THE ROLE OF NATIONAL GEOSPATIAL STANDARD FOR STRENGTHENING NATIONAL SPATIAL DATA INFRASTRUCTURE (NSDI) IN INDONESIA

Badan Informasi Geospasial
Indonesian Territory Compares to European Continent

Indonesian area is approximately a half of European continent
"...I want only one map as national geospatial reference..."

The Existence of One Map Policy will overcome land management issues.
ONE MAP POLICY ENFORCEMENT USING SPATIAL DATA SHARING STRATEGY
STANDARD ACCELERATE GEOSPATIAL TRANSFORMATION

Extencivication of Geospatial Data and Technology Utilization and Usage for various system – various user – NEED STANDARD

Common Geospatial STANDARD
Making GI Easier and Always Available
1. Act No 4 of 2011 about Geospatial Information Article 53, state that it is mandatory for the government to facilitate the development of Geospatial Information Infrastructures for performing Geospatial Information Establishment which one of those is the standard. The standard in geospatial information establishment consists of:
   - Standard for geospatial data acquisition
   - Standard for geospatial data and information processing
   - Standard for geospatial data and information storage and security
   - Standard for geospatial data and information distribution
   - Standard for geospatial information utilization

2. Presidential Decree No. 9 year 2014 about the implementation of Act No 4 of 2011. It is specified at article 62, 72, and 73 that the standard mentioned in the law which is used as the normative reference in establishing Geospatial Information can be national standards and/or other technical specifications.

3. Presidential Decree No. 27 year 2014 about National Geospatial Information Network.

A national standard can be assigned as a mandatory obligation by the geospatial information maker.
INSTITUTIONAL STRUCTURES OF JIGN

- **Central Network Node**
  - Data Center
  - Metadata Catalogue Portal
  - Data Custodians
  - Clearing Unit

- **Province Network Node**
  - Data Center
  - Metadata Catalogue Portal
  - Clearing Unit
  - Data Custodians

- **District Network Node**
  - Clearing Unit
  - Metadata Database Portal

- **City Network Node**
  - Clearing Unit
  - Metadata Database Portal

- **Big as National Network Connector**

- **Badan Informasi Geospasial**
TOPOLOGY OF JIGN

- **External Producers/Users**
- **Internal Producers/Users**
- **Public Data**
- **Internal Data**

**INDONESIAN GEOPORTAL**

- **NNC**
- **WAN Ina-SDI**

- **Clearing Unit Central NN**
  - **LAN/WAN**
  - **Data Production Unit**
  - **Confidential Data**

- **Clearing Unit Province NN**
  - **LAN/WAN**
  - **Province SKPD**
  - **Confidential Data**

- **Clearing Unit District/City NN**
  - **LAN/WAN**
  - **District/City SKPD**
  - **Confidential Data**

**External Producers/Users**
**Internal Producers/Users**
**Public Data**
**Internal Data**
CURRENT STANDARD TOPOLOGICAL STRUCTURE IN JIGN AND GEOSPATIAL BUSINESS PROCESS

NOTE:
GI Geospatial Information
GD Geospatial Data
JIGN National Geospatial Information Network
BSN National Standardization Agency

TECHNICAL COMMITTEE 07.01
- Standard for GD Collection
- Standard for GD and GI Management
- Standard for GD and GI Storage and Security
- Standard for GD and GI Distribution
- Standard for GI Utilization
- Standard for Professional Competence on Geographic Information

LEGAL SYSTEM
- Institution Structure protected by regulation

REGULATION
- Legal System

INSTITUTIONAL STRUCTURE
- DG Production & Distribution

TECHNOLOGY
- Human & Technology

STANDARD
- Geospatial Capacity

HUMAN RESOURCES

NATIONAL STANDARDS
- BSN

REGIONAL
- ASEAN Economic Community

INTERNATIONAL
- ISO TC 211

GLOBAL ECONOMIC COMMUNITY

DOMESTIC
- MRA for Surveying
Road map of geospatial data and information establishment applies a priority analysis method of business process in geospatial vocation.
The purposes of this scientific paper is giving a guidance for composing a technical specification and performing a tested and focused research on geospatial standard, so that it can simplify the implementation of national priority policy.
CURRENT STATUS OF NATIONAL STANDARD ON GEOGRAPHIC/GEOINFORMATION

Technical Committee 07.01

Consists of 11 members, including:
- **3 members** represent the government establishing geospatial information
- **2 members** represent the geospatial data consumer
- **3 members** represent the geospatial data producer
- **3 members** represent the Indonesia geospatial expert

The Number of Geospatial Standard Compilation

Consists of 68 standards, including:
- **25 standards** on geospatial data acquisition
- **33 standards** on geospatial data and information processing
- **1 standard** on geospatial data and information storage and security
- **7 standards** on geospatial data and information distribution
- **2 standards** on geospatial data and information utilization
Creating standard by understanding its business process for strengthening geospatial infrastructure
ROAD MAP OF STANDARD FOR GEOSPATIAL DATA AND INFORMATION ESTABLISHMENT

BUSINESS PROCESS OF GEODETIC AND GEODINAMIC CONTROL NETWORK ESTABLISHMENT
The road map of standard for Spatial planning establishment refers to the business process of action plan on spatial planning geospatial information establishment which is divided into 5 aspects, namely:

1. The acceleration of basic geospatial information establishment
2. The acceleration of thematic geospatial information mapping and integration
3. The development of map specification
4. The development of personal capacity in survey and mapping
5. Spatial Planning Map Consultation and Development
ROAD MAP OF STANDARD FOR THEMATIC STRATEGIC OF GEOSPATIAL DATA AND INFORMATION ESTABLISHMENT

JIGN SECRETARIAT

STANDARD OF METADATA

STANDARD OF FEATURE CATALOGUE

PRIVATE SECTORS

GOVERNMENT SECTORS

Submit report

Assigned mandatory

Mandatory to implement

Submit report
1. Many geospatial national standards are not fully implemented in geospatial vocation.
2. Many institutions pay less attention on the importance of standard. Most of geospatial capacity attaches to people, so that while the people are gone, the institution will lose its ability for producing geospatial data.
3. Here is no assessment to evaluate whether the standard is already outdated or still applicable.
4. In accordance to vast area of the Republic of Indonesia which has lots of natural resources, we have to compose many geospatial standards. Unfortunately, Indonesia does not have an appropriate infrastructure yet for supporting geospatial standard establishment.
Thanks You

Badan Informasi Geospasial
Jl. Raya Jakarta Bogor Km.46 - Cibinong
Website : www.big.go.id
Geoportal : http://tanahair.indonesia.go.id
http://portal.ina-sdi.or.id