## "The Use of International Statistical Standards"

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## **ABSTRACT**

Standardization and integration of statistical production processes needs the use of standardized categories such as definitions, classifications and methodologies. These categories are generated and promoted by international organizations that are concern about the need to have comparable official information. Information flows freely across borders in an increasingly globalized world, it is been used in analytical and policy making processes worldwide.

Owing to the large number of statistical subject matter areas, there are many different international actors involved in developing "standard" categories, at regional as well as global levels; consequently they are much dispersed. Developing an inventory of statistical standards will be important to promote its use in the harmonization, integration and comparability of international and national information. National statistical offices could develop mechanisms to diagnose, which elements of the information follows statistical standards recommended by international organizations, to impel the consistency and efficiency of official statistical systems.

Official information is vital for decision making and should be coherent with user's necessities, in order to resolve public planning challenges at either small or big scales. Integration and comparability of data and information is needed to support this process.

Different elements of information should be standardized so integration and comparability can be accomplished. The international organizations, mostly the UN organisms and others, recommend the use of concepts, definitions, classifications and methodologies to gather data and to obtain information and sets of target elements called indicators.

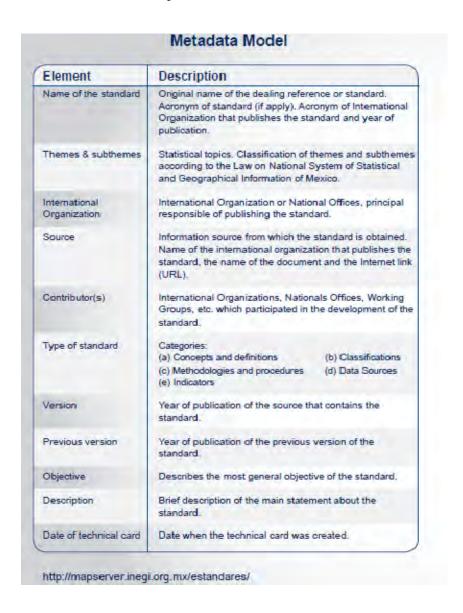
These recommendations are published in form of documents coming out from working groups, manuals, and other forms. They are spread around diverse web pages, in different formats and versions and for many various themes or group of subject matters.

A single inventory to keep all recommendations from the international organizations together, easily showing their objective and application to many themes; in the geographical and environmental, socio-demographical, economical and the state's dimensions, -under the same format (metadata) - is needed. National statistical offices can take advantages from such an Inventory.

The National Statistical Office in Mexico, *National Institute of Statistics and Geography*, INEGI build a web-based inventory with close to one-thousand entries, each showing a different international statistical standard, its objective, the international organization that recommends it, its version, and a link to the original document or web page where they are published. It is organized by four sets of themes following Mexico's National System of Statistical and Geographical Information, <a href="http://mapserver.inegi.org.mx/estandares/en/Consulta\_Produccion/Index.cfm">http://mapserver.inegi.org.mx/estandares/en/Consulta\_Produccion/Index.cfm</a>

INEGI's inventory tries to integrate the international statistical standards, proposed by different international organizations, by following a metadata framework where standards are classified in categories: Concepts and Definitions; Classifications; Methodologies and Procedures, as well as Data Sources and Indicators.

The inventory is intended to be a "one stop shopping", entrance to the different general reference frameworks, statistical or analytical frameworks, glossaries, information-systems and data bases. The inventory also tries to be friendly user, keep standards actualized and easily accessible, showing how standards are developed in their different versions.



At the working level, INEGI's inventory was created assuming the following issues:

(a) To identify the themes, sub-themes and variables that constitutes the information of national interest;

- (b) To identify the international norms (types of standards and specific versions) related to the information of national interest, which should be taken into consideration;
- (c) Given the lack of agreement on what constitutes an international statistical standard, INEGI decided to try to include recommendations made by international organizations those developed by expert groups, bringing together experts from the national statistical offices and international organizations-, it was also decided to include recommendations by other relevant expert bodies, including those practices that have been adopted with considerable success by certain group of countries.

At the 41th session of the United Nations Statistical Commission, February 2010, following a United Nations Statistical Division's solicitation (UNSD), INEGI presented its Inventory. The objective was to show it to the international community and discuss its value and usefulness. In that occasion, the Commission decided the following:<sup>1</sup>

It considers the value of such an inventory to serve the international statistical community, showing sympathy to INEGI for offering the inventory as a contribution to create a global inventory. Therefore, the inventory's data base should be administrated and actualized by the different international organizations and by the UNSD.

The Commission asked the Committee of Coordination of Statistical Activities (CCSA) to review the possibility to create the mechanisms to continue developing and maintaining the inventory of statistical standards at a global scale.

The Commission agreed with the proposal of making public the data-base of INEGI's inventory of statistical standards in the web site of the UNSD, looking for its broad access and use to other countries, international users and the general public; in order to harmonize the statistical information and as a reference to bring out the level of compliance with the international statistical standards internationally recommended.

It also asked the UNSD to adopt the necessary measures to translate the inventory to the UN official languages, to facilitate its use.

An ad-hoc working group was created by the CCSA, formed by UNSD, the International Labor Organization, the United Nations Economic Commission for Europe, the World Bank and INEGI to prepare a conceptual document about the appropriated mechanisms to continue develop and maintain the inventory of statistical standards at a global scale.

