



TOGETHER
for a sustainable future

OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.



TOGETHER
for a sustainable future

DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org

REV 1

RESTRICTED

June 2011
Original: English

REPORT ON
WEST AFRICAN REGIONAL QUALITY INFRASTRUCTURE

SSA No: 10 1028 RS

Based on the work of Martin Kellermann

United Nations Industrial Development Organization (UNIDO)
Vienna

Contents

ACRONYMS AND ABBREVIATIONS	3
PREFACE	5
EXECUTIVE SUMMARY.....	6
PART I – GENERAL INFORMATION AND INTERNATIONAL CONTEXT.....	9
1 Introduction.....	9
2 Standards, technical regulations and SPS measures.....	9
3 The Quality Infrastructure (QI).....	14
4 Quality Infrastructure at the African level	18
5 Regional Quality Infrastructures in Africa	19
PART II – THE CURRENT SITUATION IN ECOWAS	24
6 The regional QI in UEMOA.....	24
7 The situation in ECOWAS	25
PART III – POLICY ISSUES REGARDING A QI AT THE ECOWAS LEVEL.....	28
8 Policy decisions to be taken regarding the Quality Infrastructure.....	28
9 Policy decisions to be taken regarding the Technical Regulation Framework.....	41
PART IV – VALIDATION WORKSHOP IN ACCRA (APRIL 2011).....	45
10 Background.....	45
11 Summary of the break-out group discussions.....	45
12 Detail consideration of the break-out group outcomes.....	49
PART V: KEY POINTS OF AN ECOWAS QUALITY POLICY.....	56
13 West African Common Industrial Policy (WACIP)	56
14 Quality Policy framework	57
PART VI: HIGH LEVEL ROAD MAP	60
15 General.....	60
16 Conclusion	62
REFERENCES	63

ACRONYMS AND ABBREVIATIONS

AFRAC	-	African Regional Accreditation Cooperation
AFRIMETS	-	Inter-Africa Metrology System
ARSO	-	African Regional Standardization Organization
BIPM	-	Bureau International des Poids et Mesures
BRC	-	British Retail Council
BS	-	British Standard
CAC	-	Codex Alimentarius Commission
CAFMET	-	Comité Africain de Metrologie
CEN	-	Comité Européen de Normalisation
CENELEC	-	Comité Européen de Normalisation Électrotechnique
CGPM	-	Conférence Général de Poids et Mesures
CIPM	-	Comité International des Poids et Mesures
COFRAC	-	Comité Français d'Accreditation
CREQ	-	Comité Régional de la Qualité
DIN	-	Deutsche Industrie Norm
EAC	-	East African Community
EAS	-	East African Standard
EASC	-	East African Standards Committee
EC	-	European Commission
ECOWAS	-	Economic Community of West African States
EN	-	European Norme (Standard)
ETSI	-	European Telecommunication Standards Institute
EU	-	European Union
IAF	-	International Accreditation Forum
IEC	-	International Electrotechnical Commission
ILAC	-	International Laboratory Accreditation Cooperation
IPPC	-	International Plant Protection Convention
ISO	-	International Organization for Standardization
ITU	-	International Telecommunications Union
KENAS	-	Kenya Accreditation Service
MLA	-	Multilateral Recognition Arrangement
MoU	-	Memorandum of Understanding
MRA	-	Multilateral Recognition Agreement
NGO	-	Non-governmental Organization
NMI	-	National Metrology Institute
NMISA	-	National Metrology Institute of South Africa
NORMCERQ	-	Organisme Régional de Normalisation, de Certification et de Promotion de la Qualité
NQI	-	National Quality Infrastructure
NSB	-	National Standards Body
OAU	-	Organization of African Unity
OIE	-	Office International des Epizooties
OIML	-	Organisation International de Métrologie Légale
QI	-	Quality Infrastructure
RMO	-	Regional Metrology Organization

SADC	-	Southern African Development Community
SADCA	-	SADC Cooperation in Accreditation
SADCAS	-	SADC Accreditation Service
SADCMEL	-	SADC Cooperation in Metrology
SADCMET	-	SADC Cooperation in Legal Metrology
SADCSTAN	-	SADC Cooperation in Standardization
SANAS	-	South African National Accreditation Services
SANS	-	South African National Standard
SOAC	-	Système Ouest Africain d'Accreditation
SOAMET	-	Système Ouest Africain de Métrologie
SPS	-	Sanitary and Phytosanitary
SQAM	-	Standards, Quality, Accreditation and Metrology
SQAMEG	-	SQAM Expert Group
SQMT	-	Standards, Quality Assurance, Metrology and Testing
TBT	-	Technical Barriers to Trade
UEMOA	-	Union Économique et Monétaire Ouest-Africaine
UNECA	-	United Nations Economic Commission for Africa
UNIDO	-	United Nations Industrial Development Organization
WTO	-	World Trade Organization

PREFACE

A Quality Infrastructure (QI) is no longer a nice to have, but is a necessity to help exporters gain and maintain access to foreign markets and to help authorities in the effective implementation of technical regulations or mandatory standards. The QI is important at the national level as countries and their governments are developing and implementing trade policies that are designed to bring about exports, higher incomes and so upgrade the quality of life of its peoples.

As regional trading blocs move from Customs Union to Common Market and ultimately Political Union, a regional QI offers some of the same advances at the regional level, but it is even more important in respect of coordinating national efforts, provide appropriate linkages to the international level and to facilitate international recognition of the national QIs.

This discussion document has been developed to provide background information to the discussion on a regional QI in UEMOA/ECOWAS. The document has been divided into four parts:

- General information and international context. In this part background is provided on the elements of a quality infrastructure, their relationships, international best practices and regional quality infrastructures in other African trading blocs.
- The current situation in ECOWAS. In this part the situation at the time of writing regarding the regional QIs in UEMOA and ECOWAS (without UEMOA) is portrayed, QI that has developed quite differently in the past few years.
- Policy issues regarding a QI at the ECOWAS level. In this part the various issues that would require policy decisions before an effective and efficient regional QI can be developed and implemented, are discussed. These policy decisions would constitute the essence of an ECOWAS Quality Policy.
- Key points in developing an ECOWAS Quality Policy. In this part the placement of an ECOWAS Quality Policy in the overall body of ECOWAS policies is discussed, and a draft roadmap for the development of such a policy is presented.

In this discussion paper policy issues are majored on, rather than provide an in-depth exposé of the very technical and complex QI environment internationally, regionally and even nationally. Hence, references and further reading are provided at the end of the discussion paper, and readers are encouraged to broaden their knowledge, where necessary, by accessing these.

All of this will have to be carefully considered in the UEMOA/ECOWAS region in order to arrive at appropriate policies and strategies regarding a regional QI and its relationship with the national QIs of the members of ECOWAS that are widely disparate in their level of service delivery and maturity. It is hoped that this discussion paper will foster an in-depth discussion regarding the quality infrastructure and its concomitant quality policy at the ECOWAS level.

EXECUTIVE SUMMARY

A Quality Infrastructure (QI) is understood as the totality of all the institutions both public and private that provide standardization, metrology, accreditation and conformity assessment services whether required by suppliers, purchasers or authorities. In order to fully appreciate the extent of QI activities it is important to first understand the difference between standards, technical regulation and SPS measures. Standards are documents published by recognized organizations at the international, regional and national levels that provide technical guidelines for products and services compliance with which is always voluntary. Technical regulations (that include mandatory standards) are similar to standards, the difference being that compliance is mandatory by law. SPS measures are a further refinement of technical regulations in that they only deal with very specific health and safety issues related to individuals and the fauna and flora.

A vast number of international, regional and national QI institutions have been established over time. In order to coordinate activities and foster cooperation and recognition relating to the QI, regional and international organizations have been established. At the international level these include ISO, IEC, ITU, BIPM, OIE, IPPC, OIML, IAF, ILAC, and many more. Regional structures on the African continent that relate to the international organizations include ARSO, AFRIMETS and AFRAC. Because of the vast distances of Africa, recognition of national counterparts is usually organized through sub-regional structures within trade groupings. These have already been established for example in SADC and the EAC. In UEMOA some QI structures have been established through legislative instruments even though operationally, they are only at the beginning of their journey. In the larger ECOWAS no such structures have been formally established yet. This has serious negative consequences for the West African region as regards international recognition of their inspection, testing and certification services that should support intra-regional trade and exports from the region.

Internationally emerging best practices exist regarding the establishment of a regional QI and its relationship to the national QIs of the member states of the region. In evaluating such emerging practices and applying them to West Africa a number of important issues on which high level political and/or technical decision have to be made, are identified. These include amongst others:

- Should a regional standards organization be established that would be responsible for the harmonization of standards across the region, standards that could facilitate trade and that could be utilized as the basis for technical regulation? If so, what should its organizational form and governance be? What would its relationship to the international and national standards organizations be?
- In what way should the metrology infrastructure of the region be organized to ensure that the measurements emanating from the region are acceptable to the international markets? How can the multiplicity of national memberships in the sub-regional metrology groupings be resolved? Should legal metrology for the region be enlarged to include health, safety, law enforcement and environmental control over and above the well-established weights and measures for trade?
- How can the total lack of accreditation bodies in the region be resolved? Should national accreditation bodies be facilitated or should a regional body be established? How will international recognition in the shortest possible time be achieved?

- In what way should conformity assessment services be organized? Should preference be given to national bodies, or should the private industry be left to its own devices in establishing such services? How can the authorities make optimum use of conformity assessment service providers in providing services with a public responsibility dimension such as for technical regulation?
- How should all these QI services be coordinated and organized at the regional level and how should the existing UEMOA and ECOWAS structures be subsumed into a future West African QI?

At a validation workshop in Accra in April 2011 these issues were considered by representatives from all the ECOWAS member states and the UEMOA and ECOWAS Commissions. Much common ground was identified, some differences of opinion surfaced and on one or two issues diametrical opposing views were tabled. These include:

- Regional standards are a necessity and a new, permanent regional standards organization should be established on the pattern of CEN/CENELEC, the EU regional standards organizations, rather than the representative committee structures of SADC and EAC. Regional technical committees will be representative of the national NSBs, and the commercial exploitation of West African standards will be vested in the national NSBs.
- The sub-regional metrology organization SOAMET should be expanded to include all the ECOWAS member states, and membership in other sub-regional metrology organizations should be relinquished by the relevant member states. A few national metrology institutions should be identified to act as the link to international metrology inter-comparisons, who in turn would spearhead regional inter-comparisons. Legal metrology should be extended from its trade related weights and measures base, to also include law enforcement, health and safety and environmental control. No regional metrology institution should be established, but a coordinating regional structure is required.
- A new regional accreditation body should be established and it should pursue international recognition as soon as possible. The UEMOA accreditation structure should be subsumed into it. Member states that wish to establish their own national accreditation body may do so, but a MoU between them and the regional body should be established to ensure proper delineation of accreditation services in the region.
- A new regional product certification mark scheme should be established. NSBs and national certification bodies may be given authority to exploit this scheme commercially by the ECOWAS Commission once they meet defined requirements. The Commission will be the custodian of the mark and the approval rules and mechanisms of the same.
- No regional system certification system needs to be established as commercial system certification organization already serve the market well, and a regional system may not survive the tough competitive market.
- Other than agreeing that a permanently staffed regional QI structure is necessary, details of such a structure could not be resolved. There was agreement that the three fundamental QI structures, namely standards, metrology and accreditation need to be catered for. It still has to be resolved whether such structures would be an integral part of the ECOWAS Commission, whether they would be statutory bodies established in terms of community legislation or whether they should be established as stand-alone associations under a MoU with the ECOWAS Commission.

Governance issues of these would also require serious reflection to arrive at an acceptable solution for the region.

The way forward is the development of an ECOWAS Quality Policy that would provide for the politically approved framework of the West African QI, and the parallel development of the legislative instruments that could be presented to the relevant political levels in ECOWAS for consideration and promulgation. These would be followed by in-depth planning for the establishment of new West African QI organizations or the re-engineering and/or subsuming of current structures as relevant. The drafting of the Quality Policy and legislative instrument would be undertaken by a small group of experts including administrative and legal experts from the ECOWAS and UWMOA Commissions. The drafts will be submitted for consultations to a much larger stakeholder community at national and regional level before being submitted for promulgation to the political level. The detail planning for implementation is to be conducted by experts accountable to the ECOWAS Commission. High level milestones and a high level road map to be considered as part of the process complete this report.

PART I – GENERAL INFORMATION AND INTERNATIONAL CONTEXT

1 Introduction

Technical and quality requirements for products can take many forms, but compliance with such requirements, whether demanded by the market or by regulatory authorities, is a prerequisite for successfully entering a market. The supplier, manufacturer or trader has to make sure that his product or service demonstrably meets these formally stated or sometimes even inferred requirements. Such evidence can be provided by the manufacturer, but in many cases the services of an independent third party would be required in order to present evidence of compliance that will be trusted. The compilation of institutions that provide such services are known as the Quality Infrastructure¹, defined in a more formal way in the box below.

The **Quality Infrastructure** (QI) means the totality of the institutional framework (public or private) required to establish and implement standardization, metrology (scientific, industrial and legal), accreditation and conformity assessment services (inspection, testing and product- and system certification) necessary to provide acceptable evidence that products and services meet defined requirements, be it demanded by authorities (technical regulation) or the market place (contractually or inferred).

The Quality Infrastructure can be viewed from a national or a regional perspective. This is especially important in the case of developing economies where it is frequently very difficult to provide the whole gamut of standardization and quality related services to effectively and efficiently serve the industry, authorities, exporters and importers alike. In such cases a QI established at the regional level, i.e. in an economic bloc such as UEMOA/ECOWAS, does seem to be a viable and affordable alternative. Regional QIs for example, have been operating in SADC and EAC for more than a decade. What is clear however, is that a modern QI, whether at the national or regional level, does not develop all by itself. Effective and efficient QIs thrive in an enabling and supportive policy and legislative environment, i.e. a Quality Policy and Regulations/Acts of Parliament.

Before discussing the various elements of a QI, it is important to sketch the international context, and to clarify a few of the commonly utilised terms that frequently lead to misunderstandings and heated debates.

2 Standards, technical regulations and SPS measures

Within the QI community and amongst outsiders, the differences and similarities of three concepts, namely standards, technical regulations and SPS measures, have probably been responsible for more confusion than any other. As they have a marked influence on understanding the functionality of the Quality Infrastructure, it is important to define them as clearly as possible before moving on to the QI discussion. Standards, technical regulations and SPS measures have a major influence on trade,

¹ In the past SQMT, MSTQ, SQAM, and a few other variations were used as an acronym for the combination of standards, metrology, accreditation, quality assurance, testing and certification in various formats. In this discussion paper the more modern term Quality Infrastructure will be used throughout, but all the others are obviously included.

hence they are the subject of two WTO Agreements, namely the WTO Agreement on Technical Barriers to Trade (TBT Agreement) and the WTO Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement).

2.1 Standards

A standard (French: norme) is a document that describes the characteristics of a product or a service, such as design, weight, size, performance, environmental requirements, interoperability, material, the process of production or service delivery or even the protocols that allow computers or cell-phones to connect to each other. The standard may include or deal exclusively with terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method. Measurement standards (French: étalon) will be dealt with later.

Standards are generally divided into public standards and private standards. Public standards are developed and published by recognized organizations, i.e. standardization organizations. This takes place at the international, the regional and at the national level. Such standards are developed taking the needs and wishes of many stakeholders into consideration, i.e. they are developed with consensus principles in mind. It implies that the effect of the standard will be similar on all suppliers and on all consumers, and that externalities such as health, safety and environmental considerations have been considered.

