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One Map Policy for Sustainable Development of Indonesia



Head

Geospatial Information Agency of Indonesia

Presentation at the Senior Leaders Forum 2018 "Enabling Indonesia 4.0" Jakarta, 23 October 2018



Indonesia: The Maritime Continent





Volume of Geospatial Information will be enormous

Strong Human Resources and Industries in Geospatial Information are compulsory. **INDONESIA IS HUGE COUNTRY:**

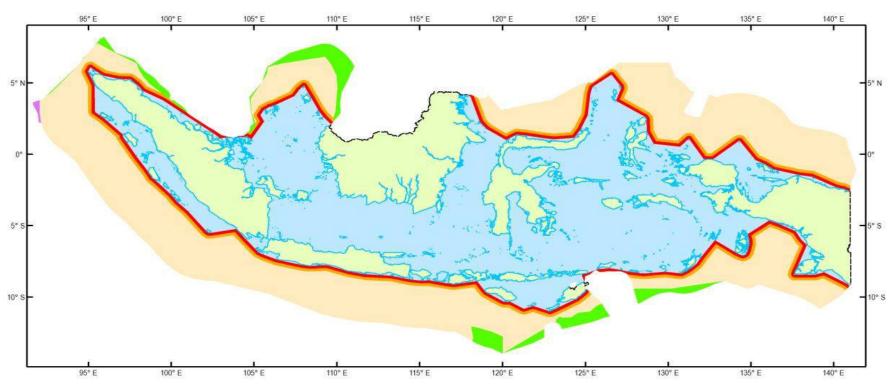
Ujung Barat (Sabang) – Timur (Merauke) = London – Bagdad Ujung Utara (Kep. Satal) – Selatan (P. Rote) = Jerman – Aljazair

Indonesia Maritime Zone

BADAN INFORMAS GEOSPASIAL

Maritime area is about 63%

Geospatial
Information is
compulsory for
managing and
developing the
maritime area of
Indonesia



SOUVERIGNTY ZONE	in km^2
1. Internal Waters and Island	3.092.085
2. Teritorial Waters	282.583
SOUVERIGN RIGHT ZONE	in km^2
1. Economic Exclusive Zone	2.936.345
2. Continental Zone	2.749.001
Continental Zone > 200 nm	4.209
Maritime Area (km^2)	3.223.137
Land Area (km^2)	1.890.739







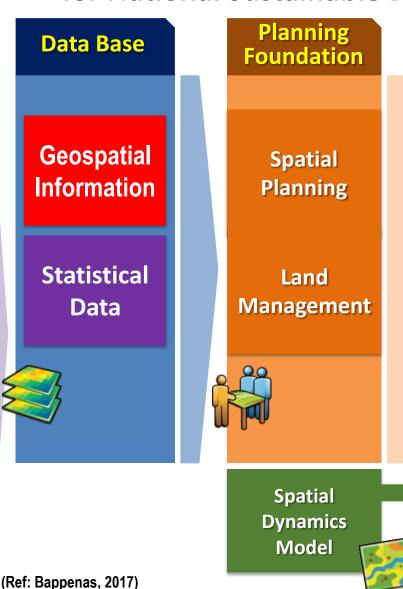
The Roles of Geospatial Information and Statistical Data for National Sustainable Development Planning

Development Directives RPJPN 2005-2025

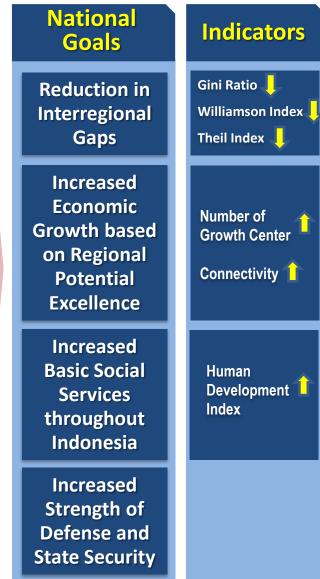
- 1. Reduced Interregional Gaps
- 2. Development of Growth Centers based on Regional Potential Advantage
- 3. Equity of
 Basic Social
 Services

