



REPUBLIC OF NIGER  
BROTHERHOOD-LABOR-PROGRESS  
MINISTRY OF PLANNING  
NATIONAL STATISTICS COUNCIL



# The National Quality Assurance Framework for Public Statistics (NQAF /PS)

**NIGER**

# Contents

ACRONYMS AND ABBREVIATIONS .....	i
FOREWORD.....	iii
GENERAL INTRODUCTION .....	1
I. CONTEXT OF DATA QUALITY IN NIGER.....	2
1.1. Context and justifications .....	2
1.2. Benefits and difficulties of quality management.....	4
1.3. Relationship to policies, strategies and framework of other statistical services.....	5
II. CONCEPTS AND FRAMEWORKS RELATED TO QUALITY .....	6
2.1. Concepts and terminologies .....	6
2.2. Comparison with existing frameworks.....	9
III. GUIDELINES FOR QUALITY MANAGEMENT .....	11
3.1. Manage the National Statistical System (NSS) .....	11
3.1.1. Coordinate the National Statistical System (NSS) .....	11
3.1.2. Manage relationships with suppliers and users of statistical data	<b>Erreur ! Signet non défini.</b>
3.1.3. Manage statistical standards .....	<b>Erreur ! Signet non défini.</b>
3.2. Manage the institutional environment .....	<b>Erreur ! Signet non défini.</b>
3.2.1. Ensure professional independence.....	12
3.2.2. Ensure mandate for data collection .....	<b>Erreur ! Signet non défini.</b>
3.2.3. Ensure the adequacy of resources.....	13
3.2.4. Ensure commitment to quality.....	14
3.2.5. Ensure confidentiality and security of statistical data .....	14
3.2.6. Ensure impartiality and objectivity .....	14
3.3. Manage statistical processes.....	15
3.3.1. Ensure use of solid methodologies .....	15
3.3.2. Manage the burden on respondents .....	<b>Erreur ! Signet non défini.</b>
3.3.3. Ensure cost-effectiveness .....	<b>Erreur ! Signet non défini.</b>
3.4. Manage statistical products .....	<b>Erreur ! Signet non défini.</b>
3.4.1. Ensure relevance.....	<b>Erreur ! Signet non défini.</b>
3.4.2. Ensure accuracy and reliability .....	<b>Erreur ! Signet non défini.</b>
3.4.3. Ensure topicality and punctuality .....	<b>Erreur ! Signet non défini.</b>
3.4.4. Ensure consistency and comparability .....	<b>Erreur ! Signet non défini.</b>
3.4.5. Ensure accessibility and clarity .....	18
IV. EVALUATION OF QUALITY AND COMMUNICATION OF RESULTS .....	20
4.1. Evaluation of products quality and statistical processes .....	20
4.1.1. Prerequisites of quality .....	21
4.1.2. Accuracy and reliability .....	24
4.1.3. Methodological rigour .....	28
4.1.4. Integrity .....	31
4.1.5. Usefulness .....	34
4.1.6. Accessibility .....	36
4.1.7. Topicality and punctuality .....	38
4.1.8. Consistency and comparability .....	39
4.2. Quality reports.....	41
4.3. Protocol implementing the National Quality Assurance Framework for Public Statistics (CNAQ/SP) in Niger .....	42
4.3.1. Mandate .....	42
4.3.2. Scope of the protocol.....	42
4.3.3. Basic Principles .....	43
CONCLUSION .....	44
ANNEX .....	46

Annex A1 : Roadmap for Quality Assessment of the National Statistical System(NSS), Institutional Environment, Processes and Statistical Products in Niger ..... **Erreur ! Signet non défini.**

## **ACRONYMS AND ABBREVIATIONS**

<b>BD</b>	Board of Directors
<b>DQAF</b>	Data Quality Assessment Framework
<b>NQAF</b>	National Quality Assurance Framework
<b>NQAF/PS</b>	National Quality Assurance Framework for Public Statistics
<b>NSC</b>	National Statistics Council
<b>CV</b>	Coefficient of Variation
<b>DCMSI</b>	Directorate of Coordination and Management of Statistical Information
<b>DFMR</b>	Directorate of Financial and Material Resources
<b>DSS</b>	Sectoral Directorates of Statistics
<b>EPA</b>	Public Establishment in Administrative Character
<b>IMF</b>	International Monetary Fund
<b>INS</b>	The National Institute of Statistics
<b>ISO</b>	International Standards Organization
<b>ISS</b>	Inspection of Statistical Services
<b>NC</b>	Not concerned
<b>SDDS</b>	Special Data Dissemination Standards
<b>GDDS</b>	General Data Dissemination System
<b>NSDS</b>	National Strategy for the Development of Statistics
<b>NSS</b>	National Statistical System
<b>PTS/NSC</b>	Permanent Technical Secretariat of the National Statistics Council

## **DEDICATION**

*This document is dedicated to the late **Boubacar SOUMAILA** called "Albora", as precursor to the establishment of quality assurance approach at the National Institute of Statistics (INS), while he was **Head of Division of Statistics Coordination and Cooperation** at the Directorate of Coordination and Statistical Development (DCDS) of the INS..*

*May his soul rest in peace!*

*Amen !*

## **FOREWARD**

The approach followed by the National Institute of Statistics (INS) for the development and adoption of a National Quality Assurance Framework (NQAF) aims to introduce the **quality approach** in the process of production of public/official statistics in Niger.

The main objective of the NQAF is to contribute to improving the quality of the statistical data produced by the National Institute of Statistics (INS) and the other structures of the National Statistical System (NSS). This quality assurance framework is also intended to increase users' confidence in Nigerien public statistics.

This document presents the main dimensions as well as the indicators relating to the quality assessment of official statistical data, for the specific case of the Nigerien statistical system. These dimensions fall under the four (4) main areas relating to:

- Management of the National Statistical System (NSS) ;
- Management of the institutional environment ;
- Statistical process management ; and,
- Management of statistical products.

These are dimensions that comply with international standards and norms as enshrined in the African Charter on Statistics, the International Monetary Fund (IMF) Data Quality Assessment Framework (DQAF), and the National Framework of the United Nations Quality Assurance, Statistics South Africa and Statistics Canada quality assurance frameworks, and the European Statistics Code of Practice.

At a time when the National Institute of Statistics (NSI) is endowing our National Statistical System (NSS) with this important tool, I would like to take this opportunity to present my encouragements and my warm congratulations to all the managers of the INS for the efforts made in developing and enriching this document.

**KANE Aichatou Boulama**

Signature of the Chairman of National Statistics Council

**Chairman of National Statistics Council**

## INTRODUCTION GENERALE

For a long time limited to the private sector, the imperatives of quality have, more and more, a renewed interest in the public domain. The quality of official statistical data is today, more than ever, at the center of national, regional and international concerns, as enshrined, in particular, in the provisions of the African Charter on Statistics, the General System for the Dissemination of Data (**GDDS**) of the IMF and the IMF Special Data Dissemination Standard (**SDDS**).

Throughout its evolution, the concept of quality has undergone several changes since its first (1st) appearance dating back to the twelfth 12th century. According to the **ISO 8402 standard of 1986**, quality is defined as "*the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs*".

As a result, the establishment of a quality assurance framework raises some preliminary issues related to the features of quality itself. In all cases, the concept of quality proceeds from an appreciation from a relative angle of failure to be absolute. The "perfect" quality is, therefore, difficult or impossible to achieve.

The establishment of a National Quality Assurance Framework (NQAF) is of paramount importance for the National Statistical System (SSN), in order to further strengthen the rigor in the development and dissemination of public official statistics, improve their quality and build confidence in their use.

This document is structured in four (4) parts. The first (1st) part sets the context for data quality in Niger. The second part focuses on quality concepts and frameworks. The third (3rd) part describes the quality management guidelines. Finally, the fourth (4th) part presents the assessment of the quality and the communication of the results.

# I. CONTEXT OF DATA QUALITY IN NIGER

## 1.1. Context and justifications

The reform of the National Statistical System (SSN) of Niger goes back to the year 2004, with the adoption of the law N ° 2004-011 of March 30, 2004 on the organization of the statistical activity and creating the National Institute of Statistics (INS), amended and supplemented by Law N ° 2014-66 of 05 November 2014. The institutional set-up thus established is the result of a political will clearly expressed by the highest authorities of Niger, in order to make statistics a priority sector on which the government relies mainly in the design, implementation, monitoring and evaluation of national and sectoral development policies and programs. For example, the National Institute of Statistics (INS), which has been transformed into an Administrative Public Institution (EPA), enjoys administrative and financial management autonomy and has a Board of Directors (BD).