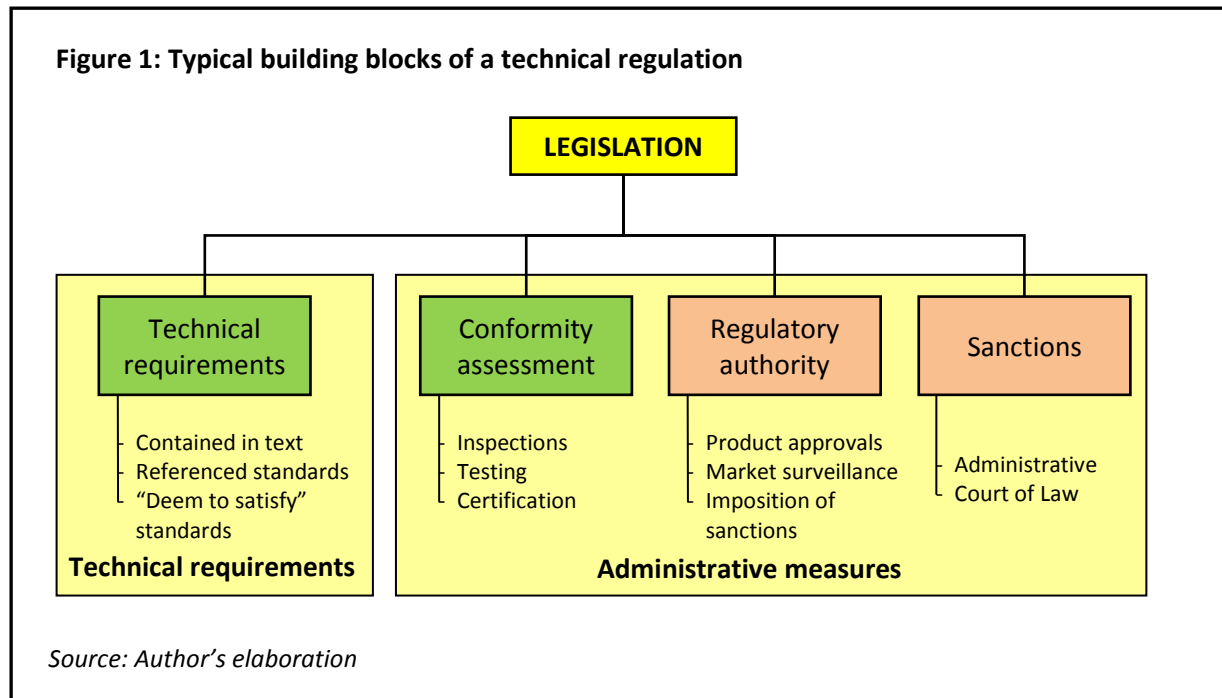
Typical international standards are those published by the International Organization for Standardization (ISO), the International Electrotechnical Commission (IEC), the International Telecommunication Union (ITU), the Codex Alimentarius Commission (CAC), the International Office of Epizootics (OIE), the International Plant Protection Convention (IPPC) to name the most important. Probably the best known regional standards are the European Union harmonized standards (EN), but there are also others such as the inter-governmental standards of the states of the former Soviet Union (GOST) or the East African Community standards (EAS) for example.

National standards are published by more than 150 countries world-wide. Typical national standards are British Standards (BS), Deutsche Industrie Norm (DIN), South African National Standards (SANS), Indian Standards (IS), etc. It is difficult to quantify the number of public standards in the world, but the Perinorm Organization for example has listed more than 700 000 standards on their database that only covers the most important public standards. Standards are frequently the basis on which technical regulations and SPS measures are promulgated, thereby making some or all of their content enforceable by law.

Private standards are developed by specific non-government groupings, i.e. sectoral organizations including NGOs, consortia, certification bodies or major retailers. Private standards are generally geared to meet the needs of those who develop and publish them. Private standards usually require third-party certification of suppliers, as a self-declaration of conformity is generally not accepted by the market. On the other hand, none of the private standards are enforceable by government under law. Hence the decision by a supplier to obtain certification is always a business decision, depending on whether it will be profitable to do so or not.

2.2 Technical regulations

Products fail and so endanger the health and safety of people, or have a negative effect on the environment, or sometimes products are offered in such a way that consumers are seriously deceived. To deal with such failures, governments implement official controls to address the issue. Such controls are called technical regulations as defined in the WTO TBT Agreement. They look very much like standards, and are often based on standards or even reference them. Whereas standards are considered to be “voluntary” in principle, i.e. suppliers have a choice to comply or not, technical regulations are mandatory in nature, i.e. everybody has to comply by law, there is no choice.



A technical regulation is therefore a document or legislation that lays down *product characteristics* or their related processes and production methods. A technical regulation may also include or deal exclusively with terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method. In all cases a technical regulation would include the *administrative measures* required to implement it, i.e. identifying the regulatory authority, listing the conformity assessment requirements, provide for market surveillance responsibilities and the implementation of sanctions in the case of non-compliance. This is another difference between standards and technical regulations – standards lack the administrative measures. The building blocks of a typical technical regulation are shown in the Figure 1.

Technical regulations are developed and implemented by a variety of Ministries or regulatory agencies or both, depending on the practices and legal system of the country. Technical regulations are generally not developed by consensus principles. In addition, technical regulations are often called something quite different. In the case of the European Union (EU) they are called *Directives* or *New Directives*. In some countries they are called *Compulsory* or *Mandatory Standards*, sometimes even *Compulsory Specifications* or just simply *Regulations*.

Technical regulations can apply to any industrial and agricultural product. An agricultural product may therefore be subject to both technical regulations and SPS measures. It is also frequently the case that a specific product is subject to more than one technical regulation, e.g. a fax machine may be subject to electrical safety requirements, to electromagnetic interference requirements and to connectivity requirements with regard to the communication network of the country. These three technical regulations may even be administered by three different regulatory agencies, thereby further complicating matters for the suppliers.

2.3 SPS measures

Sanitary and phyto-sanitary (SPS) measures are requirements imposed on goods by governments to control certain kinds of risks to human, animal or plant life and health as defined in the WTO Agreement on the Application of Sanitary and Phytosanitary Measures. The Agreement confirms the right of WTO Members to apply such measures provided that they conform with the provisions of the Agreement. For the purposes of the SPS Agreement, sanitary and phytosanitary measures are defined as any measures applied:

- to protect human life or health from risks arising from additives, contaminants, toxins or disease-causing organisms in food and beverages, or from diseases carried by animals or plants or their products, or from pests;
- to protect animal life or health from risks arising from additives, contaminants, toxins or disease-causing organisms in feedstuffs, or from diseases carried by animals or plants, or from pests, diseases, or disease-causing organisms;
- to protect plant life or health from pests, diseases, or disease-causing organisms; or
- to prevent or limit other damage to a country from the entry, establishment or spread of pests.

Typical SPS measures include the food standards enforced by government agencies to ensure the safety of foods, and the bio-security controls enforced at international borders to keep out exotic pests and diseases of animal and plants. They include measures taken to protect the health of fish and wild fauna, as well as of forests and wild flora. Measures for environmental protection, to protect consumer interests, or for the welfare of animals, other than as defined above, are not covered by the WTO SPS Agreement and would fall under the WTO TBT Agreement.

2.4 The relationship between standards, technical regulations and SPS measures

The terminology of standards, technical regulations and SPS measures is frequently a source of confusion. The reason is that common usage of these expressions in many countries does not necessarily correspond to the specific legal meanings given to these terms in the SPS and TBT Agreements. So, for example, many countries have official *food standards* that must be obeyed, whereas the TBT Agreement says that compliance with *standards* is not mandatory. In addition, the word *standard* is used with differing meanings between the SPS and TBT Agreements.

Firstly, however, it is important to understand that the TBT and SPS Agreement are complementary. The SPS Agreement applies to a defined set of official requirements, called *SPS measures*, concerning the control of certain risks to human, animal and plant life and health. By their nature SPS measures are technical barriers to trade, but they are not covered by the TBT Agreement; their use is subject to the SPS Agreement. All other technical barriers to trade are subject to the TBT Agreement. It is

however, quite possible that a specific product may be subject to both SPS measures and technical regulations depending on the attribute to be controlled, i.e. fall within the scope of both the SPS and the TBT Agreement².

Under the TBT Agreement, a *technical regulation* is a document compliance with which is mandatory – that is, it is legally binding. The TBT Agreement requires technical regulations to be based on international standards where these are available. On the other hand, under the TBT Agreement a similar document that is not meant to have mandatory application is called a *standard*. Standards are recommendations; the users of a standard may decide for themselves which standards are relevant for them and whether the benefits outweigh the costs of implementation.

Under the SPS Agreement, the definition of *SPS measure* does not refer to standards, or to technical regulations, but it is clear that an SPS measure is similar to a technical regulation as defined in the TBT Agreement. However the SPS Agreement also says that WTO Members should base their SPS measures on the international *standards, guidelines and recommendations* developed by specific organisations, namely the Codex Alimentarius Commission (CAC), the Office International des Epizooties (OIE) or under the auspices of the International Plant Protection Convention (IPPC). These are inter-governmental bodies that develop international norms, including many *standards* that are intended for mandatory application by governments.

The responsibility for developing and promulgating technical regulations and SPS measures lies with the state and its authorities. Likewise, the enforcement of technical regulations and SPS measures is the responsibility of the state and its authorities. Ultimately, these tasks are embodied in the legal system and the constitution of the state, and the way in which they are done is the sovereign decision of the state.

The responsibility for developing and publication of standards lays with recognized standards bodies. Approval of the standards is vested in the councils or boards of these standards bodies which – in accordance with international good practices – consist of representatives from interested parties, including the state. The standards development process follows internationally agreed principles such as openness, consensus and transparency.

There is therefore a strong relationship between standards, technical regulations and SPS measures, but there are also fundamental differences mostly related to their implementation and the responsibility for developing them.

² TBT measures could cover any subject, from car safety to energy-saving devices, to the shape of food cartons. To give some examples pertaining to human health, TBT measures could include pharmaceutical restrictions, or the labelling of cigarettes. Most measures related to human disease control are under the TBT Agreement, unless they concern diseases which are carried by plants or animals (such as rabies). In terms of food, labelling requirements, nutrition claims and concerns, quality and packaging regulations are generally not considered to be sanitary or phyto-sanitary measures and hence are normally subject to the TBT Agreement.

On the other hand, by definition, regulations which address microbiological contamination of food, or set allowable levels of pesticide or veterinary drug residues, or identify permitted food additives, fall under the SPS Agreement. Some packaging and labelling requirements, if directly related to the safety of the food, are also subject to the SPS Agreement.

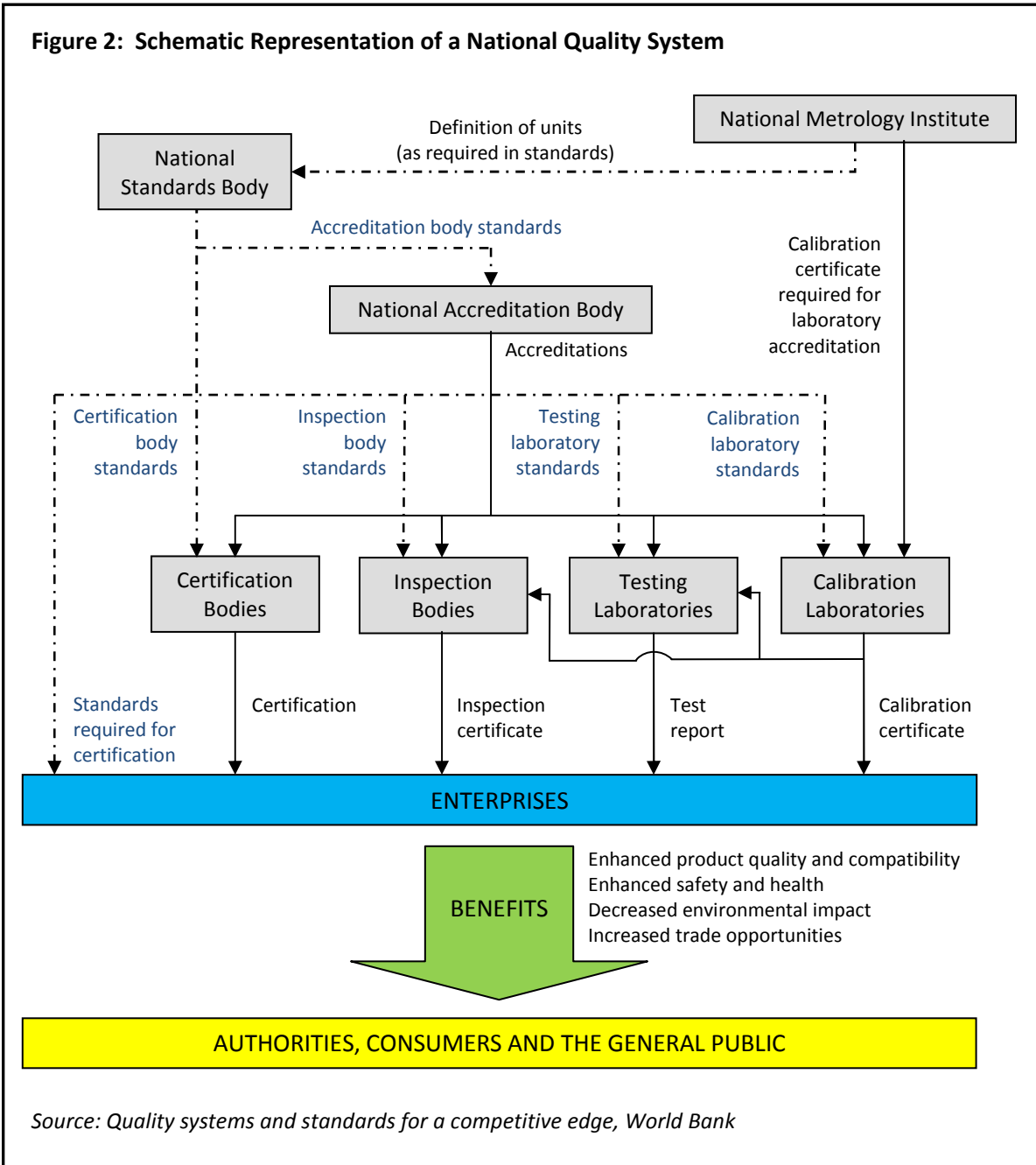
3 The Quality Infrastructure (QI)

In Figure 2 an overview of the NQI institutions and their relationship to each other is shown in a national context. In sections 4 and 5 the possibilities of regional structures that can support the national QI, as well as provide services in selected areas where national structures would be unaffordable, are discussed. But it is necessary to first understand the national situation before moving on to the regional level.

3.1 Services provided by the QI institutions

The services provided by the various organizations that make up the QI are as follows:

- Standards are developed and published under the auspices of the National Standards Body (NSB). The NSBs in most countries are government type organizations, although “not-for-gain” public companies are on the increase. Most countries have an NSB, even though its services may have to be enhanced to meet the needs of the export community. The NSB is an important link to the international and regional standardization organizations such as ISO, IEC, or CEN, CENELEC, EASC and others. These links are strategically important, because developing economies can gain early insight into market developments and influence international and regional standards to their own advantage. Funding for the NSB is frequently provided by the state as a “good for country” measure.
- Metrology services start with the National Metrology Institute (NMI). It is responsible for establishing and maintaining the national measurement standards. The NMI is usually also the custodian of the national calibration service infrastructure, ensuring that measurements in industry and testing laboratories are comparable to international standards through the national measurement standards. It is all about a traceable link for measurements. Establishing and maintaining national measurement standards is a very expensive business, and generally does not work without continuous financial support from the state. Regional metrology institutes have been considered, but so far they have not worked very well, mostly due to political issues. The NMI represents the country in international forums such as the BIPM, and regional structured such as AFRIMETS. In many developing economies the NMI functions are integrated with either the NSB or the Legal Metrology Department of the state.
- Legal metrology (strictly speaking part of the regulatory regime but frequently seen as part of the NQI because of common technologies) is that part of metrology that seeks to ensure that measuring instruments utilised in trade, law enforcement and health services for example are accurate throughout their service life. This is to ensure that an equitable transactional situation exists between the consumer, citizen or patient and the trader, law enforcement agencies and health services. The agency charged with this responsibility will administer legislation dealing with the approval of measuring instruments before marketing, calibration and verification of the same on placing them in service as well as at prescribed intervals thereafter. In addition, pre-packaging of goods is monitored to ensure that consumers are not deprived of amounts they pay for.
- Accreditation must be provided by an organization independent from any conformity assessment service provider. Two international organizations, the IAF (certification bodies) and ILAC (laboratories) manage the international recognition of national accreditation schemes. In developing economies, accreditation bodies are generally established by the state, but they can become more self-sufficient once they approach 200 to 250 accredited organizations. A single, National



Accreditation Body (NAB) is the most cost effective way by far of organizing accreditation in a country. International recognition through ILAC and IAF is a long process; it can take up to seven or eight years. Hence, very few developing economies have a fully functional accreditation body that is a signatory of the ILAC multilateral recognition agreement or the IAF multilateral recognition arrangement, and alternative arrangements, such as a regional or multi-economy accreditation body, or a recognition agreement with a foreign accreditation body to act as the *de jure* NAB have to be pursued.

