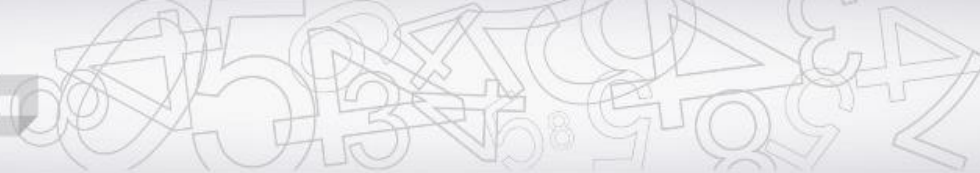


# Statistical Quality Certification System in the NSS

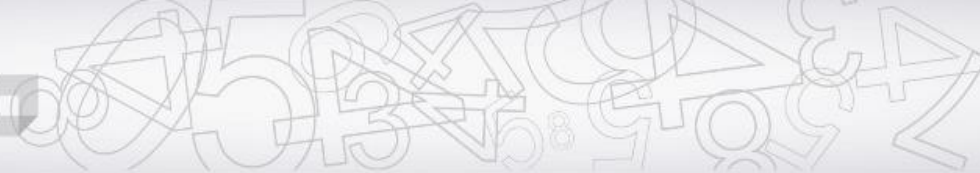


# Contents

- 1. Background to the Certification System**
- 2. Implementation of the Certification System**
- 3. Results**



