

STRATEGIC PROGRAM OF THE NATIONAL SYSTEM OF STATISTICAL AND GEOGRAPHIC INFORMATION

2016 - 2040



NATIONAL INSTITUTE OF STATISTICS AND GEOGRAPHY

AGREEMENT of the Governing Board of the National Institute of Statistics and Geography, which approves the Strategic Program of the National System of Statistical and Geographic Information (SNIEG) 2016-2040.

On the margin, there is a stamp with the national emblem that reads: United States of Mexico.- National Institute of Statistics and Geography.- Board of Government.

The Governing Board of the National Institute of Statistics and Geography, based on the provisions of section B of the article 26th of the Political Constitution of the United States of Mexico, in compliance with the provisions of articles 9, sections I, 10, and 77 fraction I of the Law of the National System of Statistical and Geographical Information; and

CONSIDERING

That the National Institute of Statistics and Geography, in its legal capacity as a public body with technical autonomy and management, legal personality and its own patrimony, is responsible for regulating and coordinating the National System of Statistical and Geographical Information, as well as statistical and geographical activities carried out by the State Units in order to obtain Information of National Interest;

That the National System of Statistical and Geographic Information has the purpose of supplying society and the State with pertinent, truthful, of high quality and timely information in order to contribute to the national development;

That the organization and regulation of the necessary activities for the planning, programming, production and dissemination of Information of national interest must be carried out through the Strategic Programs of the National System of Statistical and Geographic Information; National Statistics and Geography, and Annual of Statistics and Geography.

That in this sense, the Governing Board is in charge of the approval of the aforementioned programs, and must submit them to the opinion of the respective bodies in terms of the Law of the National System of Statistical and Geographical Information. Once the programs have been approved, they must be published in the Official Gazette of the Federation and will be compulsory for the State Units.

That the Strategic Program of the National System of Statistical and Geographic Information shall have a projection of at least 24 years and shall be reviewed and updated by the Governing Board every six years, at the beginning of the fourth year of the period corresponding to the President of the Republic. Likewise, it will constitute the guiding instrument for the integration and coordination of the National System of Statistical and Geographic Information. It will determine and hierarchize the objectives and goals to be achieved by the System, defining those general actions that may be necessary for it. Likewise, it will define the policies that the Executive Committees of the Subsystems must attend in the accomplishment of the statistical and geographic activities. Finally, it should consider the lines of action and elements proposed by the State Units, and take into account the opinion of both social and private institutions.

That the Strategic Program of the National System of Statistical and Geographic Information 2010-2034, as established in the Article 10, section I, of the SNIEG Law, was revised and updated, which resulted in a Strategic Program of the National System of Statistical and Geographic Information for the next 24 years corresponding to the 2016-2040 period.

That the Strategic Program of the National System of Statistical and Geographic Information 2016-2040 was presented to the opinion of the National Advisory Council in the Second Session 2016 held on November 30, regarding its structure and contents, and that the opinion of both social and private institutions was taken into account for its realization.

Thus, the Governing Board of the National Institute of Statistics and Geography has issued the following:

Agreement

11th / VII / 2016 - Based on articles 9, fraction I, 10 and 77, section I of the Law of the National System of Statistical and Geographic Information, the Government Board approves the Strategic Program of the National System of Statistical and Geographic Information 2016 -2040, and the Deputy General Directorate of Legal Affairs of the National Institute of Statistics and Geography is hereby instructed to take the necessary actions,

so that this Agreement gets published in the Official Gazette of the Federation, making the Program of reference known.

Transitory

FIRST.- The Strategic Program of the National System of Statistical and Geographic Information 2016-2040 will become effective the day after its publication in the Official Gazette of the Federation.

SECOND.- The Strategic Program of the National System of Statistical and Geographic Information 2016 - 2040 is the revised and updated version for the period 2010-2034.

This Agreement was approved at the Eleventh Session of the Governing Board of the National Institute of Statistics and Geography, held on December 15, 2016.- President: **Julio Alfonso Santaella Castell** .- Vice Presidents: **Enrique de Alba Guerra, Rolando Ocampo Alcántar, Mario Palma Rojo and Félix Vélez Fernández Varela** .

Aguascalientes City, Aguascalientes, December 16, 2016.- The aforementioned statements are hereby declared by the General Coordinator of Legal Affairs, **Jorge Ventura Nevares**, in exercise of the powers conferred upon him by the provisions of Section IV, Article 46 of the Rules of Procedure of the National Institute of Statistics and Geography. - Rubric.

STRATEGIC PROGRAM OF THE NATIONAL SYSTEM OF STATISTICAL AND GEOGRAPHICAL INFORMATION 2016-2040

I. Introduction

In a dynamic and continuously developing society, the production of statistical and geographic information must advance and adapt to the new reality. Technological innovations have revolutionized the volume, speed and variety of available data, as well as the ease of accessing and using information by its users. With the creation of new applications and technological devices, information is generated that allows the creation of new ways of using data. The fingerprints left by people in their daily interaction with multiple systems, and the data generated by computers, satellites, sensors and other technologies, as well as administrative records have multiplied exponentially. Thanks to the increase in available data, technological capabilities, and tools for analysis and visualization, the data ecosystem¹ has changed and the possibilities of using information have expanded.

At the same time, the users of information are changing; they have more technical and technological capacities, they demand greater opportunities, disaggregation and accessibility, they look for the link between different information sources at a temporal and geospatial level, they have a greater thematic domain. Furthermore, they are more sophisticated in their analysis. Currently, information becomes obsolete quickly in the face of social dynamism, the focus on services, the increase in international connectivity, financial and migratory flows, as well as technological change. The decision makers demand more richness, speed and quality in the information, which means that they no longer only value the final statistics but also the data from original sources, the associated methodologies, the transparency related to it, the tools, the associated services, as well as location and geographical representation. There are more expectations regarding immediate information with reduced response times in order to meet the growing and changing information needs.

The current data ecosystem is integrated by a technological medium in which large amounts of data are generated, and in which there are users with greater technological capabilities. This has posed new challenges for the Statistics and Geography Institutes throughout the world. One of the most important is the production of more timely data with new tools. In this context, the assurance of the quality of the information becomes a cornerstone, since many of the new sources of data generally do not have quality controls or verification of the stability of the supply of information over time. To fulfill the expectations of standardization and aggregation of information represents a challenge to integrate data from different sources, producers and sectors that are not prepared to share information; either because they use different methodologies, due to regulatory or budgetary restrictions, or because of different technological capacity. Another challenge derived from the use of new sources of information is to keep information's own safety, the confidentiality of the informants, and the public trust, because individuals' data proliferate in this data ecosystem along with the concerns for their privacy.

In addition to the demands on the opportunity and accessibility of information, it is essential to take care of

the accuracy and conceptual relevance of the information produced in the Statistical and Geographical Institutes, which are in a strategic position to provide data solutions that meet the new needs and protect the privacy of the informants. Therefore, it is necessary to redefine its leadership role in the establishment of standards for the production and supply of quality products and timely services; as well as being able to guide the user regarding how and when to use the information and tools available according to their needs. The information must be seen within a system in which different actors interact: those who use, produce, or provide data. In this sense, the National System of Statistical and Geographic Information (SNIEG in Spanish) is for our country, the ideal context to integrate these actors and generate alliances with the private, academic and social sectors to coordinate the production of data, avoid duplication and enhance the use of existing information.

In 2008, the Law of the National System of Statistical and Geographical Information (Law) was promulgated, whose guiding principles are accessibility, transparency, objectivity, and independence. The Law establishes that the purpose of SNIEG is to provide society and the State with Information of National Interest in order to contribute to national development. Likewise, it emphasizes that this Information must be of high quality, pertinent, truthful, and timely.