- Inspection is mostly utilized to check compliance of batches of products with stated requirements, and it can be provided by any number of organizations, whether in the private or public domain. Inspection organizations should be technically competent, i.e. accredited to ISO/IEC

17020. In many countries inspection organizations play a big role in ensuring compliance with technical regulations, such as import inspections, whether at entry or pre-shipment of products. Most inspection services have to be paid for; a few are funded by the state. In some areas, especially food safety, so-called *Competent Authorities* are made responsible for the certification of export products. They are basically public inspection authorities that are established by governments, and they should be acceptable to the recipient country authorities.

- Testing is required to demonstrate compliance of products with technical requirements. Testing services can be provided by any number of laboratories either in the public or private sector. Testing services generally have to be paid for by the sponsor. In developing countries most test services are provided by state owned laboratories, whereas in developed countries the private laboratories provide the bulk of the services. Whether public or private, testing laboratories should be accredited to ISO/IEC 17025 to demonstrate their technical competence.
- Certification is an attestation of compliance of a whole production of products, or the company producing it. Certification bodies are generally to be found in both the NSBs and in private industry, especially at the multinational level. Certification bodies should be accredited to ISO/IEC 17021 in the case of system certification and to ISO/IEC Guide 65 (soon to be replaced by ISO/IEC 17065) in the case of product certification. Certification has to be paid for by the organization seeking it. Bodies providing certification to private standards such as Globalgap or BRC, have to be accredited by the controlling organizations of those schemes.

3.2 QI institutional setup

In a developed economy, it is quite common to find separate organizations responsible for many of the above NQI services, and private service providers rather than governmental organizations providing conformity assessment services (e.g. inspection, testing and certification). In a developing country such as most of the ECOWAS members, this is not feasible in the short term, and the government has to provide the impetus for establishing the NQI organizations and fund them until they become self-sufficient. A question is which of these can be provided at the regional level, and which ones have to be provided at national level and why.

In developing countries with few resources, the tendency is to establish a single entity that must provide all the services of a NQI. This is however, only possible with some limitations if the outputs of the system needs to be recognized internationally. These limitations, which are mostly related to conflicts of interest, are as follows:

- Accreditation may not be provided by an organization that also provides conformity assessment services of any kind. Hence, if the national standards body (NSB) is to provide testing and certification together with its core function of publishing national standards as would be the case in most developing economies, it cannot be made responsible for accreditation.
- It is generally considered a bad practice, i.e. a conflict of interest, if the standards setting body is also responsible for the administration of mandatory standards or technical regulations. The risk of developing standards just to have them declared mandatory is too high. This means that countries should (i) Establish regulatory agencies in each of the relevant Ministries, or (ii) Establish a single, national regulatory agency responsible for all technical regulation implementation

as required by the various Ministries, or (iii) Establish two or three agencies responsible for food, manufactured products and telecommunication respectively.

- The regulatory authorities' activities should be limited to product approvals where absolutely necessary, market surveillance and the imposition of sanctions. Regulatory authorities should not be involved in testing, as the risk of unnecessary re-testing of especially imported products in order to keep the laboratories busy is considered an unnecessary and unacceptable trade barrier. The agencies should utilise the services of the NQI for testing and certification.
- Technical regulation should be based on international, regional or national standards. Hence, it is considered good practice if the regulatory authorities do not publish normative type documents, but engage with the NSBs to publish those national standards they can reference in technical regulation.
- There is no conflict of interest if the NSB is also responsible for fundamental metrology and the national calibration system. Although legal metrology is often combined with fundamental metrology and the national calibration system due to limited resources and metrology personnel, it is not the most effective way of organizing the metrology domain. Legal metrology personnel are in effect regulators, have a specific profile, whereas fundamental metrology is a much more scientific endeavour with a different type of personnel required.

3.3 Structures and governance of the QI

From the previous two sections it should become clear that the QI comprises of many elements, and that the organizational structure is not a given – there is no single definitive way of organizing it. It is therefore very important that a country or a region should consider the way in which the various elements of the QI are established and operated. As these are largely policy and strategic decisions, it is imperative that a proper Quality Policy is developed, approved and implemented to give effect to the decisions. Elements that need to feature in such a policy document include:

- Will the organizational structure be an integrated, semi-integrated or totally separated institutional framework. Integrated organizations make effective use of scarce resources, but they run the risk that focus of management may be on only one of the elements. They are also more difficult to connect to the international domain and international recognition is more problematic. Separate organizations, especially for standards, metrology and accreditation connect more easily to the international domain, but are more expensive due to duplication of management, administrative support and the like.
- The legal form of the various organizations constituting the QI has to be considered. Regarding standards organizations, nearly half the ISO members are government departments. Of the rest, most are statutory bodies, but “not-for-profit” private companies are a growing tendency – up from 8% ten years ago to more than 20% in 2009. Metrology institutions are mostly government organizations. Accreditation bodies on the other hand are a mixture of state organizations and “nor-for-profit” private companies albeit with an agreement with their governments regarding their status.
- The governance of the institutions should reflect a healthy balance of the stakeholders. The international best practice is to include individuals that bring with them specific strengths such as finance, marketing, etc. but that also represent the major stakeholders of the institutions. The

international accreditation requirements will also determine the governance structures to some extent.

- Role clarity is of paramount importance, i.e. the division of labour and responsibilities should be clearly articulated, otherwise the danger exists that overlaps and gaps can and do occur, putting an unnecessary strain on scarce resources, and even resulting in acrimonious fights amongst the institutions.
- Short-term and long-term financial support of government for the “good for nation” activities has to be committed. Service delivery such as inspection, testing and certification should be fully paid for by the customers at realistic, market related pricing. Establishing services may require short term government funding.

4 Quality Infrastructure at the African level

Although Quality Infrastructure has been established at the sub-regional level in quite a few of the African trading blocs such as SADC and the EAC (see section 5 below), it has been a very slow and arduous process to establish a representative Quality Infrastructure at the African level for a variety of reasons. During the Organization for African Unity (OAU) years, the African Regional Standardization Organization (ARSO) was established as an integrated approach, i.e. publish standards, provide metrology and accreditation services. This endeavour eventually stuttered, some would say failed, and many African countries withdrew from ARSO. Lately, initiatives have been undertaken to revive ARSO, but instead of having one organization doing everything, align the African QI structure with international organizations and with the difference that their scope is focussed more on coordination and linkages with the international structures rather than specific service delivery.

4.1 Standards

The African Regional Standardization Organization (ARSO) was established as an inter-governmental organization by the OAU and UNECA in 1977 in Accra. The mandate of ARSO was to develop tools for standards development, harmonization of standards and the implementation of these systems to enhance Africa’s internal trade capacity, increase the competitiveness of African products and service globally.

Although membership is open to all African countries, ARSO currently has only 27 members (approximately half of the African states). At its General Assembly meeting in 2009 in Addis-Ababa, a new strategy catering for the changing circumstances ARSO finds itself in was developed and approved, as well as a model for the harmonization of standards across Africa with the acronym ASHAM. ARSO is currently pursuing integration into the African Union structures as a specialized institution.

4.2 Metrology

The Inter-Africa Metrology System (AFRIMETS) is in its third year of existence as the Regional Metrology Organization (RMO) for Africa. Its governance and administrative infrastructure is largely in place, and the six sub-regional metrology organizations on the African continent are its main members. Therefore 43 countries on the African continent are represented in AFRIMETS, but only South Africa, Egypt and Kenya participate actively in international metrology forums. Only Somali, Eritrea, Djibouti and a few countries on the western side of Africa without any significant national metrology infrastructure have not joined AFRIMETS yet.

The primary aim of AFRIMETS is to harmonize scientific, legal and industrial metrology issues across Africa and to operate as a fully fledged RMO, fulfilling the obligations as stipulated in the CIPM Mutual Recognition Arrangement. In this regard AFRIMETS aims to increase the membership of the *Bureau International de Poids et Mesures* (BIPM), associate membership of the *Conférence Général de Poids et Mesures* (CGPM) and membership and corresponding membership of the *Organization Internationale Métrologie Légale* (OIML) amongst African states.

4.3 Accreditation

Very few African countries have established national accreditation bodies, and even fewer are internationally recognized through the MOU and MLA of ILAC and IAF respectively, in fact only Egypt, Tunisia and South Africa. One or two others are pursuing such recognition. Hence an African Accreditation Cooperation (AFRAC) is very difficult to establish, but some progress has been achieved since 2008 when the idea was first mooted. After a few meetings of stakeholders since 2008, AFRAC was officially launched in Cairo during September 2010. AFRAC will now be pursuing recognition as a Regional Accreditation Cooperation through ILAC and IAF, project plans are being drawn up, donor funding is being sought and auditors are being identified for training.

5 Regional Quality Infrastructures in Africa

Two examples of regional QI in Africa are presented in this discussion paper. Both have been in operation for more than a decade, yet differ appreciably from each other. Their basic premise however is the same, namely building QI capacity in the member states of the region, rather than provide conformity assessment services at the regional level.

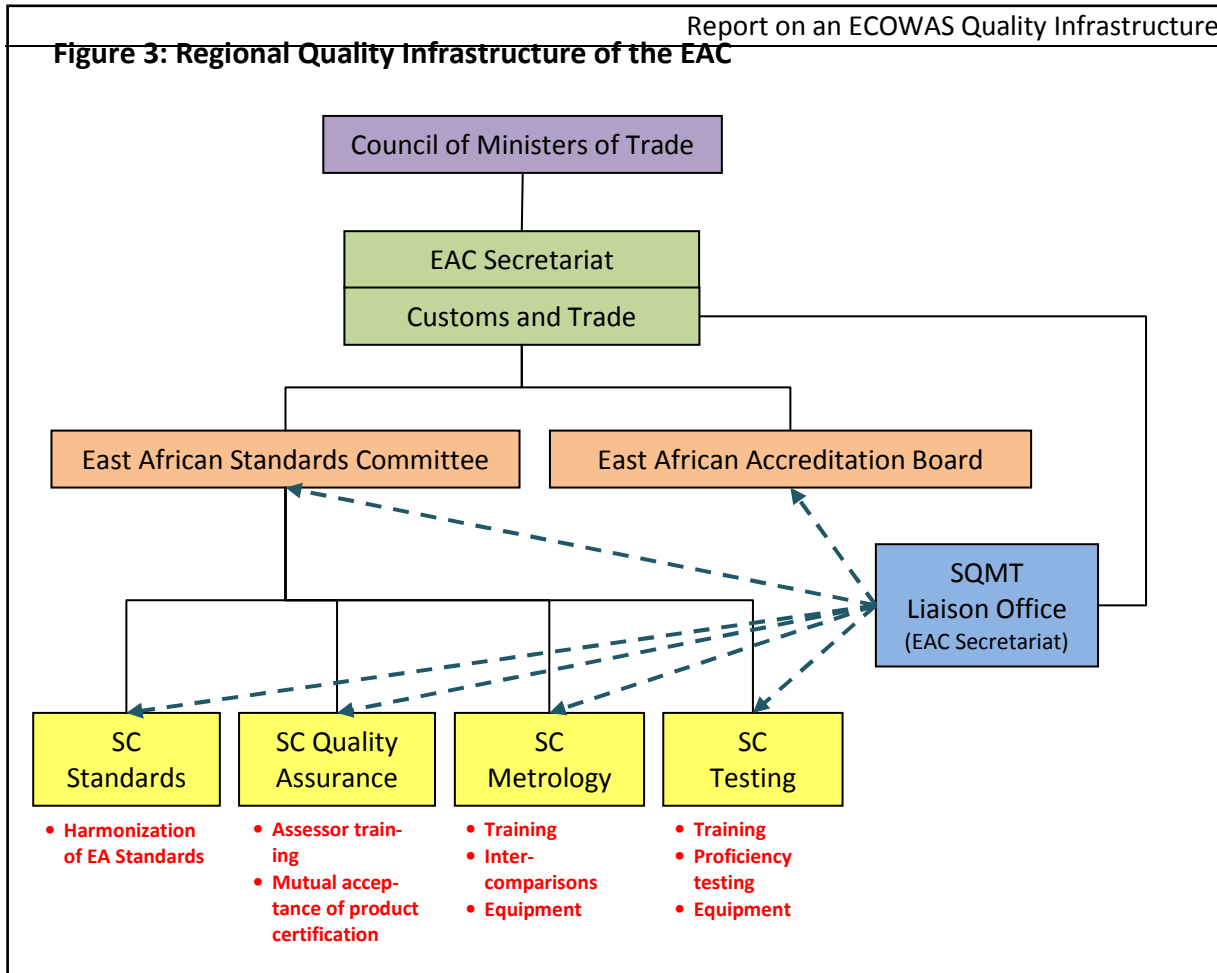
5.1 East African Community (EAC)

The regional QI in the EAC was established after the promulgation of the SQMT Protocol in 1990 in the wake of the establishment of the East African Community through a Treaty. Initially only the National Standards Bodies and the Weights and Measures Departments of the three original Partner States constituted the membership of the East African Standards Committee (EASC) that was responsible for the coordination and harmonization of standards, metrology, accreditation, testing and certification activities within the EAC. The SQMT Protocol was strengthened in 2006 when the *East African Community Standardization, Quality Assurance, Metrology and Testing Act* was promulgated after being approved by the East African Parliament a year earlier.

In terms of this Act, the EASC continues to exist. All five current Partner States are represented by their public QI organizations, but the EASC also has representatives from organized industry as well. The responsibility for accreditation has been separated from the EASC, and an East African Accreditation Board has been established in terms of this Act. The structure of the EASC and its technical sub-committees with their main responsibilities are shown in Figure 3. The East African Accreditation Board has just recently been established, and fully operational Sub-Committees are still to be established.

The EASC is responsible for coordinating standards, metrology, inspection, testing and certification activities for the region for the non-regulatory as well as the regulatory domain. Under its auspices, harmonized East African Standards are developed and approved. Ultimately all national standards

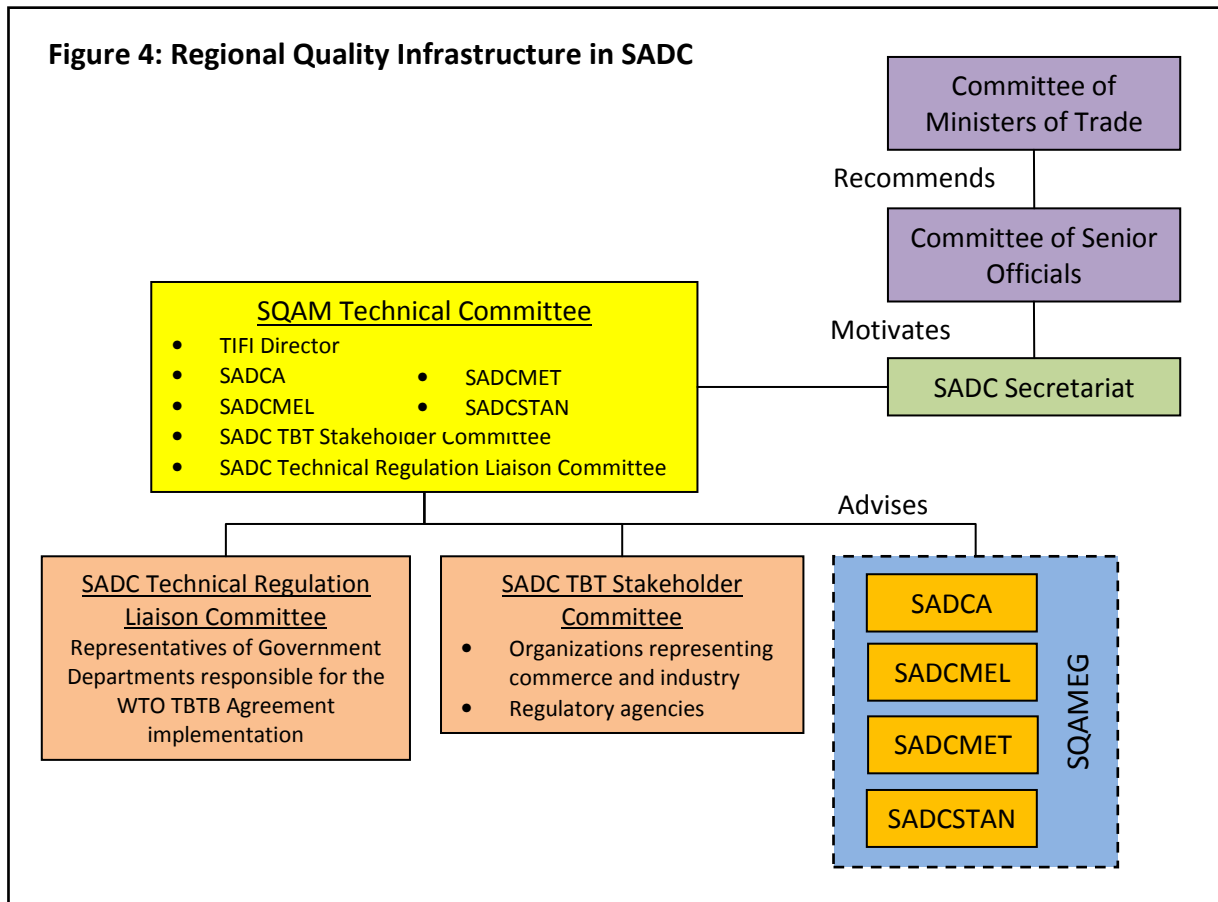
Figure 3: Regional Quality Infrastructure of the EAC



are to be harmonized across the region. Currently about 1100 have been approved and issued. The EASC has also been given the responsibility to develop Regulations for approval by the Council of Ministers to fully implement the EAC SQMT Act, 2006. Coordination of training activities across the region in cooperation with the donor community is another major activity at the moment.

