

Reforming Information Quality Assurance at the National Institute of Statistics and Geography (INEGI) in Mexico

G. M. Rubio Soto¹ and N. Torroja²

¹ *INEGI, Mexico City, Mexico; GMRUBIO@inegi.org.mx*

² *INEGI, Mexico City, Mexico; NURIA.TORROJA@inegi.org.mx*

Abstract

INEGI has introduced new legal, institutional and technical measures for strengthening information quality assurance over the last year. The approval of the Statistical and Geographical Information Quality Assurance Norm by the Board of Directors sparked a number of actions aimed at institutionalizing quality assurance. First, the Norm entrusts the Quality Assurance Committee with the task of coordinating quality assurance at INEGI. Second, the Committee developed a quality assurance framework, including an Institutional Quality Policy. Third, a quality assurance self-assessment was piloted to identify areas for improvement. Finally, the Committee developed an Annual Quality Assurance Plan based on the self-assessment results. The Plan sets out the strategies and priority actions for achieving INEGI quality assurance medium-term goals.

Keywords: Quality assurance, information quality, institutional reform.

1. Introduction

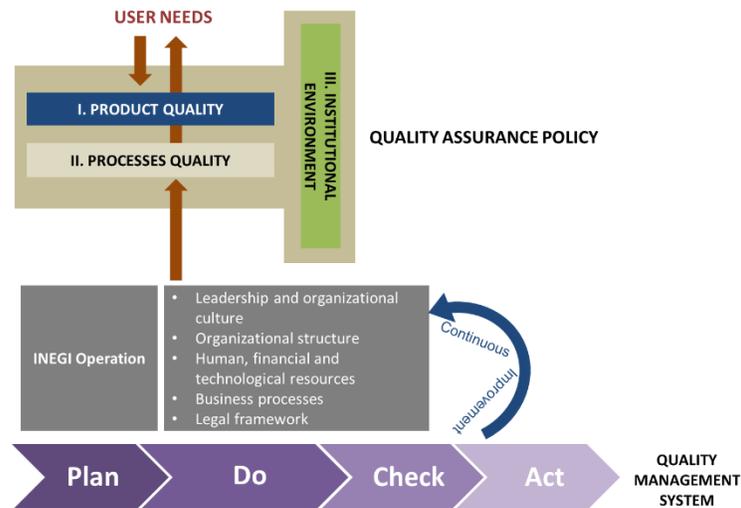
Quality assurance has evolved since INEGI creation in the early 80s. At the end of 2014, INEGI Board of Directors approved the Statistical and Geographical Information Quality Assurance Norm (QAN). The norm is aimed at institutionalizing quality assurance through outlining a general framework, establishing assessment requirements and defining institutional arrangements for quality assurance. QAN implementation will involve several phases over the medium and long term. This paper presents the initial implementation phase, including the

definition of the quality framework and setting priorities for quality assurance. These are discussed in sections 2 and 3, respectively. The final section examines lessons learned and challenges ahead.

2. INEGI Quality Assurance Framework

The Quality Assurance Committee¹ adopted a quality assurance framework focusing on user needs and including a quality assurance policy and a quality management system (see Figure 1). INEGI quality policy incorporates a set of guiding principles for developing, producing and disseminating statistical and geographical information. Following international experience, quality principles are aimed at promoting an enabling institutional environment, as well as strengthening processes and products.

Figure 1: INEGI Quality Assurance Framework



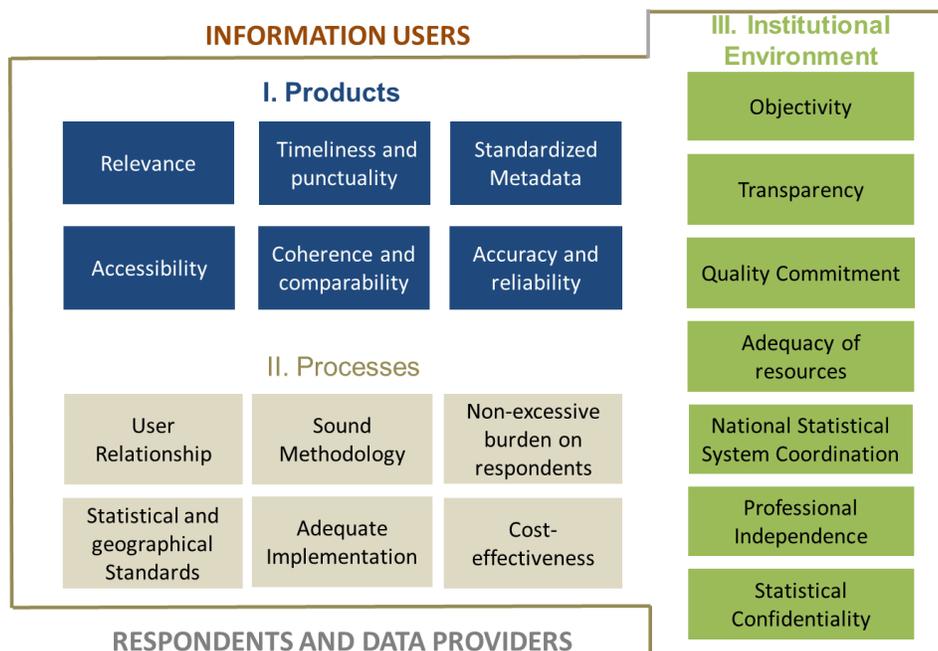
¹ The Quality Assurance Committee is responsible for coordinating quality assurance at INEGI. The Committee is integrated by the managing directors and led by INEGI President. It is in charge of defining a quality management system, including quality standards, measurement tools, reporting requirements and feedback mechanisms. Moreover, the Committee is aimed at promoting quality assurance through technical advice and training.

