



SDI FOR DISASTER MANAGEMENT

SDI DEVELOPMENT UPDATES OF INDONESIA

**Chengdu Forum for Global Geospatial Information Management
Chengdu, CHINA – Oct 15-17, 2013**

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Center For Management And Dissemination Of Geospatial Information

GEOSPATIAL INFORMATION AUTHORITY

GOVERNMENT OF THE REPUBLIC OF INDONESIA



**BARAN INFORMASI
GEOSPASIAL
GOVERNMENT OF THE REPUBLIC OF INDONESIA**



**OPEN
GOVERNMENT
INDONESIA**

TRANSPARANSI PARTISIPASI AKUNTABILITAS

INDONESIAN ACT 4 YEAR 2011

TRANSFORMATION IN PARADIGM AND INSTITUTION

BAKOSURTANAL

- INSTITUTIONS OF NATIONAL ADVISER IN DEVELOPMENT OF SURVEY, MAPPING, AND SPATIAL DATA INFRASTRUCTURE



BADAN INFORMASI
GEOSPASIAL



**BADAN INFORMASI
GEOSPASIAL**

GEOSPATIAL INFORMATION AGENCY

- THE NATIONAL ORGANIZER IN THE FIELD OF THE TOPOGRAPHIC SURVEY AND BASE MAPPING
 - INSTITUTIONS OF NATIONAL ADVISER IN DEVELOPMENT OF THEMATIC MAPS
 - THE NATIONAL ORGANIZER FOR SPATIAL DATA INFRASTRUCTURE



ACT NO. 4 YEAR 2011

FOUNDATION FOR POLICY ON GEOSPATIAL INFORMATION



1. TO ENDORSE SINGLE GEOREFERENCE FOR INTEGRITY OF GEOSPATIAL INFORMATION IN INDONESIA;
2. TO ENSURE THE AVAILABILITY AND ACCESS OF GEOSPATIAL INFORMATION WITH ACCOUNTABILITY;
3. TO ACHIEVE USEFULNESS OF GEOSPATIAL INFORMATION THROUGH COOPERATION , COORDINATION, INTEGRATION AND SYNCHRONIZATION; AND
4. TO ENCOURAGE THE USE OF GEOSPATIAL INFORMATION IN GOVERNMENT ACTIVITY AND PEOPLE'S DAILY LIFE

