

NATIONAL QUALITY POLICY
FOR BOTSWANA

LIST OF ACRONYMS

AFRAC	-	African Accreditation Cooperation
AFRIMETS	-	Intra-Africa Metrology System
ARSO	-	African Organization for Standardization
BB		Business Botswana
BEMA	-	Botswana Exporters and Manufacturers Association
BIPM	-	Bureau Internationale de Poids et Mesures
BITC	-	Botswana Investment and Trade Centre
BOBS	-	Botswana Bureau of Standards
BOS	-	Botswana (National) Standard
BQA	-	Botswana Qualifications Authority
CAC	-	Codex Alimentarius Commission
CIPM	-	Comité International des Poids et Mesures
CMC	-	Calibration and Measurement Capability
COMESA	-	Common Market for Eastern and Southern Africa
EU	-	European Union
FAO	-	Food and Agriculture Organization (of the United Nations)
GDP	-	Gross Domestic Product
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
KCDB	-	Key Comparison Data Base
NDP	-	National Development Plan
MITI	-	Ministry of Investment, Trade and Industry
MLA	-	Multilateral Recognition Agreement
MRA	-	Mutual Recognition Arrangement
NGO	-	Non-Governmental Organization
NMI	-	National Metrology Institute
NQI	-	National Quality Infrastructure
NQP	-	National Quality Policy
OIE	-	World Organization for Animal Health
OIML	-	Organisation Internationale de Métrologie Légale
SABS	-	South African Bureau of Standards
SADC	-	Southern African Development Community
SADC TBTEG	-	SADC TBT Expert Group
SADCA	-	SADC Cooperation in Accreditation
SADCAS	-	SADC Accreditation Service
SADCMEL	-	SADC Cooperation in Legal Metrology
SADCMET	-	SADC Cooperation in Metrology
SADCSTAN	-	SADC Cooperation in Standards
SADCTBTSC	-	SADC TBT Stakeholders Committee
SADCTRLC	-	SADC Technical Regulations Liaison Committee
SANAS	-	South African National Accreditation Service
SMME	-	Small, Medium and Micro Enterprises
SPS	-	Sanitary and Phyto-sanitary
TBT	-	Technical Barriers to Trade
WTO	-	World Trade Organization

DEFINITIONS OF THE NATIONAL QUALITY POLICY TERMS

Unless the context dictates otherwise, the following definitions apply to the National Quality Policy:

- **Accreditation** is the procedure by which an authoritative body gives formal recognition that a body or person is competent to carry out specific tasks.
- **Calibration** is the set of operations that establish, under specified conditions, the relationship between values of quantities indicated by a measuring instrument or measuring system, or values represented by a material measure or a reference material and the corresponding values realized by standards.
- **Certification** is the procedure by which a third party provides written attestation that a product, process or service meets specified requirements.
- **Conformity Assessment** means the demonstration that specified requirements relating to a product, process, system, person or body are fulfilled.
- **Inspection** means the examination of a product design, product, process or installation and determination of its conformity with specific requirements or, on the basis of professional judgement, with general requirements.
- **Measurement Standard** means a material measure, measuring instrument, reference material or measuring system intended to define, realize, conserve or reproduce a unit, or one or more values of a quantity, to serve as a reference.
- **National Quality Infrastructure** 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).
- **Quality** means the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs.
- **Quality Management** means the coordinated activities to direct and control an organization with regard to quality.
- **Standard** means a document, established by consensus and approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context.
- **Technical Regulation** means a document which lays down product characteristics or their related processes and production methods, including the applicable administrative provisions, with which compliance is mandatory. It may also include or deal exclusively with terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method.
- **Testing** means the determination of one or more characteristics of an object of conformity assessment in accordance with a specified method.

TABLE OF CONTENTS

LIST OF ACRONYMS	2
DEFINITIONS OF THE NATIONAL QUALITY POLICY TERMS	3
1. INTRODUCTION	7
2. BACKGROUND	8
2.1 Concept of National Quality Policy	8
2.2 Quality Infrastructure.....	8
2.3 Technical Regulation (TR)	9
3. NATIONAL QUALITY INFRASTRUCTURE AND TECHNICAL REGULATION OF BOTSWANA	10
3.1 National Quality Infrastructure in Botswana	11
3.1.1 Botswana Bureau of Standards	11
3.1.2 National Food Control Laboratory.....	12
3.1.3 National Veterinary Laboratory.....	12
3.1.4 Botswana Vaccine Institute (BVI).....	12
3.1.5 National Food Technology Research Centre (NFTRC).....	12
3.1.6 National Environmental Laboratory	12
3.1.7 Botswana Geoscience Institute (Formerly Department of Geological Survey Laboratory).....	13
3.1.8 Central Materials Laboratory.....	13
3.1.9 Private Sector and Academic Laboratories.....	13
3.1.10 Accreditation Body	13
3.2 Technical Regulation in Botswana	13
4. NATIONAL QUALITY POLICY ENVIRONMENT	14
4.1 The External Policy Environment for National Quality Policy	14
4.1.1 WTO Agreement on Technical Barriers to Trade.....	15
4.1.2 The SADC Protocol on Trade TBT Annex	15
4.2 The Interface between the NQP 2022 and Related Domestic Policies	16
4.2.1 National Development Plans (NDPs) and National Vision	16
4.2.2 Revised National Trade Policy of Botswana (2019).....	17
4.2.3 Revised Industrial Development Policy for Botswana (2014).....	17
4.2.4 Special Economic Zones Policy (2011).....	17
4.2.5 Economic Diversification Strategy (EDD 2011)	17
4.2.6 Other Key Domestic Policies (Consumer Protection).....	18

5. NATIONAL QUALITY POLICY: RATIONALE, VISION AND MISSION.....	18
5.1 Rationale for the Quality Policy	18
5.2 Strategic Policy Foundations	19
Vision.....	19
Mission	19
Theme	19
6. NATIONAL QUALITY POLICY GUIDING PRINCIPLES	19
7. NATIONAL QUALITY POLICY OBJECTIVES.....	20
7.1 Primary Objective.....	20
7.2 Specific Objectives	20
8. NATIONAL QUALITY POLICY FOCUS AREAS	21
8.1 National Quality Infrastructure	21
8.1.1 Metrology	21
8.1.2 Scientific Metrology	21
8.1.3 Industrial Metrology	22
8.1.4 Legal Metrology	23
8.1.5 Standards	23
8.1.6 Accreditation.....	24
8.1.7 Conformity Assessment.....	25
8.2 Technical Regulation.....	26
8.2.1 Technical Regulatory Framework.....	26
8.2.2 Technical requirements.....	27
8.2.3 Market Surveillance.....	27
8.2.4 Sanctions.....	27
8.2.5 Regulatory Authorities.....	28
8.2.6 Coordination of Technical Regulation Activities.....	28
8.2.7 Coordination between TBT and SPS Measures	28
8.2.8 Education and Training.....	29
8.2.9 Information and Awareness.....	29
8.2.9.1 National TBT Enquiry Point	29
8.2.9.2 Trade Promotion Organization	30
8.2.9.3 Awareness.....	30
8.2.9.4 National Quality Award.....	31
8.3 Financing the NQI and Technical Regulatory Framework.....	31
8.3.1 Government Direct Investment.....	31

8.3.2 Financial Sustainability.....	32
8.3.3 NQI and TR Financing by International Organisations.....	33
9. NATIONAL QUALITY POLICY INFRASTRUCTURE AND TECHNICAL REGULATORY EXECUTION FRAMEWORK	33
9.1 Institutional Arrangement.....	33
9.2 Implementation Plan.....	35
9.2.1 Government Ministries and Departments	35
9.2.2 Botswana Bureau of Standards.....	36
9.2.3 Private Sector.....	36
9.2.4 Non-Governmental Organizations (NGOs).....	37
9.2.5 Development Partners.....	37
9.2.6 International liaison	38
9.2.7 Regulatory Agencies.....	38
9.3 Legal Framework.....	38
9.3.1 Review of Current Legislation.....	39
10 NATIONAL QUALITY POLICY MONITORING AND EVALUATION	39

1. INTRODUCTION

Trade has been an essential driver of economic growth in Botswana since independence in 1966. Botswana became a member of WTO in 1995 and the objective was for Botswana to participate in global trade. However, for trade to be expanded at national, regional and international level, there is need to adopt and implement internationally recognized and acceptable Quality Infrastructure (QI) and Technical Regulation (TR) practices, and these criteria has now become a key for any country to join WTO. These practices are important as they provide a crucial link to global trade, market access and export competitiveness through their contribution to consumer confidence in product safety, quality, health and the environment. Hence, credible Quality Infrastructure and Regulatory environment are important pillars for industrial development and for deriving maximum benefits out of WTO Membership.

The Quality Infrastructure and Technical Regulation regime are interwoven in complex ways that should not be separated. International recognition of both is absolutely vital for Botswana to pursue a more effective integration into the world economy. Hence, the National Quality Policy (NQP 2022) articulates Government aims on both issues, i.e. the modernization of the National Quality Infrastructure and the re-engineering of the Technical Regulation regime, so that both are fully compliant with current international norms and practices. The NQP (2022) is therefore an integral part of the broader industrial, diversification and export strategies that seek the development of quality products and services. Further, the Policy seeks to enhance trade and economic development whole simultaneously ensuring that the safety and health of human, fauna and flora as well as the environment are not compromised.

The Policy was developed through a consultative process covering a wide range of stakeholders, including Government Ministries and Departments, Parastatals, the Private Sector, Civil Society, Academia and the Media as well as Development Partners. The consultative process provided an in-depth understanding of the challenges and constraints related to standards, metrology, accreditation, conformity assessment and Technical Regulation, which then informed the development of the key strategic policy measures. The Policy is therefore anchored on a participatory, inclusive and supportive process that would ensure buy-in from a wide spectrum of stakeholders.

