



INDONESIA'S UPDATE: GEOSPATIAL INFORMATION FOR SUSTAINABLE DEVELOPMENT RELATED TO INA-SDI

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**GEOSPATIAL INFORMATION AGENCY
08 August, 2012**



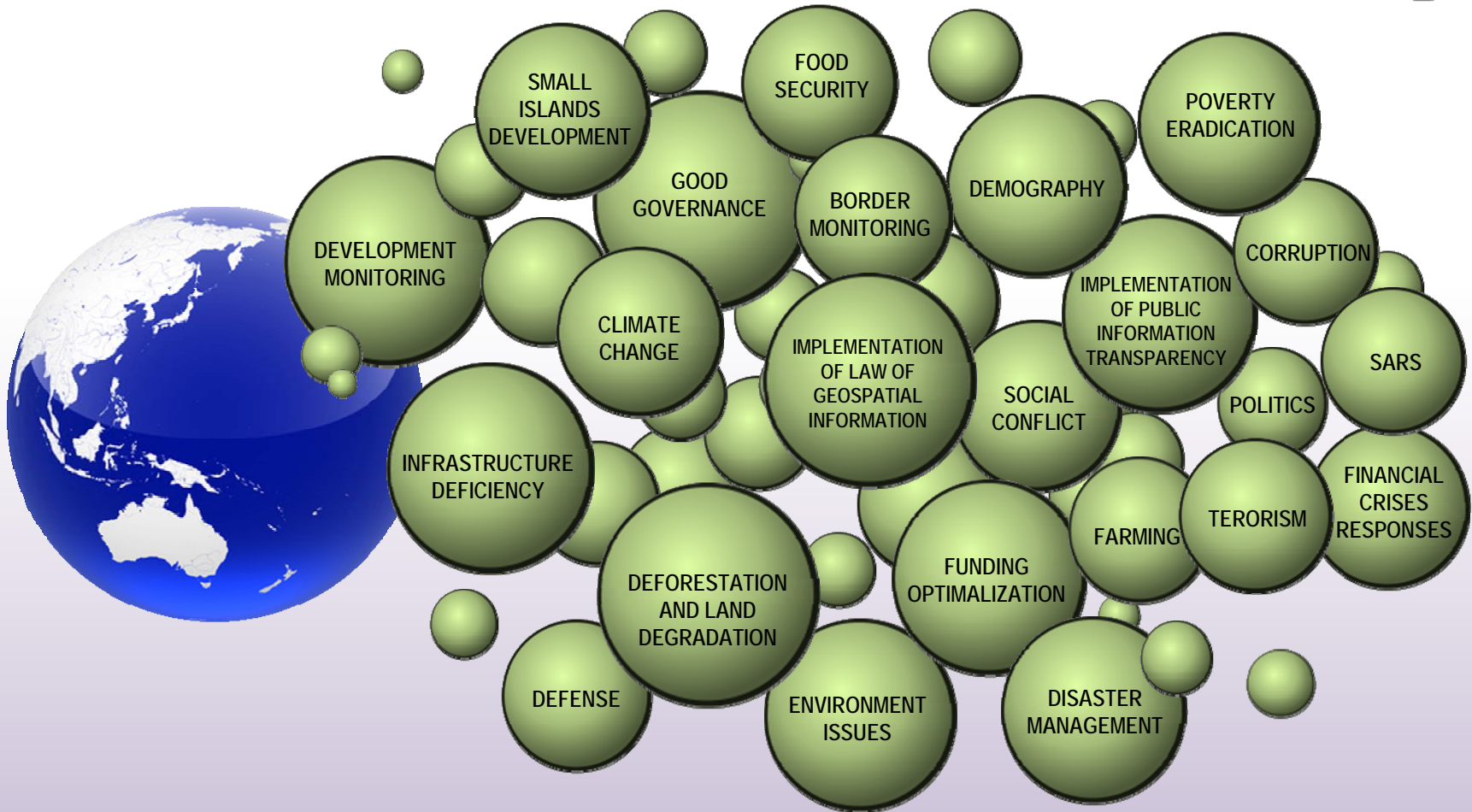


OUTLINE

1. Transformation Bakosurtanal into The Geospatial Information Agency;
2. Indonesian Spatial Data Infrastructure (Ina-SDI) Development
3. Indonesian Geoportal Development and Initial Activity to Setup collaboration between BIG, CSIRO and UNSDI to develop gazetteer application for Social Protection



GEOSPATIALLY PROBLEMS



- ❖ **COLLABORATION AND SINERGY FROM ALL STAKEHOLDERS IS A MUST!**
- ❖ **OPPORTUNITY FOR GOVERNMENT AND INDUSTRY TO FORM PUBLIC PRIVATE PARTNERSHIP**





GEOSPATIAL DATA FOR SUSTAINABLE DEVELOPMENT

LAW 4/2011, DICTUM 12 AND 15

± 90% of Government Activities has Geospatial Element

- HYDROGRAPHIC
- BUILDING AND PUBLIC FACILITY
- TRANSPORTATION
- LAND COVER
- HYSOGRAPHIC
- ADMIN BOUNDARY
- COAST LINE
- GEOSPATIAL REFERENCE
- TOPONYM/ GAZETTEERS

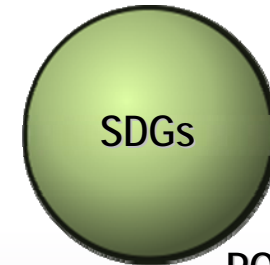
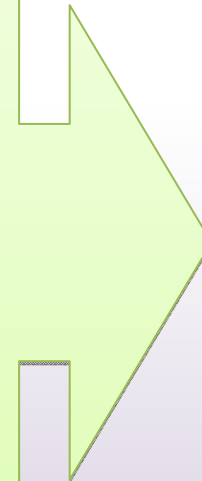


GEOSPATIAL DATABASE



- GEOLOGY
- DEMOGRAPHY
- VEGETATION
- SOIL
- BIODIVERSITY
- METEOROLOGY
- DISASTER
- SPATIAL PLANNING
- etc.

