



Republic of Ghana

MINISTRY OF TRADE AND INDUSTRY

NATIONAL QUALITY POLICY

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ABBREVIATIONS AND ACRONYMS

AFRAC	-	African Accreditation Cooperation
AFRIMETS	-	Intra-Africa Metrology System
AFSEC	-	African Electrotechnical Standardisation Commission
ARSO	-	African Organization for Standardisation
ASTM	-	American Society for Testing and Materials
BIPM	-	Bureau International des Poids et Mésures
CAB	-	Conformity Assessment Body
CAC	-	Codex Alimentarius Commission
CPESDP	-	The Coordinated Programme of Economic and Social Development Policies
CMC	-	Calibration and Measurement Capability
CSIR	-	Council for Scientific and Industrial Research
ECOWAS	-	Economic Community of West African States
EU	-	European Union
FDA	-	Food and Drugs Authority
GSA	-	Ghana Standards Authority
GTA	-	Ghana Tourism Authority
HACCP	-	Hazard Analysis and Critical Control Point
IAF	-	International Accreditation Forum
ICC	-	International Chamber of Commerce
IEC	-	International Electrotechnical Commission
ILAC	-	International Laboratory Accreditation Cooperation
IPPC	-	International Plant Protection Convention
ISSP	-	Industrial Sector Support Programme
ISO	-	International Organization for Standardization
MMDA	-	Metropolitan, Municipal and District Assemblies
MDA	-	Ministries, Departments and Agencies
MoTI	-	Ministry of Trade and Industry
NGO	-	Non-Governmental Organization
NAB	-	National Accreditation Body
NMI	-	National Metrology Institute
NEDS	-	National Export Development Strategy
NSB	-	National Standards Body
NTRF	-	National Technical Regulation Framework
NQI	-	National Quality Infrastructure
OIML	-	Organisation Internationale de Métrologie Légalé
OIE	-	World Organisation for Animal Health
PSD	-	Private Sector Development
PSDS	-	Private Sector Development Strategy
MSME	-	Micro Small and Medium Enterprises
SPS	-	Sanitary and Phyto-Sanitary
SQAM	-	Standardization, Quality Assurance, Accreditation and Metrology
TBT	-	Technical Barriers to Trade
TSSP	-	Trade Sector Support Programme
UNECE	-	United Nations Economic Commission for Europe
UNIDO	-	United Nations Industrial Development Organization
WTO	-	World Trade Organization
ACP	-	African, Caribbean and Pacific Group of States

1.0 INTRODUCTION

Globalization, characterized by significant increases in global flows of information, ideas, factors of production and technology has brought about a deep and pervasive integration of the world economy. Successive rounds of international agreements have systemically reduced tariff barriers in developed countries while introducing non-tariff barriers like technical regulations. Developing countries have followed suit, inspired by the success of several East Asian economies.

Increased trade flows in manufactured goods provide increased opportunities for employment and wealth creation. Hence any developing country seeking sustained growth needs to free itself from dependence on primary products and diversify into manufacturing for exports, whose added value comparative price advantage translates into wealth. However, in order to compete successfully in developed markets, enterprises face a formidable array of challenges. Over and above the logistics, management and financial issues, one of the major stumbling blocks is the attainment of demonstrable product and/or service quality as demanded by authorities and purchasers in domestic and especially foreign markets.

Furthermore, governments have an inherent responsibility related to the quality of goods produced and services provided and consumed by its citizens from the perspective of health, safety, fair trade practices and protection of the environment. The role of the Government is therefore to promulgate and enforce technical regulations and standards focused on the protection of human, animal and plant health and the environment while creating an enabling environment for businesses.

In order to fully leverage the opportunities for trading with foreign markets, enterprises in an economy need cost-effective access to an internationally recognized, and supportive National Quality Infrastructure (NQI) that can provide the required independent evidence of product compliance. Development and implementation of the right quality infrastructure has a significant impact on the reduction of poverty and inequality. A functional Quality Infrastructure (QI) is important to support the entry of small firms into supply chains.

Developing countries, especially those within Sub-Saharan Africa, are seeking to establish appropriate quality infrastructure that can provide efficient standardization, metrology and conformity assessment services. Fortunately, international experience in technical regulations and standards have evolved into best practices that can be adopted by governments.

Africa, through the implementation of the Africa Continental Free Trade Area (AfCFTA) Agreement is expected to modernise the conditions for regionally integrated trade under the framework of the African Organisation for Standardisation (ARSO) whose principal mandate is to harmonise African standards, conformity assessments and procedures in order to reduce Technical Barriers to Trade as well as enhance industrialisation of Africa.

A number of factors have influenced changes in technical barriers to trade. These include rapid changes in consumer preferences; the drive to liberalise and globalise international trade; the

determination that trade should be subject to rules which are transparent, non-discriminatory, and administered by a body which can impose penalties for non-compliance; the emphasis on maximising private and civil society involvement in setting standards and norms as against the earlier overreliance on the State and public financing; the growth of international best practices in all fields; and the need to be receptive to national and international public opinion.

The Organisation for Economic Cooperation and Development (OECD) countries have recognized this reality and have developed a body of guidelines to effect better regulatory practices. A number of developing countries are in the process of reviewing their technical regulation practices, e.g. Brazil, South Africa, Chile, Uganda, etc. Countries which are current or aspiring members of the EU have had to radically transform their technical regulation systems in order to comply with the EU's *acquis communautaire*.

In all these processes three (3) phases can be identified, namely deregulation, regulatory quality improvement and regulatory management, which are progressively implemented. Many countries start with a drive to deregulate i.e. getting rid of obsolete regulations. The next logical step would be to improve the performance of the institutions that are involved in technical regulation. In addition, the decision-making mechanism as to when to implement technical regulations is improved by utilising Regulatory Impact Assessments (RIA). But all these steps are to some extent tinkering with the current, normally fragmented system. It is only when the system is addressed holistically i.e. when regulatory management is considered, that real progress is achieved. These phases are therefore interdependent, and all of them must be considered in reducing technical barriers to trade.

