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Plan on establishment of National Committee on Geographical Names and Spatial Data Infrastructure in Viet Nam \*

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# Plan on establishment of National Committee on Geographical Names and Spatial Data Infrastructure in Vietnam

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#### Introduction

The Vietnamese Government is implementing the e-government Program, which was established as an effective mechanism for increasing government productivity and efficiency and a key enabler of citizen-centric services.

To achieve the above policy, the National Spatial Data Infrastructure (NSDI) will be one of the core data platform that enables sharing, accessing and management of natural and artificial objects by geographic location, which in turn will enhance efficiency in policy/decision making of the Local and Central Government. In this context, Vietnamese government has assigned the Ministry of Natural Resources and Environment to prepare a plan on the establishment of a National Committee on Geographical Names and Spatial Data Infrastructure. The presentation will deliberate on this plan. The role of the Department of Survey and Mapping of Vietnam to contribute some of the core geospatial data for the NSDI of Vietnam will be included.

#### 1. The status of spatial data infrastructure in Vietnam

Since the 2000s, most of the ministries, sectors and localities have implemented various programs and projects for specialized tasks, through which a huge and valuable database was created. Geospatial infrastructure systems and databases can be listed as follows.

#### - For basis measurements

- + Coordinate grid level 0 and 71- point marine geodetic network;
- + Coordinate grid class I, II, III in the National Reference System and Coordinate System VN-2000 covering the whole country with the total of over 14,308 points.
- + Level network including 18 points of original network; 1,176 points of class I; 1,114 points of class II; and 2,334 points of class III in the National Elevation System at Hòn Dấu Hải Phòng.
- + Basic gravity grid with 5,200 points

#### - For base geographical databases and national topographic maps:

- + Base geographical database scale 1:2,000 and 1:5,000 on urban areas and focal economic zones, established from 2008 2012, in digital form.
- + Base geographical database scale 1:10,000 associated with a digital elevation model covering the whole country, implemented from 2008 2012, in digital form.
- + National topographic maps scale 1:50,000; 1:100,000; 1:250,000; 1:500,000 and 1:1,000,000, established from 1998 2013, in both print and digital form.
- + Seabed topographic maps scale 1:10,000 and 1:50,000 for some coastal areas of Vietnam, in both print and digital form.
- + Administrative boundary maps for administrative units at commune, district and provincial levels nationally.
- + Marine chart of Vietnam marine areas, scale 1:250,000 Maps of Vietnam continental shelf scale 1:1,000,000; 1:17,000 and 1:3,000,000.
- + System of aerial and remote sensing.

#### For specialized geographic databases:

Some sectors have developed other geographic information systems serving the specialized management of each field, such as:

- + The system of land records and cadastral maps: about 80% of the parcels of land nationally, 70% of which are in digital form.
- + Maps of current land use and land use planning of administrative units at commune, district and provincial levels in 2000, 2005 and 2010.
- + Geological maps, scale 1:1,000,000, 1:500,000 and 1:250,000 covering the whole territory; scale 1:50,000 1:25,000 and 1:10,000 of some areas.
- + National forest distribution map.
- + Agricultural database of administrative units at provincial level.
- + Transport database: roads and transportation works.
- + Geographic Database on fire-fighting, rescue and salvage in the industrial zone, hotels, markets, supermarkets, trade centers in 5 cities: Ha Noi, Ho Chi Minh, Hai Phong, Da Nang, Can Tho.
- + Project "Strengthening early warning flood in Vietnam", which built the Geographic Database support management Agencies. The information on developments storms, floods will be provided by this system.

- + The program "Smart urban development" is proposed by Ministry of construction. This program applied research to build a database for a GIS about urban planning, planning defense of Hanoi, urban development strategy for the city of Ha Long, Can Tho.
- + Some provinces and cities established geographic information systems, such as: Vinh Phuc, Hue...

However, the programs and projects were conducted independently for a field or an administrative area, with no consensus on the following: information standards, policies, databases, Infrastructure. Therefore, the sharing of data between projects is very difficult, not allowing to take advantage of available resources because the data are not compatible with each other.

#### 2. The challenges

From current reality, the development of specialized geographic data in Vietnam is still sector-independent, does not follow a common standard, not connected, and thus difficult to share. The trend towards monopoly on spatial data is still going on at the level of the State agency, who is responsible for storing and providing data. Therefore, businesses and citizens are getting difficulty in accessing data. There is lack of mechanisms to mobilize the enterprises and users to be involved in collecting data and providing spatial data services. In this context, the creation of a community of suppliers and users of spatial data is not favourable.

## 3. Establishment of the National Committee on Spatial Data Infrastructure aims to build the NSDI of Vietnam

To deal effectively with these problems cited above, Vietnam is preparing for the establishment of the National Committee on Spatial Data Infrastructure for directing, coordinating and connecting activities to accelerate the building of the National spatial Data infrastructure (NSDI) of Vietnam. The National Committee, responsible for the construction and promulgation of regulations, is establishing the Council for expert advice to solve the tasks of the Committee.

#### Composition of the National Committee:

The Chairman of the Committee is expected to be the Deputy Prime Minister, and members are the 12 ministries, including the Ministry of Natural Resources and Environment, which will be involved in the construction, management and maintenance of the National spatial data infrastructure.

#### Task and power

- Study and proposal to the Government with solution to address Geographical Names (GN) and Spatial Data Infrastructure (SDI) related issues which are inter-sectorial and interdisciplinary;

- Assist the Government in directing, regulating and coordinating between ministries, ministerial-level agencies and agencies under the Government authority in addressing important interdisciplinary issues, implementing GN database standardization and formulation programs, and developing and maintaining SDI as well as exploiting and utilizing geographical information;
- Assist the Government in supervising and instructing ministries, ministerial-level agencies and agencies under the Government authority to address important issues relating to GN and NSDI;
- Be responsible for advising the Government on the following issues:
  - + Policy and orientation of GN and NSDI activities; mid-term and long term strategies and planning for GN and NSDI activities;
  - + Issues including mechanisms, institutional arrangements, policies, programs, national investment projects or important works under the authority of the Government and Prime Minister, which relate to GN and NSDI;
  - + International cooperation activities in GN and SDI of Vietnam;
  - + Legal documents promulgated under the authority of the National Assembly, Standing Committee of the National Assembly, Government and Prime Minister, regarding or relating to GN and NSDI.

#### 4. Conclusion

The establishment of the National Committee on Geographical Names and Spatial Data Infrastructure aiming to build the NSDI is a strategic plan for the development of geographic information community in Vietnam. The development of the NSDI will contribute significantly to the construction of e-government with the aim to reform the administrative system towards better serving people and ensuring more efficiency, more transparency, and more democracy. The NSDI will be shared, unified, and updated regularly to allow monitoring and evaluation of the exploitation of natural resources, industrial production, and operations of urban and environmental conditions to enhance the performance of decision-making at all levels.