ACT 4/2011, DICTUM 22

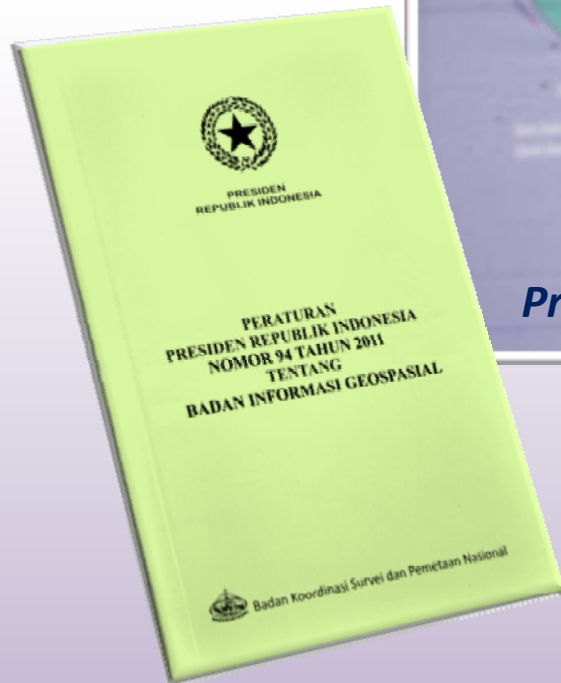


**GEOSPATIAL INFORMATION
AUTHORITY**
(PREVIOUSLY BAKOSURTANAL)





ONE MAP ONE NATION POLICY: OUTSTANDING SUPPORTS FROM OUR LEADER



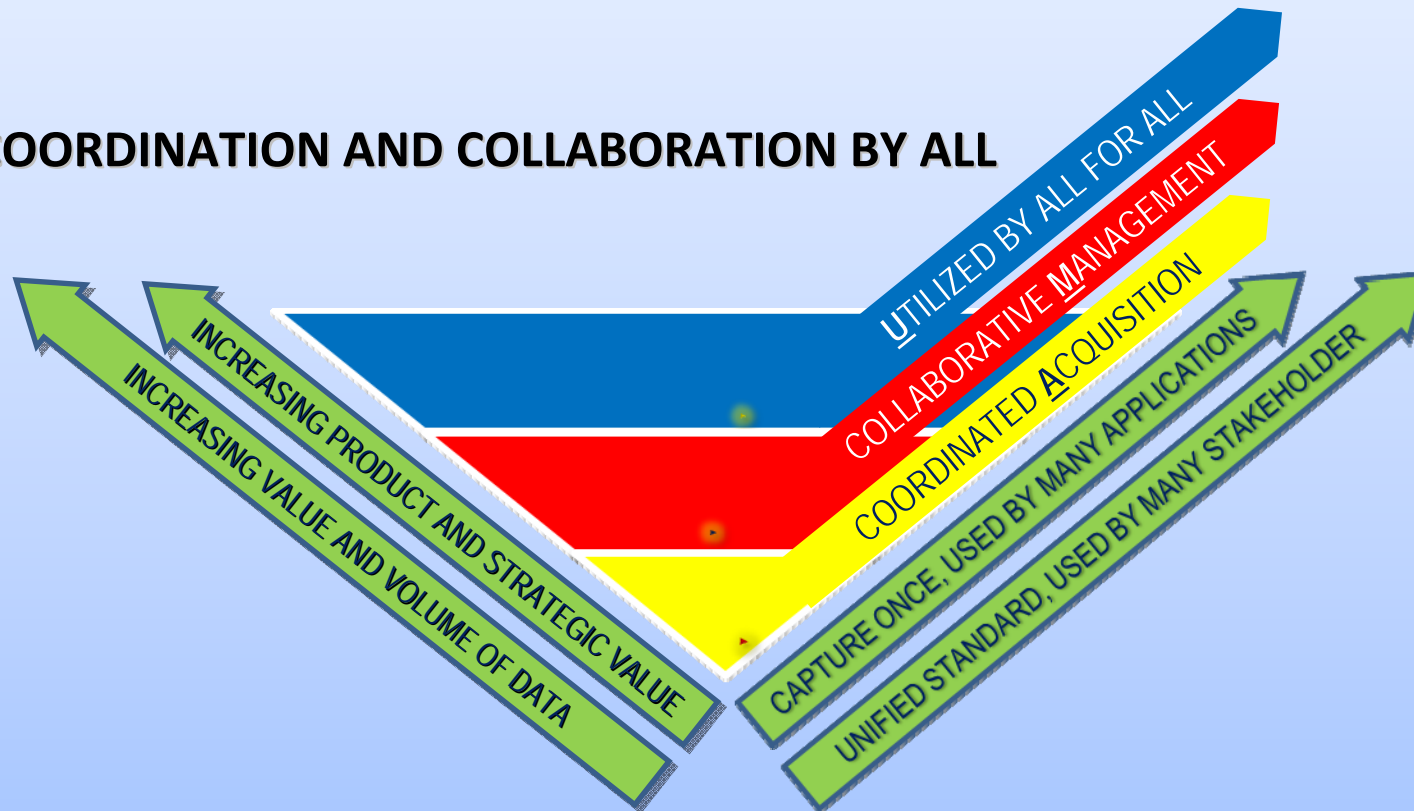
President S.B. Yudoyono

“...Geospatial data are needed by all government institutions and communities to improve quality of decisions making in all aspects of national developments.”

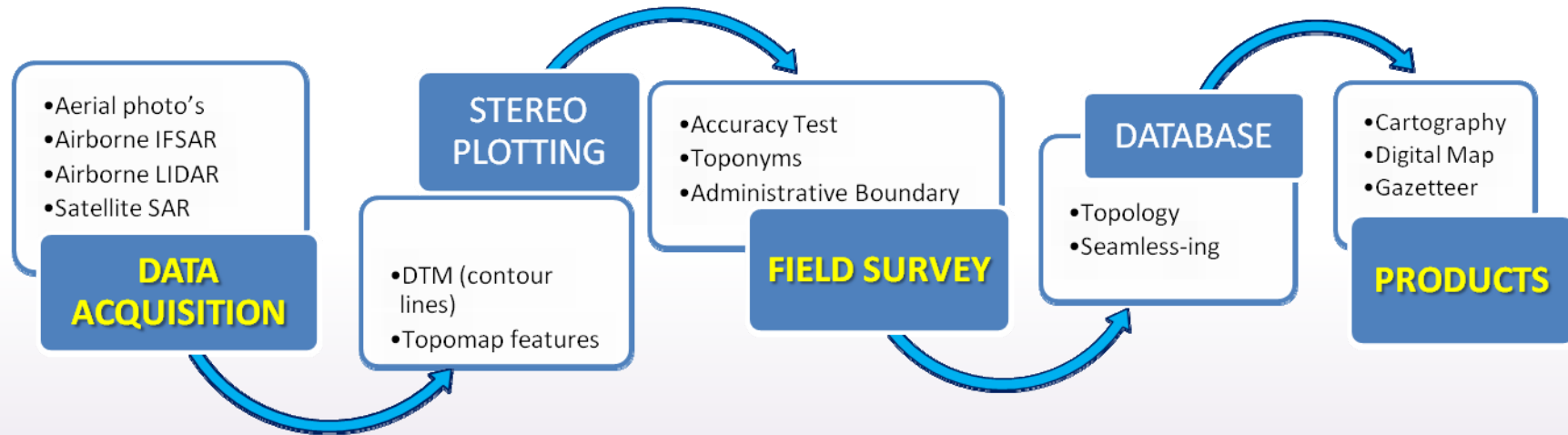
GEOSPATIAL INFORMATION ROLE TOWARDS SUSTAINABLE DEVELOPMENT



COORDINATION AND COLLABORATION BY ALL



STATUS 2013: BASE MAPPING



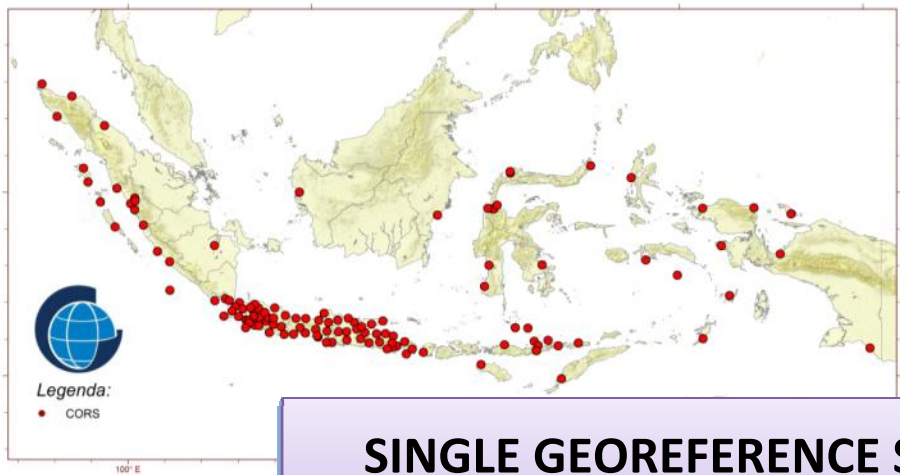
	SCALE	TOTAL	AVAILABLE	TO DO
SMALL	1:1.000.000	37	37	0
	1:500.000	103	103	0
	1:250.000	309	309	0
MEDIUM	1:100.000	1.245	1.245	0
	1:50.000	3.899	2.417	1.471
	1:25.000	13.020	1.774	11.246
LARGE	1:10.000	91.547	658	90.889
	1:5.000	379.014	128	378.458
	1:2.500	880.206	0	880.206
	1:1.000	2.729.319	0	2.729.319



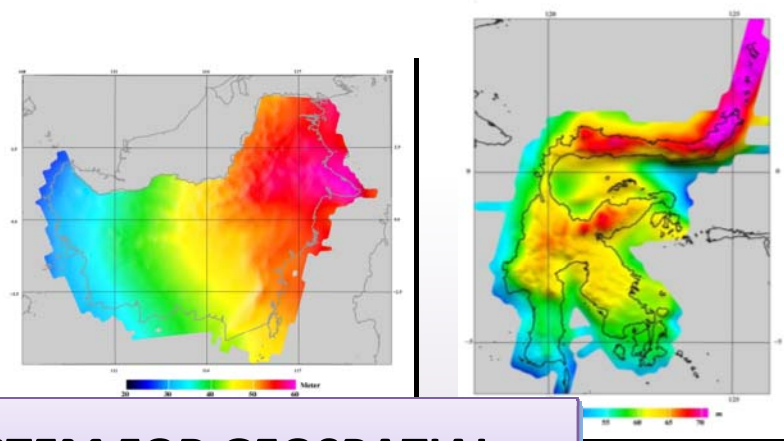
STATUS 2013: INDONESIAN GEODETIC REFERENCE SYSTEM