As shown in the Evaluation Results Report to 2015, during the 2008-2010 period, the foundations were laid for the operation of the System, thanks to which we currently have:

- Regulations for the organization and operation of SNIEG.
- Technical regulations to control the production, integration, conservation and dissemination of information from the SNIEG National Information Subsystems.
- Collegiate bodies that coordinate the activities of the State Units.
- The National Information Network that facilitates the interaction between the State Units.
- The infrastructure defined in the Law for the production of information.
- Information of National Interest produced periodically and protected in the Statistical and Geographical Information Collection of SNIEG to meet the requirements of international organizations.
- Key indicators prepared periodically and integrated into the National Catalog of Indicators.
- The Public Service of Statistical and Geographical information.
- Advances in training on technical regulations to standardize information.

The recommendations derived from this evaluation were that in the following Strategic Program it would be considered:

- The new challenges of the SNIEG through the revision and update of the Master Strategies, General Objectives and Policies.
- The review of medium and long-term goals.
- To strengthen the use of information of National Interest and key indicators in the design, monitoring and evaluation of public policies.
- The opinion of the main users about the usefulness of the Information of National Interest and the key indicators.
- The link between statistical and geographical information.
- Better practices in topics such as modernization of administrative records, Big Data, use of information that does not come from official statistics.

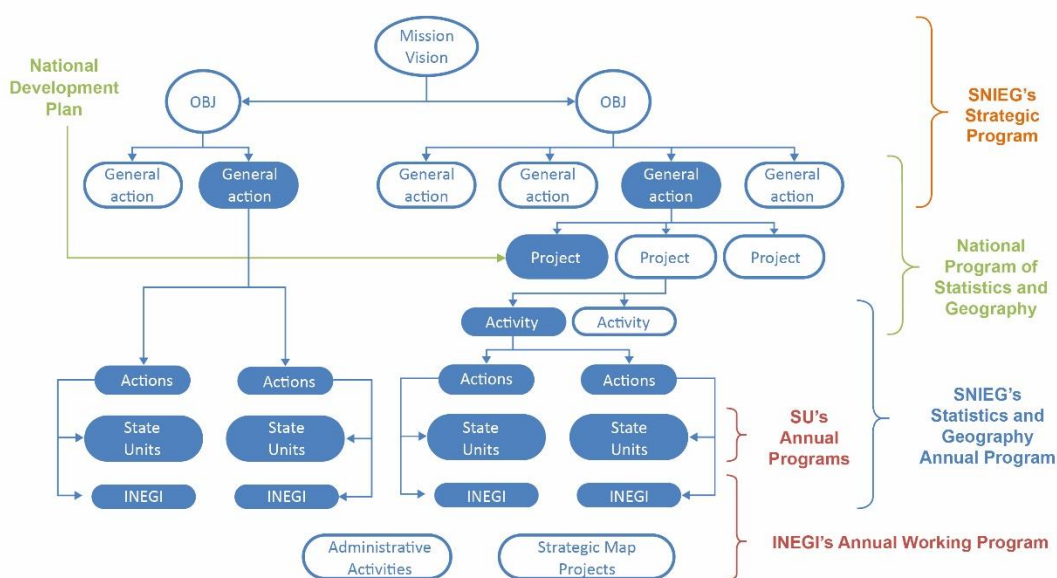
According to the Law, the Strategic Program of the SNIEG (PESNIEG) is the governing document of the System, and must have a projection of at least 24 years, and must be updated at the beginning of the fourth year of the President's period, which corresponds to the beginning of the period of the President of INEGI. Therefore, the objectives, general actions, and goals must have a long-term time frame.

Subsequently, the National Statistics and Geography Program should be reviewed, since it must be aligned with both the PESNIEG and the National Development Plan. Thus, the National Program is the medium-term planning instrument where the activities and projects to be executed each six-year period must be included in accordance with the established goals.

The Annual Programs of Statistics and Geography, which include the activities to be developed by the State Units, must also be aligned with the said long and medium term programs. On the other hand, the State Units, including INEGI, must include the actions committed in their own Annual Programs and budgets. Figure 1 outlines the way in which SNIEG programs are linked.

The present review and update aims to consolidate and modernize the SNIEG according to the new information needs, considering new technologies, information sources, international trends related to statistics and geography, as well as the evaluation of PESNIEG 2010-2034. In the following sections, the general operation of the SNIEG is explained, and so it is established the Mission and the Vision of the System, the new strategic objectives, the general actions, lines of action, and the corresponding goals with this long-term vision according to the law. Additionally, the policies that the Executive Committees of the Subsystems must attend in the realization of the statistical and geographic activities are exposed.

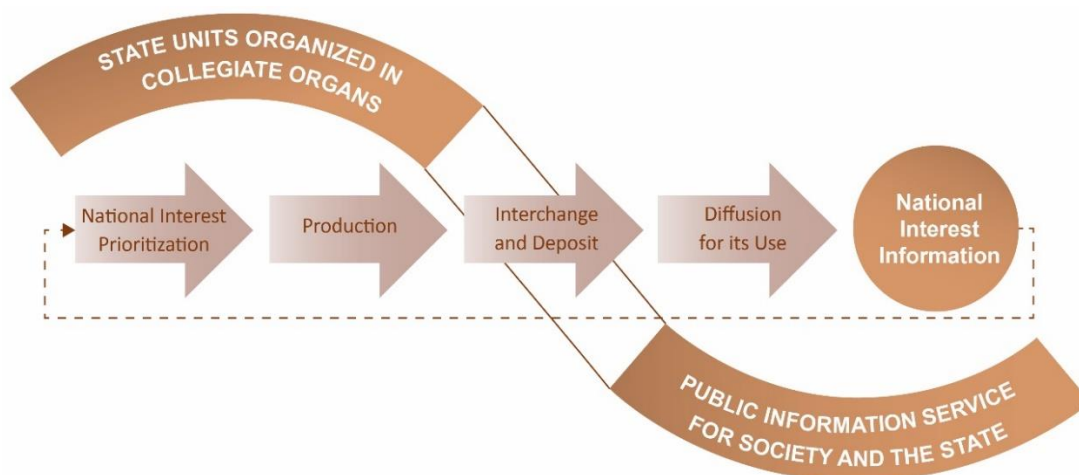
FIGURE 1
ALIGNMENT IN THE PROGRAMMING OF SNIEG



II. General Functioning of the National System of Statistical and Geographic Information

The purpose of the National System of Statistical and Geographical Information (SNIEG) is to provide to society and the State with high-quality, pertinent, truthful and timely information in order to contribute to the national development. The SNIEG is a system that coordinates the production and dissemination of information of National Interest (see figure 2). Throughout the SNIEG Law, the concept of national interest is used as an element of prioritization of information relevant to the national development whose production is required and which must have a budget allocation. The same Law proposes the establishment of technical standards to order and standardize the production of information. For both activities, the State Units are coordinated in Collegiate Bodies where the information that should be considered as of National Interest and the key indicators are proposed. On the other hand, the National Information Network is established as an exchange and safeguard mechanism to articulate the Collegiate Bodies with the Public Information Service in charge of making Information of National Interest available to society and the State. The purpose of this Service is for users to access the information produced by the different State Units that make up the SNIEG, as well as to access microdata through procedures that safeguard the confidentiality of the informants. On a recurring basis, it must be checked that the information continues to be relevant, that it is produced with high quality, that it is properly exchanged and adequately protected and disseminated for its final use.