2. BACKGROUND

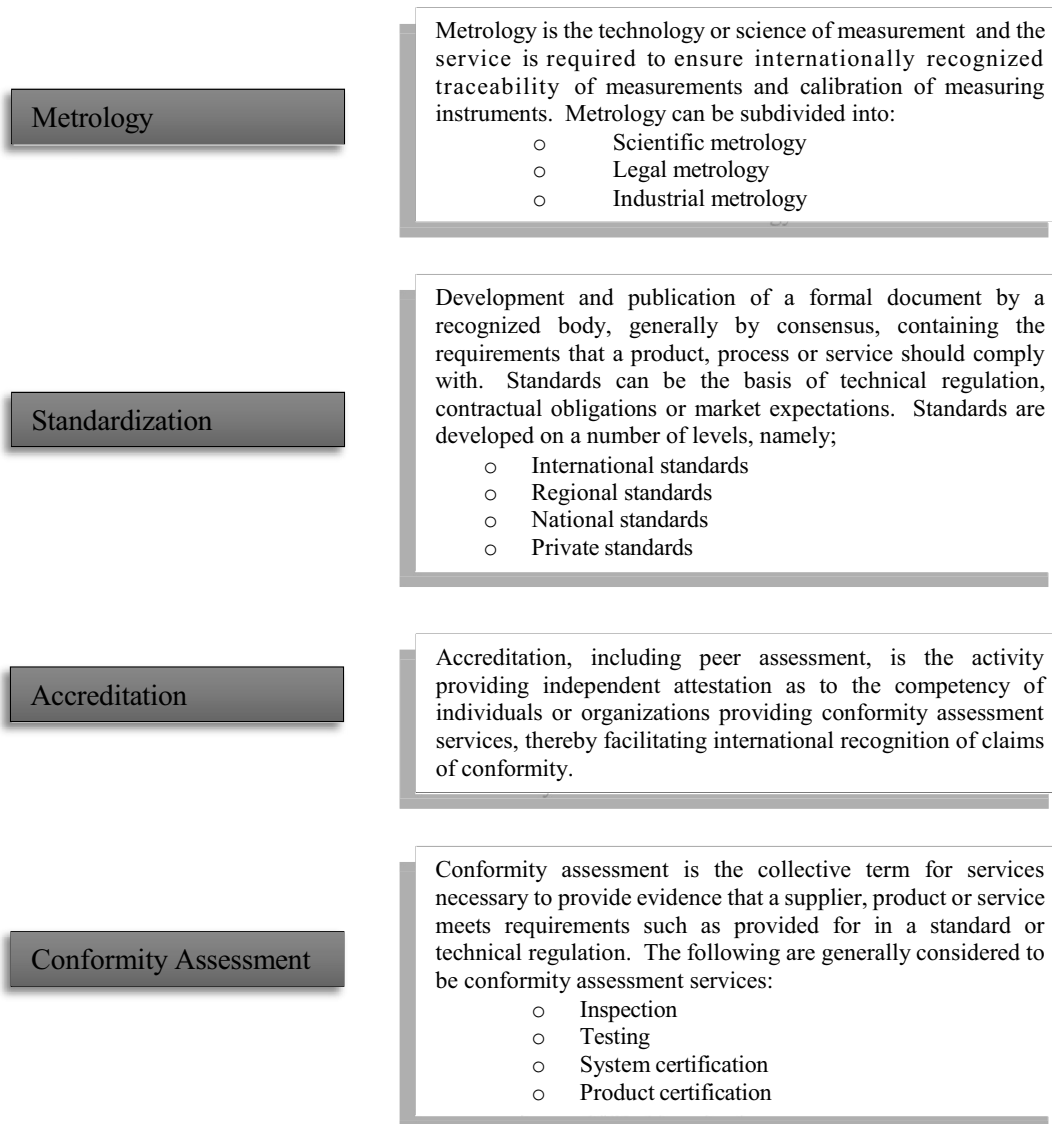
2.1 Concept of National Quality Policy

The National Quality Policy (NQP) is the basic government instrument that sets out the objectives and strategies of the country regarding the development and use of the Quality Infrastructure and Technical Regulation (TR) in relation to its economic and societal needs and the building of a quality culture. The scope of this National Quality Policy is limited to the domain as provided for in the World Trade Organisation Technical Barriers to Trade (WTO TBT) Agreement. This means that the Policy deals with all products, including industrial and agricultural products that are subject to the provisions of the WTO TBT Agreement. In modern economy services related to these products are included as well, even though they are not included in the scope of the WTO TBT Agreement.

2.2 Quality Infrastructure

The National Quality Infrastructure (NQI) is generally understood as the collection of institutions in both the Public and Private Sector together with the policies relevant to legal and regulatory framework and practices, which underpin the key fundamentals of metrology, standardization and accreditation. These three fundamentals are necessary in the support of the next level of NQI namely the conformity assessment and market surveillance services such as inspections, testing and certification. The elements constituting the NQI and their main tasks are detailed as in **Figure 2.1**.

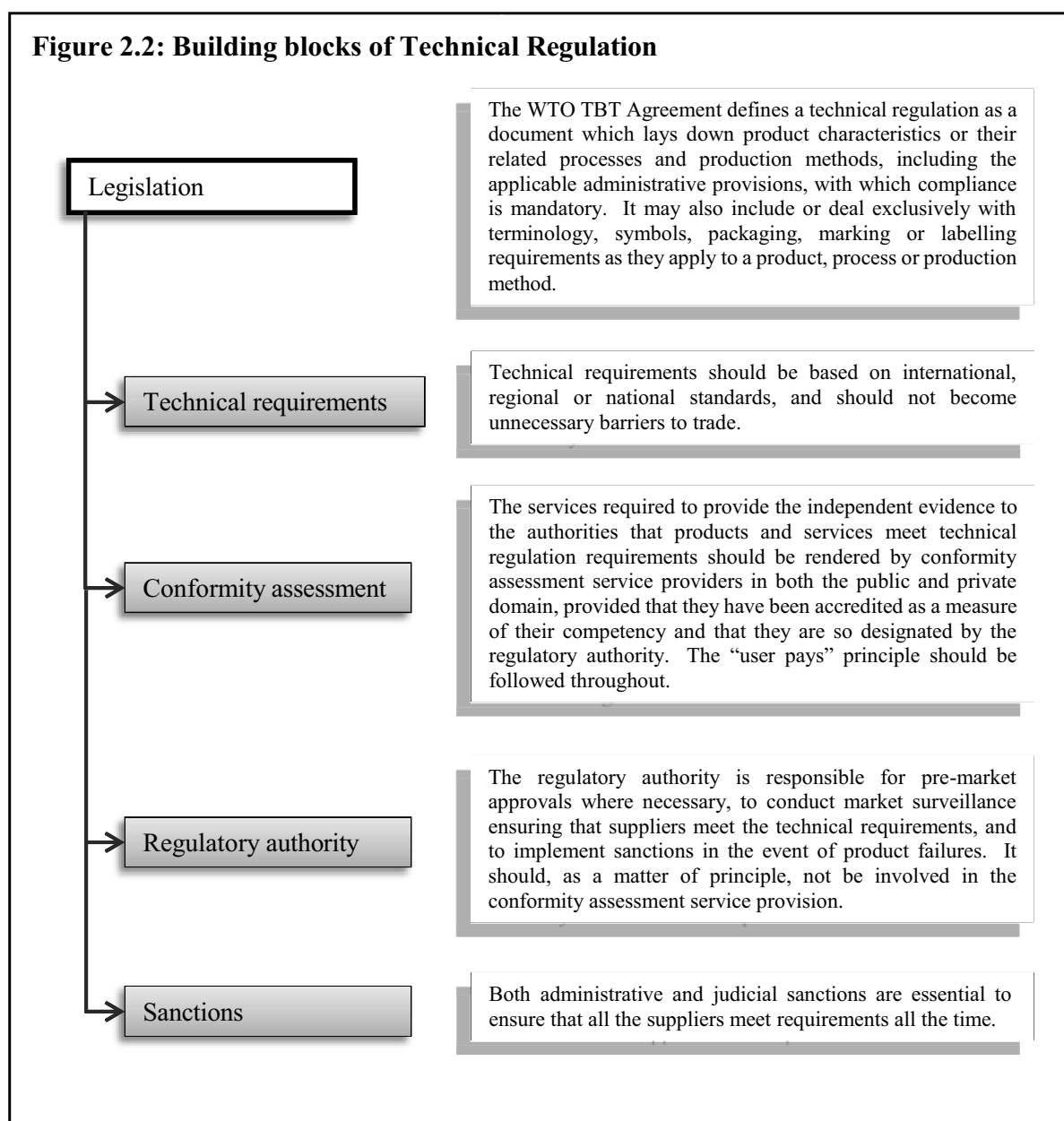
Figure 2.1: Elements of a Quality Infrastructure



2.3 Technical Regulation (TR)

Technical regulations as defined in the WTO TBT Agreement are concerned with the safety and health of the population, health of plants and animals, protection of consumers against deceptive practices, and the protection of the environment. The WTO TBT Agreement endeavours to ensure that technical regulations do not become unnecessary barriers to trade, or are disguised measures to protect local manufacturers.