CORS –GPS DISTRIBUTION 2013



GRAVITY SURVEY COVERAGE 2013

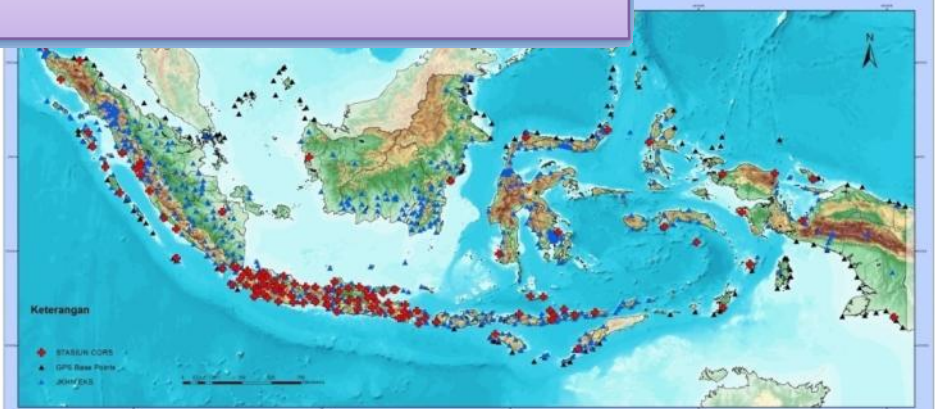


**SINGLE GEOREFERENCE SYSTEM FOR GEOSPATIAL
INFORMATION INTEGRITY AND USEFULNESS**

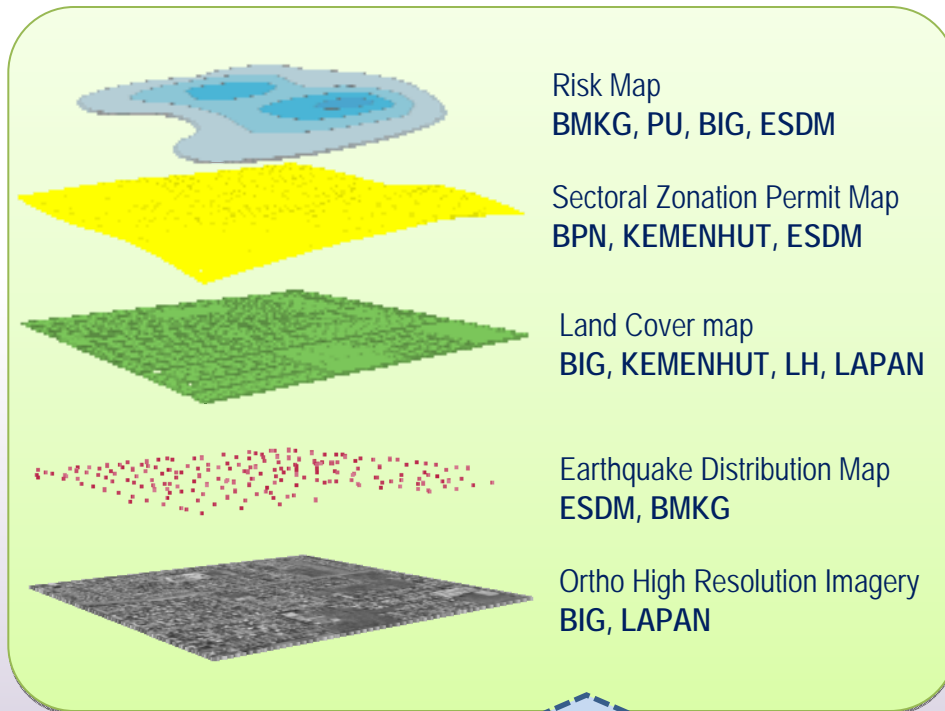
SEBARA



ASIONAL



STATUS 2013: THEMATIC MAPPING



SECTORAL
COORDINATION AND SINERGY
FOR
'ONE MAP POLICY'

11 NATIONAL WORKING GROUP FOR THEMATIC MAPPING

NATURAL RESOURCE AND
WATERSHED

FARMING AND PEATLAND

RESOURCE DYNAMIC

CLIMATE CHANGE

ECOREGION

TRANSPORTATION

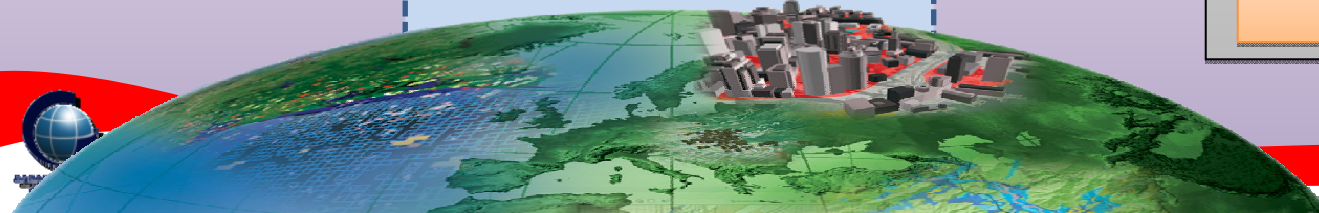
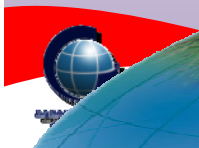
DISASTER STUDY