The metrology activities still resort under the EASC, but this will change in the not too distant future. The East African Metrology Bill is currently making its way through the East African Parliament for approval. Once this is promulgated as the East African Metrology Act, metrology will be separated from the EASC and a parallel structure will be established, similar to the East African Accreditation Board. The East African QI will then resemble the international situation more closely, where standards, metrology and accreditation are dealt with in independent forums.

The SQMT liaison office in the East African Secretariat supports the different QI structures administratively, it is the custodian of the definitive text of the East African Standards, and it acts as the liaison between the QI structures and the Customs and Trade department of the Secretariat. No regional test laboratories or metrology laboratories are envisaged, each EAC Partner State is responsible for establishing its own QI organizations. Although a regional accreditation body has been mooted, little progress has been achieved in this regard, and the *de facto* situation for some time to come will probably be that the Kenya Accreditation Service (KENAS) and the South African Accreditation Services (SANAS) will continue to provide accreditation services across the region.



5.2 Southern African Development Cooperation (SADC)

SADC was originally formed to counter the strong economic influence of South Africa in the region during the apartheid years. A SQAM³ Expert Group (SQAMEG) was established as a forum to facilitate a strong quality infrastructure in every SADC member state. The SQAMEG was made responsible for facilitating the establishment of standards bodies in those countries that did not yet have one, coordination of training, providing expert advice on the establishment of information centres, testing and certification services at the NSBs and the establishment of regional testing centres. SQAMEG consisted of the Heads of the NSBs, and it followed an integrated approach, i.e. it was responsible for standards, metrology, accreditation, testing and certification.

Once South Africa joined SADC in 1994 and joined SQAMEG, South Africa needed to be represented by more than one organization, because the various elements of the QI were organizationally totally separated in South Africa – the South African Bureau of Standards (SABS) could not speak for all the others. After lengthy discussions and workshops, SQAMEG was “broadened” to four independent cooperative forums, namely SADCSTAN (standards), SADCMET (scientific metrology), SADCMEEL (legal metrology) and SADCA (accreditation). SQAMEG was retained to deal with cross-cutting issues, but these forums did not “report” to SQAMEG. Their terms of reference were developed and included in a SQAM Memorandum of Understanding that was signed by all the SADC member states.

³ Standards, Quality Assurance, Accreditation and Metrology (SQAM)

This arrangement worked well, but required better legislative certainty at the SADC level than the SQAM MoU. Hence, the TBT Annex to the SADC Trade Protocol was developed, which included the definitive technical regulation framework for the region as well as the QI organizational structures and terms of reference of all those involved. This was signed by the SADC Committee of Ministers of Trade in 2008 and has been the guiding legislation for the activities of the SADC regional QI. The SADC QI structures are shown in Figure 4 and the main responsibilities of the four working structures are the following:

SADCA

Provide for the infrastructure for accreditation for both voluntary and regulatory domains in member states.

SADCMEL

Provide for the establishment of a harmonized legal metrology regime within member states that is internationally acceptable for trade promotion through the removal of technical barriers and enhanced confidence in trade measurements.

SADCMET

Provide the infrastructure for traceability of measurement results in member states.

SADCSTAN

- Promote regional cooperation in the development of harmonized standards and technical regulations;
- Facilitate the exchange of information on existing standards, draft standards and technical regulations among members; and
- Facilitate the adoption of regional standards by member states.

The harmonization of standards in SADC is limited to those standards that are utilised as the basis for technical regulations or mandatory standards amongst the member states. Approximately 250 such standards are in the process of being harmonized. Market related standards will not be harmonized, as most of these are adoptions of international standards anyway, and the market is much more effective in determining which standards are appropriate than official structures.

No regional metrology or testing laboratories are being contemplated; each country is responsible for the QI organizations at national level. Regional reference laboratories are not envisaged either. Linkages to international metrology comparisons are provided through the National Metrology Institute of South Africa (NMISA) as the leading institute of the region. SADCMEL and SADMET are full members of AFRIMETS. Cooperation and liaison amongst metrology and testing laboratories is fostered. No regional product certification scheme is envisaged.

A regional accreditation body, the Southern African Accreditation Service (SADCAS), has been established and incorporated under Botswana commercial law as a not-for-profit organization in 2009. SADCAS, with SANAS as a twinning partner, is pursuing international recognition through ILAC and IAF. Member states are still entitled to establish or keep their own accreditation bodies, e.g. SANAS (South Africa) and MAURITAS (Mauritius). SADCAS will provide services to those countries that do not have their own accreditation body. They in turn should establish an Accreditation Focal Point

that can liaise with SADCAS. The relationship between SADCAS, SANAS and MAURITAS is coordinated through a SADC Multilateral Recognition Arrangement.

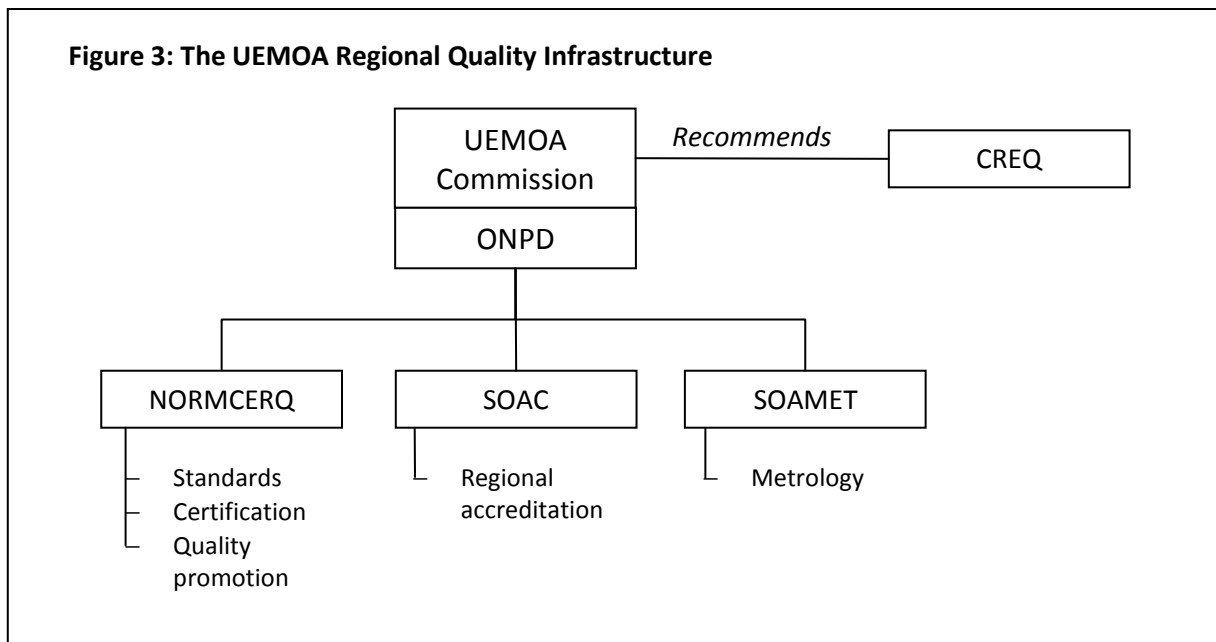
PART II – THE CURRENT SITUATION IN ECOWAS

6 The regional QI in UEMOA

In the UEMOA a regional approach to quality infrastructure has been developed over the past few years. This approach has been given legal certainty in the promulgation of five Regulations in 2006 at the UEMOA level. These have been revised in 2009 and 2010, but not all of them yet promulgated depending on a Commission decision as to the preferred legal identity of these structures, i.e. an Association incorporated in one of the member countries or an UEMOA Inter-Governmental Agency. These Regulations are:

- Scheme on harmonization of activities for accreditation, certification, standardization and metrology;
- Regional Committee for Quality (CREQ);
- Regional Organization for Standardization, Certification and Quality Promotion (NORMCERQ);
- Responsibilities, organization and operation of Metrology System (SOAMET); and
- Responsibilities, organization and operation of the Accreditation System (SOAC)

The way in which these elements of the UEMOA QI relate to each other, and their main responsibilities are shown in Figure 3. In December 2010 the three operational structures NORMCERQ, SOAC and SOAMET, had been established with a minimum of personnel. They report to the Department of Quality and Standardization established in the UEMOA Commission. By December 2010 CRQ had not yet been established.



6.1 NORMCERQ

The NORMCERQ regional structure has been given the responsibility to develop and publish UEMOA Standards, approve national certification bodies to administer the UEMOA product certification mark and to promote quality in general. The regulation does not contain the modalities for the development of regional standards, copyright issues and commercial exploitation of these standards although the practices principally meet international best practice. It is also silent on who decides on the standards to be harmonized and published and whether the regional standards will eventually totally replace national standards. By the end of 2010 no UEMOA regional standards had been published, although work on approximately 30 identified as a priority by member states had been ongoing in 17 Technical Committees.

An UEMOA product certification mark has been registered, and NORMCERQ had approved three national certification bodies by the end of 2010 to exploit this mark commercially. Some of the elements of ISO/IEC Guide 65 are utilised to evaluate the certification bodies. None of them are accredited, and NORMCERQ conducts the evaluation without the involvement of the regional accreditation structures, i.e. SOAC. This system is purported to be based on that followed by AFNOR in France.

Regarding the general promotion of quality in industry, government structures and society the regional Quality Award has been awarded a number of times. The finalists of the regional award are the winners of the national awards. ISO 9004 augmented by some region-specific requirements is utilised to assess the participant's activities.

6.2 SOAC

Ultimately SOAC should be developed into a fully fledged regional accreditation body with links to national accreditation focal points. The national accreditation focal points would be responsible for promotion activities whereas SOAC would train and register auditors, conduct assessment and issue accreditation certificates. SOAC is very much at the very beginning of its journey to gain business, train and register auditors and plan for its eventual international recognition by IAF and/or ILAC. SOAC has a twinning agreement in place with COFRAC (France) to facilitate its international recognition.

6.3 SOAMET

SOAMET has been established to coordinate the activities of the various National Metrology Institutes (NMI) of the UEMOA countries regarding scientific, legal and industrial metrology and to help develop capacity at the national level where this is necessary. SOAMET, as one of the six Sub-regional Metrology Organizations in Africa, is a signatory of the AFRIMETS Memorandum of Understanding linking all of these together.

7 The situation in ECOWAS

Unlike the situation in UEMOA, ECOWAS (without UEMOA) does not have any QI structures in place at the regional level, nor final plans to establish them or promulgate legislation to do so. Each of the 8 countries making up this group has established a national standards body, some of which are quite large, i.e. in Nigeria (NIS) and Ghana (GSB). Most of them develop and publish national standards,

provide testing and certification services. Quite a few are also involved in regulatory activities such as import inspection and mandatory standards.

However, it has been recognized at the technical level that a regional approach is necessary regarding the various aspects of standardization and conformity assessment in order to support the ECOWAS common market programme. Therefore a number of Thematic Working Groups have been established in ECOWAS (without UEMOA) to consider steps towards regional integration in this regard. Although these working groups have started, their deliberations have largely been informed by internal and technical considerations and not so much by an overall policy framework.

7.1 Standards

The Central Steering Committee of the West Africa Quality Programme recommended at their meeting in July 2010 that an effort should be made to harmonize standards across the region. A subsequent consultative meeting in October 2010 of officials of UEMOA and ECOWAS as well as the Heads of the National Standards Bodies of the region in the presence of ISO and ARSO senior officials considered various options. The meeting recommended that an appropriate legal framework for the development and implementation of standards would be absolutely essential, and that West Africa should have a single regional point for coordinating the harmonization of such standards.

The meeting also agreed that the harmonization effort should focus on standards that are of common interest to the region (i.e. standards for products traded within the region or exported, standards to harmonize technical regulations, standards for sustainable development and consumer protection, etc.), utilizing international standards wherever possible. For the development of harmonized standards, the region should adopt best practices from international and other regional standards bodies based on the WTO TBT Agreement principles. Standards for food, building materials, electricity, chemicals (cosmetics, soaps and detergents) and tourism were highlighted as most worthy of early harmonization efforts.

7.2 Metrology

During the 1st meeting of the Regional Thematic Working Group on Metrology/Calibration that took place back-to-back with the 3rd International Metrology Conference of CAFMET in Cairo during April 2010, the establishment of better metrology infrastructure for the region was discussed. Some of the main issues that impact on future policy direction were:

- To ensure the traceability of national measurement standards of ECOWAS countries it would be practical to do so via any country in the region that has signed *The Metre Convention* and whose National Metrology Institute has signed the CIPM MRA. In this respect, Ghana has become an Associate Member of the CGPM and is in the process of becoming a signatory of the CIPM MRA.
- The determination of each country's industrial need should be the initial step for deciding which countries could host a particular reference calibration laboratory in the framework of the regional division of responsibilities.
- It may be more convenient for developing countries to retain the three elements of metrology, namely scientific, legal and industrial metrology within the National Standards Body, instead of following international practice to establish separate metrology institutes.

- Due to the proliferation of electronic testing equipment in all spheres, it may be prudent to establish calibration capacity in this regard in every country in the region.

7.3 Product testing and certification

The Regional Thematic Working Group for Product Testing has been quite active and has achieved a measure of success in their work. It has recognized that in product testing and certification there are different approaches currently in place in the ECOWAS countries. UEMOA has developed a regional approach to product certification given legitimacy by appropriate legislation, but the approach in the other ECOWAS countries is still very much geared toward national interests. The working group has come to the conclusion that –

- Mandatory compliance with standards for products in some countries is implemented through mandatory product certification which could lead to trade barriers;
- An effort should be made to reduce the duplication of certification marks at the regional level, maybe by establishing a regional scheme, but that this would require a regional infrastructure to monitor the implementation of such a scheme in all of the ECOWAS countries;
- As a precursor to a regional scheme, mutual recognition agreements between the NSBs may be a useful strategy to follow; and
- Efforts should be made to find synergy between the newly established UEMOA regional product certification scheme and the well-established, large national product certification schemes, for example those of Nigeria and Ghana.

Product certification schemes have to be supported by technically competent laboratory testing. A number of test laboratories are currently pursuing accreditation. Through various development projects training in ISO/IEC 17025, business plans and proficiency testing has been provided, as has consultancy to individual laboratories to achieve accreditation. Harmonization of test methods remains a challenge due to language issues and the lack of internationally agreed standards. The compendium of test methods for food safety testing of UEMOA may serve as the basis for harmonization at the ECOWAS level.

PART III – POLICY ISSUES REGARDING A QI AT THE ECOWAS LEVEL

8 Policy decisions to be taken regarding the Quality Infrastructure

The policy issues regarding the regional QI and the concomitant technical regulation framework and SPS measures are shown in tabular form. It is important to understand that the QI cannot be viewed in isolation, but that it can only be properly considered in its full context, namely the provision of its services to the market and to the authorities. Once these policy decisions have been made, it is absolutely imperative that they are given substance in an official document that can be approved for implementation by the highest relevant political authority in the region. Such a document would be an **ECOWAS Quality Policy**.

