



# The Gambia Standards Bureau

**NATIONAL STANDARDIZATION STRATEGY – 2018 – 2020**

## EXECUTIVE SUMMARY

The Gambia Standards Bureau continues to embrace good practices to help in the execution of its mandate on National and International Standardization. The Bureau is aware that standards serve as strong tools to help drive the development of the economy of the country and all sectors require standards to help ensure quality delivery of goods and services across the length and breadth of The Gambia.



The elements and structures to help drive the national standardization process which is a fundamental pillar of the National Quality Infrastructure (NQI) have largely been put in place and currently the Bureau has through its active technical committees published 100 national standards in key sectors of the country. The Bureau continues to participate actively in international and regional standards development. In order to strengthen the gains made in standardization, the Bureau has decided to work closely with all relevant stakeholders to put in place a National Standardization Strategy. This Strategy will inform the development of a national standardization plan for the next three years. The Plan will consist of the required standards to be developed in 2018, 2019 and 2020.

This NSS was developed following the International Organization for Standardization recommended procedure. The process involves rigorous stakeholder consultations at all stages. Therefore, this strategy clearly shows stakeholders standardization needs in the next 3 years. The document will help the Bureau to judiciously use the meagre resources it has to develop the real standardization needs of the country. The strategy will also help the Bureau to clearly show the need for more resources to help realize the standards required by the country during the period under review.

From the analysis made in the strategy, the Bureau intends to publish 100 National standards under twelve technical committees in each year. The Bureau would also require 8.5 standards officers during the planned period to ensure adequate human resources for the implementation of the strategy. Given the fact that some of the published National Standards will be due for revision during the period under review, the Strategy will allow for the use of resources to revise the standards accordingly. The Strategy will also accommodate consideration of requests from key stakeholders on standards that are not captured by the strategy but are needed urgently by the country.

## **ACKNOWLEDGEMENT**

The Gambia Standards Bureau would like to express gratitude to the International Organization for Standardization (ISO) for the training and guidance provided throughout the development of this important document. The Bureau wishes also to thank all national stakeholders such as Government, Industry, Academia, Regulatory bodies and Consumer Associations on the support and collaboration provided during the development of the Strategy.

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## ACRONYMS

ARS – Africa Regional Standards  
ARSO – African Regional Organization for Standardization  
CAC – Codex Alimentarius Commission  
CD – Committee Draft  
DGS – Draft Gambian Standard  
DIS – Draft International Standard  
EAS – East African Standards  
FDGS – Final Draft Gambian Standard  
FDIS – Final Draft International Standard  
FSQA – Food Safety and Quality Authority  
GBoS – Gambia Bureau of Statistics  
GCCCI – Gambia Chamber of Commerce and Industry  
GDP – Gross Domestic Product  
GL – Guidelines  
IEC – International Electrotechnical Commission  
IPC – Infection Prevention and Control  
ISO – International Organization for Standardization  
ITC – International Trade Center  
MOTIE – Ministry of Trade, Industry, Regional Integration and Employment  
MOPE – Ministry of Petroleum and Energy  
MS – Malaysian Standards  
NAFP – National Association of Food Processors  
NBAG – National Bee-Keepers Association of Gambia  
NDP – National Development Plan  
NEA – National Environmental Agency  
NEC – National Electrotechnical Committee  
NES – National Export Strategy  
NGO – Non-Governmental Organization  
NML – National Metrology Laboratory  
NP – New Project  
NPHL – National Public Health Laboratory  
NSS – National Standardization Strategy  
OIC – Organization of Islamic Countries  
OIML – International Organization of Legal Metrology  
PAS – Publicly Available Specification  
PSDS – Private Sector Development Strategy  
PURA – Public Utilities Regulatory Authority  
RCP – Recommended Code of Practice  
RLV – Red Line Version  
SANS – South African National Standards  
SC – Sub-Committee  
SMIIC – Standards and Metrology Institute of Islamic Countries  
SPS – Sanitary and Phytosanitary  
TBT – Technical Barriers to Trade  
TC – Technical Committee  
TGSB – The Gambia Standards Bureau  
TR – Technical Report  
TRS – Technical  
TS – Technical Specification  
USD – United States Dollar  
UTG – University of The Gambia

WD – Working Draft  
WG – Working Group  
WHO – World Health Organization  
WTO – World Trade Organization

# 1.0 INTRODUCTION

## 1.1 Country Profile

The Republic of The Gambia is surrounded by the Republic of Senegal on all sides except the Atlantic Coast. The country is divided into north and south banks by the River Gambia. It has a land covering an area of approximately 11, 000 square kilometres.

The 2013 Census puts the country's population at approximately 1.86 million people, with an annual growth rate of 3.1 % (between 2003 and 2013). The country has one of the highest population densities in Africa: 173 persons per square kilometre. Urban population has grown significantly due to an upsurge in rural-urban migration and immigration. A high dependency ratio puts a growing demand and strain on household income, the food budget, and social services. Fertility rate stands at 5.9 percent (2013 Census). Literacy rate stands at 63 percent among the age group 15 and over (2013 Census).

The country's economy is predominantly agrarian with crop production, livestock rearing and fishing being the major activities. Services are emerging as a significant contributor to the economy. Tourism is today the second largest employer and revenue generating source for the country, contributing 16 % of Gross Domestic Product (GDP). Industries are very limited and mainly light. GDP per capita was estimated to be at 473.19 USD in 2016 and the 2016 World Human Development Index ranks the country 168 out of 182 countries.



## **1.2 The Gambia Standards Bureau's background**

The Gambia Standards Bureau was established by an Act of Parliament in 2010 (TGSB Act 2010). The primary role of the Bureau according to the Act is to develop and publish national standards in all sectors of the country's economy. The Bureau is also mandated to provide conformity assessment and metrology services. In 2014, the Ministry of Trade, Industry, Regional Integration and Employment appointed the Bureau as the WTO TBT Enquiry Point for The Gambia. The Bureau is governed at the policy level by a Board of Directors which is composed of representatives from relevant public and private institutions, consumer groups and academia and is headed by an independent person. The day to day management of the Bureau is orchestrated by the Director General supported by a management team.

## **1.3 National quality policy on standardization**

With regards to national standards as the initial building block for most quality related activities, the Government will see to it that the standards development process is a voluntary activity that depends on achieving consensus amongst stakeholders, and which is implemented by or on behalf of The Gambia Standards Bureau within a participatory and transparent environment. It will encourage the adoption of relevant international and regional standards based on demonstrated needs of The Gambia's authorities, industry and society, and ensure that all standards are periodically reviewed to ensure continuous conformity with technological developments, market trends and international requirements. The Gambia Standards Bureau will provide the framework required to develop and publish national standards and other normative documents and to regularly review and update the same, all in accordance with international best practices and requirements as defined in the WTO TBT Agreement and ISO/IEC Directives. Moreover, The Gambia Standards Bureau will participate in the process of developing regional and international standards where this is of relevance to The Gambia, and will coordinate these activities with the relevant local bodies. Ministries, academic and scientific institutions commit themselves to participate in all such technical committees, along with individuals, organized industry, traders and suppliers and civil society (NGOs, agriculture and tourism, and other specialized associations).

The Government will encourage the use of national and international standards for goods and services where needed as well as the independent proof of compliance through an appropriate mix of inspection, testing and certification. (Source: National Quality Policy 2014)

## **1.4 Standards Development procedure**

The procedure for developing national standards comprise the following 4 activities:

- Initiation of the project;
- Justification of the project and assignment of priorities;
- Development of the standards;
- Approval of the Standards.

### **1.4.1. Initiation of the project**

The inclusion of a standard in the work programme is measured against priorities set by National Stakeholders such as:

- The government through its different Ministries, Departments and Agencies;
- The private sector, including industry and trade;
- Consumers, Academia, NGOs; and
- Regional and International standardization bodies of which TGSB is a member.



#### **1.4.2. Justification of the project and assignment of priorities**

To include a standard in the work programme, consideration will be given to the following factors:

- Government requirements (public procurement, legislation, export promotion facilitation, etc.);
- Potential for removing non-tariff barriers at regional or international level;
- Economic development for the country;
- Contribution to national competitiveness;
- Impact on environment;
- Social impact; and
- Resources available (human, information and financial);

TGSB may find it useful to apply a list of such factors with their appropriate weights, since some factors may be more important than others, in order to establish its priority list of standards to be developed.

#### **1.4.3. Development of the standard**

Once TGSB Board has approved the development of a standard with the appropriate scope, the next stage is to refer the work to the relevant technical committee comprising of representatives of different stakeholders to develop the standard. The standard development work can also be delegated to another organization under the supervision and guidance of TGSB. In the latter case, the organization can be one of the interested parties or the one that made the request to initiate the project.

As standards provide a means to adopt new technology, it would be important while drafting a standard to take cognizance of the latest advances of science and technology. However, such advances should be of practical application in the current stage of economic and industrial development.

The work of the technical committee should be carried out through meetings. Sometimes, correspondence could also be used to speed up the work of the committee, especially when it becomes difficult to get a quorum at the meeting.

Each technical committee should appoint a chairperson, whose main role is to guide the work of the committee and see to it that the work is done according to schedule in an impartial manner and that views of all stakeholders are considered. A vice chairperson should also be appointed. The Secretary of the technical committee should be a staff of TGSB who has the following qualifications:

- Organizational ability;
- Personality to inspire confidence of members;
- Has the discipline to work in a systematic manner; and
- Ability to draft text clearly.

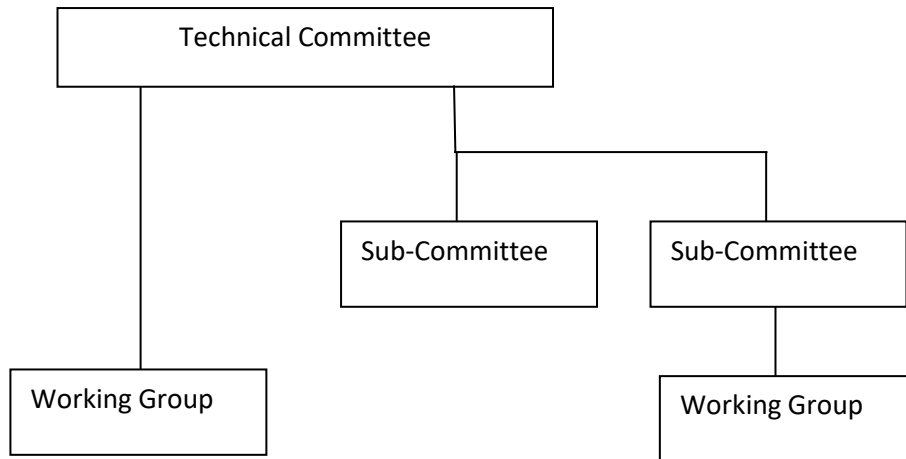
The Chairpersons of the technical committees and subcommittees will be elected by the assembled members at their first meeting.

Co-opted members may be invited by the Chairman either on a whole-time basis or for specific meetings in view of their highly specialized knowledge of the technical matter being discussed.

A technical committee may appoint sub-committees or working groups if deemed necessary. Membership of a sub-committee is drawn from the parent technical committee and added value members can be equally co-opted. It should have a chairman and a secretary with similar responsibilities as those for the technical committee.

Both technical committees and sub-committees may have working groups of independent experts to consider specific aspects of a standard. The working group would then report to the body that has set it up. Members of a working group may not necessarily come from the parent committee.