At the end of article 18 of the law N ° 2014-66 of November 05th 2014 referred to above, the National Institute of Statistics (**INS**) is dedicated as the central executive body of the National Statistical System (**SSN**), and the law gives it full mandate, amongst other, to "ensure the dissemination of quality statistical information through all services and organizations of the System".

This reform was a decisive step for the development of statistics in Niger and contributed to strengthening the managerial capacities of **INS** Officials.

To strengthen the confidence of data users in the quality of statistical data produced by the National Statistical System (NSS), the adoption of a quality assurance approach in the production and dissemination of official statistical data is necessary in Niger, because "the reputation of a National Statistical System (SSN) is mainly based on its ability to produce quality data".

Moreover, two (2) fundamental concepts must be distinguished in terms of quality: (i) **quality control** and (ii) the **quality assurance**.

The first (1st) is more in line with an internal goal of improving products, and increasing productivity and profitability. The second, more recent, involves the idea that product quality guarantees could be required by customers.

ISO seized these concepts in 1979, resulting in a standard definition of quality in 1986 and, in 1987, benchmarks for enterprise quality system certification.

Overall, the question of the quality of official statistics has to be apprehended according to **four (4) main points of view:**

- **First (1st) point of view: the user.** It is a good idea here to understand the quality of statistics as a product. Simply, when you study the quality of a product, it is obviously from the point of view of the one who will use it, and who will have about this product a number of wishes to express.
- **Second (2nd) point of view: the respondent.** Data collection is not a neutral operation for the respondent: it takes time and energy. For example, the firms surveyed may have felt at one point treated as "response machines", the statistician considering their response as a due. This behavior, which is considered extremely regal, has many negative consequences, on the propensity to respond, on the quality of the individual responses, as well as on the image of the National Statistical System (NSS).
- **Third (third) point of view: statistical coordination.** Here we use a slightly different prism to analyze the quality. There are two (2) main questions: (i) the intended purposes, in terms of undertaking a new statistical operation, justify the expenditure of public money to carry out this operation? (ii) is the statistical equipment in place well suited to achieve these objectives? This refers to the role to be played by the label committee of the National Statistics Council (NSC).
- **Fourth (4th) point of view: production.** Despite considerable advances in information technology, conducting a survey remains a cumbersome, expensive operation with many difficulties. To work in good conditions, the survey manager must have a set of indicators to know, at any time, where is the work, but also, near the end, what will be the degree of reliability results obtained. Thus, the production manager intervenes not only upstream of the survey (questionnaire, sampling plan, etc.), but also during (dashboard, performance monitoring framework, etc.) and after (analysis of the reliability of the results).

Indeed, good quality statistics are essential in contributing to the development of relevant and coherent development programs and projects to ensure better monitoring and evaluation. Accessibility of statistical information is a valuable means of better informing people about the rationale for decisions and the results of public action.

The availability of reliable and good quality statistics also helps to ensure optimal allocation of public resources, better identification of priority sectors and better anticipation of the effects and impacts of policy decisions. As a result, quality statistics can significantly improve the profitability of public investments.

## **1.2. Benefits and difficulties of quality management**

National, regional and international statistical offices and / or statistical institutes should systematically and regularly assess the strengths and weaknesses of the statistical system as part of the quest for continuous improvement in the quality of this system, the quality of institutional environment, and the quality of statistical processes and products.

In particular, the establishment of a quality assurance framework:

- ☞ provides formal mechanisms to facilitate the identification of quality issues and possible actions for their resolution;
- ☞ ensures greater transparency in the process of drawing up and publishing official statistics and at the same time reinforces the image of the statistical agency as a credible supplier of official statistics of good quality;
- ☞ serves as a consultative framework for rooting and maintaining a culture of quality within the NSS;
- ☞ facilitates the exchange of ideas on quality management with other statistical producers within the National Statistical System (NSS) and with other national and international statistical agencies.

Notwithstanding the crucial role of setting up a quality assurance framework, the management of the quality assurance framework generally faces the following difficulties:

- ☞ the multidimensional nature of quality makes it difficult to have a common and consensual understanding of it. Is it the quality based solely on precision or the one that refers to statistical products covering dimensions such as clarity, coherence, timeliness, relevance, etc.?
- ☞ the existence of several producers of statistical information is likely to make more difficult effective coordination and communication between all the members of the National Statistical System (NSS);
- ☞ the mobilization of adequate resources (human, material and financial) necessary for the implementation of a quality assurance framework.

### **1.3. Relationship to policies, strategies and framework of other statistical services**

The National Quality Assurance Framework for Public Statistics (NQAF/PS) of Niger integrates the fundamental principles of the official statistics governing the African Charter of Statistics, the main dimensions of the data quality assessment framework (DQAF) of the International Monetary Fund (IMF), the National Quality Assurance Framework of the United Nations, Statistics South Africa's quality assurance frameworks and Statistics Canada, and the European Statistics Code of Practice.

At the national level, this framework mainly integrates the orientations and concerns of Niger's second (2nd) National Strategy for the Development of Statistics (SNDS II) 2014-2018, in particular, the aspects relating to the dissemination policy as well as the archiving of statistical data.

## **II. CONCEPTS AND FRAMEWORKS RELATED TO QUALITY**

Cette section présente les concepts et terminologies couvrant les principaux aspects relatifs au Cadre National d'Assurance Qualité des Statistiques Publiques (CNAQ/SP) du Niger, avant de le comparer aux autres cadres existants.

### **2.1. Concepts et terminologies**

**Accessibility:** it covers everything related to the provision of statistical data to the user. It is based on criteria relating in particular to: (i) the mode of dissemination of data; (ii) additional information to be provided to users (availability of metadata); and (iii) helping users (availability of a publications calendar, existence of a reception and user assistance service). In other words, accessibility refers to the physical conditions in which users get the data: where to go, how to order, delivery time, clarity of pricing, convenience of marketing conditions (copyright, etc.), availability micro and macro data, variety of formats (paper, files, CD-ROMs, Internet, etc.), etc. The cost of information can be an important aspect of accessibility for some users. In general, the concept of accessibility goes hand in hand with that of clarity (see below).

**Timeliness:** this corresponds to the time that elapses between the reference point (or the end of the reference period) to which the statistical information relates, and the moment when the users can dispose of it. The timeliness of statistical information refers to the delay between its availability and the event or phenomenon it describes. In other words, statistical information is disseminated in a timely manner. As a general rule, the concept of actuality goes hand in hand with that of punctuality (see below).

**Quality assurance:** all pre-established and systematic activities implemented to evaluate: (i) the National Statistical System (NSS); (ii) the institutional environment; (iii) statistical processes and (iv) statistical products. In other words, quality assurance covers: (i) the objectives and results to be achieved in terms of quality and (ii) the methods and procedures used to achieve them.

**Clarity:** refers to the information that accompanies the data, whether the data is provided with the appropriate metadata, whether there are illustrations such as graphics and / or maps, if data quality information is also available (including in particular the limitations of use), or if additional assistance is provided by the National Institute of Statistics.

**Coherence:** This is the extent to which the statistical data produced can be compared to other statistical information in a broad analytical framework. In general, the concept of coherence goes hand in hand with that of comparability.

**Comparability:** refers to the ability to jointly use related data from different sources. It is based on the use of established and internationally recognized concepts, classifications, terminologies and methods.

**Confidentiality:** it guarantees the privacy or confidentiality of data providers (households, businesses, administrations and other respondents) for the information they provide and the use thereof for strictly statistical purposes

**Ethics:** These are the principles and rules describing the practices or behaviors that are morally acceptable to society, to an organization or an administration at a given time.

**Accuracy:** it refers to the extent to which the information describes the phenomenon it is supposed to measure. It is based on the error term in the statistical estimates and is broken down into systematic error and random error (variance). It can also be defined in relation to the main sources of errors that may lead to inaccurate data (eg coverage, sampling, non-response, etc.). In general, the concept of accuracy goes hand in hand with that of reliability.

**Reliability:** it reflects the conformity of statistical information to the reality it is supposed to describe, while minimizing standard errors and maximizing scientific rigor.

**Impartiality:** it refers to the production and dissemination of statistical data in respect of scientific independence and in an objective, professional and transparent manner, while placing users on an equal footing. In other words, the statistical information is accessible to all users without exception, at the same time, as soon as it reaches the publication stage

**Metadata:** These are data that define and describe other data. In other words, metadata refers to all the information, usually textual, that makes it possible to understand the context in which statistical data are collected, processed and analyzed, with the aim of producing statistical information (legal texts and regulations, methods and concepts used at all levels of processing, definitions and nomenclatures, etc.). It is also the body of information (including definitions, sources, methods of collection, processing and interpretation of results) necessary for a good understanding of statistical information.