FIGURE 2
THE NATIONAL SYSTEM OF STATISTICAL AND GEOGRAPHICAL INFORMATION (SNIEG)

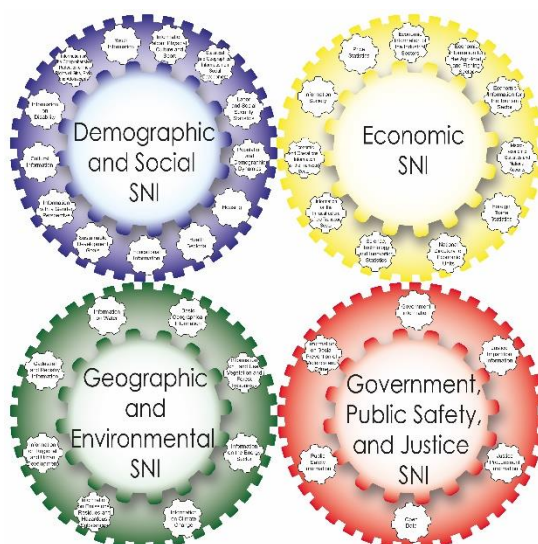


The members of the National System of Statistical and Geographical Information are a set of State Units organized through four National Information Subsystems, each of which is chaired by a Vice President of the Governing Board of the National Institute of Statistics and Geography (INEGI) (See Figure 3):

- Demographic and social;
- Economic;
- Geographic and environment; and,
- Government, public safety and justice.

FIGURE 3

National Information Subsystems



The Units of the State are the administrative areas within governmental organisms that have attributions to develop statistical and geographic activities, and/or that have administrative records so that information of National Interest may be obtained. That is, administrative units within the dependencies and entities of the Federal Public Administration, the Legislative and Judicial powers of the Federation, the states, municipalities, autonomous constitutional bodies, and federal administrative courts. These units must have professional and technical independence, that is, have the power to decide on the planning, programming, organization and direction for the generation of information, ensuring that it is disseminated without external interference, in an objective and transparent manner.

These State Units participate in the SNIEG through its Collegiate Bodies, that is, the National Consultative Council, the Executive Committees of each National Information Subsystem and the set of Specialized Technical Committees, whether thematic, sectorial or regional. The Collegiate Bodies are the mechanism through which the State Units propose the issues, information, and indicators to the INEGI Governing Board so that they may be considered of national interest and schedule the generation of the necessary data through the Annual Programs.

The State Units members of the Collegiate Bodies play a fourfold role as users, informants, producers and disseminators of the System Information. As users, they demand compatible, comparable information that combines several topics that are linked to different subsystems. As informants⁸, they have the obligation to provide with accuracy and timeliness data and quality indicators, as well as the requested reports. As producers, they must adhere to the technical regulations; make the data collected available to the SNIEG and their own thematic or sectorial information systems within the scope of their attributions, so that it can be integrated into products and services of statistical and geographic information. Finally, the State Units must contribute to the promotion of knowledge and use of Information of National Interest within the framework of SNIEG. Taking into account the multiplicity of roles and activities of the State Units is important to design articulation mechanisms within the Collegiate Bodies, among them and between subsystems, as well as with other information systems.

INEGI, as the central coordinating unit, has the function of regulating and coordinating the SNIEG. The highest governing body of INEGI is the Government Board, composed of a President and four vice-presidents. Among its functions are to regulate the operation of the SNIEG, issue technical standards, determine the information of national interest, approve the key indicators generated by the subsystems, approve the Strategic, National and Annual Programs, determine the information that must be produced by the INEGI, and approve the calendar containing the dates of its publication. In addition to being the SNIEG coordinator, INEGI carries out information production activities in the same way as the other State Units, subject to the same approved norms, in the context of SNIEG.

The functioning of the SNIEG established in the Law is the basis for defining the vision, mission, strategic objectives, general actions, lines of action, goals, and policies that make up this Strategic Program.

III. Mission, Vision, and Strategic Objectives

III. A) Mission and Vision of SNIEG

The Mission of the National System of Statistical and Geographical Information (SNIEG) is based on the article 3 of the Law:

Mission: "Provide society and the State with high-quality, pertinent, truthful, and timely statistical and geographic information of national interest to contribute to the national development."

The supply of information should consider the interrelation of data produced by the different State Units of the three powers and orders of government that are articulated through an institutional arrangement that ensures objectivity, independence, accessibility and transparency, as established in the Law. One of the main strengths of SNIEG, which is embodied in the Political Constitution of the United States of Mexico, is the linking of statistical and geographical information, which increases the scope of information and allows users to access a greater number of elements to analyze the national reality.

Article 26 of the Political Constitution of the United States of Mexico creates the System of Democratic Planning for National Development, the National System of Statistical and Geographic Information (SNIEG) and the body responsible for the evaluation of social development policy. Thus, in the constitutional context, information is linked to the planning of the State and the rendering of accounts to society. This aspect is reinforced in the SNIEG Law, which establishes that the purpose of the information provided by the SNIEG is to contribute to the national development. The way in which SNIEG contributes to this end is through the provision of high-quality national interest information that results in better decision making. From these elements it has been defined that the vision of the System to 2040 is that:

Vision: "Information of National Interest is the reference for the State and society in making decisions for national development."

At the center of the vision are the users. That is, the State and society, who need a broad knowledge of reality in order to design policies based on better grounds, and thus contribute to a national sustainable development. In addition, the information must be of quality to be used in the design, monitoring and evaluation of public policies, through the indicators established for that purpose. The more relevant, complete and solid the information is, the better decisions can be made. Therefore, the long-term vision (24 years) is that the SNIEG provide the National Interest Information necessary for decision-making for the national development.

The generation of Information of National Interest and Key Indicators that allow measuring the evolution of national development is a dynamic process where the national and international reality itself marks the need to know new phenomena. Maintaining constant reflection with national and international users is strategic to improve the analysis and understanding of the national development.

In particular, the United Nations initiative on Sustainable Development Goals seeks that all countries adopt measures to promote prosperity while protecting the planet, and it has established goals and indicators in 17 development-related dimensions. Therefore, the measurement of these indicators should be considered within the long-term vision of SNIEG as part of the relevant indicators to measure the evolution of national development.

TABLE 1
Vision Goals

INDICATOR	GOAL TO 2040
Percentage of indicators of the Sustainable Development Goals that are calculated with Information of National Interest.	90%
Percentage of indicators that allow measuring the evolution of national development that are calculated with Information of National Interest.	90%

Taking into account the Mission and Vision of the SNIEG, as well as its guiding principles and the main attributes of the information established in the Law, there have been identified five Strategic Objectives and the General Actions necessary to carry them out, as well as their associated goals. All these are presented in the following section.

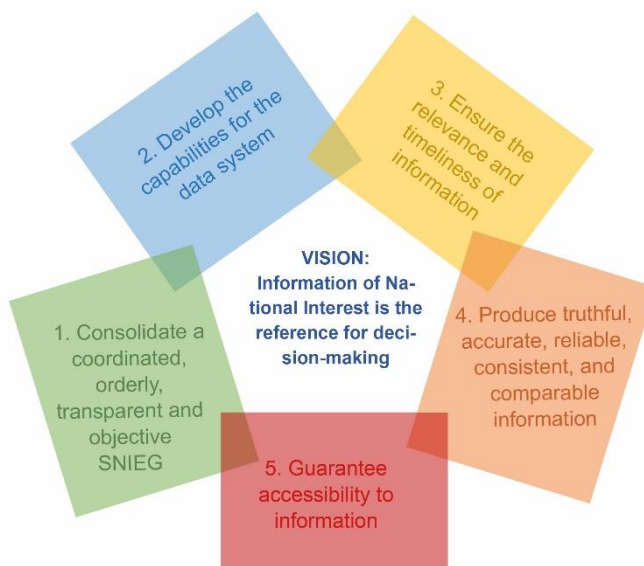
III.B) Strategic objectives, general actions, lines of action and goals.