SPATIAL PLANNING

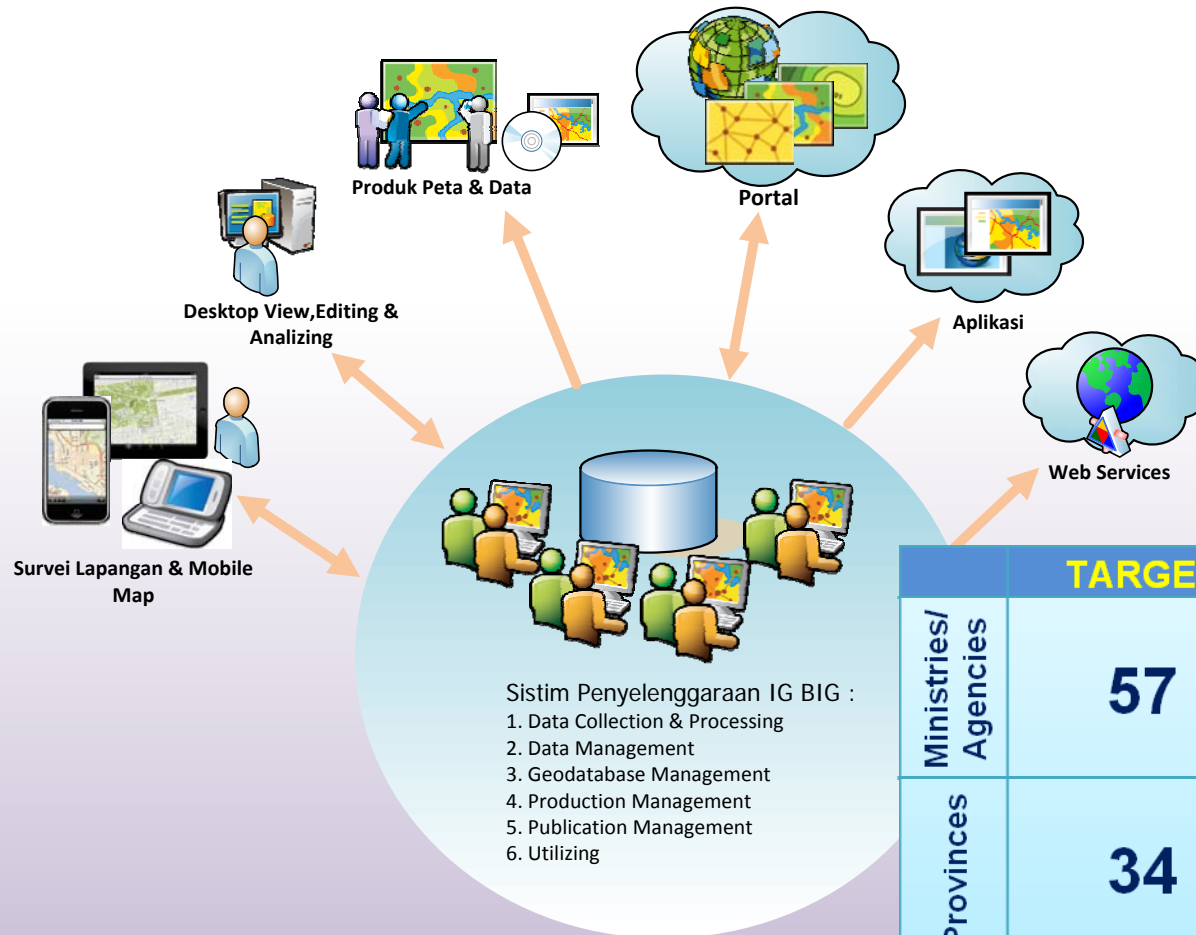
MARINE RESOURCES, COASTAL, AND
SMALL ISLANDS

SOCIAL, ECONOMY, CULTURE AND
ATLAS

SECTORAL ZONATION, LAND COVER,
AND LAND STATUS



STATUS 2013: SDI DEVELOPMENT



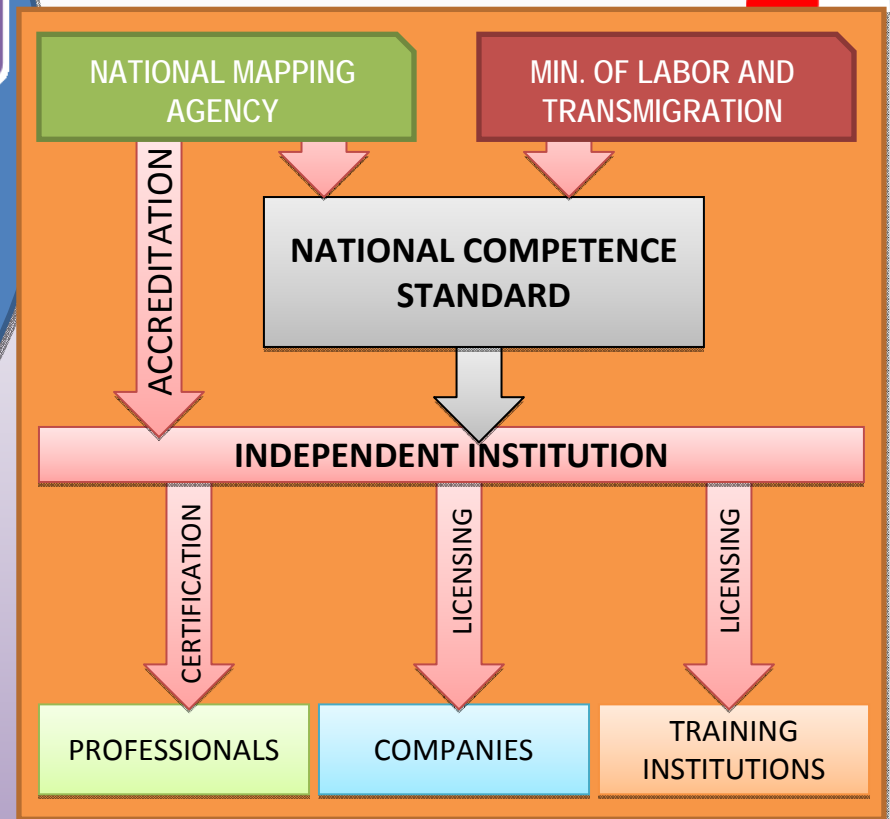
- GEOSPATIAL CLOUD COMPUTING
- NATIONAL DATA CENTER
- NATIONAL GEOPORTAL

	TARGET	CONNECTED	TO DO
Ministries/ Agencies	57	15	42
Provinces	34	14	20
Regencies/ Municipal.	500	2	498





TOWARDS STRONG GEOSPATIAL INDUSTRY



Min. of Labor Decree No. 8/2012



INDONESIA: FACING MOST KINDS OF HAZARDS

VOLCANO ERUPTION



EARTHQUAKE



FLOOD



ARTIFICIAL FAILURE



TSUNAMI



FOREST FIRE





KEY INSTITUTIONS IN DISASTER MANAGEMENT

- BNPB is the Indonesian National Board for Disaster Management : planning and coordinating the implementation of disaster management and emergency response activities in an integrated manner; and implement disaster management and emergency response from before, during, and after including disaster prevention, preparedness, emergency response, and recovery.
- BIG is the Geospatial Information Authority: planning, organizing and coordinating the development of geospatial information for disaster management activities.



