



CARICOM QUALITY ASSURANCE FRAMEWORK (CQAF) -PHASE 1



CARIBBEAN COMMUNITY (CARICOM) SECRETARIAT
JANUARY 2019

CARICOM QUALITY ASSURANCE FRAMEWORK (CQAF) -PHASE 1

**REGIONAL STATISTICS PROGRAMME
CARIBBEAN COMMUNITY (CARICOM) SECRETARIAT**

January 2019

Copyright © 2019, Caribbean Community (CARICOM) Secretariat

CARICOM QUALITY ASSURANCE FRAMEWORK –PHASE I

Prepared and Compiled by

Caribbean Community (CARICOM) Secretariat on behalf with the Standing Committee of Caribbean Statisticians

*Turkeyen
P.O. Box 10827
Georgetown
Guyana*

Telephone: (592) 222-0001 /0006

Fax: (592) 222-0098

E-mail: stats1@caricom.org

Website: www.caricomstats.org

ISBN 978-976-600-436-1 (Paperback)

ISBN 978-976-600-437-8 (Internet ed.)

PREFACE

The process of statistical production in the Caribbean Community (CARICOM) is conducted in an environment of inadequate resources, juxtaposed with an ever-increasing call for new and wider ranging statistics such as for the monitoring of the Sustainable Development Goals (SDGs). As statistical offices attempt to satisfy the needs of users, they must do so while continuing to offer the highest assurance on the quality of the data. The current document presents **Phase I of the CARICOM Quality Assurance Framework (CQAF)** comprising five key principles in this first phase and will move towards a complete CARICOM Regional Quality Assurance Framework in the near future with the completion of the Phase 2 with seven (7) additional principles.

The goal of the CQAF is to ensure that the statistics produced are fit for purpose while at the same time being a manageable framework to implement across countries. The preoccupation with the development of a quality assurance framework represents a concerted effort by the Standing Committee of Caribbean Statisticians (SCCS) to address statistical quality as a major outcome to be achieved in Member States and within the Regional Statistical Programme (RSP). The timing of this CQAF document coincides with the recent decisions by CARICOM Heads of Government to reinforce the importance of statistics as central to the integration movement as follows:

- the endorsement of the Action Plan for Statistics in the Caribbean at the Thirty-Seventh Regular Meeting of the Conference of Heads of Government (HGC) of the Caribbean Community in 2016;
- the endorsement of the preparation of the Regional Strategy for the Development of Statistics (RSDS) at the Thirty-Eighth Regular Meeting of the HGC in 2017, and
- the endorsement of the CARICOM RSDS Strategic Framework as prepared by the SCCS at the Thirty-Ninth HGC in 2018.

Quality Assurance is a strategic objective under the CARICOM RSDS Strategic Framework, situated under the Strategic Priority, Standards and Harmonisation, which seeks 'to advance the production of High Quality, Comparable, national and intra-regional statistics.

Fundamentally, The CQAF is grounded in the United Nations Fundamental Principles of Official Statistics and in the CARICOM Code of Good Statistical Practices (CGSP). The CQAF represents an important step in, not only promoting greater assurance in the use of statistics compiled by and for the Region but it should contribute in promoting the sustainability of practices that can ensure continuity in the fulfilling of the mission of providing harmonized, high quality statistics to users. The CGSP questionnaire will continue to be self-administered *every three years* as agreed to by the SCCS enhanced by a Peer Review System. The CGSP/Peer Review process will be a periodic assessment. The CQAF process is to be infused in the systems and processes of the NSOs and the wider NSS where feasible. The CGSP and the CQAF should together enable high quality CARICOM Statistics.

Given the challenges being experienced by Member States such as staff turnover and inadequate human and financial resources, the documented guidelines provided in the CQAF can enable, with the support of the CARICOM Secretariat, the implementing of a quality assurance framework in countries. It is anticipated that very small offices can follow and implement the CQAF with the five principles. Future revisions of the CQAF will incorporate case studies of implementation by NSOs across the Region.

The CQAF will inform the key steps that should be taken to ensure the production of high quality statistics at the National Statistical Offices (NSOs) and in the RSP, thereby assuring confidence in the statistical products. It will also serve to ensure the sustainability of best practices grounded in quality within the NSOs and in the RSP.

ACKNOWLEDGEMENTS

The Caribbean Community (CARICOM) Secretariat would like to thank the representatives from Member States, Associate Member States, the CARICOM Advisory Group on Statistics (AGS) and the Standing Committee of Caribbean Statisticians (SCCS) for their contribution in the development of the CARICOM Quality Assurance Framework (CQAF).

The foundation work on the development of a quality assurance system originated under initial work by the Regional Statistical Programme of the CARICOM Secretariat that sought to encourage countries to document their metadata in a standardised format. In addition, the AGS commenced work on measuring the performance of the statistical offices (Director of Statistics of Suriname) and work also continued under the Ninth European Development fund (EDF) on a regional Quality Assurance Framework. The European Union and the Director of Statistics of Suriname deserve special commendation for these efforts.

Special thanks is extended to the staff of the Regional Statistics Programme for the diligent efforts extended towards compiling and publishing this document.

Special appreciation is also extended to the staff of the Statistics Canada under the Project for the Advancement of Statistics in the Caribbean Region (PRASC) for their support. The comments received from the officer assigned from PRASC to review the CQAF were invaluable in enabling the final product and the Region is indebted to her for her willingness and her incisive inputs.

ABBREVIATIONS

AGS	-	Advisory Group on Statistics
ADP	-	Accelerated Data program
CAPS	-	Caribbean Association of Professional Statisticians
CSS	-	CARICOM Statistical System
CARICOM	-	Caribbean Community
CISP	-	Caribbean Integration Support Programme
CGSP	-	CARICOM Code of Good Statistical Practices
CQAF	-	CARICOM Quality Assurance Framework
CSME	-	CARICOM Single Market and Economy
DQAF	-	Data Quality Assessment Framework
GDDS	-	General Data Dissemination System
HGC	-	Conference of Heads of Governments
HLF	-	High Level Advocacy Forum
ICT	-	Information and Communication Technologies
IDB	-	Inter-American Development Bank
IMF	-	International Monetary Fund
NSDS	-	National Statistical Development Strategy
NSO	-	National Statistical Office
NSS	-	National Statistical System
M& E	-	Monitoring and Evaluation
PRASC	-	Project for the Regional Advancement of Statistics in the Caribbean
RSDS	-	Regional Strategy for the Development of Statistics
RSP	-	Regional Statistics Programme
RSWP	-	Regional Statistics Work Programme
SDDS	-	Special Data Dissemination System
DQAF	-	Data Quality Assessment Framework
SNA	-	System of National Accounts
SCCS	-	Standing Committee of Caribbean Statisticians
SDGs	-	Sustainable Development Goals
TWG	-	Technical Working Group
UN	-	United Nations

Table of Contents

PREFACE.....	ii
ACKNOWLEDGEMENT.....	iv
ABBREVIATIONS.....	v
1. INTRODUCTION.....	1
2. QUALITY PRINCIPLES ON THE INSTITUTIONAL ENVIRONMENT.....	4
2.2 Principle 4: Quality Commitment	4
Indicator 4.1	4
Indicator 4.2	7
Indicator 4.3	10
Indicator 4.4	11
2.3 Principle 5: Statistical Confidentiality	13
Indicator 5.1	13
Indicator 5.2	14
Indicator 5.3	15
Indicator 5.4	16
Indicator 5.5	18
Indicator 5.6	19
3. QUALITY PRINCIPLES ON THE STATISTICAL PROCESSES	22
3.2 Principle 7: Sound Methodology	22
Indicator 7.1	22
Indicator 7.2	24
Indicator 7.3	25
Indicator 7.4	26
Indicator 7.5	27
Indicator 7.6	28
Indicator 7.7	29
4. QUALITY PRINCIPLES ON THE STATISTICAL OUTPUTS.....	31
4.2 Principle 11: Relevance.....	31
Indicator 11.1	31
Indicator 11.2	33
Indicator 11.3	34

4.3	Principle 13: Timeliness.....	35
	Indicator 13.1	35
	Indicator 13.2	36
	Indicator 13.3	37
	Indicator 13.4	38
	Indicator 13.5	39
	ANNEX I Background to the Fundamental Principles of Official Statistics.....	40
	ANNEX II Foundation work on the Development of the CARICOM Quality Assurance Framework.....	41
	ANNEX III Correspondence between the Generic National Quality Assurance Framework Template and the European CoP, CARICOM GSP, IMF DQAF, LAC proposal and StatCan	44
	ANNEX IV Definition of Terms (Glossary).....	48

1. INTRODUCTION

WHAT IS THE CARICOM QUALITY ASSURANCE FRAMEWORK

The Caribbean Community (CARICOM) Quality Assurance Framework (CQAF) is the supporting framework of the CARICOM Code of Good Statistical Practices (CGSP).

The CGSP is based on fifteen (15) principles and is administered through a self-assessment questionnaire. As mentioned, the CARICOM CGSP is grounded in the UN Fundamental Principles of Official Statistics. A background to the UN Fundamental Principles of Official Statistics is in **Appendix I**. It is a vital mechanism to assess quality and good practices in Statistics. The fifteen (15) principles of the CARICOM CGSP are as follows:

A. Institutional Environment

- Principle 1: Professional Independence
- Principle 2: Mandate for Data Collection
- Principle 3: Adequacy of Resources
- Principle 4: Quality Commitment
- Principle 5: Statistical Confidentiality
- Principle 6: Impartiality and Objectivity

B. Statistical Processes

- Principle 7: Sound Methodology
- Principle 8: Appropriate Statistical Procedures
- Principle 9: Non-Excessive Burden on Respondents
- Principle 10: Cost Effectiveness

C. Statistical Output

- Principle 11: Relevance
- Principle 12: Accuracy and Reliability
- Principle 13: Timeliness and Punctuality
- Principle 14: Coherence and Comparability
- Principle 15: Accessibility and Clarity

Rationale

The Forty-Second Meeting of the SCCS, held in Cayman Islands 23-25 October 2017, endorsed the recommendation of the Twentieth Meeting of the CARICOM Advisory Group on Statistics (AGS) that was held in Paramaribo, Suriname, 19- 23 June 2017, that the CQAF should commence with a small subset of the principles of the CGSP. This approach is being presented in this document as **Phase 1 of the CQAF** and includes the following CGSP Principles:

- Quality Commitment (4),
- Statistical Confidentiality (5)¹,
- Sound Methodology (7),
- Relevance (11) and
- Timeliness and Punctuality (13).