**Micro-data:** refers to data observed directly or collected from a particular observation unit (usually a person, a household or a family). These are the immediate results of observations of statistical variables that have not been statistically processed.

**Standards:** A document or any medium / reference that defines requirements, specifications, guidelines, or features that are routinely used to ensure the fitness for purpose of a product, service, or process.

**Objectivity:** this is an attribute that confirms that statistical authorities develop, produce and disseminate statistical data in a systematic, reliable and unbiased manner.

**Relevance:** it ensures the adequate production of statistical data, while relying on regular evaluation and effective consideration of the needs of different users. In other words, relevance refers to the degree of satisfaction of users' expressed and potential needs. It refers both to the fact that all the necessary statistics are actually produced and to the fact that the concepts used (definitions, nomenclatures, etc.) correctly reflect the wishes of the users.

**Punctuality:** it refers to the discrepancy between the date of publication of the data and the originally planned date of publication, for example by reference to the dates announced in an official publication calendar, or the dates fixed by regulation or by prior agreement between producers and users of statistical data.

**Official / public statistics:** all the statistical information produced, compiled, validated and disseminated by the statistical services and bodies officially and legally mandated by the texts in force.

**Usefulness:** it refers to the extent to which the statistics produced must meet the expressed and potential needs of the users, be established on time, with appropriate periodicity, be consistent, and both internally and with other data, and follow well-defined revision rules.

## **2.2. Comparison with existing frameworks**

The table below compares the dimensions of the National Quality Assurance Framework for Public Statistics (NQAF / PS) of Niger with the quality dimensions "expressly" selected by the African Charter of Statistics, the Data Quality Assessment framework of IMF (DQAF), Statistics South Africa's quality assurance framework, Statistics Canada's quality assurance framework, and the European Statistics Code of Practice.

**Table 1: Comparison of Niger NQAF/PS with existing frameworks**

Dimensions specifically selected	African charter on Statistics	IMF Data Quality Assessment Framework	Quality Assurance Framework of Statistics South Africa	Statistics Canada Quality Assurance Framework	Code of good practice of European statistics	National Quality Assurance Framework for Public Statistics in Niger
Accuracy and reliability	X	X		X	X	X
Methodological rigor		X	X		X	X
Integrity		X	X			X
Usefulness		X				X
Accessibility	X	X	X	X	X	X
timeliness	X		X	X	X	X
Coherence and comparability	X		X	X	X	X

**Source:** African Charter on Statistics, DQAF, Statistics South Africa Quality Assurance Framework, Statistics Canada Quality Assurance Framework and European Statistics Code of Practice; construction of the authors.

### **III. GUIDELINES FOR QUALITY MANAGEMENT**

Regarding the assessment of the quality of the statistical data produced by the National Institute of Statistics (INS) of Niger and the other services and organizations producing public statistics, **four (4) main areas** are selected, namely :

- Management of the National Statistical System (NSS) ;
- Management of the institutional environment ;
- Management of statistical process ; and,
- Management of statistical products.

#### ***3.1. Management of the National Statistical System (NSS)***

The management of the statistical system aims at :

- ☞ coordinating the National Statistics System (NSS) ;
- ☞ managing relationships with suppliers and users of statistical data ;
- ☞ managing statistical standards.

##### ***3.1.1. Coordinating the National Statistics System (NSS)***

Good coordination of the NSS is necessary to improve regularly maintaining the quality of official statistics. This coordination should mainly be based on the following fundamental provisions:

- ☞ the existence of a legal and / or regulatory framework organizing the statistical activity and creating the central executive coordinating body of the National Statistical System (NSS), namely the National Institute of Statistics (INS);
- ☞ the institutionalization of a prior authorization (or "statistical visa") for survey and / or statistical census operations;
- ☞ the existence of effective mechanisms of consultation between the actors of the NSS;
- ☞ development and regular updating of concept and methodological manuals;
- ☞ the existence and regular update of a National Strategy for the Development of Statistics (NSDS) defining national priorities for statistical production in the medium term; and

- ☞ the popularization of international specifications and standards in the production of official statistics.

### ***3.1.2. Manage relationships with suppliers and users of statistical data***

The National Statistical System (NSS) needs to maintain a very good relationship with the providers and users of statistical data on the basis of the following orientations:

- ☞ the definition of national guidelines for the development of statistics by the National Statistics Council (NSC);
- ☞ the existence and implementation of a dissemination policy;
- ☞ the existence and implementation of a micro data access policy;
- ☞ holding periodic meetings between producers, suppliers and users of statistical data; and,
- ☞ carrying out surveys on meeting the needs of users of statistical data.

### ***3.1.3. Manage statistical standards***

The management of statistical standards is the coordination of a set of statistical concepts and methodologies used to ensure uniform treatment of statistical issues in a collection operation. This management must be based mainly on:

- ☞ the application of statistical standards;
- ☞ the popularization of these standards; and,
- ☞ their internalization by users and producers of data.

## **3.2. Manage the institutional environment**

The institutional and organizational environment of the statistical activity significantly influences the efficiency and credibility of the National Statistical System (NSS) in the production and dissemination of official statistics.

This institutional environment covers the following principles, namely:

- ☞ professional independence;
- ☞ mandate for data collection;
- ☞ the adequacy of resources;

- ☞ commitment to quality ;
- ☞ confidentiality and security of statistical data ; and,
- ☞ Impartiality and objectivity.

### ***3.2.1. Ensure professional independence***

The professional independence of the actors of the National Statistical System (NSS) ensures the credibility of official statistics. This professional independence relies mainly on the following orientations:

- ☞ the independence of the National Statistical System (NSS) from external or political interference in the production and dissemination of official statistics as specified by law;
- ☞ the annual and multi-year programs of the NSS (i.e. the NSDS) should be published, and the periodic reports relating thereto regularly developed to describe progress made;
- ☞ the National Statistical System (NSS) must comply with all internationally accepted legal requirements, principles, standards and guidelines for the production, management and dissemination of official statistics.

### ***3.2.2. Ensure mandate for data collection***

The INS and the Sectoral Statistics Directorates (SSDs) have a clearly defined legal mandate to collect, process, disseminate and archive official statistical data relating to all areas of the life of the nation. Administrative units, businesses, households and individuals are legally obliged to respond to statistical surveys.

The mandate for data collection is based on the following scope and guidance:

- ☞ production and dissemination of official statistics;
- ☞ the use of administrative folders and files for statistical purposes by the INS and the Sectoral Statistics Directorates (DSS);
- ☞ the obligation to reply to statistical surveys;
- ☞ the respect towards the confidentiality of the data collected.

### ***3.2.3. Ensure the equation of resources***

Resources made available to the National Statistical System (NSS) as part of the implementation of statistical operations must be sufficient, available on time and used effectively and efficiently. The principles relating to the adequacy of resources are as follows:

- ☞ INS and the Sectoral Statistics Directorates (SSD) must have adequate human, financial and material resources for the collection, processing, analysis and dissemination of official statistics;
- ☞ the quality-cost ratio ;
- ☞ meeting actual and potential needs of statistical data users;
- ☞ employment of competent officers in the process of statistical producing ; and,
- ☞ integrated planning of resources.

### ***3.2.4. Ensure commitment to quality***

The services and agencies producing official statistics must commit to provide quality data. The quality assurance of the data produced and disseminated must be based on the following principles:

- ☞ regular assessment of the National Statistical System (NSS) ;
- ☞ planning and assessment of the quality of official statistics production process ;
- ☞ regular assessment of product quality.

### ***3.2.5. Ensure confidentiality and security of statistical data***

Private information on individual persons (including legal entities) compiled in the context of the production of official statistics is confidential and should be used only for statistical purposes. The confidentiality and security of statistical data is based on the principles hereafter :

- ☞ Official statistics should not be used to identify an individual or an organization, even by comparison with other sources of information;
- ☞ the application of legislative and regulatory texts; ;
- ☞ information over survey respondents and statistical censuses of legislative and regulatory provisions and how confidentiality is guaranteed.

### ***3.2.6. Ensure impartiality and objectivity***

Official statistics must be developed and published impartially and objectively. To achieve this goal, the following principles must be observed:

- ☞ the publication of statistics data should be so organized and ordered, in accordance with national and international specifications and standards ;
- ☞ the presentation of statistics with complete impartiality and objectivity ;
- ☞ the notification to the public in advance of changes in methods or classifications.

## **3.3. Manage statistical processes**

National and international standards, guidelines and good practices must be fully respected in the procedures used by the National Institute of Statistics (INS) and the Sectoral Directorates of Statistics (DSS) to collect process and disseminate official statistics. Relevant aspects focus on sound methodology, adapted statistical procedures, a reasonable burden for respondents (in terms of time and energy) and good cost-effectiveness relationship.