## Relation of a technical committee with sub-committees and working group



In general, technical committees meet at least once every quarter to review the progress of the standards being prepared under its mandate, but they may decide to call ad-hoc meetings in order to solve difficult technical problems, irresolvable disputes in subcommittee, etc.

It is recommended that technical committees be mandated for a period of 3 years, after which TGSB Board will reconstitute them.

### 1.4.4. Approval of the standard

This activity comprises several stages, as described below.

#### **Working Draft (WD)**

The technical committee establishes and appoints a subcommittee, if required, to prepare a technical draft.

The Secretary of the technical committee will assist the committee or subcommittee with relevant international or regional standards and other information pertaining to the standard to be developed/adopted. A suitable draft may be prepared by the Secretary/proposer to be used as basis for discussion.

#### **Committee Draft (CD)**

The committee/subcommittee reviews the WD clause-by-clause to decide its validity for the requirements of The Gambia. General consensus is required to move the WD to CD. The CD is recommended to the technical Committee for discussion and approval as Draft Gambian Standard to be issued for public comment.

#### **Draft Gambian Standard (DGS)**

The technical committee approves the DGS and it is declared for public commenting. The DGS is then announced in media outlets for open consultation for a period of 60 days. At the end of the 60 days, the technical committee considers comments received and finalizes the standard. The technical committee may refer these suggestions to the subcommittee if they are substantial.

#### **Final Draft Gambian Standard (FDGS)**

At this stage, the final draft then passes out of the committee stage and is approved by TGSB Board. Declaration in the Government Gazette in accordance with section 23 of TGSB Act 2010 makes the standard official and it is published.

#### **1.4.5. Disputes**

Sometimes, it may happen that the technical committee cannot take a decision on certain issues because of diverging opinions or other. Such issues or disputes should be referred to TGSB Board whose decision would be final.

#### **1.4.6. Review of standards**

A standard may be revised or amended at any time when the need is felt. However, it should be a practice to review published standards at least once every five years as advancement in technology, discovery of new sources or materials and changes in consumer demands and changes in the business environment are frequent.

### **1.5 Current situation on standardization**

The Bureau became operational in 2012 and the work on standardization also started in 2012. Before the establishment of the Bureau a national Codex and SPS committee was already in place in the country. In this regard, this committee was adopted as the Technical Committee (TC) responsible for development and adoption of national food standards. This TC reviewed and adopted 25 standards which were published in 2013 (10) and in 2015 (15) respectively. TGSB similarly adopted the National Electrotechnical Committee (NEC) as a TC responsible for the review and adoption of national standards in the electrotechnical field in 2013. The NEC since then has reviewed and finalized 33 national standards of which 2 were published in 2015, 3 in 2016 and 29 in 2017. These standards cover different electrical products and systems. Standards are also published by various TCs set up by the Bureau in the areas of building and construction (11), food packaging (7), management systems (10), halal (3) and metrology (10) which adds up to total of 101 published national standards.

However, the development of national standards is not anchored on a standardization strategy. As a result, the process of identification of priority subjects for standards development is limited to consultations with stakeholders at the TC level. The content of the annual standards division's work programme is prepared by members of TCs for each of the TCs and is approved by the Board.

### **1.6 Justification for an NSS**

Standards are a critical tool for the development of all sectors of a country. It drives efficiency and ensures quality in sectoral infrastructural development but also in the delivery of various services and products by all sectors of society. Therefore, standards are needed by all spheres of the economic, social, political and cultural facets of the country. The benefits of standards include but is not limited to the following:

- Basis for regulations and contracts: Standards can be used by private and public actors. Governments can use standards to support regulation in order to address issues of public policy (health, safety, the environment, etc.). Private actors can use standards as a basis for their technical cooperation and to provide a reference for legal agreements in the form of contracts.
- Protection of safety, health, property and the environment
- Facilitation of market access and trade

- Basis for assurance and the verification of (quality) claims
- Interchangeability, interoperability
- Variety reduction
- Dissemination of innovative and more sustainable technologies
- Technology transfer and knowledge sharing
- Providing market transparency, e.g. by reducing information asymmetry
- Supporting network effects and the value of interconnected devices
- Optimum solutions to repetitive problems

The development of standards requires use of resources such as experts in the various fields and adequate staff for the management of the standards development process. It also requires time and financial resources. Additionally, the process requires strong collaboration and communication with stakeholders throughout. In developing countries such as The Gambia, these resources are scarce. Therefore, in order to ensure that standards are available for all sectors and at the right time, standards setting bodies such as TGSB needs to put in place a standardization strategy to assure the judicious use of resources and put in place the right mechanisms to develop the standards required by society at each point in time. Although the benefits of standardization exceed the resources expended, priorities should be well defined to ensure that scarce resources are used effectively to satisfy real needs of the country.

## **2.0 METHODOLOGY APPLIED**

The Standardization Strategy for The Gambia was developed through a sequence of process steps as outlined below. These steps are anchored on the ISO recommended methodology for the development of a National Standardization Strategy.

### **Step 1: Determine national priorities for standardization: Socio-economic analysis and stakeholder outreach**

A taskforce was established at the Bureau to lead the process of the development of the NSS. The taskforce collected socio economic data from relevant institutions and authorities. For example, data on sector contribution to GDP was obtained from Gambia Bureau of Statistics (GBoS), data on sector contribution to import and export was obtained from Ministry of Trade, Industry & Employment (MOTIE) and GBoS. Information on national and social priorities were obtained from national documents such as the National Development Plan (NDP) and public opinion issues carried out frequently on radio, newspapers and television respectively. In addition to the socio- economic analysis, a stakeholder survey was conducted. In this activity all relevant stakeholders were engaged to complete a response form. The responses from stakeholders were compiled and validated in an input validation workshop.

### **Step 2: Validation of information obtained from socio economic analysis and stakeholder inputs**

A workshop was organized to validate the information gathered from the stakeholders input survey. During the workshop, responses from each stakeholder was presented and confirmed. Stakeholders also considered and validated the results of the socio-economic survey.

### **Step 3: Identify priority topics for standardization**

Base on the results gathered from the activities of step one and two a list of priority topics for standardization was compiled. This list was consolidated to cover all the responses from the stakeholder and socio-economic surveys.

### **Step 4: Prioritize and finalize the list of priority topics and map them to already existing relevant international, regional or other standards**

The list of priority topics was mapped to existing international, regional and other standards. This resulted to a complete list of standards to be developed in all the areas identified in the analysis.

**Step 5: Identify the final list of standards to be developed in the three-year period**

The final list of standards to be developed in the three-year plan was consolidated and finalized.

**Step 6: Calculate the required human resources for the implementation of the plan over a three-year period**

Using the final list of standards as basis, the required human resources for the development of all the standards in the list was calculated.

**Step 7: Publish the NSS after validation by stakeholders and official approval by TGSB board**

The Draft NSS was developed and presented to a National validation workshop for approval by stakeholders. The approved strategy was presented to the TGSB Board of Directors for approval and launching.

### 3.0 ASSESSING ECONOMIC PRIORITIES

**Table 1:** Assessment of economic priorities based on % contribution to GDP

N°	ECONOMIC SECTOR	ECONOMIC SUB SECTOR	PERCENTAGE CONTRIBUTION TO GDP	SOURCE AND DATE OF INFO	Rank
<b>1.</b>	<b>AGRICULTURE</b>		<b>22</b>	<b>GBoS (2013 Estimates)</b>	<b>1*</b>
		Crops	12.1	GBoS (2013 Estimates)	1
		Livestock	7.8	GBoS (2013 Estimates)	2
		Forestry	0.4	GBoS (2013 Estimates)	4
		Fishing	1.8	GBoS (2013 Estimates)	3
<b>2.</b>	<b>INDUSTRY</b>		<b>15</b>	<b>GBoS (2013 Estimates)</b>	<b>1</b>
		Mining and quarrying	3.2	GBoS (2013 Estimates)	3
		Manufacturing	5.4	GBoS (2013 Estimates)	2
		Electricity, gas and water	1.4	GBoS (2013 Estimates)	3
		Construction	4.9	GBoS (2013 Estimates)	3
<b>3</b>	<b>SERVICES</b>		<b>57</b>	<b>GBoS (2013 Estimates)</b>	<b>1*</b>
		Wholesale and retail trade	22.8	GBoS (2013 Estimates)	1*
		Hotels and restaurants	2.8	GBoS (2013 Estimates)	3
		Transport, storage, communication	14.2	GBoS (2013 Estimates)	1
		Communication	9.6	GBoS (2013 Estimates)	2
		Financial intermediation	10.1	GBoS (2013 Estimates)	1
		Real estate, renting and	2.9	GBoS (2013 Estimates)	3
		Public administration	2.0	GBoS (2013 Estimates)	3
		Education	1.0	GBoS (2013 Estimates)	3
		Health and social work	1.0	GBoS (2013 Estimates)	3
		Other community,	0.4	GBoS (2013 Estimates)	4

**Note:** The following rule was followed to assign ranks to the sectors & sub-sectors according to their contribution to GDP:

Rank 1*	Override Priority
Rank 1	>10% of GDP
Rank 2	5 - 10% of GDP
Rank 3	1 – 4.9% of GDP
Rank 4	0.2 – 0.9% of GDP
Rank 5	< 0.2% of GDP

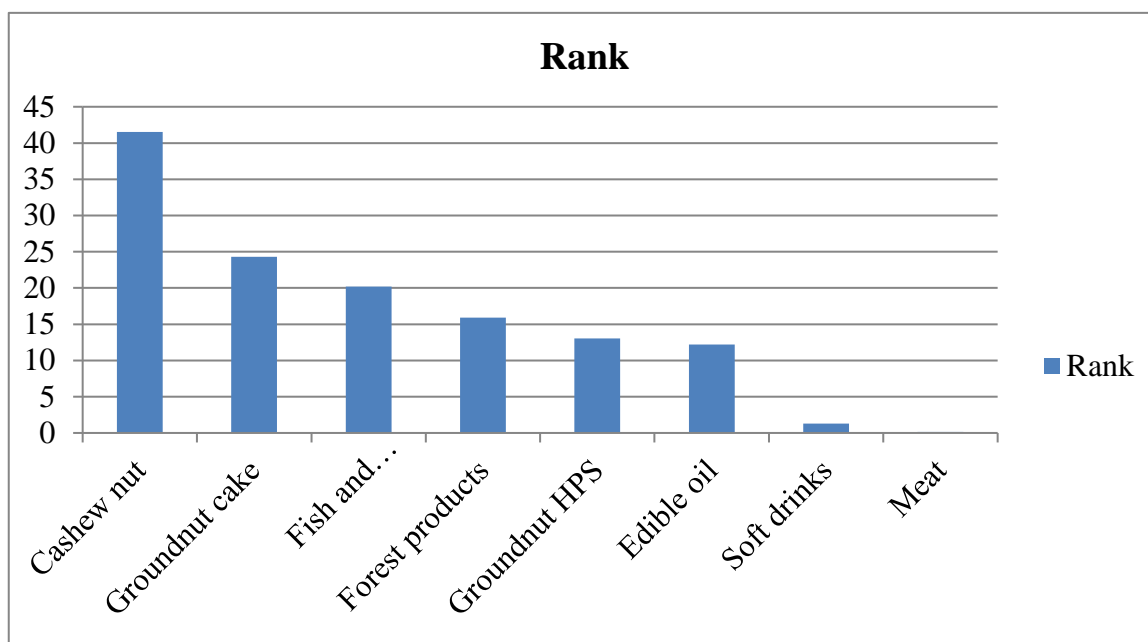
**Table 2:** Key economic sectors based on percentage contribution to National Exports