Figure 2 summarizes INEGI quality principles. Institutional and organizational factors shape the effectiveness and credibility of National Statistical Institutes (NSIs). Hence, INEGI quality policy fosters an institutional environment based on objectivity, transparency, quality commitment, adequacy of resources, professional independence, statistical confidentiality, as well as, coordination of the national statistical and geographical system.

Processes used to organize, collect, process and disseminate information are also critical for quality assurance. INEGI quality policy for managing statistical and geographical activities promotes the use of sound methodologies, international or nationally agreed standards, and adequate implementation processes. Moreover, the quality policy at the processes level includes the principles of solid relationships with information users, non-excessive burden on respondents, and cost-effectiveness.

Finally, at the product level, INEGI quality policy aims at producing statistical and geographical information that is relevant, accurate, reliable, coherent, and comparable over time and across regions. Furthermore, information should be timely, readily accessible by users and including standardized metadata.

Figure 2: INEGI Quality Policy



3. Setting Priorities for Quality Assurance

The Quality Assurance Committee is in charge of approving the Annual Quality Assurance Plan. This plan sets out the objectives, strategies and priority actions for achieving INEGI quality assurance medium-term goals. Following the QAN, the 2015-2016 Plan has two main objectives: implementing INEGI Quality Policy and developing a quality management system. The Committee agreed on an initial set of strategies for achieving each objective, as described in Table 1.

Table 1: Objectives, medium-term goals and strategies for INEGI Quality Assurance

Overall objective: Deliver high quality statistical and geographical information by strengthening INEGI's organizational, legal, technical and operational conditions as required by the QAN.	
Objective 1: Produce and disseminate information following INEGI Quality principles and guidelines.	Medium-term target (2018) Implement coordinated and complementary activities for quality assurance.
Strategies 1.1 Strengthening information relevance, accessibility and timeliness. 1.2 Promoting the use of standards and other means to ensure information coherence and comparability. 1.3 Making sure information is disseminated together with complete and standardized metadata. 1.4 Consolidating the use of sound methodologies and adequate processes. 1.5 Implementing actions aimed at increasing cost-efficiency.	
Objective 2: Develop a quality management system.	Medium-term target (2018) Implement key quality management components, including indicators, reports, evaluations, feedback mechanisms and promote a quality culture.
Strategies 2.1 Designing and implementing formal mechanisms for quality assurance at the unit level. 2.2 Developing quality indicators, reviews and reports. 2.3 Building a culture of quality.	

Priority actions stemmed from areas for improvement identified through a self-assessment. All INEGI units, except the Administration Directorate, evaluated their quality assurance practices based on the UN National Quality Assurance Framework (NQAF). NQAF questions were adapted to INEGI context and organized in three assessment tools: an assessment matrix of information production at the program (project) level, and two questionnaires for information dissemination and Statistical and Geographical System coordination. Results from these analyses were combined with an earlier qualitative assessment at the institutional level completed by the management team.

For the 2015-2016 Quality Assurance Plan, INEGI units selected priority actions to address areas for improvement at the program level. In addition, the Committee Secretariat proposed cross-cutting actions based on the pooled analysis of self-assessment results. These institutional-level actions range from reviewing policies or generating new guidelines to developing a training strategy.

4. Moving forward

The QAN initial implementation phase focused on defining INEGI quality assurance framework and planning the next steps. The main challenge in the coming years is ensuring that INEGI quality policy is systematically applied in every day work and regularly assessed. Some of the lessons learned from this phase include the following. First, strong leadership providing guidance as well as continuous and consistent messages about the importance and objectives of the reform is fundamental for fighting scepticism. Second, an awareness campaign and targeted training activities are critical for introducing the new quality policy and its implementation milestones. Third, quality assessment should be considered as part of a broader monitoring and evaluation strategy to ensure a complementary use of the different tools and methods, as well as a better coverage of evaluation topics over time. Finally, improvement actions may be more efficiently identified and implemented when a generic statistical business process model is in place.

5. References

INEGI (2015a), Norma para el Aseguramiento de la Calidad de la Información Estadística y Geográfica del Instituto Nacional de Estadística y Geografía, Dirección General de Integración, Análisis e Investigación.

INEGI (2015b), Marco para el aseguramiento de la calidad de la información estadística y geográfica del Instituto Nacional de Estadística y Geografía, Comité de Aseguramiento de la Calidad.

INEGI (2015c), Política de Calidad Institucional, Comité de Aseguramiento de la Calidad

European Conference on Quality in Official Statistics (Q2016)
Madrid, 31 May-3 June 2016

INEGI (2015d), Manual de Integración y Funcionamiento del Comité de Aseguramiento de la Calidad, Comité de Aseguramiento de la Calidad.