Quality Infrastructure element	Policy decisions that will have to be considered	Comments
8.1 Organizational structure		
<p>Quality Infrastructure at the regional level can be organized in many ways as the EU, SADC and EAC have demonstrated over the past decades. In the EU the European standards organizations CEN, CENELEC and ETSI play a very important role in the development of the harmonized European Standards (EN). The other two major parts of the European QI are the European Association of National Metrology Institutes (Euromet) and European co-operation for Accreditation (EA). They coordinate activities amongst their members and operate as regional organizations in terms of metrology and accreditation recognition arrangements <i>viz. a viz.</i> ILAC, IAF, BIPM and other interna-</p>	<p>Phase 1</p> <ol style="list-style-type: none"> 1. Consider a policy decision on the format of the regional QI. Structures need to be considered for the three fundamental domains. i.e. standards, metrology and accreditation: <ol style="list-style-type: none"> a. A cooperation structure such as in SADC and EAC; b. An independent association as currently contemplated by UEMOA, but open to all of ECOWAS countries c. An inter-governmental agency under the ECOWAS Commission. 2. Other structures such as for testing or inspection can 	<p>The policy decision will largely depend on ECOWAS customs and practices.</p> <ol style="list-style-type: none"> a. Cooperative structures are funded by members states, hence are the most cost-effective. But, because membership changes from time to time, continuity is sometimes compromised, unless the Secretariats are provided by a permanent structure such as a QI Office in the ECOWAS Commission. b. Associations are more permanent structures, hence continuity of activities is enhanced, but they have to be

Quality Infrastructure element	Policy decisions that will have to be considered	Comments
<p>tional organizations.</p> <p>In SADC, the regional QI is clearly defined in the TBT Annex to the SADC Trade Protocol. It consist of a number of technical working structures combined with structures representing the stakeholders, all of which feed into an overall coordinating committee (see 5.2 above for more details)</p> <p>In the EAC the regional QI is defined in East African Community Acts of Parliament. Currently two have been established, but these will soon be three, namely the East African Standards Committee, the East African Accreditation Board and the East African Metrology Council. These are accountable to the EAC Secretariat and Council of Minister (see 5.1 above for more details)</p>	<p>also be contemplated, but are frequently included in the structure responsible for standards.</p> <p>3. Consider a policy decision regarding the overarching governance of the regional QI. Possibilities include:</p> <ul style="list-style-type: none"> a. A coordinating committee representative of all the structures and the ECOWAS Commission, such as in SADC b. A regional committee representative of the regional structures and the major stakeholders of the region accountable to the relevant Department in the Commission, such as the East African Standards Committee. 	<p>funded by the member states, i.e. they are much more expensive.</p> <p>c. Inter-governmental Agencies are permanently staffed structures, expensive and an addition to the bureaucracy of the ECOWAS Commission. Agencies can be given legal powers that are difficult in the case of cooperative committees or associations.</p> <p>An overarching coordinating mechanism is a necessity, as the integration of the various elements of the regional QI is too important to be left to its own devises.</p>
<h2>8.2 Standards</h2>		
<p>Standards are “voluntary” in themselves. Standards are used by industry, suppliers and purchasers to determine or agree on the characteristics of products and services that are supplied. Standards are frequently utilised as the basis for technical regulation and SPS measures. Some standards are</p>	<p>Phase 1</p> <p>1. A policy decision has to be made whether regional ECOWAS Standards will be developed and published. If so, then a decision has to be made whether</p> <ul style="list-style-type: none"> a. All national standards published by member states will be harmonized and published as 	<p>Most regions develop and publish regional standards. There are two main reasons for doing so:</p> <ul style="list-style-type: none"> a. Most regional standards are adoptions of international standards, but some have to be adapted to take regional

Quality Infrastructure element	Policy decisions that will have to be considered	Comments
<p>declared mandatory in terms of specific legislation with administrative measures, thereby elevating them to technical regulations.</p> <p>Thousands of international standards have been published by ISO, IEC, ITU, CAC, OIE and IPPC for example. Large numbers of regional standards have been published in the EU, the erstwhile Soviet Union states and the EAC. At national level, more than 150 countries publish vast numbers of national standards.</p> <p>ISO and IEC Standards are not freely available, and are copyrighted. Adoption of these standards as regional or national is only possible once an agreement with ISO and IEC has been reached in this respect. Standards from most of the inter-governmental international standards organizations are freely available and can be adopted without major issues.</p> <p>Regional and national standards are increasingly equivalent to the international standards, but differences do occur due to local peculiarities. In addition, indigenous standards are developed and</p>	<p>ECOWAS Standards, ultimately totally replacing national standards; or</p> <p>b. Only standards to be used in support of technical regulations and SPS measures at the regional level will be harmonized and published as ECOWS Standards.</p>	<p>realities into consideration</p> <p>b. Depending on the regional legislative structures, it may be necessary to use regional standards as the basis for technical regulation, because international standards are controlled by organizations outside the region.</p>
	<p>2. The regional structure to develop and publish ECOWAS Standards should be agreed to in principle. There are a few possibilities, namely</p> <p>a. Establish a regional standards body to replace all national standards bodies</p> <p>b. Establish a regional standards body similar to CEN, CENELEC or ETSI</p> <p>c. Establish a regional cooperation such as SADCSTAN or EASC</p>	<p>a. Establishing a regional standards body to replace the national standards bodies is very problematic in that the national voice for standards development is silenced</p> <p>b. A regional standards body such as CEN, CENELEC or ETSI coordinates regional technical committees representative of NSBs. It does however require financing of the regional standards body by the member states.</p> <p>c. A regional cooperation such as SADC or EASC assigns the regional technical committees to one of the member states. This is the most cost effective option, but requires dedication, commitment and resources by the member state NSBs.</p>
	<p>Phase 2</p> <p>3. If ECOWAS standards are to be developed and published, the following policy decision regarding proc-</p>	<p>To be discussed and developed once the Phase 1 decision has been made.</p>

Quality Infrastructure element	Policy decisions that will have to be considered	Comments
<p>published where no international standards exist. In many countries the ratio between international adoptions versus indigenous standards eventually settles around 80% adoptions.</p>	<p>ess have to be considered:</p> <ol style="list-style-type: none"> a. Whether ECOWAS Standards should be based as far as is practicable on international standards such as those published by ISO, IEC, ITU, CAC, OIE and IPPC; b. Who authorises the development of specific ECOWAS Standards, and how are priorities decided; c. After due development process in accordance with ISO/IEC Directives and Annex 3 of the WTO TBT Agreement with appropriate public comment periods, who should approve and/or ratify the draft regional standards to become ECOWAS Standards; d. Which organization is responsible to maintain the definitive text of approved ECOWAS Standards and so provide legal certainty as to their content; e. How will copyright in the ECOWAS Standards be assured and in whom is this vested; and f. Which organizations will be allowed to commercially exploit ECOWAS Standards, i.e. who would be allowed to sell them. 	

Quality Infrastructure element	Policy decisions that will have to be considered	Comments
8.3 Metrology		
<p>Metrology is the science of measurement. Metrology is divided into three main areas, namely fundamental or scientific metrology, legal metrology and industrial metrology. Governments usually take responsibility for scientific and legal metrology, whereas the private sector deals with industrial metrology in the more developed economies. In less developed economies governments initiates the establishment of industrial metrology, but relinquishes it to the private industry as soon as it is feasible to do so.</p> <p>At the international level two organizations are important in metrology:</p> <ul style="list-style-type: none"> • The Bureau des Poids et Mesures (BIPM) was established in terms of <i>The Metre Convention</i> (1875) to coordinate research into physical units and standards, and to oversee the inter-laboratory comparisons of the national laboratories. • The Organisation Internationale de Métrologie Légale (OIML) was established in order to promote the global harmonization of legal metrology procedures. <p>At Africa level AFRIMETS has recently been estab-</p>	<p>Phase 1</p> <ol style="list-style-type: none"> 1. Consider a policy decision to establish a sub-regional metrology organization for the whole of the ECOWAS region and to continuously support it politically and financially. Such a construct would facilitate better integration with the international metrology structures and would enhance recognition of the metrology capabilities of the region. SOAMET is a signatory of AFRIMETS and could be enlarged to include all ECOWAS countries. 2. Consider a policy decision regarding the primary metrology institutes for the ECOWAS region. These are vital links in establishing the CMCs for the region as they participate in international inter-laboratory comparisons. Possibilities include: <ol style="list-style-type: none"> a. Establishment of a new, regional primary metrology institute that serves the whole region. b. Identify two or three member states with well-developed metrology infrastructure and allocate the political responsibility to act as primary metrology institutes for the region to them. c. Make no decision at the regional level and let the metrology fraternity seek their own solutions. 3. Consider a policy decision regarding the overall scope of legal metrology in the region. The possibilities are threefold, and need not be implemented concurrently, but can be phased in, namely: 	<p>A sub-regional metrology organization is actually not negotiable if international recognition of the metrology capabilities of member states is sought.</p> <ol style="list-style-type: none"> a. Important policy issues to be considered include where it will be situated, how it will be funded and what the governance structures would be. b. In this case, the other national metrology institutes will generally revert to these designated metrology institutes in all matters related to international recognition and inter-laboratory comparisons. (Example: NMISA (South Africa) in the SADC region). c. This would be a negative option <p>The international community is rapidly moving towards the inclusion of health and law enforcement in legal metrology. A phased approach is however, has many</p>

Quality Infrastructure element	Policy decisions that will have to be considered	Comments
<p>lished (2008) as the regional intra-Africa metrology system to harmonize metrology activities on the continent and to interact with the international metrology community more effectively. The sub-regional metrology organization of UEMOA, namely SOAMET is one of the principal members of AFRIMETS – ECOWAS does not yet have such a sub-regional organization.</p>	<ol style="list-style-type: none"> a. Limit legal metrology to trade metrology activities only; b. Include safety and health as well as trade metrology; or c. Include trade metrology, safety and health and law enforcement within the scope of legal metrology in keeping with international developments. 	<p>advantages for regions and countries that struggle with resources.</p>
<p>Scientific metrology. Scientific metrology deals with the organization and development of measurement standards and with their maintenance. Every country should establish a National Metrology Institute (NMI) responsible for the national measurement standards, i.e. the standards of highest accuracy in the country and the legal reference point for all measurements. The Calibration and Measurement Capability (CMC) of a country in terms of its national measurement standards is determined in accordance with agreed procedures and peer reviews, where after these values are inserted in the international database maintained by the BIPM. This links a country's metrology infrastructure with the rest of the world. Scientific metrology is generally considered a "good-for-country" government responsibility.</p> <p>Legal metrology. Legal metrology is concerned with the accuracy of measurements where these</p>	<p>Phase 2</p> <ol style="list-style-type: none"> 4. Consider a policy decision regarding the legal framework for legal metrology to the point where even regulations for type approval of measurement equipment, calibration and verification processes for the same and regulations for pre-packaged goods are harmonized across the region and enforced. 	<p>These can be dealt with after Phase 1.</p>
	<ol style="list-style-type: none"> 5. Consider a policy decision regarding the preconditions for the acceptance of the outputs of legal metrology departments or agencies in other member states without further regulatory intervention. This could include accreditation to ISO/IEC 17020 and ISO/IEC 17025 as relevant, and the traceability of legal metrology working standards to national measurement standards acceptable to the region. 	

Quality Infrastructure element	Policy decisions that will have to be considered	Comments
<p>have an influence on the transparency of economical transactions, health and safety and increasingly also law enforcement. Because legal metrology is a type of technical regulation, it can only be managed by authorities or agencies that have the required legal powers. Legal metrology activities relate mainly to the imposition of controls in the following:</p> <ul style="list-style-type: none"> • Testing and type approval of measuring equipment falling within the scope of legal metrology legislation; • Calibration and verification of approved measuring equipment in use in trade, health and safety and in law enforcement; • Control of processes of suppliers of pre-packaged goods to ensure proper control over quantities; and • Determination of preferred pre-package sizes for consumer protection. <p>Industrial metrology. Industrial metrology has to ensure the adequate functioning of measurements used in industry as well as in production and testing processes as these are important inputs into the quality of industrial activities. This includes the need for traceability of measurements to the national measurement standards, which is just as important as the measurement itself. A national</p>		

Quality Infrastructure element	Policy decisions that will have to be considered	Comments
calibration system takes care of the traceability issue, whereas metrological competence is required to ensure proper measurements.		
8.4 Accreditation		
<p>Accreditation is the formal recognition of the technical competency of an organization as measured against relevant standards such as ISO/IEC 17020, ISO/IEC 17021, ISO/IEC 17025 and others. Accreditation is rapidly becoming the preferred way of the authorities to determine whether a conformity assessment service provider should be allowed to provide services with a public responsibility dimension, e.g. testing and certification for technical regulations. Similarly, importers are reluctant to accept test certificates for products if not provided by an accredited laboratory. Accreditation is therefore no longer a “nice to have”, but is a prerequisite for inspection bodies, test laboratories and certification bodies that operate in the international, even domestic markets.</p> <p>International recognition is not automatic, but has to be achieved through multilateral recognition agreements or arrangements of the International Laboratory Accreditation Cooperation (ILAC) or the International Accreditation Forum (IAF) that include peer reviews to ensure that an accreditation</p>	<p>Phase 1</p> <ol style="list-style-type: none"> 1. Consider a policy decision whether a regional accreditation body will be established. Issues that would need attention include: <ul style="list-style-type: none"> • In which country such a body would be placed; • What the legal structure would be (i.e. a part of the ECOWAS Commission structures, an incorporated company, etc.); • How the body would be funded (i.e. start-up as well as operations for a fair number of years); • What the governance structures would look like; and • The required legal instruments to provide the necessary certainty for the decision. 2. As a second alternative consider a policy decision to designate emerging national accreditation bodies of the major economies in ECOWAS as the <i>de facto</i> regional accreditation bodies. Issues that would need consideration include: <ul style="list-style-type: none"> • The number of <i>de facto</i> accreditation bodies, and from which countries; • Financial and other support for these bodies to 	<p>The most pragmatic approach is to combine a regional accreditation body with national accreditation bodies of those countries that wish to establish them. This is the way that SADC has arranged its accreditation system. SOAC could easily be enlarged to include all ECOWAS countries.</p>

Quality Infrastructure element	Policy decisions that will have to be considered	Comments
<p>body itself operates at the appropriate competency levels. This is a long, expensive and arduous process that can take up to seven years.</p> <p>Studies have also shown that an accreditation body requires about 200 to 250 accredited organizations as its clients before it approaches self-sufficiency. This is a big ask in most developing economies. Considering the above, it makes a lot of economic sense to establish only one accreditation body within a country. Another possibility would be to establish a regional accreditation system that can be utilised by all the members of the region.</p> <p>Regional accreditation systems are a new development, but already best practices are developing. These include different models such as:</p> <ul style="list-style-type: none"> • Establishment of a regional accreditation body that “partners” with a recognized accreditation body elsewhere to seek international recognition through ILAC and IAF; and • Establishment of national accreditation focal points in each country of the region. The accreditation focal points liaise with the regional accreditation body to facilitate accreditation services, and have assessors trained and registered. 	<p>achieve international recognition; and</p> <ul style="list-style-type: none"> • The required legal instruments to provide the necessary certainty for the decision. <p>3. As a third alternative combine 1 and 2, i.e. establish a regional accreditation body, but allow those countries that wish to establish their own national accreditation bodies to do so. Coordination amongst the national accreditation bodies and the regional body can be arranged through a MoU or similar.</p> <p>Phase 2</p> <p>4. Consider policy aspects of any mechanisms to support member states to establish the appropriate national accreditation focal points and the relevant modalities to operationalize them.</p>	