N°	Economic sector	Percentage contribution to Export	Source and date of information	Rank
1	Edible oil	12.3967 %	Ministry of Trade 2014/2015	1
2	Meat	0.12899 %	Ministry of Trade 2014/2015	5
3	Fish and Fishery Products	20.19 %	Ministry of Trade 2014/2015	1*
4	Vegetables	0.008 %	Ministry of Trade 2014/2015	5
5	Cashew nuts	41.54 %	Ministry of Trade 2014/2015	1*
6	Product of milling industry	0.0676%	Ministry of Trade 2014/2015	5
7	Groundnut cake	24.279 %	Ministry of Trade 2014/2015	1*
8	Soft drinks	1.288 %	Ministry of Trade 2014/2015	4
9	Inorganic chemicals	0.0159 %	Ministry of Trade 2014/2015	5
10	Forest Product	15.93%	Ministry of Trade 2014/2015	1
11	Fruits	0.085 %	GBoS 2012/2015	5
12	Groundnuts HPS	13.02 %	GBoS 2012/2015	1
13	Sesame Seed and Oil	0.11 %	GBoS 2012/2015	5

**Note:** The following rule was followed to assign ranks to the sub-sectors according to their contribution to National

Exports:

Rank 1\*      Override Priority  
Rank 1      >10% of National Exports  
Rank 2      5 - 10% of National Exports  
Rank 3      1 – 4.9% of National Exports  
Rank 4      0.2 – 0.9% of National Exports  
Rank 5      < 0.2% of National Exports

**Chart 1: Major Contributors to National Exports****Table 3: Key economic subjects based on percentage contribution to National Imports**

N°	Imported commodity, product or group of similar products	Percentage of National Imports (Av. Last 5 years)	Percentage of National Imports (2015)	Source and date of information	Rank
1	Cotton	3.506	2.50	ITC website	3
2	Sugars and sugar confectionery	6.142	6.84	ITC website	2
3	Cereals	11.53	6.37	ITC website	1
4	Animal, vegetable fats and oils, cleavage products, etc.	5.44	4.89	ITC website	2
5	Electrical, electronic equipment	4.976	4.35	ITC website	3
6	Vehicles other than railway, tramway	6.764	4.24	ITC website	2
7	Machinery, etc.	3.754	3.59	ITC website	3
8	Cereal flour, starch, milk preparations and products	0.968	3.35	ITC website	4
9	Miscellaneous edible preparations	1.158	3.10	ITC website	3
10	Plastics and articles thereof	1.982	2.94	ITC website	3
11	Coffee, tea, mate and spices	1.146	2.58	ITC website	3



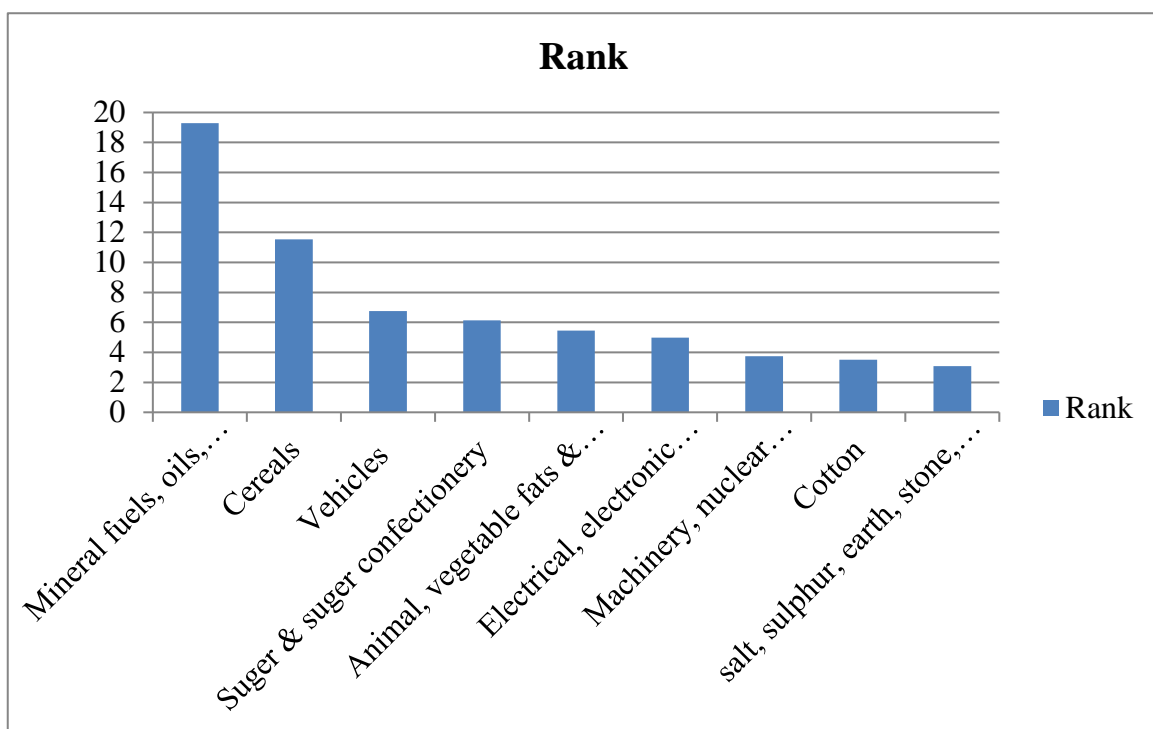
12	Footwear, gaiters and the like, parts thereof	0.98	2.58	ITC website	4
13	Furniture, lighting, signs, prefabricated buildings	1.044	2.09	ITC website	3
14	Mineral fuels, oils, distillation products, etc.	19.278	19.0	ITC website	1*
15	Manmade staple fibres	0.41	2.05	ITC website	4
16	Other made textile articles, sets, worn clothing etc.	1.046	2.01	ITC website	3
17	Articles of iron or steel	1.142	2.00	ITC website	3
18	Dairy products, eggs, honey, edible animal product	1.736	1.80	ITC website	3
19	Iron and steel	1.014	1.68	ITC website	3
20	Manmade filaments	2.088	1.67	ITC website	3
21	Meat, fish and seafood food preparations	0.498	1.63	ITC website	4
22	Ceramic products	0.968	1.63	ITC website	3
23	Vegetable, fruit, nut, etc food preparations	1.19	1.58	ITC website	3
24	Special woven or tufted fabric, lace, tapestry etc	0.298	1.30	ITC website	4
25	Pharmaceutical products	2.122	1.16	ITC website	3
26	Meat and edible meat offal	0.658	1.12	ITC website	4
27	Soaps, lubricants, waxes, candles, modeling pastes	0.726	1.08	ITC website	4
28	Salt, sulphur, earth, stone, plaster, lime and cement	3.09	0.99	ITC website	3
29	Edible vegetables and certain roots and tubers	0.848	0.77	ITC website	4
30	Miscellaneous manufactured articles	0.238	0.75	ITC website	4
31	Beverages, spirits and vinegar	0.57	0.71	ITC website	4
32	Paper and paperboard, articles of pulp, paper and board	0.714	0.64	ITC website	4
33	Articles of apparel, accessories, not knit or crochet	0.216	0.63	ITC website	4
34	Rubber and articles thereof	0.362	0.60	ITC website	4

**Note:** The following rule was followed to assign ranks to the sub-sectors according to their contribution to National

Imports:

Rank 1*	Override Priority
Rank 1	>10% of National Imports
Rank 2	5 - 10% of National Imports
Rank 3	1 – 4.9% of National Imports
Rank 4	0.2 – 0.9% of National Imports
Rank 5	< 0.2% of National Imports

**Chart 2: Major Contributors to National Imports**



## 4.0 ASSESSING NON-ECONOMIC PRIORITIES

**Table 4:** Assessing Non-Economic/Social Priorities

N°	Non-economic priority	Situation surrounding the problem	Rank
1	Waste management	Very serious and urgent problem, public outcry	1*
2	Flooding	Very serious and urgent problem, public outcry	1
3	Second hand goods	Serious problem, common occurrence, media attention	2
4	Quality of medical drugs	Serious problem, common occurrence, media attention	2
5	Illegal logging	Serious problem, common occurrence, media attention	2
6	Littering	Serious problem, common occurrence, media attention	2
7	Illegal Migration	Very serious and urgent problem, public outcry	1
8	Child marriage	Serious problem, some media reports	3
9	Fire incidence	Serious problem, some media reports	3
10	Open defecation	Serious problem, some media reports	3
11	Sexual Harassment	Problem localized, no media reaction	4
12	Child Trafficking	Serious problem, some media reports	3
13	Climate Change	Very serious and urgent problem, public outcry	1*
14	Mining and Quarrying	Serious problem, common occurrence, media attention	2
15	Whole Sale and Retail Trade	Very serious and urgent problem, public outcry	1
16	Organic Chemicals	Serious problem, some media reports	3
17	Halal Issues	Very serious and urgent problem, public outcry	1
18	Measurement in Trade, Industry, Health and Environment	Very serious and urgent problem, public outcry	1
19	Delivery of Public Service	Very serious and urgent problem, public outcry	1
20	Tourism and related businesses	Serious problem, common occurrence, media attention	2

**Note:** The ranks were recorded under the following categories:

- Very serious and urgent problem, public outcry - 1
- Serious problem, common occurrence, media attention - 2
- Serious problem, some media reports - 3
- Problem localized, no media reaction - 4

**Table 5:** Priorities in National Development Plan (NDP) and policies

<b>N°</b>	<b>Sector/Issue</b>	<b>Importance and Chances of Occurrence</b>	<b>Rank</b>
1	Road and drainage Infrastructure	Expected to gain great importance in the near future	1
2	Tourism and Culture	Expected to gain great importance in the near future	1
3	Energy – Renewable (Solar, wind)	Expected to gain great importance in the near future	1
4	Youth Employment	Expected to gain great importance in the near future	1
6	Debt Burden	Expected to gain some importance in the long term	4
7	Poverty reduction	Expected to gain great importance in the near future	1
8	Civil Service Reform	Expected to gain great importance in the near future	1
9	Justice, Human Rights, Anti-Corruption & Legal Framework Reforms	Expected to gain some importance in the medium term	3
10	Agriculture	Expected to gain great importance in the near future	1
11	Industry	Expected to gain some importance in the long term	4
12	Transport	Expected to gain great importance in the near future	1
13	Land Use Management	May gain importance shortly, provided certain conditions are fulfilled	2
14	Information Communication Telecommunication (ICT)	Expected to gain great importance in the near future	1
15	Human Resource	Expected to gain great importance in the near future	1
16	Environment and Climate Change	Expected to gain great importance in the near future	1
17	Cancer Screening and Treatment	Expected to gain some importance in the medium term	3

18	Health Sector Management Strengthening	Expected to gain some importance in the medium term	3
19	Migration	Expected to gain some importance in the long term	4
20	Social Protection	May gain importance shortly, provided certain conditions are fulfilled	2

**Source:** The Gambia National Development Plan 2018-2021, The Gambia National Export Strategy (NES) 2013-2017, The Private Sector Development Strategy (PSDS) 2015-2019

**Note:** The ranks were recorded under the following categories:

- Expected to gain great importance in the near future (1)
- May gain importance shortly, provided certain conditions are fulfilled (2)
- Expected to gain some importance in the medium term (3)
- Expected to gain some importance in the long term (4)