The five Strategic Objectives that have been identified to contribute to the new Vision of the SNIEG and that are presented in figure 4 can be divided into two large groups. The first group corresponds to objectives 1 and 2 in which global actions are proposed that support the development of the System, on the one hand, through elements necessary for effective coordination and, on the other, through human and technological capabilities indispensable for the functioning of statistical and geographical activities. The second group corresponds to objectives 3, 4, and 5, which represent the major processes that must be followed in order to provide adequate information service, that is, to define needs and plan their attention, carry out information-generation activities, and finally the information's dissemination.

- **Consolidate a coordinated, independent, transparent and objective SNIEG.** The first Strategic Objective seeks to give continuity to master strategies 1 and 5 of the Strategic Program 2010-2034 regarding the "Consolidation of the National System of Statistical and Geographical Information" and the "*Coordinated participation of the three levels of government.*" It refers to the consolidation of a coordinated, independent, transparent and objective SNIEG, where the normative and organizational bases for its good functioning and continuous improvement will be established. The General Actions included in this Strategic Objective are of a transversal nature to the other objectives since the regulations, quality management, standards, metadata and evaluation are elements that support the generation of information and must be present in all phases of this generation of information. Professional and technical independence, transparency and objectivity, as well as security, confidentiality and protection of information are part of the principles of the Law that provide the institutional framework for the proper functioning of SNIEG. A properly coordinated SNIEG is the first step to substantially improve the generation and integration of the information that decision makers require to influence the national development.

FIGURE 4

Strategic objectives around the Vision



- **Develop the capabilities for the data ecosystem.** The second Strategic Objective is closely linked to the master strategy 4 of the Strategic Program 2010-2034 regarding "*Promotion of research and skills development.*" It raises the development and creation of the necessary capacities to face the challenges imposed by the information demands of the Mexican society, recognizing that the base of every organization are both the people and the infrastructure they need to develop their activities. This objective is directly linked with the decision makers from the angle of development and capacity building to promote innovation in the exploitation, as well as analysis of information sources that allow obtaining quality information.
- **Ensure the relevance and timeliness of the information.** The third Strategic Objective is indirectly related to the master strategy 2 of the Strategic Program 2010-2034 regarding the "*Production of Information of National Interest.*" In this case, it was considered that the planning activities before the production of information merit greater emphasis, because it is the moment in which the relevance and timeliness of the information is assured. Thus, this objective refers to the identification and prioritization of information needs, as well as to the design of products that ensure the usefulness of the data provided for decision-making.
- **Produce truthful, accurate, reliable, consistent and comparable information.** The fourth Strategic Objective gives continuity to the master strategy 2 of the Strategic Program 2010-2034 related to "*Production of Information of National Interest.*" In this case, progress is made in specifying the characteristics that should be looked for at the time of the production process. The general actions emphasize the aspects that must be taken into account to ensure the veracity, accuracy, reliability, coherence and comparability, which are essential elements for the information to be true to reality and of high quality.
- **Guarantee accessibility to information.** Finally, the fifth Strategic Objective seeks to broaden the scope of the master strategy 3 of the Strategic Program 2010-2034 regarding "*Contribution to the construction of a society of information and knowledge.*" While the promotion of the use of information continues, it seeks to guarantee access to Information of National Interest. This objective establishes the necessary elements for the last stage of information provision (i.e. dissemination), which will seek to guarantee accessibility to information, as well as to promote its use. In order for users to make decisions based on information, it is essential that it is available, accessible and that it allows the necessary disaggregations and interrelations for its analysis.

The Strategic Objectives are explicitly aligned with the principles of product and environmental quality that are included in the SNIEG Principles and Best Practices that have taken up the international experience of EUROSTATⁱⁱⁱ, UN^{iv}, ECLAC^v, and the OECD.^{vi} Additionally, the strategic objectives can be operated in a standardized manner with the Generic Model of the Statistical Process (GSBPM for its acronym in English) proposed by UNECE, which also adjusts to the development of geospatial information.

Based on this general approach, the following sections describe each strategic objective, its general actions, the lines of action that both the State Units and INEGI must carry out in each case, as well as the goals that have been defined for the achievement of these purposes.

1 =Strategic Objective: Consolidate a coordinated, independent, transparent and objective SNIEG.

In order to consolidate a systematically coordinated National System of Statistical and Geographic Information (SNIEG), it is important that the Collegiate Bodies of the SNIEG and its Subsystems work in an articulated manner, even more so if we take into account that decision-makers need information that may involve several Subsystems. Likewise, it is necessary to link the three powers and orders of government as well as with other information systems of the Mexican State.

As part of the guiding principles of SNIEG, transparency and objectivity must be primary objectives for its consolidation. In order to reach this goal, it is necessary to reinforce and articulate the regulations, while keeping them permanently updated; Strategies must be established to ensure the conservation, security and confidentiality of information, the latter being seen as a right that by law have informants who provide data for statistical purposes; likewise, generate mechanisms for evaluation and monitoring of SNIEG, as established in the General Actions presented in Table 2.

TABLE 2
General Actions of Objective 1

OBJECTIVE 1	GENERAL ACTIONS
Consolidate a coordinated, independent, transparent, and objective SNIEG	<p>1.1: Ensure effective coordination, participation and consultation among the collegiate bodies, government orders and other State systems.</p> <p>1.2: Have a regulatory framework that enables an agile and efficient organization scheme.</p> <p>1.3: Generate mechanisms to evaluate the quality of information in a systematic, transparent and objective manner.</p> <p>1.4: Establish strategies to ensure the conservation, security and confidentiality of information.</p>

It should be noted that the general actions related to this Strategic Objective are transversal and directly related to the other Objectives, as they set the rules for the operation of the system.

1.1: Ensure effective coordination, participation and consultation among the Collegiate Bodies, government orders and other State systems.

Scope and lines of action:

The functioning of the System is done through its Collegiate Bodies, so that achieving joint work and articulated among them and in their interior, under a common programmatic strategy, is fundamental to achieve an efficient System that allows supplying the National Information of necessary interest for decision makers, taking advantage of the competitive advantages of each State Unit and avoiding duplication.

On the other hand, it is important to strengthen the State Statistical and Geographic Information Committees and to establish links with the other Collegiate Bodies, as well as with representations in the states of the different State Units to identify regional information needs, promote and enforce the use of the SNIEG regulations and

standardize the generation of statistical and geographic information at the local level, as well as to promote the use and knowledge of the available information. All this in order to improve the quality of the information produced in the states, in addition to strengthening their capacities for the use of information.

Besides the SNIEG, the Mexican State has other information systems whose purpose is to generate thematic or sectorial indicators. In some cases, they are generated through specific actions carried out by certain State Units,^{vi} in others through coordination mechanisms of various agencies and public and private entities.^{viii} Therefore, it is important to establish coordinated strategies that allow generating synergies between the different systems and take advantage of the strengths of each one in order to meet a greater number of information needs and avoid possible duplications.

TABLE 3
Goals of General Action 1.1

INDICATOR	GOAL TO 2040
Percentage of State Units that actively participate in the Collegiate Bodies of SNIEG.	80%

1.2: Have a regulatory framework that enables an agile and efficient organization scheme.

Scope and lines of action:

The regulations are the basis of the operation of any system, so they must establish the rules of operation in an articulated manner and ensure that all participants apply them. The general regulatory environment consists of principles, policies, norms, as well as rules for the functioning of committees and working groups. The regulations must be understandable, widespread and verifiable, as well as having monitoring mechanisms and, where appropriate, sanctions. The Governing Board of INEGI has the power to regulate the functioning of the System, based on proposals coming from the collegiate bodies or from INEGI itself.

