CONFORMITY AND INTEROPERABILITY ASSESSMENT ON A REGIONAL BASIS:

Collaboration Among Regional And Sub-Regional Organizations for Establishing a Common Conformance and Interoperability Regime and Mutual Recognition Agreements

Preamble

In the framework of collaboration among regional and sub-regional organizations for establishing a common conformity and interoperability (C&I) regime and mutual recognition agreements, the ITU is carrying out conformity and interoperability assessment on a regional basis. The current study/assessment covers the 15 Southern African Development community (SADC) countries comprising Angola, Botswana, Democratic Republic of Congo (DRC), Lesotho, Malawi, Mauritius, Mozambique, Namibia, Swaziland, Tanzania, Zambia, Zimbabwe, South Africa, Seychelles, and Madagascar. Even though few of these countries notably South Africa and Mauritius have made greater strides in the development of their ICT systems especially in the areas of Conformity assessment, others (e.g. DRC and Lesotho) still need to catch up with those that have made relatively greater progress. It is worth mentioning that Conformance and interoperability of systems within the overall framework of collaboration in the standardization of systems and networks can make a significant contribution to this development hence the need for these assessments in the regions.

Objective

The objective is to undertake the Conformity and Interoperability Assessment on Regional Basis. This project aims to identify all the necessary elements and promote the Collaboration among Regional and Sub-regional Organizations for establishing a common C&I Regime and Mutual Recognition Agreements. The assessment will identify most of the SADC countries requirements and existing gaps in the areas of Conformity Assessment Testing and present some possible and harmonized scenarios to meet the needs and interests of Member States in the Region.

Expected Deliverable/Outcome

At the end of the assessment possible Scenarios for establishing of Common C&I Regime and Mutual Recognition Agreements shall be specified. The deliverable shall also recommend possible ways to facilitate the implementation of ITU Conformity and Interoperability Programme especially in the areas of Capacity building and the Establishment of Test Centres on regional and subregional basis. The assessment shall recommend regional or subregional organisations suitable to perform conformity assessment testing including the function of MRA coordinations. The assessment shall also recommend entities that are capable of providing funding opportunities to support the establishment of testing centers in the region.

Scope of Assessment

In this assessment geographical/ICT indicators (Part A), service providers (Part B), regulatory/ legal framework and institutions (Part C) dealing with conformance assessment, accreditation issues/bodies (Part D), laboratories (Part E), certification bodies and marking (F) are covered for each country. Further, the demographic (Part G), and economic (Part H) factors are also covered.

Assessment Tool/Questionnaire

The tool for this assessment is based on Questionnaire which is found below. The Questionnaire comprises two sections: Section One (for Part A, B, C, D, E and Part F) and Section Two (Parts G and H)

SECTION ONE

A. Geography and ICT Indicators

- ❖ Total Area:
- ❖ Highest point:
- ❖ Lowest point:
- ❖ Penetration of Telecoms and Internet including wireless, broadband and ICTs,
- ❖ Number of voice subscribers (fixed):
- ❖ Number of voice subscribers (mobile):
- ❖ Penetration of voice subscribers (fixed):
- ❖ Penetration of voice subscribers (mobile):
- ❖ Number of internet subscribers:
- ❖ Number of wireless internet subscribers:
- ❖ Number of fixed internet subscribers:
- ❖ Number of internet subscribers using mobile phones for access:
- ❖ Penetration of internet subscribers:
- ❖ Penetration of fixed internet subscribers:
- ❖ Penetration of wireless internet subscribers:
- ❖ % of telecommunications coverage:
- ❖ % of 3G/wireless broadband coverage:
- ❖ % of coverage for fixed access infrastructure (fibre and copper):
- ❖ Penetration of internet in rural areas:
- ❖ Penetration of voice in rural areas:

B. Service Providers

- ❖ Number of mobile network operators:
- ❖ Number of fixed telephony operators:
- ❖ Number of mobile network operators providing 3G (WCDMA, HSDPA, HSPA+) services:
- ❖ Number of service providers deploying WiMAX:

- ❖ Number of service providers deploying LTE:

- ❖ Number of service providers providing Internet:

- ❖ Number of fixed Internet service providers:

- ❖ Number of wireless Internet service providers:

- ❖ Number of telecom infrastructure providers:

- ❖ Number of telecom infrastructure providers (fibre/copper):

- ❖ Number of telecom infrastructure providers (tower):

- ❖ Number of foreign owned telecom service providers:

C. Regulatory Framework and Institutions (Per Country)

- ❖ Is there any regulatory framework and regulation which establishes technical requirements for products and services to be legally imported and deployed in the marketplace?

If yes, what products/services/areas does it cover? (indicate all that apply)

	Service/product/areas covered	YES	NO
1	ICT/telecom products and services (i.e. network and terminal equipment)		
	Electrical/electronic apparatus		
3	Environmental requirements		

- ❖ If yes, indicate the Conformity Assessment Schemes adopted for market entry (check all that apply)

- - certification

- - self-declaration

- - third party declaration (through conformity assessment body)

- - labelling

- - use of proxies such as IEC, FCC, ETSI, etc

- - others (specify)_____

❖ Are these Conformity Assessment Schemes based on the ISO/CASCO set of Guidelines and standards?