The foundation work undertaken by the AGS on the development of the CQAF is in **Appendix II**. For those countries that have the capacity to undertake work beyond the Phase 1 CQAF, documentation (Phase 2-CQAF) will be developed for their use. Phase 2 will contain the following principles:

- Impartiality and Objectivity (6);
- Appropriate Statistical Procedures (8);
- Non-Excessive Burden on Respondents (9);
- Cost Effectiveness (10);
- Accuracy and Reliability (12);
- Coherence and Comparability (14) and
- Accessibility and Clarity (15).

The remaining three Principles, Professional Independence (1), Mandate for Data Collection (3) and Adequacy of Resources while directly impacting data quality are not of the form that can be readily incorporated in a quality assurance framework.

The mapping of the CARICOM CGSP into other quality frameworks including the

¹ The 20th AGS recommended four principles and a fifth principle, Statistical Confidentiality was added post the meeting and agreed to subsequently be the AGS.

European Statistics CoP is provided in **Appendix III** ².

The format for the Phase I of the CQAF document consists of presenting for each of the selected principles of the CGSP the following:

- A brief introduction of the group³ containing the principles;
- A brief **statement** of the principle;
- The **context** of the principle comprising the following:
 - The **indicators** for each principle are listed;
 - The **High Level or Strategic Level** actions that are required to be put in place in developing the system are listed for each indicator;
 - Actions required at the **Operational Level** are listed for each indicator. These actions are the practical activities, procedures and instructions to make operational the framework and to routinize the application of each principle. Essentially the operational level provides information on “how to do it”.
 - A **Checklist of Performance Measurements** is presented for each indicator to enable a quick assessment of key requirements for appropriate application of the principles.

² The linkages between the CARICOM CGSP, the European CoP, the DQAF, the LAC CoP and StatCan QAF are provided in this Appendix.

³ There are three main groups under which the principles of the CGSP are classified- Institutional Environment, Statistical Processes and Statistical Outputs.

2. QUALITY PRINCIPLES ON THE INSTITUTIONAL ENVIRONMENT

2.1 Introduction

Institutional and organizational factors and arrangements have a significant influence on the effectiveness and credibility of a statistical authority in the production and dissemination of official National and Regional Statistics. The relevant issues are professional independence, mandate for data collection, adequacy of resources, quality commitment, statistical confidentiality, impartiality and objectivity. The principles, Quality Commitment and Statistical Confidentiality are included in this section.

2.2 Principle 4: Quality Commitment

Member States commit themselves to operate according to a high level of quality in producing and disseminating official statistics.

Context:

It is important to have a commitment to high quality in producing official statistics because data will only be useful if the quality is good. Accurate, reliable and timely information contribute to sound decision-making. Therefore, commitment to sound processes for collecting, compiling, processing and disseminating data are essential in ensuring that the statistical outputs are of high quality.

Indicator 4.1 An overarching policy document on Quality has been prepared and made available to the public. The organisational infrastructure is in place to monitor the quality of the production and dissemination of statistics.

High/Strategic level

1. **The CARICOM Code of Good Statistical Practices (CGSP)** complemented by the Peer Review system is in place as a standard for Quality Assurance across the region. The CGSP complemented by the Peer Review system has a schedule for its implementation

2. **Infrastructure exists for the application/use of the quality guidelines** of the CQAF or the adaptation development of these guidelines;
3. **Related to (2) country-specific or national Quality Assurance Framework** based on the CQAF could also be developed to ensure the operationalising of the CGSP throughout the development, production and dissemination of statistics. The country-specific QAF will be aligned to the CARICOM CGSP once it is based on the CQAF.

The steps in applying the CQAF should essentially comprise:

- a. An **overarching statement** or **declaration** of commitment to quality and specific **statements where required** which should all be made public and should be agreed/signed on to by all managers/supervisors within the NSO;
- b. Incorporation within the Organisational Structure of the NSO of a function/position (s) for Quality Assurance. Ideally, there should be a **unit/part of a division** that advises on the **development and management of quality** within the NSO. At the very least, there should be a **dedicated staff-member** to coordinate the development and management of the process. In the absence of either scenario time should be allotted from key staff-members at set times during each week for the implementation of the QAF;
- c. **An Implementation guide** should be developed to facilitate the implementation of both the High Level and Operational Level practices and actions in the CQAF;
- d. **Staff Training Programme** on quality should exist;
- e. **Communication Programme** to inform users of the CGSP and the CSQAF framework and results should exist.
- f. A **Business Process model**⁴ should be developed that clearly articulates the various stages of the statistical production process around which the management of quality would be required.

⁴ The Generic Statistical Business Process Model (GSBPM) of the UNECE was recommended during the meeting held on the Transformative Agenda for the Modernisation of Official Statistics, held in Barbados in September 2016. The GSBPM describes and defines the set of business processes needed to produce official statistics. It provides a standard framework and harmonised terminology to help statistical organisations to modernise their statistical production processes, as well as to share methods and components. The GSBPM can also be used to provide a framework for process quality assessment and improvement.

Items (a) to (e) should constitute the starting point in applying the CQAF.

Operational Level

1. **Undertake self- assessment of the CARICOM CGSP** (every three years);
2. **Conduct of Peer-Review** (every three years or as determined by the SCCS);
3. **Sign/Commit to the declaration on quality;**
4. **Undertake country-specific quality assessment, CQAF** at a time-period to be determined. These can correspond to precede the assessments in (1) and (2) and should take the form of appropriate quality reviews/assessments of the processes, systems and mechanisms of data production and dissemination.
5. **Undertake Training programme at regular intervals** to ensure effective training of staff and training-of trainers;
6. **Prepare more detailed and unambiguous procedures and instructions** and explanatory notes as required to support the implementation of the specific relevant processes listed under this section. Some of these notes may will be prepared as “lessons learnt” during the course of implementation. These procedures should be adequate to assure transparency and accountability about products, processes and interpretability of data. These notes etc. should be comprehensive and should be incorporated in the main Quality Guidelines on a periodic basis;
7. **Inform Members of the public about the guidelines,** the declarations /statements on quality and the outcome of the reviews.
8. **Develop a Business Process Model**

Checklist of Performance Measurement

- i. Self-assessment score from CGSP; (Periodic)
- ii. Report from Peer-Review Activity (periodic)
- iii. An officially adopted and implemented quality policy.

- iv. A declaration/statement on the quality commitment developed and publicised.
- v. Clearly established quality checklists to assure methodological soundness.
- vi. Implementation Guide
- vii. Communication Plan
- viii. Detailed procedures and instructions and explanatory notes as part of the guidelines are produced as required at the operational level.
- ix. Staff Training Programme exists and Staff training occurs at regular intervals, and as often as required.
- x. An active quality management committee/unit or similar system is in place. Schedule in terms of staff -time/meeting allocation for the application of the QAF is developed and implemented where a formal and regimented committee may not be completely possible
- xi. User satisfaction assessment is done. Results are made public and used in planning and continuous quality improvement initiatives.
- xii. Plan/proposal for Business Process model development.

Indicator 4.2 Systems and Procedures are in place to monitor the quality of the statistical production processes of collection, processing and dissemination of statistics.

High/Strategic Level

1. **Quality Monitoring Infrastructure:** Methodological support, financial, technical, staffing support and relevant tools and related infrastructural support such as IT are available to monitor the statistical production processes of collecting, processing and disseminating statistics
2. **Quality Review System:** A System is in place to review the results of quality assessments and specifically for trade-offs between quality and continued production and dissemination of statistics in a timely manner. A system of informing all staff as well as relevant staff on the outcome or specifics of the review should exist;
3. **Procedures on Quality:** Procedures exist to enable the incorporation of quality considerations in statistical production and dissemination processes.

4. **System of documentation** of quality exists;

Operational Level

1. **Prepare Implementation/Operational Quality Assurance Plan:**

An Implementation/Operational Quality Assurance Plan should be in place for the statistical processes and which will detail the procedures, standards including legislation, rules for the conduct of operations specific to quality control actions. This implementation plan should serve to evaluate quality, detect, prevent, and address errors and issues that in general negatively impact quality at every stage of the statistical production processes

The Implementation or Operational Quality Assurance Plan should include the following:

- a. Process for documenting Metadata utilising modernised approaches such as the Accelerated Data Program (ADP) tool;
- b. User feedback mechanisms such as User-Producer schedule for seminars/questionnaires to be administered;
- c. Process for designing quality systems for all statistical production and dissemination processes including the following:
 - (i) the efficiency of the process and the effectiveness in delivering results- check to see that the process [production and dissemination] produces the exact result that is required- not more not less;
 - (ii) reliability – the process results in the delivery of the same output every time the same input is used;
 - (iii) robustness in delivering the desired outputs on repeated occasions – the process works properly even under extreme conditions;
 - (iv) security – the process does not result in the loss of data or in unauthorised access to the data;
 - (v) flexibility relative to adjustments and updates- the process should

allow for updates to be made as needed;

(vi) reproducibility- up-to-date documentation of the process should be available;

(vii) compatibility/interoperability – the process should allow the flow of data easily from one part of the system to the next without having to be transformed or manipulated;

(viii) ability to monitor the processes and to detect errors- there should be built in performance metrics to enable monitoring and detection of errors. A report should be produced on errors in production and dissemination by type of error e.g. 'broken hyperlink', or errors in accuracy of data.

d. Timeframe for the quality assessments.

2. **Conduct Review meetings on Quality Assurance:** Meetings should be convened at scheduled times to review Quality Assurance reports;
3. **Prepare an Action Plan:** Action Plan from review meeting with recommended decisions in (1) should be developed with timelines for the specific activities.
4. **Provide Guidance to relevant staff:** Informing relevant staff on actions required to enable improvement in practices should be planned and operationalised;

Checklist of Performance Measurement

- i. Methodological Frameworks;
- ii. Staffing with required skills set;
- iii. Finance for enabling adequacy of resources/staff/skills-sets;
- iv. IT infrastructure is adequate including equipment, software applications and staffing;
- v. Detailed Quality Assurance Implementation Plan

Indicator 4.3 Product quality is regularly monitored and assessed and quality reports produced and made public.