Quality Infrastructure element	Policy decisions that will have to be considered	Comments
<p>An alternative would be to designate national accreditation bodies of major economies in the member states as the <i>de facto</i> regional accreditation body. In ECOWAS this could be Nigeria and Ghana for example, and then follow the same logic as above with national accreditation focal points in the other member states.</p>		
8.5 Testing		
<p>Testing is the activity that provides the evidence that a product complies or does not comply with stated requirements, such as those in a standard or a technical regulation. Testing can take many forms depending on the requirements. Testing can be destructive or non-destructive. Testing services can be provided by either public or private laboratories; the major issue is whether they can demonstrate their technical competency.</p> <p>Test laboratories are expensive to establish and maintain. In order to function properly and to be accepted internationally test laboratories require: (i) high investment in buildings and environmental controls (e.g. temperature, humidity, air quality, lighting or combinations thereof), (ii) well-trained and experienced staff, (iii) continuous supply of electricity, (iv) continuous supply of sophisticated consumables and certified reference materials</p>	<p>Phase 1</p> <ol style="list-style-type: none"> 1. Consider policy aspects regarding test services with a public responsibility dimension, i.e. testing for technical regulations or mandatory standards, such as: <ol style="list-style-type: none"> a. Testing services can be provided by public and private laboratories alike; b. Testing will only be provided by technically competent test laboratories, i.e. accredited laboratories, that have also been designated by their respective governments to the Commission; and c. Test reports by such designated laboratories shall be accepted by all regulatory authorities in the region unless proven otherwise. <p>Phase 2</p> <ol style="list-style-type: none"> 2. Consider policy issues regarding Reference Test Laboratories, such as: <ol style="list-style-type: none"> a. Is the concept necessary for the optimum functioning of testing in the region; b. If so, then what are the criteria for identifying 	<p>Opening up the testing with a public dimension such as technical regulations to any technically competent laboratory is the preferred mode of operation for the future. Keeping such testing to public laboratories only is seen as a monopoly that has no place in a modern QI.</p> <p>These can be dealt with after Phase 1.</p> <p>In spite of the challenges to provide test services to a region as large and diverse as ECOWAS by a single regional laboratory, it</p>

Quality Infrastructure element	Policy decisions that will have to be considered	Comments
<p>mostly from developed economies, and (v) participation in international proficiency schemes and accreditation to demonstrate their technical competency.</p> <p>Test laboratories have been or are being established in many ECOWAS member states to meet the priority needs of the industry and authorities, mostly in food safety testing. Various development agencies are supporting these laboratories to train staff, validate test methodologies, implement a quality management system in accordance with ISO/IEC 17025 and ultimately obtain internationally recognized accreditation. An ECOWAS Thematic Working Group has been established in 2009 in this regard to coordinate much these activities.</p> <p>Testing services with a public responsibility dimension, i.e. testing for technical regulations or mandatory standards used to be the sole domain of public laboratories in the past. This is changing fast as more and more governments and regulatory agencies accept the test results from accredited private laboratories, which have also been designated by their governments. A typical example is the “notified bodies” of the EU.</p>	<p>such laboratories and who decides on their status and who should be maintaining the list of such laboratories and how shall they be funded; and</p> <p>c. Test reports by such Reference Test Laboratories should be accepted by all the regulatory authorities or members states as the final arbiter in cases of dispute.</p> <p>3. Consider policy issues regarding proficiency testing schemes, such as free and rapid movement of samples utilised in proficiency testing across borders and through customs;</p>	<p>does make sense to designate a few reference test laboratories in a region that can</p> <ol style="list-style-type: none"> a. Provide testing service to its own country as well as to other countries; b. Train the staff of testing laboratories of its own country and other countries; c. Supply test procedures and other technical documents to other laboratories; d. Take part in international meetings and seminars and provide information about them and about the latest development on technology; e. Visit test laboratories of other countries regularly to provide additional consultancy to improve their performance; f. Perform regional proficiency testing schemes; and g. Moderate the forum within the website of the program regarding the testing field of its competence.

Quality Infrastructure element	Policy decisions that will have to be considered	Comments
8.6 Product certification		
<p>Product certification with the relevant certification mark placed on the product is an independent attestation that the product meets the requirements of a specific standard. Product certification therefore is a very useful device to provide important information to the public or to regulatory authorities. Product certification comes in many forms. ISO/IEC Guide 67 lists at least five types of product certification. Most of them depend on the testing of the product against the requirement of the standard, and the audit of the manufacturing facility or processes to ensure that not only the tested product complies, but also all others like it.</p> <p>Product certification is provided by public entities such as national standards bodies in many countries all over the world. Many of their certification marks enjoy a very high market value in their home markets (e.g. KEBS, SABS, SON, etc.). It is also provided by private certification organizations, of which there are hundreds operating in various economies. Some have gained international recognition (i.e. VDE, TÜV, UL, etc.) but many are limited to their country of origin.</p> <p>Regions have considered establishing a regional product certification mark to uplift the quality of</p>	<p>Phase 1</p> <ol style="list-style-type: none"> 1. Consider a policy decision whether a regional product certification mark would be a valuable device to uplift the general quality of products manufactured in the region. Issues to consider include: <ol style="list-style-type: none"> a. Should the UEMOA regional product certification scheme be extended to ECOWAS as a whole; b. Which certification bodies could be registered to administer the scheme and what would the requirements be to become registered; c. Which organization would be responsible for the oversight of these certification bodies and what authorities should they be given in this regard; d. Would royalties be payable by the certification bodies, and if so, to whom would the royalties be payable; and e. Where would the product certification mark have to be registered in order to protect it from fraudulent usage. 2. Consider an alternate policy decision to accept as equal national product certification schemes provided that the certification bodies are appropriately accredited, and if so what would the modalities have to be to ensure acceptance of the various national product certification schemes throughout the region. 	<p>Product certification is usually the domain of commercial interests. Countries with well established product certification marks will be very reluctant to give up the market value of these marks.</p> <p>It may be possible to establish a regional mark in parallel with the established national marks to help small economies and to let the market decide on the value of such marks.</p> <p>Mutual recognition of national product certification marks in other regions has not worked – there are too many commercial interests at stake.</p> <p>Utilising product certification marks, whether national or regional, as the sole mechanism for mandatory standards is considered a barrier to trade. Utilising it as a “deem to satisfy” mechanism, but also allowing others is more acceptable.</p>

Quality Infrastructure element	Policy decisions that will have to be considered	Comments
<p>products exported from the region or traded within. In the EU the so-called Key-mark was established some time ago. Certification bodies could be registered to provide certification services in this regard, depending on whether they complied with specified requirements. The EU Key-mark did not enjoy much success in the market place, and is now mostly forgotten.</p>	<p>3. Consider a policy decision to utilise a regional product certification mark as “deem to satisfy” evidence of compliance with regional mandatory standards or technical regulations.</p>	
<h3>8.7 System certification</h3>		
<p>System certification (i.e. ISO 9001, ISO 14001, HACCP, etc.) is provided by a large variety of certification bodies in both the public and private domain. The main issue is that these organizations should be accredited by an accreditation body that is part of the multilateral recognition arrangement of the IAF, for the certification services they offer, but this is not a legal obligation. This purely a commercial issue, and governments seldom get involved, other than providing financial and other support to national standards bodies that wish to establish such a service. The same holds true at the regional level.</p> <p>Should system certification become a prerequisite for the supply of products that fall within the scope of technical regulations or mandatory standards, the situation changes somewhat. In this case the certification of suppliers to ISO 9001, ISO</p>		<p>System certification is highly commercialized all over the world. Hence it is very difficult, if not impossible for a region to establish a regional system. It is much better to leave the market to develop by itself.</p>

Quality Infrastructure element	Policy decisions that will have to be considered	Comments
14001 or HACCP for example has a public responsibility dimension, and it would be appropriate to demand their proper accreditation and their designation by the government of the country they operate from.		

9 Policy decisions to be taken regarding the Technical Regulation Framework

Establishing a regional QI is only half the story. It is equally important to establish a common approach to technical regulation, as these give rise to most barriers to trade. Standards can be harmonized, metrology can be coordinated and accreditation can be provided at regional level, but if the technical regulations amongst are not harmonized, then the trade barriers remain.

Technical Regulation Framework element	Policy decisions that will have to be considered	Comments
9.1 Overall framework		
<p>Harmonizing technical regulations is one of the fundamentals of a common market in order to facilitate the free movement of goods and services.</p> <p>The overall framework of technical regulation can take many forms. The basic building blocks however, as broadly provided for in the WTO TBT Agreement have to be in place, otherwise the technical regulation will eventually fail – see section 2.2 above. Probably the most successful re-engineering of a technical regulation framework took place in the European Union during the</p>	<p>Phase 1</p> <ol style="list-style-type: none"> 1. Consider a policy decision to establish a technical regulation framework for the whole region instead of trying to harmonize existing frameworks. <p>Phase 2</p> <ol style="list-style-type: none"> 2. Develop and agree on the building blocks of a new technical regulations framework for the region 3. Develop an implementation roadmap 	<p>Efforts to try and harmonize technical regulations in other regions have not met with much success.</p> <p>The alternate not to try and harmonize technical regulations has been followed in NAFTA, but the USA and Canadian markets are big enough to do it.</p>

Technical Regulation Framework element	Policy decisions that will have to be considered	Comments
1990s with their New Directives and Global Approach. These replaced a myriad of national approaches that the EU structures failed to harmonize since the signing of the Treaty of Rome.		
9.2 Technical requirements		
<p>Technical regulations should be based on international standards wherever these exist according to WTO TBT Agreement requirements. These technical requirements can be dealt with in three basic ways, namely</p> <ul style="list-style-type: none"> • Reproduce the technical requirements in totality in the regulation – a system considered less acceptable. • Reference regional standards by number, title and scope. This gives suppliers and authorities certainty as to the requirements and all stakeholders can be involved in setting the standard. • Utilising regional standards as “deemed to satisfy” requirements, i.e. suppliers may also make use of equivalent standards. This is the system is the basis of the EU New Directives with its European harmonized standards (EN) that retain their “voluntary” character even though they are listed on an official list in support of New Directives implementation. 	<p>Phase 1</p> <ol style="list-style-type: none"> 1. Consider a policy decision to utilise one of the three basic possibilities, i.e. <ul style="list-style-type: none"> • Full technical requirements contained in the regulation; • Reference regional standards; or • Utilise regional standards as “deem-to-satisfy” requirements. <p>Phase 2</p> <ol style="list-style-type: none"> 2. Develop and agree on the building blocks of a new technical regulations framework for the region. 3. Develop an implementation roadmap including the development and promulgation of relevant legislative instruments at the regional level. 	<p>The first of the three options, although legally sound, has problems in keeping technical regulation up-to-date.</p> <p>The second option is preferred by many economies as it is clear, and easy to keep up-to-date. As the standards are revised every five years on average, so the technical regulation keeps pace with technological development.</p> <p>The third option works well in sophisticated technical environments such as the EU where the equivalence of various standards can be rapidly determined. It may be less convenient in a developing economy environment, due to the lack of technical resources.</p>
9.3 Conformity assessment modules		
In principle two types of evidence of compliance can be provided, namely a self declaration of conformity by the supplier, or inspection, testing and certification by an independent third	1. Consider a policy decision to utilise inspection, testing and certification from any technically competent ser-	Giving the regulatory authorities the sole mandate for inspection, testing and certification is not considered a viable option

Technical Regulation Framework element	Policy decisions that will have to be considered	Comments
<p>party. Although the self-declaration of conformity is the most cost-effective option, it does require very effective market surveillance and product liability legislation. It is therefore not utilised all that much and only for low risk products, i.e. toy safety in the EU and USA.</p> <p>Inspection, testing and certification by regulatory authorities is no longer considered a trade-friendly option. This is expensive, leads to unnecessary multiple inspection and testing, and frequently ends up in corrupt practices.</p> <p>Opening up the conformity assessment services to all public and private service providers is the most cost-effective option in the long run, but checks and balances have to be implemented to ensure that this type of testing with its public responsibility dimension is provide by technically competent organizations with integrity.</p>	<p>vice provider, with the provision that they are:</p> <ul style="list-style-type: none"> • Accredited for the specific tests; and • Designated by their respective governments to deal with liability issues. <p>2. Strengthen the policy decision by ensuring that conformity assessment by such accredited and designated service providers is accepted by all regulatory authorities in the region.</p> <p>Phase 2</p> <p>3. Develop and agree on a suite of conformity assessment modules that must be utilised by lawmakers when developing technical regulations for the region.</p>	<p>any longer if trade is to be supported without diminishing the controls required to look after the safety and health of the people and the environment.</p> <p>What is also important is to develop a number of modules that must be utilised by the authorities when developing technical regulations depending on the risks involved and consequential damages in products failing in the market place.</p>
<h4>9.4 Regulatory agencies</h4>		
<p>Regulatory agencies are necessary to ensure that the requirements of technical regulations are followed by suppliers. This means that regulatory authorities have three main responsibilities, namely</p> <ul style="list-style-type: none"> • Pre-market approval of products with an inherent high risk profile; • Market surveillance of all products falling within the scope of technical regulations; and 	<p>Phase 1</p> <p>1. Consider a policy that would empower national regulatory authorities to implement regional technical regulations.</p> <p>2. Consider a policy decision that a common data base and early warning system is established to support the effective implementation of regional technical regulations.</p>	

Technical Regulation Framework element	Policy decisions that will have to be considered	Comments
<ul style="list-style-type: none"> Application of sanctions when suppliers do not meet requirements. <p>In regions throughout the world, administration of technical regulations remains a sovereign responsibility of countries. The region can develop and require implementation of a common technical regulation, but making it work has to be done at national level.</p>	<p>Phase 2</p> <ol style="list-style-type: none"> 3. Develop the modalities for a common data base and early warning system for technical regulation implementation in the region. 	
9.5 Sanctions		
<p>Sanctions against suppliers whose products do not meet the requirements of relevant technical regulations are generally implemented in two stages, namely:</p> <ul style="list-style-type: none"> Administrative sanctions; and Courts of Law. <p>Administrative sanctions are implemented by the regulatory authority, and the supplier may have to withdraw product from the market, may be allowed to rectify the problem or in severe cases have to destroy the consignment.</p> <p>Should suppliers not heed the administrative sanction request, then the regulatory authorities should take the supplier to court quickly and decisively to ensure that the problem and danger is alleviated.</p>	<p>Phase 1</p> <ol style="list-style-type: none"> 1. Consider a policy decision to align the sanctions across the region. <p>Phase 2</p> <ol style="list-style-type: none"> 2. Develop and agree on the building blocks of a new technical regulations framework for the region 3. Develop an implementation roadmap 	

PART IV – VALIDATION WORKSHOP IN ACCRA (APRIL 2011)

10 Background

Parts I and II of this publication are an overview of the international context that would inform a regional quality policy, which can be considered a necessary pre-requisite for the development of an effective and efficient regional quality infrastructure. It traces such structures in two other African regions, namely SADC and the EAC, and sketches the current situation in UEMOA and ECOWAS. Part III provides an analysis of the issues that would need to be considered in order to arrive at such a West African Quality Policy. In order to validate the information in Parts I and II, but more importantly, to initiate discussions on the issues listed in Part III to identify common ground and identify areas of divergence, face-to-face discussions have many advantages.

Such face-to-face discussions were made possible during a validation workshop held in Accra, Ghana on 18 and 19 April (under the auspices of the West African Quality Programme funded by the EU and executed by UNIDO) which was attended by delegates from all ECOWAS countries and the ECOWAS and UEMOA Commissions. During the workshop, the highlights of the Parts I, II and III were presented, followed by a series of break-out group discussions on selected primary issues listed in Part III. The composition of the break-out groups was established in a way that would facilitate cross-pollination of ideas amongst the French and English speaking groups, and smaller and larger economies.

The four break-out session groups presented their preferences to the plenary to enable countries to establish common ground and identify those areas that will need further reflection before a final decision on the West African Quality Infrastructure can be taken. This part provides, in the first place, a high level summary of the break-out group discussions. Secondly, it contains an evaluation of the common ground reached and makes recommendations based on good practices for areas where common ground could not be reached.

11 Summary of the break-out group discussions

The summary of the three break-out group sessions are presented as tables. The common ground is clearly shown in that either all or at least three of the break-out groups reached the same or a similar conclusion. In the latter case it could be argued that the preferences of the odd group constitute a minority view that could possibly be accommodated within the bigger picture. It is also clear that for a few selected issues common ground was not identified, indicating either a lack of in-depth understanding of the issues, or national experiences that were defended in spite of the needs of the region as a whole. These issues will need further reflection within the region. There are also one or two issues where the preferences indicate a polarization of ideas that will have to be addressed for the greater good of the whole.

11.1 Standards, metrology and accreditation

The standards, metrology and accreditation domains are generally considered the fundamental building blocks of any quality infrastructure.

