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### Needs and Opportunities for establishment of Type Approval Test Labs and role of MRAs

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## What is Type Approval?

- Type approval simply means that the product is certified to meet certain requirements for its **type**, whatever that may be e.g. cellphone, wireless router
- Type approval is granted to a product that meets a minimum set of regulatory, technical and safety requirements
- Compliance to type approval requirements is often denoted by a marking on the product or packaging
- Formal assertion of claims of compliance may be indicated by:
  - Declaration of Conformance
  - Supplier Declaration of Conformance (SDoC)
  - Certification of compliance by an accredited body



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## Basic concepts in Type Approval

- Principal concerns addressed are network harm, interference and safety of life issues
- Performance issues left to marketplace players
- Concept of “family of products” approvals
- Compliant products receive approval mark
- Mark carries, or points to, key data for regulatory authorities and marketplace surveillance
- Issues concerning marking/self marking and collection of fees
- Database listing of all compliant products
- Fees for listing, certification and testing



## Why Type Approval?

- **Promotes transparency** for market access and assures and maintains the confidence of suppliers, importers, end users and new technology developers
- Non-transparent conformity assessment procedures can become effective protectionist tools
- Is in the interest of equipment suppliers, network operators and end users
- Contributes to ensuring the interoperability of networks
- Confirms that products fulfil the requirements laid down in regulations and standards.
- International trend is such that performance and functionality issues should be left to market players
- Ideally every economy should have a type approval system in place





## When to establish a Type Approval Lab

### NEGATIVE DRIVERS

- Vocal user concerns, dissatisfaction, complaints and disorder in the marketplace
- Increased incidence of interference in all services
- Public concerns about health risks such as from exposure to non-ionizing electromagnetic radiation
- Suspicion of dumping of sub-standard products in the marketplace which have failed testing in other countries
- No available test labs in-country or region with acceptable service performance, scope and costs

### POSITIVE DRIVERS

- Standards available or under development to define the technical requirements for products legitimately deployed in the marketplace
- Legislation and regulations in place or under development



## The importance of standards in the Type Approval Processes

- Conformity to technical standards is essential for the interoperability of equipments and networks
- Reduces the risks of confinement to a particular technology and supplier lock-in
- Ensures that legitimate objectives such as safety and non-interference are met
- Contributes to the process of regional integration
- Contributes to market aggregation, competitiveness and trade





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### **International and pseudo-international Standards Organizations 1/3**

- ITU-T - ITU Telecommunication Sector
- ISO - International Organization for Standardization
- IEC - International Electrotechnical Commission
- IETF - Internet Engineering Task Force
- IEEE - Institute of Electrical and Electronics Engineers
- OASIS - Organization for the Advancement of Structured Information Standards
- W3C - World Wide Web Consortium



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### **International and pseudo-international Standards Organizations 2/3**

- CISPR - International Special Committee on Radio Interference
- 3GPP - 3rd Generation Partnership Project
- AIIM - Association for Information and Image Management
- CableLabs - Cable Television Laboratories
- Ecma International
- GS1 - Global supply chain standards (identification numbers, barcodes, electronic commerce transactions, RFID)





## Regional Standards Organizations 3/3

### Africa

- ARSO - African Regional Organization for Standardization
- SADCSTAN - Southern African Development Community (SADC) Cooperation in Standardization

### Americas

- COPANT - Pan American Standards Commission
- AMN - MERCOSUR Standardization Association
- CROSQ - CARICOM Regional Organisation for Standards and Quality
- CITEL - Inter American Telecommunications Commission

### Asia Pacific

- PASC - Pacific Area Standards Congress
- ACCSQ - ASEAN Consultative Committee for Standards and Quality
- APT Standardization Program (ASTAP)

### Europe

- CEN - European Committee for Standardization
- CENELEC - European Committee for Electrotechnical Standardization
- ETSI - European Telecommunications Standards Institute

### Middle East

- AICTO - Arab Information and Communication Technologies Organization



## Role of MRAs in a Type Approval Regime

- Recognition of the competence of third parties to carry out national regulatory/type approval processes
- Avoids the cost of duplicative testing and promotes transparency
- Streamlines market access to foreign markets
- Saves in time to market and production costs
- Circumvents predatory practices and market entry roadblocks
- Reduces diversity of procedures and methods thereby significantly reducing the costs of producers who sell in multiple markets
- Ultimate goal: "one test, done once, valid worldwide"
- TBT Agreement strongly encourages WTO Members to engage in such agreements





## Institutional Arrangements to support MRAs

- Legislation permitting delegation of various authorities e.g. Certification, to foreign MRA partner
- Legislation permitting acceptance of foreign MRA partner competence in calibration
- Pan-Regional organization to host the MRA database e.g. CITELE in the Americas; APEC TEL in Asia-Pacific; EC in Europe
- Joint committee of MRA partners to oversee on-going developments and deal with problems
- Processes and procedures for engagement, operation, problem resolution, and withdrawal from the MRA



## Conclusions

- Type approval test labs form an important part of an orderly telecommunication equipment marketplace
- Test labs need not be in every country to fulfil this objective
- Any given test lab need not have full coverage of all possible technical standards
- Excellent precedents set and information available from currently operating type approval labs in many countries
- Information available includes technical standards, test methods, and operational processes and procedures
- MRAs can provide the framework for mutual acceptance of competence of foreign partners to carry out compliance testing, certification and marking for MRA partner.





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# Thank You

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