Recognizing that industrial development and effective trade are hinged on a functional NQI, after adopting the West Africa Common Industrial Policy (WACIP) in 2010, ECOWAS instituted measures to assist Member States in formulating National Quality Policies (NQPs).

Implementation of NQPs is expected to lead to the streamlining and enhancement of NQIs to facilitate trade within and among Member States in the sub-region, the Continent and with other trading partners in order to meet the following economic targets by 2030:

- Contribution of manufacturing to regional GDP increased from 7% to 20%
- Intra-ECOWAS trade increased from 12% to 40%
- Exports of goods manufactured in ECOWAS to the global market increased from 0.1% to 1.0%
- Ensure consistent GDP growth of 7% and at least a third of all products/services generated by local firms.

The Government of Ghana, as part of its transformational agenda has identified a functional National Quality Infrastructure consistent with international best practices as key in supporting industrialization toward accelerated economic growth.

In view of Government programmes on rapid industrialization and promotion of increased export earnings, it is anticipated that the growth in the demand for Quality Infrastructure services, such as Accreditation, Conformity Assessment, Metrology and Standardization will

outstrip the supply in the medium to long term if investments in the sector continues to be largely Government-led.

There is therefore the need to have a National Quality Policy that streamlines the operations of actors in the National Quality Infrastructure space and at the same time crowd-in private sector investments to ensure that services provided remain affordable and competitive to enhance the competitiveness of made-in-Ghana goods and services. This has been the international best practice as it frees up resources for the most critical compliance and enforcement activities which are the mandate of Government. The fundamental principle underlying the Policy is that the private sector is the engine of growth, with Government providing an enabling environment designed for the National Quality Infrastructure to thrive over the long term.

1.1 Structure of the National Quality Policy

The National Quality Policy is structured into five (5) thematic areas based on key components of the National Quality Infrastructure and specific crosscutting issues:

1. Metrology
2. Standardisation
3. Accreditation
4. Conformity Assessment
5. Technical Regulations and Good Regulatory Practice

Each of the five (5) policy thematic areas has been analysed on the basis of their policy context, policy objective and policy prescriptions designed to achieve each policy objective. This structure ensures that the specific policy prescriptions to be implemented are not only clearly identified, but also properly understood within the relevant context.

The National Quality Policy (NQP), presented in this document, provides the guidelines, and agreed framework for formulating and implementing the NQP Implementation Programme, a 5-year blueprint consisting of projects with a defined plan of action, budget and key performance indicators to be achieved within specific timelines and periodically reviewed by relevant stakeholders to assess impacts and make appropriate adjustments.

2.0 THE NATIONAL QUALITY INFRASTRUCTURE (NQI)

Within the context of the Quality Policy, the “*National Quality Infrastructure (NQI)*” is the totality of the institutional framework (public or private) established to implement standardization, metrology (scientific, industrial and legal), accreditation and, conformity assessment services (inspection, testing, verification and validation, and certification) within an economy. NQIs are necessary to provide acceptable evidence that products and services meet defined requirements demanded either by Government authorities (technical regulations) or by the marketplace (contractually or inferred). The NQI covers institutions involved in metrology, standardization, accreditation, conformity assessment, and market surveillance.

In effect, Quality Infrastructure (QI) comprising the organizations (public and private) together with their systems, policies, legal and regulatory framework, and practices established to support and enhance the quality, safety and environmental soundness of goods, services and processes for the effective operation of domestic markets, and to enhance and maintain international recognition and operating in the public and private sectors is important to enable access to foreign markets. It is a critical element in promoting and sustaining economic development, as well as environmental and social wellbeing.

NQI institutions provide services to suppliers and consumers. In many countries however, conformity assessment services (i.e. inspection, testing, verification and validation and certification) for example are progressively being provided by the private sector rather than by government entities, whereas governments retain the responsibility to ensure that the fundamentals, i.e. standards, metrology and accreditation are maintained and enforced.

The optimum efficiency of the NQI in the national economy is as much a public policy issue as well as a market-driven service. The notion that two separate systems are required, i.e., one for government authorities and one for the marketplace is outdated and leads to unnecessary duplication and inefficiency of the systems. In a modern NQI, technical competency issues and the required legal checks and balances can appropriately be dealt with through accreditation and conformity assessment. Hence a single, coherent NQP can serve both government authorities and the marketplace.

Table 1 below provides a summary of the elements that make up the NQI, the typical institutions and the services they should provide. These elements are interrelated and in most cases the output of more than one will be required to provide the purchaser, user or the authorities with the required information and confidence that a product, process or service meets expectations and requirements. Figure 1 clearly illustrates the interrelationships of the various elements of a NQI.

Ideally, each of the elements of the NQI would be an independent organization to avoid overlapping mandates and conflicts of interest. However, the reality in some developing economies such as Ghana is that inadequate financial and technical capacity causes the

combination of some of the elements, resulting in conflicts of interest. These have cardinal principles to be considered when combining the NQI elements, namely:

- The accreditation function cannot be combined with the provision of conformity assessment services i.e., inspection, testing and certification in the same organization
- The national standards body may also become the national accreditation body, but then it cannot provide conformity assessment services (e.g., Canada or Malaysia)
- Regulatory agencies should allow suppliers to use the services of technically competent, i.e., accredited conformity assessment service providers, and let market forces determine the overall effectiveness and efficiency of such service provision.

