



**UNIVERSIDAD NACIONAL  
AUTÓNOMA DE MÉXICO**



# SPATIAL DATA INFRASTRUCTURE PART\_III

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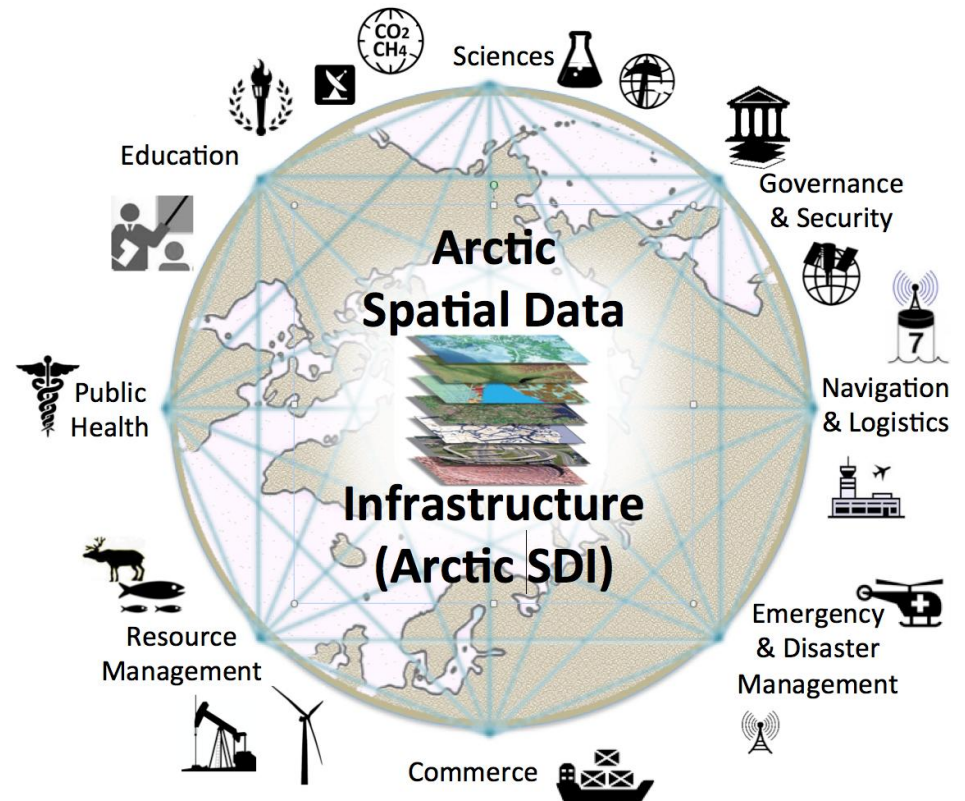
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## Design of an SDI (team work)

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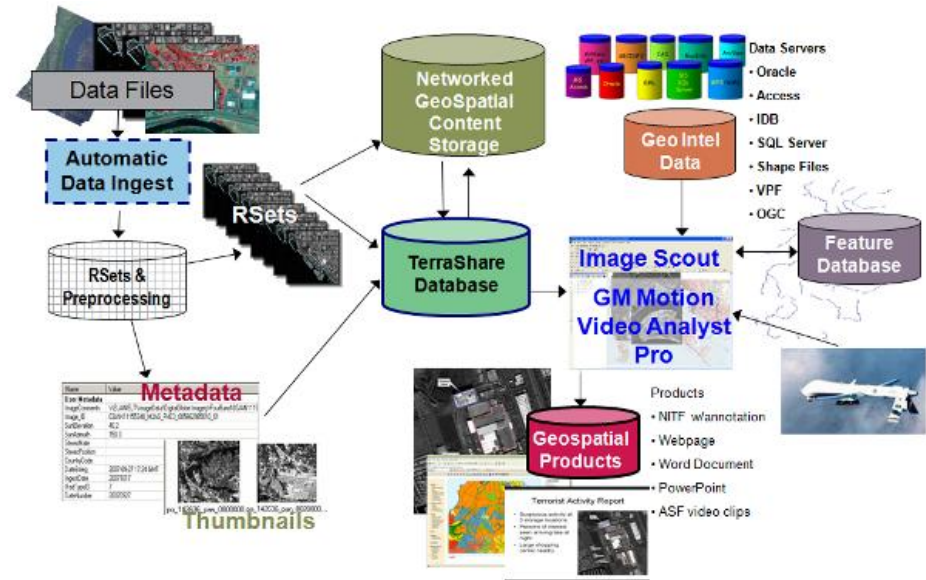
Information layers and data bases that will be included



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**5 MINUTES PRESENTATION OF EVERY GROUP.**



# Organizational Structure

Leadership is required to ensure that the SDI initiative is successfully planned and implemented.