The typical building blocks of a Technical Regulation (which would include regulations established within the public sector and local authorities, compulsory standards and legal metrology) are detailed **Figure 2.2** below:



3. NATIONAL QUALITY INFRASTRUCTURE AND TECHNICAL REGULATION OF BOTSWANA

Botswana has many of the elements of National Quality Infrastructure (NQI) and Technical Regulation (TR) in place. However, few can demonstrate their technical proficiency as required for international recognition or even local market requirements. A number of mostly public institutions constitute the NQI of Botswana. The main institutions are the Botswana Bureau of Standards (BOBS), under the Ministry of Investment, Trade and Industry, and various government laboratories attached to

Ministries such as the National Veterinary Laboratory (Ministry of Agricultural Development and Food Security), the National Food Control Laboratory (Ministry of Health and wellness) and others. Over the years, there have been very few Botswana based Private Sector NQI institutions. However, this situation is changing as many medical laboratories and other private testing laboratories have emerged over the recent years. These are entering the market to service the country alongside outside companies such as the South African Bureau of Standards (SABS), Intertek and SGS which provide conformity assessment services in the country. The NQI of Botswana is discussed below:

3.1 National Quality Infrastructure in Botswana

3.1.1 Botswana Bureau of Standards

The Botswana Bureau of Standards (BOBS) was established through the Standards Act of 1995. BOBS is the pinnacle body developing and publishing Botswana Standards (BOS) and it is the National WTO TBT Enquiry Point. It provides calibration, inspection, testing and system and product certification services. BOBS has been made responsible for Trade Metrology through the Weights and Measures Act (2006) and is the custodian of the national measurement standards. In the development and implementation of Compulsory Standards, BOBS acts as the regulatory agency of the Ministry of Investment, Trade and Industry. BOBS provides training services in respect of various standards and conformity assessment regimes.

The development of national standards meets the requirements of the WTO TBT Agreement. BOBS has developed approximately 1400 national standards that have been published. However, by September 2020 only 668 of the approved standards were available in printed copies or electronic format.

BOBS has accredited 8 of the 15 laboratory areas and is currently working on accrediting its certification business. BOBS uses SADCAS to accredit its services. The national measurement standards are yet to be gazetted and only the temperature CMC(s) has been listed on the International Key Comparison Database at BIPM.

BOBS is still wholly financed and dependent on Government to fund its operations, including subsidizing conformity assessment services. International evidence indicates that the development and publication of national standards, establishment and maintenance of national measurement standards, and international liaison (e.g. membership of ISO, IEC and relevant regional organizations) remain a government responsibility in all developing economies. Conformity assessment services however, should in principle be financially self-financing through payment of user - pays. Therefore, BOBS will explore various ways and means of executing user pay mechanisms in order to strengthen its financial position.

3.1.2 National Food Control Laboratory

The National Food Control Laboratory falls under the Department of Public Health within the Ministry of Health and Wellness. The laboratory receives samples from Ministry inspection entities, BOBS and Ministry of Local Government and Rural Development. The laboratory tests these samples and provides the reports to these inspectorates for any follow up actions. The laboratory is yet to be accredited.

3.1.3 National Veterinary Laboratory

The National Veterinary Laboratory (NVL) falls under the Department of Veterinary Services in the Ministry of Agricultural Development and Food Security. It is the main testing laboratory for the meat exports of Botswana to the EU and elsewhere. It conducts testing to ensure that (i) the hygiene conditions of the meat export abattoirs are in conformity with stipulated international standards and (ii) the beef and other meat products processed in such abattoirs are safe for human consumption. Some of the laboratory services have been accredited by SADCAS.

3.1.4 Botswana Vaccine Institute (BVI)

The Botswana Vaccine Institute (BVI) is a public company limited by shares and is 100% owned by the Government of Botswana. BVI is mandated primarily to manufacture and distribute livestock vaccines; foot and mouth disease being the main product. In addition to this, BVI is also a testing laboratory. It provides confirmatory or definitive diagnosis of foot and mouth disease for the Directorate of Veterinary Services in Botswana and for many other similar directorates in the SADC region. The laboratory is internationally recognized and is the OIE Reference Laboratory for foot and mouth disease in Sub-Saharan Africa.

3.1.5 National Food Technology Research Centre (NFTRC)

NFTRC is an independent government company operating as a food research and development organization dedicated to the development of post-harvest food processing. The NFTRC has capabilities in food analysis, food product development, food safety and quality monitoring. Its laboratories are not accredited.

3.1.6 National Environmental Laboratory

The National Environmental Laboratory provides a good range of testing services of environmental pollutants in the following media: groundwater, surface (river) water, wastewater, leachates, sludge, gases, airborne dust, sediment and soil. It provides a service not only to its Ministry, but also on request to clients in the private sector. The laboratory is not accredited.

3.1.7 Botswana Geoscience Institute (Formerly Department of Geological Survey Laboratory)

The laboratory carries out geochemical analysis of soils and rocks to provide the chemical composition of the samples. Parameters tested for include oxides, trace and major elements. It also carries out chemical analysis of water samples for the purpose of determining the quality of water from different sources such as boreholes. Testing is done based on BOS 32 for drinking water and FAO Guidelines for livestock drinking water. The laboratory is not accredited.

3.1.8 Central Materials Laboratory

The Central Materials Laboratory within the Department of Roads in the Ministry of Transport and Communications carries out testing of road building materials to ensure and regulate the quality thereof. Botswana Standards are the basis for many of these tests. The laboratory is not accredited.

3.1.9 Private Sector and Academic Laboratories

A small number of private sector laboratories have been established in Botswana. These laboratories provide calibration and testing services and some of them are accredited. Laboratories situated in the Universities and Technical Colleges provide testing mainly for academic purposes and are not accredited.

3.1.10 Accreditation Body

Botswana does not have a national accreditation body. The Ministry of Investment, Trade and Industry established an Accreditation Focal Point within the Ministry in order to facilitate the accreditation of Botswana organizations. Its current activities are more related to creating awareness, because laboratories and certification bodies wishing to be accredited contact the accreditation bodies directly.

In order to obtain accreditation, Botswana organizations have previously made use of the South African National Accreditation Services (SANAS); however, currently, the SADC Accreditation Service (SADCAS) which has its Head Office in Gaborone, is the main service provider. SADCAS is now signatory to the MRA of ILAC and MLA of IAF.

3.2 Technical Regulation in Botswana

In Botswana, various Government Ministries have established one or more Regulatory Authorities either as departments in the Ministry or as Independent Statutory Bodies or Agencies, to develop and implement Technical Regulation within their domain. There is no definitive national guideline for the development and implementation of Technical Regulation. Hence each Ministry and their Agencies develop and implement Technical Regulation as they see appropriate. The result of this arrangement is that coordination has been a challenge. In addition, this option is generally costly for a smaller economy like Botswana. Inevitably, this approach has led to divergences in Technical Regulation development and implementation, and in this way compromises compliance of the

country on its international obligations such as the WTO TBT Agreement. The WTO TBT Agreement requires Botswana to timeously notify all its Technical Regulation to the WTO Secretariat for comment by other WTO Member States before they are implemented. In the past few years, only the Compulsory Standards of the Ministry of Investment, Trade and Industry administered by BOBS, were notified. Notification of the Technical Regulation developed by other Ministries has over the years fallen short.

Good regulatory practice indicates that standards should be the basis of the technical requirements of the Technical Regulations. Some Regulatory Authorities in Botswana reference Botswana Standards (BOS) for this purpose, and have a good working relationship with BOBS. Others however, still develop their own requirements and either publish them as Ministry documents or include them fully in the relevant Technical Regulation. The same divergence of approach can be seen in Conformity Assessment. Some Regulatory Authorities will accept test results from competent third-party laboratories, whereas others insist on testing products within their own laboratories.

Some products, subject to Technical Regulation, fall within the domain of more than one Regulatory Authority. Hence, the result is an overlap in regulatory activity, i.e. the supplier has to deal with more than one Regulatory Authority that frequently place differing demands on product quality and the supplier. This situation inflates the cost of products without resulting in better safety for the consumer or the environment, in fact the opposite is often the case. Local products and imported products are frequently handled differently, violating one of the basic tenets of the WTO TBT Agreement. The result is that Botswana products are rendered non-competitive in world markets.

At the international level, it has become the norm that Regulatory Authorities should not render Conformity Assessment services that provide the evidence that a product complies with Technical Regulation requirements. It is argued that this is a conflict of interest and as such a mandate allows the Regulatory Authority to extract rent from suppliers that have to comply with the Technical Regulation. In Botswana, this is amongst others, the case with BOBS, as it is responsible for the implementation of Compulsory Standards, yet it also provides Conformity Assessment services.

4. NATIONAL QUALITY POLICY ENVIRONMENT

The National Quality Policy (NQP) has to be aligned with a number of international and regional agreements and protocols, primarily those of the WTO and SADC. Further, the Policy has to also integrate with relevant domestic Policies that are affected by some aspects of the NQI and Technical Regulation.

4.1 The External Policy Environment for National Quality Policy

The NQP 2022 is considerably influenced by what is happening at regional and global levels. The need for products and services meeting quality requirements and integration into the global value chains as well as the need to address impediments to trade in the

form of non-tariff barriers has significant influence on the Policy. Two agreements, one international and the other regional, have a marked influence on the NQI and the Technical Regulation regime of Botswana. These are the WTO TBT Agreement and the SADC Protocol on Trade. The other more encompassing regional arrangements that may exert an influence are the Tri-partite Free Trade Agreement between COMESA, EAC and SADC and African Continental Free Trade Area Agreement. The principles however, will remain the same, because any regional agreement will be subservient to the international WTO TBT Agreement.

4.1.1 *WTO Agreement on Technical Barriers to Trade*

Botswana is a member of the WTO. Hence the country has to fulfil the obligations of all the WTO Agreements, including the WTO TBT Agreement and its companion, the WTO SPS Agreement. Both of these Agreements deal with standards, Conformity Assessment in respect of legally binding technical requirements. The former deals with all products (industrial and agricultural), while the latter is for health and safety issues only. The WTO TBT Agreement in particular, is of great importance with respect to the NQP 2022 as it deals with the development, publication and implementation of national standards, Technical Regulation and application of Conformity Assessment requirements to ensure compliance with Technical Regulation and/or standards; identification of the responsible authorities for Technical Regulation; and public information systems for standards and Technical Regulation.