### ***3.3.1. Ensure the use of sound methodology***

The statistics of good quality must be based on sound methodology which requires right procedures, skills and tools. The following principles must be observed to ensure a sound methodology :

- ☞ the methodological framework used by the NSS must comply with national and international specifications and standards ;
- ☞ Procedures are put in place to ensure consistent use of concepts, definitions and nomenclatures within the NSS ;
- ☞ procedures are put in place for the proper use of official statistics ;
- ☞ procedures giving the right to the services and bodies of the National Statistical System (NSS) to comment on misinterpretations and abuses of official statistics, are put in place ;
- ☞ the business directory and survey frame are regularly updated ;

- ☞ a plan of training and development of staff of the National Statistical System (NSS) is adopted and implemented.

### ***3.3.2. Manage the burden on respondents***

The response burden on providers of statistical data (households, businesses, etc.) must be reasonable. It must likewise be proportionate to the needs of users. The statistical authorities must therefore monitor it, while setting targets for its gradual reduction. This must be based on the following principles:

- ☞ the extent and detail of requests for official statistics should be limited to what is strictly necessary;
- ☞ the response burden should be distributed as widely as possible among the surveyed populations, using appropriate sampling techniques;
- ☞ the information sought from companies should be easily accessible in their management accounts, and electronic means should be used, where possible, to facilitate their transmission;
- ☞ data from administrative sources will be used as far as possible to avoid the proliferation of expensive statistical operations (surveys and censuses);
- ☞ centralization and sharing of data within the National Statistical System (NSS) should be encouraged to limit the number of new surveys to be conducted;
- ☞ Activities related to the collection of statistical data within the National Statistical System (NSS) should be harmonized and, where possible, joint surveys should be conducted with the aim of reducing the response burden and transaction costs.

### ***3.3.3. Ensure cost-effectiveness***

To ensure cost-effectiveness in the management of statistical processes, the following principles must be observed:

- ☞ legislative and regulatory measures must be put in place to control the use of financial and material resources allocated to the NSS;
- ☞ independent studies should be periodically conducted to monitor the use and traceability of resources allocated to the NSS;

- ☞ information and communication technologies are optimally used in the collection, processing and dissemination of statistical data;
- ☞ the use of administrative folders and files for statistical purposes is improved in order to limit the use of often costly direct surveys;
- ☞ standardized solutions that improve the efficiency and effectiveness of statistical operations are encouraged and implemented by the departments responsible for official statistics.

### ***3.4. Manage statistical products***

The production and dissemination of official statistics must correspond to the needs of users. The main aspects of statistical product management relate to relevance, accuracy, reliability, timeliness, punctuality, consistency, comparability (between regions / provinces and countries), clarity and accessibility for users.

#### ***3.4.1. Ensure relevance***

The relevance of official statistics is based on the following principles:

- ☞ Establishment of formal procedures and frameworks to consult users, verify the relevance and usefulness of existing statistics in relation to their current needs, as well as to examine new needs and priorities;
- ☞ the priority needs of users of official statistics are taken into account and reflected in the annual work programs of the NSS departments and agencies;
- ☞ the periodic organization of surveys to satisfy the needs of users of statistical data.

#### ***3.4.2. Ensure accuracy and reliability***

Official statistics must reflect reality accurately and reliably. Accuracy and reliability mainly cover the following aspects:

- ☞ regular assessment and validation of baseline data, intermediate results and statistical outputs by authorized NSS authorities;
- ☞ measurement and systematic documentation of sampling and non-sampling errors;
- ☞ regular improvement of statistical process

### ***3.4.3. Ensure the timeliness and punctuality***

Official statistics must be disseminated in good time and at the scheduled times. The principles governing news and punctuality are as follows:

- ☞ the degree of timeliness must meet national and international standards for dissemination;
- ☞ a timetable for disseminating official statistics produced by the NSS is made public at the beginning of each year;
- ☞ the periodicity of official statistics must take into account the needs of users as much as possible;
- ☞ non-compliance with the release schedule must be announced in advance, explained, and a new set of release dates must be set;
- ☞ the preliminary results of a statistical operation may be disseminated where deemed useful, provided that their accuracy is generally acceptable.

### ***3.4.4. Ensure consistency and comparability***

Official statistics must have internal and temporal consistency in order to allow comparison between regions / provinces and countries. In this respect, the following principles must be observed:

- ☞ official statistics are internally consistent (e.g. arithmetic and accounting equalities are accurate);
- ☞ official statistics must allow comparison over a reasonable period;
- ☞ official statistics are developed on the basis of common standards for coverage, definitions, units and classifications in different surveys and other sources;
- ☞ statistics from different surveys and other sources are comparable and reconcilable;
- ☞ Transnational comparability of data is ensured through the use of harmonized definitions of concepts, standards and calculation methodologies.

### ***3.4.5. Ensure accessibility and clarity***

Official statistics must be presented in a clear and understandable form. They must also be disseminated in a convenient and appropriate manner, available and accessible to all users at the same time and under the same conditions. Accessibility and clarity must be based on the following principles:

- ☞ the presentation of statistics in an appropriate format, which facilitates universal access, correct interpretation and useful comparisons;
- ☞ archiving statistics and metadata;
- ☞ the use of modern information and communication technologies by broadcasting services and, where appropriate, the traditional printed form;
- ☞ specific analyzes and other on-demand works are carried out where possible, and the public is informed;
- ☞ access to micro data for research purposes must be authorized and subject to specific rules or protocols;
- ☞ users are kept informed about statistical process methodologies and the use of administrative files and files for statistical purposes;
- ☞ Users are kept informed of the quality of the statistical products, in accordance with the criteria for assessing the quality of official statistics

## **IV. QUALITY ASSESSMENT AND COMMUNICATION OF RESULTS**

### **4.1. Assessment of product quality and statistics processes**

The National Quality Assurance Framework for Public Statistics (NQAF/PS) in Niger was inspired by the main dimensions of quality enshrined in the African Charter on Statistics, the Data Quality Assessment Framework (DQAF) of the IMF, Statistics South Africa's quality assurance framework, Statistics Canada's quality assurance framework, and the European Statistics Code of Practice.

Thus, as far as the implementation of NQAF/PS of Niger is concerned, the quality assessment of statistical processes and products is based on **the eight (8) main dimensions** below, namely:

1. Quality preconditions ;
2. Accuracy and reliability;
3. Methodological rigor;
4. Integrity;
5. Utility;
6. Accessibility;
7. Timeliness;
8. Consistency and comparability.

#### **4.1.1. Quality preconditions**

##### **Description**

The preconditions for quality relate to the institutional parameters essential to data quality. In this way, they integrate the legal and institutional framework as well as the availability of human, material and financial resources for statistical work. These preconditions also relate to the relevance of the statistical information in relation to the field covered.

##### **Main components**

The main components of the preconditions for quality are:

- ☞ the legal and institutional framework to be favorable to the compilation of statistics;
- ☞ the human, material and financial resources that are appropriate to the needs of the statistical programs;
- ☞ relevance related to the availability of accurate and timely statistical information for changing needs;
- ☞ other aspects of quality management in relation to the statistical work environment conditions.

##### **Indicators, Specific statements and Assessment criteria**

Components	Indicators	Specific statements	Assessment criteria			
			Great quality	Acceptable Quality	Problematic quality	Poor quality
Legal and institutional framework favorable to the compilation of statistics	1.1. Coordination between the agencies responsible for producing the data is adequate.	1.1.1.. Legislative and regulatory texts clearly define the role of the various actors	The texts clearly define the role of the different actors.	The texts implicitly define the role of the different actors.	Inexistence de textes mais existence d'arrangement informel	Neither texts nor informal arrangement
	1.2. The obligation to reply is governed by law	1.2.1. A statistical law exists and requires the obligation to answer under penalty.	The obligation to reply is explicitly required by law	The obligation to reply is implicitly required by a law	NC	Non-existence of a law on the obligation to reply
	1.3. Statistical secrecy is governed by a law.	1.3.1. A statistical law exists and guarantees the confidentiality of the information collected	The confidentiality of the information collected is explicitly guaranteed by a law	The confidentiality of the information collected is implicitly guaranteed by a law	NC	Non-existence of a law on the confidentiality of information collected

