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Indonesian geoSpatialData Infrastructure (Ina-SDI) Development : Capacity Building and Technology Transfer *

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Indonesian geoSpatial Data Infrastructure (Ina-SDI) Development : Capacity Building and Technology Transfer



State Law Nr. 4 / 2011 : GeoSpatial Information.

Principle of State Law Nr. 4 / 2011:

- Coordination (Synchronization and Harmonization)
- Accessibility
- Distribution
- Human Resources



State Law Nr. 4 / 2011: GeoSpatial Information. Related To Capacity Building And Technology Transfer

UNDANG-UNDANG REPUBLIK INDONESIA

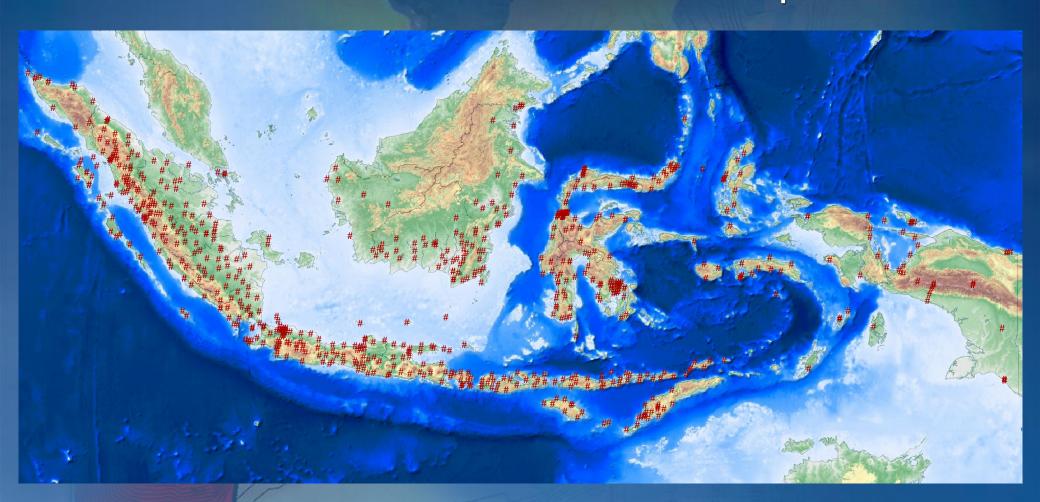
INFORMASI GEOSPASIAL

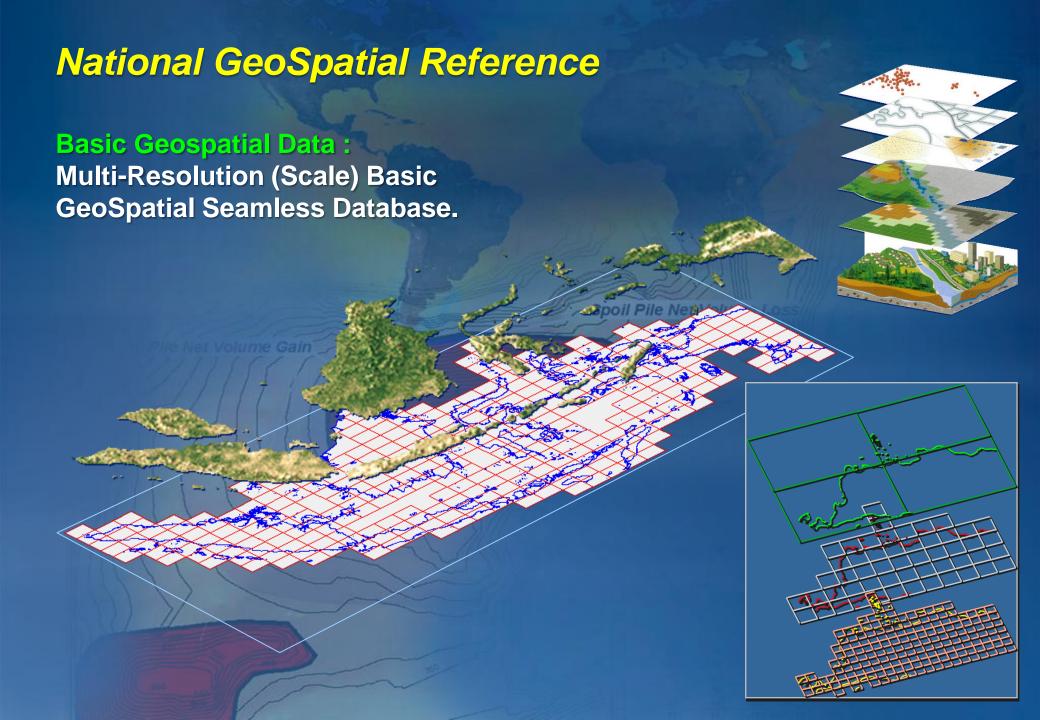
- The administration of basic geospatial data and information should result in high quality and accessible geospatial data and information.
- Basic geospatial data and information (National Geodetic Infrastructure and Common Reference Basic Maps / Topographic Maps) are administered by Government and implemented by implementing institutions including Governments and Individuals.
- The implementation of geospatial information is carried out by business entities that administratively qualified, technically certified, and supported by certified professionals.
- ❖ BAKOSURTANAL gives assistances concerning meaning, directing, planning, evaluation of the thematic geospatial information administration in form of socialization, education and training for the institution involved.