As stipulated in the WTO TBT Agreement, it is the responsibility of Government to ensure that all actors involved in any aspect of the above list, whether at national or local level, comply with the requirements of the WTO TBT Agreement. Government is also responsible to ensure that all newly developed Technical Regulations, irrespective of whether they are developed at national or local level, are notified timeously to the WTO Secretariat for comment by other WTO Members before they are implemented. In the case of Botswana, BOBS would be responsible for ensuring that standards development in Botswana meets the requirements of Annex 3 of the WTO TBT Agreement. The NQP 2022 therefore, has to be carefully aligned with the requirements of the WTO TBT Agreement.

4.1.2 *The SADC Protocol on Trade TBT Annex*

Botswana is also a member of SADC. In support of the SADC Protocol on Trade, Annexes have been promulgated that deal with the same issues as the WTO TBT and SPS Agreements. The SADC Trade Protocol TBT Annex, aligned with its international counterpart, determines in more detail the harmonization of standards, technical regulation and the concomitant conformity assessment regimes within the region to facilitate trade amongst SADC Member States. Obligations additional to the WTO TBT Agreement as contained in the SADC Trade protocol TBT Annex include: the adoption of the approved SADC harmonized text for a standard as a national standard and the withdrawal of a conflicting national standard; the use of appropriate international measures to promote acceptance of Conformity Assessment results among Member States; the use of consultation, participation and

Exchange of information processes when Technical Regulation is developed, amended and implemented; the relevant use of impact and risk assessments to inform technical regulatory decisions; the review, update and modification of Technical Regulation to meet changing needs; and the co-ordination amongst various institutions that are part of the Technical Regulation Framework. To ensure that the obligations of the SADC Trade Protocol TBT Annex are fully complied with, each Member State must establish and maintain a function within government which oversees the implementation of the TBT Annex at national level for all future technical regulation work.

In addition, the TBT Annex establishes six regional cooperative structures in the Quality Infrastructure and Technical Regulation domains that Botswana has an obligation to participate in. These are: SADC Technical Regulations Liaison Committee (SADCTRLC); SADC TBT Stakeholders Committee (SADCTBTSC); SADC Cooperation in Accreditation (SADCA); SADC Cooperation in Legal Metrology (SADCMEL); SADC Cooperation in Measurement Traceability (SADCMET); SADC Cooperation in Standardisation (SADCSTAN) and SADC TBT Expert Group (TBTEG). Therefore, the NQP (2022) for Botswana has to take cognisance of these requirements.

4.2 The Interface between the NQP (2022) and Related Domestic Policies

The domestic Policies which the NQP (2022) needs to integrate seamlessly with are quite numerous. These include, inter alia, policies dealing with trade, industrial development, the environment and health. The Policies relating to trade and industrial development are of particular importance in this regard, and are outlined below:

4.2.1 National Development Plans (NDPs) and National Vision

The NDP 11 follows the integrated planning approach which is anchored on Vision 2036, which include, amongst others, a prosperous and innovative nation. Vision 2016 anticipated that Botswana will have diversified its economy with mining, agriculture, industry, manufacturing, services and tourism all making substantial contributions to GDP by 2016. It is worth noting that both Vision 2016 and the NDP10 have been reviewed and a New Vision for Botswana, Vision 2036 and a new National Development Plan, NDP11 have been finalized. The two policy papers have both identified- Diversified *Export-led Economic Growth and Job Creation* as national priority areas. The diversification of the economy will require the NQI and the Technical Regulation regime that promote competitiveness of Botswana goods and services in regional and global markets; and this is the essence of the interface between the NQP on the one hand, and the Visions and NDPs of the country, on the other. Equally important is the National Spatial Plan 2036 which maps out the country's natural and economic demographics. In essence, the issues of quality of products and services, safety and health of human, fauna and flora as well as the environment will be crosscutting across all these Plans.

4.2.2 Revised National Trade Policy of Botswana (2019)

The Revised National Trade Policy which has been reviewed to align it to current international practices has amongst its objectives, the development of a viable and vibrant private sector, increasing and improving market access, international competitiveness of Botswana goods and services and support for the carefully planned liberalization, restructuring and simplification of non-tariff barriers with a special emphasis on regional integration and compliance with WTO rules. To realise these objectives, Botswana will require an NQI and Technical Regulation that enjoy international recognition for the goods and services she provides. The NQI and Technical Regulation promote Botswana's goods and services market access in the international markets and thus augment the realisation of the objectives of the Revised Trade Policy.

4.2.3 Revised Industrial Development Policy for Botswana (2014)

The Industrial Development Policy (2014) envisions a Botswana with a developed, diversified, sustainable and globally competitive industries. In order to become globally competitive, Botswana products have to demonstrably comply with continuously advancing quality requirements from both regional and international markets. To provide the required compliance evidence acceptable to the global markets, Botswana industries will need to be aligned to an NQI that enjoys international recognition, and that delivers affordable standards, metrology, accreditation and conformity assessment services. Therefore, NQP 2022 promotes the realisation of the objectives of the Industrial Development Policy (2014).

4.2.4 Special Economic Zones Policy (2011)

The SEZs Policy aims to diversify both the economic and export base of Botswana into sustainable sectors by providing for the development of Public and Private Sector SEZs as well as Public-Private Partnerships SEZs. This will attract global investors to develop industries which will produce world class goods and services for international markets. Moreover, the SEZs Policy will result in the development of SEZs enterprises with different production value chains to supply goods and services. Therefore, the NQP 2022 will support and compliment the SEZs Policy by ensuring that goods and services produced in the SEZs conform to internationally recognised standards, metrology, accreditation and conformity assessment services.

4.2.5 Economic Diversification Strategy (EDD 2011)

The overall objective of the EDD Strategy is to diversify the economic and export base of the country into non-mineral economic sectors. The Strategy aims to develop local, regional and global value chains and clusters as well as creating new industries that will be able to serve both the local and international markets. This will be achieved through the use of Government interventions geared towards improving local production capacity and to achieve quick wins and early harvest of low hanging fruits in targeted

sectors of the economy. Further, the Strategy aims to develop a vibrant and globally competitive private sector; and an entrepreneurial culture for business growth and enhanced citizen participation in the economy. Therefore, a well-thought out NQP 2022 will support and augment the realisation of the EDD Strategy objectives in the area of product standards, quality and accreditation.

4.2.6 Other Key Domestic Policies (Consumer Protection)

Although the policies dealing with trade and industrial development issues are in place, some important policies that would also deal with technical regulation and SPS measures have been developed, reviewed and implemented. On the other hand, the Ministry of Health and Wellness is already in the process of developing an all-encompassing food safety legislation. It is very important to harmonize the interfaces between the SPS related policies and their development with the relevant elements of the NQP 2022.

5. NATIONAL QUALITY POLICY: RATIONALE, VISION AND MISSION

5.1 Rationale for the Quality Policy

Over the years Botswana has developed an NQI and TR regime through various Policy and Legislation pronouncements, programmes and initiatives. However, the country has never developed a focused Policy geared towards developing an internationally recognised and acceptable standards, metrology, accreditation and conformity assessment services. Therefore, this National Quality Policy for Botswana is meant to fill this vacuum in the Country's Policy space.

Further, for mostly historical reasons, the Technical Regulation regime of Botswana, similar to that of many developing economies, has been of an *ad hoc* nature, fragmented, and not fully compliant with international requirements. The situation is exacerbated by overlaps in activities amongst various regulatory agencies. These overlaps add unnecessary transaction costs and thereby render products non-competitive. In addition, many of the technical regulation regimes are ineffective as compliance is not enforced. This constitutes a serious impediment to trade, not only in export markets, but also in the local market.

In addition, the changing economic environment prompted by liberalisation policies as well as globalisation of trade, demand for strengthening the NQI and TR to support industry, trade, environment and consumer's health and safety. In view of this, it is imperative to put in place measures and institutional mechanisms to ensure that all goods and services for domestic and international markets meet the required quality, environment, health and safety standards through appropriate production technologies and other value addition processes. This will significantly contribute to Government's national objectives of industrial development, economic diversification, wealth creation and poverty eradication.

5.2 Strategic Policy Foundations

Vision

To be a Regional and Globally recognised National Quality Infrastructure and Technical Regulation Regime by 2036.

Mission

To ensure that the quality of Botswana Goods and Services meet the requirements for Domestic and Global Competitiveness.

Theme

Using Quality for Botswana's Global Competitiveness.

6. NATIONAL QUALITY POLICY GUIDING PRINCIPLES

The National Quality Policy (2022) will have a profound effect on trade and the safety and health of human, fauna and flora as well as the environment. It is therefore important that it is underpinned by the following guiding principles:

- i. **International Recognition** - to develop a National Quality Infrastructure and Technical Regulation that are recognised and accepted nationally, regionally and globally;
- ii. **Market Access** – to ensure that Botswana has internationally recognised technical regulation, standards and conformity assessment that accord her favourable market access with all trading partners;
- iii. **Compliance**: to ensure that all players in the economic space comply with all the fundamental requirements of the agreed standards and technical regulation;
- iv. **Quality Culture** – to develop a social system that is quality conscious which shall be a motivation and a catalyst for the production and consumption of quality goods and services in the country;
- v. **Compatibility**: to ensure that national standards are in line with regional and international standards;
- vi. **Transparency** - to ensure all quality assurance measures are implemented in a transparent, non-discriminatory manner and avoid unnecessary restrictions on trade and industry development;
- vii. **Innovation and Competitiveness** – adoption and application of quality standards and technical regulations that enhance Botswana's innovation and competitiveness;
- viii. **Promotion of Health, Safety and Environmental Protection** – creation of a trade-friendly technical regulation environment that takes into account the human, animal, plant and environmental health and safety; and

- ix. ***Private Sector Participation*** – to ensure full Private Sector participation in the development and use of National Quality Infrastructure and Technical Regulation.