❖ If there is legislation and regulation dealing with ICT and telecom products and services and related areas such as electrical safety and environmental issues, how is it applied? Is it compulsory or voluntary?

❖ Where such legislation and regulation exists does it permit delegation of authorities to foreign entities under arrangements such as Mutual Recognition Agreements (MRAs) on Conformity Assessment e.g. for certification?

❖ Is there a national standards system and national standards development organisation (SDOs)? (indicate YES/NO in the following table)

	YES	NO
National standards system		
SDO		

❖ Where such SDOs exist are they committed to adoption of international standards wherever possible rather than developing national standards which may deviate from the international ones?

❖ Is there Metrology legislation and any National Institute of Metrology responsible to maintain the national measurement standards in the country; to establish and maintain their metrological traceability to the units of the International System of Units (SI)?

	YES	NO
Metrology legislation exists?		
National Metrology institute for national measurement and their traceability to international units		

- ❖ If Metrology legislation exists in your country does it permit delegation of authorities to foreign entities under arrangements such as MRAs e.g. for calibration of equipment?

- ❖ Is there any Institution responsible for the Development of conformity assessment programs?

- ❖ If, YES, which areas of conformity assessment does it cover? (indicate all areas that apply)

	Areas covered by conformance assessment programs	YES	NO	M*	V^
1	Products				
2	Processes				
3	Services				
4	Personnel				

indicate whether conformance assessment in this area is mandatory (M)

^ indicate whether conformance assessment in this area is voluntary (V)

What are these Institutions involved in the development of conformance assessment programs? (name all)

- ❖ What are the possible resources from National/Regional/International Funds to assist private and public sector to invest in infrastructure, e.g., Labs and human resources? (list all)

- ❖ Is there legislation and regulation which establishes importation requirements for products and services such as ICTs including telecom products, electrical safety and environmental aspects

- ❖ How is importation control of the products entering the country/region enforced e.g. at point of entry, spot checks and post market surveillance?

- ❖ Is there a post market surveillance, audit and enforcement regime established for products entering the country/region, and deployed in the country/region, and a schedule of punishments for infractions?

- ❖ What actions, if any, are undertaken to identify counterfeit products and what actions are taken to remove such products from the marketplace and to deal with parties responsible for bringing them into, or deploying them in the country/region?

    - *counterfeit products are identified by (list all means):*

    - *the actions taken to remove counterfeit products include (list/state all):*

    - *action taken against parties that bring into and deploy counterfeit products include(list all action):*

D. Accreditation

- ❖ Is there any Accreditation Body (ISO/IEC 17011) (not only in ICT)?

- ❖ In which field/s does it accredit organisations and with what scopes?

	Accreditation body	Field (e.g. telecom)	Scope (e.g. products/services/personnel etc)
1			
2			
3			
4			

E. Laboratories

- ❖ What are the Laboratories identified in the country/region and what service levels do they provide (e.g. 1st, 2nd and 3rd party testing)?

- ❖ Are they (Labs) Accredited (ISO 17025) or is there any kind of peer evaluation of the lab?

- ❖ What are the fields and scopes of such Labs?

- ❖ How is the laboratory funded? (by Government, Organisations and Individuals). Indicate all that apply

F. Certification Bodies And Marking

- ❖ What Certification Bodies (ISO/IEC 17065) are in the country, where are they located?

- ❖ What are the fields and scopes of the Certification Bodies? (eg ICTs and Telecom)

- ❖ What Marks of conformity are on products in your country/region that are trusted – i.e. trusted Marks e.g. EU, FCC, IEC etc

G. Demographics

- ❖ Population (Total):
- ❖ Population (Female):
- ❖ Population (Male):
- ❖ Population Growth Rate:
- ❖ Birth Rate:
- ❖ Death Rate:
- ❖ Life Expectancy:
- ❖ Life Expectancy (Female):
- ❖ Life Expectancy (Male):
- ❖ Fertility Rate:
- ❖ Infant Mortality Rate:
- ❖ Literacy rate:
- ❖ Age Structure
- ❖ 0-14 years:
- ❖ 15-64 years:
- ❖ 65 and above:
- ❖ Native Languages:
- ❖ Official Languages:

H. Economy

- ❖ Gross Domestic Product (GDP):
- ❖ GDP Growth:
- ❖ GDP per capita:
- ❖ GDP by sector:
- ❖ Inflation:
- ❖ Unemployment Rate:
- ❖ Main industries:

- ❖ Exports (value):
- ❖ Export Goods:
- ❖ Main Export Partners:
- ❖ Imports (value):
- ❖ Import Goods:
- ❖ Main Import Partners:
- ❖ Foreign Direct Investment (value):
- ❖ Gross External Debt (country specific):
- ❖ Public Debt (country specific) :
- ❖ Foreign Reserves (country specific):