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Nations**

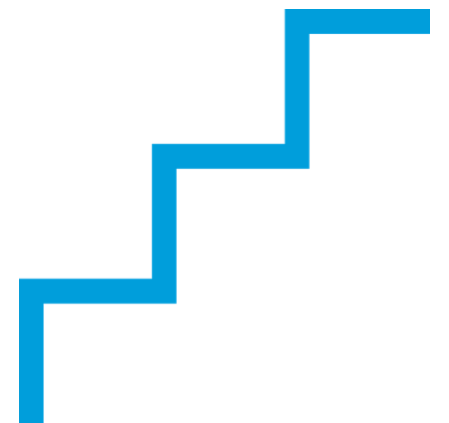
DESA
Statistics Division

Session 4.3: Quality Culture: Review of the draft guidance developed by the EG-NQAF Subgroup

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Workshop on the Implementation of a National Quality Assurance Framework for Official Statistics in Countries of the Latin American and Caribbean Region

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Draft Guidance

Structure:

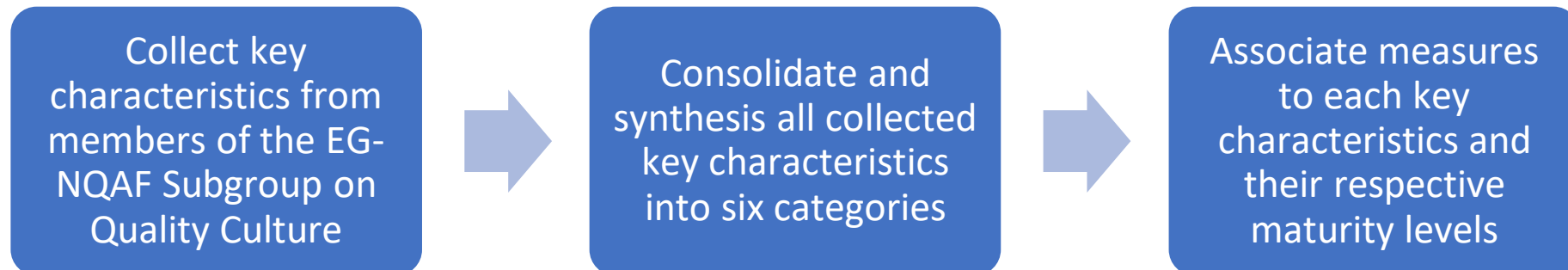
- Working definition
- Key Characteristics
- Measures with assigned levels of maturity

Working Definition

A quality culture for official statistics contains **shared values, practices, and beliefs within an organization**. It should include accurate, reliable and relevant official statistics for informed decision-making. A quality culture in an organization prioritizes **high-quality products, services, and processes, guided by core values that ensure credibility and trust**. In the context of a National Statistics Office, a quality culture also considers **spreading knowledge about quality concepts, methods, and tools to promote trust, participation, and communication, conducting high-quality production of official statistics**.

Key Characteristics

Development process:



Key Characteristics

Original Key Characteristics:

1. Awareness and Education	10. Transparency
2. Responsibility and Accountability	11. Adaptability
3. Collaboration	12. Employee Engagement
4. Continuous Improvement	13. User Engagement
5. Data Governance	14. Documentation
6. Tools and Technology	15. Data security and confidentiality
7. Quality Evaluation and error handling	16. Innovative culture
8. Leadership Support	17. Error handling and reporting
9. Communication	

Key Characteristics

Revised Key Characteristics:

- ❖ **Capacity Development** (associated with item 1: Awareness and Education, 6: Tools and Technology, 11: Adaptability, 16: Innovative culture)
- ❖ **Effective communication management** (associated with item 9: Communication, 10: Transparency, 13: User Engagement)
- ❖ **Data Governance** (associated with item 4: Continuous Improvement, 5: Data Governance, 15: Data security and confidentiality)

Key Characteristics

Revised Key Characteristics:

- ❖ **Quality Evaluation and Error Handling** (associated with item 7: Quality Evaluation and error handling, 14: Documentation, 17: Error handling and reporting)
- ❖ **High-level commitment** (associated with item 8: Leadership Support)
- ❖ **Employees commitment** (associated with item 2: Responsibility and Accountability, 3: Collaboration, 12: Employee Engagement)

Maturity model of each key characteristics

Four levels of maturity to measure the quality culture implementation status:

- **Level 1 (basic):** The NSO only has a basic awareness of the importance of quality management without a systematic approach to integrate quality culture.
- **Level 2 (advanced):** The NSO have initiated some structured activities and procedures for quality management. However, these practices may not be implemented across different departments in a standardized manner.
- **Level 3 (more advanced):** The NSO and NSS have established standardized processes and awareness for quality management. The quality assurance is integrated in the regular workflow. The NSO and NSS may not maintain the momentum of continuous improvement and innovation and not proactively evaluate quality issues for official statistics.
- **Level 4 (most advanced):** The NSO and NSS have fully integrated quality culture. There is a comprehensive and mature system in place to monitor and improve quality assurance. Innovation and continuous improvement are committed by the NSSs.