7. NATIONAL QUALITY POLICY OBJECTIVES

7.1 Primary Objective

To ensure that the quality of Botswana goods and services is designed to match the needs, expectations and requirements of producers, retailers and consumers, as well as those of the regulatory authorities in the domestic and global markets.

7.2 Specific Objectives

The specific objectives of the NQP (2022) are to:

- i. promote regional and global recognition and acceptance of Botswana National Quality Infrastructure and the Technical Regulation;
- ii. improve Botswana products and services market access and competitiveness in all trading partners;
- iii. promote quality awareness among National Quality Institutions, producers and consumers;
- iv. promote Private Sector participation in the National Quality Infrastructure and Technical Regulatory Framework;
- v. improve coordination and collaboration among regulatory and standards development agencies;
- vi. develop capacity of National Quality Infrastructure and Technical Regulatory Framework;
- vii. To support SMMEs conformance to standards and compliance with Technical Regulation;
- viii. To promote Government and Private Sector Funding of National Quality Infrastructure and Technical Regulation;
- ix. To develop legislation for National Quality Infrastructure and Technical Regulation; and,
- x. To establish appropriate Institutions for National Quality Infrastructure and Technical Regulation.

8. NATIONAL QUALITY POLICY FOCUS AREAS

This Section defines the NQP (2022) Policy Focus Areas. This covers the National Quality Infrastructure (NQI) and the Technical Regulatory Framework (TRF) in line with the WTO/TBT agreements. The Section outlines the core elements of the NQI and TRF as well as Government policy in addressing them. Implementation of the Policy Focus Areas will bring about the realization of the objectives of the Policy. The Policy Focus Areas are discussed below.

8.1 National Quality Infrastructure

The NQI consists of institutions that provide three fundamental areas of quality, namely; metrology, standards and accreditation services. These support conformity assessment services which include inspection, testing and certification. Government will establish and maintain the fundamental services, and provide the policy environment enabling the Private Sector to provide conformity assessment services detailed below:

8.1.1 Metrology

Metrology is the technology or science of measurement. It influences, drives and underpins much of what is done in industry, trade, regulation, legislation, the quality of life, science and innovation. Metrology is of fundamental importance to industry and trade because these must have confidence in the accuracy and reliability of the measurements which metrology provides. Metrology is subdivided into three branches, namely scientific, industrial and legal metrology as discussed below:

8.1.2 Scientific Metrology

Scientific metrology is the development and organisation of the highest level of measurement standards. It includes the establishment of quantity systems, development of new measurement methods and units of measurement, the realisation of measurement standards and the transfer of traceability from these standards to users in society. It came around the 19th Century as an initiative to enhance the global consistency of measurements. In view of this, Government will:

- i. Establish National Metrology Institute (NMI) of Botswana in BOBS. BOBS will retain responsibility for national measurement standards while Government will continue to facilitate the development of capacity within BOBS to enable it to realize the national measuring standards as required by authorities and industry;
- ii. Ensure the process of establishing Designated Institutes is subject to a mutual agreement between the Ministry of Investment, Trade and Industry, BOBS and the Designated Institutes and their line Ministries. In order to ensure appropriate coordination amongst the metrology institutions, no institution purporting to be a Designated Institute may be established without such agreement. In agreement with BIPM good practices, BOBS will in the short to medium term have the overall

responsibility of ensuring that all Designated Institutes implement and maintain quality management systems that comply with the Comité International des Poids et Mesures (CIPM) Multilateral Recognition Arrangement requirements. However, overtime as a country we should establish an autonomous NMI in line with international best practice;

- iii. If expedient, extend the scientific metrology system to other national Designated Institutes technically competent in specialized fields of measurements (e.g. chemistry, radiation, virology, etc.) so as to maintain national measurement standards capable of providing a reliable and accurate measurement service across all relevant disciplines within Botswana; and
- iv. Ensure that BOBS and all other Designated Institutes will, mindful of the demonstrated needs of trade, industry sectors and the authorities, and within their capabilities, link up with the international metrology system. This linkage will be demonstrated through entries of their Calibration and Measurement Capabilities (CMCs) in the international recognition system (i.e. Key Comparison Data Base – KCDB) maintained by the Bureau Internationale de Poids et Mesures (BIPM).

8.1.3 Industrial Metrology

Industrial metrology is the application of measurement science to manufacturing and other industry processes, ensuring the suitability of measurement instruments, their calibration and satisfactory functioning in production. Industrial metrology is beneficial in that it supports global trade in measuring instruments, consumer protection, reduction in disputes and transaction costs. It also ensures full collection of Government excise and taxes based on measurements. In view of this, Government will:

- i. Ensure calibration services are provided by BOBS, and other public or private calibration laboratories provided that their calibration equipment is traceably calibrated to the national measurement standards kept by the NMI in BOBS, Designated Institutes or a national metrology laboratory abroad with known and recognized measurement capability;
- ii. Ensure that calibration services provided by the public and private laboratories are acceptable for trade and law enforcement; and
- iii. Ensure that all calibration laboratories are accredited to ISO/IEC 17025 to ensure their technical competency.

8.1.4 Legal Metrology

Legal metrology is concerned with legislative requirements of measurements and measurement instruments for the protection of public health and safety, the environment, enabling taxation, protection of consumers and fair trade. The benefits of legal metrology include, among others, increased compliance, use as evidence for regulatory purposes and levelling the playing field in international trade of goods and services. In view of this, Government will:

- i. Ensure that measurements used in trade, law enforcement, health services and environmental management lead to an equitable situation regarding traders and consumers, and correctness of measurements in law enforcement, health services and environmental protection;
- ii. Ensure that the regulations for measuring equipment and pre-packaging are based, as far as possible, on the Recommendations of the Organisation Internationale de Métrologie Légale (OIML), regional standards of the SADC Cooperation in Legal Metrology (SADC MEL) and international standards published by the International Organization for Standardization (ISO) or the International Electrotechnical Commission (IEC);
- iii. Ensure that the type approval of measuring equipment fall within the scope of legal metrology regulations. The type approval of such measuring equipment will be based on valid OIML Basic Certificates of Conformity and associated OIML Type Evaluation Reports issued by Authorities appointed by OIML Member States, or in the absence thereof, Legal Metrology Institute will conduct tests in its own laboratories or subcontracts to an accredited laboratory;
- iv. Where deemed appropriate for effective and efficient service delivery, Government may move the legal metrology activities to another regulatory authority or even separate and establish it as an independent legal metrology authority; and
- v. For improved enforcement of Legal Metrology, provide legal metrology divisions with the necessary resources (i.e. funding, accommodation, vehicles, test equipment and trained personnel) to render an effective service, and they shall be accredited to ISO/IEC 17020 Standard to ensure their technical competency.

8.1.5 Standards

Standards may simply be defined as a set of rules and procedures for ensuring quality. They define how products, processes and people interact with each other and their environments. They enhance competitiveness by offering proof that products and services adhere to requirements of governments and the market. When used effectively, they facilitate international trade and contribute to technology upgrading and absorption. There are two types of standards, voluntary and compulsory standards. In view of the above, Government will:

- i. Ensure that BOBS facilitates the national standards development process as a voluntary activity that depends on achieving consensus amongst stakeholders (i.e. public, private sector and civil society) in compliance with Annex 3 of the WTO TBT Agreement. The development of national standards will be based on the actual needs of the authorities, private sector and civil society;
- ii. Ensure that BOBS establishes and maintains a framework for developing and publishing national standards and other normative documents. Further, BOBS will publish all National Standards irrespective of their origin. BOBS will ensure that published national standards are regularly reviewed and updated to ensure continuous alignment with technological developments, market trends as well as regional and international requirements;
- iii. Ensure that BOBS develops national standards within its own technical committee structures or register Standards Development Organizations to do so. BOBS or any Standards Development Organization it registers will comply with international requirements and good practices as defined in the WTO TBT Agreement and ISO/IEC Directives. Standards Development Organizations not registered by BOBS will not be eligible to develop national standards;
- iv. Ensure that BOBS guides national standards development in the adoption of relevant international and regional standards with minimum deviations so as not to create unnecessary barriers to trade. Any deviations from international or regional standards should be based on demonstrated and scientifically proven reasons, other than the protection of local industry. Even though Botswana will develop her own Standards that are particular to the country, recourse will be made to adopt and use existing international and regional standards where applicable;
- v. Ensure that BOBS actively participates in the process of developing international and regional standards where this is of strategic importance to Botswana, and will coordinate this involvement with relevant local bodies; and
- vi. Ensure that private standards, i.e. standards developed outside the national standards development process, become more important in international trade as they are utilised extensively by the major retail organizations in developed countries. BOBS will engage with the organizations developing such standards to ensure that Botswana industry and producers are not disadvantaged in their application.