The Governing Board of INEGI also has the power to establish technical and high quality standards based on proposals that strengthen the regulation of statistical and geographic activities. The establishment of quality standards, concepts, definitions, classifications, target populations, geographical delimitations and other statistical and geographical standards allow to make compatible the structure and content of data and metadata, the comparability in time and space, as well as facilitating the integration, dissemination and use of information. Not only it is the establishment of technical norms and standards important, but also their dissemination and the training for its proper application and systematization by all SNIEG members.

TABLE 4
Goals of General Action 1.2

INDICATOR	GOAL TO 2040
Percentage of State Units that generate, integrate and disseminate Information of National Interest in accordance with the regulations of the SNIEG.	95%

1.3: Generate mechanisms to evaluate the quality of information in a systematic, transparent and objective manner.

Scope and lines of action:

One of the central elements of transparency is that society is informed of the activities carried out and the results obtained. Reports for accountability and quality assessments are important tools for this purpose. The Law establishes that each year the results of the execution of the Annual Program of Statistics and Geography, of the activities of the Committees of the Subsystems, and those related to the INEGI regarding the activities on the exercise of the expense must be given to the Federal Executive (i.e. the President) and the Congress of the Union (i.e. legislators). In addition, evaluations of the Strategic Program and the National Program of Statistics and Geography must be submitted every six years or whenever they undergo modifications. These reports are the instruments that report the functioning of the System and are integrated by the INEGI with information from the State Units organized in the Collegiate Bodies.

On the other hand, evaluations, understood as self-evaluations, peer reviews or external reviews, audits and certifications of information in addition to those that are made to integrate the reports to the Congress of the Union and other organizations that promote transparency, are the basis for promote improvement actions that allow to diagnose and increase the quality of SNIEG information.

Likewise, the design of information quality indicators in accordance with the approved standards will be part of the systematic evaluation mechanism that will allow measuring the application of the corresponding regulations and identifying the areas of opportunity to undertake actions that lead to the achievement of the objectives. In this way, users will also have the certainty of the quality of the data, its limitations and may make appropriate use of the information.

Within the systematic evaluations should be considered the mechanisms that will serve to continuously verify that the quality standards through which the Information of National Interest was approved are maintained over time. Likewise, INEGI, at the initiative of the Executive Committees, may request international organizations to review and comment on the methodologies used to generate the information (e.g., as part of the international commitments that Mexico has signed, the International Monetary Fund has evaluated and issued recommendations to different State Units, the Ministry of Finance, the Bank of Mexico, and the INEGI regarding compliance with the Data Dissemination Standard).

TABLE 5
Goals of General Action 1.3

INDICATOR	GOAL TO 2040
Percentage of Information of National Interest that includes in its metadata indicators of the quality of the products based on the Principles and Good Practices of the SNIEG.	95%

1.4: Establish strategies to ensure the conservation, security and confidentiality of information.

Scope and lines of action:

Guaranteeing the confidentiality of the informants, as well as the security and protection of the information, are essential aspects for the proper functioning of the system. To fulfill them, it is necessary to define norms that specify the actions that the producers of information must carry out, which can be proposed by the Collegiate Bodies and must be approved by the Governing Board of INEGI to be mandatory.

It is important to establish mechanisms and controls in the processes of generation, integration and dissemination of information. These mechanisms must be transversal and adequately monitored to avoid and deal with the risks. Based on the general rules of the System, each State Unit producing Information of National Interest must establish these mechanisms and controls, to facilitate its implementation. Additionally, it is useful for the different State Units to share good practices, as well as guidelines or procedure manuals, so that INEGI will seek to create spaces for interaction among the members of the Collegiate Bodies.

TABLE 6
Goals of General Action 1.4

INDICATOR	GOAL TO 2040
Percentage of State Units that produce Information of National Interest that apply the conservation, security and confidentiality strategies of SNIEG.	95%

2nd Strategic Objective: Develop the capacities for the data ecosystem.

Technological advances have revolutionized the amount of data available from which statistical and geographic information can be generated; however, in order to profit from this opportunity it is necessary to develop and expand the human, technical, technological and organizational abilities of each State Unit. This is especially relevant given the diversity of abilities and interests, as well as the rotation of public officials and members of the collegiate bodies.

It is essential to generate strategies to continuously improve these abilities and thus build a solid SNIEG that can face the challenges of the current data ecosystem. This objective seeks for the State Units to develop their technical capacities so that the realization of information production activities is carried out through an adequate organizational structure to provide the Statistical and Geographical Information. To achieve this, the General Actions described in Table 7 have been proposed.

TABLE 7
General Actions of Objective 2

OBJECTIVE 2	GENERAL ACTIONS
Develop capabilities for the data ecosystem	<p>2.1: Promote the strengthening of technical and technological capabilities in statistics and geography.</p> <p>2.2: Establish strategic alliances with the academic, private and international sectors to enhance the sources of knowledge, information sources and talent development.</p> <p>2.3: Innovate in unconventional analysis methods and techniques for the use of information from different sources.</p>

2.1: Promote the strengthening of technical and technological capabilities in statistics and geography.

Scope and lines of action:

An indispensable condition to face the challenges derived from the changes in the data ecosystem is to expand the knowledge for the use and adaptation of the new technologies to the processes related to the Statistical and Geographical Information. The technological capacities in the different areas and orders of government are varied. However, it is important to prioritize their strengthening and increase the budget allocated to information systems.

The basis for the use of technological advances lies in the capabilities of people who specialize in the production and analysis of information. It seeks to consolidate a guild of experts in statistics and geography that is the basis of the institutional structures that are dedicated to generating this type of information in the State Units. To achieve this, lines of action should be established to professionalize the service of specialists in the field, as well as to carry out training and promote the exchange of experiences and good practices.

The development of abilities should be part of the Training Program that will be permanently updated, so that over the years there is a reference to meet these requirements. The topics and training activities will be proposed by the SNIEG Collegiate Bodies to be part of the Program.

TABLE 8
Goals of General Action 2.1

INDICATOR	GOAL TO 2040
Percentage of State Units that operate with professionals with technical and technological capabilities of statistics and geography.	95%

2.2: Establish strategic alliances with the academic, private and international sectors to enhance the sources of knowledge, information sources, and talent development.

Scope and lines of action:

The academic sector focuses on research and innovation, so it is essential to have strategic alliances to know the sources of knowledge, as well as to identify and use alternative sources of information that are being developed in national and international academic institutions. The same happens with the private sector in a competitive environment, which evolves from the innovation and information to which they have access.

In a similar way, international organizations have groups dedicated to the development of models, standards and useful experiments to adopt in the production and analysis of statistical and geographic information. It is important to participate in these groups for the reflection and subsequent adoption of methodologies and innovative information sources. The Collegiate Bodies of the SNIEG constitute a favorable space to share the knowledge obtained from these strategic alliances.

TABLE 9
Goals of General Action 2.2

INDICATOR	GOAL TO 2040
Percentage of strategic alliances with the academic, private and international sectors that result in methodological improvements, use of other sources of information and the development of talents for the statistical and geographical activities of SNIEG.	80%

2.3: Innovate in unconventional analysis methods and techniques for the use of information from different sources.

Scope and lines of action:

Technological advances have revolutionized the amount of available data from different sources, with which one can generate statistical and geographic information. A prerequisite for this is that these data are integrated in such a way as to ensure their quality, and that their integration is based on solid methodologies. It is convenient to profit from alternative sources, including administrative records to produce information with more opportunity. However, it is necessary to take care that solid methodologies are used to ensure their quality. Once these methodologies have been tested and can be applied on a regular basis, they should be used for the production of statistical and geographic information, so it is important to encourage its development and use by the State Units within the collegiate bodies of SNIEG.

