Basic Territorial Information Group Spatial Data Infrastructure, SDI-CHILE (SNIT)

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Key words: IDE, Spatial Data Infrastructure, Chile, fundamental data.

The SNIT, National System of Territorial Information, currently IDE-Chile, was created to optimize the management of geospatial information in the country, and today coordinates in a permanent way the various participating institutions.

The main target of IDE-Chile is that the citizenship and public organizations, in its decision making process could have access to the geospatial information.

1. IDE -CHILE: MISSION AND VISION

"Coordinate, promote and define principles and strategies for plans and technical, technological and regulatory programs that contribute to the systematic and coherent acquisition of an efficient management of geospatial information in the public agencies, providing accurate, timely, reliable, standardized and quality geospatial information as a response to the needs of the country"

2. BASIC TERRITORIAL INFORMATION GROUP (GITB)

Within the working groups of IDE-Chile is the GITB, constituted by the organizations responsible for generating and developing fundamental geospatial data in Chile. Its objective is to study and implement standards for geospatial information and coordinate the response to national needs regarding geographical, topographic, nautical, and aeronautics information.

On JUNE 06th 2012 the Minister of Defense named the Director of the Military Geographic Institute as the coordinator of the Thematic Basic Territorial Information area.

The Military Geographical Institute, as a coordinator of the group, maintains constant meetings(convened) with the different state institutions.

Some years ago, the GITB defined the fundamental data, which are geographic data sets of national coverage or broad-coverage within the country, and are considered important for various types of applications. The geographic data can include topographic and thematic data and they are: Reference System, toponymy, Administrative political boundaries, transport infrastructure, hydrography, topography and Orthoimage.

At present the GITB is working on two types of fundamental data: toponymy and political and administrative boundaries of the country that have been developed from the year 2007 up to date.

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1. INTRODUCTION

The Geospatial Data Infrastructure of Chile, "IDE" (SDI)-Chile, is a network of public institutions working in a coordinated and collaborative manner in order to make available to the whole community current and reliable geospatial information that is useful for public and private management, also serving the citizens needs.

This government initiative is led by the Ministry of National Assets and Resources, whose Minister performs the role of President of the Council of Ministers for Spatial Information. From this ministry the IDE members receive guidelines to optimize information management in their organizations, facilitate its usage and citizen access as well

2. THE ROLE OF IDE-CHILE

- Coordinate actions at national and regional levels aimed at strengthening institutional support systems which require proper management of geospatial information.
- Give timely and prompt access to geospatial information in the country through technological tools, procedures and good practices.
- Promote the use of geospatial information at state institutions in the creation of public policies and decision-making procedures.
- Provide a guiding framework to all producers and users of geospatial information institutions concerning standards, regulations and technical specifications.
- Support the strengthening and creation of capabilities in producers, users and decision makers involved in the management processes of geospatial information.

3. ORGANIZATION OF IDE-CHILE

The IDE consists of the following agencies:

- 3.1. Territorial Information Council
- 3.2. Executive Secretariat.
- 3.3. Interministerial Technical Committee
- 3.4. Regional IDEs.
- 3.5. Thematic areas.
- 3.6. Working Groups.

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3.1. Council of Ministers for Spatial Information

Chaired by the Minister of National Assets and Resources. In this the Interior, Foreign Relations, Defense, Finance, Economy, Development and Tourism, Social Development, Education, Public Works, Housing and Urban Development, and Agriculture Ministries all participate.

Its function is to resolve and propose general guidelines and actions within the system regarding the consolidation of the Chile Geospatial Data Infrastructure.

3.2. Executive Secretariat

Directed by the Executive Secretary of IDE-Chile, this is a multidisciplinary team of professionals, mainly in the area of Geomatics.

It is responsible for the operational coordination of public institutions and the development and consolidation of the National Geospatial Data Infrastructure.

3.3. Interministerial Technical Committee

Chaired by the Executive Secretary of IDE-Chile and comprising representatives of the Ministers participating in the Council of Ministers for Territorial Information. Its function is to advise and assist the IDE Executive Secretary in relation to the policies of land information management and the development and consolidation of the National Geospatial Data Infrastructure.

3.4. RegionalIDEs

Led by the Regional Intendant and coordinated by a Regional Government professional. Regional IDEs are integrated by the Regional Government and various sectors and regional services. The main function of IDE in this territorial level is to facilitate the proper management of geospatial information within the region.