8.1.6 Accreditation

Accreditation is the process in which an organisation that has fulfilled a set criterion is conferred a certificate of competency, authority, or credibility to offer specified conformity assessment services (e.g. testing, inspection or certification). The accreditation body evaluates the personnel and supporting management system of the candidates for

accreditation and can request practical tests for laboratories when relevant. This activity is important for industry and trade. In view of this, Government will:

- i. Ensure that together with local authorities, it will utilise accreditation to its fullest extent in determining the technical competency of regulatory agencies and conformity assessment service providers that are working in implementing technical regulations, compulsory standards and legal metrology;
- ii. Accepts the SADC Accreditation Service (SADCAS) as its *de facto* national accreditation body for all domains within the scope of ILAC and IAF multilateral recognition agreements or arrangements;
- iii. Support SADCAS with resources as agreed to in the multilateral SADC/SADCAS Memorandum of Understanding. Government will also enter into a bilateral MOU with SADCAS that may provide for the representation of the Botswana Government in the governance structures of SADCAS;
- iv. Where SADCAS does not provide an internationally recognized accreditation service for a specific domain, Government may source the service of another internationally recognized national accreditation organization;
- v. ensure that Ministries do not establish assessment or registration structures for conformity assessment service providers that can be construed as accreditation within the scope of IALC and IAF multilateral recognition agreement(s); and
- vi. In future, review its policy decision to utilize SADCAS as a *de facto* national accreditation body, establish a national accreditation body and pursue international recognition for it.

8.1.7 Conformity Assessment

Conformity Assessment comprises testing, inspection, and certification of products or services. Testing is the determination of a product's characteristics against the requirements of the standard. Inspection encompasses the examination of a product design, end product, or process, and the determination of its conformity with requirements. Certification is the formal substantiation by a certification body after an evaluation, testing, inspection, or assessment, that a product, service, organization, or individual meets the requirements of a standard. In view of the above, Government will:

- i. Ensure that inspection and testing services and the certification of products or management systems for the implementation of Technical Regulation are provided by inspection bodies, laboratories and certification organizations in both the Private and Public Sector that demonstrably fulfil the requirements of the relevant

- international standards and are accredited as such by an internationally recognized accreditation body;
- ii. Support programmes to develop the required capacity of Conformity Assessment Service Providers to ensure that accreditation is obtained in accordance with specified times;
 - iii. In order to provide Conformity Assessment services required by both the Public Sector and the Private Sector, Government will establish, maintain and continuously improve the capacity and technical competency of Conformity Assessment Service Providers in the public domain;
 - iv. Create a policy environment that will facilitate the development of Private Conformity Assessment service providers, and utilise their services in public procurement and technical regulation provided that they can demonstrate their technical capability through relevant accreditation;
 - v. Provide financial incentives to the SMMEs which will be in the form of rebate payments after testing and certification, and not through the fixing of below cost prices for the services of public service providers;
 - vi. Utilise Botswana Standards (BOS) in State purchases to ensure that the State is provided with quality products and services through an appropriate mix of inspection, testing and certification.

8.2 Technical Regulation

The WTO TBT Agreement defines a Technical Regulation as a document which lays down product characteristics or their related processes and production methods, including applicable administrative provisions with which compliance is mandatory.

Technical Regulations are concerned with the safety and health of the population, flora and fauna, consumer protection against deceptive business practices, and the protection of the environment. In view of this, Government will ensure that technical regulations are developed only where domestically required and in line with international obligations. In addition, Government will ensure that technical regulations do not constitute unnecessary barriers to trade. Government will ensure that products imported from any trading partner are accorded treatment no less favourable than products of national origin. In order to ensure that technical regulations meet all international obligations, Government will embark on a regulatory reform programme as detailed below:

8.2.1 Technical Regulatory Framework

A Technical Regulatory Framework (TRF) comprises a number of building blocks that have to be appropriately defined and implemented at national level taking into consideration international best practice, local realities and customs. These include impact assessment, technical requirements, conformity assessment, regulatory authority and sanctions. In view of the above, Government will:

- i. develop and promulgate an internationally compliant National Technical Regulation Framework that will provide guidance to all Ministries, Departments and their Agencies in respect of the development and implementation of technical regulation;
- ii. Ensure that the National TRF deals with the necessity to utilise impact assessments before technical regulations are promulgated, define the use of standards, set the norms for the competency of conformity assessment service providers, designate the responsibilities of regulatory authorities and describe the imposition of sanctions; and
- iii. Ensure that in order to facilitate its rapid implementation by all Ministries, Departments and their agencies, and to facilitate notification of the compliance measures, Government takes to ensure the implementation of the WTO TBT Agreement in the country and the Technical Regulatory Framework will be given legal certainty through an Act of Parliament.

8.2.2 Technical requirements

Technical requirements of the Technical Regulation will be based on international and regional standards adopted and published as national standards. Botswana will, as far as possible, avoid the use of technical requirements as barriers to trade. The technical requirements will be referenced in such a way that technological developments at the international and regional level are incorporated as early as possible.

8.2.3 Market Surveillance

Market surveillance will be conducted on products that fall within the scope of Technical Regulation at the moment of being placed on the market and may include visits to commercial, industrial and storage premises, workplaces and other premises where products are put into service or in the market. Regulatory Authorities will be required to approve products prior to marketing in cases where the risks are high; and will be responsible for market surveillance and the imposition of sanctions where necessary.

8.2.4 Sanctions

Sanctions are necessary to ensure that suppliers continuously meet the requirements of the promulgated technical regulations. Regulatory Authorities will be empowered and their staff appropriately trained to impose administrative sanctions that allow suppliers to rectify non-conforming products and services or remove the same from the market place. In case of failure of suppliers to heed administrative sanctions, provision will be made for legal action through the country's Courts of Law.

8.2.5 Regulatory Authorities

Regulatory authorities are those entities responsible for any market approvals, conducting market surveillance to ensure that suppliers meet the technical requirements, and implementing sanctions in the event of product failures. The Regulatory Authority should, as a matter of principle, not be involved in the conformity assessment service provision.

In order to enhance the efficacy of the technical regulation regime in Botswana, Government will establish a small number of Technical Regulation Authorities to implement and maintain technical regulation falling within the scope of the WTO TBT Agreement and the SADC Trade Protocol TBT Annex. The actual number of Regulatory Authorities shall be established through dialogue between the relevant Ministries facilitated by the Ministry of Investment, Trade and Industry. This will follow a sectoral approach; consideration of trade patterns and international and regional agreements and protocols.

Therefore, Government will rationalise and restructure all established Regulatory Authorities already existing in various Ministries. The newly established Regulatory Authorities shall be as agreed to at Government level. In determining the mandates of the Regulatory Authorities, the coordination between food safety and manufactured products will be given special attention, as will the sectors identified for development in the Industrial Development Policy (2019). Lastly, Ministries will retain the responsibility to develop and promulgate technical regulations within their sphere of responsibility, but will do so in collaboration with the relevant Regulatory Authority that will become responsible for implementation.

8.2.6 Coordination of Technical Regulation Activities

In order to oversee the implementation of the Technical Regulatory Framework, the Government of Botswana will establish a Technical Regulation Coordination Office responsible for, among other things: coordination of activities related to technical regulation development and implementation amongst the regulatory authorities and the NQI; ensuring that the Regulatory Authorities follow the defined Technical Regulation Framework in developing and implementing technical regulation; ensuring that all the Regulatory Authorities meet the requirements of the WTO TBT Agreement and the SADC Protocol on Trade TBT Annex; and overseeing the review of Technical Regulation already on the statute books by the Regulatory Authorities, in order to

revise, confirm or withdraw such regulation and to make sure that they comply with the Technical Regulation Framework.

8.2.7 Coordination between TBT and SPS Measures

Although Sanitary and Phyto-sanitary (SPS) measures are closely related to Technical Regulations and share many services dealt with in this Policy such as standards, metrology, accreditation, testing and certification, SPS measures in Botswana are dealt with in policies and legislation other than covered by this Policy. Government will therefore, ensure that the interface between Technical Regulations and SPS measures are identified and properly defined so as to minimize any overlaps and gaps, any uncertainties regarding Regulatory Authorities are set aside and the NQI provides appropriate support services to both.

8.2.8 Education and Training

The availability of a properly trained and skilled workforce is essential in the increasingly complex systems regarding manufacturing and service delivery. Government will collaborate with the Private Sector and Civil Society in order to strengthen and improve the human capacity in the following:

- i. Government and Private academic institutions will take the necessary steps to ensure that various stakeholders have the opportunity to obtain the knowledge and skills they need to execute the quality standards triggered by globalization challenges. Moreover, they will establish appropriate programmes at different educational levels with the view to improving the quality culture and to developing the specialized knowledge and expertise required for implementing the NQP 2022;
- ii. Establishment of training and registration schemes for quality professionals such as assessors/auditors and consultants in quality and environmental management systems, health and safety in the workplace, and other relevant certification activities as defined in international requirements; and
- iii. BQA will play an important role in assessing the training establishments to ensure an appropriate level of competency in the training curricula. BQA will also support the establishment of a registering authority (which would be a professional body such as those registering engineers and lawyers for example) for quality management system assessors/auditors in order to fulfil international requirements.

8.2.9 Information and Awareness

Information is key to the success of any modern economy, as is the general awareness regarding quality. Specific strategic policy measures to enhance both the information systems and the quality awareness in the public and private sectors as well as civil society to be undertaken are listed below.

8.2.9.1 National TBT Enquiry Point

The creation of an adequate information network that involves all the various quality infrastructure institutions is important for guaranteeing the success of quality related activities. This information network will be spearheaded by BOBS as the appointed national WTO TBT Enquiry Point, but must be extended to include all the relevant stakeholders. Government is committed to providing the necessary resources to enable BOBS to:

- i. Provide information on standards, Technical Regulation and the concomitant conformity assessment and administrative provisions as required by the WTO TBT Agreement and the SADC Trade Protocol TBT Annex;
- ii. Review Technical Regulation notifications of all WTO member countries to the WTO on a continuous basis so as to inform the public and private sector in Botswana on trends that will impact on their businesses and on Botswana as a country; and
- iii. Compile relevant information to be utilised by Government representatives in the relevant WTO and SADC structures to protect the interests of the Country regarding standards, technical regulation and conformity assessment.