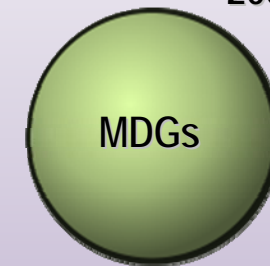
± 65% of Government Activities use Geospatial Element as Primary Identifier



POST 2015



2009-2014



2000-2015

Gazetteers:

- *Indexes of spatial identifiers;*
- *Can be used to achieve interoperability*



POLICY UPDATE: RULE OF LAW

LAW NO. 4 YEAR 2011



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

LAW 4/2011, DICTUM 22



GEOSPATIAL INFORMATION AGENCY
BADAN INFORMASI GEOSPASIAL (BIG)



INSTITUTIONAL TRANSFORMATION

BAKOSURTANAL

- THE NATIONAL BODY OF TRUSTEE IN THE FIELD OF SURVEYS, MAPPING AND SDI



BADAN INFORMASI
GOSPASIAL



**BADAN INFORMASI
GOSPASIAL**

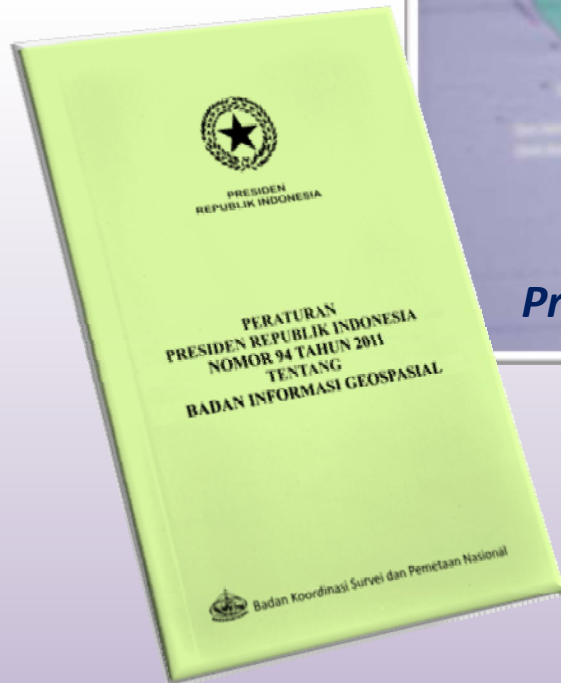
GEOSPATIAL INFORMATION AGENCY (BIG)

- THE NATIONAL ORGANIZER IN THE FIELD OF THE TOPOGRAPHIC SURVEY, BASE MAPPING, AND SPATIAL DATA INFRASTRUCTURE
- NATIONAL COORDINATING BODY FOR DEVELOPMENT OF THEMATIC MAPPING