Components	Indicators	Specific statements	Assessment criteria			
			Great quality	Acceptable Quality	Problematic quality	Poor quality
		1.3.2. A statistical law exists and guarantees the statistical secrecy under penalty of sanctions	Statistical confidentiality is explicitly guaranteed by a law	Statistical confidentiality is implicitly guaranteed by a law	NC	Non-existence of a law
Human, material and financial resources reflect the needs of statistical programs	1.4. The staffing as well as the material and financial means reflect the needs expressed by the NSS.	1.4.1. A career management plan for INS staff is developed and put in place.	A formal career management plan for INS staff is implemented	There is no career management plan for INS staff but there is informal arrangement	Existence of a non-applied training and development plan	Neither Career Management Plan nor Informal Arrangement
		1.4.2. A training and development plan for NSS staff is in place.	A formal training and development plan for NSS staff is implemented	Lack of training and development plan for NSS staff but existence of informal arrangement	Existence of a non-applied training and development plan	No training plan or informal arrangement
		1.4.3. A National Fund for the Development of Statistics is set up.	The resources allocated to the development of statistics are adequate	The resources allocated to the development of statistics are not adequate	NC	Resources allocated to the development of statistics are neither adequate nor used effectively
		1.4.4. NSS organizations and services have adequate human resources	Staff assigned to the structures of the NSS meet their needs	Staff assigned to the structures of the NSS is insufficient		Absence of staff
		1.4.5. NSS organizations and services are provided with adequate material resources	The material resources made available to the NSS are adequate			
	1.5. Measures concerning the efficient use of resources are put in place	1.5.1. Sound management of financial and material resources is observed	A manual of administrative, financial and accounting procedures is implemented	Non-existence of manual of administrative, financial and accounting procedures but use of recognized rules for good management of resources	NSC sessions are not held but existence of a non-formal monitoring and assessment framework for the statistical program	No manual of administrative, financial and accounting procedures nor use of recognized rules for good management of resources
		1.5.2. Sound management of human resources is observed	A human resources management manual exists and implemented	Non-existence of a human resources management manual but use of recognized rules in this area	NC	No resource management manual nor use of recognized rules
Availability of accurate and timely statistical information for changing needs	1.6. Regular monitoring of the relevance and usefulness of existing statistics is carried out.	1.6.1. Periodic meetings between producers and users of the data are regularly held.	Periodic meetings between the producers and the users of the data are kept at a precise regularity.	Periodic meetings between the producers and the users of the data are held but the regularity is not respected	Existence of an informal framework of relationship between producers and users of data	No meeting between producers and users of the data
		1.6.2. A mechanism for finding user	Existence of a regular survey	Existence of an irregular	NC	Non-existence of survey

Components	Indicators	Specific statements	Assessment criteria			
			Great quality	Acceptable Quality	Problematic quality	Poor quality
		satisfaction is put in place	of user satisfaction	survey of user satisfaction		
Other aspects of quality management in relation to the statistical work environment	1.7. A quality assessment system is put in place.	1.7.1. A Data Quality Assessment Committee is in place and functional.	The texts clearly define the role, responsibilities and functioning of the Data Quality Assessment Committee	The texts implicitly define the role, attributions and functioning of the Data Quality Assessment Committee	Non-existence of texts but existence of informal arrangement	Neither texts nor informal arrangement
	1.8. A monitoring and assessment system for the statistical program is set up.	1.8.1. a structure responsible for monitoring the implementation and assessment of the statistical program exists and is functional	The texts clearly define the role, attributions and functioning of the structure	The texts implicitly define the role, attributions and functioning of the structure	Inexistence of texts but existence of informal arrangement	Neither texts nor informal arrangement

#### **4.1.2. Accuracy and reliability**

##### **Description**

Accuracy and reliability are based on the principle that statistical data must reflect the realities of the facts to which they relate. To this end, they integrate the basic data, the verification of these data as well as the statistical techniques used in addition to the assessment and validation of the intermediate data. They also incorporate revision studies.

##### **Main components**

**The main components of accuracy and reliability are:**

- ☞ the basic data that should be appropriate for the production of statistics;
- ☞ verification of basic data requiring regular evaluation;
- ☞ the statistical techniques used which must follow sound statistical procedures;
- ☞ assessment and validation of intermediate data and statistical products;
- ☞ Review studies resulting from monitoring and exploitation of the information provided.

##### **Elements and indicators of assessment**

Components	Indicators	Specific statements	Assessment criteria			
			Great quality	Acceptable quality	Problematic quality	Poor quality
Basic data appropriate for the production of statistics	2.1. The basic data are collected in the framework of programs taking into account the realities of Niger.	2.1.1. Data collection programs for official statistics are appropriate.	An annual national statistical program (validated by the NSC) exists	An annual national statistical program (not validated by the NSC) exists	NC	No annual national statistical program or formal data collection framework
		2.1.2. The data collection schedule is regular and respected.	The collection schedule is respected according	Non-existence of a formal collection schedule but data	NC	No schedule of collection neither collection of data at

Components	Indicators	Specific statements	Assessment criteria			
			Great quality	Acceptable quality	Problematic quality	Poor quality
			to a precise regularity	collected at regular intervals		regular intervals
Baseline data appropriate for the production of statistics	2.2. Baseline data are reasonably consistent with national and international specifications and standards.	2.2.1. Baseline data fall within the definition, scope, classification and assessment criteria adopted by the National Statistical System.  2.2.2. Baseline data are sufficiently close to internationally recognized good practices for the compilation of official statistics.	A manual of concepts and definitions exists and regularly updated  The concepts and definitions meet internationally accepted good practice for the compilation of official statistics. Discrepancies are justified and sufficiently documented	A manual of concepts and define exist but the update does not obey a certain regularity  The concepts and definitions meet internationally accepted good practice for the compilation of official statistics. Discrepancies are justified but not sufficiently documented	NC  The concepts and definitions meet internationally accepted good practice for the compilation of official statistics. Discrepancies are neither justified nor sufficiently documented	Inexistence of a manual of concepts and definitions  The concepts and definitions do not meet internationally accepted good practice for the compilation of official statistics. Discrepancies are neither justified nor documented
Baseline data appropriate for the production of statistics	2.3. The baseline data are obtained in due time.	2.3.1. Regular monitoring of data collection schedules provides their collection in due time.	A data collection schedule is well followed	NC	NC	No follow-up of the data collection schedule
Baseline data appropriate for the production of statistics	2.4. Baseline data are regularly assessed.	2.4.1. The accuracy of survey data is checked at regular intervals.	Sampling errors are within acceptable standards: $CV < 15\%$ and $B_2(T_n) = 0$ where $CV$ represents the coefficient of variation and $B_2(T_n)$ the square of the bias of the estimator $T_n$ .	$15\% < CV < 25\%$ where $CV$ represents the coefficient of variation	$25\% < CV < 33\%$ where $CV$ represents the coefficient of variation.	$CV > 33\%$ where $CV$ represents the coefficient of variation.

Components	Indicators	Specific statements	Assessment criteria			
			Great quality	Acceptable quality	Problematic quality	Poor quality
			variation and B2 (Tn) the square of the bias of the estimator Tn.			
		2.4.2 The accuracy of data from other secondary sources is checked at regular intervals.	Data sources are accompanied by quality reports	NC	NC	Data sources do not have quality reports
Statistical techniques used	2.5. The compilation of official statistics is based on scientific and / or sound techniques for processing the baseline data	2.5.1. The data processing procedure is correct and of good quality.	The data processing procedure (correction of non-responses, automated consistency checks, etc.) is documented	NC	NC	The data processing procedure is not documented
Assessment and validation of intermediate data and statistical products	2.6. Intermediate results are validated in view of other information	2.6.1. Intermediate results are verified using other sources.	Intermediate results are assessed with comparable sources. Inconsistencies are reconciled	The producers of the data prove the consistency of the intermediate results.	NC	Producers of the data do not prove the consistency of the intermediate results
Assessment and validation of intermediate data and statistical products	2.7. Statistical discrepancies in intermediate data are rigorously evaluated and analyzed	2.7.1. Atypical variations in statistics arising from potential data problems are carefully reviewed and communicated to users.	Producers of data report atypical variations in statistics that identify potential data problems	NC	NC	Data producers do not report atypical variations in statistics that identify potential data problems
revision studies	2.8. Statistical discrepancies and other potential problem indices in statistical products are analyzed with rigor.	2.8.1. Statistical discrepancies are monitored.	Statistical discrepancies are reported	NC	NC	Statistical discrepancies are not reported
		2.8.2. Statistical products are	Existence of a	NC	NC	Non-existence of a

Components	Indicators	Specific statements	Assessment criteria			
			Great quality	Acceptable quality	Problematic quality	Poor quality
		horizontally and vertically verified to reduce discrepancies.	statistical quality control system			statistical quality control system

#### **4.1.3. Methodological rigor**

##### **Description**

Methodological rigor refers to the principle that the production of statistical data must be based on a rigorous methodological basis. It refers mainly to the application of accepted national and international standards, principles and good practices.