## 5.0 COMBINING ECONOMIC AND NON-ECONOMIC PRIORITIES

**Table 6:** Combining Economic and Non-Economic Priorities

SECTOR	SUB-SECTOR	FIELD	ECONOMIC IMPORTANCE			NON-ECONOMIC IMPORTANCE		RANK
			GDP	EXPORT	IMPORT	SOCIAL IMP.	FUTURE PLAN	
AGRICULTURE	Food	Crops	1*	1*	4		1	1
		Livestock and Meat products	2	5	3		1	2.8
		Fish and Fishery products	3	4	5		1	3.3
		Processed Food	1	3	4	1	1	2
	Forestry	General	4	3	3	2	1	2.6
INDUSTRY	Mining and Quarrying	General	3	5	1*	2	1	1
	Manufacturing	General	2	5	3	2	2	2.8
	Petroleum	General			1*		1	1
	Electro-Technical	General	3	5	3		1	3
	Construction	General	3	5	3	2	1	3
SERVICES	Wholesale and retail trade	General	1*	1	1	1*	3	1

	Hotels and restaurants	General	3			3	1	2.3
	Transport, storage, communication	General	1			1	1	1
	Financial intermediation	General	2			2	1	1.7
	Real estate, renting and business activities	General	1			2	2	1.7
	Public administration	General	3			3	1	2.3
	Education	General	3			1	1	1.7
	Health and social work	General	3			1	2	2
	Other community, social and personal services	General	3			2	3	2.7
	Metrology	General					1	1
<b>ENVIRONMENT</b>	Waste Management	General				1*	1	1
	Flooding	General				1	1	1
	Littering	General				2	1	1.5
	Climate Change	General				1*	1	1
	Open Defecation	General				3	3	3
	Organic Chemicals	General				3	3	3

<b>SOCIAL</b>	Sexual Harassment	General				4	2	3
	Child Trafficking	General				3	2	2.5
	Illegal Migration	General				1	4	2.5
	Child Marriage	General				3	2	2.5
	Halal Issues	General						
<b>HEALTH</b>	Medical Drugs	General				2	2	2
	Traditional Medicine	General					2	2
	Veterinary Drugs	General					2	2
	Public Health	General					3	3

## INTERPRETATION OF THE RANKINGS

### Ranking 1-5

**1\***- Priority which overrides all other ranks

**1** – Highest priority

**5** – Lowest priority



## 6.0 RESPONSES RECEIVED FROM STAKEHOLDERS

**Table 7:** Responses Received from Stakeholders

Sub-sector	Field	Proposed Item	Rank	Proposer	Mode of Proposal
Food	Fruits & vegetables	Standards for fruits and vegetable	3	FSQA	Stakeholder engagement
		Standards for fruit and vegetable juice	3		
	Roots & Tubers	Gari	3		
		Onions	4	GCCI	
	Fish	Fish and fishery product	1	FSQA	Stakeholder engagement
	Dairy Products	Milk & Milk products	1	FSQA	
	Meat & other animal products	Meat & meat products	2		
		Butcheries (meat handling at butcher shops). Structure and facility design	2		
	Bread & pastry	Bakeries (tapalapa bread) Structural design for Local bakery	1	FSQA	Stakeholder engagement
	Cereals	Rice	5	GCCI	
	Agro-processing	Packaging	5		
	Cooking oil	Vegetable oil	5		
	Cooking oil	Palm oil	5		
	Processed Food	Findi/Fonio	1	NAFP	Stakeholder engagement
Flour Coos Karaw		1			
Chereh, Chakri, Sanhal		1			
Groundnuts; Deggeh, Nuffly, Mbahal, Groundnut cake, Roasted peanuts and Churra Gerteh		1			
Rice; Sanhal, Naan Mburu		2			
Pepper, Pepper Sauce, Pepper Powder, Dry Pepper		2			

		Baobab Juice Powder	2		
		Wonjo Juice Powder	3		
		Jam Syrup	3		
		Locust Beans Powder, Dry Locust Beans	3		
		Jam, Mango, Papaya, Water Melon, Banana, Orange, Daharr, Cashew	3		
		Beans Powder	3		
		Yoghurt	1		
		Lime Juice Syrup	4		
		GINGER- Fruit Powder, Juice, Ginger mint	2		
		CASSAVA- Powder, Dry and fresh leaves, Gari	2		
		SEA FOOD- Fish, Shrimps, Oysters, Yate, Smoked cat fish/bonga	2		
		LEAVES- (Dried) kinkiliba, Mborr Mborr, Mint leaves	3		
		MORINGA- Powder, Seeds, Roots, Oil	1		
		PACKAGING- Plastic Bags, Bottles, Glass Jars, Paper Bags, Cups and Bowls	2		
		LABELLING- Pre-Package	2		
		Maize Flour Karaw, Grits and Cherreh	2		
		Dry Fruits	3		
	Commercial Beekeeping (Processed Food)	Honey	2	NBAG	Stakeholder Engagement
	Slaughtered Animal	Beef/lamb/goat	1	TC MEMBER	Stakeholder Engagement
Higher Education	Education	Mathematics	1	UTG	Stakeholder Engagement
		English	1		
		History	3		
		Accounting	2		
		Economics	1		
		Management	1		
		Political science	3		
		Public Health	1		

		Physics	1		
		Biology	1		
		Chemistry	1		
		Nursing	1		
		Computer science	1		
		Development studies	2		
		Human resources	2		
		Banking and finance	3		
		Marketing	2		
		Tourism & Hospitality	3		
		Engineering	1		
		Gender	3		
		Religious studies	3		
		Law	1		
		Journalism	2		
		Medicine	1		
	Basic Education	Basic Education	2	TC MEMBER	Stakeholder Engagement
Lab equipment	Temperature	Thermometers (-70 to 18 <sup>0</sup> C for freezers and fridges), up to 100 <sup>0</sup> C (incubators and water baths)	1	NPHL	Stakeholder Engagement
	Mass	Weighing Balance (milligrams & grams)	1		
	Speed	Centrifuges	1		
	Volume	Pipettes (micro litres) and measuring vessels (milli litres)	1		
Metrology	Testing and Calibration	General requirements for the Competence of Testing and calibration laboratories (ISO 17025: 2005)	1	NML	Stakeholder Engagement
	Petroleum	Petroleum measurement systems-calibration-temperature corrections for use when calibrating volumetric proving tanks (ISO 8222:2002)	2		
	Measuring Equipment	Measurement management system requirements for measurement process and measuring equipment (ISO 10012)	3		
	Measuring Equipment	Standard graduated glass flasks for verification officers (OIML R43: 1981)	1		

	NAWI	Non-Automatic Weighing Instruments (NAWI-Metrological and test requirements (OIML R76-11992))	2		
Electrotechnical	Electrical Installations in buildings	Plugs and sockets	1	PURA	Stakeholder Engagement
	Conductors of insulated cables	Electric power cables	1		
	Electrical Installation	Electric cables	3	GCCI	
	Electric Installation	Solar Power	3		
	Domestic and industrials electrical materials	Switches, sockets, lamps, cables, circuit breakers, etc.	1	NEA	
Petroleum Products	Light Petroleum Fuels	Petrol	2	MOPE and NEA	Stakeholder Engagement
		Gasoil	1		
		Jet Fuel (Jet AI)	5		
	Cooking gas	Liquefied Petroleum Gas (LPG)	3		
		Liquefied Petroleum Gas (LPG)	4		
	Heavy Fuel	Heavy fuel oil	1	Jah Oil	
		Petrol	1		
Petroleum Industry	Storage systems	Storage tanks	1	NEA	Stakeholder Engagement
	Fluid level	Storage tanks	1		
	Product transport	Tanker trucks and fitness	1		
	HSE	Gas stations, tanks and trucks	1		
Auto Service	Mechanical	Workshop, Tools, equipment and PPEs	2		
	Workshop Waste	Disposal of mechanical, electrical and chemical waste	1		
Renewable Energy	Solar accessories	Solar panel, battery, inverter, charge controller	3	PURA	Stakeholder Engagement

Refrigeration, air-conditioning & heating	Domestic and industrial cooling and heating	Refrigerators, air conditioners, coolers, air handlers, water heaters, boilers, regulators, etc.	3	NEA	Stakeholder Engagement
Construction	Building Construction	Cement	1	GCCCI and Jah Oil	Stakeholder Engagement
	Construction Materials	Rods	3		
		Steel Materials sizes	2		
	Transportation of construction materials	Safe transport of cement, gravel, sand	1		
	Structure Food premises (Construction)	Design and structural standards for food facilities	2	FSQA	Stakeholder Engagement
Medicine	Medicinal Drugs	Paracetamol	3	GCCCI	Stakeholder Engagement
		Antibiotics	3		
Services	Banking	Bank loans & securities	2		
	Fuel	Specification for handling, storage and transport of portable cylinders of LPG	1		
Wax Products	Commercial Beekeeping	Wax and Wax Products	1		
Training	Honey Processing	Knowledge Sharing	5		
Body cream	Bee Wax	Wax	4		
Small vendors	Home prepared food	General food	1	TC Member	Stakeholder Engagement
Transportation	Transportation	Vehicles	1		
ICT	Financial transaction	Secure environment and process standard for operating electronic payments		Gamswitch	Stakeholder Engagement
		security	Information security and risk assessment		
		Financial transaction	EMV physical and cryptographic		
		Financial transaction	2 factor authentications		
	Financial transaction	Payment security control			

	Financial transaction	Central terminal management policy			
		Quality management system		ITAG	Stakeholder engagement
	Hardware	Servicing Support			
	Information security	Internet security Server security			
	Management system	Quality Management ISO9001			
	Networking	Deployment Maintenance Support			
	Software Integration	Deployment Quality management			
	Certification Courses	Software training, hardware training, networking			
		Quality assurance of ICT service		MoBSE	Stakeholder engagement

## 7.0 COMBINED SOCIO-ECONOMIC PRIORITIES WITH RESPONSES RECEIVED FROM STAKEHOLDERS

**Table 8:** Combined Socio-Economic Priorities with Responses Received from Stakeholders

SECTOR	SUB-SECTOR	FIELD	SUBJECT	GDP	EXPORT	IMPORT	SOCIAL IMP.	FUTURE PLAN	STAKEHOLDER INPUT	OVERALL RANK
AGRICULTURE	Food	Crops	Fruits & Vegetables	1*	1*	4	N/A	1	3.6	1
			Cereals							
			Roots & Tubers							
		Livestock	Meat Products	2	5	3	N/A	1	1.5	2.5
			Dairy Products							
			Egg Products							
		Fish	Fish and Fishery products	3	4	5	N/A	1	1	2.8
		Processed Food	Commercial Beekeeping	1	3	4	1	1	2.3	2.1
			Packaging							
			Agro-processing							
	Forestry	Logging	Timber Products	4	3	3	2	1	N/A	2.6
Inorganic Chemicals	Fertilizers & Pesticides	Compound fertilizers & Urea	N/A	N/A	N/A	3	3	N/A	3	
		Chemical pesticides								
INDUSTRY	Mining and Quarrying	Mining	Sand & Gravel Mining	3	5	1*	2	1	N/A	1
			Mineral Mining							
			Survey							
	Manufacturing	Processing	Good Manufacturing & Processing practices	2	5	3	2	2	2.3	2.7
	Petroleum	Petroleum Products & Services	Storage Systems	N/A	N/A	N/A	N/A	1	2	1.5
			Fuel Products							
			Fuel Tankers							
			Service Stations							
Electro-technical	Renewable Energy	Solar & Wind Products	3	5	3	N/A	1	2.25	2.9	