POLICY UPDATE: OUTSTANDING SUPPORTS FROM OUR LEADER

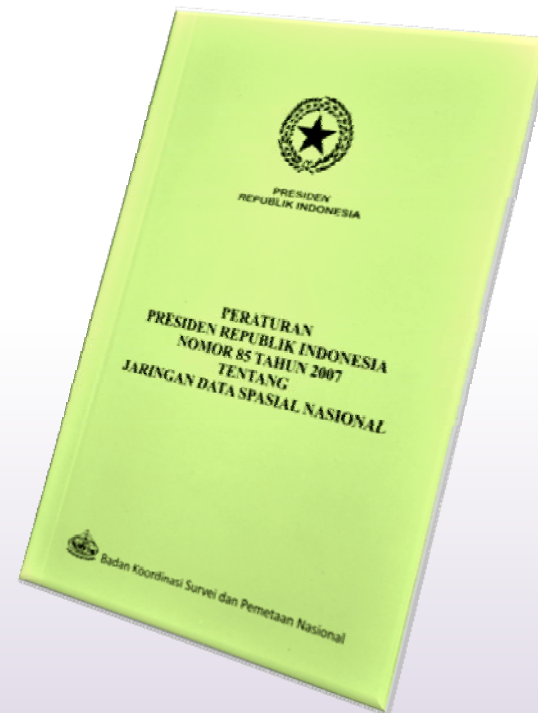


President S.B. Yudoyono

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



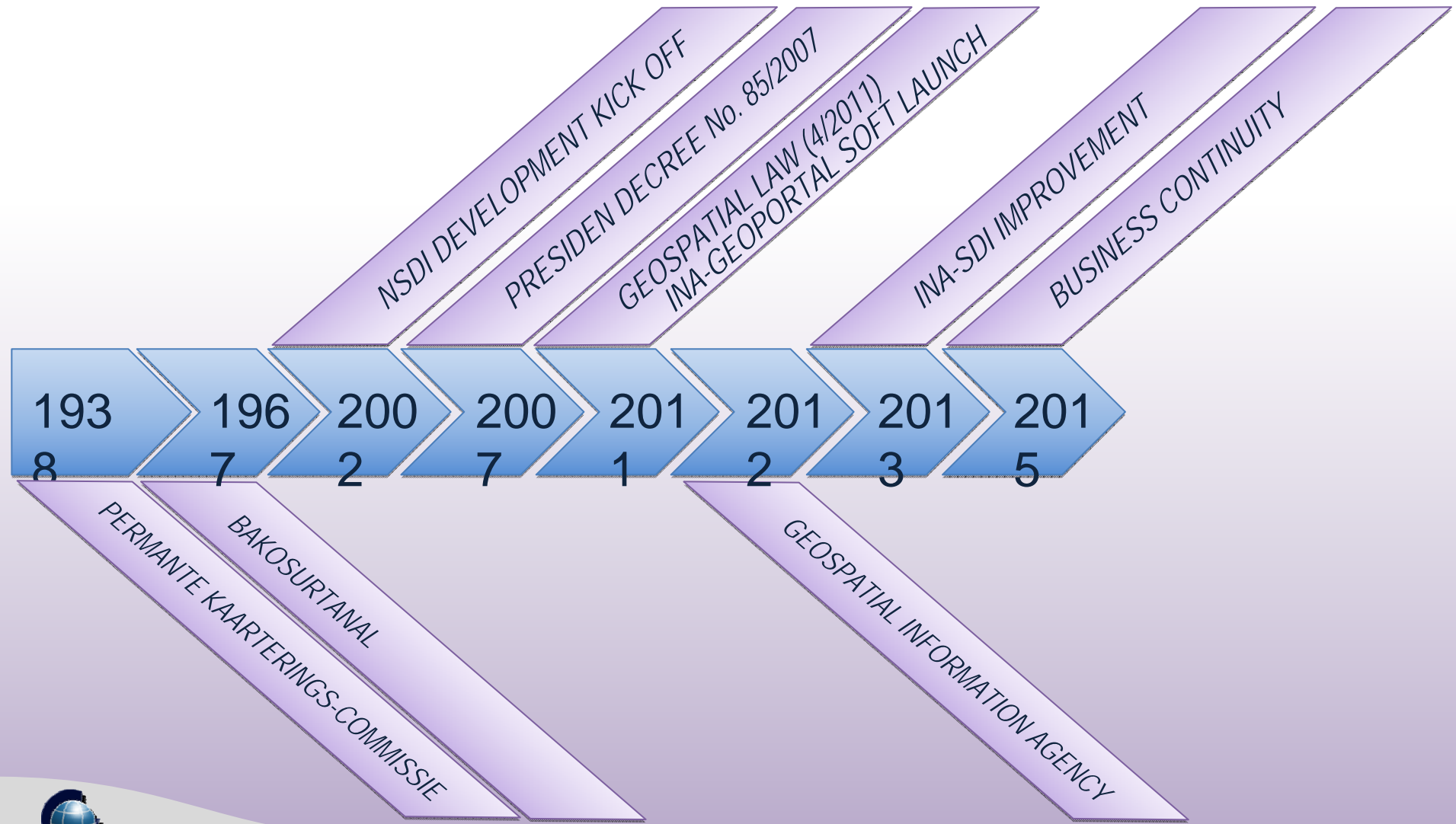
POLICY UPDATE: PRINCIPLES OF INDONESIAN SDI (**ina-sdi**)



- ❖ INTEGRATION OF: INSTITUTIONAL ARRANGEMENT, POLICY, TECHNOLOGY, STANDARDIZED DATA, AND HUMAN RESOURCES TO FORM SUPPORTIVE ENVIRONMENT FOR USERS.
- ❖ INA-SDI FACILITATING DISCOVERY, ACCESS, EVALUATION AND USAGE ACCURATE AND ACCOUNTABLE GEOSPATIAL INFORMATION EASILY AND ECONOMICALLY.



POLICY UPDATE: MILESTONE OF INDONESIAN SDI (*ina-sdi*)