Issue	Preferences			
	Group 1	Group 2	Group 3	Group 4
Standards				
Q1 – Should ECOWAS Regional Standards be developed and published?	Yes – such standards are important to facilitate trade, to serve as the basis for technical regulations and to provide a mechanism for indigenous standards			
Q2 – Which regional standards should be developed and published?	Harmonize and publish regional standards used in intra-regional trade and technical regulation			
Q3 – What form should the regional standards infrastructure take?	A regional standards body similar to CEN or CENELEC to cooperate with national standards bodies should be considered			
Metrology				
Q1 – Regional metrology body	Enlarge SOAMET to include all ECOWAS members, even though modalities may have to be reviewed			
			Minority report: Close down SOAMET and establish new RMO	
Q2 – Primary metrology institutes	Identify a number of advanced NMIs in member states as the most cost-effective option for the region			
Q3 – Scope of legal metrology	Include trade, health and safety, law enforcement and environmental control	Include trade, health and safety, law enforcement and environmental control	Include trade and health	Include trade, health and safety, law enforcement and environmental control
Accreditation				
Accreditation services in the region	Establish a regional accreditation service and merge SOAC with it	Establish a regional accreditation service, but allow member states to establish national accreditation bodies	Designate national accreditation bodies in member states as <i>de jure</i> regional bodies	Establish a regional accreditation service and merge SOAC with it

11.2 Conformity assessment

Conformity assessment is the second level of service delivery in a quality infrastructure.

Issue	Preferences			
	Group 1	Group 2	Group 3	Group 4
Testing for Technical Regulation				
Q1 – Can testing for technical regulations be provided by public and private laboratories?	Yes, as it will give suppliers a choice and will foster public/private partnerships			
Q2 – How should the technical competency of testing laboratories active in regulatory fields be established?	Regulatory authority approval	ISO/IEC 17025 accreditation	ISO/IEC 17025 accreditation	ISO/IEC 17025 accreditation
	Minority report: ISO/IEC 17025 accreditation			
Q3 – Should test laboratories in the regulatory domain be designated?	Yes, as it is necessary to ensure their liability in the region			
Regional product certification scheme				
Q1 – Should a regional product certification scheme (including a mark) be established?	Yes, as it will foster intra-regional trade, support the SME sector in minimizing transactional costs of product certification in the region			
Q2 – Modalities for the administration of a regional product certification scheme				
Q2a – Could the West African scheme be an extension of the UEMOA based scheme?	No	No	Yes	Yes
Q2b – Which certification bodies should be allowed to administer the scheme?	Only National Standards Bodies or National Certification Bodies should be allowed			
Q2c – Who should have the final oversight of the scheme?	ECOWAS Commission			
Regional system certification scheme				
Is there a need for a regional system certification scheme?	No, the market is saturated with service providers and the competition with the multinationals will be fierce			

11.3 Quality infrastructure organizational structures

The regional organizations have to coordinate national activities, provide a link to the international quality infrastructures and in selected cases, provide services that the national level cannot deliver.

Issue	Preferences			
	Group 1	Group 2	Group 3	Group 4
Form of the West African Quality Infrastructure				
Q1a – Cooperation structures like in EAC or SADC	No, it is necessary to have more permanent structures in place			
Q1b – Permanent structures in ECOWAS Secretariat	Yes, but optimal format will need to be determined			
Governance of the West African Quality Infrastructure				
Q2a – Should the governance of the regional QI structures be vested in the Commission?	Yes, but it should be established as a separate Directorate	No	Yes, and they could be similar to the governance of the UEMOA QI structures	No
Q1b – Should the governance of the QI structures be vested in representative committees?	No	Yes, on which members states are appropriately represented	No	Governance committee of member states

12 Detail consideration of the break-out group outcomes

On a positive note, a lot of common ground was evident amongst the break-out groups. This augers well for the development of a common QI for the region that would be acceptable to most of the stakeholders. Over and above a more detailed discussion of the break-out groups in this section to augment the table of the previous section, additional recommendations based on good practices elsewhere are also provided for consideration in the near future.

12.1 Standards, metrology and accreditation

12.1.1 Standards

There was unanimity that regional standards should be developed and published, i.e. harmonize conflicting national standards. Such harmonized regional standards would facilitate intra-regional trade and could serve as an agreed basis for the implementation of technical regulations across the region. Obviously, adoption of international standards would constitute the bulk of the harmonized regional standards, but it was stated a few times that indigenous standards have to be developed especially for products unique to the region for which no international standards exist.

The preference of all the groups was for a regional structure similar to that of CEN or CENELEC to manage the development of regional standards. Some of the key elements of a CEN/CENELEC type operation would be:

- Establishment of regional technical committees representative of member states in the same way that ISO does it at the international level;
- The regional standards body is the custodian of the definitive text and copyright of the approved regional standards, but the financial exploitation of these standards is reserved for the national standards bodies;
- Final decision on the regional standards to be developed, is based on the demonstrated needs of the regulatory authorities and intra-regional trade; and
- Oversight over and coordination in regard of the activities of the regional technical committees to ensure that they follow agreed process and comply with WTO TBT Agreement obligations and that they operate in line with ECOWAS strategies and programmes, has to be in place.

Such a regional standards body will require the appropriate legal instrument to establish it, define its governance, list the obligations of member states, and deal with its financing. In addition, it will be important to give legal certainty to the regional standards, ensure copyright of the same and provide the overall process parameters for their development and approval. The administrative details should be dealt with in subsidiary legal instruments. The organizational form of the regional standards body will have to follow West African custom and practice, i.e. whether it is a structure within the ECOWAS Commission or whether it should be an ECOWAS statutory body or association.

12.1.2 Metrology

Linking metrology at the national level to the international level and to ensure its recognition, countries are strongly advised to work through Regional Metrology Organizations (RMOs) affili-

ated to the BIPM and others. AFRIMRETS has been established at the pan-African level to serve this purpose. Due to the vast distances in Africa, the continent has been divided into six sub-regional RMOs. Hence, the current situation prevailing in ECOWAS, namely that UEMOA member states belong to SOAMET, Nigeria and Ghana are members of NEWMET and a small number of ECOWAS countries are not members of either, is not useful to foster coordination of metrology activities in West Africa, or to obtain the required international recognition.

The break-out groups were therefore unanimous in their preferences that an ECOWAS metrology organization must be established. There was also consensus that SOAMET should be expanded to cover the whole region, but that its legal instruments, modalities and process may have to be revisited in order to render them relevant for the whole of West Africa. The advantage of this approach amongst others is that SOAMET is a recognized sub-regional RMO within AFRIMRETS. A minority considered this approach inappropriate and would favour the establishment of a new organization and to subsume SOAMET into it. The sensitivities of the minority report could however, be dealt with in the review process.

There was also unanimity regarding the identification of a number of advanced National Metrology Institutes (NMIs) to serve as the regional focal points of international metrological comparisons, instead of the alternative to establish a regional metrology institute. This will certainly lower the costs to the region, but will mean that a few member countries will have to invest heavily at the national level. A similar scheme is followed in most regions of the world.

Regarding the scope of legal metrology there was unanimity that the current practices limited only to trade need to be extended. The majority considered that West Africa needs to follow international trends and include trade, health and safety, law enforcement and environmental control within the scope of regional legal metrology. A minority considered that only trade and health and safety are required. All recognized however, that the implementation of a wider scope will be a step-by-step process. Such an approach will accommodate the minority view automatically.

12.1.3 Accreditation

Internationally recognized accreditation services are no longer a “nice to have” but are an absolute necessity for international recognition of conformity assessment services. No national accreditation bodies have been established within the region, and should they be established it will take quite a few years for them to obtain international recognition. In addition, it will be very costly for smaller economies to establish national accreditation bodies because the available business is nowhere near enough to make it a viable proposition from a financial perspective. Hence, the majority preference is to establish a regional accreditation body. A minority considered this to be impracticable, and supported the development of national bodies.

As to how the regional accreditation body is to be established, the majority view was that a new body should be established and that SOAC should be subsumed into it, rather than extend the activities of SOAC to the whole region. The organizational form of such a regional accreditation body will require careful thought, because a measure of independence to separate it from political interference and financial pressures will be required for international recognition (e.g. in SADC the accreditation coordination structure is SADCA, whereas the regional accreditation body is SADCAS, a private “not for gain” company incorporated in Botswana). It was also made

clear that member states should not be hindered from establishing their own national accreditation bodies, albeit with a formal understanding between them and the regional body regarding the territories that they should serve. This is similar to the situation at the international level where there is a limitation placed on accrediting bodies not to pursue business outside their territory to the detriment of others.

12.2 Conformity assessment

Conformity assessment has developed into big business at the international level with a multitude of companies and multinationals providing the whole gamut of conformity assessment services. It is therefore very important to consider the establishment of regional conformity assessment services carefully, and rather consider controls over those that do provide such services especially in the domain with public responsibilities.

12.2.1 Testing for technical regulations

Testing to ensure proper implementation of technical regulations has been the sole responsibility of regulatory authorities, i.e. the state, in the past. This is no longer tenable due to the massive investments to keep up to date with technological developments, investments that government no longer wish to make. Hence this type of testing with a public responsibility dimension has been shifted to third-party laboratories, with authorities controlling two important management aspects of such testing.

In the first place, there was unanimity that both public and private laboratories should be allowed to provide testing in support of the implementation of technical regulations in West Africa. This would allow for private investment in laboratory services and would support public/private cooperation.

Secondly, the technical competency of such testing laboratories has to be demonstrated to all. The international trend is that accreditation to ISO/IEC 17025 is the way to do so. Hence, the majority view was that this should also be pursued in West Africa. Only a minority view was that the regulatory authorities should be charged with this responsibility. The latter view is not supported internationally and is sometimes seen as the cause of unnecessary trade barriers. What is also clearly understood is that this will be a long process. There are very few accredited laboratories in West Africa, and trying to implement such a preference immediately will not be possible. A process of actively working towards it however, will be important in gaining the confidence of major trading partners and will facilitate exports to the more sophisticated but lucrative markets.

The workshop was also unanimous in their preference that such laboratories need to be designated by member country governments. Designation is a process whereby authorities look beyond technical competency to legal liabilities, ethical behaviour, payment of taxes and similar issues that accreditation does not address. The problem with such an approach, e.g. the notified bodies of the EU, means that such laboratories would need to be resident in the country of the government designating it.

If designation is rigorously enforced as wished for by the workshop, it will be seen as a major trade barrier by trading partners, and may even scupper trade agreements. It is therefore important that other solutions should also be allowed for such as: (i) unilateral recognition of labo-

ratory results by the regulatory authorities, (ii) acceptance of results from accredited foreign laboratories even though they may not be designated, and (iii) the acceptance of international certification such as OIML or IEC CB scheme test reports.

Additional recommendation 1:

It is recommended that the testing for demonstrating compliance of products to technical regulations be provided by technically competent laboratories in the region and abroad. The mechanism for identifying such laboratories should be one or more of the following depending on the risk assessment regarding failure of the product:

- Accreditation to ISO/IEC 17025;
- Designation by the regulatory authorities;
- Unilateral recognition of laboratory results by the regulatory authorities;
- Acceptance of results from accredited foreign laboratories even though they may not be designated;
- Acceptance of international test certificates such as OIML or IEC CB scheme.

12.2.2 Regional product certification scheme

Regional product certification schemes have been tried in other regions. To date they have not been very successful due to the availability of many national or multinational schemes. This is not the case in West Africa. There was unanimity that a West African product certification scheme with its own distinctive mark should be established. UEMOA has established such a scheme, an UEMOA Mark has been registered, but no organizations have been approved yet to administer the scheme at the national level.

The workshop was evenly divided as to whether the UEMOA scheme should be extended to the whole of the region, or whether a new scheme should be established. No doubt, the fact that the UEMOA scheme is not yet operational, and that the UEMOA Mark does not reflect an ECOWAS identity are some of the reasons for the split view. Considering the views expressed and some of the fundamentals such a scheme should comply with, it seems that a new scheme with a new mark representative of the whole region, should be developed. It would then make a lot of sense to subsume the UEMOA scheme into the broader ECOWAS scheme, without major disruption to industry in UEMOA.

Regarding the question of which organizations should eventually be allowed to administer such a scheme, there was unanimity that only national standards bodies or national certification bodies should be allowed to do so once they meet specified criteria. This should not be a problem, and can be seen as a commercial decision to support the NSBs of smaller economies.

The oversight body of such a scheme (i.e. the copyright owner of the mark, the establishment of the criteria and final approval of certification bodies, etc.) was unanimously considered to be the ECOWAS Commission. Obviously, the appropriate legal instruments will have to be promulgated that includes amongst others the organizational form, governance, finances, framework for the approval of certification bodies, obligations of certification bodies and certified companies, transgressions and sanctions.

Additional recommendation 2:

It is recommended that a new regional product certification scheme for ECOWAS is developed and established. Elements of the new scheme should include:

- A certification mark representative of the whole region;
- A set of requirements that certification bodies have to comply with based on ISO/IEC Guide 65 (or its imminent successor, ISO/IEC 17065); and
- A mechanism for integrating the UEMOA product certification scheme.

In addition to the above elements, the scheme should also cater for the ECOWAS Commission to be the oversight body of the scheme and that only NSBs or national certification bodies that can demonstrate the required technical competence would be authorized to exploit the ECOWAS product certification mark commercially.

12.2.3 Regional system certification scheme

There was unanimity that a regional system certification scheme (e.g. ISO 9001, ISO 14001, ISO 22000, HACCP, etc.) was not warranted. The main reasons for this decision are that the market is already well served by many certification bodies in this regard, including multinationals, and that the competition is fierce and probably beyond a regional institution to handle.

12.3 West African regional QI organizational format

The challenges to determine the organizational formats for the West African QI are formidable. In the first instance a decision has to be made whether the organizations will be permanent structures with permanent staff or whether they will be permanent committees representative of member country interests. In addition, the manner of merging of the UEMOA QI structures with such new constructs must be considered.

12.3.1 The structures

There was general consensus that a permanent committee structure such as has been established in EAC and SADC is not wanted, and that permanently staffed structures are preferred. This does mean however, that the ECOWAS Commission will become responsible for the long-term funding of such structures. Participants accepted this notion, but considered it preferable to mechanisms in other regions where the bulk of the funding comes from a few rich member states. As to the organizational form of such permanent structures, the UEMOA experiences should be carefully considered, also the current ongoing UEMOA debate as to the “independence” of such structures from the political level, i.e. establishing them as associations.

Additional recommendation 3:

It is recommended that the structures are considered simultaneously with the governance issues (see 12.3.2 below) as they are inextricably linked to each other.

Although the workshop did not express itself regarding the number and scope of the various structures, regional experiences suggest that at least three structures dealing with standards, metrology and accreditation are a necessity to link with the international levels. This has also

been stated by default during the discussions regarding these specifics (see 12.1 above). What still needs to be agreed to, is whether a structure representative of the national technical regulation domains is needed. Experiences in other regions suggest that such a structure is necessary, especially in the light of the emergence of technical regulations as trade barriers in regional context.

Additional recommendation 4:

It is strongly recommended that a structure representative of the ministries and/or agencies responsible for national technical regulation be established as part of the regional structures.

Depending on the ECOWAS Commission custom and practice such structures could be part of the Commission, could be established as statutory bodies in terms of community legislation or precedence, or could be established as stand-alone associations operating in accordance with a MoU with the ECOWAS Commission. It does not make sense to have a structure within the greater ECOWAS and a parallel within UEMOA. This will certainly compromise international recognition apart from the fact that it would be much more expensive to maintain. UEMOA member countries will be the losers should the parallel structures remain.

Additional recommendation 5:

It is recommended that the UMOA structures be subsumed in an appropriate manner and in as short a time frame as possible, within the newly established ECOWAS structures, unless it is the UEMOA structure that is expanded to cover the whole of West Africa, e.g. SOAMET.

12.3.2 Governance of the regional QI structures

The governance question did not lead to consensus of opinion. Groups variously proposed a separate Directorate in the Commission, governance structures similar to those in UEMOA, and Councils/Boards representative of member countries. This issue will therefore need to be carefully considered before an appropriate governance structure can be presented. Issues such as ECOWAS Commission practices and rules, strategy development and fiduciary responsibilities, and political support for the activities, are only some of the issues that need to be factored into the debate and ultimate preferred options. A small expert group to consider the overall governance of the regional QI structures may therefore be indicated, with administrative, legal and financial experts from the Commissions to be included in the discussions.

Additional recommendation 6:

It is recommended that a small group of quality infrastructure experts, including administrative, legal and financial experts from the ECOWAS and UEMOA Commissions is established to develop proposals for the organizational format of the ECOWAS QI and the governance of the same.

Generally speaking, good governance practices for such technically and/or business orientated structures world-wide suggest that the governance bodies should consist of a small number of professionals from government and industry that can provide the necessary strategic direction

and act out the fiduciary responsibilities. This means that the governance is not representative of the broader stakeholder community. In order to capture the important input of the broader stakeholder community, it is recommended that a Quality Infrastructure Forum be established where those that wish to participate can do so. This forum will meet probably annually and will develop recommendations to the ECOWAS Commission and the regional QI structure governance bodies on future strategies and needs of the stakeholder community.