High/Strategic Level

1. **Product Quality Monitoring System:** A system should be in place to regularly monitor product quality over time using the results of quality reporting geared for both users and producers of statistics. The results produced from this process should also be regularly analysed to informed corrective or new actions needed to improve product quality.
2. **Procedures on User Satisfaction survey:** A structure should be in place to implement periodic user satisfaction surveys or other such initiatives and to disseminate the results produced on a regular basis.

Operational Level

1. **Conduct Review meetings on Quality Assurance:** Meetings should be convened at scheduled times to review Quality Assurance reports;
2. **Prepare an Action Plan:** Action Plan from review meeting with recommended decisions in (1) should be developed with timelines for the specific activities.
3. **Provide Guidance to relevant staff:** Informing of relevant staff on actions required to enable improvement in practices should be planned and operationalised;

Checklist of Performance Measurement

- i. Percentage of indicators and targets in place to measure the quality of statistical products.
- ii. Percentage of quality reports presented according to a standardised format for comparison across statistical processes and products.
- iii. Reports on user perception of quality on statistical process and products.

- iv. Relevant aspects of the Self-assessment score from CARICOM code of Good Statistical Practices (periodic).
- v. Relevant aspects of the report from the conduct of the Peer Review activity (periodic).

Indicator 4.4 There is a regular and thorough review of the key statistical outputs using external experts where appropriate.

High/Strategic Level

1. **Planning for Quality Reviews:** Schedule for the conduct of quality reviews (CGSP/Peer review, country specific QAF) exists;
2. **Staffing Infrastructure:** Staffing Infrastructure including trainers as part of the Organisational structure is in place for the conduct of these reviews;
4. **Reference documentation:** Documents for the conduct of quality review are in place and include – the CGSP self-assessment questionnaire and Peer Review guidelines, questionnaire and report format; relevant materials, such as questionnaires, guidelines and reporting formats for the country-specific QAF.
5. **Action Plans:** Action Plan format exist and Action plan completed based on findings of quality review;
6. **User Feedback:** User survey framework;
7. **Mechanisms for incorporating External Experts** (Optional) – as appropriate;

Operational Level

1. **Conduct Quality Review** in accordance with schedule that has been prepared;
2. **Undertake Train-the trainer's Programme periodically** to ensure adequate competencies exist for the undertaking of the Quality Review;

3. **Organise the availability of all reference documents** for the conduct of the quality review
4. **Design a format for/complete the Action** plan relative to the review meeting
5. **Obtain external experts** if required in the undertaking of the review.

Checklist of Performance Measurement

- i. Compliance with international standards/benchmarks (GDDS, SDDS, DQAF, 2008 SNA, etc.)
- ii. Indicators produced for the various dimensions of quality:
 - a. Relevance
 - Coherence of reference dates
 - Percentage of data gaps
 - b. Accuracy and Reliability
 - Sampling errors
 - Unit response and non-response rate
 - Editing and imputation rate
 - Coherence of data sources
 - c. Timeliness and punctuality (release calendar)
 - Timeliness of first release
 - d. Time between commencement of data collection and first release
 - Punctuality of the first release
 - The number of days between the scheduled release date and actual release date
 - Timeliness of the release of the final results
 - e. Accessibility and clarity
 - Number of mechanisms/formats used for dissemination by type
 - Feedback from public on access/clarity
 - f. Comparability
 - Length of comparable time series
 - Chain linking of time series to maintain / ensure comparability among bases

- Breaks in series/new series that have not been linked
- iii. Number of activities detailed in the Action Plan by type
- iv. User-producer seminar/survey report

2.3 Principle 5: Statistical Confidentiality

The privacy of data providers (legal persons – individuals, households, enterprises, administrations and other respondents), and the confidentiality of the information they provide and its use for statistical purposes only must be absolutely guaranteed.

Context:

All data collected must be used for statistical purposes only and protected from any disclosure. All possible measures must be taken to protect against identification of persons, either directly or indirectly. The privacy of data providers and confidentiality of data should be enshrined in law and must be observed in practice.

Indicator 5.1 Statistical Confidentiality is guaranteed in law.

High/Strategic level

1. **Clear provisions in law:** Statistics legislation should contain clear provisions for the observance/safe-guarding of statistical confidentiality of individual/person data (natural or legal) and for its exclusive use for statistical purposes only. There should be clear provisions in the law as to who other than the staff of the NSO can take the Oath of Secrecy and under what conditions.

Operational Level

1. **Enact/update Statistics Bill** as required which should contain clear provisions for confidentiality/ disclosure protection, in the dissemination and use of statistics.

2. **Prepare/update and install regulations** as required which should be consistent with (1).
3. **Develop, clearly articulate/inform and implement** mechanisms for treating with breaches of confidentiality.

Checklist of Performance Measurement

- i. Statistics Act with Confidential Clause- inclusive of employees taking Oath of Secrecy, on the dissemination of person level data and on the use of data collected from MDAs for statistical purposes only and whether non-employees can take the oath of secrecy and under what conditions and what level of data;
- ii. Oath of Secrecy format;
- iii. Regulations with operational procedures corresponding to Statistics Act;
- iv. Monitoring system for ensuring prevention of disclosure protection;
- v. Mechanisms for obtaining agreement from persons (enterprises) where publication of disaggregated data may result in breach of confidentiality.

Indicator 5.2 Statistical authority staff members sign legal confidentiality commitments on appointment.

High/Strategic Level

1. **Mandatory Confidentiality commitments:** Commitment for the observance of statistical confidentiality exists through mandatory taking of the oath of secrecy by all staff and other relevant persons.

Operational Level

1. **Ensure all staff/persons take the oath of secrecy:** Staff upon assuming appointment whether permanent or temporary must take the oath of secrecy. In accordance with the law where other persons (non-staff) who undertake on behalf of the statistical authorities to undertake work /given access to specific data sets/ level of data, they must take the oath of secrecy.

Checklist of Performance Measurement

- i. All staff (One hundred percent) have taken the Oath of Secrecy;
- ii. Other relevant persons take the Oath of Secrecy.

Indicator 5.3 Substantial penalties are prescribed and administered for any wilful breaches of statistical confidentiality.

High/Strategic Level

- 1. **Provisions exist in the legal framework** to prohibit information disclosure by all staff and other persons taking the Oath of Secrecy;
- 2. **Fines, penalties and penal terms of imprisonment** that are to be administered for breaches of confidentiality are specified in the legal framework.

Operational Level

- 1. **Ensure the passing of Regulations corresponding** to Statistics Act that provide further details on the penalty provisions and the procedures to be followed in applying these penalties;
- 2. **Develop/implement a System for review** and updating of penalties, fines, penal terms etc;
- 3. **Monitor and document observed breaches of statistical confidentiality** and the corresponding outcomes such as the application of the fines and penalties by the relevant authority.

Checklist of Performance Measurement

- i. List of detailed procedures for breach of confidentiality are known by all staff;
- ii. Time period for review of penalties etc.
- iii. List of breaches of statistical confidentiality and outcomes.
- iv. List of penalties, fines etc applied for the breaches in (iv)

- v. Procedure for monitoring breaches and the application of fines, penalties etc.

Indicator 5.4 Instructions and guidelines are provided [to staff] on the protection of statistical confidentiality in the production and dissemination processes. These guidelines are spelled out in writing and made known to the public..

High/Strategic Level

1. **Confidentiality policy:** A confidentiality policy is available to staff and *members of the public*⁵ and lays out principles and commitment and rules/regulations and procedures related on statistical confidentiality which are consistent with the Statistics Act.
2. **Function/position in organizational structure:** The organization structure includes a position/function responsible for ensuring confidentiality including policy, guidelines development, monitoring of its application and reviewing periodically/as required the methodology for data protection.
3. **Documented Guidelines:** Documentation of the processes to be followed to ensure statistical confidentiality when disseminating data, specifically aggregate data for small population groups and data that are disaggregated by characteristics that may lead to the identification of persons, and micro data.
4. **Confidentiality/trade-off on access to data:** Updating on knowledge on confidentiality/trade-offs on granting access to statistical data for research purposes.
5. **Dissemination Policy** is in place to ensure no violation of statistical confidentiality;

⁵ The CARICOM Model Bill as endorsed by the SCCS states in Clause 12: “Any person employed in the exercise of any power or the performance of any duty under this Act, including any additional staff employed by the Chief Executive Officer pursuant to section 7(2), shall, before assuming his duties, take the oath or make the affirmation set out in the Second Schedule: The question therefore of “persons not employed” – are they to be included in the part that treats with “the performance of any duty”.

Operational Level

1. **Develop and enforce Staff Rules and Regulations** comprising clauses on statistical confidentiality/disclosure protection.
2. **Prepare and install General office procedures** that contains information on ensuring statistical confidentiality/disclosure protection;
3. **Identify and assign responsibility to a Staff member** who will ensure that a system of enabling statistical confidentiality exists and is made operational relative to the guidelines. This person should also monitor its implementation, review/update periodically its provision, undertake training of staff and ensure that there is adherence by staff/persons to the provisions.
4. **Undertake the training of staff on guidelines** and instructions to ensure statistical confidentiality in the production and dissemination of statistics.
5. **Develop and Implement Statistical disclosure control methods:** Procedures are in place to ensure the application of appropriate statistical techniques that will prevent the identification of persons/households/enterprises from any statistical data release.
6. **Develop and implement procedures for the access to individual data:** Access to individual statistical data are clearly spelt out to staff as to where and how and what conditions and the process of seeking clarification/permission or other measures (e.g. micro data lab, secure environment, anonymised data).
7. **Implement procedures that can facilitate the granting of access to data users while ensuring the maintenance of confidentiality:** Procedures are in place to strike a balance between the needs of data users against the obligation to maintain confidentiality, ensuring that there are no breaches.
8. **Review processes in place on the disclosure control:** Review and update periodically policies and procedures for maintaining confidentiality of data.

9. **Implement procedures for the dissemination of statistics** that take into consideration the issue of statistical confidentiality/prevention of disclosure of individual level data.

Checklist of Performance Measurement

- i. Staff rules and regulations for statistical confidentiality content;
- ii. Staff member duties and responsibilities related to statistical confidentiality concerns;
- iii. List of office procedures reflecting confidentiality concerns;
- iv. Infrastructure IT and general equipment e.g. password, alarm system;
- v. Staff in place/responsibilities assigned in job description;
- vi. Training schedule/list of staff trained/to be trained;
- vii. Statistical methods to review data to be disseminated/accessed by users;
- viii. Application software/methods for anonymising data.
- ix. Statistical lab or other security measures e.g. camera
- x. Dissemination Policy

Indicator 5.5 Physical and technological provisions are in place to protect the security and integrity of statistical databases.