POLICY FOUNDATION OF GEOSPATIAL INFORMATION FOR DISASTER MANAGEMENT



INDONESIAN ACT 4 YEAR 2011 ABOUT GEOSPATIAL INFORMATION

Article 17

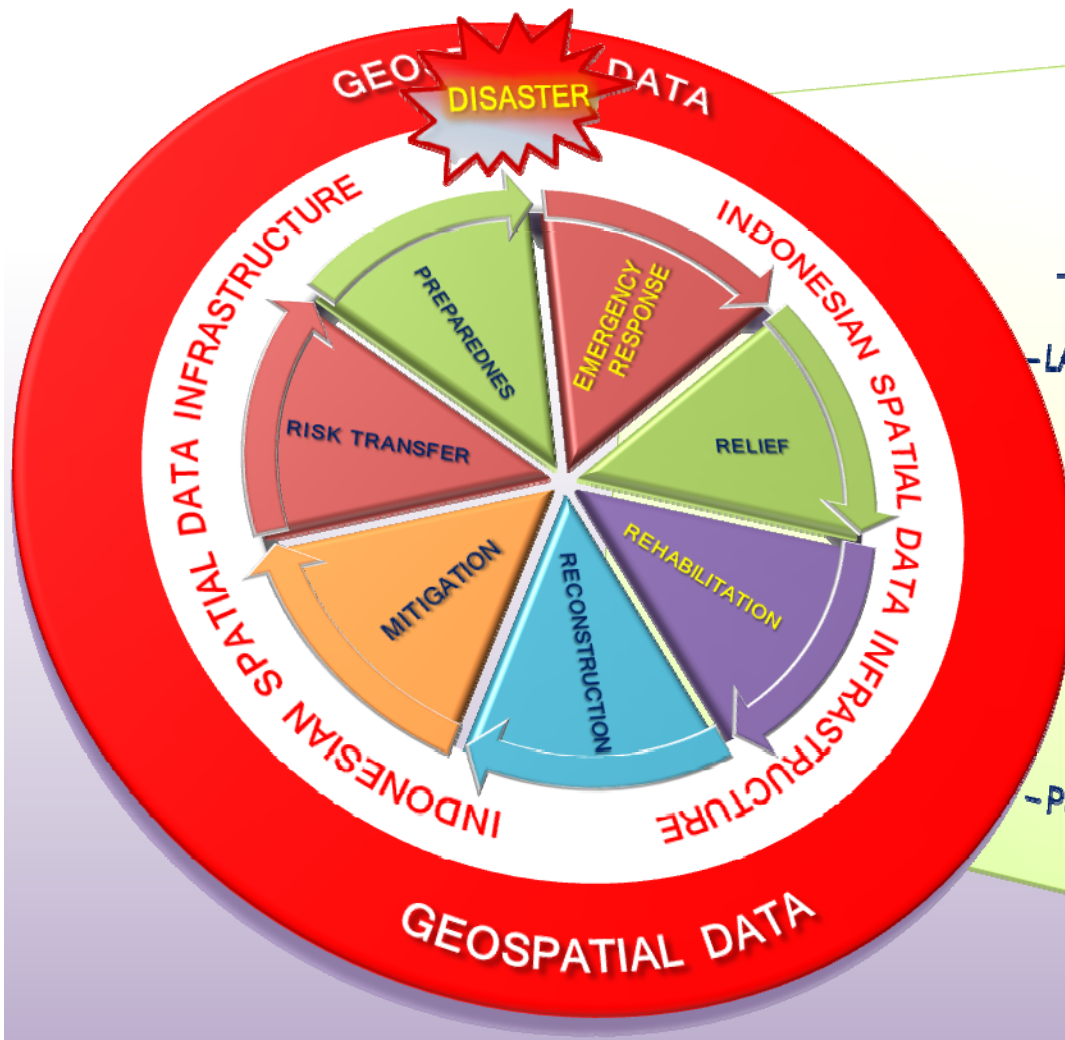
In the event of natural disasters, war, change of administrative boundaries, or other events that result in changes in the basic map elements that influencing the pattern and structure of community life, updating basemap must be performed.

Article 52

To the needs of disaster management, **everyone shall share their geospatial information when requested by Government Agencies or local government given the task of disaster management affairs.**