			Clean Cook Stoves								
		Electrical Installations & Materials	Domestic & Industrial Electrical materials								
			Electrical Installations in Buildings								
	Construction	Design & Materials	Construction Materials	3	5	3	2	1	2.17	2.7	
			Structural Design								
			Transportation of materials								
<b>SERVICES</b>	Wholesale and retail trade	Imported & Exported Goods	Inspection & Certification of imports & exports	1*	N/A	N/A	1*	3	1	1	
			Second-hand Goods								
	Hotels and restaurants	Hotel & Restaurant ratings	Structures, Designs & Personnel	3	N/A	N/A	3	1	N/A	2.3	
	Transport, storage, communication	Transport	Vehicles, Boats & Ferry services	1	N/A	N/A	1	1	1	1	1
		Communication	Telecommunications & IT								
		Storage	Fuel Storage tanks Storage facilities for food products								
	Financial intermediation	Banking	Banking system & security	2	N/A	N/A	2	1	2	1.8	
	Real estate, renting and business activities	Property Management	Loss, Damage & Destruction of tangible properties	1	N/A	N/A	2	2	N/A	1.6	
			Estate Management								
			Requirements for estates								
Public administration	Quality Management	Management of Public Resources	3	N/A	N/A	3	1	N/A	2.3		
Education	Educational Materials	Teaching Materials	3	N/A	N/A	1	1	1.72	1.7		
Other community, social	Issues related to Physically	Access to Public buildings & facilities	3	N/A	N/A	2	3	N/A	2.6		



	and personal services	Challenged persons	Access to public transportation							
	Metrology	Verification & Calibration	Measuring Equipment	N/A	N/A	N/A	N/A	1	1.4	1.2
			Non-Automatic Weighing Equipment							
<b>ENVIRONMENT</b>	Waste Management	Solid Waste Management	Household & Industrial Waste Management	N/A	N/A	N/A	1*	1	1	1
	Flooding	Physical Planning	Drainage System	N/A	N/A	N/A	1	1	N/A	1
			Lands & Surveys							
	Littering	Public Littering	Environmental Management	N/A	N/A	N/A	2	1	N/A	1.5
	Climate Change	Global Warming	Energy Issues	N/A	N/A	N/A	1*	1	N/A	1
		Forest Management								
	Open Defecation	Toilets	Public Toilets	N/A	N/A	N/A	3	3	N/A	3
<b>SOCIAL</b>	Sexual Harassment	Rape	Sensitization	N/A	N/A	N/A	4	2	N/A	3
	Child Trafficking	General	Sensitization	N/A	N/A	N/A	3	2	N/A	2.5
	Illegal Migration	General	Youth Employment	N/A	N/A	N/A	1	4	N/A	2.5
	Child Marriage	General	Advocacy	N/A	N/A	N/A	3	2	N/A	2.5
	Halal Issues	Halal Products	Animal Slaughtering							
		Halal Food, cosmetics, pharmaceuticals								
	Halal Services	Halal Tourism & Halal Management systems								
<b>HEALTH</b>	Medicine	Medical Drugs	Quality & Safety of Drugs	N/A	N/A	N/A	2	2	3	2.3
		Chemicals	Soaps & Detergents							
			Cosmetics							
			Tobacco							
	Traditional Medicine	Classification & Usage								
	Veterinary Drugs	Quality & Safety of Veterinary Drugs								
Health Services & Facilities	Public Health	Requirements for Health facilities	N/A	N/A	N/A	N/A	3	N/A	3	
Medical Devices	xxx	Dental, X-ray, syringes								

## 8.0 FINAL COUNT OF REQUESTED STANDARDS DEVELOPMENT PROJECTS

**Table 9:** Final Count of Requested Standards Development Projects

TECHNICAL COMMITTEES	TOTAL NUMBER OF REQUESTED PROJECTS	
	ACTION TYPE	NUMBER
GAMS/TC 01 - Food & Agricultural Products	Ad	62
	Ac	2
	Mo	0
	Na	6
GAMS/TC 02 – Electrotechnical	Ad	50
	Ac	1
	Mo	0
GAMS/TC 06 - Building and Construction	Ad	48
	Ac	1
	Mo	1
GAMS/TC 08 - Metrology	Ad	7
	Ac	0
	Mo	0
GAMS/TC 05 - Management Systems	Ad	29
	Ac	0
	Mo	0
GAMS/TC 04 - Halal	Ad	5
	Ac	0
	Mo	0
GAMS/TC 03 - Petroleum	Ad	10
	Ac	0
	Mo	0
GAMS/TC 09 - Tourism	Ad	8
	Ac	0
	Mo	0
GAMS/TC 12 - Clean cook stoves	Ad	0

	Ac	2
	Mo	3
GAMS/TC 10 – Medical and Health	Ad	30
	Ac	0
	Mo	0
GAMS/TC 07 - Transportation	Ad	24
	Ac	0
	Mo	1
GAMS/TC 11 - Information and Communication Technology	Ad	8
	Ac	0
	Mo	2

**TOTAL NUMBER OF ACTION TYPES**

ADOPTION (Ad) = 281

ACTIVE PARTICIPATION (Ac) = 6

MONITORING (Mo) = 7

NATIONAL DEVELOPMENT (Na) = 6

**TOTAL NUMBER OF STANDARDS FOR 3 YEARS = 300 STANDARDS**

## 9.0 STANDARDIZATION PLAN FOR THE THREE-YEAR PERIOD (2018-2020)

The Bureau has applied the strategy to establish twelve TCs and develop 100 standards in each year of the planned period. The overall rank for subsectors, fields and subjects were used to identify standards to be developed in year 1, year 2 and year 3. The criteria used is as follows:

Rank 1&2: Standards identified in these categories will be developed in year 1

Rank 2&3: Standards identified in these categories will be developed in year 2

Rank 4&5: Standards identified in these categories will be developed in year 3

However, if the priority for year 1 exceeds 100 standards, the remainder will be moved to the following year and so on.

**Table 10:** Final List of Standards to be Developed for The Three-Year Plan

AREA	LIST OF STANDARDS IDENTIFIED	TARGETED YEAR OF DEVELOPMENT		
		2018	2019	2020
FOOD & AGRICULTURAL PRODUCTS	Standard for Cherreh	Na		
	ISO 6322-2:2000 Storage of cereals and pulses -- Part 2: Practical recommendations	Ad		
	ISO 6322-3:1989 Storage of cereals and pulses -- Part 3: Control of attack by pests	Ad		
	ISO 11287: 2011 Green Tea	Ad		
	ARS 858:2013, Rough (paddy) rice — Specification	Ad		
	ARS 502:1991(E), Compound fertilizers — Specification	Ad		
	ARS 500:1991(E), Compound fertilizers — Sampling	Ad		
	ISO 959: 1998 Part 1 – Black Pepper (whole or grain) – specification	Ad		
	ARS 122:1984(E), Code of practice of smoked fish	Ad		
	ARS 316:1985(E), Recommended international code of hygienic practice for ground nuts (peanuts)	Ad		
	ARS 463:1987(E), Millet — Specification	Ad		
	CD-ARS 860-2012, Fortified wheat flour – Specification	Ad		
	CD-ARS 921-2012, Fresh onions – Specification	Ad		
	CAC/RCP 48-2001 Code of Hygienic Practice for Bottled/Packaged Drinking Waters (Other than Natural Mineral Waters)	Ad		
CAC/GL 50-2004 General Guidelines on Sampling	Ad			

CAC/RCP 51-2003 Code of Practice for the Prevention and Reduction of Mycotoxin Contamination in Cereals	Ad		
CAC/RCP 52-2003 Code of Practice for Fish and Fishery Products	Ad		
CAC/RCP 53-2003 Code of Hygienic Practice for Fresh Fruits and Vegetables	Ad		
CODEX STAN 74-1981 Standard for Processed Cereal-Based Foods for Infants and Young Children	Ad		
CODEX STAN 170-1989 Standard for Pearl Millet Flour	Ad		
CODEX STAN 184-1993 Standard for Mangoes	Ad		
CODEX STAN 193-1995 General Standard for Contaminants and Toxins in Food and Feed	Ad		
CODEX STAN 213-1999 Standard for Limes	Ad		
CODEX STAN 245-2004 Standard for Oranges	Ad		
CODEX STAN 279-1971 Standard for Butter	Ad		
CODEX STAN 281-1971 Standard for Evaporated Milks	Ad		
CODEX STAN 299-2010 Standard for Apples	Ad		
CODEX STAN 307-2011 Standard for Chilli Peppers	Ad		
CODEX STAN 318-2014 Standard for Okra	Ad		
Standard for tapalapa		Na	
ISO 16002:2004 Stored cereal grains and pulses -- Guidance on the detection of infestation by live invertebrates by trapping		Ad	
ARS 465:1987(E), Wheat — Specification		Ad	
ARS 721:1999(E), Specification for biscuits		Ad	
Standard for Churah Gerrteh		Na	
ISO 1673:1991 Onions -- Guideline for storage		Ad	
ISO 3631:1978 Citrus fruits -- Guideline for storage		Ad	
ARS 505:1991(E), Fertilizers — Ammonium sulphate — Specification		Ad	
ISO 24333:2009 Cereals and cereal products – Sampling		Ad	
CD-ARS 861-2012, Fortified maize flour – Specification		Ad	
CD-ARS 862-2012, Fortified cooking oils – Specification		Ad	
ISO 874:1980 Fresh fruits and vegetables – Sampling		Ad	
CD-ARS 929-2012, Leafy vegetables – Specification		Ad	
CD-ARS 854-2012, Gari – Specification		Ad	
Standard for Kola nuts		Na	
ISO 542: 1990 Oil Seeds – Sampling		Ad	
CAC/GL 17-1993 Guideline Procedures for the Visual Inspection of Lots of Canned Foods for Unacceptable Defects		Ad	

CAC/GL 20-1995 Principles for Food Import and Export Inspection and Certification		Ad	
CAC/GL 22R-1997 Regional Guidelines for the Design of Control Measures for Street-Vended Foods (Africa)		Ad	
ISO 6322-1:1996 Storage of cereals and pulses -- Part 1: General recommendations for the keeping of cereals		Ad	
CODEX STAN 183-1993 Standard for Papaya		Ad	
ARS 61:1986(E), Sardines and sardine-type products — Canned — Specification		Ad	
CODEX STAN 197-1995 Standard for Avocado		Ad	
CODEX STAN 207-1999 Standard for Milk Powders and Cream Powder		Ad	
CODEX STAN 171-1989 Standard for Certain Pulses		Ad	
ISO 6322-2:2000 Storage of cereals and pulses -- Part 2: Practical recommendations		Ad	
ISO 6322-3:1989 Storage of cereals and pulses -- Part 3: Control of attack by pests		Ad	
CODEX STAN 117-1981 Standard for Bouillons and Consommés			Ad
ISO 7562:1990 Potatoes -- Guidelines for storage in artificially ventilated stores			Ad
CAC/GL 2-1985 Guidelines on Nutrition Labelling			Ad
CODEX STAN 172-1989 Standard for Sorghum Grains			Ad
ARS 326:1991 (E), Edible palm kernel oil – Specification			Ad
CAC/GL 78-2011 Guidelines for the Control of Campylobacter and Salmonella in Chicken Meat			Ad
CODEX STAN 192-1995 General Standard for Food Additives			Ad
ISO 6639-2:1986 Cereals and pulses -- Determination of hidden insect infestation -- Part 2: Sampling			Ad
Standard for Sanghal			Na
Standard for Bitter kola nuts			Na
ISO 6639-1:1986 Cereals and pulses -- Determination of hidden insect infestation -- Part 1: General principles			Ad
CODEX STAN 218-1999 Standard for Ginger			Ad
CODEX STAN 219-1999 Standard for Grapefruits			Ad
CODEX STAN 238-2003 Standard for Sweet Cassava			Ad
CODEX STAN 243-2003 Standard for Fermented Milks			Ad
CAC/RCP 68-2009 Code of Practice for the Reduction of Contamination of Food with Polycyclic Aromatic Hydrocarbons (PAH) from Smoking and Direct Drying Processes			Ad
CODEX STAN 247-2005 General Standard for Fruit Juices and Nectars			Ad
CODEX STAN 300-2010 Standard for Bitter Cassava			Ad
ISO 6660:1993 Mangoes -- Cold storage			Ad
CODEX STAN 88-1981 Standard for Corned Beef			Ad