Although fundamental metrology and accreditation is not *per se* a conflict of interest (as defined by the BIPM, ILAC and the IAF) it is perceived to be close to being so, and hence developing countries are advised to rather shy away from combining industrial metrology and accreditation in a single institution.

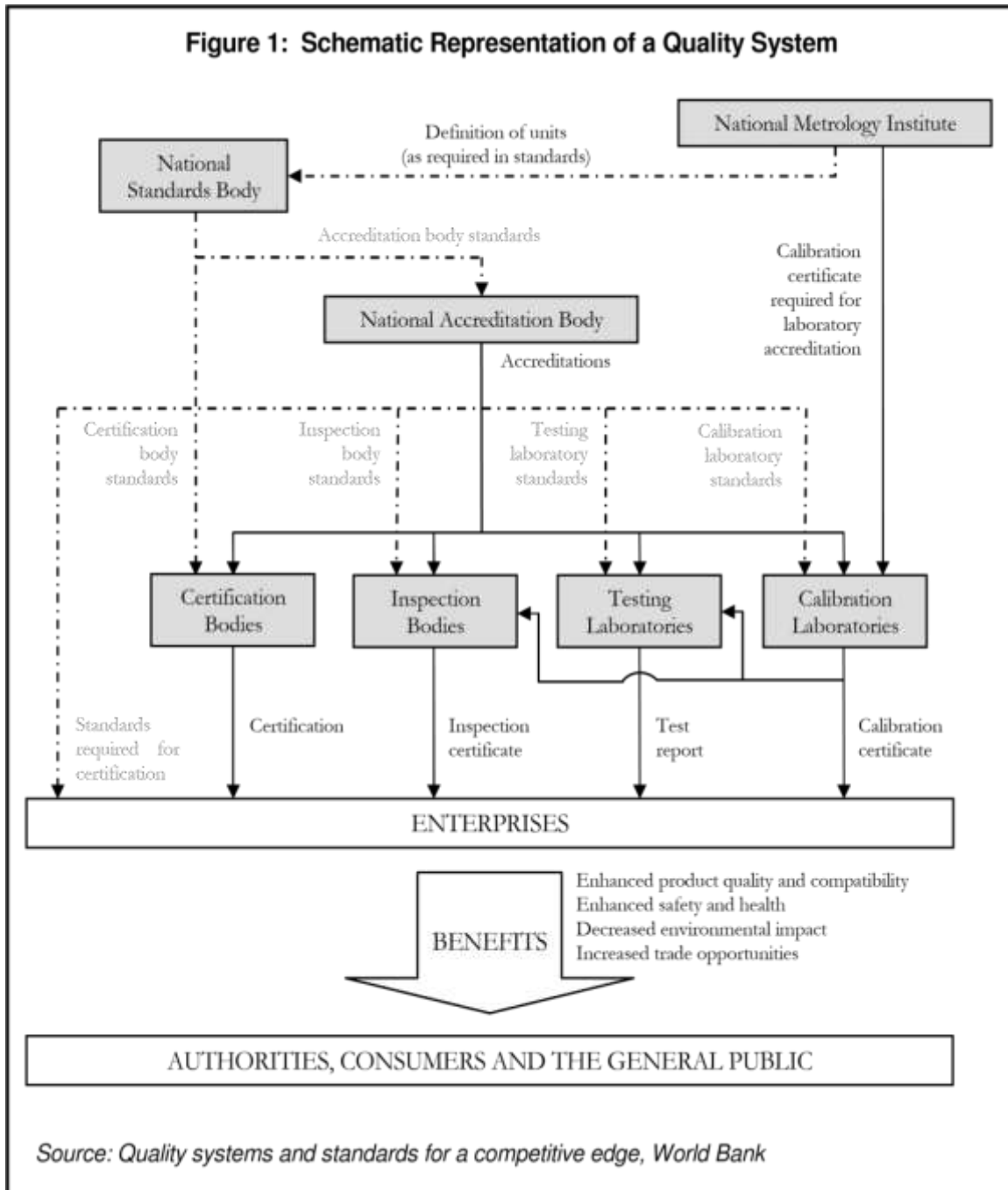
Table 1: National Quality Infrastructure Service Outputs and Institutions

Element	Description of service	Institution(s)
Standards	<p>Publication of a formal document (standard), generally developed by consensus, containing the requirements that a product, process or service should comply with.</p> <p>Suppliers are encouraged to use standards in order to promote productivity, health and safety of consumers and the environment.</p>	<ul style="list-style-type: none"> • National Standards Body (NSB) • Sectoral Standards Development Organizations (SDO) • Industry based standards organizations <p>NOTE: Although most NSBs are public organizations, a few private NSBs exist. A public NSB is usually a monopoly, and a private NSB has an agreement with the government to this effect. The SDOs are mostly private.</p>

Element	Description of service	Institution(s)
Metrology	The technology or science of measurement. Metrology can be subdivided into scientific metrology (the development and organization of the highest level of measurement standards), legal metrology (the assurance of correctness of measurements where these have an influence on the transparency of trade, law enforcement, health and safety) and industrial metrology (the satisfactory functioning of measurement instruments used in industry, production and testing).	<ul style="list-style-type: none"> • National Metrology Institute (NMI) • Calibration Laboratories (public or private) • Legal Metrology Department (LMD) <p>NOTE: The NMIs and LMDs are invariably public organizations. Calibration laboratories may be public or private.</p>
Element	Description of service	Institution(s)
Accreditation	The activity providing independent attestation as to the competency of an individual or an organization to offer specified conformity assessment services (e.g. testing, inspection or certification).	<ul style="list-style-type: none"> • National Accreditation Organization/Body <p>NOTE: This is usually a public organization with a defined monopoly.</p>
Inspection	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. Inspection is often conducted on consignments such as import inspection, to ensure that the whole consignment is equivalent to the product sample tested.	<ul style="list-style-type: none"> • Import inspection agencies • General inspection agencies <p>NOTE: These can be public or private agencies. Competition in the marketplace is the norm.</p>
Testing	The determination of a product's characteristics against the requirements of the standard. Testing can vary from a non-destructive evaluation (e.g., X-ray, ultrasound, pressure testing, electrical, etc. where after the test the product is still fit for use) to a total destructive analysis (e.g., chemical, mechanical, physical, microbiological, etc. where after the test the product is no longer fit for use), or any combination thereof.	<ul style="list-style-type: none"> • General testing laboratories (including environmental labs) • Medical laboratory testing <p>NOTE: These can be public or private laboratories. Competition in the marketplace is the norm.</p>