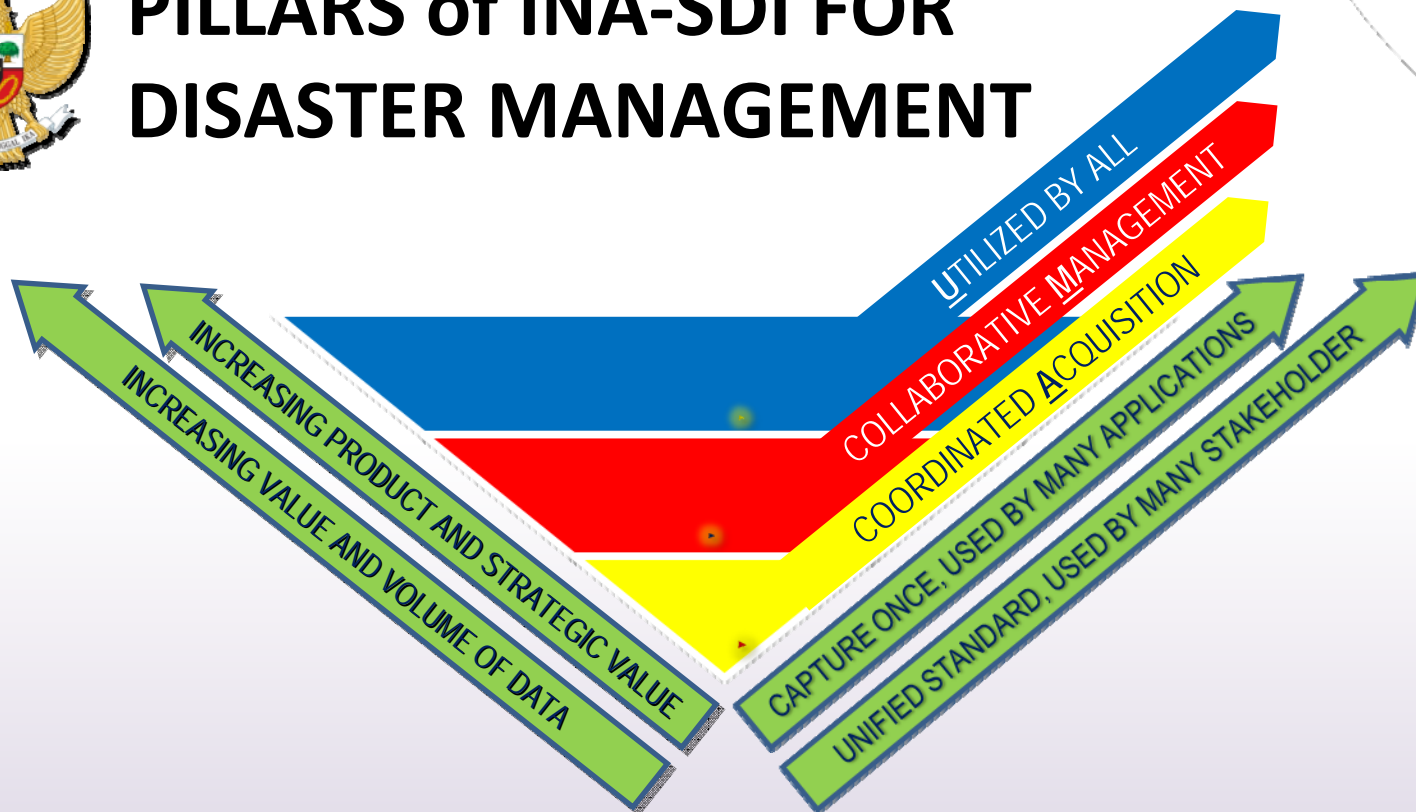
SDI ROLE IN DISASTER MANAGEMENT



- **EXTRA-TERRESTRIAL:**
 - ASTEROID IMPACT
- **INTERNAL GEO-DYNAMIC PROCESSES:**
 - EARTHQUAKE, TSUNAMI, VOLCANIC ERUPTION
- **EXTERNAL GEO-DYNAMIC PROCESSES:**
 - LANDSLIDE, SOIL EROSION, LAND DEGRADATION
- **HYDRO-METEOROLOGICAL:**
 - FLOODS, TROPICAL STORMS, DROUGHT
- **ECOLOGICAL / ENVIRONMENTAL:**
 - POLLUTION, CROP DISEASE,
- **EPIDEMICS:**
 - SARS, HIV / AIDS, AVIAN FLU
- **TECHNOLOGICAL:**
 - INDUSTRIAL ACCIDENTS
- **CONFLICTS:**
 - PUBLIC DISORDERS, POLITICAL, TERRORISM