##### **Main components**

**The main components of the methodological rigor are the following:**

- ☞ Concepts and definitions to be in accordance with accepted national and international frameworks;
- ☞ the scope of application to be in line with internationally accepted standards, principles and good practices;
- ☞ Classification to be in accordance with internationally accepted standards, principles and good practices;
- ☞ the registration base for which flows and stocks must be valued and accounted for in accordance with internationally accepted standards, principles and good practices

##### **Indicators, specific statements and evaluation criteria**

Components	Indicators	Specific statements	Assessment criteria			
			Great quality	Acceptable quality	Problematic quality	Poor quality
Concepts and definitions in accordance with accepted national and	3.1. The conformity of concepts and definitions with internationally accepted standards, principles and good practices is respected.	3.1.1. The concepts and definitions used in the official statistics compilation framework are consistent with internationally and nationally developed	The compilation of official statistics is in accordance with international and	NC	NC	The compilation of official statistics is not in line with textbooks developed

Components	Indicators	Specific statements	Assessment criteria			
			Great quality	Acceptable quality	Problematic quality	Poor quality
international frameworks		manuals.	national textbooks.			at the international and national levels.
Scope in accordance with internationally accepted standards, principles and good practices	3.2. The scope is in accordance with the standards, principles and internationally accepted good practice	3.2.1.. Coverage differences between some statistical indicators are clearly defined	Coverage deficiencies of some indicators are justified with reference to internationally accepted standards, principles and good practices	NC	NC	Coverage deficiencies of some indicators are not justified by reference to internationally accepted standards, principles and good practices
Classification in accordance with internationally accepted standards, principles and good practices	3.3. The classification is in line with internationally accepted standards, principles and good practices.	3.3.1Classification systems are faithful to internationally accepted standards, principles and good practices.	Classification meets internationally accepted standards, principles and good practices.	NC	NC	The classification does not meet internationally accepted standards, principles and good practices.
Basis of registration for which flows and stocks must be valued and accounted for in accordance with internationally accepted standards, principles and good practices	3.4. Flows and stocks are assessed at market prices.	3.4.1. The flow and stock assessment criteria are consistent with the principle of valuation at market price	The Assessment criteria of flows and stocks satisfy the assessment principle at the market price	NC	NC	The flow and stock assessment criteria do not satisfy the market price valuation principle
	3.5. Registration is calculated on the basis of established entitlements.	3.5.1. The recording of the transactions is in accordance with the principle of accounting on the basis of established entitlements	The recording of the accounting operations satisfies the accruals- based accounting principle	NC	NC	The recording of the accounting operations does not satisfy the accruals-based accounting principle

Components	Indicators	Specific statements	Assessment criteria			
			Great quality	Acceptable quality	Problematic quality	Poor quality
	3.6. Gross / net registration procedures generally comply with internationally accepted standards, principles and good practices.	3.6.1 Registration procedures on a gross / net basis comply with internationally or nationally defined criteria.	Gross / net registration procedures meet internationally or nationally defined criteria	NC	NC	Gross / net registration procedures do not meet internationally or nationally defined criteria

#### **4.1.4. Integrity**

##### **Description**

Integrity is based on respect for the principle of objectivity in the collection, processing and dissemination of official statistics. It refers to the institutional arrangements guaranteeing professionalism in the practices and policies for compiling official statistics.

##### **Main components**

The main components of integrity are:

- ☞ the professionalism that must be the fundamental principle of statistical policies and practices;
- ☞ the transparency that must be observed in the development of official statistics;
- ☞ the ethical standards that must be respected in terms of statistical policies and practices.

##### **Indicators, specific statements and assessment criteria**

Components	Indicators	specific statements	assessment criteria			
			Great quality	Acceptable quality	Problematic quality	Poor quality
Professionalism	4.1. Statistics are impartially established	4.1.1. Provisions governing the compilation of statistics are in accordance with the principles of professional independence	A legal or regulatory framework explicitly guarantees professional independence	A legal or regulatory framework implicitly guarantees professional independence	Non-existence of texts but existence of informal arrangement	Neither texts nor informal arrangement
		4.1.2. NSS works to promote professionalism	Professionalism is promoted	NC	NC	Professionalism is not promoted.
	4.2. The choice of sources, statistical techniques and	4.2.1. Decisions on dissemination are based solely on statistical	Data dissemination decisions are made on the basis of statistical	NC	NC	Data dissemination decisions are not made on the basis of statistical

Components	Indicators	specific statements	assessment criteria			
			Great quality	Acceptable quality	Problematic quality	Poor quality
Transparency	dissemination decisions are based exclusively on statistical considerations.	considerations.  4.2.2. The choice of data sources and statistical techniques is based exclusively on statistical considerations.	considerations.  Data sources and statistical techniques are based on statistical considerations	NC	NC	considerations.  Data sources and statistical techniques are not based on statistical considerations
	4.3. The relevant statistical agency is entitled to comment on misinterpretation or misuse of statistics.	4.3.1. Legislative or regulatory provisions authorize the competent body to make comments in case of misinterpretation or misuse of statistics.	The public is sufficiently edified in case of misinterpretation or misuse of statistics	NC	NC	The public is not edified in case of misinterpretation or misuse of statistics
	4.4. Provisions governing the collection, processing and dissemination of data are disseminated to the public.	4.4.1. The public has access to information about the terms of confidentiality and other basic provisions.	Access to information on the terms of confidentiality and other basic provisions is open to the public	NC	NC	Access to information on the terms of confidentiality and other basic provisions is not open to the public
Ethical standards	4.5. The access of state workers to the data before their dissemination is communicated to the public	4.5.1. The public is informed that state workers have access to the data before it is released.	Access to data before publication by state workers is communicated to the public	NC	NC	Access to data before publication by state agents is not communicated to the public
	4.6. The products of agencies and statistical services are clearly identified	4.6.1. The main statistical publications under the responsibility of the NSS are clearly inventoried, identified and communicated to the public.	Products under the responsibility of the NSS are communicated to the public	NC	NC	Products under NSS responsibility are not released to the public
	4.7. Major changes in methodology, baseline data and statistical techniques are subject to prior notification.	4.7.1. Users are informed in advance of major changes in methodology, baseline data and statistical techniques.	Major changes in methodology, baseline data and statistical techniques are communicated to users	NC	NC	Major changes in methodology, baseline data and statistical techniques are not communicated to users
	4.8. Ethical standards exist and are known to the staff of statistical agencies and services.	4.8.1. Ethical standards are clearly defined.  4.8.2. The staff of statistical agencies and departments are aware of the ethical	A legal or regulatory framework explicitly defines the code of ethics  Staff internalize ethical standards	A legal or regulatory framework implicitly defines the code of ethics  NC	Non-existence of a regulatory framework but existence of informal arrangement  NC	Neither texts nor informal arrangement  Staff have no knowledge of ethical standards

Components	Indicators	specific statements	assessment criteria			
			Great quality	Acceptable quality	Problematic quality	Poor quality
		standards.				

#### **4.1.5. Usefulness**

##### **Description**

This dimension is based on the principle that the statistics produced must meet the needs, be established on time, with appropriate periodicity, be consistent, and both internally and with other data, and follow well-defined revision rules.

##### **Main components**

**The main components of usefulness are:**

- ☞ produced data that must meet the needs of users;
- ☞ the periodicity and the deadlines of diffusion which must obey the standards of diffusion accepted at the international level;
- ☞ the consistency of the statistics should be observed in relation to the same set of data, time and other data sets policies and practices for regular data review should be observed.

##### **Indicators, specific statements and assessment criteria**

<b>Components</b>	<b>Indicators</b>	<b>Specific statements</b>	<b>Assessment criteria</b>			
			<b>Great quality</b>	<b>Acceptable quality</b>	<b>Problematic quality</b>	<b>Poor quality</b>
Data produced to meet user needs	5.1. The periodicity obeys diffusion standards.	5.1.1. The periodicity of the statistics complies with the norms and standards of data dissemination	The periodicity of the statistics is respected according to the norms and standards of data dissemination	NC	NC	The periodicity of the statistics is not respected in accordance with the norms and standards of data dissemination
Periodicity and timing of dissemination	5.2. Dissemination times meet broadcast standards	5.2.1. Delays in disseminating statistics comply with data dissemination standards	Deadlines are met according to data dissemination standards	NC	NC	Deadlines are not respected according to data dissemination standards