ELECTRO-TECHNICAL	IEC 61347-1:2015 RLV - Edition 3.0 (2015-02-19), Lamp control gear – Part 1: General and safety requirements	Ad		
	IEC 61140:2001, Protection against electric shock – Common aspects for installation and Equipment	Ad		
	IEC TS 62257-7-1:2010, Recommendations for small renewable energy and hybrid systems for rural electrification - Part 7-1: Generators - Photovoltaic generators	Ad		
	IEC TS 62257-7-3:2008, Recommendations for small renewable energy and hybrid systems for rural electrification - Part 7-3: Generator set - Selection of generator sets for rural electrification systems	Ad		
	IEC TS 62257-8-1:2007 , Recommendations for small renewable energy and hybrid systems for rural electrification - Part 8-1: Selection of batteries and battery management systems for stand-alone electrification systems - Specific case of automotive flooded lead-acid batteries available in developing countries	Ad		
	IEC TS 62257-9-1:2016 , Recommendations for renewable energy and hybrid systems for rural electrification - Part 9-1: Integrated systems - Micropower systems	Ad		
	IEC TS 62257-9-2:2016 , Recommendations for renewable energy and hybrid systems for rural electrification - Part 9-2: Integrated systems – Microgrids	Ad		
	IEC TS 62257-9-4:2016 , Recommendations for renewable energy and hybrid systems for rural electrification - Part 9-4: Integrated systems - User installation	Ad		
	IEC TS 62257-9-5:2016 RLV , Recommendations for renewable energy and hybrid systems for rural electrification - Part 9-5: Integrated systems - Selection of stand-alone lighting kits for rural electrification	Ad		
	IEC TS 62257-9-6:2008 , Recommendations for small renewable energy and hybrid systems for rural electrification - Part 9-6: Integrated system - Selection of Photovoltaic Individual Electrification Systems (PV-IES)	Ad		
	<b>IEC 60906-3:1994</b> , IEC system of plugs and socket-outlets for household and similar purposes – Part 3: SELV plugs and socket-outlets, 16 A 6 V, 12 V, 24 V, 48 V, a.c. and d.c.	Ad		
	IEC PAS 62257-10:2017 , Recommendations for renewable energy and hybrid systems for rural electrification - Part 10: Silicon solar module visual inspection guide	Ad		
	IEC 62552-1:2015, Household refrigerating appliances - Characteristics and test methods - Part 1: General requirements	Ad		
	IEC 61215-1:2016 - Edition 1.0 (2016-03-09), Terrestrial photovoltaic (PV) modules - Design qualification and type approval - Part 1: Test requirements	Ad		

IEC TR 62725:2013 - Edition 1.0 (2013-03-22), Analysis of quantification methodologies of greenhouse gas emissions for electrical and electronic products and systems	Ad		
IEC 62321:2008 - Edition 1.0 (2008-12-11), Electrotechnical products - Determination of levels of six regulated substances (lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls, polybrominated diphenyl ethers)	Ad		
IEC TS 62257-12-1:2015 , Recommendations for renewable energy and hybrid systems for rural electrification - Part 12-1: Selection of lamps and lighting appliances for off-grid electricity systems	Ad		
SANS 507-1:2014 (Ed. 1.01), Electricity distribution - Guidelines for the provision of electricity distribution networks in residential areas Part 1: Planning and design of distribution networks	Ad		
SANS 959-1:2014 (Ed. 1.01), Photovoltaic systems for use in individual homes, schools and clinics Part 1: Standardized requirements applicable to off-grid individual homes, schools and clinics	Ad		
IEC 62485-1:2015 , Safety requirements for secondary batteries and battery installations - Part 1: General safety information	Ad		
IEC 62485-2:2010 , Safety requirements for secondary batteries and battery installations - Part 2: Stationary batteries	Ad		
IEC 61010-1:2010+AMD1:2016 CSV - Edition 3.1 (2017-01-10), Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements	Ad		
IEC 62321-1:2013 - Edition 1.0 (2013-05-17), Determination of certain substances in electrotechnical products - Part 1: Introduction and overview		Ad	
IEC 61400-2:2013 - Edition 3.0 (2013-12-12), Wind turbines - Part 2: Small wind turbines		Ad	
<b>IEC 62040-1:2008</b> Edition 1.0 (2008-06-11) - Uninterruptible power systems (UPS) - Part 1: General and safety requirements for UPS		Ad	
IEC 60238 - Edison screw lamp holders		Ad	
IEC 62552-2:2015, Household refrigerating appliances - Characteristics and test methods - Part 2: Performance requirements		Ad	
IEC 62552-3:2003, Household refrigerating appliances - Characteristics and test methods - Part 3: Energy consumption and volume		Ad	
IEC 61558 – 1: -Safety of transformers, reactors, power supply units and similar products - Part 1 – General requirement and test		Ad	
IEC 61010-2-033:2012 - Edition 1.0 (2012-04-04), Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-033: Particular requirements for hand-held multimeters and other meters, for domestic and professional use, capable of measuring mains voltage		Ad	



	IEC TR 61592:2003, Household electrical appliances - Guidelines for consumer panel testing		Ad	
	IEC 62301:2011, Household electrical appliances - Measurement of standby power		Ad	
	IEC 62087-1:2015 - Edition 1.0 (2015-06-05), Audio, video, and related equipment - Determination of power consumption - Part 1: General		Ad	
	IEC 62474:2012 - Edition 1.0 (2012-03-22), Material declaration for products of and for the electrotechnical industry		Ad	
	IEC 60086-1:2015 - Edition 12.0 (2015-07-28), Primary batteries - Part 1: General		Ad	
	IEC 60904-1-1:2017 - Edition 1.0 (2017-05-18), Photovoltaic devices - Part 1-1: Measurement of current-voltage characteristics of multi-junction photovoltaic (PV) devices		Ad	
	<b>IEC TR 62510:2008</b> Edition 1.0 (2008-06-11) Standardizing the characteristics of electricity			Ad
	<b>IEC TR 62511:2014</b> Edition 1.0 (2014-09-25) Guidelines for the design of interconnected power systems			Ad
	<b>IEC TS 62749:2015</b> Edition 1.0 (2015-04-09) Assessment of power quality - Characteristics of electricity supplied by public networks			Ad
	<b>IEC 62052-21:2004</b> Edition 1.0 (2004-05-18) - Electricity metering equipment (a.c.) - General requirements, tests and test conditions - Part 21: Tariff and load control equipment			Ad
	<b>IEC 60076-5:2006</b> Edition 3.0 (2006-02-07) - Power transformers - Part 5: Ability to withstand short circuit			Ad
	IEC 62305-1:2010 - Edition 2.0 (2010-12-09), Protection against lightning - Part 1: General principles			Ad
	<b>IEC 62477-1:2012</b> Edition 1.0 (2012-07-24) - Safety requirements for power electronic converter systems and equipment - Part 1: General			Ad
	<b>IEC 60998-1:2002</b> Edition 2.0 (2002-12-13) - Connecting devices for low-voltage circuits for household and similar purposes - Part 1: General requirements			Ad
	IEC 61439-1 - Low-voltage switchgear and control gear assemblies - Part 1: General rules			Ad
	IEC 60755:2008 - General requirements for residual current operated protective devices			Ad
	IEC 61084-1, Cable trunking and ducting systems for electrical installations: GR			Ad
	IEC 60269-1:1998, Low voltage fuses – Part 1: General requirements			Ad
	IEC 60269-3:1987, Low voltage fuses – Part 3: Supplementary requirements for fuses for use by unskilled persons (fuses mainly for household and similar applications)			Ad
	IEC 60884-2-2, Plugs and socket-outlets for household and similar purposes – Part 2: Particular requirements for socket-outlets for appliances			Ad
BUILDING & CONSTRUCTION	ARS 127-1:1990 (E), Buildings and civil engineering works —Vocabulary —Part 1: General terms	Ad		
	ARS 128-1:1990 (E) Building construction —Tolerances —Expression of dimensional accuracy —Principles and terminology	Ad		
	ARS 197:1990 (E), Building construction —Modular coordination —Stairs and stairs openings Coordinating dimensions	Ad		

ARS 413:1987(E), Lime –Quicklime —General requirements	Ad		
ARS 618:1989 (E), Doors —Terminology	Ad		
ARS 619:1989 (E), Building and sanitary pipes	Ad		
ARS 629:1990(E), Portland cement—Determination of compressive strength	Ad		
ARS 633:1990(E), Standard Sand —General requirements	Ad		
ARS 632:1990(E), Cement —Test Methods —Determination of setting time and soundness	Ad		
C94 / C94M - 16b Standard Specification for Ready-Mixed Concrete	Ad		
EAS 784:2013, Code of practice for Galvanized and aluminum zinc corrugated steel Sheet roofing and wall covering	Ad		
EAS 416:2005, Building and civil engineering terms —Parts of construction works Roofs and roofing	Ad		
SANS 552:2003 Paint-rollers including handle-frames and refills	Ad		
SANS 681:2014 Undercoats for paints	Ad		
SANS 682:2007 (2013-10-04) Aluminium paint	Ad		
ARS 181:1988 (E), Plywood —Classification		Ad	
ARS 625:1990(E), Cement —Definitions and terminology		Ad	
ARS 626:1990(E), Portland cement —General requirements		Ad	
ARS 628:1990(E), Portland cement —Determination of density		Ad	
ARS 414:1989 (E), Lime —Hydrated lime —General requirements		Ad	
ISO 13006:2012- Ceramic tiles -- Definitions, classification, characteristics and marking		Ad	
ISO/TR 17870-1:2015 -Ceramic tiles -- Guidelines for installation -- Part 1: Installation of ceramic wall and floor tiles		Ad	
ISO/TR 17870-2:2015- Ceramic tiles -- Guidelines for installation -- Part 2: Installation of thin ceramic wall and floor tiles and panels		Ad	
ISO 16133:2004 Soil quality -- Guidance on the establishment and maintenance of monitoring programmes		Ad	
ISO 18400-102:2017 Soil quality -- Sampling -- Part 102: Selection and application of sampling techniques		Ad	
ISO 18400-103:2017 Soil quality -- Sampling -- Part 103: Safety		Ad	
ISO 18400-105:2017 Soil quality -- Sampling -- Part 105: Packaging, transport, storage and preservation of samples		Ad	
ISO 18400-106:2017 Soil quality -- Sampling -- Part 106: Quality control and quality assurance		Ad	
ISO 19434: 2017 Mining – Classification of mine accidents		Ad	
ISO/NP 22932-1 Mining – Terminology – Part 1: Planning and Surveying		Mo	
ASTM C1528/C1528M – 17a Standard Guide for Selection of Dimension Stone		Ad	
EAS 410:2005, Hot-dip aluminum-zinc coated plain and corrugated steel sheets Specification		Ad	