# 1. BACKGROUND TO THE CERTIFICATION SYSTEM

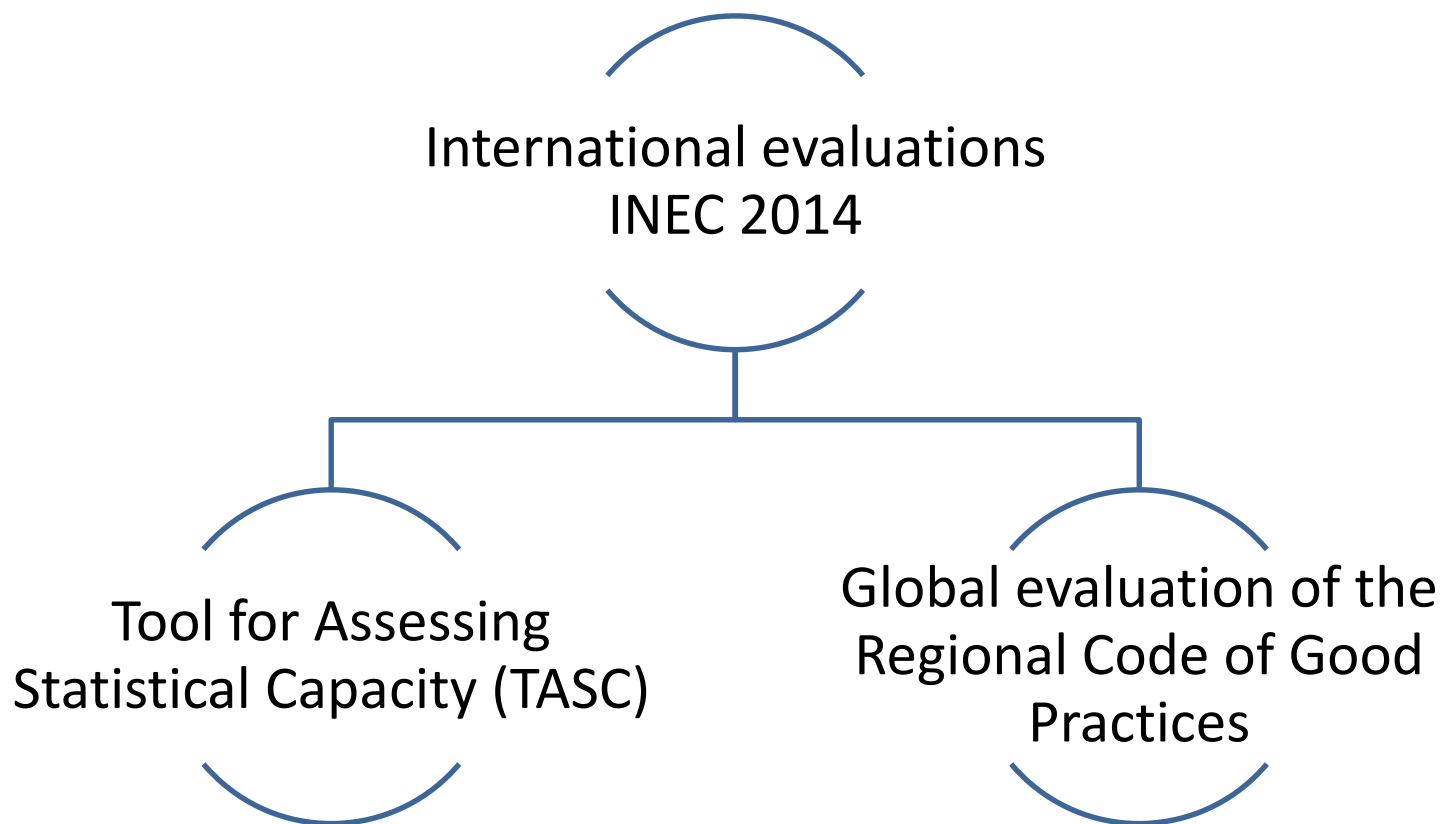


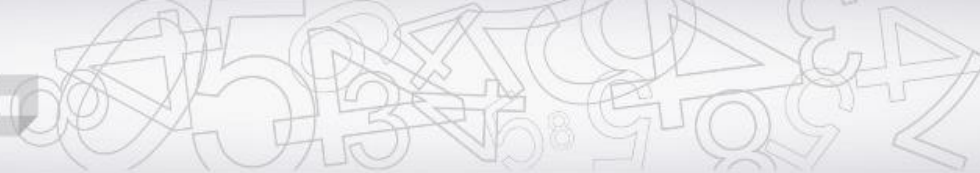
## THE NEED TO GENERATE QUALITY

- Ecuador's Political Constitution establishes that the transformation of the country is based on timely and quality statistics.
- Official statistics are the basis for the design, formulation and evaluation of development plans and public policy.



## **INEC'S CAPACITY AS PRODUCER OF STATISTICS AND COORDINATOR OF NSS- EVALUATION BY INTERNATIONAL TOOLS**





## REFERENCES

**International benchmarks**

**Statistical Quality Assurance System:**

✓ National Statistics Administration Department (DANE Colombia)

**Quality evaluation frameworks:**

- ✓ Organisation for Economic Co-operation and Development (OECD)
- ✓ European Community National Office (EUROSTAT)

**Statistical quality framework**

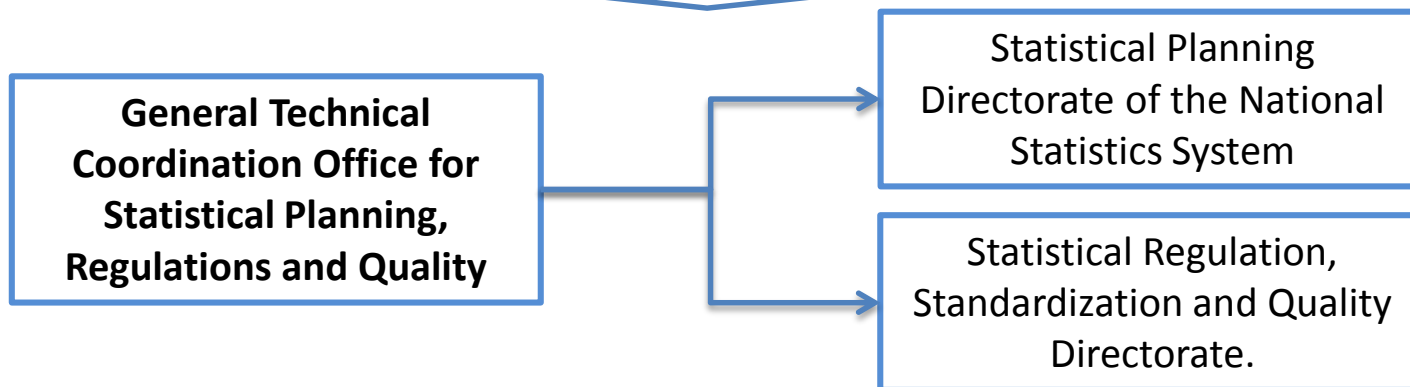
**Ecuador's Statistical Production Model**

**Ecuador's Code of Good Statistical Practices**

# LEGAL FRAMEWORK

Law on Statistics	Executive Decree No. 77	National Statistics Program	Technical Regulations for the Quality Certification System for Statistical Operations
Authorizes INEC to coordinate, plan, regulate and produce statistics	Art. 3 "Implement a system to certify compliance with the statistical production regulations for entities subject to NSS.	Instrument that establishes guidelines for entities subject to NSS in their statistical research activities.	Establishes procedures and parameters for the analysis and certification of quality in the statistical process.