Components	Indicators	Specific statements	Assessment criteria			
			Great quality	Acceptable quality	Problematic quality	Poor quality
according to internationally accepted broadcast standards						
Coherence of statistics	5.3. Statistics are consistent or can be reconciled within a reasonable time interval	5.3.1. The statistics provided obey an internal coherence	Data producers check the internal consistency of the statistics provided at regular intervals.	Data producers check the internal consistency of the statistics provided but at non-regular intervals.	NC	Data producers do not check the internal consistency of the statistics provided.
	5.4. The statistics are consistent or can be compared with those from other baseline data	5.4.1. The statistics provided obey an external coherence	Data producers periodically check the external consistency of the statistics provided	Data producers check the external consistency of the statistics provided but at non-regular intervals.	NC	Data producers do not check the external consistency of the statistics provided.
	5.5. Revisions are made according to an established and transparent schedule	5.5.1 Review practices are in a predictable sequence that statistics users are aware of	Existence of a revision schedule that users are aware of	Existence of a revision schedule but only a part of the users are aware of it	Existence of a non-public review schedule	Non-existence of revision schedule
	5.6. Preliminary or revised statistics are clearly identified as such	5.6.1. Users are informed that the data is preliminary	preliminary data is communicated to users	NC	NC	Preliminary data is not communicated to users
		5.6.2. Users are informed that data is revised	Revised data is communicated to users	NC	NC	Revised data is not communicated to users
	5.7. Review studies and analyzes are released to the public	5.7.1. Users are informed about statistical review studies	review studies are communicated to users	NC	NC	revision studies are not communicated to users
		5.7.2. Users are notified of statistical review results	Revision results are communicated to users	NC	NC	Revision results are not communicated to users

#### **4.1.6. Accessibility**

##### **Description**

Accessibility integrates the need in the presentation, in a clear and intelligible way, of data and metadata. These must also be available on an unbiased basis incorporating the relevance and updating of the metadata.

##### **Main components**

The main components of accessibility are:

- ☞ The presentation of statistical data which must be clear and understandable;
- ☞ The availability of metadata that must be current and relevant;
- ☞ A user support service that must be prompt and competent.

##### **Indicators, specific statements and assessment criteria**

Components	Indicators	Specific statements	Critères d'évaluation			
			Great quality	Acceptable quality	Problematic quality	Poor quality
Clear and understandable statistical data presentation	6.1. The statistics are presented in such a way as to facilitate their interpretation and to allow meaningful comparisons.	6.1.1. The presentation of the statistics meets users' needs.	The presentation of the statistics facilitates the understanding of the users	NC	NC	User requirements are not taken into account in the presentation of statistics The presentation of statistics does not facilitate the understanding of users
	6.2. The means and media of dissemination are adequate	6.2.1. The means of dissemination are within the reach of users.	Existence of several data dissemination media	NC	Existence of a single data medium	Non-existence of data dissemination media
	6.3. Statistics are released according	6.3.1. A calendar announces the dates of	The statistics are	The statistics are	NC	Statistics are released in

Components	Indicators	Specific statements	Critères d'évaluation			
			Great quality	Acceptable quality	Problematic quality	Poor quality
	to a schedule announced in advance.	dissemination in advance.	disseminated according to the pre-established schedule	released in a relatively reasonable time compared to the pre-established schedule		an unreasonable amount of time in relation to the pre-established schedule
	6.4. The statistics are made available to all users at the same time.	6.4.1. The public is informed of the statistics release and the procedures for accessing them.	Availability of information and releases is communicated to the public	NC	NC	Availability of information and releases are not communicated to the public
	6.5. Statistics that are not disseminated systematically are communicated to interested parties upon request.	6.5.1. Aggregated tab-on-demand data can be provided based on specific needs.	Arrangements are made to respond to user requests	NC	NC	No provision is made to respond to user requests
	6.6. Documentation is available on the concepts, fields of application, classifications and statistical techniques used.	6.6.1. A manual of concepts and definitions is released and updated.	The Concepts and Definitions Manual exists and is widely released	Concepts and definitions manual exists but not widely released	NC	Inexistence of a manual of concepts and definitions
		6.6.2. A methodological manual is released and updated.	Methodology manual exists and is widely released	Methodology manual exists but not widely released	NC	Inexistence of a manual of methodologies
		6.6.3. The classifications used are adapted to the national context.	The classification used is adapted and released	NC	NC	The classifications used are not adapted and released
availability of metadata that must be current and relevant	6.7. Metadata of released statistics are publicly available	6.7.1. General and specialized information on official statistics is available and publicly available.	Metadata exist and widely available to the public	Metadata exist but not widely available to the public	NC	No metadata
Existence of a prompt and competent user assistance service	6.8. Access points are specified for each data category.	6.8.1. Appropriate assistance is provided to statistical users.	Existence of a user media service	NC	NC	Non-existence of a user media service

#### **4.1.7. Timeliness and punctuality**

##### **Description**

The timeliness of the information refers to the delay between its availability and the event or phenomenon it describes. A compromise is sometimes necessary between the timeliness and accuracy of the statistical information.

##### **Main components**

The main components of timeliness are:

- ☞ the trade-off between timeliness and accuracy in meeting the needs of users;
- ☞ the respect of the dates of dissemination compared to a pre-established calendar.

##### **Indicators, specific statements and assessment criteria**

Components	Indicators	Specific statements	Assessment criteria			
			Great quality	Acceptable quality	Problematic quality	Poor quality
Trade-off between timeliness and accuracy in meeting user needs	7.1. A trade-off between timeliness and accuracy in meeting the needs of users is found.	7.1.1 Cases of extreme slowness are noted.	Cases of extreme slowness are justified	NC	NC	Cases of extreme slowness are not justified
		7.1.2. Best practices are identified.	Best practices are promoted	NC	NC	Best practices are tainted
Respect of dissemination dates in relation to a pre-established calendar	7.2. The release dates are respected in relation to a pre-established calendar.	7.2.1. Timeliness is taken into consideration in the design and implementation of programs.	The design and implementation of the programs are in line with timeliness	NC	NC	The design and implementation of the programs are not up to date
		7.2.2. Changes to longer-term dissemination dates are controlled.	The distribution schedule is subject to regular assessment	NC	NC	Release schedule is not subject to regular assessment

#### **4.1.8. Consistency and comparability**

##### **Description**

Consistency is the extent to which statistical data can be related to other statistical information in a broad analytical framework. Comparability is the ability to combine and jointly use related data from different sources. It is based on the use of internationally recognized concepts, classifications, terminologies and methods.

##### **Main components**

The main components of consistency and comparability are:

- ☞ internal consistency which must guarantee arithmetic and accounting equalities;
- ☞ the comparison of statistics in both time and space;
- ☞ the harmonization of methodological tools, concepts and definitions.

##### **Indicators, specific statements and assessment criteria**

Components	Indicators	Specific statements	Critères d'évaluation			
			Great quality	Acceptable quality	Problematic quality	Poor quality
Internal coherence	8.1. Internal consistency in the presentation of statistics is observed.	8.1.1. Arithmetic and accounting equalities are verified.	The mastery of the reliability of the data production process is guaranteed	NC	NC	Mastery of the reliability of the data production process is not guaranteed
Statistics comparison	8.2. The statistics produced allow a comparison in both time and space	8.2.1. Data from different sources and having a different periodicity are compared.	The statistics produced are consistent in time and space	NC	NC	The statistics produced are not consistent in time and space
Harmonization of methodological tools,	8.3. Methodological tools, concepts	8.3.1. Official statistics are developed on the basis of harmonized tools, concepts	The compilation of statistics is based on	NC	NC	Statistics compilation is based on different tools,

Components	Indicators	Specific statements	Critères d'évaluation			
			Great quality	Acceptable quality	Problematic quality	Poor quality
concepts and definitions	and definitions are harmonized.	and definitions	harmonized tools, concepts and definitions			concepts and definitions

## **4.2. Quality reports**

The communication on the quality of the management system, the institutional environment, the production chain of data and statistical products is made through the preparation of reports examining and explaining the characteristics of these domains.

These quality reports describe the quality according to the dimensions chosen. It involves the following:

- prerequisites for quality;
- accuracy and reliability;
- methodological rigor;
- integrity;
- usefulness;
- accessibility;
- topicality ;
- consistency and comparability.

The structure of a quality report is organized into four (4) main parts:

- i) context and assessment expected;
- ii) Assessment main results;
- iii) difficulties encountered;
- iv) recommendations.

### **4.3. Protocol for the implementation of the National Quality Assurance Framework for Public Statistics (NQAF /PS)**

The purpose of this protocol is to present the general framework and the basic principles, **before the statistical data produced by the services and organizations of the National Statistical System (NSS) are certified as quality.**

#### **4.3.1. Mandate**

Article 18 of Law No. 2004-011 of March 30, 2004, on the organization of statistical activity and creating the National Institute of Statistics (INS), amended and supplemented by Law No. 2014- 66 of 05 November 2014, empowers the National Institute of Statistics (INS) as the central body of the National Statistical System (NSS) and gives it full mandate, inter alia, “*to ensure the dissemination of quality statistical information by all the services and organizations of the System*”.