High/Strategic Level

1. **IT Security policy:** An IT security policy has been formulated and disseminated to all staff covering the procedures to safeguard confidential and sensitive data throughout all statistical processes.
2. **General security system** in place to ensure statistical confidentiality.
3. **Appropriate physical infrastructure:** Tools, software/ security measures and related infrastructure are in place to prevent data breaches and violation of statistical confidentiality.
4. **Secured storage and monitoring of access to data:** Systems for storing or using statistical data must not allow access to data that is not permissible under existing laws.

Operational level

1. **Develop and Implement Data Security protocols:** Establish and implement data security protocols at all stages of data handling.
2. **Deploy tools/install software applications and systems of storing, archiving and retrieving data** to enable statistical confidentiality;
3. **Install secure storage system as well as mechanisms to monitor access** that guards against disclosure of individual data.

Checklist of Performance Measurement

- i. Data Security Protocols
- ii. Tools, software etc;
- iii. Storage/monitoring systems/mechanisms

Indicator 5.6 Strict protocols apply to external users accessing statistical micro data for research purposes.

High/Strategic Level

1. **Conditions for access to individual data for scientific purposes.** There should be clear conditions in the Statistics legislations relative to access to individual level data for scientific purposes.⁶ Micro data should only be provided based on a formal agreement between the parties that clearly outlines the terms of use of the data, and expectations regarding disclosure protection. Such agreements, whether new or pre-existing, must be consistent with the applicable laws of the country⁷.
2. **Safeguards for researchers access to individual data for scientific purposes:** Prior to making microdata available, measures should be taken to ensure that the privacy of data providers is strictly assured and therefore in the use

⁶ The CARICOM Model Statistics Bill contains a provision on access to “anonymized microdata” for research purposes that countries can adopt in their statistics legislation.

⁷ The CARICOM Regional Data Policy that was developed in 2012 based on two projects in data management funded by the EU and the IDB, specified that the release of data should be consistent with the applicable laws of the countries. (CCS, pp. 12).

of this data by researchers confidentiality and security are absolutely guaranteed such that there are no unauthorized identification or disclosure⁸.

3. **Control over the copying of individual data made available for purposes of scientific research:** Appropriate measures must be in place to prevent the copying of micro data by researchers when access is granted.

Operational Level

1. **Develop and make available to staff public measures to safeguard micro data for access by persons for research purposes:** Specific procedures, agreements on the term of use of individual level data should be put in place to protect the confidentiality of micro data. These procedures should include the application of data anonymization techniques to micro data; encrypting data during transfer; identification of cells with small numbers such as to prevent their dissemination. These measures should be in accordance with the Statistics Legislation.
2. **Implement the safeguards developed in (1) on access to individual level data** to ensure that the privacy of data providers is strictly enforced and that the use of individual level data by researchers absolutely and effectively guarantees confidentiality as well as security from unauthorized identification or disclosure;
3. **Monitor the use of microdata** by persons that are granted access for research purposes, which can take the form of e.g. close surveillance during use; restrictions on the copying/photographing of information and reviewing of tables/data that are accessed, to ensure that there is no individual level disclosure. This monitoring should prevent any circumstances that may lead to a breach of confidentiality. The use of micro data labs which should be effectively monitored and which is included earlier as part of the infrastructure is a mechanism for monitoring the use of microdata.

⁸ Ibid

Checklist of Performance Measurement

- i. List of measures/procedures for access of individual data by members of the public;
- ii. Checklist of Safeguards put in place;
- iii. Systems/tools and related security and monitoring infrastructure for monitoring use by public of micro data and prevention disclosure-
- iv. Tables and routine statistical products (aggregated) reviewed/checked for disclosure prevention
- v. Public use files/Data sets anonymized using statistically sound anonymization techniques and reviewed and /checked
- vi. Fully-outfitted micro data lab in use and monitored and reviewed.

3. QUALITY PRINCIPLES ON STATISTICAL PROCESSES

3.1 Introduction

Regional and other international standards, guidelines and good practices must be fully observed in the processes used by the Statistical authorities to collect, process and disseminate official statistics. The credibility of the statistics is enhanced by a reputation for good management and efficiency. The relevant aspects are Sound Methodology (7), Appropriate Statistical Procedures (8), Non-excessive Burden on respondents (9) and Cost Effectiveness (10). In the CQAF, Phase 1, Sound Methodology, Principle 7, is included. Even though these principles come under statistical processes, High Level or Strategic actions are stated.

3.2 Principle 7 - Sound Methodology

Member States commit to incorporate sound methodology in the production, analysis and dissemination of official statistics.

Context:

Sound methodology must be the basis for statistics for it to be of high quality. Internationally recommended standards must inform the production of statistics and relevant expertise, tools and procedures must be present and adequate.

Indicator 7.1	The overall methodological framework of the statistical authority follows international standards, guidelines, and good practices.
--------------------------	---

High/Strategic Level

1. **Methodological Infrastructure:** The Methodological infrastructure should exist and should conform to the most up-to date international statistical standards.
2. **Regional and National level frameworks** that should also conform to the international standards can also be developed and updated regularly based on changes at the international level as well as to incorporate good statistical practices. The overarching infrastructure may therefore comprise common regional strategies and frameworks where these have been developed and agreed to by CARICOM Member States.

3. **International Methodological frameworks** are monitored for changes/updates and revisions and national and regional frameworks are monitored to ensure that they are updated as required.
4. Use of the national and regional methodological frameworks relative to the international frameworks are monitored nationally/regionally

Operational level

1. **Document and make available a methodological framework, which should include concepts, definitions, methods, classifications and other related standards, guidelines and procedures for the production and dissemination of statistics.** The concepts, definitions, methods and other related standards etc. governing statistical processes across all statistical areas should be systematically documented and detailed using appropriate formats and tools. The documentation should be updated continuously and promptly whenever there are changes to the methodological framework such as updates of international standards.
2. **Document Regional and National Standards and Good Statistical Practices:** Where regional and national standards are applied, these must be documented to explain the concepts, methods and the rationale if any, where there is divergence from international standards. Methods of harmonisation back to the international level should be incorporated where possible e.g. international classifications should be explained and implemented for the purposes of international and regional comparisons. Additionally, Tables of Equivalence can be prepared/updated where applicable.
3. **Ensure regular updating of regional and international standards consistent** with updates and the international level and based on good practices. Document periodically, the changes that are required to be made to achieve concordance with the changes made in international standards and prepare a schedule for implementation;
4. **Facilitate and monitor use of the relevant standards** that have been documented. Prepare a report on the use or lack thereof in respect of the relevant standards;

5. **Identify, document and disseminate Good Statistical Practices:** Good practices that have been identified should be documented and shared within the NSO. This good practise can also be documented and presented at national, regional and international meetings, workshops and seminars.

Checklist of Performance Measurement

- i. International Frameworks including methodologies with concepts and methods, classifications etc
- ii. Regional/national methodologies with explanations, tables of equivalence
- iii. Good Statistical Practices

Indicator 7.2	Procedures are in place to ensure that standard concepts, definitions and classifications are consistently applied throughout the statistical authority.
--------------------------	---

High/Strategic Level

1. **Concepts, definitions and classifications:** Concepts, definitions and classifications that have been developed as applicable to the CARICOM region or at the national level and conforming to international standards and guidelines should be consistently applied within the National Statistical Systems.

Operational level

1. **Enable the application of methodological documentation:** An internal review process is in place to systematically monitor the use of the methodological documentation inclusive of all concepts, methods and classifications that have been developed.
2. **Develop and make use of a system for periodic training of staff** within the NSS on concepts, definitions and classifications and for reviewing the use made of these concepts, classifications etc.
3. **Undertake Regional and Cross-National Review Processes:** Opportunities should exist for the review and assessment of statistical processes across all

areas at the regional level bringing together relevant experts across countries. Cross-national review should also be conducted as appropriate. Therefore, at the regional level and across countries, activities for the review and assessment of *methodologies in the use* should be undertaken. These activities may include training mechanisms, regional workshops, attachments, exchange visits, remote guidance etc.

4. **Ensure accessibility of documentation:** Documentation on statistical processes including metadata should be made available to all staff within the NSS and should be disseminated publicly in an appropriate form.

Checklist of Performance Measurement

- i. Monitoring/review system for methodological framework
- ii. Schedule for periodic training
- iii. Link/access mechanism to frameworks

Indicator 7.3	The business register and the frame for population surveys are regularly evaluated and adjusted if necessary in order to ensure that they are of high quality.
----------------------	---

High/Strategic Level

1. **Infrastructure in place for the development and evaluation of business register and frames for household surveys:** Infrastructure should exist for the development and maintenance of a business register and for the household survey frames.

Operational level

1. **Development and Maintenance of the business register/Household Survey Frames:** A business register should be developed in accordance with international, regional or national guidelines as required. Procedures should be in place for the systematic updating of the register regarding all relevant changes in the population of businesses in the register (e.g. change of activity, births, deaths, mergers and acquisitions and other structural changes as well as changes of main variables). Similarly, household survey frames should be systematically evaluated to ensure that significant developments in the

environment such as new housing areas, conversion of housing areas to business development are appropriately reflected in the frame.⁹ Population and housing census records should be used to implement a significant update of the household frames separate from the systematic reviews.

2. **Quality assessment of the business register and household survey frame:** The business register should be subject to systematic review in order to assess its quality. Similarly, the survey frame should be systematically assessed to ensure high quality, particularly with respect to coverage and accuracy of information.

Checklist of Performance Measurement

- i. Procedures for updating Business Register and Household Survey frame including sources of data, periodicity of update for each specific source; timing of significant updates
- ii. Procedures for evaluating quality of business register and household survey frames including checks on data coverage in surveys; on-site checks by field supervisors and office staff, checks against other sources of information

Indicator 7.4	Detailed concordance exists between national classifications and sectorisation systems and the corresponding official systems.
----------------------	---

High/Strategic Level

1. **Infrastructure in place to keep abreast of any changes in classification systems within countries:** A staff can be assigned responsibility to monitor changes in the International classification systems and compliance on the classification systems in use within the NSO (country-level) and within the NSS as required e.g. Trade Customs.