Additional recommendation 7:

It is recommended that a regional consultative forum be established that can be representative of all the stakeholders interested in standardization, conformity assessment and technical regulations. This forum could meet annually and provide important guidance and recommendations to the governance structure of the ECOWAS Regional QI.

PART V: KEY POINTS OF AN ECOWAS QUALITY POLICY

Whereas Part IV dealt with the possible structure of an ECOWAS Quality Infrastructure, Part V places a future ECOWAS Quality Policy in the context of other, broader ECOWAS Policies, as it needs to be properly integrated into the bigger ECOWAS picture. In this respect the West African Common Industrial Policy (WACIP) of 2010 can be considered as the overall framework within which to develop a common approach to a regional QI and TRF, i.e. the ECOWAS Quality Policy. The overall structure of an ECOWAS Quality Policy is also indicated.

13 West African Common Industrial Policy (WACIP)

13.1 General objectives

The general objectives (as described in Part II) of the West African Common Industrial Policy (WACIP) is to accelerate the industrialisation of West Africa through the promotion of industrial transformation of local raw materials, development and diversification of industrial productive capacity and strengthening of regional integration and export of manufactured goods. To this end it lists the following as general objectives:

- Creating more wealth and added value through increased industrial processing of local commodities;
- Strengthening market access for the region's manufactured products;
- Creating competitive value chains;
- Sustaining and strengthening the regional integration process; and
- Integrating industrial policy and trade policy into the global development and economic growth policy of the States in the region.

13.2 Interventions

In order to achieve these general objectives, the WACIP puts forward a list of 12 interventions. Some of these rely on the establishment of an effective and efficient quality system at the regional and national level, namely –

1. Private sector development through support measures to enhance competitiveness;
2. Development of industrial production capacities through increased endogenous processing of local commodities to create more wealth and added value in value chains;
3. Development of infrastructures and support services such as quality and conformity assessment infrastructures, technological, information services, trade, investments, export promotion, customs, energy, industrial areas, etc;
4. Strengthening cooperation between the respective private sectors of the Member States through exchange of experience on product quality, economic and standardization information;
5. Development of regional industrial integration in the areas of intra-regional and global trade due to its importance for economic and social development;
6. Effective implementation of Community Investment and Competition rules and their application, adopted on 19 December 2008 by the ECOWAS Heads of State and Government;
7. Balanced economic development of the various States in the regions;

8. Promotion of a positive image for the region;
9. Establishment of suitable financing systems for regional enterprises, especially the SME/SMIs;
10. Promotion of endogenous and foreign direct investments; and
11. Mobilisation of resources and diversification of the financial instruments required for the creation and upgrading of industries.
12. Prompt implementation of the ECOWAS Common External Tariff which is presently enforced by some countries of the Community, without its having been formally adopted due to ongoing discussions on the 5th band issue.

The first five of these interventions can be considered to be important regarding the discussions of this document. The third intervention talks directly about the establishment of quality and conformity assessment services, and information services. In addition, an effective and efficient QI and TRF will have a direct bearing on interventions (1), (2), (4) and (5).

13.3 Specifics

The WACIP goes further, and in its paragraph 11.8 deals directly with the envisaged Standardization, Quality Assurance, Accreditation and Metrology Programme (SQAM). It specifically mentions that the adoption of high-level industrial standards and guarantee of acceptable product quality are of major importance for the expansion of intra-regional trade, as well as for exports.

The SQAM programme has been initiated and its implementation will be accelerated whilst capitalizing on the lessons learnt and the attainments of current programmes. Specific interventions required in this regard would be to –

- Strengthen the QI in the region through consolidation of the legal framework;
- Training of human resources;
- Strengthening technical capacity of the conformity assessment services in order to ensure quality and conformity of products and services with standards.

Furthermore, the programme will focus on elaborating and providing West Africa with a quality regional policy in keeping with the region's ambitions.

14 Quality Policy framework

Building upon the WACIP as a basis, an ECOWAS Quality Policy can and should provide much more detail regarding the establishment of a regional infrastructure. Typical elements that make up a Quality Policy are the following:

14.1 Introduction and context

The Introduction and context should describe in a fair amount of detail the current international trends, the regional situation and why it has become necessary to establish a regional Quality Infrastructure and technical regulation framework.

14.2 Vision for the ECOWAS Quality Policy

This part of the ECOWAS Quality Policy, the state of affairs a few years into the future is described, i.e. what should the region look like with regard to the QI and the technical regulation and SPS regimes, if all the elements of the ECOWAS Quality Policy have been successfully implemented and what the overall outcome should be. The actual time period to achieve the desired state of affairs should also be identified.

14.3 Current state of affairs

The current state of the regional QI and the technical regulation and SPS regimes, as well as their relationship to the national level needs to be described to create a baseline from which progress can be measured. Very important issues that need to be described are the overlaps and unclear legislation of various policies and agencies that lead to unnecessary bureaucratic activities especially with regard to the development and implementation of technical regulation and SPS measures, including any import controls.

14.4 Objectives of the ECOWAS Quality Policy

The policy has to spell out very clearly what its objectives (e.g. the envisaged purposes) are. This clarity of thought is important as it would guide the debate regarding the details of the policy that may for example be contained in legislation for its future implementation. The objectives would also become the key performance indicators at the end of the specified implementation time that would tell whether the policy has been successfully implemented or not.

14.5 The Regional Quality Infrastructure

The readers and users of the ECOWAS Quality Policy will come from all walks of life, such as senior policy makers of Ministries, Parliamentarians, NGOs, the press and many more. Not all of them would be as familiar with the elements that make up the Quality Infrastructure as would be the institutions of the infrastructure itself, such as national standards bodies, test laboratories, metrology institutes, and the like. It is therefore appropriate that a clear, but concise overview be given of the institutions and their responsibilities that make up the regional QI.

14.6 Technical Regulation Framework

The national QIs are service providers to both authorities and the private sector, and many services will eventually be provided by private industry. Regulatory activities on the other hand, are always the responsibility of the state. There is however, a very clear connection between the two, and the one cannot function without the other. This is also the reason why the WTO TBT Agreement deals with both domains. Hence it is equally important that a clear and concise description of the regional Technical Regulation Framework be provided in the Quality Policy, and not only the QI.

14.7 Commitment of the Commission

There are a number of ways to deal with the commitment of the Commission. An elegant way, is to list the overall commitment and then to describe the end state for each of the QI institutions and the technical regulation regime separately, each in its own section.

14.8 Role of other stakeholders

The private sector has to be intimately involved right from the start in the design of the QI as they would be one of the main beneficiaries of the services of the QI. The same applies to the non-governmental organizations and society in general. The Quality Policy therefore needs to spell out the role of the private sector in appropriate detail.

14.9 Relationships with International organizations

A very strong and active international QI community exists with renowned organizations such as ISO, IEC, ITU, CAC, OIML, BIPM, ILAC, IAF and many others that have a massive influence on the international standardization and related activities. This means that the regional institutions need to connect effectively with such international organizations. The Quality Policy should provide guidance on the priorities for membership at the international level, the level of participation and key responsibilities of the regional institutions *viz. a viz.* their national counterparts.

14.10 Financing

An analysis of the NQI institutions worldwide indicates that governments retain the responsibility to fund the three main institutions to a large extent, even in relatively well developed economies. Hence, the ECOWAS Commission will have to commit itself to constantly fund the standards and metrology institutions of the QI at appreciate levels. The same applies to accreditation, depending on the final decision on a regional accreditation body.

14.11 Legal framework

It is quite obvious that much of the environment in which the ECOWAS QI and the Technical Regulation Framework can be given legitimacy will have to be guided by legislation. Therefore, the Quality Policy should spell out the Commission's commitment to develop and promulgate such legislation.

PART VI: HIGH LEVEL ROAD MAP

Developing a regional Quality Policy and establishing a regional QI has to be undertaken with the cooperation of all the stakeholders, but especially the political level as well as the QI institutions and regulatory agencies at national level. This can only really be started once the major political decision as shown in **Phase 1** of the table in **Part III** have been agreed to. Then it would be possible to develop draft text in small working groups that can then be work-shopped in more representative meetings. The approval at the political level has to follow ECOWAS custom and practice. In this Part a possible high level road map, including a number of important milestones, of such a process is presented for consideration.

15 General

A vast number of preferences based on common ground regarding the West African Quality Infrastructure have been identified during the workshop as listed in Part IV. These should form the basis of any design of such an infrastructure. In Part IV, some additional recommendations have been listed where singular preferences could not be identified, but which are based on international and regional good practices. They would form the second set of elements to be factored into the design of the infrastructure. In the third instance there are elements, particularly the governance of the regional QI structures that will have to be developed from basic principles, as there are no definitive international or regional examples, and where ECOWAS Commission rules, custom and practice need to be observed which have not been considered in this report.

15.1 High level milestones

There has been some debate as to whether a regional Quality Policy has to be developed and approved before the legislation establishing the regional QI can be developed, i.e. the QI institutions can be established. In a perfect world, the Quality Policy would be developed and approved before the next step, namely the establishment of the regional QI, is contemplated. Because the establishment of a regional QI is in the first place a political decision, albeit including technical considerations, it would make sense to first obtain political buy-in for the process. Due to the intensity in respect of the integration process of the region, it may be useful to develop the Quality Policy and the required legislative instruments, i.e. the regional QI in parallel. This does mean however, that the process has to be guided and managed very carefully to ensure that the establishment of the QI does not get ahead of the political process.

The high level milestones for the development and establishment of the West African Quality Infrastructure can broadly be stated as the following:

1. Develop draft text for a Quality Policy for West Africa that takes into account the preferences and recommendations as described in Parts IV and V.
2. Provide the draft text to the appropriate structures in ECOWAS to obtain stakeholder views and further recommendations. Include these where appropriate in the draft text.
3. Present the draft text that has been consulted widely to the relevant political structures in ECOWAS to obtain approval for implementation.
4. Plan the development and promulgation of required legal instruments to give effect to the West African Quality Policy in accordance with ECOWAS rules.

5. Develop an implementation plan to establish the structures, appropriate the required funds from the ECOWAS / UEMOA budgets, and appoint the relevant staff and governance. This would include the planning and execution of the merging of UEMOA QI structures with the new structures or the extension of the UEMOA structure to the whole region.

Obviously all the above would require detail planning as well. It is recommended that the Quality Policy be developed and approved as soon as possible in order to maintain and even extend the momentum generated through the workshop and other decisions at ECOWAS and UEMOA Commission levels.

15.2 High level roadmap to an ECOWAS Quality Policy

Developing a regional Quality Policy has to be undertaken with the cooperation of all the stakeholders, but especially the political level and the QI institutions and regulatory agencies at national level. To develop draft text in such a large group is very difficult, and it makes much more sense to do so in a working group established especially for this purpose. Thereafter wider stakeholder consultations are indicated before the draft text is presented for consideration and approval at the political level. The approval at the political level has to follow ECOWAS custom and practice.

Issues that have been identified as Phase 2 decisions in Part III have to be dealt with by the working group in developing a draft regional Quality Policy wherever possible and appropriate. Where these cannot be resolved by the working group, in-depth discussions with a larger stakeholder group will be necessary either during the quality policy development stage or during the establishment of the actual West African QI. These are very important detail discussions that must not be neglected.

	Activity	2011		2012			
		Q3	Q4	Q1	Q2	Q3	Q4
1	A working group of experts develop a first draft ECOWAS Quality Policy based on this report and its recommendations. The working group to include QI experts, and administrative and legal experts from the UEMOA and ECOWAS Commissions.						
2	The draft ECOWAS Quality Policy is presented and considered to the wider stakeholder community in workshops at national and even at regional level.						
3	The working group considers the comments and recommendations of the various workshops and revises the draft accordingly where appropriate.						
4	The draft ECOWAS Quality Policy is presented to the ECOWAS Commission structures for consideration and final approval at the level of the Ministers of Trade and Industry and even above if required.						

15.3 High level roadmap to the establishment of the West African QI

The process to develop the relevant legislative instruments to establish a West African QI can be started as soon as some of the more fundamental decisions regarding such infrastructure have been reached in principle, even though the political approval through the ECOWAS Quality Policy has not run its full course. The draft legislative instruments can always be brought up to date

with the most recent information after the stakeholder consultations of the ECOWAS Quality Policy.

Once the draft legislative instruments have been developed, the planning for the establishment of the West Africa QI has to commence. This will be a major undertaking, as new organizations, their governance structures, staff, budgets, accommodation, and much more will have to be planned for and implemented once the legislative instruments have been promulgated. The following Gant Chart can just indicate the major activities – a tremendous amount of detail planning will have to take place that cannot be provided for in this report. The detail planning will have to be executed by a dedicated group appointed by and accountable to the ECOWAS Commission.

	Activity	2011		2012			
		Q3	Q4	Q1	Q2	Q3	Q4
1	Develop draft legislation based on preliminary considerations of the draft ECOWAS Quality Policy and proposed West African QI by a small working group of legal and QI experts.						
2	The draft legislative instruments are considered in the light of the agreed Quality Policy and proposed West African QI.						
3	The legislative instruments are presented to the ECOWAS political structures for approval and promulgation.						
4	Detailed planning by a dedicated group accountable to the ECOWAS Commission for the establishment of the West African QI takes place, including the subsuming of the existing UEMOA and ECOWAS QI structures in the same						
5	Establishment and operationalization of the West African QI, including the standing down of the UEMOA and ECOWAS quality infrastructure						

16 Conclusion

The establishment of a West African QI is a strategically important endeavour as it would ensure that the region can connect to the international environment in this regard. Such a regional structure would facilitate and support the development of service delivery with regard to standards, metrology, accreditation, inspection, testing and certification at the national level and where necessary at the regional level. This service delivery can enjoy international recognition thereby facilitating intra-regional trade and exports from the region, support the industrial development of especially the SME sector and thereby support job creation which eventually leads to poverty reduction. It will support the implementation of effective and efficient technical regulation regimes to safeguard the peoples, fauna and flora from unsafe products. Without such a West African QI it will be very difficult and expensive for the region to gain this international acceptance, and it will be left to the individual countries to do so. Although technically feasible, it will be much more expensive and especially smaller economies will find it very difficult if not impossible to do so.

REFERENCES

West African Common Industrial Policy, July 2010, ECOWAS Commission, Abuja

The East African Community Standardization, Quality Assurance, Metrology and Testing Act, 2006, EAC Secretariat, Arusha

Annex IX Concerning Technical Barriers to Trade, SADC Trade Protocol, SADC Secretariat, Gabone

Fast Forward: National Standards Bodies in Developing Countries, International Organization for Standardization (ISO), 2008, Geneva, ISBN 978-92-67-10477-5

Values and rules for global responsibility: Quality Infrastructure, a step towards good governance, Physikalisch-Technische Bundesanstalt, 2006, Braunschweig

Report of the consultative meeting of National Standards Bodies for harmonization of standards in West Africa, Ouagadougou, 7-8 October 2010, UNIDO

Report of the first meeting of the Regional Thematic Working Group (RTWG) on "Product certification scheme and quality awards", Abuja, 27-29 September 2010, UNIDO

Report of the 1st meeting of the Regional Thematic Working Group (RTWG) on "Metrology / calibration", 24-26 April 2010, Cairo, Egypt

Report of the second meeting of the Regional Thematic Working Group (RTWG) on "Product testing", 14-16 October 2010, Conakry, Guinea, UNIDO

Regulation No. 05/2010/CM/UEMOA, Scheme on harmonization of activities for accreditation, certification, standardization and metrology in the WAEMU, UEMOA Commission, Ouagadougou

Regulation No. /2010/COM/UEMOA, The responsibilities, organization and functioning of the Regional Committee for Quality (CREQ), UEMOA Commission, Ouagadougou

Regulation No. /2010/COM/UEMOA, The responsibilities, organization and operation of the West African System of Metrology (SOAMET), UEMOA Commission, Ouagadougou

Regulation No. /2010/COM/UEMOA, The responsibilities, organization and operation of the West African Accreditation System (SOAC), UEMOA Commission, Ouagadougou

Regulation No. /2010/COM/UEMOA, The responsibilities, organization and functioning of the Regional Organization for Standardization, Certification and Quality Promotion (NORMCERQ), UEMOA Commission, Ouagadougou