Group exercise/discussion: Quality culture: characteristics and measures

Group exercise/discussion:

Quality culture: characteristics and measures

5 groups as follows:

Each group needs to determine

- 1 note taker/facilitator/"judge" of "evidence"
- 1 presenter

Time

- 20 minutes for discussion and preparation
- 5 minutes for presentation

Group 1	Group 2	Group 3	Group 4	Group 5
Antigua and Barbuda	Grenada	Bolivia	Chile	Ecuador
Barbados	Jamaica	Cuba	Dominican Republic	Uruguay
Belize	St. Kitts and Nevis	Mexico	Paraguay	Peru
Colombia (E)	Saint Lucia	Costa Rica	Colombia (S)	Colombia (S)
	Colombia (E)	Colombia (S)	Colombia (S)	Colombia (S)
Task				
Charac. 3	Charac. 4	Charac. 1	Charac. 2	Charac. 6

Questions:

Do the characteristics and measures make sense?

Do we need amendments?

Quality culture: characteristics and measures

1. Capacity Development

- Employees receive education and training on quality assurance, ensuring they understand its significance and principles. Essential tools and technology should be provided for effective monitoring and validation of official statistics, enhancing data quality. The organization should also foster an innovative culture, encouraging idea-sharing to continually improve quality assurance and data sources, ultimately enhancing production processes and statistical quality.

1. Capacity Development: measures

Level 1	1) Rate of completion of mandatory basic training in statistical quality assurance of all staff at the NSO involved in the production of official statistics
Level 2	2) Rate of implementation of automated and standardised tools for data validation are applied to all official statistics
	3) Rate of completion of mandatory of refresher or advanced training in statistical quality assurance of all staff at the NSO involved in the production of official statistics
	4) Conduct of pre- and post-training evaluations
	5) Participation in external training events and workshops on statistical quality assurance
Level 3	6) Conduct of quality circles for identifying and implementing innovative methods and tools for quality assurance
	7) Rate of completion of mandatory basic training in statistical quality assurance of all staff in the NSS involved in the production of official statistics
Level 4	8) Rate of completion of mandatory of refresher or advanced training in statistical quality assurance of all staff involved in the production of official statistics of middle and to management
	9) Periodic benchmarking exercise with other organizations regarding the use of new methods and tools
	10) Periodic benchmarking exercise with other organizations regarding the introduction of new tools and services
	11) Number of implemented innovations for quality improvement per year

2. Effective communication management

- In a quality assurance culture, effective communication management is a fundamental characteristic. This involves the establishment and maintenance of clear, open, and consistent channels of communication for the discussion of quality issues, challenges, and improvements within the organization. This includes regular team meetings, documentations of processes, procedures, and quality-related information in a systematic and comprehensive manner, and forums for employees to voice their concerns. Quality assurance standards and values should be properly advocated and communicated across all levels of the organization. Lastly, transparency is required in how data sources and data transformation are communicated. Employees are made aware of the sources of data, how it's processed, and any potential limitations or biases. This fosters a culture of trust in the organization's data.

2. Effective communication management: measures

External communications	
Level 1	1) There is a public statement expressing the NSO's commitment to quality assurance and high-quality statistics
Level 2	2) Publication of metadata of all official statistics and regular update as required
	3) User satisfaction surveys are conducted for all major statistics
	4) All rules and regulations governing the production of official statistics are publicly available
	5) There are public statements of many other producers of official statistics expressing their commitment to quality assurance and high-quality statistics
	6) All major statistics are published with quality reports and indicators
Level 3	7) The NSO uses different communication channels including social media and monitors its usage and effectiveness through appropriate metrics
Level 4	8) All major statistics are evaluated regarding their accessibility
Internal communications	
Level 1	1) Number of the internal communication channels used within NSO, including but not limited to regular meetings, newsletters, and internal forums on quality assurance issues
Level 2	2) Frequency of staff meetings, both formal and informal to discuss quality assurance and its related topics

3. Data Governance

- Data governance involves the establishment of policies and measures aimed at safeguarding sensitive data to ensure data integrity and privacy and maintaining the accuracy and reliability of the data. This commitment entails a range of measures, including, regular security audits, consistent data management procedures and continuously updating policies for continuous improvement of the quality standard based on regular assessments, audits, and reviews.