The innovation and development of unconventional analysis techniques for the generation of statistical and geographic information is basic both for the use of the new data ecosystem and for making the production of data more efficient, and for providing timely information for decision-making. New methodologies should be developed that allow the use and integration of the different information sources, ensuring the quality of the data. The innovation projects and development of these analytical solutions should be part of the Research Program.

These projects will be proposed by the Collegiate Bodies of SNIEG to be part of the Program and will be approved by the INEGI Governing Board.

TABLE 10
Goals of General Action 2.3

INDICATOR	GOAL TO 2040
Percentage of State Units that have improved the quality of alternative sources based on the use of solid methodologies or evaluation tools.	80%
Percentage of research in non-conventional analysis techniques that were adopted in the generation of statistical and geographic information of SNIEG.	70%

3rd Strategic Objective: Ensure the relevance and timeliness of information.

The ultimate goal of the SNIEG, established in the vision, is that the National Interest Information be the reference in the decision making for the national development through providing the necessary information to the Democratic Planning of the National Development, as well as the evaluation and accountability to society. For this, it is essential to ensure that the information is relevant and timely. That is, that meets the needs of decision makers both in terms of subject matter, temporality and geographic disaggregation. In this way, the National Interest Information, as well as the National Catalog of Indicators should be the main sources of information for the design, monitoring, and evaluation of public policies. To achieve this objective, it is necessary to know the information needs and prioritize them in order to schedule their production. Table 11 lists the General Actions that will be carried out to achieve these purposes.

TABLE 11
General Actions of Objective 3

OBJECTIVE 3	GENERAL ACTIONS
Ensure the relevance and timeliness of information	<p>3.1: Identify and prioritize information needs in order to determine the Key Indicators of the National Catalog of Indicators and Information of National Interest.</p> <p>3.2: Design an offer of products and services to meet the needs of decision makers in a comprehensive and cost-effective manner.</p> <p>3.3: Identify emerging issues and define mechanisms for their attention and timely follow-up.</p>

3.1: Identify and prioritize information needs in order to determine the Key Indicators of the National Catalog of Indicators and Information of National Interest.

Scope and lines of action:

The information needs are enormous, so mechanisms must be established to prioritize them given their importance for decision-making. Both the Political Constitution of the United States of Mexico and the SNIEG Law establish precepts that can be retaken to establish priorities, such as the information demanded by international agreements signed by Mexico and those established in the laws, as well as the hierarchies established in the National System of Democratic Planning for national development.

Although the SNIEG Collegiate Bodies are the appropriate mechanism to identify these needs, the prioritization rules must be established by the INEGI Governing Board in order to be homogeneous for all the Committees and allow a space to establish hierarchies among the total set of needs of the different subsystems.

Once the information needs have been identified and prioritized, the Key Indicators and Information of National Interest must be defined through transparent and agile processes that give room for reviewing their quality at an initial moment, as well as over time, in order to determine that they are still relevant and reliable. Additionally, it is important to define the information that may become National Interest. That is: the information that does not yet meet the quality requirements but that, given its relevance for decision making, must be in an improvement scheme to be considered. These indicators and information must be proposed in the Collegiate Bodies of the SNIEG, and approved by the Governing Board.

TABLE 12
Goals of General Action 3.1

INDICATOR	GOAL TO 2040
Percentage of Key Indicators and Information of National Interest that are explicitly used in the National Development Plan, its Sectorial, Institutional, Specific or Regional Programs.	60%
Percentage of Key Indicators or National Interest Information used explicitly to evaluate public programs at the federal level.	40%

3.2: Design an offer of products and services to meet the needs of decision-makers in a comprehensive and cost-effective manner.

Scope and lines of action:

In order to meet the needs of decision makers in a comprehensive manner, it is necessary to conceptualize integrated products and services that allow articulating and replicating the information required for decision making. These products and services can arise from different sources and need specific visualization or analysis tools, in order to take the best alternative, cost-effectiveness criteria must be included when deciding the projects that will be carried out. Likewise, the State Units responsible for the production of information must be established, as well as the mechanisms for their generation and integration in the Annual Statistics and Geography Programs.

These Programs are proposed by the Collegiate Bodies of the SNIEG and approved by the Governing Board of INEGI, identifying the statistical and geographical activities of the corresponding year, as well as the responsible State Units and the date committed for their publication. It should be noted that INEGI itself is considered as a State Unit producing information; and its Annual Work Program and Budget will be based on activities committed within the framework of the System.

TABLE 13
Goals of General Action 3.2

INDICATOR	GOAL TO 2040
Percentage of products included in the Annual Statistics and Geography Programs that are used to generate key indicators or Information of National Interest.	80%

3.3: Identify emerging issues and define mechanisms for their attention and timely follow-up.

Scope and lines of action:

National and international realities are dynamic, which is why frequently emerge issues that need to be known with greater depth and precision. Some of these issues will become a part of structural or long-term needs, while others will respond to short-term conjunctures. In both cases, it is important to identify these information needs in time, define the conceptual framework, the methodology, and the mechanisms to produce this information, as well as the State Units responsible for its generation and the budget allocated for it.

Each statistical or geographical project established to meet these purposes must conclude with a recommendation of the convenience of including new Key Indicators to the National Catalog of Indicators, establishing the data susceptible of becoming Information of National Interest, as well as a cost-effectiveness analysis of the future mechanisms to produce this information. The emerging issues will be proposed by the Collegiate Bodies of SNIEG, and will be approved by the INEGI Governing Board. Likewise, emerging issues that are considered to require further analysis will become part of the Research Program.

TABLE 14
Goals of General Action 3.3

INDICATOR	GOAL TO 2040
Percentage of projects with emerging themes that resulted in improvements in the thematic and geographic coverage of the National Interest Information.	80%

4th Strategic Objective: Produce truthful, accurate, reliable, consistent, and comparable information.

In order to contribute to adequate decision-making, it is not enough to ensure relevance and timeliness, but it is necessary to generate and integrate information with robust standards, methodologies and processes that:

- Ensure truthful, accurate and reliable results in statistical terms,
- Comply with criteria of accuracy and geographical completeness,
- Be consistent internally and over time; and
- They are comparable between different geographical areas and between different sources of information.

This information must be produced following the principles of quality in the statistical and geographic processes, it must be based on solid methodologies, it must seek the best cost-effectiveness, reduce the burden of the informants and maintain the established standards. To facilitate the integration of data from different sources, it is essential to use a common information infrastructure, that is, a compatible geostatistical framework and catalogs that specify homogeneous conceptual definitions.

Indicators are important products for decision making, so it is essential that they are integrated or developed from information produced with solid and transparent methodologies, with standardized processes, as well as with quality controls that ensure compliance with standards. Likewise, administrative records and alternative sources should be used to produce quality information at lower cost. Innovation in sources, methodologies and technologies must be constant and generate a spiral of improvement in quality. However, it is important that it be done in a controlled manner to measure and document improvements.

The general actions established to achieve this objective are introduced in Table 15:

TABLE 15
General Actions of Objective 4

OBJECTIVE 4	GENERAL ACTIONS
Produce truthful, accurate, reliable, consistent, and comparable information	<p>4.1: Ensure that the information infrastructure is used as a common base for the production of statistical and geographic projects.</p> <p>4.2: Design the production of information based on methodologies that allow the linking of different statistical and geographic projects.</p> <p>4.3: Produce information with cost-effectiveness criteria in standardized processes and with quality controls.</p> <p>4.4: Take advantage of administrative records and alternative sources to produce statistical and geographic information.</p> <p>4.5: Innovate in sources, methodologies and technologies for the production of information based on protocols that allow measuring and documenting the impact of improvements.</p>

4.1: Ensure that the information infrastructure is used as a common base for the production of statistical and geographic projects.