	SANS 802:2014 Bituminous aluminium paint		Ad	
	SANS 795:2014 Wheelbarrows		Ad	
	ARS 182:1988 (E), Plywood —Measurement of dimensions of panels			Ad
	ARS 184:1990(E), Plywood —Determination of dimensions of test pieces			Ad
	ARS 423:1989 (E), Pozzolanas —Fly ash and other pozzolanas for use with lime —General requirements			Ad
	ARS 556/1:1991(E), Steel wire for fences —Barbed wire —Part 1: Specification			Ad
	ARS 631:1990(E), Portland Cement —Determination of fineness by specific surface			Ad
	C685 / C685M - 14Standard Specification for Concrete Made by Volumetric Batching and Continuous Mixing			Ad
	C1602 / C1602M – 12 Standard Specification for Mixing Water Used in the Production of Hydraulic Cement Concrete			Ad
	C1798 / C1798M - 16e1 Standard Specification for Returned Fresh Concrete for Use in a New Batch of Ready-Mixed Concrete			Ad
	E3069 – 17 Standard Guide for Evaluation and Rehabilitation of Mass Masonry Walls for Changes to Thermal and Moisture Properties of the Wall			Ad
	ISO 10545-16:2010 Ceramic tiles -- Part 16: Determination of small colour differences			Ad
	ISO 15175:2004 Soil quality -- Characterization of soil related to ground water protection			Ad
	ISO 18400-101:2017 Soil quality -- Sampling -- Part 101: Framework for the preparation and application of a sampling plan			Ad
	ISO 18400-107:2017 Soil quality -- Sampling -- Part 107: Recording and reporting			Ad
	EAS 11:2013 Galvanized plain and corrugated steel sheets — Specification; 2nd Edition			Ad
METROLOGY	ARS 292:1990 (E), Standard one metre bar for verification officers	Ad		
	ARS 303:1990(E), Cylindrical weights from 1gram to 10 kilograms (class M2)	Ad		
	ARS 306:1990(E), Standard weight for verification officers	Ad		
	ARS 560:1990(E), Conventional value of the result of weighing in air		Ad	
	ARS 563:1990(E), Hexagonal Weights ordinary accuracy class from 100 grams to 50 kilogramme		Ad	
	ARS 307:1990(E), Metrological regulations for non-automatic weights instruments			Ad
	ARS 559:1990 (E), Technical regulations for non-automatic weighing machines			Ad
MANAGEMENT SYSTEMS	ISO 10004:2012 Quality management -- Customer satisfaction -- Guidelines for monitoring and measuring	Ad		
	ISO 21001 Educational organizations -- Management systems for educational organizations -- Requirements with guidance for use	Ad		

ISO/TS 17582:2014 Quality management systems -- Particular requirements for the application of ISO 9001:2008 for electoral organizations at all levels of government	Ad		
ISO 18091:2014 Quality management -- Guidelines for the application of ISO 9001:2008 in local government	Ad		
ISO 30301:2011 Information and documentation -- Management systems for records – Requirements	Ad		
ISO 30302:2015 Information and documentation -- Management systems for records -- Guidelines for implementation	Ad		
ISO/IEC 27003:2017 Information technology -- Security techniques -- Information security management systems – Guidance	Ad		
ISO/IEC 20000-1 Information technology -- Service management -- Part 1: Service management system requirements	Ad		
ISO/TS 22003:2007, Food safety management systems — Requirements for bodies providing audit and certification of food safety management systems	Ad		
ISO/TS 22004:2005, Food safety management systems — Guidance on the application of ISO 22000:2005	Ad		
ISO 10377:2013 Consumer product safety -- Guidelines for suppliers		Ad	
ISO 10393:2013 Consumer product recall -- Guidelines for suppliers		Ad	
ISO 24518:2015 Activities relating to drinking water and wastewater services -- Crisis management of water utilities		Ad	
ISO 14004:2016 Environmental management systems -- General guidelines on implementation		Ad	
ISO 14005:2010 Environmental management systems -- Guidelines for the phased implementation of an environmental management system, including the use of environmental performance evaluation		Ad	
ISO/TS 22003:2007, Food safety management systems — Requirements for bodies providing audit and certification of food safety management systems		Ad	
ISO/IEC 17065, Conformity assessment — Requirements for bodies certifying products, processes and services 1		Ad	
ISO/IEC 17021:2011, Conformity assessment — Requirements for bodies providing audit and certification of management systems 2		Ad	
ISO 22005:2007, Traceability in the feed and food chain — General principles and basic requirements for system design and implementation		Ad	
ISO 22301:2012 Societal security - Business continuity management systems - Requirements			Ad

	ISO/DIS 41001 Facility management - Management systems - Requirements with guidance for use			Ad
	ISO 37001:2016 Anti-bribery management systems -- Requirements with guidance for use			Ad
	ISO 37101:2016 Sustainable development in communities -- Management system for sustainable development -- Requirements with guidance for use			Ad
	ISO 55001:2014 Asset management -- Management systems -- Requirements			Ad
	ISO 55002:2014 Asset management -- Management systems -- Guidelines for the application of ISO 55001			Ad
	ISO 50004:2014 Energy management systems -- Guidance for the implementation, maintenance and improvement of an energy management system			Ad
	ISO/DIS 45001 Occupational health and safety management systems -- Requirements with guidance for use			Ad
	ISO/TS 22367:2008, Medical laboratories — Reduction of error through risk management and continual improvement 2			Ad
	ISO/TS 22002-1:2009, Prerequisite programmes on food safety — Part 1: Food manufacturing			Ad
TOURISM	ISO 13009:2015 Tourism and related services -- Requirements and recommendations for beach operation	Ad		
	ISO 18513:2003 Tourism services -- Hotels and other types of tourism accommodation -- Terminology 1	Ad		
	ISO/TS 13811:2015 Tourism and related services -- Guidelines on developing environmental specifications for accommodation establishments 1	Ad		
	ISO 14785:2014 Tourist information offices -- Tourist information and reception services -- Requirements 1		Ad	
	ISO 18065:2015 Tourism and related services -- Tourist services for public use provided by Natural Protected Areas Authorities – Requirements		Ad	
	ISO/TR 21102:2013 Adventure tourism -- Leaders -- Personnel competence 1		Ad	
	ISO 17679:2016 Tourism and related services -- Wellness spa -- Service requirements			Ad
	ISO 21103:2014 Adventure tourism -- Information for participants			Ad
PETROLEUM	D235-02(2012): Standard Specification for Mineral Spirits (Petroleum Spirits) (Hydrocarbon Dry Cleaning Solvent)	Ad		
	D1835-16: Standard Specification for Liquefied Petroleum (LP) Gases	Ad		
	D3699-13be1: Standard Specification for Kerosene	Ad		
	D396-16e1: Standard Specification for Fuel Oils	Ad		
	D4150-08(2016): Standard Terminology Relating to Gaseous Fuels		Ad	

	D4175-17: Standard Terminology Relating to Petroleum Products, Liquid Fuels, and Lubricants		Ad	
	D4177-16e1: Standard Practice for Automatic Sampling of Petroleum and Petroleum Products		Ad	
	D4178-82(2012): Standard Practice for Calibrating Moisture Analyzers			Ad
	D4682-13: Standard Specification for Miscibility with Gasoline and Fluidity of Two-Stroke-Cycle Gasoline Engine Lubricants			Ad
	D6227-14: Standard Specification for Unleaded Aviation Gasoline Containing a Non-Hydrocarbon Component			Ad
HALAL	OIC SMIIC 1 General Requirements for Halal Food	Ac		
	OIC/SMIIC CD 6 Particular requirements for the application of OIC/SMIIC 1 to places where Halal foods and beverages are prepared, stored and served	Ac		
	MS 1900: 2014 Sharia-Based Quality Management Systems – Requirements with Guidance	Ad		
	MS 2610: 2015 Muslim Friendly Hospitality Services – Requirements	Ad		
	OIC SMIIC 5: 2017 General Guidelines of Occupational Safety and Health		Ad	
	MS 2424: 2012 Halal Pharmaceuticals – General Guidelines		Ad	
	MS 2565: 2014 Halal Packaging – General Guidelines		Ad	
CLEAN COOK STOVES	ISO/DIS 19867-1 Clean Cook Stoves and Clean Cooking Solutions – Harmonized Laboratory Test Protocols – Part 1; Standard Test Sequence for Emission and Performance, Safety and Durability			
	ISO/DIS 19867-3 Clean Cook Stoves and Clean Cooking Solutions – Harmonized Laboratory Test Protocols – Part 3; Voluntary Performance Target for Cook Stoves Based on Laboratory Testing			
	ISO/NP TR 19925 Clean Cook Stoves and Clean Cooking Solutions – Guidelines for Social Impact Assessment			
	ISO/NP TR 21276 Clean Cook Stoves and Clean Cooking Solutions – Terms and Definitions			
	ISO/CD 19869 Clean Cook Stoves and Clean Cooking Solutions – Guidance on Field Testing Methods for Cook Stoves			
TRANSPORTATION	ISO 39001:2012 Road traffic safety (RTS) management systems - Requirements with guidance for use	Mo		
	ISO 2416:1992 Passenger cars -- Mass distribution	Ad		
	ISO 3779:2009 Road vehicles -- Vehicle identification number (VIN) -- Content and structure	Ad		
	ISO 4030:1983 Road vehicles -- Vehicle identification number (VIN) -- Location and attachment	Ad		
	ISO 4249-1:1985 Motorcycle tyres and rims (Code-designated series) -- Part 1: Tyres	Ad		
	ISO 5775-2:2015 Bicycle tyres and rims -- Part 2: Rims	Ad		
	ISO 24409-3:2014 Ships and marine technology -- Design, location and use of shipboard safety signs, safety-related signs, safety notices and safety markings -- Part 3: Code of practice	Ad		
	150/5370-10G - Standards for Specifying Construction of Airports	Ad		
	ISO 1176:1990 Road vehicles -- Masses -- Vocabulary and codes		Ad	

	ISO 3832:2002 Passenger cars -- Luggage compartments -- Method of measuring reference volume		Ad	
	ISO 10596:2009 Ships and marine technology -- Marine wind vane and anemometers -pr3-consideration for metrology TC.		Ad	
	ISO 3935:1977 Shipbuilding -- Inland navigation -- Fire-fighting water system -- Pressures		Ad	
	ISO 12604-1:2017 Aircraft ground handling -- Checked baggage -- Part 1: Mass and dimensions		Ad	
	ISO/TR 11225:2012 Space environment (natural and artificial) -- Guide to reference and standard atmosphere models		Ad	
			Ad	
	ISO 4249-3:2010 Motorcycle tyres and rims (code-designated series) -- Part 3: Rims		Ad	
	ISO 4143:1981 Shipbuilding -- Inland vessels -- Open rowing lifeboats			Ad
	ISO 15371:2015 Ships and marine technology -- Fire-extinguishing systems for protection of galley cooking equipment			Ad
	ISO 21070:2011 Ships and marine technology -- Marine environment protection -- Management and handling of shipboard garbage			Ad
	ISO 13643-5:2017 Ships and marine technology -- Maneuvering of ships -- Part 5: Submarine specials -pr3			Ad
	ISO 4115:1997 Air cargo equipment -- Air/land pallet nets			Ad
	ISO 4116:1986 Air cargo equipment -- Ground equipment requirements for compatibility with aircraft unit load devices			Ad
	ISO 12056:1996 Aircraft -- Self-propelled passenger stairs for large capacity aircraft -- Functional requirements			Ad
	ISO 8843:2005/Amd 1:2012 Aerospace electric equipment and systems*			Ad
MEDICINE	ISO 10555-1:2013 - Intravascular catheters -- Sterile and single-use catheters -- Part 1: General requirements	Ad		
	ISO 7864:2016 - Sterile hypodermic needles for single use--Requirements and test methods	Ad		
	ISO 7886-1:2017 - Sterile hypodermic syringes for single use--Part 1: Syringes for manual use	Ad		
	ISO 24234:2015 - Dentistry -- Dental amalgam	Ad		
	ISO 6876:2012 - Dentistry -- Root canal sealing materials	Ad		
	IEC 80601-2-60:2012 - Medical electrical equipment -- Part 2-60: Particular requirements for basic safety and essential performance of dental equipment	Ad		
	ISO 7494-2:2015 - Dentistry--Dental units--Part 2: Air, water, suction and wastewater systems	Ad		
	ISO 20126:2012 - Dentistry--Manual toothbrushes--General requirements and test methods	Ad		