National GeoSpatial Reference

National Geodetic Infrastructure:

Horizontal, Vertical, Gravity control points framework.





BAKOSURTANAL: National Coordinating Agency for Surveys and Mapping of Indonesia

Indonesian Government Agency, tasks:

- Responsible to the President in the field of survey and mapping.
- Responsible for providing Basic Geospatial Data and Information, including Topographic Maps, Marine Base Maps, Aeronautical Chart Maps, Geodetic Framework, and the development of NSDI.
- Provides specific thematic maps such as National, Province and District Boundaries maps as well as others thematic maps.
- ❖ State Law Nr. 4/2011 → The National Coordinating Agency for Surveys and Mapping of Indonesia (Bakosurtanal) will become new agency of Geospatial Information Agency or Badan Informasi Geospasial (BIG), still waiting for the Presidential Decree issued.
- ★ State Law Nr. 4/2011 → BIG is the authorized institution to provide common reference base maps at various scales 1:1,000,000; 1:500,000; 1:250,000; 1:100,000; 1:50,000; 1:25,000; 1:10,000; 1:5,000; 1:2,500; 1:1,000).

Presidential Regulation Nr. 85 / 2007: National GeoSpatial Data Infrastructure / Network

BAKOSURTANAL:

- To establish Ina-SDI: Indonesian geoSpatial Data Infrastructure.
- ❖ Institutional Arrangement to support geospatial data sharing and disemination by involving the Participating Institutes consisting of Government and Regional Government as Ina-SDI Nodes.
- To establish the Ina-SDI Distributed Network Node (DNN), Centralized Network Node (CNN), and Network Node Connector (NNC).
- To establish Ina-SDI Portal that is named Ina-GeoPortal to provide GeoSpatial Data Sharing facilities



Presidential Regulation Nr. 85 / 2007 : National GeoSpatial Data Network

- ❖ The establishment of the Governance Body, part of Institutional Arrangement → Indonesian geoSpatial Data Infrastructure (Ina-SDI) Committee.
- Indonesian NSDI has already launched its initial Indonesian Geospatial Portal (Ina-GeoPortal) on October 17th, 2011 in conjunction with the launch of the new Geospatial Information Agency or Badan Informasi Geospasial (BIG).

The goal of Ina-SDI development is to reduce duplication of effort among agencies, improve quality and reduce costs related to data and information, to make data more accessible to the public, to increase the benefits of using available data.