**Institutional framework created in the National Institute for Statistics and Census.**



## 2. IMPLEMENTATION OF THE STATISTICAL QUALITY CERTIFICATION SYSTEM



## GENERAL ASPECTS OF THE CERTIFICATION SYSTEM

What is it?

- It is analysis of the quality of the statistical production process with the goal of **enhancing** the quality of the basic statistical operations: censuses, surveys and statistics based on administrative records.

What are its objectives?

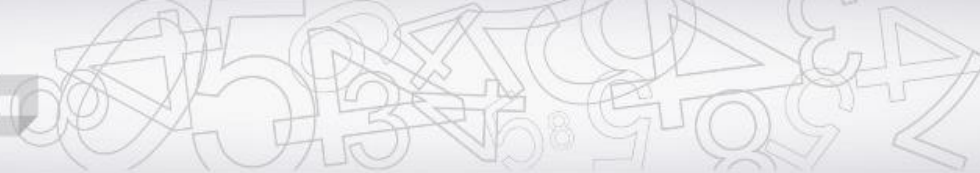
- Improve statistical production processes.
- Increase the use of official statistics.
- Promote statistical culture

What is analyzed

- Compliance with the Code of Best Statistical Practices (CBP) and the Statistical Production Model (MPE) is analyzed.

Which operations must be subjected to the certification process?

- All basic operations
- Operations to be certified that appear in the I.O.E will be prioritized annually.



## WHAT IS ANALYZED?

Component	Quality Requirement	Principles	
<b>Institutional Environment</b>	Regulatory framework	1. Coordination of the statistical system 2. Professional independence 3. Statistical confidentiality 4. Data collection mandate 5. Adequate planning and resources 6. Commitment to statistical quality 7. Impartiality and objectivity 8. Statistical culture	
	Commitment to quality		
<b>Production process</b>	<b>Planning</b>		
	<b>Design</b>		
	<b>Construction</b>		
	<b>Collection</b>		9. Sound methodology 10. Adequate statistical processes 11. Response burden 12. Cost-effectiveness
	<b>Processing</b>		
	<b>Analysis</b>		
	<b>Dissemination</b>		
	<b>Archiving</b>		
	<b>Evaluation</b>		
Subject Matter expert			
Computer environment	13. Relevance 14. Accuracy and reliability 15. Timeliness and punctuality 16. Consistency and comparability 17. Accessibility and clarity		
<b>Statistical production</b>		Statistical environment	

# PHASES OF THE QUALITY CERTIFICATION SYSTEM

Priorization of statistical operations

Certification committee

1. Preparation

2. Collection of information

3. Quality analysis

4. Certification

5. Comprehensive monitoring

## STATISTICAL OPERATIONS AT NSS:

Subject matter expert according to the statistical operation

### INEC team

- ✓ Statistical process analyst
- ✓ Statistical production analyst (computer and statistical environments)

## STATISTICAL OPERATIONS AT INEC:

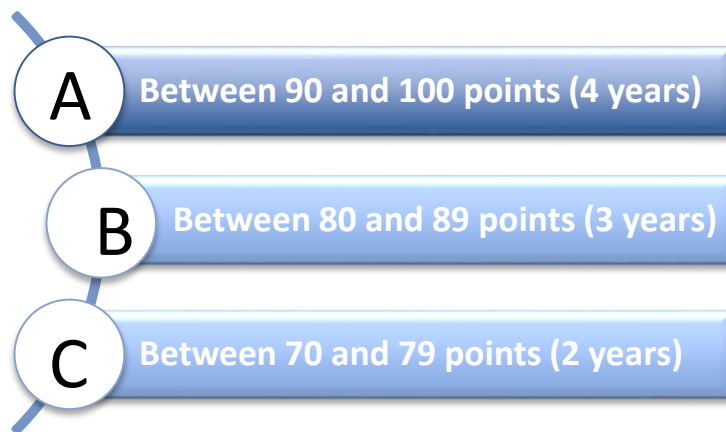
### External Experts team:

- ✓ Subject matter expert
- ✓ Statistical process expert
- ✓ Statistical production expert (computer and statistical environments)

### Core INEC team

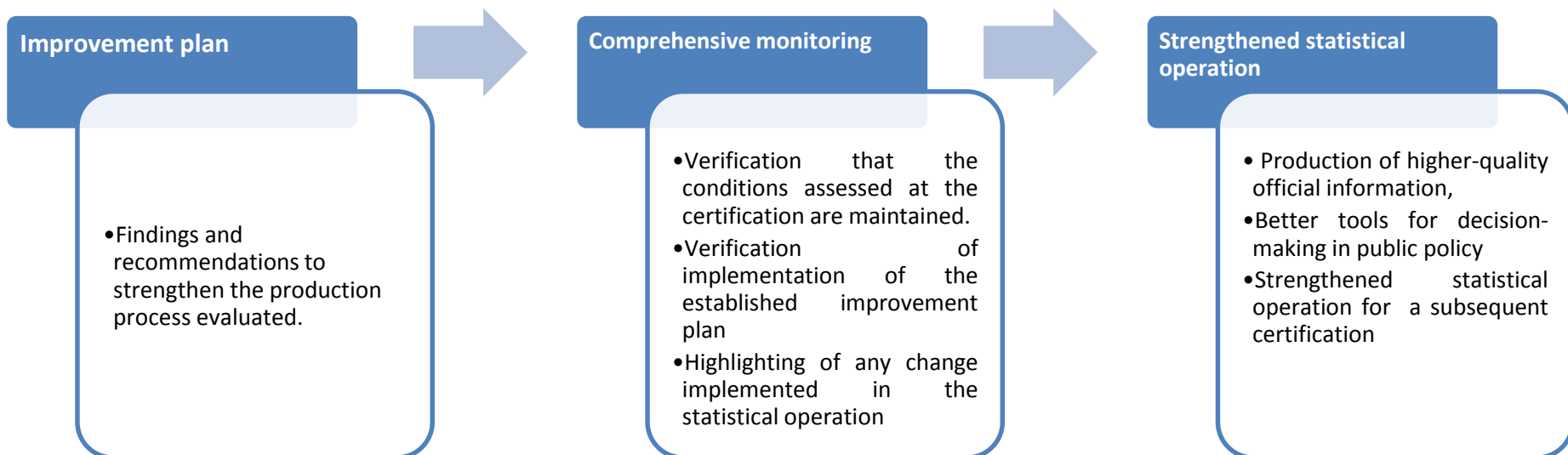
- \* Coordination and support in the implementation phases for the SCC
- \* Responsible for comprehensive follow-up

## DEGREES OF QUALITY AND COMPREHENSIVE MONITORING

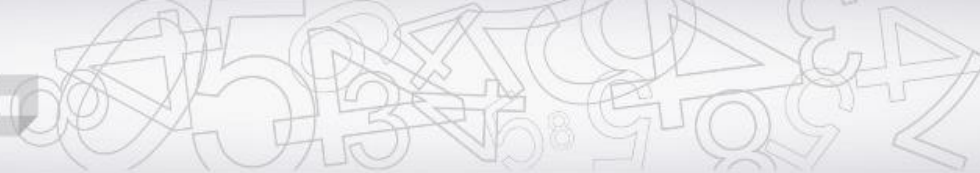


If the statistical operation does not obtain the minimum score, it has a maximum of one year to implement the improvements with the greatest impact on its production process

Following the certification process, comprehensive monitoring is conducted in which the INEC team verifies and monitors compliance with the improvement plan for each entity



### 3. RESULTS



## STATISTICAL OPERATIONS SUBJECTED TO THE CERTIFICATION PROCESS BETWEEN 2014 AND 2016

YEAR	STATISTICAL OPERATIONS IN THE CERTIFICATION PROCESS
2014	6
2015	11
2016	24
<b>TOTAL</b>	<b>41</b>

**\*23 statistical operations are to be certified in 2017.**