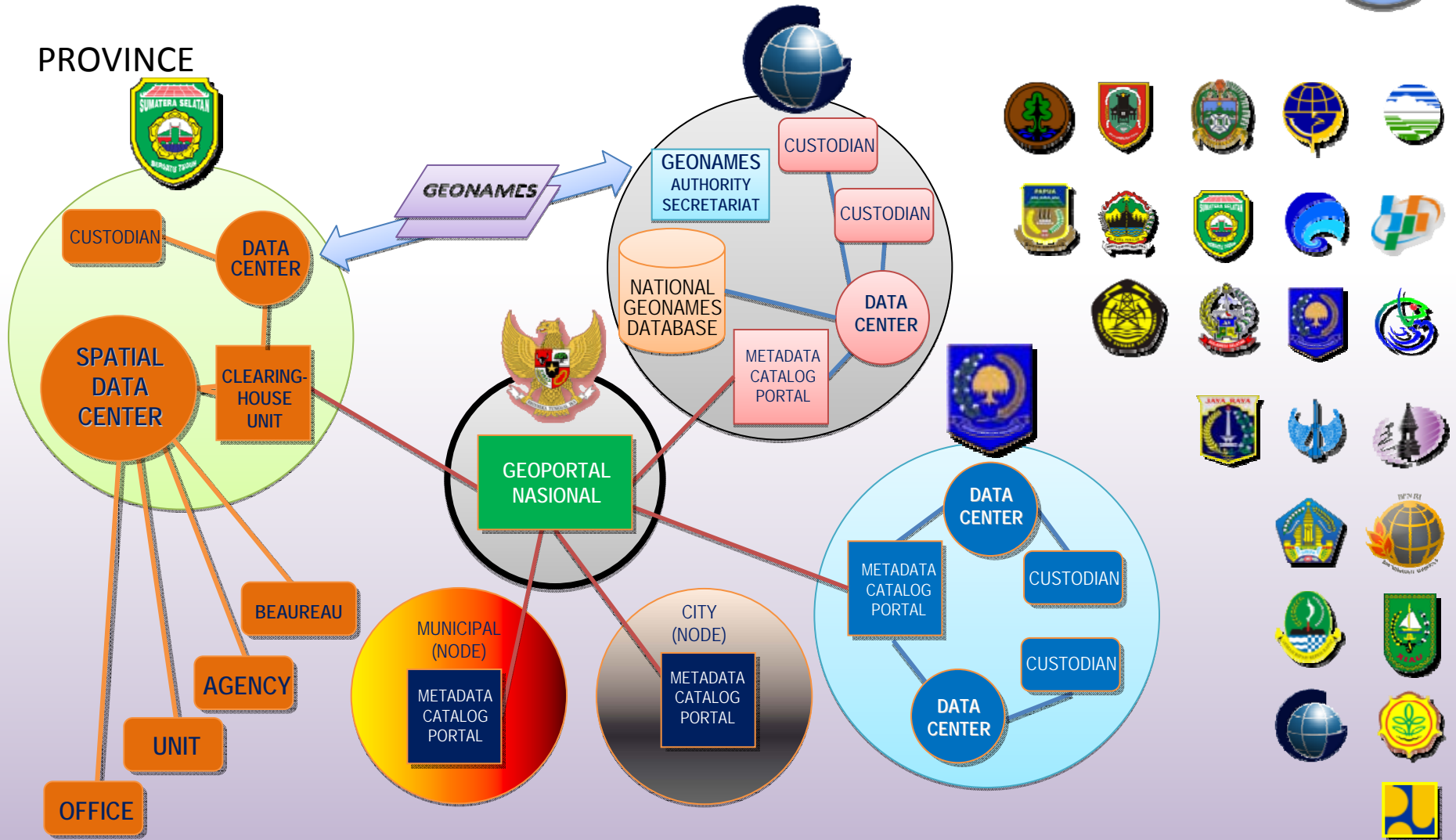




SDI UPDATE: TYPICAL STRUCTURE

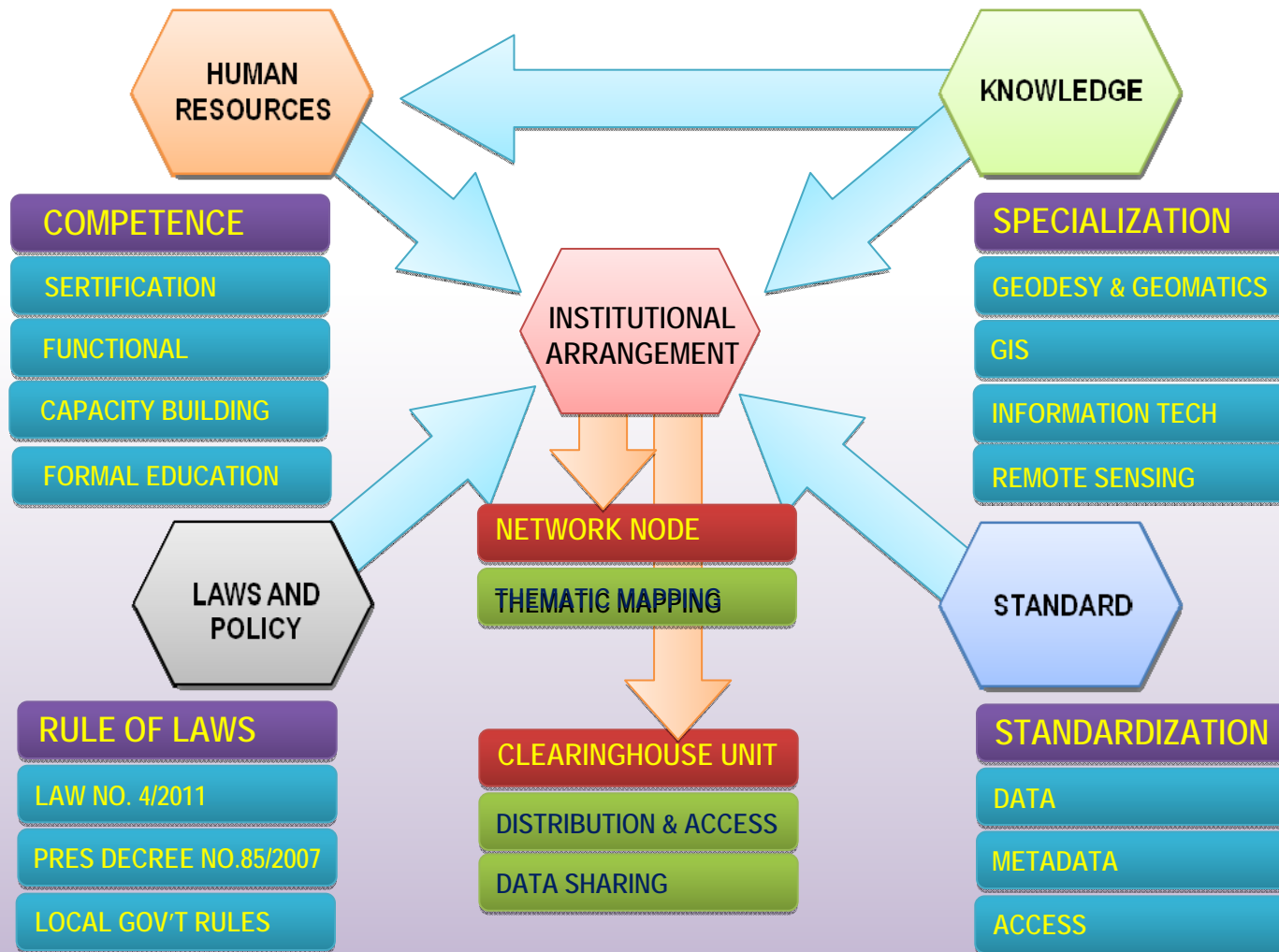
57 MINISTRIES/AGENCIES, 33 PROVINCES, & 500 MUNICIPALITIES