Element	Description of service	Institution(s)
Verification and Validation	<p>Verification is a confirmation of a claim (i.e., information declared by the client), through the provision of objective evidence, that specified requirements have been fulfilled.</p> <p>Validation is a confirmation of a claim, through the provision of objective evidence, that the requirements for a specific intended future use or application have been fulfilled</p>	<ul style="list-style-type: none"> • Validation Bodies • Verification Bodies <p>NOTE: These can be public or private agencies.</p>
Certification	<p>The formal independent third-party attestation by a certification body after an evaluation (e.g., testing, inspection or assessment) that a product, service, organization or individual meets the requirements of a standard.</p>	<ul style="list-style-type: none"> • Product certification organizations • System certification organizations • Persons certification bodies <p>NOTE: These can be public or private organizations. Competition in the marketplace is the norm.</p>

Figure 1: Schematic Representation of a Quality System



Source: *Quality systems and standards for a competitive edge*, World Bank

3.0 CONTEXT

3.1 General Context

A number of public institutions together with private organizations constitute the current Ghanaian NQI landscape. Some major public organizations involved in NQI activities include the Ghana Standards Authority (GSA), the Food and Drugs Authority (FDA), the Council for Scientific and Industrial Research (CSIR), Ghana Tourism Authority (GTA), the National Petroleum Authority, the National Communications Authority, the Energy Commission, the Ghana National Accreditation Service (GhaNAS), and the Metropolitan, Municipal and District Assemblies (MMDA) among others. Some private sector operators in the NQI space include among others SGS medical laboratories etc. A number of Ministries and their Agencies also undertake QI activities such as the development of normative documents and technical regulations, testing and certification within their mandates.

It is known that the activities of public institutions often overlap mostly due to inconsistencies in legislations, leading to a lack of clarity regarding the division of labour. This lack of clarity is having a negative impact on the effectiveness and efficiency of the system, leading to unnecessary and often acrimonious confrontations and is therefore not in the best interest of the country.

Metrology functions are spread over a number of institutions such as the Ghana Standards Authority (GSA), the Council for Scientific and Industrial Research (CSIR-IIR), the National Communications Authority (NCA) and the Ghana Atomic Energy Commission (GAEC) as there is no National Metrology Institute (NMI). This policy seeks to consolidate the calibration activities of these institutions into a national calibration system to comply with international best practice.

Ghana is in the process of establishing a national accreditation body to accredit conformity assessment bodies seeking international recognition. Seeking accreditation outside a country is an expensive exercise and does not allow government the control to effectively identify and regulate the activities of its conformity assessment bodies. There are presently very few accreditation bodies on the African continent which are internationally recognized. These include those of South Africa, Egypt, Tunisia, UEMOA, Nigeria, Kenya, Sudan and Southern African Development Cooperation (SADC).

The Quality Policy provides details of the preferred NQI and the relevant responsibilities of the institutions to facilitate proper division of work.

Government must take a leading role in establishing key NQI organizations. In developing economies, the involvement of government in these early stages is necessary to provide the NQI organizations with the requisite authority and to provide the required finances. Some NQI services will always be funded totally or in a large part by government, and these include fundamental metrology, standards development and promulgation and accreditation.

3.2 Policy Context

The National Quality Policy (NQP) is set within the context of relevant constitutional provisions and the following key national policies:

1. The Coordinated Programme of Economic and Social Development Policies (CPESDP) (2017-2024)
2. National Export Development Strategy
3. National Food Safety Policy
4. Ten Point Industrial Transformation Agenda

3.2.1. The Coordinated Programme of Economic and Social Development Policies (CPESDP) (2017-2024)

Within the CPESDP, government realizes that the main thrust of private sector development policy is to establish Ghana as the most business friendly country in Africa. This will entail creating an enabling environment to attract both domestic and foreign investors, with the aim of growing businesses and expanding the private sector. To this end, Government will, as a matter of priority, identify and address the systemic structural and institutional bottlenecks that constrain the environment for business expansion and growth.

The NQP therefore has been developed as a tool for addressing systemic structural and institutional bottlenecks that constrain NQI institutions with a consequent effect on private sector investments.

3.2.3. National Export Development Strategy

One of the key strategic objectives of the National Export Development Strategy (NEDS) is to strengthen and resource export development related institutions and networks of business development service providers, policies and programmes for providing well-focused and enhanced support services to enable export businesses to flourish. This objective is in line with the general aim of an NQP.

Also aligned with the quality policy is the strategic output that emphasizes institutional capacity and resources for export value chain infrastructure development and enhanced support service delivery.

3.3.4. National Food Safety Policy

The vision of the National Food Safety Policy is a well-established and structured food safety system that clearly outlines the roles of all relevant stakeholders for the management and control of food safety. The mission of the National Food Safety Policy is to put in place a well-coordinated management system to ensure food safety that guarantees consumer protection and public health. The goal of the National Food Safety Policy is to provide for the management and control of food safety to ensure public health and safety.