#### **4.3.2. Scope of the protocol**

At the end of the provisions of the aforementioned law, the National Statistical System (NSS) is composed of:

- the National Statistics Council (NSC);
- the National Institute of Statistics (INS);
- departments responsible for compiling statistical data of ministerial departments and public and parapublic bodies (the list of these services is set up each year by order of the Minister in charge of statistics); and,
- national training schools in statistics and demography.

As part of the implementation of the National Quality Assurance Framework for Public Statistics (CNAQ / SP), the services and organizations concerned as well as the statistical data to be assessed must meet the following ***three (3) main criteria***:

- i) **the services and organizations producing the statistical data to be assessed must be members of the National Statistical System (NSS);**
- ii) **the statistical data to be assessed must correspond to the needs of the users, beyond the specific internal needs of the services and producer organizations;**
- iii) **the statistical data to be evaluated are likely to be produced over time (statistical series), and not statistical data produced to meet a specific need.**

#### **4.3.3. Basic principlee**

**Principle 1:** Official statistics are those produced by the INS as well as the services responsible for compiling statistical data from ministerial departments and public and parapublic bodies.

**Principle 2:** National Statistical System (NSS) structures are responsible for the content of statistics and data accuracy, thus ensuring continuity in production.

**Principle 3:** Statistical publications of the National Statistical System (NSS) must systematically be subject to a quality assessment process, before being certified, when they respect the quality dimensions enshrined in the **NQAF /PS**, official statistics.

**Principle 4:** INS and the departments responsible for compiling statistical data of ministerial departments and public and parapublic bodies must impartially establish official statistics according to a criterion of practical use and make them available and accessible to all users of public information.

**Principle 5:** In order to maintain confidence in the official statistical information, INS as well as the services responsible for compiling statistical data of ministerial departments and public and parapublic bodies must determine, according to purely professional considerations, particularly scientific principles and ethical rules, methods and procedures for collecting, processing, storing and presenting statistical data.

**Principle 6:** In order to facilitate a correct interpretation of the data, INS as well as the departments responsible for compiling statistical data of ministerial departments and public and parapublic bodies must provide, according to scientific standards, information on sources, the methods and procedures they use (metadata).

**Principle 7:** INS and the departments responsible for compiling statistical data of ministerial departments and public and parapublic bodies have the right to comment on misinterpretations and misuse of statistics.

**Principle 8:** Data used for statistical purposes can be drawn from different sources; it could be statistical surveys, files or administrative documents. INS as well as the services responsible for compiling statistical data of ministerial departments and public and parapublic bodies must choose their source (s), taking into account the quality of the data they can provide, their timeliness, costs and the burden on respondents.

**Principle 9:** The individual data collected for the compilation of statistics by the bodies responsible for it, whether they concern natural persons or legal entities, must be strictly confidential and used only for purely statistical purposes.

**Principle 10:** Legislative and regulatory texts and all provisions governing the functioning of statistical systems must be internalized by the various bodies of the NSS and popularized to the public.

**Principle 11:** INS ensures the coordination of the National Statistical System (NSS) to ensure the coherence and efficiency of the system.

**Principle 12:** INS should promote the use by all National Statistical System (NSS) structures of internationally defined concepts, classifications and methods to promote consistency and effectiveness.

**Principle 13:** INS and the departments responsible for developing statistical data of ministerial departments and public and parapublic bodies should promote bilateral and multilateral cooperation in the field of statistics, thus contributing to the improvement of the process of developing official statistics.

**Principle 14:** Quality certified statistics by the National Statistical Council (NSC) must be assessed at regular intervals, to be determined by mutual agreement between the NSC and the heads of departments and agencies producers, with a view to ensuring that the statistics assessed maintain their level of quality.

**Principle 15:** INS and all the structures of the NSS must work for the promotion of statistical culture in Niger.

## CONCLUSION

The quality of official statistical data is today, more than ever, at the center of national, regional and international concerns, as enshrined, in particular, in the provisions of the African Charter on Statistics, both the IMF General Data Dissemination Systems (GDDS) and Special Data Dissemination Standard (SDDS).

The establishment of a National Quality Assurance Framework (NQAF) is of paramount importance for the National Institute of Statistics (INS), in order to further reinforce the rigor in the development and dissemination of official statistics, improve their quality and build confidence in their use.

Indeed, through article 18 of the law N ° 2004-011 of March 30th, 2004 on the organization of the statistical activity and creating the National Institute of Statistics (INS), modified and completed by the Law No. 2014-66 of 05 November 2014, the National Institute of Statistics (INS) is dedicated as the central executive body of the National Statistical System (NSS), and the law gives it full mandate, *inter alia*, to "*ensure the dissemination of quality statistical information by all the services and organizations of the System*".

Also, to strengthen the confidence of data users in the quality of the statistical data produced by the National Statistical System (NSS), the adoption of a quality assurance approach in the production and dissemination of official statistical data becomes very necessary in Niger, because "*the reputation of a National Institute of Statistics (INS) is mainly based on its ability to produce quality data*".

Niger's quality assurance framework incorporates the fundamental principles of official statistics governing the African Charter on Statistics, the main dimensions of the International Monetary Fund's (IMF) Data Quality Assessment Framework (DQAF), United Nations National Quality Assurance Framework, Statistics South Africa, Statistics Canada Quality Assurance Frameworks and the European Statistics Code of Practice.

At the national level, this framework mainly integrates the orientations and concerns of Niger's second (2nd) National Strategy for the Development of Statistics (**NSDS II**) 2014-2018, in particular, the aspects relating to the dissemination policy as well as archiving statistical data.

Finally, Niger is the fifth (5th) African country to set up a real National Quality Assurance Framework (**NQAF**) after South Africa, Burundi, Ethiopia and Uganda.

## **ANNEX**

### **Quality assessment process of the National Statistical System (NSS), the institutional environment, processes and statistical products in Niger**

#### **Objectives**

The general objective of this process is to contribute to the quality of the general framework and operational procedures, the statistical data produced by the services and organizations of the National Statistical System (NSS) before their certification.

Specifically, this process has the following objectives:

- define the main steps and procedures for the quality assessment of the National Statistical System (NSS), the institutional environment, the data production chain and the statistical products;
- identify key actors involved at each stage and define their responsibilities;
- define the products (output or deliverables) expected at each step.

#### **Expected results**

The expected results of this process are:

- the main steps and procedures for the quality assessment of the National Statistical System (NSS), the institutional environment, the data production chain and the statistical products are defined;
- the main actors involved at each stage are identified and their responsibilities are defined;
- the products (output or deliverables) expected at each stage are defined.

### **Main steps of the quality assessment of the National Statistical System (NSS), the institutional environment, processes and statistical products**

#### **Step 1: Signature of a memorandum of understanding**

During this preparatory stage, INS and the department (s) or agency (s) whose statistics shall be assessed must sign a Memorandum of Understanding, in which the two (2) parties agree on a mutual agreement:

- assessment objectives ;

- assessment expected results ;
- assessment methodology ;
- the assessment team, in which the Statistical Services Inspectorate ( ISS) created by the INS will have a fundamental role to play;
- timing and budget of the assessment.

Memoranda of Understanding will be developed on a case-by-case basis, depending on whether the National Statistical System (NSS), the institutional environment, the data production chain or statistical products are to be evaluated.

- ☞ **Responsible structure :** INS General Management
- ☞ **other structures concerned :** Directorate of Coordination and Management of Statistical Information (DCMIS), ISS, Services or organizations producing public statistics
- ☞ **Output of the step:** Memorandum of Understanding signed between the parties.

### **Step 2 : Quality assessment**

During this stage, the aim is to evaluate the National Statistical System (NSS), the institutional environment, the data production chain or the statistical products, according to the assessment grids enshrined in the National Quality Assurance Framework of Public Statistics (NQAF / PS), and produce a quality report.

- ☞ **Responsible structure :** Assessment Team
- ☞ **Other structure concerned:** INS Directorate of Financial and Material Resources (**DFMR**), Permanent Technical Secretariat of the National Statistics Council (**PTS / NSC**).
- ☞ **Output of this step :** Quality report with recommendations

### **Step 3: Feedback of assessment results**

At the end of its work, the assessment team submits its quality report at the discretion of the General Manager of INS, who reserves the right to declare, on this basis, whether the statistics evaluated are of acceptable quality and publishable. In the event that they are not, he will send reasoned recommendations to the service or producer organization, in order to take necessary measures to improve the quality of the public assessed statistics.

- ☞ **Responsible structure :** INS General Management
- ☞ **Other structure concerned :** DCMSI
- ☞ **Output of the step:** Motivated recommendations of INS General Manager to the attention of managers of services or organizations producing assessed public statistics.