Developing the SDI planning process (i.e., vision, mission, roadmap, and strategic plan).



# Organizational Structure

Leading and facilitating the development and deployment of the key SDI components : institutional arrangements, framework data, policies, standards and technologies.

Promoting and facilitating the use of the SDI through communication, and outreach and training activities, and support of selected applications development.

Managing the SDI measuring and monitoring program.



# Examples of lead SDI organizations in the Americas

Country	SDI Lead Organization
Brazil	National Commission of Cartography (CONCAR)
Canada	GeoConnections Division, Mapping Information Branch, Natural Resources Canada
Chile	Ministry of National Properties Colombia Colombian Commission of Space (CCE)
Ecuador	National Geoinformatics Council (CONAGE)
Mexico	National Institute of Geography and Statistics (INEGI)
United States	Federal Geographic Data Committee (FGDC)
Uruguay	Agency for Electronic Government and Information Society (AGESIC)
Venezuela	Geographic Institute of Venezuela Simon Bolivar



# SDI Strategic Framework

The creation of an effective strategic framework is an important prerequisite to success in planning and implementing any spatial data infrastructure.

Close alignment with the priorities of the government(s) that will provide the financial backing for the SDI initiative will help to ensure political support for the infrastructure's development and ongoing sustainability



# SDI Strategic Framework

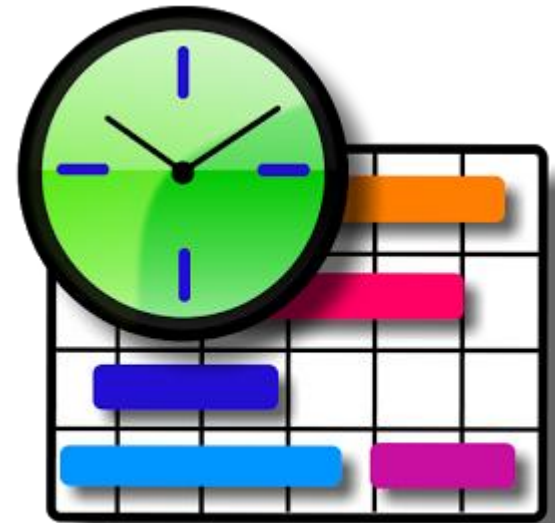
Once those priorities are determined, the steps in creating the strategic framework include the development of a strategic plan or roadmap (i.e., vision, mission, goals, objectives and initiatives)





# SDI Strategic Framework

And implementation plans (i.e., activities or tasks to achieve the objectives and a timetable for their completion) for the SDI initiative that aligns with those priorities.



# Alignment with Government Priorities

During the initial planning of SDI initiatives and the securing of political support for their funding, it is particularly crucial that those priorities be well understood.



# Alignment with Government Priorities

Such priorities can be ascertained from a number of sources, such as:

- Budget documents
- Departmental business plans
- Speeches by politicians and senior government officials
- Government press releases and media coverage
- Other print and online publications, websites, etc.



# Alignment with Government Priorities

Once priorities are established, the key stakeholders must be identified and **convinced** of the role that the SDI can play in helping them to address those priorities.



# Some examples

During the second phase of Canada's CGDI development, GeoConnections focused on support of four key Government of Canada priorities:

- Public Safety and Security
- Environment and Sustainable Development
- Public Health
- Matters of Importance to Aboriginal Peoples.



**This focus helped to secure five more years of funding support and resulted in the improved use of geospatial information for policy and decision-making in these important areas.**



# Strategic Plan or Roadmap

The strategic planning process begins with the articulation of a vision statement for the SDI initiative.

A good vision statement is a long-term view that describes the desired future for the SDI

And is intended to inspire, motivate and align the activities of those people interested in seeing that future become a reality.



# Define the path to the achievement of the vision as follows:

**Goals** – High-level, qualitative statements that describe what needs to be accomplished in order to achieve the vision in broad terms.

**Objectives** – Measurable steps that, taken together, lead to the achievement of goals.

**Initiatives** – Investments of time and money in projects that must be undertaken by specific stakeholders in order to achieve the objectives and ultimately realize the vision of the SDI.