3.3.5. Ten Point Industrial Transformation Agenda

Industrialization and Private Sector Development in general, present opportunities to expand the economy and create more jobs. Government has therefore embarked on a comprehensive industrial transformation and private sector development agenda, encapsulated in a Ten Point Industrial Transformation Agenda. The NQP would sit at the core of building strong institutions that would provide the needed quality infrastructure support for this industrialization agenda by developing standards, testing, calibration, inspection, accreditation, and measurement facilities.

4.0 DESCRIPTION OF THE QUALITY POLICY

4.1 Scope of the Policy

The scope of the policy covers the main internationally recognised elements of the NQI which are: Metrology, Standardization, Conformity Assessment, Accreditation and Technical Regulations/Good Regulatory Practices.

The Government of Ghana plans, through its Trade Policy and its supporting Industrial Transformation Agenda, to ensure the establishment of an environment that would help Ghana's society prosper in different economic, social, and technological areas. This will take into account the opportunities, potential and changes that are anticipated at the regional and international levels in the upcoming era. Ghana is committed to re-orientate and re-engineer its National Quality Infrastructure (NQI) in a holistic manner so as to become more effective and efficient and to ensure that it meets international standards and recognition. Here, the Government of Ghana will focus on quality and technical competency to ensure that the proper environment exists for national goods and services to gain a competitive edge in international markets, thereby leading to expanded exports and hence sustainable growth of Ghanaian society.

The Government of Ghana has articulated a clear vision for a "Ghana Beyond Aid" as a self-reliant and self-sustaining economy anchored on inclusive growth, job creation and shared prosperity. In addition to the African Continental Free Trade Area (AfCFTA) Agreement, Ghana is currently implementing preferential trade agreements, including but not limited to the African Growth and Opportunity Act (AGOA), the EU-Ghana Interim Economic Partnership Agreement, and the Ghana-UK Trade Partnership Agreement. Marshalling resources from the NQI to support domestic producers, for imports substitution and export market penetration is of utmost strategic importance.

4.2 Rationale for the National Quality Policy

As an integral part of strengthening the NQI, Government will institutionalise and implement a common approach to developing technical regulation. A Technical Regulation Framework (TRF) is proposed to ensure that the division of work between the NQI and the authorities responsible for the administration of technical regulation is properly delineated, monitored and enforced to ensure that trade facilitation as well as responsibility for protecting the safety and health of its citizens and the environment are not compromised.

In addition to the above, it is expected that the policy will encourage the private sector to invest in strengthening and expanding the NQI, enabling Government to focus public financing on the most critical areas required as public good, including enforcement.

The overall objective of the Quality Policy is to provide a concise and coherent framework for regulatory and institutional reforms to ensure that goods and services emanating from or traded in Ghana are designed, manufactured, and supplied in a manner that match the expectations

and requirements of the purchasers and consumers as well as regulations in the local and in the export markets.

The long-term outcome of the implementation of the Quality Policy will be to establish a world-class metrology, standardization, accreditation, inspection, testing and certification infrastructure.

4.3 Vision

The National Quality Policy (NQP) aims to enable Ghana to develop an effective and efficient Quality Infrastructure, that is globally recognised and tailored to address challenges in the domestic and export markets, particularly SPS and TBTs.

To achieve the vision the National Quality Policy will establish a National Quality Infrastructure to:

- Develop and implement a common approach to technical regulation, i.e., Good Regulatory Practice (GRP) including a Technical Regulation Framework (TRF) and market surveillance
- Eliminate overlapping functions by ensuring that the activities of the NQI and regulators are properly coordinated
- Ensure that the health & safety of citizens as well as the protection of the environment are not compromised
- Ensure that non-tariff barriers do not impede trade
- Provide a common approach in dealing with sub-standard imported and domestic products and services

4.4 Strategic Objectives

The strategic objectives of the National Quality Policy are to:

- Improve the international competitiveness of Ghana leading to enhanced export performance
- Protect consumers and the environment from counterfeited and unsafe products
- Raise the quality of life of the Ghanaian people
- Support Government's industrial transformation agenda and other national strategies for increasing exports; enhancing import substitution and improving business regulations and the ease of doing business

5.0 THEMATIC AREAS OF THE POLICY

5.1 Introduction

The main thematic areas of the National Quality Policy (NQP) are Metrology (Scientific, Legal and Industrial), Standards, Accreditation, Conformity Assessment (Testing, Inspection, verification, validation and Certification) and Technical Regulations, Enforcement and Good Regulatory Practices.

5.2 Metrology

Policy Context

Currently, the legislation governing metrology in Ghana is outdated and does not meet the needs of industry and consumers. Also, metrology functions are spread across various NQI institutions creating overlaps and making coordination at the national level difficult.

To maximize the benefits derived from an efficient Metrology system, there is the need to consolidate the current fragmented metrology service delivery in the country by establishing an independent National Metrology Institute (NMI) in Ghana. Ghana Standards Authority (GSA) will incubate the new NMI until it is matured enough to be weaned off as an independent National Metrology Organisation for Ghana.

Policy objective

To increase the awareness of metrology and to establish a common metrological framework as one of the fundamental building blocks of the quality infrastructure.

Policy Prescriptions

Government will:

- Consolidate the current fragmentation of metrology in the country by establishing an independent National Metrology Institute.
- Ensure that Ghana uses the International System of Units (SI) of measurements at the national level and where applicable, other local or traditional units of measurements are phased out gradually.
- Establish and strengthen the NMI with the responsibility of acquiring and conserving national measurement standards capable of providing accurate and reliable measurements in the country
- Provide an enabling environment for the establishment of private calibration laboratories

- Ensure that all calibration laboratories are appropriately accredited against the relevant international standards
- Ensure that a national calibration system is established, maintained, and continuously improved to diffuse the national measurement standards into industry, authorities and society.
- Ensure that no other Ministry or Agency shall establish legally enforceable metrology requirements for measuring equipment unless in coordination and with the approval of the NMI.
- Ensure that the NMI shall have the responsibility to type-approve measuring equipment, have the same verified on placement into service and thereafter have them regularly calibrated and verified.
- Ensure protection of consumers by controlling pre-packaging operations of products, all of which to be based on relevant regional or international standards.
- Ensure the NMI's participation in international bodies concerned with metrology.