Operational level

1. **Concordance with changes at the International Level:** Monitor revisions in the classification systems that have been undertaken at the

⁹ In this respect, countries can make use of the CARICOM Manual for the Updating of the Business Register which should be regularly updated to reflect international and national best practices.

International level, such as at the United Nations Statistics Division (UNSD) or International Labour Organisation (ILO);

2. **Work Plan for conformity:** Ensure that a work plan with timelines is developed to enable conformity to the latest revisions
3. **Correspondence tables:** Correspondence tables should be documented and kept up-to-date. Explanatory notes or comments should be made;
4. **Periodic Checks on Conformity:** Develop and implement a schedule to carry out periodic checks on all classification systems in use in the various sectors of the NSO and across the departments of the NSS.

Checklist of Performance Measurement

- i. Staff assigned;
- ii. Work Plan for conformity;
- iii. Updated Correspondence tables
- iv. Schedule for the exchange of information/periodic checks
- v. Meetings/Actions agreed/taken

Indicator	Graduates in the relevant academic disciplines are recruited.
7.5	

High/Strategic Level

1. **Recruitment of staff:** Staff with appropriate qualifications from relevant disciplines should be recruited in an open and unbiased process and in accordance with applicable national legislation.

Operational level

1. **Document Qualifications requirement for posts:** There should be documented qualifications requirement for all posts and these requirements should be in keeping with standard requirements for specific posts.

2. **Undertake Career Guidance seminars and similar outreach in schools and universities:** Periodic outreach to schools and universities relative to academic areas for jobs in statistics

Checklist of Performance Measurement

- i. Human Resource Management policy
- ii. Job descriptions
- iii. Career guidance seminars and similar outreach e.g. flyers

Indicator 7.6	Staff attend international relevant training courses and conferences, and liaise with statistician colleagues at international level in order to learn from the best and to improve their expertise.
----------------------	---

High/Strategic Level

1. **Training Policy to enable Professional and technical development:** A policy is in place for the participation of staff in training programmes, workshops and related events. All staff should have an opportunity to attend such events/be trained.
2. **High-level commitment in place towards staff development:** Engendering a culture of allowing staff to be fully engaged without interruption, in training programmes in which they have been recommended to participate.

Operational level

1. **Ensure that staff attend training courses, meetings and workshops:** Staff members attend training programmes, meetings and workshops at a national or international level on the application of standards and classifications. Personal Action Plans should be prepared and implemented to ensure that staff who benefit from training are able to make use of the training post the activities.
2. **Enable the participation of staff in networking activities internationally, regionally and nationally:** Staff should participate in technical working

groups (TWG), expert group meetings, attachment programmes /exchange visits, e-meetings and similar networking activities for their professional and technical development

Checklist of Performance Measurement

- i. Training schedule /percentage of staff by type of training
- ii. Percentage staff participating in conferences, seminars, attachments etc by type of activity/work area etc
- iii. Training Outcomes /Personal Action Plans.

Indicator 7.7	Co-operation with the scientific community to improve methodology is organised and external reviews assess the quality and effectiveness of the methods implemented and promote better tools, when feasible.
----------------------	---

High/Strategic Level

1. **Contact with the scientific community:** There should be regular contact through conferences, workshops, task forces, etc with the scientific community to discuss methodological, IT and innovative developments.
2. **Collaboration among Regional Statisticians:** Staff members of national statistical offices should liaise with other statistical colleagues remotely or via face-to-face meetings to discuss and learn about any changes to international methodological frameworks including standards, guidelines, and good practices.
3. **Participation and Presentations at conferences/meeting:** Regular participation and presentations at relevant national, regional and international conferences especially the Regional Statistical Research Seminar (organised by the RSP, CARICOM Secretariat) and other conferences organised by the Caribbean Association of Professional Statisticians (CAPS).
4. **Organisation of conferences:** The CARICOM Statistics System (CSS) including the CARICOM Regional Statistics Programme (RSP), the National Statistical Offices and other national statistics producing agencies within

the National Statistical System should seek to organise national and regional conferences, research seminars, workshops and similar events.

Operational level

1. **Undertake a Peer Review of methods used:** Peer-Review of the statistical methods used should be undertaken where appropriate every three years or as determined by the SCCS.
2. **Conduct/Participate in Conferences, research seminars, peer review activities and workshops (remotely or face-to-face)** with various stakeholders including professional statistical societies, international, regional/extra-regional and national statisticians, members of the academia/scientific community on methodological issues and advancements, IT tools and developments in Statistics, statistical innovations in general and other such developments, and best practices.
3. **Analyse recommendations from activities undertaken to improve, peer review and assess methodologies/Conduct Feedback surveys:** Analysis of recommendations and feedback from activities should be conducted
4. **Prepare an Implementation Matrix:** An implementation matrix should be prepared, and the follow-up actions required should be monitored relative to the improvement of methodologies based on the activities undertaken and the recommendations identified

Checklist of Performance Measurement

- i. Recommendations/Evaluation reports on international, regional and national conferences, research seminars, workshops, peer reviews and similar events on the methodological frameworks. IT tools and methods, other innovations and developments
- ii. Reports of face to face meetings/e-meetings/identification of actions to be taken
- iii. Feedback Surveys
- iv. Analysis of recommendations, feedback surveys
- v. Implementation Matrix

4. QUALITY PRINCIPLES ON STATISTICAL OUTPUTS

4.1 Introduction

Statistical outputs must meet users' needs. Statistics comply with quality standards and serve the needs of official institutions, governments, research institutions, business concerns and the public generally. The important issues concern the following principles: Relevance (11), Accuracy and Reliability (12), Timeliness and Punctuality (13), Coherence and Comparability (14) and Accessibility and Clarity (15). The extent to which the statistics meet these requirements imply that high quality statistics can be provided to users. In the COAF, Phase 1, the principles of Relevance and Timeliness and Punctuality are being addressed.

4.2 Principle 11: Relevance

Official statistics must meet the needs of users.

Context:

Relevance is one of the most important principles that should underscored and should be incorporated within the National Statistical Office. Data produced and disseminated by NSOs should be relevant to fulfil the needs of users in both the public and private sectors, academia, researchers, the citizens' rights for information and other users. Official Statistics is relevant if it conforms to the needs of different users.

Indicator 11.1 **Processes are in place to consult users, monitor the relevance and practical utility of existing statistics in meeting their needs, and advise on their emerging needs and priorities.**

High/Strategic Level

1. **Policies on user consultation:** Efforts should be made to include the in the Strategic Plan of the NSO as well as in the National Strategy for the Development of Statistics (NSDS) a programme to consult users. The policy can incorporate promotion of the use of statistics.
2. **User consultations Forum:** There should be regular and structured consultations of users, including focusing on both, the content of the

statistical programme and the product quality of the statistical products and services that are made available to users. These consultations can also be used to inform and explain major methodological changes that have occurred and how they will impact the statistics that are produced.

3. **Analysis of the data on the use of statistics:** A structure should be in place to analyse data on the use of statistics to support priority setting and user consultation.
4. **Identification of Users/Analysis:** Identification of users and users' expectations are required. The degree to which users' needs are being satisfied should be analysed.

Operational level

1. **Collect data on access to available statistics by users:** Implement various tools to collect data on user access to available statistics e.g. download counters, e-feedback forms.
2. **Compile and Maintain register of persons accessing data:** Compile and regularly maintain a register on various categories of persons accessing data by type of statistics used including data most used, least used and unmet needs. The register should specifically identify key persons accessing the data and their data needs.
3. **Develop User consultation guidelines/ procedures:** Guidelines/procedures for user consultation on the statistics compiled and disseminated should be implemented and monitored.
4. **Develop and Compute measures of Relevance:** Quality indicator(s) on relevance should be developed and regularly assessed/analysed periodically.
5. **Seminars on how to use the statistics:** Sessions can be held periodically or made available remotely, through videos on the use that the public can make of the statistics that are produced.

6. **Analysis of data on users:** Data collected on users should be periodically analysed including the degree to which users' expectations/needs are met. This analysis should feed back to inform the statistical work programme to ensure relevance of the data produced.

Checklist of Performance Measurement

- i. Online counters, feedbacks;
- ii. Register/Questionnaire Design format to collect user profile;
- iii. Guidelines, procedural manuals;
- iv. Indicators to measure relevance;
- v. Schedule of seminars/user consultation activities/, list of participants/profile

Indicator 11.2 Priority needs are being met and reflected in the work programme.

High/Strategic Level

1. **Regional Statistical Work Programme priorities based on national, regional and international goals and targets:** Procedures are in place to review the priorities in the RSWP based on the priorities of national regional and international goals and targets and the needs of other users; The RSWP Monitoring and Evaluation Programme should therefore incorporate evaluation of priorities to identify new, emerging priorities and those areas that have lower priorities

Operational level

1. **Undertake periodic Review of the Regional Statistical Work Programme:** Countries should undertake a review of the RSWP at the national level at a time to be determined by the SCCS to ascertain the priorities of the statistical work relative to new, emerging and changing national, regional and international priorities as agreed by governments. This review should be followed by a regional review and evaluation of the RSWP. Small-scale annual reviews can also be undertaken where this is deemed necessary. The needs of other users should also be taken into consideration;

Checklist of Performance Measurement

- i. Statistical Work Programme (which should be aligned to the RSWP);
- ii. National Development Plans/priorities
- iii. Community Strategic Plans
- iv. Internationally-agreed to goals and targets;
- v. Monitoring & Evaluation framework

Indicator 11.3 User satisfaction surveys are undertaken periodically.

High/Strategic Level

1. **System in place for the conduct of user satisfaction surveys:** As part of the quality review system, there should be process in place to gather and assess feedback from users of data

Operational level

1. **Conduct User satisfaction surveys:** User satisfaction surveys or similar user feedback mechanisms should be undertaken at least annually.
2. **Implement Improvement actions arising from the user satisfaction surveys:** Actions for improvement arising from the user satisfaction surveys should be identified and scheduled for implementation.

Checklist of Performance Measurement

- i. User Survey Forms/online forms;
- ii. Schedule for Survey;
- iii. Action Plan/implementation schedule

4.2 Principle 13: Timeliness and Punctuality

Official statistics must be disseminated in a timely and punctual manner.

