

# ITU Regional Workshop on Bridging the Standardization Gap for the Arab and Africa regions

Algiers, Algeria, 26-28 September 2011

#### THE ROLE OF MARKET SURVEILLANCE AND AUDIT IN ADDRESSING NON COMPLIANCE

Presented by Bill McCrum ITU Consultant





#### Fundamentals of an orderly telecom equipment marketplace

- Robust technical requirements for products entering the marketplace
- Interference free services wireless, wireline, broadcast, satellite
- Products are safe for citizens and service provider personnel
- Market access regime that inspires trust and confidence in users, suppliers and service providers
- Delivers national and international connectivity
- Reflects priorities and values of a society
- Many developing countries moving quickly from uncontrolled market access driven by variety of concerns e.g. health, quality, economics, counterfeit





#### Institutional foundations for an orderly telecom equipment marketplace

- Robust legal framework for market entry with assessed penalties for non compliance
- Telecom policy, regulations and standards
- Technical specifications for equipment covering:
  - > Wireless
  - wireline
  - ► EMC
  - > SAR
  - > Broadcast
- Trusted credentials based on accreditation, certification, testing and marking per ISO/IEC Stds
- Post market surveillance and audit





# Shared responsibilities in an orderly marketplace

#### Government agencies:

- Legislators
- Border control agencies
- Regulatory authorities
- Inspection agencies
- Accreditation and Certification Bodies
- Manufacturers
- Importers
- Distributors
- Vendors





# **Objectives of Market Surveillance**

- Ensuring continued compliance
- Preventing interference
- Preventing harm to the network
- Ensuring safety of personnel
- Ensuring that non-compliance is dealt with promptly





# Market Surveillance and Audit

- Three components of market surveillance:
  - Targeting
  - Auditing physical and desk audit
  - Assessment of Compliance







#### **Basic tools for compliance assessment and physical audit**

- Access to testing facilities for compliance assessment:
- ISO/IEC 17025 Accredited Test lab equipped with some or all of the following sub units:
  - Wireless test unit
  - Wireline test unit
  - EMC test unit
  - Calibration unit
  - SAR test system
  - Environmental chamber
  - Anechoic chamber
  - > Open Area Test Site (OATS)
  - Electromagnetically Shielded room





#### **Determination of non-compliance**







#### **Responsible parties in** *Identification* and *Determination* of Non-Compliance

- Identification definition: "initial finding, reporting or complaint of non-compliance"
- National authority contacts responsible parties which may include one or more of:
  - certificate holder, manufacturer, test lab, certification body, supplier, distributer and importer
- Time limits set for responses e.g. 15/30 days
- Investigation begins forthwith
- Potential extent of non-compliance discovered e.g. 250K units in the marketplace
- Production run data examined
- Determination of non-compliance made by authority
- Report produced and sent to Enforcement branch with recommendation for appropriate action





### **Collaboration Frameworks**

- Motivation heads-up on non-compliances in other markets
- Collaboration instruments: MoU, MRA, Informal information exchange
- Relationships among participants: e.g. independent entities, regulatory bodies, governments departments and agencies
- Elements of collaboration:
  - Scope of market surveillance e.g. telecom terminal equipment, radio apparatus, EMC, SAR
  - Identification of participating bodies
  - Exchange and handling of information e.g. limitations, restrictions and confidentiality
  - Contact persons and entry into effect
  - Oversight arrangements and meetings e.g. Joint Committee





#### Preparations for global conformity assessment acceptance

- 1.0 Enablement of Mutual Recognition Arrangements and Agreements (MRAs)
- Legislation needs to allow for delegation of powers:
  - Recognition of competence in calibration
  - > Recognition of competence in accreditation authorities
  - Recognition of competence in testing and certification
- Mandatory recall powers may need to be in legislation if voluntary recalls are not foreseen as being effective

2.0 Robust test methodologies need to be in place to respond to potential challenges of findings of non-compliance





### Targeting

- Random selection/sampling of regulated equipment for market surveillance and audit based on:
  - Past history of non-compliance certifier, manufacturer, or importer
  - New applicant for certification
  - New technology
  - Popularity of product (mass deployment)
  - Price of product relative to similar products
  - Potential for harm/impact to network or people





## Auditing

- Physical audits of a representative sample of products entering the marketplace
- Large volumes of new radio equipments and surveillance cost considerations force sampling levels to be typically of the order of 2 to 5%
- Additional sampling of at least 1% recommended for equipment subject to radio frequency exposure limits
- Desk audits to complement physical audits (technical evaluation of documents submitted in support of certification, or SDoC)





#### **Recommendations for action**

- Review market surveillance regimes established in other jurisdictions e.g. EU, US, Brazil, Canada, others
- Ensure that legislative and regulatory instruments are in place to permit inspection and enforcement, assess penalties and deal with counterfeit and fraud
- Ensure that robust technical requirements are in place for products entering the marketplace
- Establish an inspection program to survey the market and perform desk audits
- Establish and/or identify test labs that can perform physical audits and compliance testing
- Establish collaborative arrangements with regional partners for early identification of non-compliances





# **THANK YOU**

# billmccrum@bell.net