PILLARS of INA-SDI FOR DISASTER MANAGEMENT



Institutional Arrangement

Human Resource

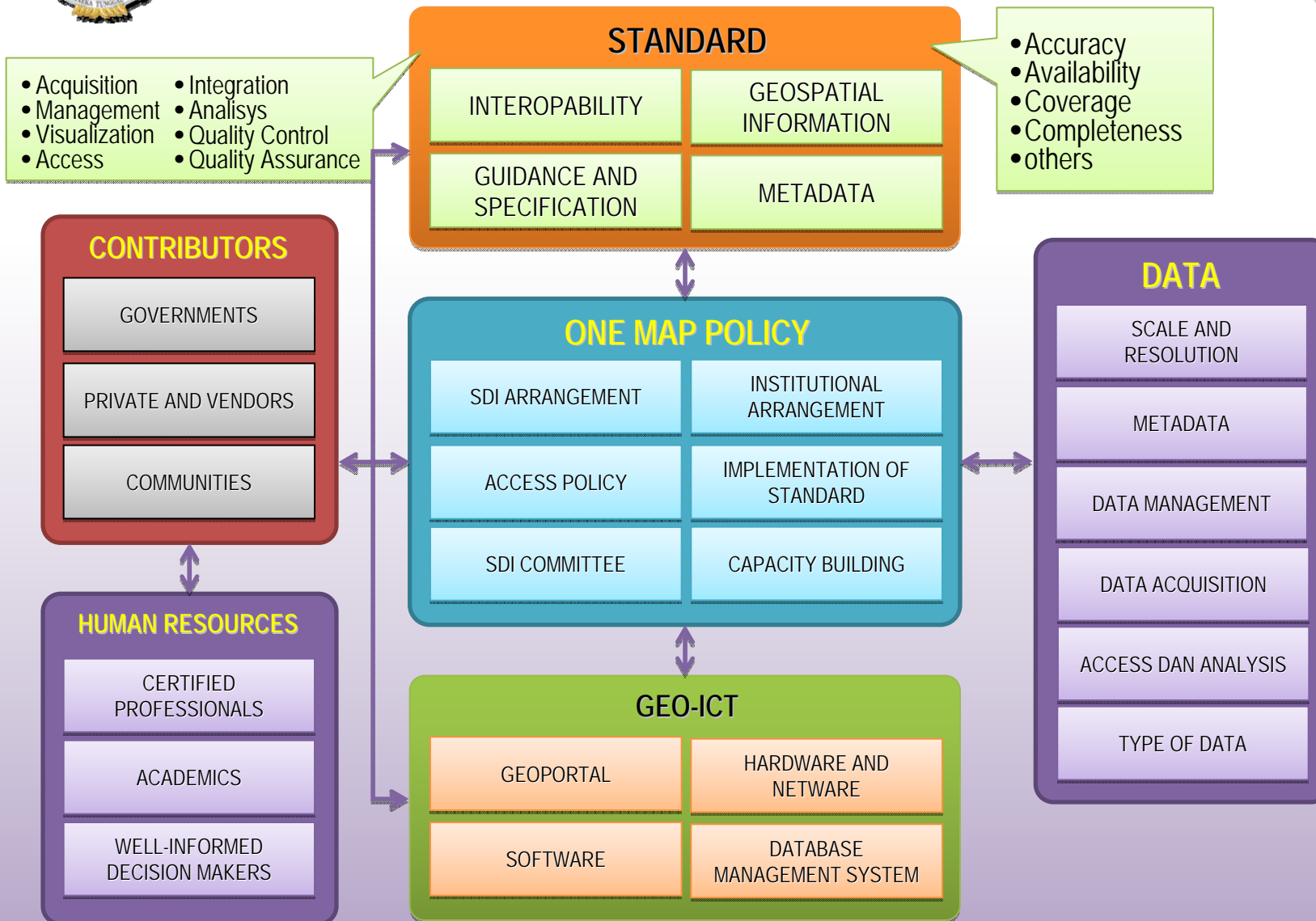
Standardized Geospatial Data

Science and Technology

Laws And Rules



SDI'S WORKING ELEMENTS FOR DISASTER MANAGEMENT



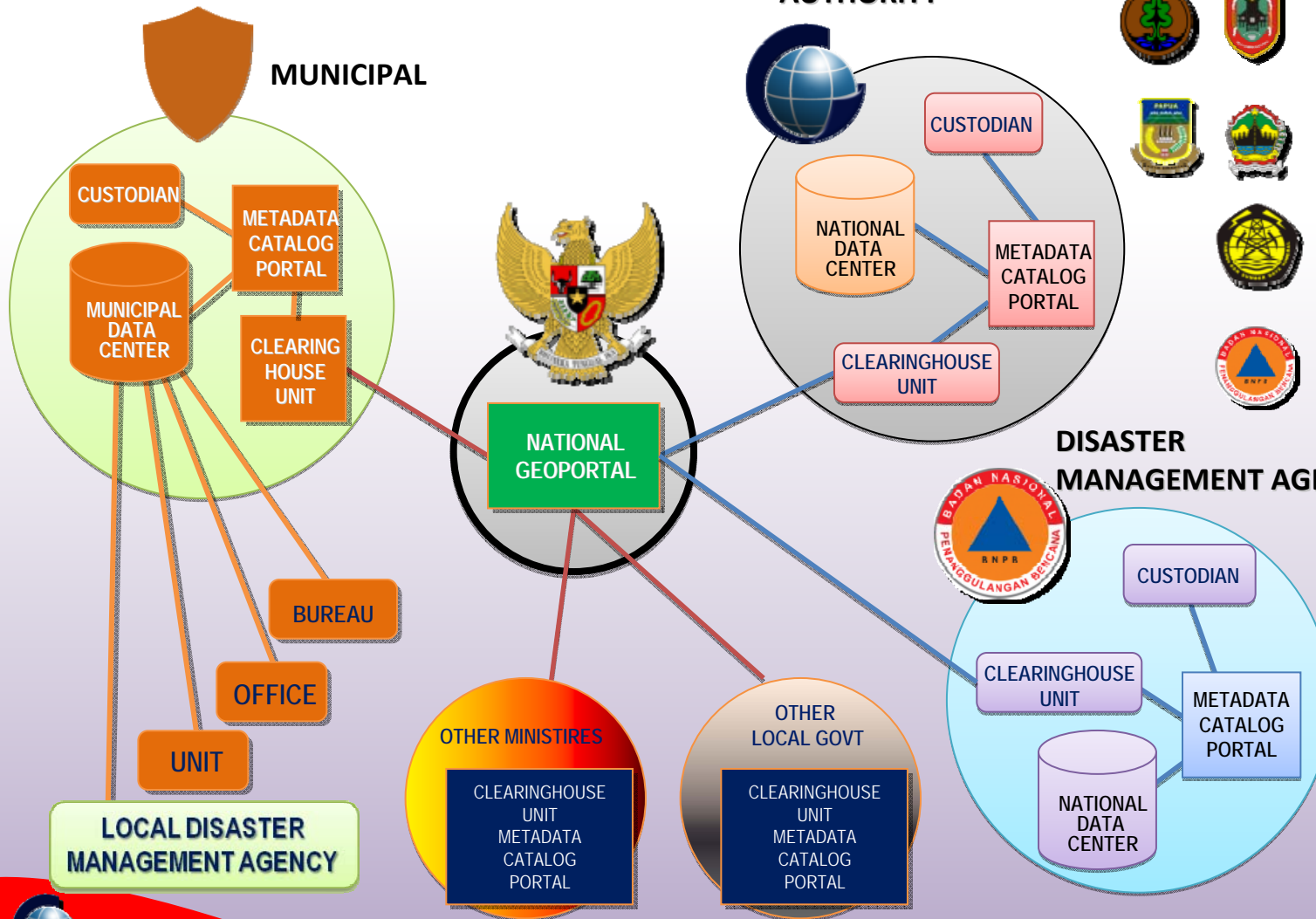
ARCHITECTURE OF INA-SDI: READINESS FOR DISASTER EVENT MINISTRIES, PROVINCES, MUNICIPALITIES, AND THE COMMUNITIES



NATIONAL GEOSPATIAL INFORMATION AUTHORITY



DISASTER MANAGEMENT AGENCY



INA-GEOPORTAL : ONE MAP ONE GATEWAY



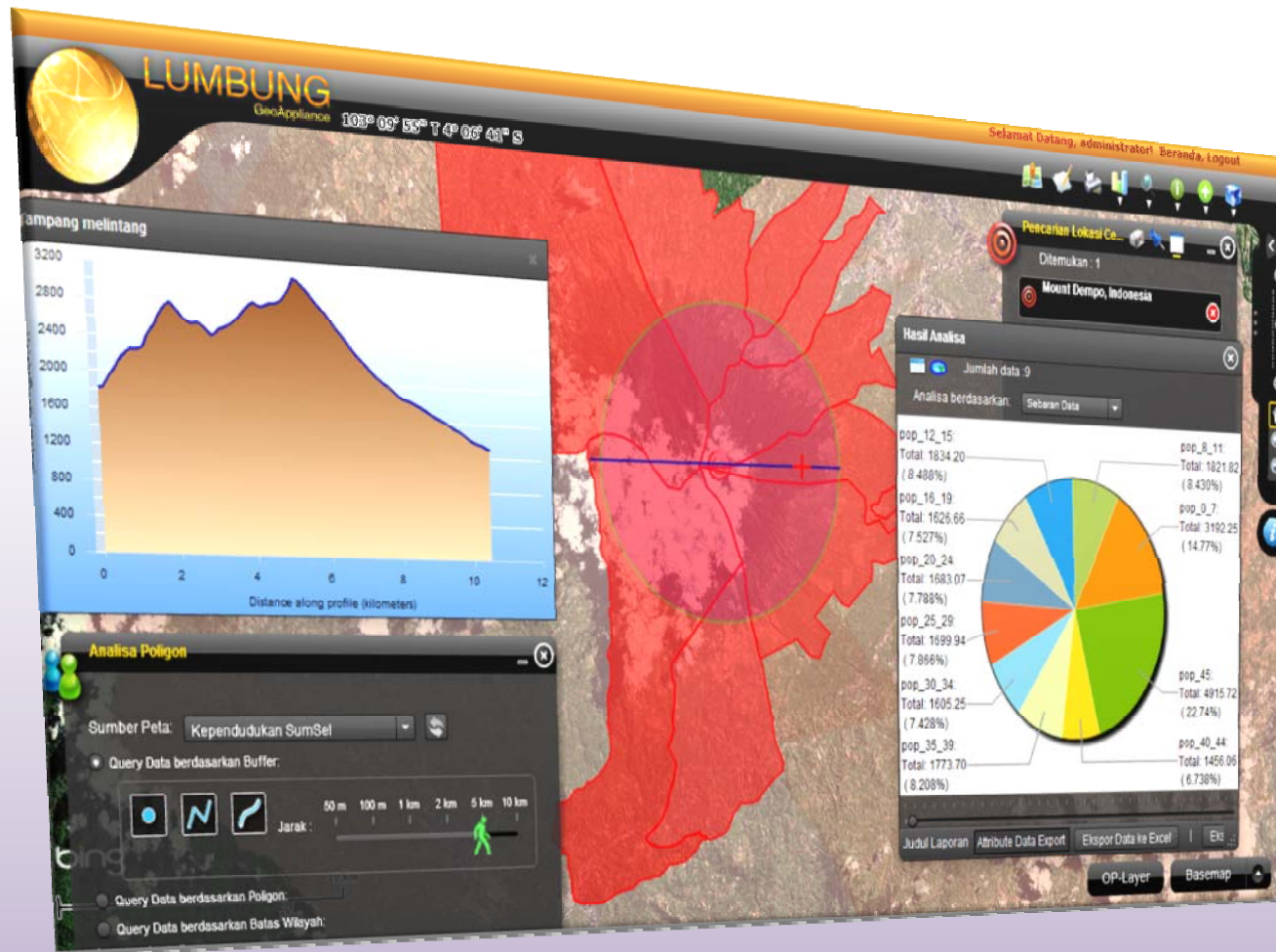
<http://tanahair.indonesia.go.id> OR <http://maps.ina-sdi.or.id>