Scope and lines of action:

The objective of the information infrastructure is to standardize and homologate the production of statistical and geographic information. It is useful to the methodological design, to define the samples of the surveys and as a basic geographic reference that is able to integrate the information. It is currently integrated by the National Geostatistical Framework for demographic and social information, as well as the economic one; the National Inventory of Homes, the National Statistical Directory of Economic Units, the National Registries of Statistical and Geographic Information, the Register of State Units, and an Inventory of Projects and Statistical Products in the Area of Government, Public Security, and Administration of Justice. On the geographical side, it is integrated by the Spatial Data Infrastructure of Mexico relating to geographical names; Cadastral Data; Topographic; Natural Resources and Climate; Continental, Insular and Submarine relief; Coastal, International, State and Municipal Boundaries; Geodetic Reference Framework.

The components of this infrastructure must be complementary and compatible with each other to ensure the articulation of different information generation projects, including from different Subsystems. Although INEGI is responsible for generating and updating the information infrastructure, all the State Units producing information that make up the SNIEG must use it as a basis for the methodological design of the projects for the generation of statistical and geographic information.

TABLE 16
Goals of General Action 4.1

INDICATOR	GOAL TO 2040
Percentage of the products included in the Annual Statistics and Geography Programs that use the INEGI information infrastructure for the generation of Information of National Interest.	90%

4.2: Design the production of information based on methodologies that allow the linking of different statistical and geographic projects.

Scope and lines of action:

The information must be coherent and comparable in three dimensions: thematic, temporal and geographical, as well as between different sources of information. To achieve this, used methodologies must ensure congruence in concepts and classifications, in time and space, as well as between different projects for the generation of statistical and geographic information.

In order to guarantee the homogeneity and comparability of the information, the INEGI shall provide and promote the use of definitions, classifications, nomenclatures, abbreviations, identifiers, directories, catalogs, symbols, geographical boundaries, and other elements that are essential for these purposes. The State Units and the Collegiate Bodies of the SNIEG must propose concepts and classifiers in their respective fields of competence for them to be approved by the Governing Board and applied by the members of the System in compliance with the regulations. Additionally, the State Units should seek that the designs of the methodologies be comprehensive considering the need to relate information from different sources.

TABLE 17
Goals of General Action 4.2

INDICATOR	GOAL TO 2040
Percentage of Information of National Interest whose methodologies allow direct linkage with other statistical and geographic projects.	70%

4.3: Produce information with cost-effectiveness criteria in standardized processes and with quality controls.

Scope and lines of action:

To generate information through censuses, surveys, derived statistics, geospatial data or other mechanism, standardized processes should be developed, as well as quality controls that ensure compliance with the defined standards. The standards approved for the SNIEG are the basis of the operation, however, the best national practices and recognized international standards can also be retaken.

At all times, the cost-effectiveness ratio must be taken into account to decide the production methods of each project, as well as to conceptualize coordinated and integrated projects that reduce costs and maintain the quality of the products (the cost-effectiveness ratio is what measures the effectiveness by weight spent. Effectiveness is understood as compliance with the pertinence, timeliness, and accessibility of information, whose actions correspond to objectives 3 and 5 of this Strategic Program).

TABLE 18
Goals of General Action 4.3

INDICATOR	GOAL TO 2040
Percentage of Information of National Interest that is produced with standardized processes and with quality controls.	95%

4.4: Take advantage of administrative records and alternative sources to produce statistical and geographic information.

Scope and lines of action:

For decades, administrative records have been used in Mexico and other countries to generate official statistical and geographic information. However, in order to generate information from these sources, it is necessary to do so based on solid methodologies that ensure their quality and consistency, as well as apply evaluation mechanisms designed to improve existing administrative records so they can be used for statistical and / or geographical purposes. Likewise, it is necessary to establish agreements with the State Units responsible for the generation of information for the integral use of administrative records. Within the framework of the National Information Subsystems, administrative records that can be used to produce statistical and geographic information of National Interest should be identified and projects that can be substituted or supplemented by administrative records should be identified and have a strategy for carrying it out, ensuring the quality of the information and its availability over time. For the alternative sources, the same principles of quality and methodological support apply, whose use is relevant to produce more information with more opportunity or even to replace current sources.

TABLE 19
Goals of General Action 4.4

INDICATOR	GOAL TO 2040
Percentage of Information of National Interest that is produced through administrative records or other alternative sources made with opportunity, solid methodologies and quality.	60%

4.5: Innovate in sources, methodologies, and technologies for the production of information based on protocols that allow measuring and documenting the impact of improvements.

Scope and lines of action:

The innovation in sources, methodologies and technologies is the basis to develop and make more efficient the State Units that produce information and, therefore, the SNIEG. It is important that these improvements in the production processes are measured and documented based on pre-established protocols or developed expressly for this matter. The Collegiate Bodies of SNIEG are the spaces where the application of these protocols will be shared and approved. These protocols for measurement and documentation of improvements must be a part of the Research Program, will be proposed by the Collegiate Bodies of the SNIEG and will be approved by the Governing Board of INEGI.

TABLE 20
Goals of General Action 4.5

INDICATOR	GOAL TO 2040
Percentage of products included in the Annual Statistics and Geography Programs that have documented and evaluated improvements in sources, methodologies, and technologies.	80%

5th Strategic Objective: Guarantee accessibility to information.

In order to ensure that information is used for decision-making, it is essential that it is presented in an open, clear, and comprehensible format, guaranteeing easy access with no more limits than that imposed by the public interest and the principles of confidentiality and reservation established in the Laws. The information must be accessible both for those dedicated to the design, monitoring and evaluation of public policies, as well as for researchers, students, businessmen, Non-Governmental Organizations (NGOs), persons with disabilities, and for

society in general, taking into account that each one of them requires thematic disaggregations and different functionalities.

This objective seeks for the different sectors of society to identify SNIEG as the source of Information of National Interest and use it on a permanent basis. For this, it is necessary that users have access in an agile and simple way to the information through appropriate tools, in addition to offering products and services that facilitate their use.

The following table shows the general actions that must be carried out to guarantee accessibility to information.

TABLE 21
General Actions of Objective 5

OBJECTIVE 5	GENERAL ACTIONS
Guarantee accessibility to information	<p>5.1: Make the information available to users in a simple, consistent and standardized manner.</p> <p>5.2: Develop tools that facilitate the access and use of information.</p> <p>5.3: Develop products and services that facilitate the use and interpretation of information.</p> <p>5.4: Promote knowledge and proper use of statistical and geographic information</p>

5.1: Make the information available to users in a simple, consistent and standardized manner.

Scope and lines of action:

To ensure effective decision-making, it is essential to make available to users the information they need, specifying their scope, limitations, quality and metadata so that it can be used appropriately. The Public Information Service must include at least the Information of National Interest, the Key Indicators and the Information Infrastructure of SNIEG. This service must be provided by the INEGI, who will coordinate the dissemination of the information produced by the different State Units that make up the SNIEG, including the one generated by the Institute itself. It should be noted that when legally mandated State Units are empowered to produce and disseminate statistical and geographic information, they must observe the bases, rules, and principles established for that purpose. The Public Information Service integrates information of National Interest produced by the different State Units that make up the SNIEG, including the one generated by the INEGI.

In parallel, the INEGI will provide a service so that specialized users have access to microdata through procedures and protocols that ensure the confidentiality and reservation of basic information established in the Law. The Governing Board will encourage other State Units to make available for the users, the Information of National Interest at microdata level through the Microdata Laboratory of the INEGI. In addition, convenient alliances with other actors and initiatives that aim to promote the use of information will be made.

