment experience in  
Bangladesh**

**Prepared by Md. Mehfuz Bin Khaled  
& Mohammed Ashraful Alam**

**Bangladesh Telecommunications Regulatory Commission**

# Legal Framework of the C&I Regime for telecommunication/ICT equipment in Bangladesh

**Applicable Law :** The Bangladesh Telecommunication Act, 2001

## **Governing role of the Act :**

- The Commission (BTRC) may specify the national standards and technical aspects of the apparatus that are used in a telecommunication system and in providing telecommunication services.
- The Commission may, for different class of apparatus, determine different standards, criteria and method for verifying their compliance.

## **Power of the Commission/ Governing role of the Guidelines :**

- The Commission shall encourage and take action for adequate interconnection and interoperability of services, exercising its responsibility in a way that promotes efficiency, sustainable competition, and gives the maximum benefit to the users. [Interconnection regulation 2004]
- The Licensee shall design and maintain its telecommunication network(s) in accordance with any directions issued by the Commission and shall comply with interoperability and other technical standards prescribed by the Commission. [BWA, Broadband Wireless Access Guidelines]
- Technical characteristics of equipment used in BWA systems shall be in conformity with the WiMAX forum standards and International Telecommunications Union (ITU) and its radio regulations. The operator must deploy certified equipment from the accredited/certified vendors (e.g. WiMAX Forum Certification). [BWA Guideline]
- The Licensee(s) shall provide the connection arrangement and facilities to ANS Operators, Licensed Telecommunication Operators and to other authorized users with equipment and technology at the Nodal Points of the NTTN. [Nationwide Telecommunication Transmission Network Guideline]
- NTTN systems must be interoperable with the existing standard telecommunication technologies, equipment and system(s) being used in Bangladesh by other operators. [Nationwide Telecommunication Transmission Network Guideline]
- IPTSP operators will ensure inter-operability and associate inter-networking compatibility with the PSTN operators, Mobile operators and other voice service providers in that of addressing, in particular for calling an IP Telephone from a PSTN Telephone, Mobile Phone, other voice service providers, PC and vice-versa. [IP Telephony Service Guideline]
- IP Telephony services must be interoperable with the existing and NGN technologies and equipment. [IP Telephony Service Guideline]

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

- Users are deprived of benefit such to able to communicate anybody through a single network.
- Lack of conformity and interoperability increases overall OPEX, ultimate result in the degradation of QoS.
- Increase in ICT digital divide and standardization gap resulting poor confidence on the regulatory body.
- Operators are not able to choose more competitive and quality equipment for operations.
- Bangladesh being a disaster prone country such a flood, cyclone and earthquake. Emergency network use is not possible due to lack of interoperability.

# Conformity assessment processes in place

**Conformance testing measures how accurately a product implements a technical specification. (as per ITU)**

- at BTRC all vendors are required to submit technical specifications of equipment.
- the equipments specifications are judged and then NOC is provided

**The degree of compliance helps vendors and users of the equipment to evaluate how the equipment will perform in the network where it will integrate with other network devices to provide an offered network service. (as per ITU)**

- At BTRC, when the equipments are in operation. Various compliance parameter are checked through spectrum monitoring, site inspections, database system.
- Other systems such as CDR, QOS is also used.

# Institutions responsible for C&I activities

## **Powers and Responsibilities of the Commission**

- The Commission shall encourage and take action for adequate interconnection and interoperability of services, exercising its responsibility in a way that promotes efficiency, sustainable competition, and gives the maximum benefit to the users.
- The Commission may intervene in negotiations on interconnection agreements, if no agreement is brought about between the negotiating operators or access providers within 3 (three) months of request by any party, giving directions particularly on the issues that are unresolved in the interconnection agreement
- Where the operators enter into an interconnection agreement with other operators and access providers, the Commission shall have the right to review such interconnection agreement in its entirety or part of it and direct them to incorporate changes in the interconnection agreement to ensure conformity with the Act, Regulation or Interconnection Guidelines.
- The Commission may impose conditions in interconnection agreements in order to ensure - the interoperability of services, including the conditions designed to ensure satisfactory end-to-end quality, which may include implementation of specific technical standards, specifications or codes of conduct or directives issued by the Commission.

# Vision of the future

- Work on standardization process & certification system
- Build capacity for ensuring conformity
- Get equipments for testing and measurements
- Coordinate meeting between multi-vendor, multi-operator and multi-service providers
- Run pilot projects for testing and conformability

Thank You