3. Data Governance: measures

Level 1	1) All staff working in the production of official statistics have to complete a mandatory training on data confidentiality and data security
Level 2	2) Data security of infrastructure and processes is regularly reviewed in respect to the implementation of best practices
	3) Practices and tools are implemented that assure confidentiality of data while ensuring user's access to microdata and the provision of disaggregated statistics
Level 3	4) There are clear rules and agreements for data access and data sharing for the production of official statistics
Level 4	5) Data security is externally audited in respect to the implementation of best practices

4. Quality Evaluation and Error Handling

- A proper regular quality evaluation will improve the awareness of quality assurance of the staff member and thereby strengthen the quality culture within the organization. The establishment of Key Performance Indicators (KPIs) will assess the quality of official statistics and monitor progress in enhancing that quality. These KPIs serve as vital metrics that offer valuable insights into the efficacy of quality improvement initiatives. Moreover, a strong quality assurance culture emphasizes the importance of openly documenting and communicating errors as well as their underlying causes. This transparent approach fosters a cooperative and collaborative environment where continuous error handling and the enhancement of the quality of official statistics become integral parts of the organizational culture, ultimately educating staff and reinforcing the commitment to maintaining high-quality standards.

4. Quality Evaluation and Error Handling: measures

Level 1	1) Quality checks are performed, and quality indicators are identified and calculated for all statistics
Level 2	2) Availability of a National Quality Assurance Framework used to evaluate the quality of official statistics and to identify improvement actions
	3) Comprehensive documentation of errors found including their root causes
	4) Quality assurance checks and procedures are implemented at data collection/ data entry
	5) Quality indicators and quality reports are produced and published for all statistics
	6) Users are notified about any corrections and errors in a timely manner
Level 3	7) Quality assurance checks and procedures are regularly review and benchmarked against practices of others
	8) Regular revision studies are being conducted and published
Level 4	9) The NSO publishes a comprehensive quality report for all its statistics
	10) All producers of official statistics publish quality indicators and quality reports for their statistics
	11) External quality evaluation of official statistics are carried out and quality of official statistics is certified

5. High-level commitment

- High-level commitment in a quality assurance culture is a cornerstone trait that shapes the entire organization's approach to quality. When leaders actively advocate and prioritize quality assurance, it stresses the importance of quality assurance throughout the organization. By implementing policies and measures to embrace the values of quality assurance, leaders promote the responsibility for maintaining and improving quality standards within the organization.

5. High-level commitment: measures

Level 1	1) Commitment to quality is publicly available
Level 2	2) The top management publicly and repeatedly expresses its commitment to data quality and continuous improvement
	3) Quality management is institutionalized through a quality manager, focal point, circle or similar instrument
Level 3	4) The top management is directly involved in efforts to improve data quality
Level 4	5) Feedback from employees and stakeholders could assess the perceived level of leadership commitment

6. Employees commitment

- Employee commitment is a pivotal characteristic of a quality assurance culture within the organization. It is fostered through a sense of responsibility and accountability, where employees collectively share the duty to uphold accurate and high-quality official statistics. This commitment is further strengthened by a culture of collaboration, as departments and teams collaborate across functions to establish and maintain quality assurance standards. To motivate workforce in upholding the organization's quality standard, employee engagement should be signified, contributing to the establishment of a culture of excellence and continuous improvement.

6. Employees commitment: measures

Level 1	1) Rate of completion of mandatory basic training in statistical quality assurance of all staff at the NSO involved in the production of official statistics
Level 2	2) Implementation of the required quality checks and quality assurance procedures is part of the work assignments and responsibilities of all staff working in the production of official statistics
Level 3	3) Staff are participating on workshop and international activities on quality assurance
	4) The availability of the knowledge sharing platforms on quality assurance, such as Wiki platforms and document repositories to promote the sharing of information and expertise
Level 4	5) Awareness and knowledges about the national quality assurance framework and quality assurance procedures is periodically assessed through a management and staff survey
	6) The conduct of employee satisfaction survey to assess the internal collaboration, such as interdepartmental collaboration and the success of cross-functional projects on the issues with quality assurance



Thank you.