5.3 Standardization

Policy Context

There is limited in-house capacity by the GSA in drafting technical text for the development of sector specific standards in new and emerging areas. Additionally, standards development is capital intensive, and this limits the GSA's ability to develop new standards and review existing ones.

Some regulatory agencies do not reference standards published by GSA, but rather reference other international standards even though those standards have been adapted to suit the Ghanaian context.

Policy objectives

- To ensure that the standards development process continues to be an activity that depends on achieving consensus amongst stakeholders, in a participatory and transparent environment.
- To develop and promote appropriate standards for new and emerging sectors for effective use by industry to improve productivity, quality and enhance competitiveness.

Policy Prescriptions

Government will:

- Encourage the adoption of relevant international and regional standards based on the needs of regulatory authorities, industry, and consumers.
- Ensure that the development of national standards remains the preserve of the Ghana Standards Authority.

- Use national, regional, and international harmonised standards as relevant basis for the development of technical regulations.
- Ensure that all standards are developed and periodically reviewed to ensure continuous conformity with technological developments, market trends and international requirements.
- Encourage the Ghana Standards Authority to provide the framework required to develop and publish national standards and other normative documents on a national level, and to regularly review and update same.
- Ensure that standardizing bodies accept and follow the Code of Good Practice for the Preparation, Adoption and Application of Standards as provided in Annex 3 of WTO Agreement on Technical Barriers to Trade;
- Ensure that no other Ministry or Agency publishes normative documents that purport to be Ghana Standards or references standards other than national standards, except in cases where there are no national standards.
- Ensure that the Ghana Standards Authority participates in the process of developing regional and international standards on behalf of Ghana.
- Ensure that, to develop national standards, the Ghana Standards Authority establishes the relevant technical committees, in line with approved guidelines and rules based on the WTO TBT Agreement requirements and ISO/IEC Directives.
- Encourage Ministries, academic and scientific institutions and industry to commit to actively participate in and/or sponsor technical committees.

5.4 Accreditation

Policy Context

Ghana is in the process of establishing a national accreditation body. Accreditation is an independent third-party attestation of the technical capabilities of conformity assessment service providers to carry out specific tasks. Public and private laboratories currently seek accreditation from outside the country at exorbitant costs, hence the establishment of a national accreditation body is timely.

Policy Objective

To establish an internationally recognised accreditation body providing accreditation services in the subregion within the next 5 years.

Policy Prescriptions

Government will

- Develop and promulgate legislation that would regularize the status of the Ghana National Accreditation Service.

- Encourage the Ghana National Accreditation Service to work in accordance with international standards and pursue international recognition.
- Ensure that no Ministry or Agency shall establish or be allowed to pursue activities that are akin to the accreditation of conformity assessment bodies.
- Ensure that the governance of the Ghana National Accreditation Service shall be set up in such a way to facilitate international recognition.
- Ensure that the Ghana National Accreditation Service shall establish the relevant technical committees to handle all required sectors to be accredited, such as test laboratories, calibration laboratories, bodies for the certification of products and management systems, inspection bodies and bodies carrying out training and certification of quality related personnel.
- Encourage the Ghana National Accreditation Service to cooperate closely with Ministries and their Agencies in developing accreditation programmes.

5.5 Conformity assessment

Policy Context

A well-established conformity assessment infrastructure is made up of adequate numbers of private and public conformity assessment bodies which have been accredited for specific tasks. However, there is lack of incentives for private sector participation in conformity assessment service provision.

Many regulatory agencies maintain laboratories. However, the capacity required to satisfy the more developed markets or to test all products that have a bearing on the safety and health of Ghanaian consumers, is still inadequate. A major challenge is the maintenance and proper calibration of test equipment. The infrastructure to provide these services are inadequate.

Policy objectives

To ensure that conformity assessment services demonstrate the quality of products and services independently.

To ensure that conformity assessment service provision is transparent, non-discriminatory and avoids unnecessary barriers to trade.

To create a level playing field to encourage the private sector to participate in conformity assessment (testing, calibration, inspection, verification and validation or certification) services.

Policy prescriptions

Government will

- Develop legislation to regulate conformity assessment bodies to ensure their operations are based on national standards and guidelines.

- Encourage conformity assessment bodies to obtain and maintain accreditation to minimize the need for retesting or recertification.
- Ensure that conformity assessment services are provided by laboratories, inspection, and certification bodies both in the private and public domains that demonstrably fulfil the requirements of the relevant international standards.
- Establish, maintain, and continuously improve the conformity assessment service provision and all quality infrastructure related institutions in the public domain.
- Create a policy environment that will not hinder but facilitate the development of private conformity assessment service providers, while enhancing the capacity of the public institutions.
- Utilize the services of private conformity assessment bodies in public procurement and the enforcement of technical regulations.

5.6 Technical Regulations and Good Regulatory Practice

Policy Context

Ministries, Departments and Agencies are involved in the development and enforcement of technical regulations. The mandates of some of the key QI Institutions are not clear enough to eliminate overlapping functions. Currently, there is no specific regulatory framework for technical regulations that coordinate the mechanism for developing and enforcing TRs in Ghana.

The use of a regulatory framework with guidelines for developing technical regulations will bring about uniformity in the development process and enforcement procedures. Collaboration of all stakeholders with a multi-sectoral approach, will create openness and understanding of issues at stake to promote easy compliance. Market surveillance, an integral part of enforcing technical regulations, is not effectively conducted.