TABLE 22
Goals of General Action 5.1

INDICATOR	GOAL TO 2040
Percentage of Key Indicators, Information of National Interest and the susceptible one that is offered through the SNIEG Public Information Service.	98%

5.2: Develop tools that facilitate the access and use of information.

Scope and lines of action:

To facilitate the access and use of information, adequate tools must be developed to exploit the data. The purpose must be to remain at the technological forefront in order to create efficient instruments, with storage capacity and an adequate speed of response. Likewise, it should be sought that these tools allow the interrelation of data from different sources and produced by the State Units, including those produced by the INEGI. Also, it should be sought that users can make queries tailored to their needs.

TABLE 23
Goals of General Action 5.2

INDICATOR	GOAL TO 2040
Percentage of users of the Public Information Service who consider that it is easy to access the information they need (divided according to the degree of specialization of the users).	80%

5.3: Develop products and services that facilitate the use and interpretation of information.

Scope and lines of action:

The products and / or services that are provided must ensure their use by different types of users, from those who need aggregate information for quick consultation to expert users who will process the data directly or automatically. It will be sought that there is a set of scheduled, articulated, clear, and comprehensible products that include the information produced by all the State Units. These products and services must be oriented to national users and to meet the main international requirements to which the country has committed.

TABLE 24
Goals of General Action 5.3

INDICATOR	GOAL TO 2040
Percentage of users of the Public Information Service that consider that the products have the required level of detail (divided according to the degree of specialization of the users).	90%

5.4: Promote knowledge and proper use of statistical and geographic information.

Scope and lines of action:

It is important that the different types of users know what Information of National Interest and Key Indicators exist, and how they should be used for their best purpose, in addition to avoiding data misinterpretations. In order to carry out this general action, promotion and training strategies should be developed, considering the education sector as a strategic ally for the development of this type of activity. The promotion and training will be carried out by INEGI in coordination with the State Units within the framework of the Collegiate Bodies, guaranteeing the feedback at all times.

TABLE 25
Goals of General Action 5.4

INDICATOR	GOAL TO 2040
Percentage of Key Indicators or Information of National Interest used by journalists, academics, students, public servants, civil society organizations or business associations	95%

IV. Policies to be met by the Executive Committees of the Subsystems

The policies are a declaration of general principles and basic guidelines that guide the behavior of the Executive Committees of the SNIEG Subsystems and the State Units that participate in them. The following is a description of the policies that are considered essential to adequately meet the objectives established in the previous section of this Strategic Program.

A. Ethical behavior

Ethics is a universal principle that has specific components for different professional fields. The activities related to the production and dissemination of statistical and geographic information are not the exception, for this reason a Code of Ethics of the SNIEG has been developed that must be followed by all the State Units that make up the Collegiate Organs of the System, ensuring an ethical and responsible behavior during the development of its functions.

B. Ensuring the high quality of information

The assurance of the quality of the statistical and geographical data represents a fundamental element, so that data are useful and reliable, and in this way they contribute to a better decision-making. The Governing Board of INEGI approved the Principles and Best Practices for the statistical and geographic activities of the SNIEG with the purpose that the State Units, including the INEGI, take into account the best national and international practices associated with the processes for generation of statistical and geographic information.

C. Prioritization of public interest

The public interest is a principle that must be followed by all institutions that carry out statistical and geographical activities. The information that is generated must have as its main axis the generation of value for the State and the Mexican society. It must be of national interest and support the decision-making for the national development. Likewise, the information must be seen as a good to which the general public must have access, without any greater restriction than the principle of confidentiality established by law. Similarly, the task of the Units of the State must be transparent, seeking adequate accountability to society.

D. Cross- linking between subsystems

The Executive Committees and their respective Specialized Technical Committees are organized by a subsystem. Nevertheless, the information needs to go beyond this division, so it is essential that there is a transversal link between subsystems. This should always be kept in mind to generate interactions when necessary.

E. Interinstitutional collaboration

The SNIEG is integrated by Units of the State that interact through Collegiate Organs, the relationship between them must be based on the willingness to collaborate with each other especially in the exchange of information, experiences and good practices to provide feedback to the statistical and geographic projects.

F. Adaptation or adoption of international best practices

Different international organizations such as UN, UNGGIM, UNECE, OECD, PAIGH, OGC, ISO, IHO, ECLAC

and EUROSTAT have developed and documented models, guidelines, standards and practices for the production of statistical and geographic information that combine lessons learned in different countries. The adoption of these models and international references allows the Units of the State to have a documented reference base that can serve to strengthen their processes in an assertive manner. These practices include the Fundamental Principles of the Official Statistics of the UN, the principles of the International Monetary Fund, as well as the modernization initiatives of UNECE such as the Statistical Data and Metadata eXchange (SDMX), the Generic Statistical Business Process Model (GSBPM), the World Geodetic Reference Framework (GGRF) and the Geospatial Information Standards Function Guide and its technical compendium.

G. Efficient use of resources

Making efficient use of public resources is the obligation of all State Units to carry out their statistical and geographical activities. For this, it is important to adhere to the austerity policies established by the budgetary authorities. Likewise, it should be defined that the realization of information generation projects is based on a cost-effectiveness analysis.

Acronyms and abbreviations

ECLAC	Economic Commission for Latin America and the Caribbean
EUROSTAT	European Statistical Office
GGRF	World Geodetic Reference Framework
GSBPM	Generic Model of the Statistical Process
IHO	International Hydrographic Organization
INEGI	National Institute of Statistics and Geography
IPGH	Pan-American Institute of Geography and History
ISO	International Organization for Standardization
Law of the SNIEG	Law of the National System of Statistical and Geographic Information
OECD	Organization for Economic Cooperation and Development
OGC	Open Geospatial Consortium
NGO's	Non Governmental Organizations
UN	United Nations
PESNIEG	Strategic Program of the National System of Statistical and Geographic Information
SAGARPA	Secretariat of Agriculture, Livestock, Rural Development, Fisheries and Food
SDMX	Statistical Data and Metadata eXchange
SEMARNAT	Ministry of Environment and Natural Resources
SHCP	Ministry of Finance and Public Credit
SNIEG	National System of Statistical and Geographic Information
SU	State Units
UNECE	United Nations Economic Commission for Europe
UNGGIM	United Nations Global Geospatial Information Management

References

- ⁱ An environmental ecosystem is a system that is made up of a set of living organisms and the physical environment in which they are related. Analogously, the term data ecosystem refers to a social phenomenon promoted by digital technology, in which more sophisticated users interact in a technological environment where there is more information. The data ecosystem is the union of data generated by the use of digital services and applications, greater technological capabilities, and individual or institutional actors that operate outside the traditional spheres of scientific research. For more information see Emmanuel Letouzé, *BIG DATA & DEVELOPMENT AN OVERVIEW*, DATA-POP ALLIANCE PRIMERS SERIES, March 2015.
- ⁱⁱ The members of the collegiate bodies provide data about themselves with the exception of the INEGI, since their role as informant is to provide the information that they collected from their informants.
- ⁱⁱⁱ European Statistical Office.
- ^{iv} Organization of the United Nations.
- ^v Economic Commission for Latin America and the Caribbean.
- ^{vi} Organization for Economic Cooperation and Development.
- ^{vii} Some of them are the Comprehensive Information System of Income and Public Expenditure (SHCP), the National Information System for Sustainable Rural Development (SAGARPA), the National System of Environmental Information and Natural Resources (SEMARNAT).
Some examples are the Democratic Planning System, the Performance Evaluation System, the National Transparency System, Access to public information and protection personal dates.