PROVINCE



ELEMENTS OF NETWORK NODE

57 MINISTRIES/AGENCIES, 33 PROVINCES, & 500 MUNICIPALITIES



DEVELOPING AN SDI IS MORE THAN TO SETUP INFORMATION TECHNOLOGY

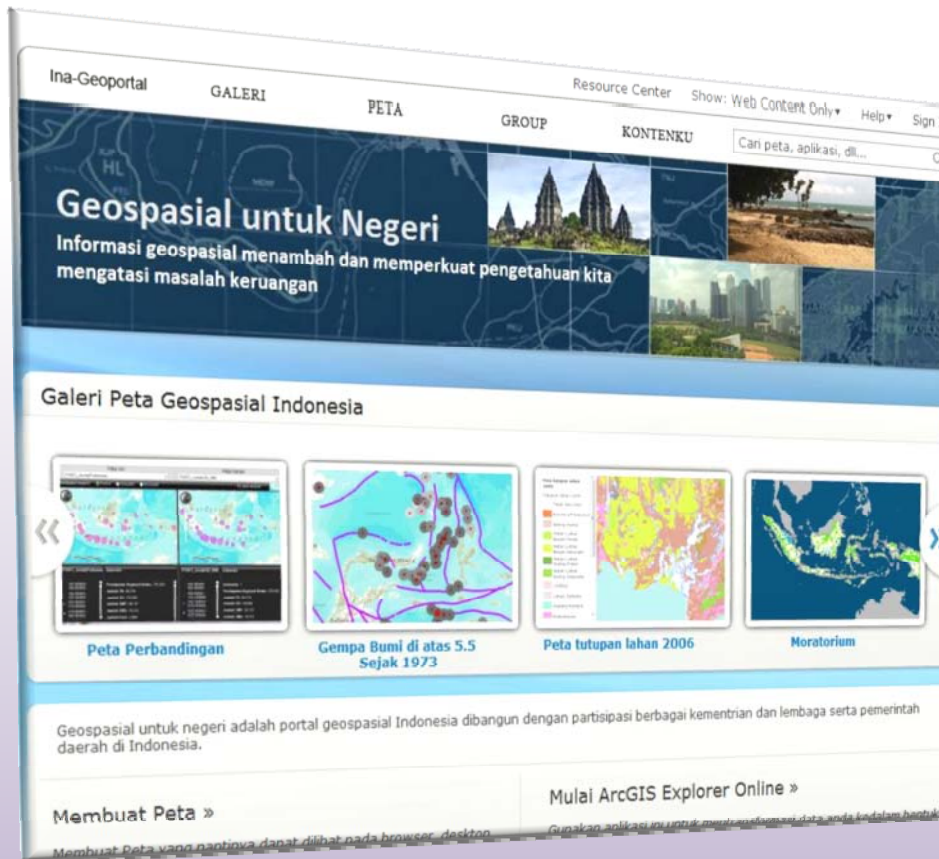




SDI UPDATE: INA-GEOPORTAL

ONE MAP, ONE GATE, ONE SOLUTION

<http://maps.ina-sdi.or.id> :



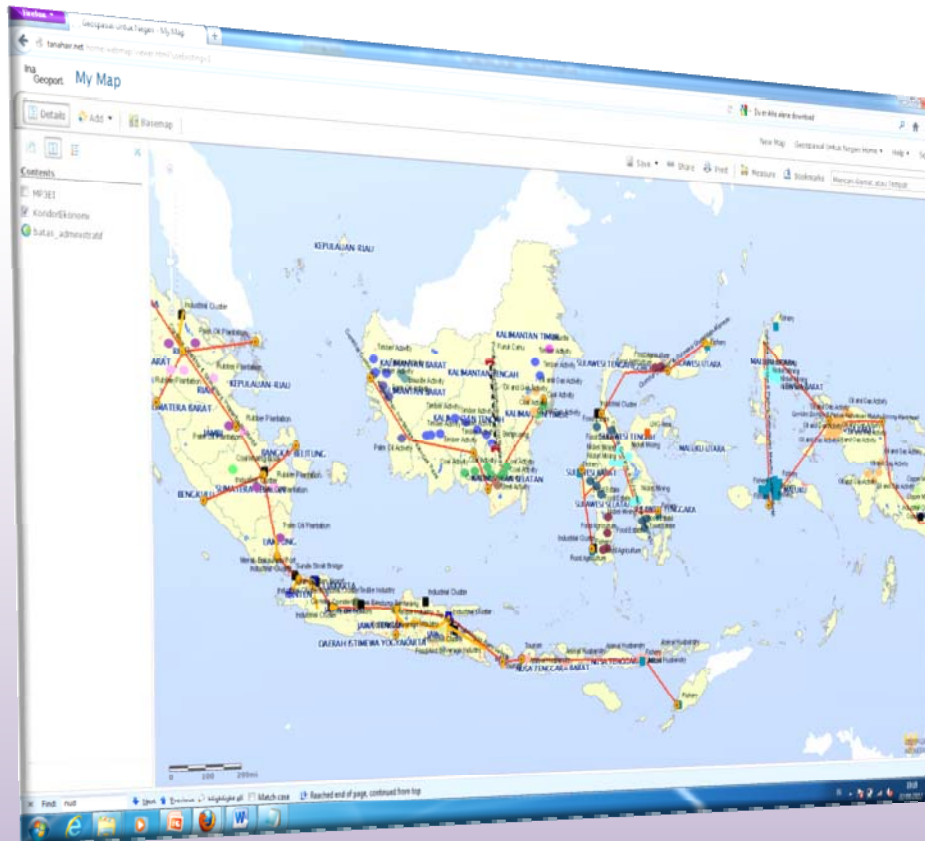
MAIN FUNCTIONS:

- ❖ SEARCH & DISCOVER
- ❖ INTEGRATE
- ❖ SHARE DATA AND APPS
- ❖ PRODUCE THE MAPS
- ❖ PUBLISH MAPS
- ❖ ACCESS VIA MOBILE DEVICE

- **EMPOWER CITIZENS TO USE ACCOUNTABLE GEOSPATIAL INFORMATION**
- **HOSTING PILOT PROJECT OF UNSDI**



SDI UPDATE: INA-GEOPORTAL EXAMPLE IN SUSTAINABLE DEVELOPMENT



<http://geoservices.ina-sdi.or.id>:
Power Plant 10.000MW Phase I
(ESDM); Spatial Planning

BAPPENAS



<http://geoservice.bakosurtanal.go.id>:
State Border; Provincial Border;
Land Cover; Gazetteer



<http://geoservices.ina-sdi.or.id>
Poverty Line (BPS)