Context:

Timeliness refers to the speed of disseminating data to users and reflects the¹⁰ lapse of time between the end of a reference period (or a reference date) and dissemination of the data. Punctuality refers to the possible time lag existing between the actual delivery date of data and the target date when it should have been delivered e.g. dates announced in some official release calendar. Most users require up-to-date statistics at any given time but often it can also be at a pre-established time. It is also necessary to have a balance between timeliness and punctuality on the one hand and the accuracy of the data. This issue will be dealt with in the Phase 2 COAF, which would include the Principle 12 on Accuracy and Reliability.

Indicator 13.1 Timeliness meets the highest official and international dissemination standards.

High/Strategic Level

1. **Compliance with international standards on timeliness.** There should be compliance with international standards on timeliness. Where regional /national standards are specified such as for data submission protocols, regionally or nationally, these should also be followed
2. **Production/publication of a release calendar.** To facilitate punctuality, a release calendar should be developed and published for key statistics and indicators, for which timeliness standards should be established within guidelines agreed at the level of the SCCS or at the international level.
3. **Follow-up actions identified for any divergences from timeliness targets:** Divergences from Regional and International agreed timelines should be regularly monitored and an action plan to address any challenges should be developed if timelines targets are consistently unmet.
4. **Development of a procedure to calculate and monitor quality indicators on**

¹⁰ OECD Glossary

timeliness: A procedure should be developed to regularly calculate quality indicator(s) on timeliness and these should be monitored internally.

Operational level

1. **Identify/adopt international standards on timeliness:** Standards on timeliness should be established for each area of statistical datasets, which should be in accordance international/regional standards.
2. **Develop and publish a calendar for the release of all statistics:** The calendar should reflect the timeliness of the data series.
3. **Monitor and evaluate divergences** from timeliness of each data set.
4. **Prepare indicators on timeliness:** Analyse and publish indicators on timeliness.

Checklist of Performance Measurement

- i. Document for each dataset by international, regional and national standards
- ii. Data Release Calendar/publication;
- iii. List of Timeliness Indicators

Indicator 13.2	A standard daily time is set for the release of official statistics.
-----------------------	---

High/Strategic Level

1. **A release policy:** A release policy should be defined as part of an overall dissemination policy. The release policy should distinguish between different kinds of publications of data sets and their corresponding release guidelines. (e.g. press releases, specific statistical reports/tables, general publications.

Operational level

1. **Production/publication of a release calendar.** A release calendar should be produced and published for key indicators for which punctuality standards should be established within guidelines agreed at the level of the SCCS or at the international level.
2. **Publish datasets/other information at a standard time.** Statistical releases should be published at an established standard time.

Checklist of Performance Measurement

- i. Procedures/ Guidelines;
- ii. Record of release of publications

Indicator 13.3	Periodicity of official statistics takes into account user requirements as much as possible.
-----------------------	---

High/Strategic Level

1. **User requirements incorporated in dissemination policy:** The dissemination policy of the organisation should incorporate feedback from users regarding the periodicity of the various statistical datasets being produced.

Operational level

1. **Undertake consultation on periodicity of key statistical datasets.** User feedback should be obtained regarding the periodicity of certain key statistical datasets. This can be incorporated in the user surveys.

Checklist of Performance Measurement

- i. User requirement policy content;
- ii. Questions on user requirements on periodicity

Indicator 13.4 Any divergence from the dissemination time schedule is publicised in advance, explained and a new release date set.

High/Strategic Level

1. **Dissemination Policy with content on monitoring and assessing punctuality:** Procedures on punctuality of releases should be included in the dissemination policy.
2. **System for publicising divergences from published times:** Divergences from published times of release should be announced in advance and a new release time published.

Operational level

1. **Develop and implement procedures on monitoring and assessing punctuality:** The punctuality of every release is monitored.
2. **Publish divergences from the pre-announced time in advance of the date with related explanations and new date of release.** Divergences from the pre-announced time should be published in advance including the new release time and an explanation of the reasons for the divergence.

Checklist of Performance Measurement

- i. Policy on divergence;
- ii. Guidelines and procedures to implement policy;
- iii. Calendar of release;
- iv. Worksheet with divergence details;
- v. Releases on divergence

Indicator 13.5 Preliminary results, planned and unplanned revisions of acceptable aggregate quality can be disseminated when considered useful.

High/Strategic Level

1. **Policy covering the dissemination preliminary results:** A policy covering the conditions for the release of preliminary results taking into account data accuracy should be developed.
2. **Revision Policy:** A revision policy covering planned revisions and unplanned revisions inclusive of the correction of errors should be developed.

Operational level

1. **Develop guidelines for releasing preliminary results:** The releasing of preliminary results should be regularly monitored and should be governed by comprehensive guidelines to ensure that there is acceptable data quality especially with respect to data accuracy and reliability prior to any such release.
2. **Report on the quality of preliminary results:** The public release of preliminary results should be accompanied with appropriate information regarding the quality of the published results.
3. **Develop and Publish Policy of scheduled and unscheduled revisions:** A policy should be developed and published providing guidance on the scheduled revisions of key outputs or groups of key outputs, as well as on unscheduled revisions that may be due to errors that have been detected post the publication of results.

Checklist of Performance Measurement

- i. Policy on release of preliminary data.
- ii. Guidelines on release of preliminary data
- iii. Report on quality of preliminary data
- iv. Policy on revisions/schedule to distinguish planned and unplanned revisions

Background to the Fundamental Principles of Official Statistics

The need for a set of principles governing official statistics became apparent at the end of the 1980s when countries in Central Europe began to change from centrally planned economies to market-oriented democracies. It was essential to ensure that national statistical systems in such countries would be able to produce appropriate and reliable data that adhered to certain professional and scientific standards. Towards this end, the Conference of European Statisticians developed and adopted the Fundamental Principles of Official Statistics in 1991 (CES/702), which were subsequently adopted in 1992 at the ministerial level by ECE as decision C(47). Statisticians in other parts of the world soon realized that the principles were of much wider, global significance. Following an international consultation process, a milestone in the history of international statistics was reached when the United Nations Statistical Commission at its Special Session of 11-15 April 1994 adopted the very same set of principles – with a revised preamble – as the United Nations Fundamental Principles of Official Statistics.

At its forty-second session in 2011, the Statistical Commission discussed the Fundamental Principles of Official Statistics and acknowledged that the Principles were still as relevant today as they had been in the past and that no revision of the 10 Principles themselves was necessary. The Commission recommended, however, that a 'Friends of the Chair' group revise and update the preamble of the Fundamental Principles in order to take into account new developments since the time when the Principles were first formulated. At its forty-fourth session in 2013, the Statistical Commission adopted the revised preamble.

At the same session, the Commission recommended to the Economic and Social Council the adoption of a draft resolution on the Fundamental Principles of Official Statistics. In accordance with that recommendation, the Council endorsed the Fundamental Principles in its resolution 2013/21 of 24 July 2013. In the same resolution, the Council recommended the Fundamental Principles to the General Assembly for endorsement. Pursuant to the recommendation of the Economic and Social Council, the representative of Hungary, together with 48 co-sponsors, introduced a draft resolution on the matter at the sixty-eighth session of the General Assembly. After a short informal consultation process, the Assembly, in its resolution 68/261 of 29 January 2014, endorsed the Fundamental Principles of Official Statistics.

APPENDIX II

Foundation work on the Development of the CARICOM Quality Assurance Framework

Quality Assurance in Statistics has always been a priority in CARICOM. The Regional Statistics Programme (RSP) of the CARICOM Secretariat has taken extensive initial steps to improve the quality of regional statistics in collaboration with the Standing Committee of Caribbean Statisticians (SCCS) and the CARICOM Advisory Group on Statistics (AGS)¹¹, a subsidiary group of the SCCS.

One of the earliest efforts (2001) at stimulating a focus on the production and dissemination of high quality data was the encouragement of countries to document their metadata using a standardized format. A standardized format was designed for the documentation of the methodologies and the Secretariat converted national formats to this standardized format and disseminated both formats on its website. Among the series of data documented were National Accounts, Balance of Payments and Business and Household Surveys.

Efforts that focused on quality assurance also occurred in 2005, when the initial CARICOM Advisory Group on Social Gender and Environmental Statistics received a presentation from the Director of Statistics of the General Bureau of Statistics of Suriname on, 'League Tables – Measuring Performance of Statistical Offices', at its Sixth Meeting. This system provided a mechanism of measuring the performance of Statistical Offices in Member States, based on a ranking methodology¹².

In addition, in 2009, the RSP presented a paper at the CARICOM Second Regional Statistical Research Seminar entitled '*Conceptualisation of a Regional Quality Assurance Framework*' which formed the foundation for the eventual development of such a framework. In 2010, quality assurance was on the agenda of the Thirty-Fifth Meeting of the SCCS, at which the results of a survey on data quality supported was presented.¹³

¹¹ This Advisory Group focused on the areas of the Social/Gender and Environment Statistics and was a precursor to the current CARICOM AGS

¹² This was adopted from the former Deputy Director of the United Nations Statistics Division, Williem de Vries. The approach developed for the region, as compared to the original model, had a relevant mix of statistical indicators reflecting population and living standards, as well as combining variations of EUROSTAT's dimensions of data quality

¹³ The staff that assisted in this work were employed under the Ninth European Development Fund.

Fundamentally, in 2009, with the support of a Consultancy under the Caribbean Integration Support Programme (CISP), Ninth European Development Fund (9th EDF), the CARICOM Code of Good Statistical Practices (CGSP) was developed. This initiative represents a turning point in the development of a CARICOM Quality Assurance Framework (CQAF) since it identified principles upon which the current process is built. The CGSP is based on the European Statistical Code of Practice and is grounded in the UN Fundamental Principles of Official Statistics. The CGSP can therefore be easily mapped into the European CoP.

The CGSP was administered for the first time in 2010 and has been administered in 2013/14 and 2016/17, at intervals of approximately 3 years. Current developmental work led by the AGS and endorsed by the SCCS seeks to incorporate a system of Peer Review, which can reinforce the CGSP, and at the same time the CQAF. Pilot countries have been identified, the peer review questionnaire has been developed and endorsed and initial training for peer reviewers have been conducted.

A key contributing framework to the achievement of quality assurance has been the common Regional Statistical Work Programme (RSWP), which was endorsed by the Fifteenth Meeting of the Community Council of Ministers (Council) in 2005. The mandate for the development of the RSWP dates back to the Eighth Meeting of Council and its Resumed Session both of which were held in 2001 at which Council noted the approach to enable strategic direction for the development of statistics in CARICOM including: efforts to harmonise statistics in the Region; to document statistical methodologies and the processes of data collection and compilation; and to enhance the ability to effectively depict the socio-economic status of CARICOM Member States through the establishment of a core set of socio-economic statistics.