Enforcement of Technical Regulations is a major problem in Ghana partly due to the large and informal economy sector with multiple levels in the distribution channels from importers, wholesalers through retailers all the way to petty traders and hawkers. The cost of enforcement without commensurate returns to regulatory institutions in terms of fines and other financial sanctions discourage regulators from enforcing technical regulations.

Policy Objective

To develop a Technical Regulatory Framework with guidelines for the development, enforcement and monitoring of Technical Regulations to streamline the regulatory regime in the country.

Policy Prescriptions

Government will:

- Develop, in line with international best practice, a technical regulatory framework that will be the basis for coordinating the development and enforcement of technical regulations.
- Improve the existing market surveillance regime to promote effective enforcement of technical regulations.
- Ensure that a transparent Regulatory Impact Assessment process and regime becomes operationalized in MDAs and regulatory bodies.
- Strengthen Post-Market surveillance through collaboration and data exchange among key regulators and encourage joint-market surveillance
- Strengthen the enforcement provisions in existing laws of key regulators to administer financial sanctions and administrative penalties to generate revenue for market surveillance
- Strengthen consumer complaints and feedback procedures including establishment of hotlines to receive and address complaints
- Engage with the Judicial Service on how to fast-track criminal prosecution as a deterrent to non-compliance to standards and regulations

6.0 CROSSCUTTING ISSUES

These are issues that cut across the main technical components of the NQI and promote effective operation of the quality infrastructure. These thematic areas include:

- a. Micro, Small, Medium and Enterprises (MSME)
- b. Precision Quality, Quality Promotion and Quality Culture
- c. Education, Training and Human Resources development
- d. Financing the NQI
- e. Information Network
- f. Legal Framework for QI Institutions
- g. Research and Development
- h. National Quality Awards
- i. Role of International Standards Setting Organizations
- j. Stakeholders' Dialogue.

6.1 Micro, Small, Medium Enterprises (MSME)

Micro, Small and Medium Enterprises constitute the bulk of Ghanaian industry. Hence, the government will introduce special incentives to support the implementation of quality management systems into MSMEs to enhance the quality of their operations and products without distorting the market for conformity assessment services.

The support provided by the government will consist of rebates offered to MSMEs once they have demonstrably complied with quality requirements. These rebates will be made up of initial percentage payback after certification, and further percentage payback after three years if MSMEs maintained their certification.

In determining the scope of technical regulations, the government will consider lowering the requirements for micro enterprises or even waive them altogether if it can be shown that it will not lead to widespread deceptive practices. Health and safety considerations will be excluded from such considerations

6.2 Precision Quality, Quality Promotion and Quality Culture

6.2.1 Precision Quality

Precision quality highlights the value of precision industries and quality products and services in job creation. It places focus on precision in industry, services, and processes to ensure that goods, services and products are of world-class quality. To guide the attainment of precision quality for MSMEs, standards and educational materials shall be developed. Government shall ensure that precision quality is embedded in all industries, especially MSMEs.

6.2.2 Quality Promotion and Quality Culture

Quality promotion and quality culture are very important for a sustainable QI in a country. One of the major constraints that regulators in quality infrastructure face is low level of public awareness, market information and advocacy on the importance of safe and good quality products. As a result, consumers are unknowingly exposed to cheap, unsafe and substandard goods and services that tend to pose public health hazards.

It is therefore very important to create quality consciousness among the public, consumers, traders, manufacturers, trade and professional associations in the electronic and print media. This makes all stakeholders and decision makers adequately aware of the importance and benefits of a functional National Quality Infrastructure.

Quality conscious consumers will make demands that serve as catalysts to compel manufacturers, producers, and traders to focus on quality. Accredited organisations will be encouraged to lead the awareness creation.

6.3 Education, Training and Human Resource Development

Training of personnel in Quality Infrastructure related subjects in Ghana is inadequate. Quality as a subject must be introduced at all levels of the education ladder. In addition, short courses on standards, technical regulations, conformity assessment, accreditation, and calibration, should be offered to relevant officers. This will help create a labour force for the QI institutions.

In order to facilitate such training programmes, it may be advisable to encourage interested Ghanaians to liaise with the Ministry of Education to publish simplified books on Quality Infrastructure.

There is paucity of local consultants in the area of management systems certification or accreditation to establish the capability of companies.

Government and the QI Institutions will:

- Undertake awareness campaigns and trainings with the view to raising knowledge and awareness of quality in society.
- Create and conduct capacity building programmes in QI institutions including preparation and publication of technical brochures, manuals
- Promote application of quality tools to improve products and services through training of industry personnel.
- Support consumers and consumer organizations to disseminate knowledge and information about standards and quality
- Create national pools of experts in quality management to support producers and service providers to apply quality management systems
- Encourage close involvement of the private sector in all relevant initiatives.

6.4 Financing the NQI

The government shall be responsible for financing the development of, and upgrading and restructuring, the existing NQI institutions within the public sector. Government will mobilize resources from public funds, development partners and the private sector for the implementation of the National Quality Policy.

Government will encourage public-private collaboration in the financing and delivery of QI services. However, the government will retain full responsibility for the funding of:

- a) The development and publication of national standards
- b) The establishment and maintenance of the national measurement standards
- c) The legal metrology services, in so far as they cannot be funded through the fees and levies paid by the users of weighting and measuring equipment
- d) The establishment and short-term operational expenses of the National Accreditation Body
- e) The participation and maintenance of the membership of the National Standards Body, National Accreditation Body, National Metrology Institute, and other relevant institutions in regional and international organizations
- f) Strategic conformity assessment areas that are not commercialized, until such a time that government redesignates those areas; and
- g) The establishment of a proper market surveillance system to ensure that technical regulations are enforced.