<http://sigi.pu.go.id>:
Road Network

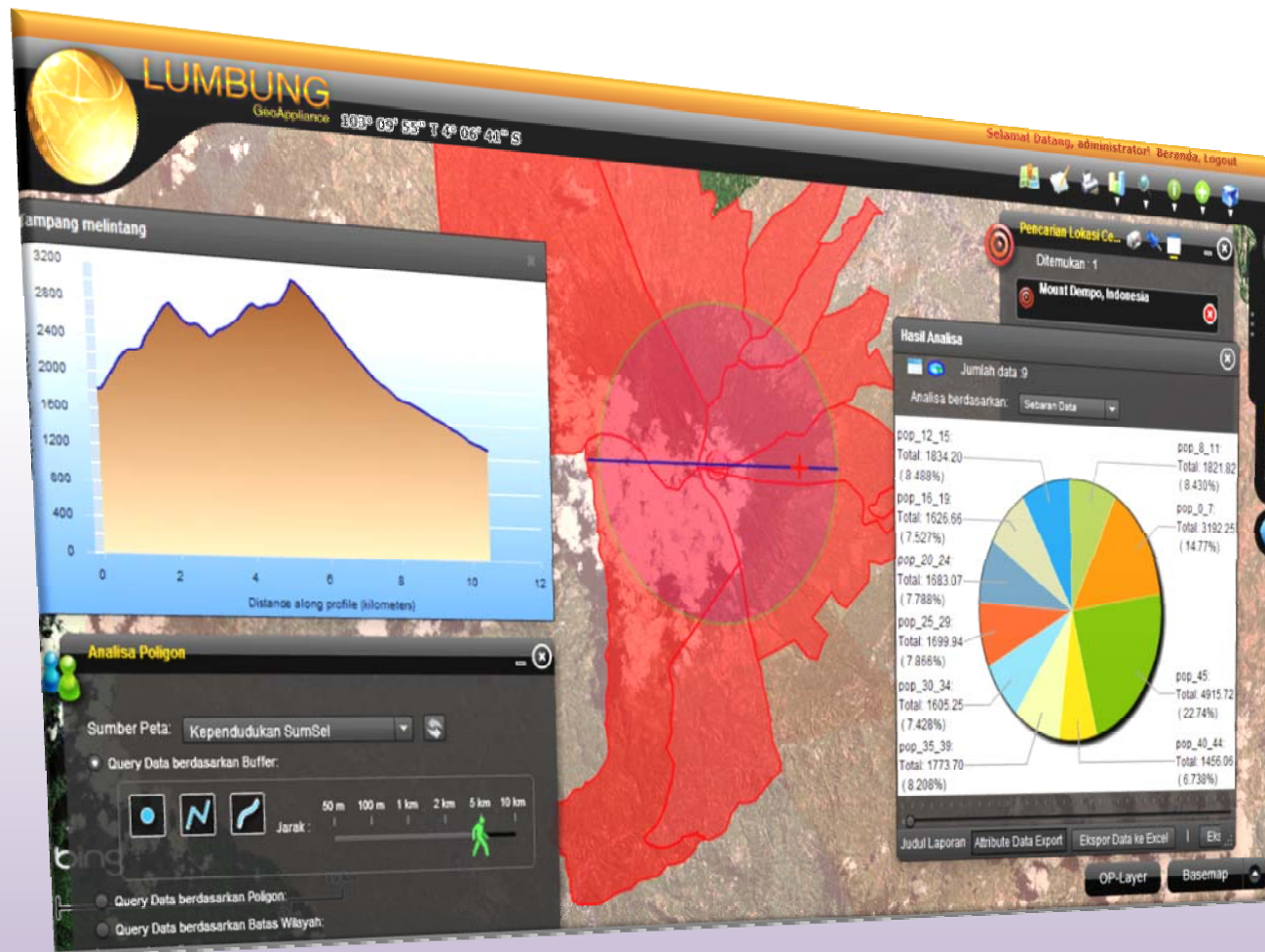


<http://geoservices.ina-sdi.or.id>:
Environment-Ecoregion



INDONESIA UPDATE: INA-GEOPORTAL

EXAMPLE IN DISASTER MANAGEMENT



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

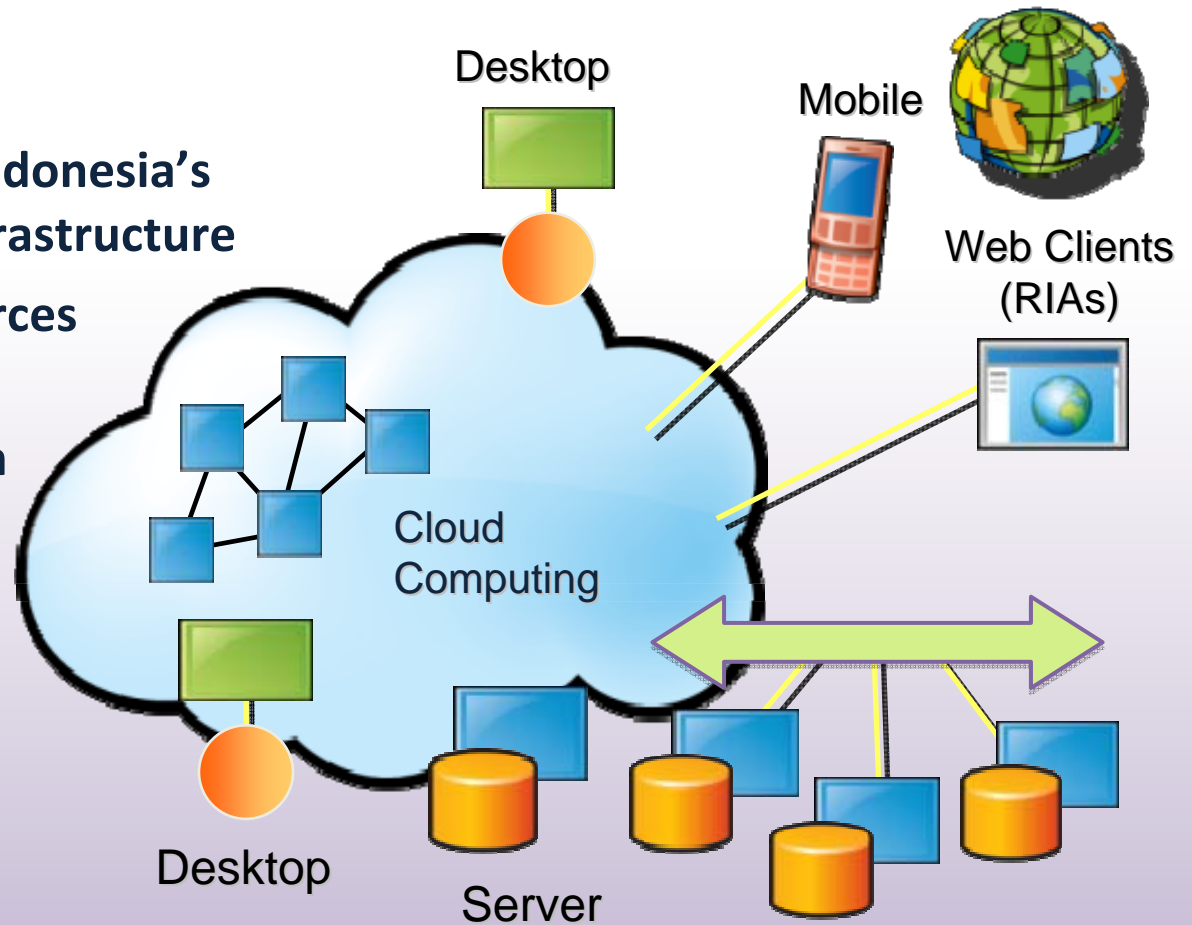


SDI UPDATE: CLOUD EXPANSION

SERVICING GEOSPATIAL INFORMATION TO LOCAL GOVERNMENTS



- **Overcoming Variety of Indonesia's Data Communication Infrastructure**
- **Minimum Client's Resources Requirement**
- **Bandwidth Consolidation**
- **Feeding Mobile GIS**





GEONAMES UPDATE: UNSDI-NATIONAL GAZETTEER SDI-GAZETTEER FRAMEWORK



- PRIMARY IDENTIFIER FOR “WHERE”
 - REGISTRATION AND IDENTITY OF SPATIAL REFERENCES – **SPATIAL BOOKMARKS**
