



Conclusions of C&I study for Maghreb region

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The way forward

**Study group C&I
Maghreb**

**Audit the existing
+ Upgrade plan**

Specialised laboratories

**Regulatory aspects
+ MRA**



Audit the existing



A study of existing in the Maghreb region in infrastructure, regulation and policy in the domain C & I revealed that:

- no testing laboratories for C & I testing dedicated to radio equipments and telecommunication terminal s as recommended in the manuals and guides of the ITU and the international regulations (except to some extent for Tunisia, a well equipped approval laboratory of the ANRT in Morocco, Mauritania for some approval tests)
- No regulatory harmonization in this domain
- no proper university training policy on C & I and for professionals
- no C & I policy at the spheres of decision-making or C & I culture for the consumer in Maghreb



C&I study group (1)



This group will have the task:

- implementation of a C & I policy to establish a strategy for setting up testing laboratories at national or regional level
- Make a reflection at the Maghreb scale for the adoption and transposition of the equivalent of European Directives and / or ITU recommendations for tests Compliance (ITU Mark)
- Make also a thought at the Maghreb scale for performance and interoperability testing for some radio technologies and Telecom equipments with reference to international standards and ITU recommendations
- Mobilize the necessary funds for the establishment of testing laboratories and quality infrastructure
- Mobilization of expertise and funds to upgrade existing laboratories



C&I study group (2)



- Implementation of a legislative and regulatory framework for the assessment of compliance and harmonization of relevant texts.
- identifying real needs and appreciation of the roles and capabilities of each stakeholder in the concerned countries
- Definition of laboratory designation criteria for market control tests
- Identification of the Maghreb laboratories that can potentially be notified even at medium term
- Coordination of C & I training actions and mobilization of trainers
- Relay point between test applicants and competent laboratories, in particular the regional laboratory



C&I study group (3)



- Coordination between the concerned countries in order to develop MRAs
- Definition of **conformity tests** and **interoperability tests** requested by different types of product across the Maghreb.
- Definition of the criteria and the technical regulatory requirements for market control
- **Coordination** between North African countries towards developing **MRAs** between them (**one by one** at first step). As a second step, MRA could be **extended** to all Maghreb region.
- In third step, we can project to MRAs between Maghreb zone and Europe or Arab region



Upgrade plan



- Identify the shortcomings in the Maghreb laboratories
- Definition of scopes to cover
- Mobilize funds for:
 - missing acquisitions
 - technology transfer
 - Follow up accreditation process



Specialized laboratories (mini Labs)



Invest in specialized laboratories with a **small investment and a limited scope**:

- reduce investment in terms of civil engineering, test setups and measurement equipment
- Accelerate the process of acquisition of hardware and technical expertise
- Aim of ARMs to **ensure complementarities** between existing test setups a test equipments put in place
- Guarantee a measure of compliance even if it does not cover all the normative scope

It is perfectly feasible to extend the scope of the respective laboratories in subsequent phases.



This study showed that there is

- → a lack of capacity and infrastructure, which urge the need of the implementation of an efficient and harmonized conformity assessment program.
- With the exception of Tunisia and Morocco, in part, we can conclude that the other Maghreb countries need to invest in this area to set up new testing laboratories for radio and Telecommunications terminal products
- Harmonize the regulatory framework (the Moroccan initiative, which is following closely by Tunisia and Algeria to transpose the European directives regarding conformity testing).



Outcomes



- define the protocol and interoperability testing that must be privileged to be opted on a regional level,
- the passage through regional coordination with ITU assistance and a regional organization funding such as the Arab League and the UMA is needed to put a **regional working group** that will address this work.
- **use existing resources** in Tunisia and Morocco
- and **invest in small complementary laboratories** for
 - compliance testing (such as for SAR, which is missing)
 - interoperability testing in areas that should be defined as urgent for these countries (mobile, wifi, XDSL and fixed telephony, ...)

Outcomes

- The urgent work to be delegated to the working group since its establishment is
- to **choose** the protocol and interoperability testing that must be set up
 - to **select countries** to implement these testing laboratories,
 - and seek the necessary **funding**.
 - All this work must be accompanied in parallel with **upgrade** of regulatory instruments governing this area of C&I in the Maghreb
 - Capacity building actions should be also planned for the region (the **role of ITU is essential** here).

- Following these regulatory work, this working group can start proposing MRAs by **pairs of countries**
 - (Tunisia - Morocco, Tunisia - Algeria, Tunisia - Mauritania, Algeria - Mauritania, Morocco -Libya ...).
- At the end of this process it is possible to have an agreement for the entire region
- this working group has been proposed following the meeting of Rabat - December 2015
- We propose to pass by the Arab league and UMA
- **ITU can help this approach and encourage the success of this work**



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