3.5. Thematic Areas

Its functions are to coordinate the management of geospatial information within the institutions that comprise it, share best practices that contribute to strengthen sectoral Geospatial Data infrastructure and promote the use of information in decision-making at the sectoral level. There are eight thematic areas, each of which consists of a set of public institutions that work in related issues. These are: Basic Territorial Information, Infrastructure, Natural Resources, Property, Planning, Heritage, Social and Regions.

3.6. Working Groups

Coordinated by the Executive Secretariat of IDE-Chile, their function is to develop multi-sectoral initiatives for specific tasks or topics in the field of geospatial information and its proper management. They are made up of public institutions associated with the particular theme of the working group.

4. BASIC TERRITORIAL INFORMATION GROUP, GITB.

This group consists of organizations which are responsible for generating and developing the fundamental geospatial data of Chile.

Its purpose is to study and implement standards for geospatial information and coordinate responses to national needs regarding topographical, nautical and aeronautical geographic information.

4.1. The GITB and its Organization.

On June 6, 2012 the Minister of Defense appointed the Director of the Military Geographic Institute as coordinator of the Thematic Area for Basic Territorial Information.

Currently, Colonel Rony Jara Lecanda is the Director of the IGM and coordinates the working group. The participanting institutions are: Ministry of Public Works (MOP), Information Centre for Natural Resources (CIREN), National Institute of Statistics (INE), National Office for State Frontiers and Boundaries (DIFROL) of the Ministry of Foreign Relations, Secretariat for Regional and Administrative Development of the Ministry of Interior (SUBDERE), Executive Secretary of the Ministry of National Assets and Resources, Aerophotogrammetric Service of the Air Force (SAF), Hydrographic and Oceanographic Service of the Chilean Navy (SHOA) and Military Geographic Institute (IGM) of the Ministry of Defense.

In 2010, the GITB was the manager of the project: "Development of Chilean standards for geospatial information, as a contribution to the development of the National Spatial Data Infrastructure"; 19 ISO 19100 standards for geographic information were worked on in that project.

4.2. GITB and Fundamental Data

The GITB defined the fundamental data within the work it performed as sets of geographic data with national coverage or comprehensive coverage within the country that are considered important for various types of applications. They may include topographic and thematic data and they are: Reference System, Toponymy, Administrative Political Boundaries, Transportation Infrastructure, Hydrography, Relief and Orthoimages.

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4.2.1. Reference system

It establishes a common reference system to define the position of all geographic information. It gives the means for attaching geographic elements to a nationwide system of horizontal and vertical coordinates.

4.2.2. Toponymy

It corresponds to the information of the names of places or geographic features that define them uniquely. It is referenced by geographic identifiers.

4.2.3. Administrative Political Boundaries

This data includes the political-territorial units that meet the purposes of state management. To fulfill the objectives of government and administration, the country is divided into fifteen territorial units called regions. The regions are then divided into provinces and these, into districts.

4.2.4. <u>Transportation Infrastructure</u>

This is the collection of infrastructureset up by man in order to transport people or goods from one place to another, serving mainly for the implementation of certain economic and social activities.

4.2.5. Hydrography

All items related to water features and their mapping.

4.2.6. Relief

This involves data representing the vertical distance from a datum to a point or object on the surface of the Earth, as well as measures of terrain height on the surface or deep in the water.

4.2.7. Orthoimage

This deals with all the photographic elements or other images subjected to a rectification process, which corrects the distortions of perspective in the image by the sensor or the relief.

4.3. Progress Report on the Definition and Collection of Fundamental Data.

- In 2008, GITB determined SIRGAS as the Reference System for Chile.
- GITB, at present, is working on three fundamental data: Toponymy, Transportation Infrastructure and Political and Administrative Boundaries of the country which have been developed since 2007 to date.
- In 2013 the Toponym subgroup determined that the official institutions of the national database for names in Chile are: Geographic Military Institute (IGM), National Office for State Frontiers and Boundaries (DIFROL) and the Hydrographic and Oceanographic Service of the Chilean Navy (SHOA).
- Regarding the Political Administrative Limits subgroup; in 2013 it obtained the complete Administrativa (DPA) Political Division at 1:50,000: borough, provincial and regional boundaries of the country.

4.4. GITB Targets for 2014

- 1. Toponym Subgroup: Tocontinue working on the creation of the National Toponym Database (IGM-DIFROL-SHOA).
- 2. Political Administrative Limits Subgroup: together with DIFROL, work on obtaining the registration certificate of the International Boundary of the country to complete the Administrative Political Boundaries.
- 3. Transportation Infrastructure Subgroup: The Ministry of Public Works will conduct a registry of information: data type and current state to make them available for IDE-Chile.

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