In September 2010 the Committee reviewed the document concluding the following<sup>2</sup>:

<sup>&</sup>lt;sup>1</sup> Comisión de Estadística de las Naciones Unidas. Informe sobre el 41° período de sesiones (23 a 26 de febrero de 2010). Consejo Económico y Social. Documentos Oficiales 2010. Suplemento núm. 4. E/2010/24. E/CN.3/2010/34. <a href="http://unstats.un.org/unsd/statcom/doc10/Report-S.pdf">http://unstats.un.org/unsd/statcom/doc10/Report-S.pdf</a>

El 29 de octubre de 2010, el Presidente del INEGI recibió una felicitación y reconocimiento del Director Nacional de la Oficina Nacional de Estadística de la República Dominicana, actual Presidente de la Conferencia Estadística de las Américas de la CEPAL, en el sentido de que el inventario del INEGI, servirá como modelo para integrar un inventario a nivel mundial.

<sup>&</sup>lt;sup>2</sup> United Nations, ECOSOC E/CN.3/2011/30. Report of the Committee for the Coordination of Statistical Activities on the inventory of global statistical standards. 8 December 2010. Statistical Commission Forty-second session, 22-25 February 2011.

The purpose of such an inventory is to provide of the knowledge and serve as a reference system about the statistical standards internationally recommended, so it should be completed, actualized and assure its reliability and accessibility for the users.

The international organisms and divers groups will be able to use it to identify areas where recommendations on standards are needed and also to identify overlapping.

The development of the inventory should be done by steps, where the first step has a limited level of detail, and where the user's retrievals will help determining contents and priorities for the next steps.

It is expected that, besides the Commission and the international organisms the inventory could be used by professional of the national statistical offices, the academic research community and by the general public.

The global inventory's coverage will include: all the official methodological publications of the member organisms of the CCSA; the internationally agreed classifications; some standards published by organizations from out of the international statistical system, such as the International Statistical Organization and regional versions of global standards.

In the first step of the global inventory, the basic unit will be the publication, even that it is recognized that further detail will be needed.

UNECE's statistical classification of activities (Database of International Statistical Activities, DISA), was proposed as the thematic structure for the global inventory.

It was also proposed to designate an editor for each group of themes or domain from an international organization or a national statistical office, who should be an expert in his field. Also an editorial committee will be created with the responsibility on contents, changes in the metadata model, classification of standards and, on the inclusion of each standard to the global inventory

The global inventory should belong to all the international organism members of the CCSA, so they can give the inventory its appropriate maintenance.

Some of the difficulties encountered in organizing international standards are related to the fact that different subject areas are at different stages of statistical development. In order to better understand the relationship between international standards, conceptual maps or diagrams could be developed to explain, in a simple manner, how international organizations and other relevant actors are related. Such information is particularly useful in areas where there are multiple reference frameworks.

By this international effort, some questions are going to be answered: What constitutes an international statistical standard? Who develops and promotes them all? and When and how are they being modified?

But there are still some questions where National statistical offices need to find the answers: *How are internationally recommended statistical standards being used and implemented?* 

Trying to face this last question, at INEGI a second step towards international statistical standards has been taken by launching a pilot project, which tries to address the issue of the use of these

standards in the generation of official statistics in three themes: *Comercio*-Commerce, *Trabajo*-Labor, *Suelo/Cobertura*-Land/Land cover.

A review of the Inventory analyzing the international standards that are being applied to these themes, studying the possible variations that could exist at the national level and try to measure the degree of compliance, using questionnaires distributed to the various producers of national information, is undergoing.

Documenting the variations of national practices from international standards, using a unique metadata model can be used to orient and support future national statistical development.

## Measurement of the compliance between National Statistics and International Pilot Project Standards.

Information Sub-	Standards.	
system	Tasks	
Economy	Theme selection	Commerce
	National data source	Encuesta Mensual sobre Establecimientos Comerciales (EMEC) Monthly Survey on Commercial Establishments
	Review and complete the inventory of standards	
	Pre-diagnostic	
	Validation with the area responsible of the Survey	
	Diagnostic	
	Recommendations	
Socio-demography	Theme selection	Labor
	National data source	Encuesta Nacional de Ocupación y Empleo (ENOE) National Survey on Ocupation and Employment
	Review and complete the inventory of standards	
	Pre-diagnostic	
	Validation with the area responsible of the Survey	
	Diagnostic	
	Recommendations	
Geography and Environment	Theme	Suelo/Cobertura Land/Land Cover
	National data source	Methodology for the actualization of the Land/Land Cover cartography, Series III
	Review and complete the inventory of standards	
	Pre-diagnostic Pre-diagnostic	
	Validation with the area responsible of the information	
	Diagnostic	
	Recommendations	

Using international recommendations to develop national statistical systems can help with the integration and comparability of information. Statistical systems, worldwide and locally should be coherent to support decision making, public and private planning and evaluation.

Different elements of information should be standardized so integration and comparability can be accomplished, manly concepts and definitions, classifications, methodologies to obtain information and sets of target standardized elements called indicators.

In this sense, understanding what is an international statistical standard, who and how are they developed and promoted or recommended, who and how they are been utilized is fundamental so they can be properly incorporated into a data quality framework, in accordance to the particular necessities of each country

Following a common model formed by the international statistical recommendations, means utilizing a common language, where harmonization, integration and comparability of information can be possible.