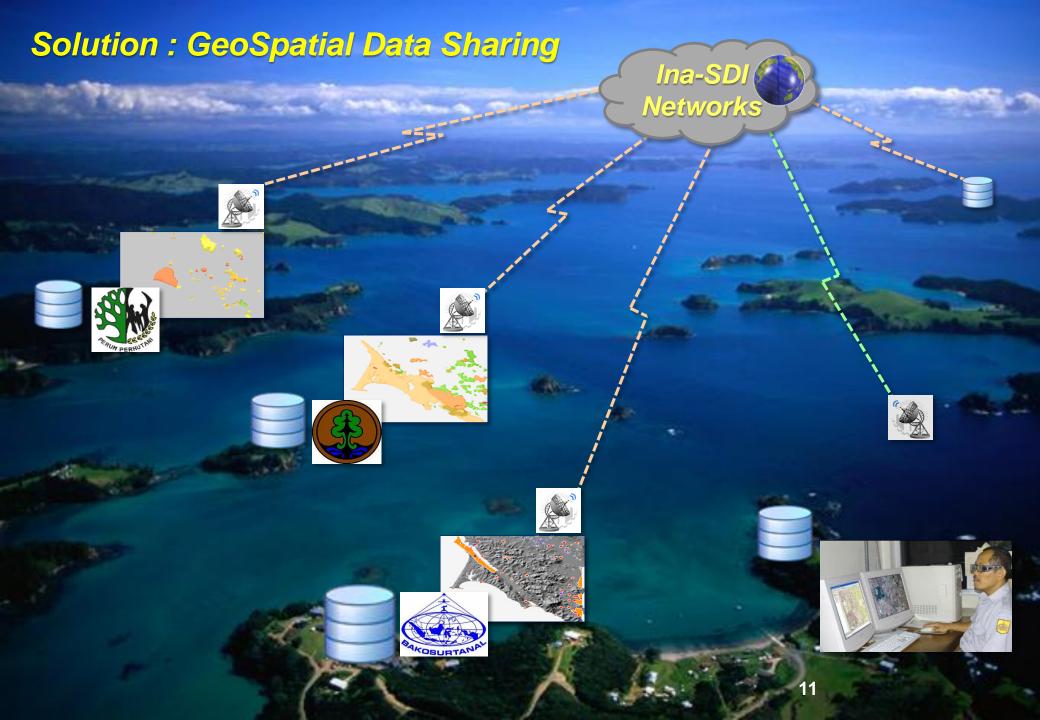
Its success relies on key partnerships among participating institutes and other national geospatial data producers; Participation receptacle of province, district and local government as well as the private sectors will be needed to increase the national geospatial data availability, data accessibility and sharing.

Ina-SDI Networking Development Project

- Presidential Regulation Nr. 85 / 2007
- An infrastructure for collecting, maintenance and utilization of the geospatial information by BAKOSURTANAL and others geospatial information stakeholders.
- The goal of Ina-SDI portal (Ina-Geoportal) is to provide an easy and fast access to high quality geospatial data and information.
- The scope of development:
 - Distributed Network Nodes (DNN) and Centralized Network Node (CNN) of the Indonesian NSDI
 - Basic Geospatial Database Centre at BAKOSURTANAL, Disaster Recovery Center (DRC), including it's back-up system
 - Organize trainings and conduct the Capacity Building for Officers and Staff of Participating Institutes.
 - Development or integration of functionality to satisfy the business functional requirements of the Indonesian NSDI.

Distributed Network Node (DNN) of Ina-SDI





Ina-SDI Portal: Ina-GeoPortal > http://maps.ina-sdi.or.id

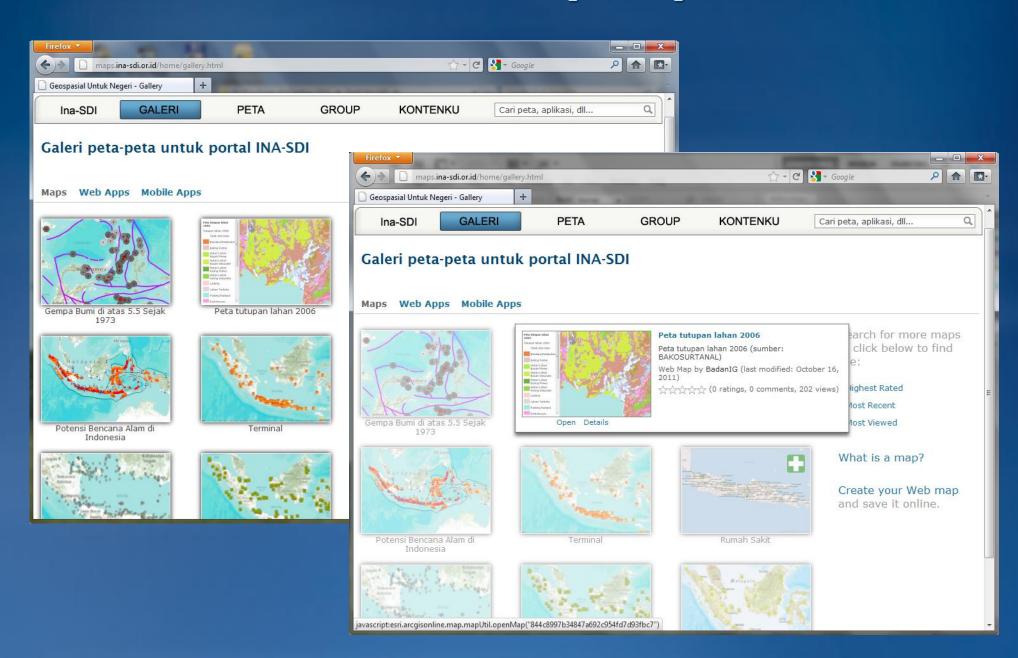


Main Function:

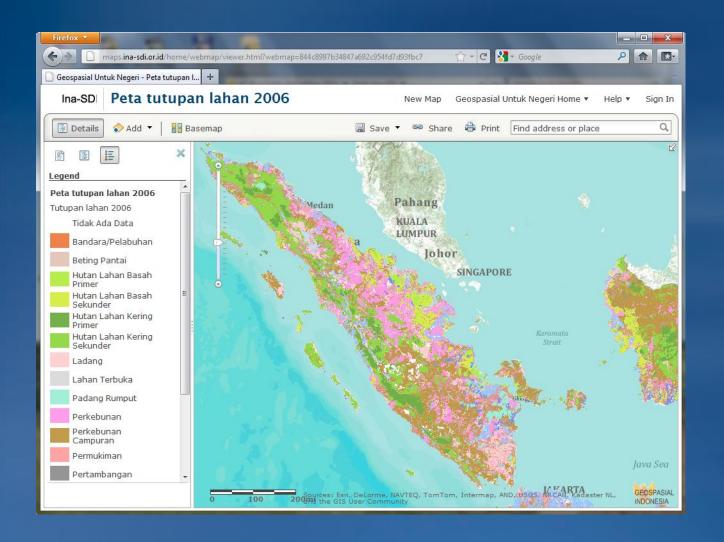
- Search & Discover
- Integrate
- Analyse (GIS Desktop Tools)
- Share (data and application)
- Produce the Maps
- Publish the Geospatial Information
- Access via Mobile Device

Now ..., you can make and publish maps in an integrated manner in a common georeference → One Map, One Solution, for the Nations!

Ina-SDI Portal: Ina-GeoPortal -> http://maps.ina-sdi.or.id



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Ina-SDI in 2012:

GeoSpatial Cloud Computing Services

- Powerful Computer Server & Workstation
- Unlimited Bandwidth
- High Capacity and Low Cost Storage Media
- Mobile GIS
- Cloud



BAKOSURTANAL: Current Status & Activities

Current Status:

- 100 geospatial firms
- Approximately 20,000 people work in government institutions and private firms
- * At least 33 state universities (one in each province) have geospatial subjects
- Geospatial firms associations
- Geospatial professional associations
- 5500 government geospatial related institutions

Current Activities:

- National Coordination Meeting on Surveys and Mapping
- National Coordination Meeting on Indonesian SDI
- Geospatial information socialization for provincial, district, municipal governments
- Establishment of Center of SDI development in 33 provinces in cooperation with local Universities (currently 6 Universities)

BAKOSURTANAL: Current Training & Professional Activities

- Two days training in SDI development for provincial, district, municipal governments
- Ina-SDI training for NSDI Networking Project
- Congress and seminar of professional association: Indonesian Surveyor Association (ISI), Indonesian Remote Sensing Community (MAPIN), Indonesian Cartographic Association (AKI).
- Meetings between BAKOSURTANAL, Indonesian Geomatics Council (DGI), Association of Indonesian Survey and Mapping Firms (APSPI), and Professional Associations.
- Certification programs carried out by ISI and Indonesian Geomatics Professional Certification Body
- International participation: FIG, PCGIAP, ASEAN-FLAG, SEAC, IHO, IUGG, UNGEGN, ISO/TC211, ICA.

BAKOSURTANAL: Capacity Building Program

Develop Regulations

Government Regulations, Product & Business Process Standards,
 Guidance, Technical Specifications

Implement certification

- Establish certifying institutions for firm certification
- Establish certifying institutions for professional certification
- Perform certification program for firms and professionals by the above accredited institutions

Training

- Establish education and training centers, in cooperation with universities
- Implement trainings for government institutions involve in thematic geospatial information production

BAKOSURTANAL: Ina-SDI Training Program for NSDI Networking Project

Program

- Consumers (Internal and External)
- Producers,
- IT Service Management,
- NSDI Governance Team members, and
- Application and Service Developers.

Implementation

- Establish training content,
- Establish training service,
- Establish a training development plan.

정말 감사합니다 Thank You Very Much