Fundamentally, the RSWP contributed to the development of a quality assurance framework through its focus on the improvement in the production of a common core of high quality statistics for establishing, monitoring and evaluating the CARICOM Single Market and Economy (CSME), and in the facilitation of effective decision-making by policy-makers, business entrepreneurs, and others. Evidently, the basis for assuring quality must be built upon a foundation of a common core of relevant statistics and this is the fundamental contribution of the RSWP to the process of developing a quality assurance framework for CARICOM.

Relative to the efforts already put in place, the RSP in discussions with the team executing the Canadian-funded Programme for the Regional Advancement of Statistics in the Caribbean (PRASC) raised the issue of assistance in this area of developing the CARICOM Quality Assurance Framework. This led to a CARICOM regional workshop on the development of a regional quality assurance framework facilitated and funded by PRASC in December 2016 at which countries developed a draft output document. Changes made post the workshop included: firmly grounding the draft CQAF in the work already put in place on the CARICOM Code of Good Statistical Practices (CGSP), the main foundational work on quality to that point; the size of the draft CQAF was rationalized such that it does not negatively impact the production of basic statistics.

APPENDIX III

Correspondence between the Generic National Quality Assurance Framework Template and the European CoP, CARICOM GSP, IMF DQAF, LAC proposal and StatCan

Generic National Quality Assurance Framework Template (NQAF)		European Statistics Code of Practice (CoP)	CARICOM CODE OF GOOD STATISTICAL PRACTICES (CGSP)	International Monetary Fund's Data Quality Assessment Framework (DQAF)	Latin America and the Caribbean Regional Code of Good Statistical Practice (LAC)	Statistics Canada Quality Assurance Framework (StatCan)
3a.	Managing the statistical system					
NQAF1.	Coordinating the national statistical system	CoP. 2.1 CoP. 2.2 CoP. 2.3 CoP. 3.3 CoP. 3.4	CGSP 2.1 CSGP 2.2 CSGP 2.3: CGSP 3.3: CGSP 3.4:	DQAF. 0.1.1 DQAF. 0.1.2	LAC. 2.1 LAC. 2.2 LAC. 2.3 LAC. 2.4 LAC. 3.1 LAC. 3.2 LAC. 3.3	CAN 2
NQAF2.	Managing relationships with data users and data providers	CoP. 2.3 CoP. 7.7 CoP. 9.1 CoP. 9.2 CoP. 9.3 CoP. 9.4 CoP. 9.5 CoP. 9.6 CoP. 11.1 CoP. 11.2 CoP. 11.3 CoP. 15.6 CoP. 15.7	CGSP. 2.3 CGSP. 7.7 CGSP. 9.1 CGSP. 9.2 CGSP. 9.3 CGSP. 9.4 CGSP. 9.5 CGSP. 9.6 CGSP. 11.1 CGSP. 11.2 CGSP. 11.3 CGSP. 15.6	DQAF. 5.3.1	LAC 2.4 LAC 3.3	CAN 1
NQAF3.	Managing statistical standards	CoP. 7.1 CoP. 7.2 CoP. 10.4 CoP. 14.3 CoP. 15.5	CGSP. 7.1 CGSP. 7.2 CGSP.10.4 CGSP. 14.3 CGSP. 15.5	DQAF. 3.1.2		CAN 11

Generic National Quality Assurance Framework Template (NQAF)		European Statistics Code of Practice (CoP)	CARICOM CODE OF GOOD STATISTICAL PRACTICES (CGSP)	International Monetary Fund's Data Quality Assessment Framework (DOAF)	Latin America and the Caribbean Regional Code of Good Statistical Practice (LAC)	Statistics Canada Quality Assurance Framework (StatCan)
3b.	Managing the institutional environment					
NQAF4.	Assuring professional independence	CoP. 1.1 CoP. 1.2 CoP. 1.3 CoP. 1.4 CoP. 1.5 CoP. 1.6 CoP. 1.7 CoP. 1.8	CGSP. 1.1 CGSP. 1.2 CGSP. 1.3 CGSP. 1.4 CGSP. 1.5 CGSP. 1.6 CGSP. 1.7	DQAF. 1.1.2 DQAF. 1.1.3	LAC. 1.1 LAC. 1.2 LAC. 1.3 LAC. 1.4 LAC. 1.5 LAC. 1.6 LAC. 1.7	CAN 12
NQAF5.	Assuring impartiality and objectivity	CoP. 6.1 CoP. 6.2 CoP. 6.3 CoP. 6.4 CoP. 6.5 CoP. 6.6 CoP. 6.7 CoP. 6.8	CGSP. 6.1 CGSP. 6.2 CGSP. 6.3 CGSP. 6.4 CGSP. 6.5 ----- CGSP. 6.6 CGSP. 6.7	DQAF. 1.1.1	LAC. 7.1 LAC. 7.3 LAC. 7.4 LAC. 7.5	CAN 12
NQAF6.	Assuring transparency	CoP. 6.3 CoP. 6.4 CoP. 6.5 CoP. 6.6 CoP. 8.6	CGSP. 6.3 CGSP. 6.4 CGSP. 6.5 ----- CGSP. 8.6	DQAF. 1.2.1 DQAF. 1.2.2 DQAF. 1.2.3 DQAF. 1.2.4	LAC. 7.1 LAC. 7.2 LAC. 10.5 LAC. 15.3	CAN12
NQAF7.	Assuring statistical confidentiality and security	CoP. 5.1 CoP. 5.2 CoP. 5.3 CoP. 5.4 CoP. 5.5 CoP. 5.6	CGSP. 5.1 CGSP. 5.2 CGSP. 5.3 CGSP. 5.4 CGSP. 5.5 CGSP. 5.6	DQAF. 0.1.3	LAC. 4.1 LAC. 4.2 LAC. 4.3 LAC. 4.4 LAC. 4.5 LAC. 4.6 LAC. 4.7	CAN12
NQAF8.	Assuring the quality commitment	CoP. 4.1 CoP. 4.2 CoP. 4.3 CoP. 4.4	CGSP. 4.1 CGSP. 4.2 CGSP. 4.3 CGSP. 4.4	DQAF. 0.4.1 DQAF. 0.4.2 DQAF. 0.4.3	LAC. 6.1 LAC. 6.2 LAC. 6.3 LAC. 6.4 LAC. 6.5 LAC. 8.1 LAC. 8.2 LAC. 8.3	CAN 12
NQAF9.	Assuring adequacy of resources	CoP. 3.1 CoP. 3.2 CoP. 3.3 CoP. 3.4	CGSP. 3.1 CGSP. 3.2 CGSP. 3.3 CGSP. 3.4	DQAF. 0.2.1	LAC. 5.1 LAC. 5.2 LAC. 5.3 LAC. 5.4	CAN 12

Generic National Quality Assurance Framework Template (NQAF)		European Statistics Code of Practice (CoP)	CARICOM CODE OF GOOD STATISTICAL PRACTICES (CGSP)	International Monetary Fund's Data Quality Assessment Framework (DOAF)	Latin America and the Caribbean Regional Code of Good Statistical Practice (LAC)	Statistics Canada Quality Assurance Framework (StatCan)
3c.	Managing statistical processes					
NQAF10.	Assuring methodological soundness	CoP. 7.1 CoP. 7.2 CoP. 7.3 CoP. 7.4 CoP. 7.5 CoP. 7.6 CoP. 7.7 CoP. 8.2 CoP. 8.3 CoP. 8.4 CoP. 8.5 CoP. 8.6	CGSP. 7.1 CGSP. 7.2 CGSP. 7.3 CGSP. 7.4 CGSP. 7.5 CGSP. 7.6 CGSP. 7.7 CGSP. 8.2 CGSP. 8.3 CGSP. 8.4 CGSP. 8.5 CGSP. 8.6	DQAF. 2.1 DQAF. 2.2 DQAF. 2.3 DQAF. 2.4	LAC. 9.1 LAC. 9.2 LAC. 9.3 LAC. 9.4 LAC. 9.5	CAN 4 CAN 11
NQAF11.	Assuring cost-effectiveness	CoP. 10.1 CoP. 10.2 CoP. 10.3 CoP. 10.4	CGSP. 10.1 CGSP. 10.2 CGSP. 10.3 CGSP. 10.4	DQAF. 0.2.2	LAC. 12.1 LAC. 12.2 LAC. 12.3 LAC. 12.4	
NQAF12.	Assuring soundness of implementation	CoP. 8.1 CoP. 8.2 CoP. 8.3 CoP. 8.4 CoP. 8.5 CoP. 8.7 CoP. 8.8 CoP. 8.9	CGSP. 8.1 CGSP. 8.2 CGSP. 8.3 CGSP. 8.4 CGSP. 8.5	DQAF. 3.1.1 DQAF. 3.3.1 DQAF. 3.3.2	LAC. 10.1 LAC. 10.2 LAC. 10.3 LAC. 10.4 LAC. 10.5 LAC. 10.6	
NQAF13.	Managing the respondent burden	CoP. 8.7 CoP. 8.8 CoP. 8.9 CoP. 9.1 CoP. 9.2 CoP. 9.3 CoP. 9.4 CoP. 9.5 CoP. 9.6	CGSP. 9.1 CGSP. 9.2 CGSP. 9.3 CGSP. 9.5 CGSP. 9.6	DQAF. 0.1.4	LAC. 11.1 LAC. 11.2 LAC. 11.3 LAC. 11.4 LAC. 11.5	CAN 10