8.2.9.2 Trade Promotion Organization

The Botswana Investment and Trade Centre (BITC) is charged with the responsibility of attracting and promoting investment, and developing and promoting exports. To this end, BITC collects and disseminates trade information to exporters on product requirements for accessing foreign markets. In this respect, BITC will include market requirements regarding compliance with standards as well as technical regulation in target markets.

BITC and BOBS will establish a coordination system for their information regarding product and service requirements that will assist suppliers and exporters with requirements in export markets. BITC and BOBS have signed Memorandum of Understanding in this respect which will ensure that suppliers and exporters can access information portals of the two institutions. BITC will provide exporters, especially the SMME sector with information in respect of product design, packaging design, and other product or service characteristics relevant to export markets.

8.2.9.3 Awareness

Government will further strengthen awareness programmes that are aimed at changing practices of the productive work force in respect of day-to-day quality issues such as a positive attitude towards work, orderliness, cleanliness, hygiene, punctuality and timeliness of service.

Government will consistently ensure allocation of adequate media time and space in the electronic and printed media for effective dissemination of concepts, principles, practices and developments of quality, in order to inculcate and reinforce a national quality culture. It will foster the publication of general quality news and bulletins to educate the general public on quality issues and consumer rights.

BOBS and other relevant NQI institutions will take the lead in celebrating domestic and international standards, metrology and accreditation days and in this way promote a better understanding in the public and private sectors as well as civil society regarding the general and specific concepts of quality and the role that the fundamentals of the NQI play in this regard.

8.2.9.4 National Quality Award

Government, in cooperation with the NQI organizations and business and industry associations, will establish a National Quality Award to reward organizations for performance excellence. These will be organizations that are a role-model in organizational management system that ensure continuous improvement in delivering products and/or services, demonstrate efficient and effective operations, and provide a way of engaging and responding to customers and other stakeholders. The National Quality Award will also help in creating quality awareness within the industrial and business sectors.

8.3 Financing the NQI and Technical Regulatory Framework

It is of vital importance to make the public and private financial resources available for the implementation of the NQP 2022. Government will be responsible for financing the development, upgrading and restructuring of the existing NQI institutions within the public sector. The financing of Private Sector institutions and organizations remains the responsibility of the Private Sector, including their involvement in technical committees and similar structures at the national, regional and international level.

In addition, international practice indicates that Governments in developing economies like Botswana must fund the fundamental activities of the NQI that benefit the country as a whole, i.e. development of standards, standards information and national metrology, and where private sector investment may not be profitable. Conformity assessment services on the other hand, even though they may need to be established initially by Government, are increasingly being provided by Private Sector or commercialized public sector organizations on purely business principles.

8.3.1 Government Direct Investment

Government will assume responsibility for financing NQI activities which will not be profitable to attract private sector investment, but would be beneficial for the whole country. In some cases, Government may choose to pursue the Public-Private Partnership (PPPs). Government will, in particular, have the responsibility for financing the following:

- i. The development and publication of national standards by BOBS as well as the maintenance of their standards information centre and WTO TBT Enquiry Point;
- ii. The establishment and maintenance of the national measurement standards by the NMI in BOBS, determination of their Calibration and Measurement Capabilities for inclusion in the BIPM key comparison database and support them to enhance the calibration infrastructure in the country;
- iii. The legal metrology services in so far as they cannot be funded through the fees and levies paid by the users of measuring equipment falling within the scope of legal metrology regulations;
- iv. Establishing and maintaining membership of BOBS and other relevant institutions in international organizations such as ISO, IEC, BIPM, OIML, CAC, IAF, ILAC, etc., the SADC regional organizations SADCA, SADC MEL, SADC MET, SADC STAN, TBTEG, and SADC CTRLC, and quality infrastructure organizations at the African level namely AFRAC, AFRIMETS and ARSO relevant to the proper functioning of the NQI activities;
- v. The establishment and maintenance of testing, certification and calibration capacity in support of the authorities and private sector, with the proviso that these services will be commercialized as soon as possible in order not to compete with the private industry on an unequal basis. Strategically important testing and calibration capacities that can never be successfully commercialised will continue to receive the appropriate funding until such time as it is no longer a strategic necessity; and,
- vi. The establishment and enforcement of Technical Regulations including market surveillance operations. As an exception the funding for the on-going inspections, testing and certification of products falling within the scope of technical regulations will be the responsibility of the suppliers.

8.3.2 Financial Sustainability

In order not to distort the market, and to provide for a steady self-earned income of the NQI institutions in the public domain, the private industry, and also Government institutions that make use of the conformity assessment services, shall pay for such services. The pricing levels set by the public NQI institutions shall cover costs as well as provide for future expansion but shall take into consideration the capacity of the SMME sector to pay for such services. Any Governmental financial support to the

SMME sector will not be demanded as a reduction of prices of the NQI institutions as this will negatively impact their long-term financial sustainability, but will be channeled to the SMMEs in another way. The NQI institutions will work closely with the relevant Government Departments and Government will ensure that these Institutions are adequately financed.

8.3.3 NQI and TR Financing by International Organizations

Government is aware of opportunities for financing by Development Partners, Regional Organizations like SADC and The Multilateral Organizations like the WTO, the World Bank and the IMF, and will from time to time tap onto these financing these Institutions to develop NQI and TR in the country.

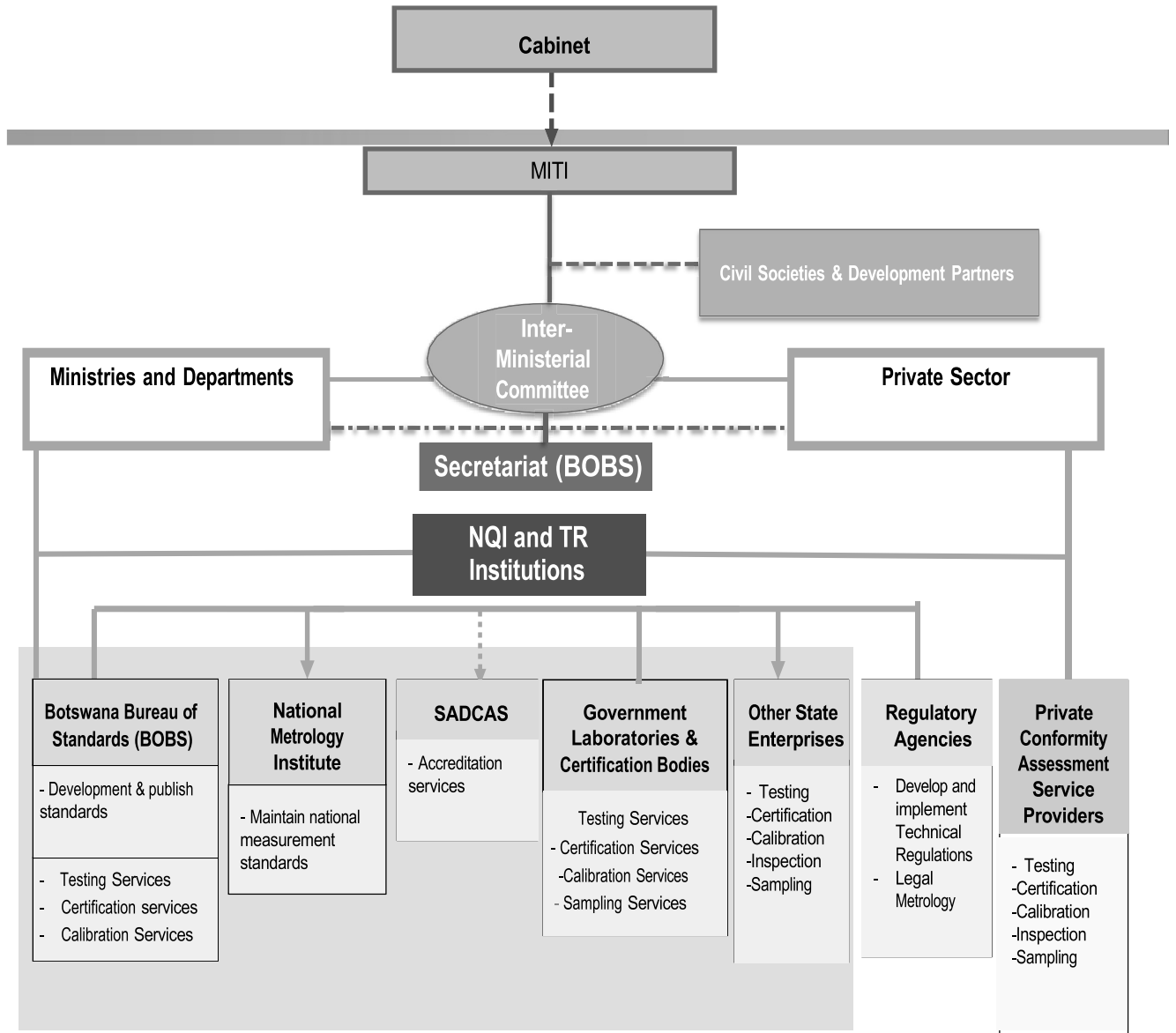
9. NATIONAL QUALITY POLICY INFRASTRUCTURE AND TECHNICAL REGULATORY EXECUTION FRAMEWORK

9.1 Institutional Arrangement

There is no single internationally agreed model for the organizational arrangement of the elements of an NQI and Technical Regulatory Framework. It would be most appropriate if independent institutions are established to provide the services for each of the elements of NQI. This is in fact how the quality infrastructure organizations are established at the international level, e.g. organizations such as BIPM and OIML (metrology), ISO, IEC and ITU (standards), and IAF and ILAC (accreditation). Such an approach however, will be very difficult in Botswana due to resource constraints; as such combinations have to be considered. However, combinations are possible provided that conflicts of interest are avoided, e.g. the combination of accreditation and conformity assessment is unacceptable. On the other hand, the combination of standards, testing and certification services as practiced by the Botswana Bureau of Standards (BOBS) may even be desirable to foster long-term financial sustainability of the institution. Other issues that need to be considered when deciding on the NQI structures include trading partner preferences, legal systems and civil service custom and practice.