ISO 11137-1:2006 - Sterilization of health care products -- Radiation -- Part 1: Requirements for development, validation and routine control of a sterilization process for medical devices	Ad		
EAS 187:2000 - Toothpaste — Specification Gives requirements and test methods for physical and chemical properties, and for marking and/or labelling of toothpastes for daily use with a toothbrush.	Ad		
Governance V3		Ad	
IPC Standards for Community-Based Orgs V3		Ad	
Leadership V3		Ad	
Leadership Standards for Assisted Reproductive Technology V3		Ad	
Medication Management V3		Ad	
Considerations for requesting analyses of drug samples - TRS 902 Annex 4: 2002		Ad	
WHO good practices for pharmaceutical quality control laboratories - TRS 957 Annex 1 – 2012		Ad	
Proposed guidelines for implementation of the WHO certification scheme - TRS 823 Annex 3 – 1992		Ad	
Guidelines on import procedures for pharmaceutical products - TRS 863 Annex 12 – 1996		Ad	
WHO good distribution practices for pharmaceutical products - TRS 957 Annex 5 - 2010		Ad	
Model guidance for the storage and transport of time- and temperature sensitive pharmaceutical products - TRS 961 Annex 9 – 2011			Ad
Guidelines on the conduct of surveys of the quality of medicines - TRS 996 Annex 7 – 2016			Ad
WHO guidance on testing of “suspect” substandard/spurious/falsely labelled/falsified/counterfeit medicines - In preparation			Ad
Procedure for assessing the acceptability, in principle, of active pharmaceutical ingredients for use in pharmaceutical products - TRS 953 Annex 4 - 2009			Ad
Guidelines on packaging for pharmaceutical products - TRS 902 Annex 9 – 2002			Ad
WHO guidelines for sampling of pharmaceutical products and related materials - TRS 929 Annex 4 – 2005			Ad
Guidelines for the assessment of herbal medicines - TRS 863, Annex 11 – 1996			Ad
WHO guidelines on good herbal processing practices (GHPP) for herbal medicines - In preparation			Ad
WHO guidelines for selecting marker substances of herbal origin for quality control of herbal medicines - In preparation			Ad
WHO global model regulatory framework for medical devices including IVD medical devices - To be published – 2017			Ad



## INTERPRETATIONS

**ADOPTION = Ad**

**MONITORING = Mo**

**NATIONAL DEVELOPMENT = Na**

**ACTIVE PARTICIPATION = Ac**

## 10.0 ESTIMATE OF TOTAL RESOURCES PER PRIORITY SECTOR

The Bureau currently has a total number of 8 Technical Officers who for the purpose of the strategy will be designated as standards officers. Each standards officer will perform the duties of Technical officer, Editor and secretary for the TC they are assigned to manage. The Director of Standardization Division will also work with some technical committees playing a similar role as the standards officers. Thus, the Bureau will provide 8.5 standards officers as human resource for the implementation of the Strategy. In The Gambia, the total number of man days for government officers is 210 days per year. Base on this figure the resources (8.5 standards officers) available at the Bureau can provide 1785 man days each year. This shows that the Bureau will be able to complete the implementation of the strategy in the planned period.

**Table 11:** HR man days per element and Three-year man days' estimate

TECHNICAL COMMITTEES	NUMBER OF ELEMENTS	NEEDED HUMAN RESOURCES MAN-DAYS			
		TO	ED	SEC	TOTAL MAN-DAYS
GAMS/TC 01 – FOOD AND AGRICULTURAL PRODUCTS	Ad	496	186	186	868
	Ac	99	20	28.5	147.5
	Mo	0	0	0	0
	Na	270	60	82.5	412.8
1428.3					
GAMS/TC 02 - ELECTROTECHNICALS	Ad	400	150	150	700
	Ac	49.5	10	14.25	73.75
	Mo	0	0	0	0
	Na	0	0	0	0
773.75					
GAMS/TC 06 - BUILDING & CONSTRUCTION MATERIALS	Ad	392	147	147	686
	Ac	49.5	10	14.25	73.75
	Mo	0	0	0	0
	Na	0	0	0	0
759.75					
GAMS/TC 04 - METROLOGY	Ad	56	21	21	98
	Ac	0	0	0	0
	Mo	0	0	0	0
	Na	0	0	0	0
98					
GAMS/TC 05 - MANAGEMENT SYSTEMS	Ad	232	87	87	406
	Ac	0	0	0	0
	Mo	0	0	0	0
	Na	0	0	0	0
406					
GAMS/TC 04 - HALAL	Ad	40	15	15	70
	Ac	0	0	0	0
	Mo	0	0	0	0
	Na	0	0	0	0
70					
GAMS/TC 03 - PETROLEUM	Ad	80	30	30	140
	Ac	0	0	0	0
	Mo	0	0	0	0
	Na	0	0	0	0

140					
GAMS/TC 09 - TOURISM	Ad	64	24	24	112
	Ac	0	0	0	0
	Mo	0	0	0	0
	Na	0	0	0	0
112					
GAMS/TC 12 - CLEAN COOKSTOVES AND CLEAN COOKING SOLUTIONS	Ad	0	0	0	0
	Ac	99	20	28.5	147.5
	Mo	36	0	3	39
	Na	0	0	0	0
186.5					
GAMS/TC 10 - MEDICAL AND HEALTH	Ad	240	90	90	420
	Ac	0	0	0	0
	Mo	0	0	0	0
	Na	0	0	0	0
420					
GAMS/TC 07 - TRANSPORTATION	Ad	192	72	72	336
	Ac	0	0	0	0
	Mo	12	0	1	13
	Na	0	0	0	0
349					
GAMS/TC 11 - INFORMATION COMMUNICATION TECHNOLOGY	Ad	64	24	24	112
	Ac	0	0	0	0
	Mo	24	0	2	26
	Na	0	0	0	0
138					
<b>TOTAL = 4880.80</b>					

## 11.0 ESTIMATING INTERNAL RESOURCES PER ELEMENT OF STANDARDS DEVELOPMENT

### 11.1 Calculating Human Resources for one Adoption project

Standards Development Task	Work time			Repetitions per lifecycle	Total Work time (WT)			Total time for all tasks
	TO	ED/TR	SECR		TO	ED/TR	SECR	
Preliminary analysis	1	0	0	1	1	0	0	1
Preparation & management of TC meetings	1	0	0.75	1	1	0	0.75	1.75
Preparation of TC meeting report	1	0	0.75	1	1	0	0.75	1.75
Verification & circulation of drafts	0.5	0	0.5	1	0.5	0	0.5	1
Communication with stakeholders	1	0	0.5	1	1	0	0.5	1.5
Project management	3	0	0	1	3	0	0	3
Commenting on ISO projects (WD)*	0	0	0	0	0	0	0	0
Commenting on ISO projects (CD)*	0	0	0	0	0	0	0	0
Balloting on ISO DIS with comments*	0	0	0	0	0	0	0	0
Balloting on ISO FDIS*	0	0	0	0	0	0	0	0
Editing/finalization of adopted ISO standard	0.5	3	0.5	1	0.5	3	0.5	4
<b>Totals:</b>					<b>8</b>	<b>3</b>	<b>3</b>	

\* Not applicable for "Adoption"

**Total time for 1 Ad: 14**

## 11.2 Calculating Human Resources for one Active Participation-project

Standards Development Task	Work time			Repetitions per lifecycle	Total Work time (WT)			Total time for all tasks
	TO	ED/TR	SECR		TO	ED/TR	SECR	
Preliminary analysis	2	0	0	3	6	0	0	6
Preparation & management of national TC meetings	1.75		0.75	4	7	0	3	10
Preparation of the meeting report of the national TC	1		0.75	4	4	0	3	7
Verification & circulation of drafts	0.5		0.5	4	2	0	2	4
Communication with stakeholders	2		0.5	4	8	0	2	10
Project management	5		0	1	5	0	0	5
Commenting on ISO projects (WD)	3		0.5	3	9	0	1.5	10.5
Commenting on ISO projects (CD)	2		0.5	1	2	0	0.5	2.5
Balloting on ISO DIS with comments	2		0.5	1	2	0	0.5	2.5
Balloting on ISO FDIS	2		0.5	1	2	0	0.5	2.5
Editing/finalization of adopted ISO standard	2.5	10	1.25	1	2.5	10	1.25	13.75
				<b>Totals:</b>	<b>49.5</b>	<b>10</b>	<b>14.25</b>	

**Total time for 1 Ac: 73.75**

## 11.3 Calculating Human Resources for one Monitoring-project

Standards Development Task	Work time			Repetitions per lifecycle	Total Work time (WT)			Total time for all tasks
	TO	ED/TR	SECR		TO	ED/TR	SECR	
Preliminary analysis	1			2	2	0	0	2
Preparation & management of TC meetings	1		0.5	2	2	0	1	3
Preparation of TC meeting report	1			2	2	0	0	2
Verification & circulation of drafts	0.5			3	1.5	0	0	1.5
Communication with stakeholders	1			2	2	0	0	2
Project management	1			1	1	0	0	1
Commenting on ISO projects (WD)					0	0	0	0
Commenting on ISO projects (CD)					0	0	0	0
Balloting on ISO DIS with comments	1			1	1	0	0	1
Balloting on ISO FDIS	0.5			1	0.5	0	0	0.5
Editing/finalization of adopted ISO standard					0	0	0	0
				<b>Totals:</b>	<b>12</b>	<b>0</b>	<b>1</b>	

**Total time for 1 Mo: 13**

## 11.4 Calculating Human Resources for one National development-project

Standards Development Task	Work time			Repetitions per lifecycle	Total Work time (WT)			Total time for all tasks
	TO	ED/TR	SECR		TO	ED/TR	SECR	
Preliminary analysis	3	0	0	2	6	0	0	6
Preparation & management of TC meetings	2		0.75	4	8	0	3	11
Preparation of TC meeting report	1		0.75	4	4	0	3	7
Verification & circulation of drafts	0.5		0.5	2	1	0	1	2
Communication with stakeholders	2		0.5	2	4	0	1	5
Project management	3		0	1	3	0	0	3
Organization of balloting on national project	0.5		0.5	3	1.5	0	1.5	3
Collation, analysis and circulation of comments	2		0.5	3	6	0	1.5	7.5
Resolution of comments / Update of draft standard	3		0.5	3	9	0	1.5	10.5
Editing/finalization of adopted ISO standard	2.5	10	1.25	1	2.5	10	1.25	13.75
							<b>13.7</b>	
				<b>Totals:</b>	<b>45</b>	<b>10</b>	<b>5</b>	

**Total time for 1 Na: 68.75**