# Implementation Plans

The implementation planning process is tactical in nature and is designed to provide all stakeholder organizations with detailed direction on how they can collectively support the realization of the SDI vision.



# Example:

The implementation strategy of the NSDI in Brazil is proposed in the NSDI Action Plan (CONCAR, 2010), based on staggered goals according to priorities and well-defined objectives to be achieved over three implementation cycles:



# Example:

Cycle I – December 2010: Implementation of a minimal infrastructure of hardware, software, telecommunications and facilities of the Brazilian Directory of Geospatial Data (DBDG) and the GIS Portal Brazil, with search tools, exploration and access of data and spatial metadata implemented and working.



# Example:

Cycle II – 2011 to 2014: Consolidation of the DBDG in the federal government and its extension to other levels of government. This cycle also marks the strengthening of the institutional and people components, besides the development of norms and standards. The focus will be on both the data and services, which will be expanded according to the user demands.



## Example:

Cycle III – 2015 to 2020: The major goal of this cycle is to transform the NSDI into the main search engine for exploration and access to Brazil's spatial data and information.

This will support public policy formulation by the government sector, in addition to supporting the society itself in decision-making related to its normal routines, including encouraging voluntary participation.

At the end of Cycle III, it is expected that the NSDI will also be internationally recognized for its ability to contribute to transnational projects.



# Project statement



# Objectives



# Information layers and data bases that will be included.





# Already available information: Maps, charts and databases



# Custody and maintenance of the SDI



# Access to information (Geoportal)



# Access to information (Geoportal)

## Áreas Naturales Protegidas

SIEM CRG

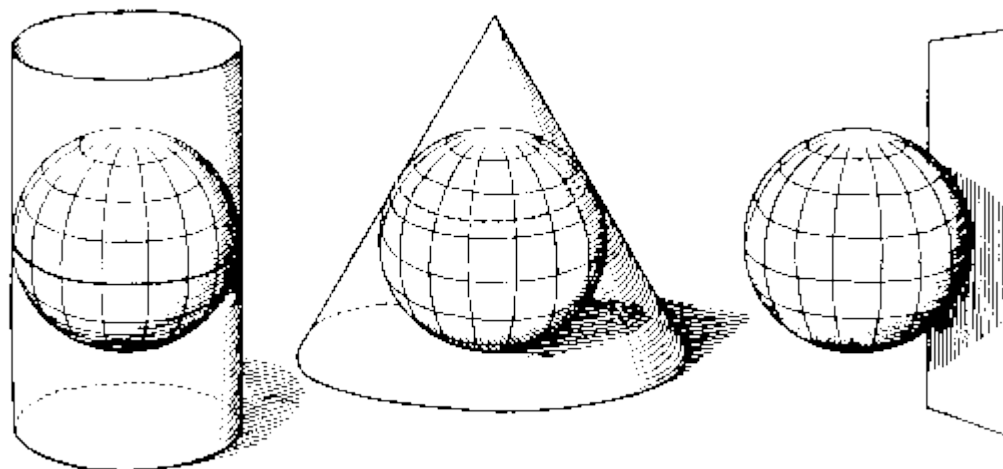
The screenshot displays a web-based geoportal interface. On the left, a sidebar titled 'Contenido del mapa' lists several layers: 'Áreas Naturales Protegidas' (checked), 'Cuerpos de Agua', 'Zona Urbana y Vegetacion Alta', 'Imagen Landsat-8' (checked), 'Open Street Map' (checked), 'Google Maps', and 'Bing Maps'. The main map area is split into two views: a satellite image on the left and a vector map on the right. The vector map shows various geographical features, including roads, rivers, and administrative boundaries. Labels on the vector map include 'Poza Rica de Hidalgo', 'Gutiérrez Zamora', 'Independencia', 'Tlapacoyan', 'Misantla', 'Teziutlán', 'Altotonga', 'Zaragoza', and 'Perote'. A scale bar at the bottom right indicates distances up to 60 km. The interface also includes a search bar at the top right, a toolbar with navigation and measurement tools, and a coordinate display at the bottom left showing 'E: -99°25'10.12" N: 20°2'53.44"'. The text '© OpenStreetMap contrib' is visible at the bottom right of the map area.

# Access to information (Geoportal)



# Connection with other SDI's

## INTEROPERABILITY



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