The screenshot shows the Ina-Geoportal website interface. At the top, there are navigation tabs: Ina-Geoportal, GALERI, PETA, GROUP, and KONTENKU. A search bar contains the text "Mencari Peta, Aplikasi dan lain...". Below the navigation is a main banner with the title "Geospasial untuk Negeri" and the subtitle "Informasi geospasial menambah dan memperkuat pengetahuan kita mengatasi masalah keruangan". The banner includes a grid of images and the "OPEN GOVERNMENT INDONESIA" logo. Below the banner is a carousel of four featured items: "Daerah Tertinggal" (a map of Indonesia), "Simpul Jaringan Kab. Sumbawa" (a map of Sumbawa), "Simpul Jaringan Provinsi DI Yogyakarta" (a map of Yogyakarta), and "Kebakaran lahan di Prov. Riau (data Pleiades 18,)" (a satellite image of a fire). Below the carousel is a paragraph: "Geospasial untuk negeri adalah portal geospasial Indonesia dibangun dengan partisipasi berbagai kementerian dan lembaga serta pemerintah daerah di Indonesia." At the bottom, there are three sections: "Membuat Peta »" (Membuat Peta yang nantinya dapat dilihat pada browser, desktop atau perangkat mobile. Dapat dishare dalam Blog, melalui email, ataupun diembed pada website.), "Mulai ArcGIS Explorer Online »" (Gunakan aplikasi ini untuk mentransformasi data anda kedalam bentuk peta dan presentasi yang bagus.), and "Pengunjung »" (1,162 Visitors 27 Aug 2012 - 8 Sep 2013, with a ClustrMaps logo and "Click to see" text).



WEB APP FOR DISASTER MANAGEMENT

STATISTICAL-GEOSPATIAL INTEGRATION ON INA-GEOPORTAL PLATFORM



FACILITATING ALL LEVEL OF DECISION MAKINGS TO COLLABORATE FOR DISASTER RESPONSES WITH ACCURATE AND ACCOUNTABLE GEOSPATIAL INFORMATION



INA-GEOPORTAL : SERVICING BASEMAPS TO MEMBER OF INA-SDI AND THE COMMUNITIES



The screenshot displays the Ina-Geoportal web application. The browser address bar shows the URL: `maps.ina-sdi.or.id/home/webmap/viewer.html?useExisting=1`. The page title is "Ina Geoport My Map". The interface includes a search bar at the top right with the placeholder text "Mencari Alamat atau Tempat". Below the search bar, there are navigation and utility icons: Save, Share, Print, Measure, and Bookmarks. A left sidebar contains a "Search for layers to add" section with a search input field (containing "(e.g., parcels, fire...)"), a "Go" button, and a list of categories and layers. The "In:" dropdown is set to "A GIS server". The "What:" dropdown is set to "St". The list of layers includes: BIG-IGD, BIG-IGT, BPN, BPS, KPU, LAPAN, Kementerian ESDM, Kementerian Dalam Negeri, Kementerian Kehutanan, Kementerian Kelautan Perikanan, Kementerian Lingkungan Hidup, Kementerian Parekraf, Kementerian Perhubungan, Kementerian Pertahanan, Kementerian PDT, Kementerian PU, Kementerian Pertanian, Provinsi Bali, Provinsi DKI Jakarta, Provinsi Jawa Barat, Provinsi Jawa Tengah, Provinsi Jawa Timur, Provinsi Kalimantan Selatan, Provinsi Kalimantan Tengah, Provinsi Papua Barat, Provinsi Sulawesi Selatan, Provinsi Sulawesi Tengah, and Provinsi Sumatera Selatan. A "Done Adding Layers" button is located at the bottom of the sidebar. The main map area shows a topographic map of a region in Indonesia, with a scale bar at the bottom left indicating 0, 1.5, and 3 km. The text "GEOSPASIAL INDONESIA" is visible in the bottom right corner of the map area.



GEOSPATIAL SUPPORT COMMAND CENTER

BETTER DECISION MAKING WITH COMMON OPERATING MAPS



CAPABILIT

GOVERNANCE IN THE FIELDS OF SURVEYING, MAPPING AND GEOSPATIAL DATA INFRASTRUCTURE IN PROVIDING TIMELY, RELEVANT, AND ACCURATE GEOSPATIAL INFORMATION TO SUPPORT DISASTER MANAGEMENT





WAY FORWARD



- **COMPLETE NATIONAL BASEMAPS AND HIGH RESOLUTION ORTHO IMAGERY.**
- **IMPROVING STABLE NETWORK INFRASTRUCTURE** (IN COORDINATION WITH THE MINISTRY OF COMMUNICATION AND INFORMATION)
- **IMPLEMENTING OPEN GOVERNMENT DATA** AS PART OF *“OPEN GOVERNMENT INITIATIVE”*
- **CONSTRUCT NEW POLICY AND GUIDELINES** TO ENCOURAGE MORE STATE MINISTRIES, PROVINCIAL AND LOCAL GOVERNMENTS, AND UNIVERSITIES TO JOIN SDI.
- **SYNCHRONIZE WITH REGIONAL AND GLOBAL POLICY** ON GEOSPATIAL INFORMATION, ESPECIALLY FOR COMPLETION OF AND AFTERMATH *MILLENIUM DEVELOPMENT GOALS*.



SEE YOU IN BALI FOR UN-GGIM-AP PLENNARY MEETING 2014



Terima Kasih/Thank You/谢谢