 - STABILITY PREDICTABILITY PERSISTENCE FOR USE **TO REFERENCE OTHER INFORMATION**
- SUPPORTS INDONESIAN SDI EFFORTS
- UN-SCOPE – BUILD UNSDI



GEONAMES UPDATE: UNSDI-NATIONAL GAZETTEER

SDI-GAZETTEER FRAMEWORK FOR SOCIAL PROTECTION



■ SOCIAL PROTECTION

“PREVENTING, MANAGING, AND OVERCOMING SITUATIONS THAT ADVERSELY AFFECT PEOPLE’S WELL BEING.^[1] “

- POLICIES AND PROGRAMS TO REDUCE POVERTY AND VULNERABILITY
- REDUCING EXPOSURE, ENHANCING CAPACITY TO MANAGE RISKS

■ MULTI-SECTORAL INFORMATION

- ACCURATE
- UP TO DATE
- TIMELY
- INTEGRATED
- PRESENTED IN MEANINGFUL WAYS



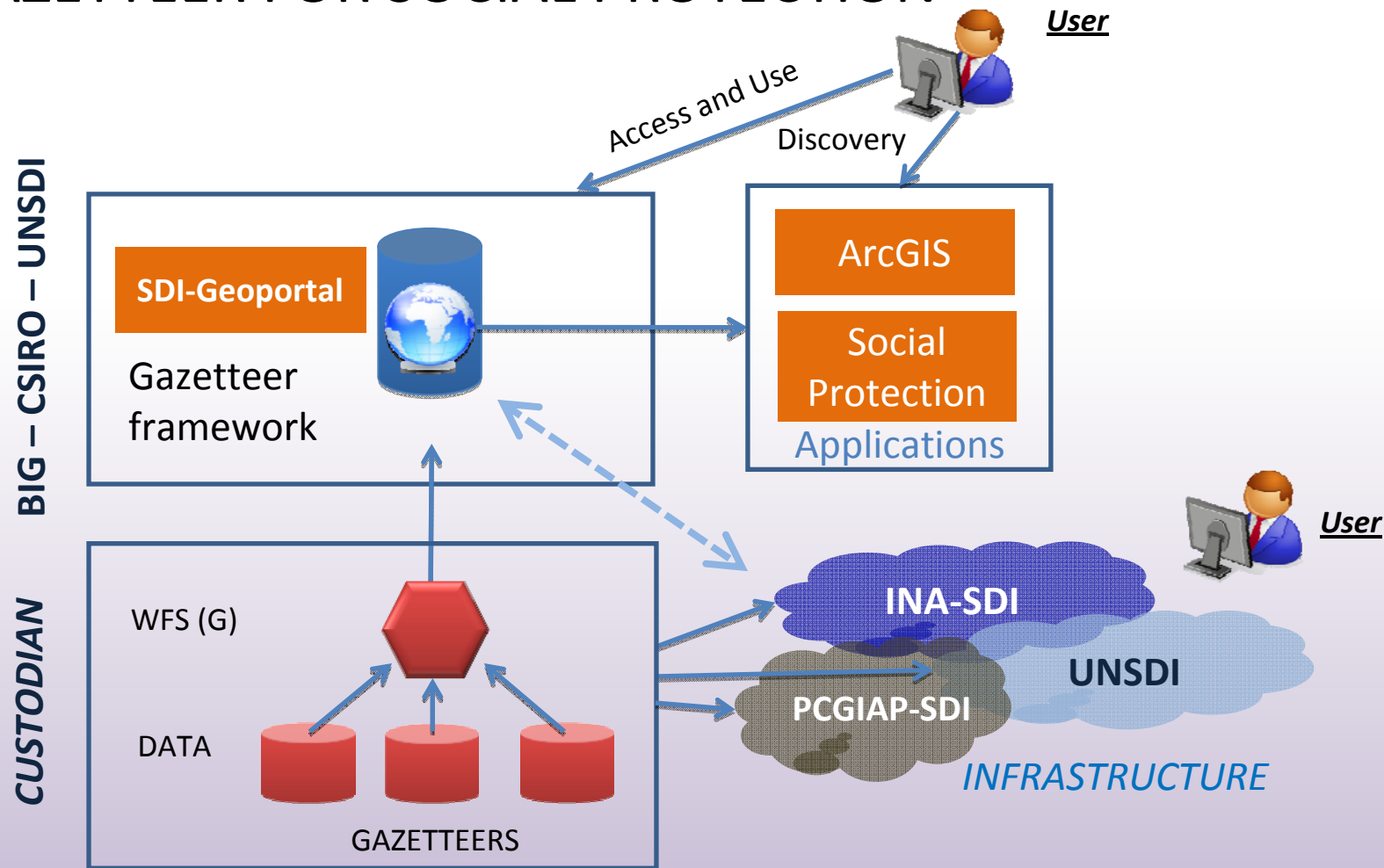
¹[United Nations Research Institute For Social Development](http://www.un.org/development/desa/pubs/2014/04/2014-report-on-the-state-of-the-worlds-children-2014)