The National Quality Infrastructure and Technical Regulatory Execution Framework is as presented in **Figure 1**. As can be seen in the Figure, the development and implementation of the National Quality Policy is by no means a Government responsibility alone. The Private Sector, Civil Society, Academia, Labour Unions and other Stakeholders have a major role to play in the Policy Implementation. These are explained in the sub-Sections below.

Figure 1: National Quality Policy Institutional Structure



9.2 Implementation Plan

The successful implementation of the NQP (2022) requires an Implementation Plan which incorporates all stakeholders from both the public service and the private sector. To this end, a Plan has been developed (see Annexure I) which involves establishment of the Quality Infrastructure as envisaged in this Policy, reviewing the current institutional arrangement and establishing new structures with clearly defined responsibilities to ensure a conducive environment for delivering the services required to support Vision 2036 and its Development Plan (NDP11). An integrated approach is adopted to ensure that there are no oversights, overlaps, duplication and conflicts of interest amongst the various institutions that constitute the NQI and the Regulatory Authorities in Botswana. The Sub-Sections below outline the various Institutional Arrangements for effective Implementation of the Policy:

9.2.1 Government Ministries and Departments

In terms of Implementation Responsibilities, the MITI is given oversight responsibility for the implementation of the NQP (2022). The Ministry will establish an Inter-Ministerial Coordination Committee representing relevant Government Ministries, Public Sector Organizations, Independent Departments and Private Sector which will drive implementation of the National Quality Policy. Relevant Development Partners may be invited as observers. The Permanent Secretary, Ministry of Investment, Trade and Industry, or his/her representative will be the designated Chairperson. The Ministry may expand the Inter-Ministerial Coordination Committee Membership as and when necessary. The Ministry will provide regular reports to Cabinet for guidance and strategic direction.

On the other hand, each Ministry, their Agencies and Local Authorities will be responsible for the implementation of their respective portfolios in the NQP (2022) Implementation Plan. The Ministries, their Agencies and Local Authorities will liaise closely with the Inter-Ministerial Coordination Committee in this regard. Further, the relevant Ministries and their Agencies will be responsible for ensuring that the implementation of the NQP (2022) interfaces seamlessly with other Government Policies in the country.

The Inter-Ministerial Coordination Committee's main objective is to lead the institutional and legal modernisation of the NQI with a view to providing competent and essential support and services to the public sector, industries, and all other stakeholders, following international good practices and norms. In addition, the Inter-Ministerial Coordination Committee will lead the development of the TRF until the envisaged Technical Regulation Coordination Office is established to take over this function. The Inter-Ministerial Coordination Committee is also responsible for

reviewing the Implementation Plan every six months and to report progress to the MITI and Cabinet. In discharging its functions, the Inter-Ministerial Coordination Committee will:

- i. Commission studies, request information from concerned institutions and conduct research to obtain information and data;
- ii. Review and adopt findings of investigations on the current status of the national quality infrastructure;
- iii. Develop and endorse recommendations with regard to establishing policies, functions and roles of the institutions concerned and in relation to developing or revising the enabling legislation for the national quality infrastructure;
- iv. Adopt plans for the modernization of the national quality infrastructure and assign implementation to specific agencies or persons;
- v. Progress the decisions and recommendations made to the highest level of the government for modernizing the legislation, rules and procedures for the concerned departments as provided for in the procedures and practices established by Government;
- vi. Develop and implement Technical Regulatory Framework; and,
- vii. Monitor and oversee implementation plans.

9.2.2 Botswana Bureau of Standards (BOBS)

BOBS is the Country's National Standards Body and will be responsible for:

- i. Development and publication of national standards as well as promoting quality assurance in the country;
- ii. Maintaining national measurement standards;
- iii. Provision of testing;
- iv. Calibration of instruments used in industry; and
- v. Certification of products and services

9.2.3 Private Sector

The Private sector has a very important role in the implementation of the National Quality Policy, and its participation in the management of the public NQI is absolutely essential, as is the establishment of Private Sector conformity assessment service providers. In order to achieve the maximum benefit from the NQI, the Private Sector, spearheaded by the Business Botswana (BB) and the Botswana Exporters and

Manufacturers Association (BEMA), individual companies as well as their organized structures should improve the quality of their products and services. Further, these institutions should hasten the introduction of international good practices in the field of quality; participate actively in the governance, representative structures and technical committees of the public NQI organizations dealing with standardization, accreditation and metrology; invest in the development of Quality Infrastructure such as inspection bodies, test and calibration laboratories and certification organizations; demand accreditation as the prime indicator of technical competence from all their conformity assessment service providers; develop human resources, training the people needed for implementing quality management systems and for improving and maintaining the quality of products and services; participate in and promote national quality events, including national quality awards and the like; sponsor, participate in and promote quality dissemination activities, such as congresses, seminars and publication of information in journals, magazines and other suitable means of communication; and participate in financing activities that support quality.

9.2.4 Non-Governmental Organizations (NGOs)

The successful implementation of the National Quality Policy will also require active involvement of civil society. Therefore, NGOs are encouraged to take the following initiatives in collaboration with relevant partners: promote and participate in the education and training activities of quality system professionals; participate in the dissemination of quality related information; implement activities that promote the improvement of quality; promote the representation of relevant bodies in the technical committees in the field of standardization, metrology, accreditation and quality; and propose improvements on quality policy and better ways to implement the NQP (2022). Along with this, the Media will be expected to become actively involved in the dissemination of information on the development and implementation of the NQP (2022).

9.2.5 Development Partners

A number of international Development Partners are active in Botswana. A Ministry or Botswana based organization is the designated counterpart for each of their development programmes. All the International Development Partners should ensure that development and capacity building programmes related to the NQI and Technical Regulation Framework support the implementation of the NQP (2022). Further, these should coordinate support of other partners for the execution of priority programmes; support the transfer of quality related technology to the country; the transfer of knowledge and information which allow for the development of adequate quality and technology infrastructure; Botswana's participation in relevant international and regional organizations; and provide training for national specialists and technicians necessary to support the implementation of the NQP (2022).

9.2.6 *International liaison*

Standards, Metrology, Accreditation and Conformity assessment develop at a rapid pace at the international and regional levels. It is therefore especially important that the NQI institutions of Botswana are actively involved at the appropriate international forums so that Botswana authorities and industry remain firmly in touch with such developments. All the stakeholders will cooperate to create favourable conditions for active participation in international organizations related to the various functions of the NQI. These include ISO, IEC, OIML, BIPM, CAC, ITU, IPPC, OIE, IAF, ILAC, amongst others. The same applies to the seven regional SADC TBT Structures; namely, SADCA, SADC MEL, SADC MET, SADC STAN, TBTEG, SADCTBTSC, and SADCTRLC in which Botswana must participate as a SADC Member State. Others further afield that may become important from time to time include COMESA and the quality infrastructure organizations at the African level such as AFRAC, AFRIMETS and ARSO.

The Government is committed to strengthening the affiliation of the national institutions with these international and regional organizations and support the participation of representatives of Botswana public sector and private sector in the general assemblies and technical committees where it is of relevance to Botswana. The national institutions will develop and pursue a strategy for such involvement that takes into consideration the needs of the country as a whole. All stakeholders will cooperate to create conducive environment for effective participation in the implementation of the WTO TBT Agreement and the SADC Protocol on Trade TBT Annex requirements, thereby individually and collectively fulfilling Botswana's obligations in international and regional matters relating to the NQI and Technical Regulation Framework.

9.2.7 *Regulatory Agencies*

Government will rationalize and restructure the regulatory authorities whose mandate would be to develop and implement the technical regulations, including;

- i. to conduct market surveillance inspections;
- ii. information sharing;
- iii. enforcement of legal metrology and type approval activities; and
- iv. Sanctions

9.3 Legal Framework

The business environment is affected by, amongst others, the legal and regulatory framework related to the Quality Infrastructure and Technical Regulation. Similarly, the NQI institutions, especially in the public domain, are bound by legislation that governs their objectives, authorities, governance, finances, processes and operations. To facilitate the implementation of this NQP (2022), Government will review the existing legal framework as a matter of priority, to benchmark it against international good practices,

and to ensure that it complies with the international and regional obligations of Botswana. Specific measures that will be actioned include the following:

9.3.1 Review of Current Legislation

Current legislation that will be reviewed and revised as appropriate shall include the following:

- i. Standards Act (1995) providing for the establishment of the Botswana Bureau of Standards (BOBS), containing definitive requirements for the development and publication of Botswana National Standards, promoting the use of standards in the public and private sector, as well as providing for BOBS to render conformity assessment services;
- ii. Weights and Measures Act (2006) elevating it to a Legal Metrology Act dealing with the control of measuring equipment in trade, health, law enforcement and environmental control. The revised Act will cover the type approvals of measuring equipment, use of such measuring equipment, pre-packaging requirements and the establishment and mandate of legal metrology offices. The technical details for measuring equipment and pre-packaging will be dealt with in Regulations framed under this Act; and
- iii. All legislation providing for the establishment and mandates of Regulatory Authorities in the relevant Ministry to ensure that it complies with the Technical Regulation Framework Act, once that has been promulgated.

10 NATIONAL QUALITY POLICY MONITORING AND EVALUATION

There will be a monitoring and evaluation framework that will be developed in consultation with all implementing partners after the approval of the Policy by Parliament. The Framework will have the requisite performance indicators, baselines and targets that will assist in the continuous monitoring and evaluation of this policy. The National Quality Policy will be reviewed on intervals of five (5) years or as and when the economic environment dictates.