In order not to distort the market, and to provide for a steady flow of internally generated funds for the NQI institutions, government institutions that make use of the conformity assessment services of the NQI, must pay for such services. Pricing shall be set by the NQI institutions.

6.5 Information Network

A national information network shall be created on quality infrastructure database where stakeholders can share knowledge and experiences. Facilities used by the Notification authorities and Enquiry Points for TBT, SPS and National Codex Contact Point to supply information shall be improved and upgraded for easy flow of information to all stakeholders and interested parties. Government may put in place an enabling environment that allows extended media coverage for quality information dissemination.

6.6 Legal Framework for QI Institutions

Legislation on QI Institutions must be specific and relevant at all times. Some of the existing legislations are old and need review to allow the concerned organisations to function effectively. New legislation for a National Accreditation Body, a National Metrology Institute and Good Regulatory Practice need to be developed in line with international best practices.

Institutional functions shall be clearly defined and aligned so as to eliminate the inherent overlapping of functions.

6.7 Research and Development

To sustain the operations of the elements of QI in the country, continuous improvement is needed. In this regard, research and development (R&D) will be made an integral part of the implementation of the NQP. Internal and external R&D measures will be identified and addressed.

Internal R&D will seek to address reducing waste; improving service delivery; identifying and incubating new businesses; and researching into competitiveness and innovative matters.

External R&D will seek to address partnership and collaborative activities between academia and other research institutions. QI institutions will serve as solution hubs for industry.

6.8 National Quality Awards

National Quality Awards are marks of recognition conferred on organisations that have performed excellently. Applicants' performance is usually assessed in relation to a set of criteria to determine awardees. The scheme for quality awards is meant to introduce competition in quality promotion and it encourages organisations to continuously improve on their performance. Government will continuously provide support for the National Quality Awards Scheme

6.9 Role of International Standards Setting Organizations

International standards organizations play a major role in the effective operation of NQI. These organizations are concerned with product, system and measurement standards as well as other normative documents which are made available to members and encourage members to participate. Memberships offer access to database of standards and other documents, and the opportunity to make input into QI related matters.

6.10 Stakeholders' Dialogue

Government shall promote a public-private collaboration in implementing the National Quality Policy, as well as establish an effective coordination mechanism with the private sector, development partners, NGOs, consumer organizations, civil society, and business associations. In this regard, the National Quality Infrastructure Committee will play an important role. In particular, the government shall:

- a) Support and encourage the private sector to implement national standards and adopt quality management systems.
- b) Ensure that interests of consumers are represented at appropriate fora.
- c) Improve the quality of products, hasten the introduction of international best practices in the field of quality.
- d) Encourage the private sector to participate actively in representative structures and technical committees dealing with standardization, accreditation, and conformity assessment.
- e) Encourage the private sector to invest in the development of quality infrastructure.
- f) Mobilize resources from public funds, international development partners, and the private sector, for the implementation of the National Quality Policy.

7.0 INSTITUTIONAL FRAMEWORK FOR THE IMPLEMENTATION OF NQP

7.1 Establishment of a National Quality Committee (NQC)

The Ministry of Trade and Industry will set up a National Quality Committee made up of NQI Institutions. The NQC will develop strategies and promote overall quality initiatives and ensure that objectives in the Implementation Matrix of NQP are adequately achieved. The structure of the NQC shall demonstrate a representation of key players from both the public and private sectors.

7.2 Objectives of the National Quality Committee

The objective of the National Quality Committee (NQC) is to Coordinate all NQI matters and ensure that the components of NQI are properly established and made to collaborate and operate in an interrelated and recognised manner.

8.0 TERMS AND DEFINITIONS

1. **Accreditation:** means a procedure by which an authoritative body gives formal recognition that a body or person is competent to carry out specific tasks
2. **Calibration:** means a 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.
3. **Certification:** means a procedure by which a third party gives written attestation that a product; process or service meets specified requirements.
4. **Conformity Assessment:** means the demonstration that specified requirements relating to a product, process, system, person, or body are fulfilled.
5. **Inspection:** means the examination of a product design, product, process or installation and the determination of its conformity with specific requirements or, on the basis of professional judgement, with general requirements.
6. **Metrology:** means the science of measurement and includes scientific, industrial and metrology. No testing would be possible unless the characteristics of the product or service in question can be measured in a way, which compares them against physical or chemical reference of known values. Therefore, adequate methods for measuring the properties of products and services are fundamental to the quality assessment process.
7. **National Metrology Institute** means institution designated by national decision to develop and maintain national measurement standards for one or several quantities.
8. **National Quality Infrastructure (NQI):** 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 NQI is the key tool for the implementation of the National Quality Policy.
9. **National Quality Policy (NQP):** An official national document adopted at a highest level of a Country (Government or National Assembly) which gives the general visions on quality and technical regulation issues that are in coherence with the general national policy adopted by the national authorities in all the areas. The NQP helps for the definition of objectives and results to be achieved, as well as the necessary resources to be mobilized in the field of quality.

- 10. Quality** means the degree to which a set of inherent characteristics fulfils requirement.
- 11. Regulator** means authority that carries out the mandate given under the law to oversee implementation and administration of technical regulations and includes national and provincial government departments, local authorities and regulatory agencies established by legislation.
- 12. 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.
- 13. Standardization** means the activity of establishing, with regard to actual or potential problems, provisions for common and repeated use, aimed at the achievement of the optimum degree of order in a given context.
- 14. Standards Body** means a standardizing body recognized at national, regional or international level that has as a principal function, by virtue of its statutes, the preparation, approval or adoption of standards that are made available to the public.
- 15. Technical Regulations** means document that 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.
- 16. Testing** means the determination of one or more characteristics of an object of conformity assessment according to a specific procedure.