INDONESIA UPDATE: GAZETTEER

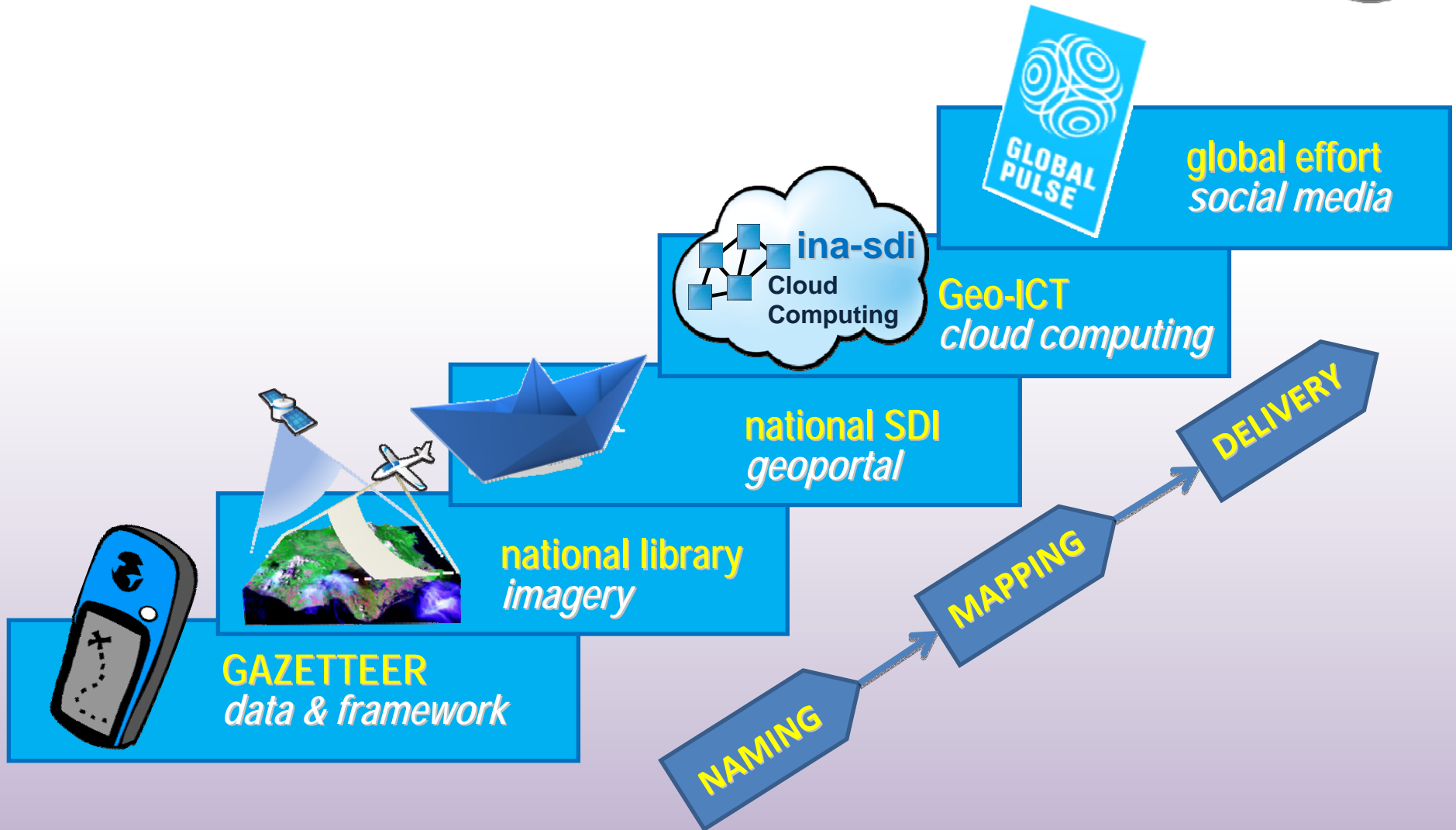
GAZETTEER FOR SOCIAL PROTECTION



THE GAZETTEER FRAMEWORK – Set of Integrated Index to Spatial Data Across SDIs



INDONESIA UPDATE: INA-SDI AND SOCIAL PROTECTION



USAGE OF **GAZETTEER FRAMEWORK** WILL SUPPORT NATIONAL'S PROBLEM SOLVING!





SUMMARY

- ENACTMENT OF LAW NO. 4 YEAR 2011 SHALL REGULATE ORGANIZATION OF GEOSPATIAL INFORMATION.
- GEOSPATIAL INFORMATION AGENCY (BIG), TRANSFORMED AGENCY FROM BAKOSURTANAL, RESPONSIBLE TO PROVIDE GEOGRAPHIC NAMES AND GAZETTEER ALONG WITH BASEMAP.
- GAZETTEER AND TOPONIMY HAS BEEN OUR DAILY JOB SINCE 1980s, BUT WITH UNIMAGINABLE GEOSPATIAL TECHNOLOGY NOWADAYS, WE REALIZE THERE'S STILL A LOT TO BE ACCOMPLISHED.
- "BORDERLESS" (GLOBAL) PROBLEMS NEEDS COMMON GAZETTEERS STANDARDIZATION AND BREAKTHROUGHS, IN DOING SO, WE PLAN TO HAVE CLOSE COLLABORATION WITH UNSDI, UN GLOBAL PULSE, ALONG WITH OUR PARTNER: CSIRO-AUSTRALIA AND BKG-GERMANY.
- WE ALSO TAKING HIGHLY TO PARTICIPATE IN UN-GGIM FORUM AND ITS WORKING GROUPS TO LEARN TOGETHER ABOUT GEOSPATIAL INFORMATION MANAGEMENT





THANK YOU