Generic National Quality Assurance Framework Template (NQAF)		European Statistics Code of Practice (CoP)	CARICOM CODE OF GOOD STATISTICAL PRACTICES (CGSP)	International Monetary Fund's Data Quality Assessment Framework (DOAF)	Latin America and the Caribbean Regional Code of Good Statistical Practice (LAC)	Statistics Canada Quality Assurance Framework (StatCan)
3d.	Managing statistical outputs					
NQAF14.	Assuring relevance	CoP. 11.1 CoP. 11.2 CoP. 11.3	CGSP. 11.1 CGSP. 11.2 CGSP. 11.3	DQAF. 0.3.1	LAC. 13.1 LAC. 13.2 LAC. 13.3 LAC. 13.4	CAN 3
NQAF15.	Assuring accuracy and reliability	CoP. 8.6 CoP. 12.1 CoP. 12.2 CoP. 12.3	CGSP. 8.6 CGSP. 12.1 CGSP. 12.2 CGSP. 12.3	DQAF. 3.2.1 DQAF. 3.4.1 DQAF. 3.4.2 DQAF. 3.4.3 DQAF. 3.5.1 DQAF. 4.3.1 DQAF. 4.3.2 DQAF. 4.3.3	LAC. 10.5 LAC. 14.1 LAC. 14.2 LAC. 14.3 LAC. 14.4 LAC. 14.5	CAN 4
NQAF16.	Assuring timeliness and punctuality	CoP. 13.1 CoP. 13.2 CoP. 13.3 CoP. 13.4 CoP. 13.5	CGSP. 13.1 CGSP. 13.2 CGSP. 13.3 CGSP. 13.4 CGSP. 13.5	DQAF. 3.1.3 DQAF. 4.1.1 DQAF. 4.1.2 DQAF. 5.1.3	LAC. 15.1 LAC. 15.2 LAC. 15.3 LAC. 15.4 LAC. 15.5	CAN 5
NQAF17.	Assuring accessibility and clarity	CoP. 15.1 CoP. 15.2 CoP. 15.3 CoP. 15.4 CoP. 15.5 CoP. 15.6 CoP. 15.7	CGSP. 15.1 CGSP. 15.2 CGSP. 15.3 CGSP. 15.4 CGSP. 15.5 CGSP. 15.6	DQAF. 5.1.1 DQAF. 5.1.2 DQAF. 5.1.4 DQAF. 5.1.5 DQAF. 5.2.1 DQAF. 5.2.2 DQAF. 5.3.2	LAC. 6.3 LAC. 7.4 LAC. 7.5 LAC. 17.1 LAC. 17.2 LAC. 17.3 LAC. 17.4 LAC. 17.5 LAC. 17.6 LAC. 17.7	CAN 6 CAN 7
NQAF18.	Assuring coherence and comparability	CoP. 14.1 CoP. 14.2 CoP. 14.3 CoP. 14.4 CoP. 14.5	CGSP. 14.1 CGSP. 14.2 CGSP. 14.3 CGSP. 14.4 CGSP. 14.5	DQAF. 4.2.1 DQAF. 4.2.2 DQAF. 4.2.3	LAC. 16.1 LAC. 16.2 LAC. 16.3 LAC. 16.4	CAN 8
NQAF19.	Managing metadata	CoP. 15.1 CoP. 15.5	CGSP. 15.1 CGSP. 15.2			CAN 13

APPENDIX IV

Definition of Terms - Glossary

Term	Explanatory Notes/Meanings of key Terms
Action Plan for Statistics	<p>The Action Plan for Statistics was endorsed by CARICOM Heads of Government at the 37th Meeting of the Conference of Heads of Government in 2016. There were five (5) major issues identified each of which contained Specific Actions and a timeframe.</p> <p>The Plan covers five (5) major issues:</p> <ul style="list-style-type: none"> • Governments should undertake the strengthening of the National Statistical Systems (NSS) and specifically the National Statistical Offices (NSO); • Governments should pursue the upgrading of the Information and Communication Technology (ICT) base; • Promoting of careers in Statistics should be undertaken by Governments – embedding statistics as a [data] science in the curriculum of primary and secondary schools and enabling scholarships at the tertiary level; • Governments should endorse and promote the Caribbean Association of Professional Statisticians (CAPS); <p>Governments should support a regional approach to the development of statistics to optimise scarce resources in the strengthening of the NSS.</p>
Administrative data	<p>Administrative data are information that are collected and maintained by Ministries, Departments and Agencies (MDAs) of Governments, to meet legislative or regulatory requirements. The purpose is primarily for administrative records including for regulatory or audit purposes. This is one of the sources for statistics used by the National Statistics Offices for statistical purposes only. The NSOs therefore require access to this data either through linking individual records, data extraction and submission in electronic form or through the conduct of a survey of these agencies, or other means.</p>

**Advisory Group on
Statistics**

The CARICOM Advisory Group on Statistics (AGS) is a subsidiary group of the Standing Committee of Caribbean Statisticians (SCCS), which was established in 2007, which was the year of its First Meeting in Suriname. Its main objective at that time was to enable the implementation of the common Regional Statistical Work Programme (RSWP) which was approved by the Fifteenth Meeting of the Community Council of Ministers in 2005. The Agenda of the AGS is now an expanded one, acting as a body that seeks to advance the decisions of the SCCS, participating in development projects and leading in initiatives such as the CARICOM Model Bill, the CARICOM Quality Assurance Framework and monitoring of projects funded by IDPs. The AGS has Terms of Reference. It is not a decision-making body but makes recommendations for determination by the SCCS.

**CARICOM Code of Good
Statistical Practices
(CGSP)**

The CARICOM Code of Good Statistical Practices was developed out of a Ninth European Development Project on Statistical Programming. It is based on the European Statistics Code of Ethics Practice (ESCP) and comprises 15 Principles covering the institutional environment, the statistical production processes and the output of statistics. There are indicators of good practice for each of the Principles. It currently is administered on a self-assessment basis, but work is in progress to incorporate a Peer Review system for the CGSP.

The Code of Good Statistical Practice is therefore used as a technical standardisation instrument for coordinating and developing statistical activities, upgrading their quality and, as a result, strengthening the national statistical systems. It underscores the development of the CARICOM Quality Assurance Framework which is based on 12 of the 15 Principles of the CGSP and which is currently being developed for implementation in the CSS. Please see Attachment I on the overview of key regional public goods.

CARICOM Model Statistics Bill	The Model Bill is model legislation that serves, as the name implies, as a model to Member States for developing/updating their respective statistical legislation. It was developed with the support of funding from the Inter-American Development Bank regional public goods facility and with the full participation of the CARICOM AGS and the SCCS. Please see Attachment I on the overview of key regional public goods. It takes into consideration a number of key issues impacting the work in statistics such as IT, coordination of the national statistical system, need for independence of the NSO relative to the integrity of the statistics produced and the access of anonymised micro data access.
CARICOM Statistical System (CSS)	The CARICOM Statistical System (CSS) comprises the National Statistical Offices, other producers of statistics in Ministries, Departments and Agencies (MDAs) and the Regional Statistical Programme (RSP). The NSO and the other producers of statistics in the MDAs make up the National Statistical System (NSS).
Generic Statistical Business Process Model (GSBPM)	The GSBPM describes and defines the set of business processes needed to produce official statistics. It provides a standard framework and harmonised terminology to help statistical organisations to modernise their statistical production processes, as well as to share methods and components. The GSBPM can also be used for integrating data and metadata standards, as a template for process documentation, for harmonizing statistical computing infrastructures, and to provide a framework for process quality assessment and improvement. It was developed by the United Nations Economic Commission for Europe (UNECE). It is a means to describe statistics production in a general and process-oriented way. It is used both within and between statistical offices as a common basis for work with statistics production in different ways, such as quality, efficiency, standardisation, and process-orientation.

Metadata	<p>A basic definition is that metadata are data that describe other data. Thus, statistical metadata are data that describe statistical data. Statistical metadata may also describe processes that collect, process, or produce statistical data; such metadata are also called process data. The term “statistical metadata” may also be used for descriptions of resources and tools that are instrumental in statistics production, e.g., statistical classifications and standards, registers, and statistical methods, procedures, and software. Metadata is a tool for comprehension, interpretation and understanding, providing meaning for numbers. It helps the user to determine if the data are appropriate for the problem at hand, i.e., determine its fitness for use.</p>
Methodological frameworks	<p>Regionally/internationally agreed standard sets of recommendations on how to compile systems of statistics in specific areas. The recommendations are expressed in terms of a set of concepts, definitions, classifications and rules that comprise the regionally/internationally agreed standard for measuring the specific area.</p>
Microdata	<p>The term “microdata” refers to sets of records containing information on individual persons, households or business entities. Microdata are obtained from statistical surveys, censuses and administrative sources and are usually aggregated in the form of tables or otherwise for use in the production of official statistics. Included in the Core Values of the RSDS is the commitment to Confidentiality and the guarantee that the privacy of data providers - households, individuals, enterprises, administrations and other respondents would be upheld and that information provided would only be used for statistical purposes. The SCCS has adopted a position on access to microdata in the Region which states, in part, that ‘access to all statistical data, whether microdata or tabular data, shall be strictly in accordance with the Statistics Acts of CARICOM Member States and Associate Members’ and ‘encourages Member States and Associate Members to establish mechanisms for disclosure prevention, such as data anonymisation and to provide access to microdata under controlled conditions, such as microdata laboratories’.</p>

National statistical office (NSO)	The NSO is a central statistical agency mandated to produce key official statistics. It may be a department or office of a ministry or an autonomous or semi-autonomous statistical authority.
National Statistical System (NSS)	The national statistical system (NSS) is the ensemble of statistical organisations and units within a country that jointly collect, process and disseminate official statistics on behalf of the national government.
National Strategy for the Development of Statistics (NSDS)	The NSDS is a mechanism that has been developed by the organisation Partnership in Statistics for Development in the 21st Century (PARIS21), based on strategic planning, and used to assist countries in strengthening statistical capacity. For regional statistical offices, there is also a Regional Strategy for the Development of Statistics (RSDS).
Peer review system	<p>Evaluation of the performance, or the quality of work, of a member of a peer group by the experts drawn from that group.</p> <p><i>Development of A Peer Review System in the Caribbean Code of Good Statistical Practices (CGSP):</i></p> <p>The Fifteenth Meeting of the CARICOM Advisory Group on Statistics (AGS) after discussions of the results of the second administration of the CGSP in 2013/14 made the following recommendation: (i) A Peer Review System as developed by the CARICOM AGS was recommended to be endorsed by the SCCS; (ii) The Peer Review is to be undertaken as an initial mechanism that can audit the results of the self-assessment.</p> <p>Countries have volunteered to be peer-reviewed and countries and organisations that attend the SCCS have also volunteered to be reviewers. Training of the Peer Reviewers have been conducted. Pilot Implementation of the system is outstanding.</p>
Technical Working Groups (TWG)	A technical working group is a group of persons with expertise on a particular area who work together on specific goals. In the case of the Region, TWGs have been established in a number of areas such as national accounts/trade in services, merchandise trade, SDGs and environment, in order to further the development of these statistics.