Government Vision "Nawacita"

SDGs



Regional **Approach National Urban System Rapidly Growing** Areas **Special Areas Border Areas** Underdeveloped Areas Disaster-prone Areas **Local Economic Development Rural Areas Scenarios and Regional Development Strategies of Big Islands and Provinces** (RPJMN Book III)



Geospatial Information for Sustainable Development



















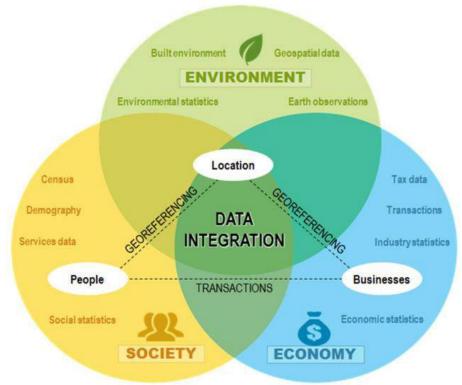
RESPONSIBLE CONSUMPTION





Location:

Link between society, the economy and the environment

















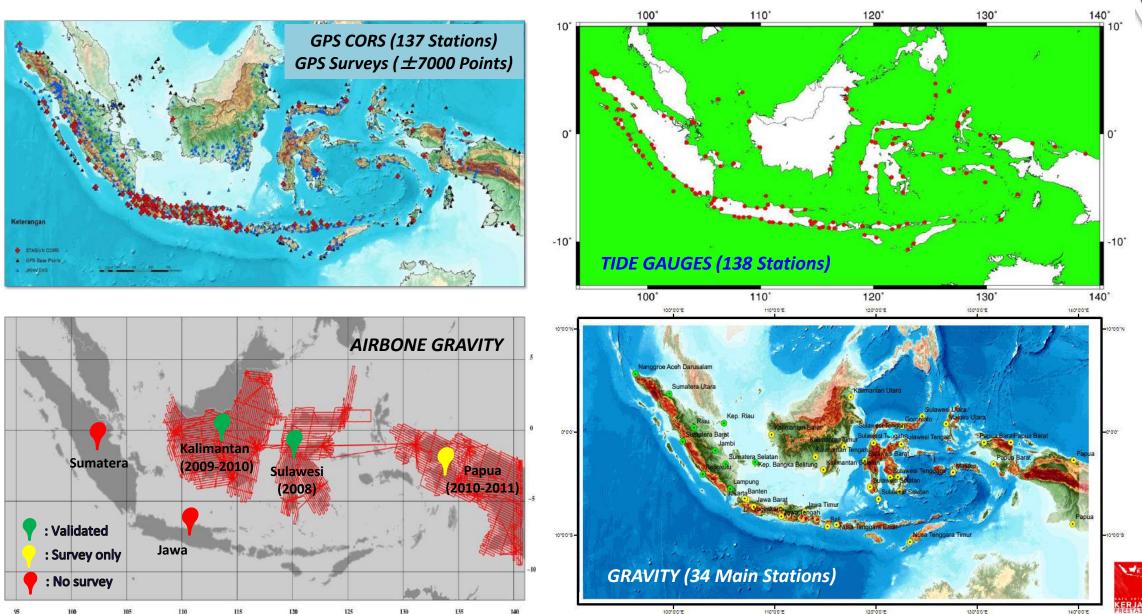


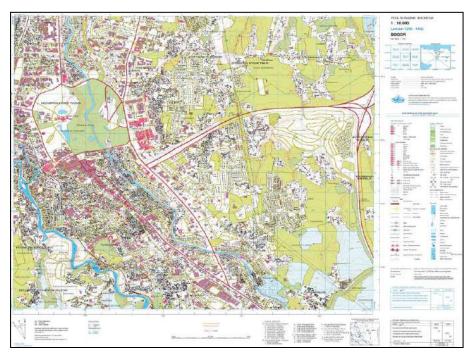




Geospatial Reference Frames of Indonesia







Basemaps of Indonesia

Topographic Map



- Coastal Area Map
- Marine Area Map

Topographic Map

Topographic layers:

- 1. Coastline
- 2. Hipsography
- 3. Hidrography
- 4. Topographic names
- 5. Administrative boundary
- 6. Transportation and utility
- 7. Building and public facility
- 8. Land cover

Coastal Area Map



Marine Area Map



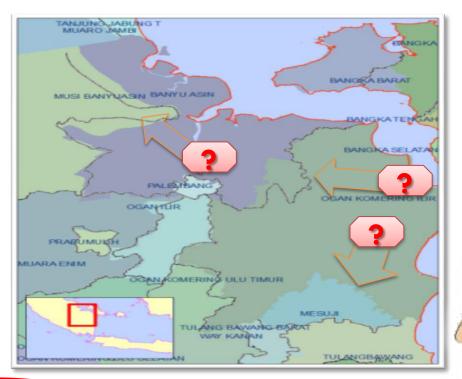




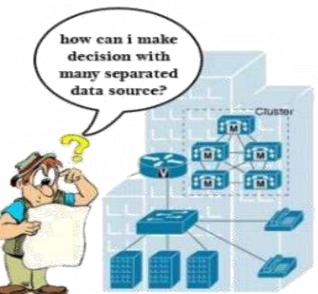
One Map Policy (OMP) Background

Geospatial Information issues in Indonesia:

Many Layers and Many Actors



- More than one institutions produced and published the same map without coordination;
- Several maps were not created by authorized institutions;
- Different geospatial information was published such as the number of islands and the size of forest areas;
- Overlaps of land uses permits (licenses);
- Basic Geospatial Information was rarely used as the basis for creating maps;
- **❖** Satellite imageries for the same area were purchased by more than one institutions.



THE PROBLEMS OF GEOSPATIAL DATA:

- * Non-Uniform Georeference.
- Limited Data Availability.
- Out of date and Inaccurate.
- Difficult Accessibility.
- **❖** No Optimum Utilization, etc.

Low quality decision making process and consequently degrade the achievement of the national development goals





Example of Overlapping Permits due to Non Unified Maps

Topographic Map (RBI)

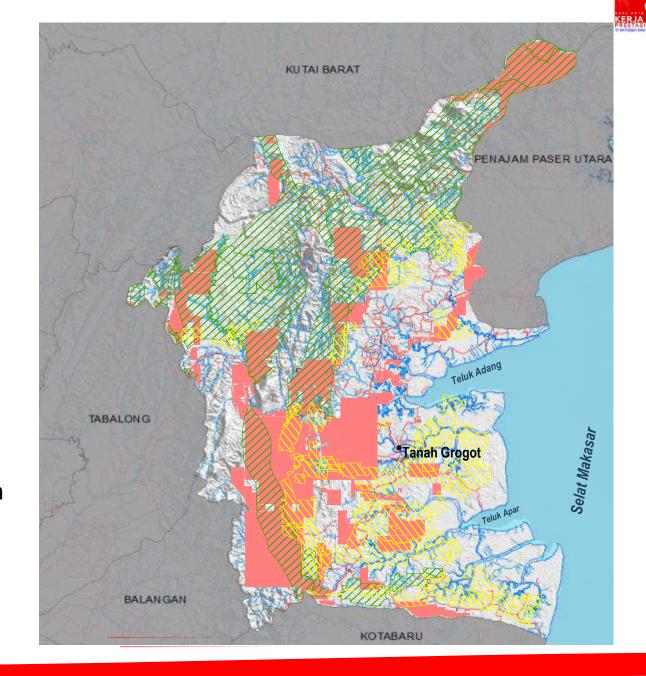
Permits of Mining Sector

Permits of Forestry Sector

Permits of Cadastral Sector

CREATING LEGAL, SOCIAL & ECONOMIC CONFLICTS:

- ✓ Lead to unattractive investment condition
- **✓** Hampering the development process
- **✓** Delaying the project completion
- **✓** Wasting the energy of development





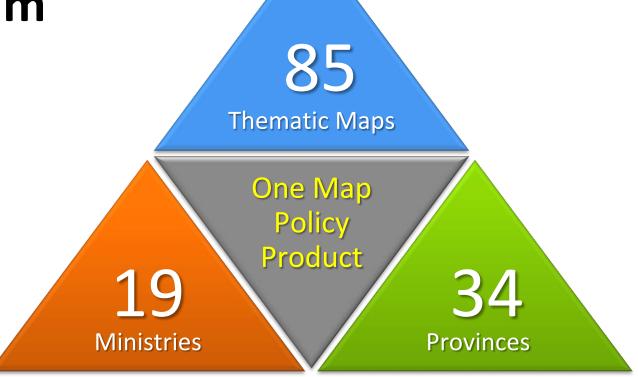
ONE MAP POLICY Program

CHARACTERISTICS

- One Georeference
- One Standard
- One Database
- One Geoportal

ACTIVITIES

- Compilation
- Integration
- Synchronization
- Data Sharing



Acceleration of One Map Policy (Presidential Regulation 9/2016)

Value

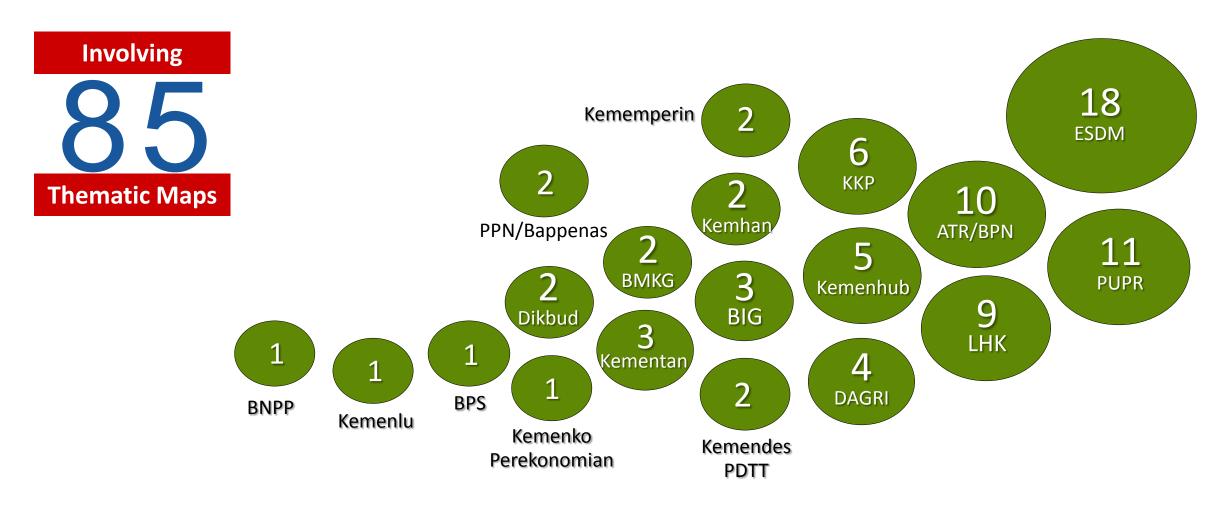
- Unified National Geospatial Data and Information
- Reliable and Accountable Spatial Planning
- Reliable and Accountable Development Policy





ONE MAP POLICY

19 Ministries and 85 Thematic Maps







85 Thematic Maps of OMP Program

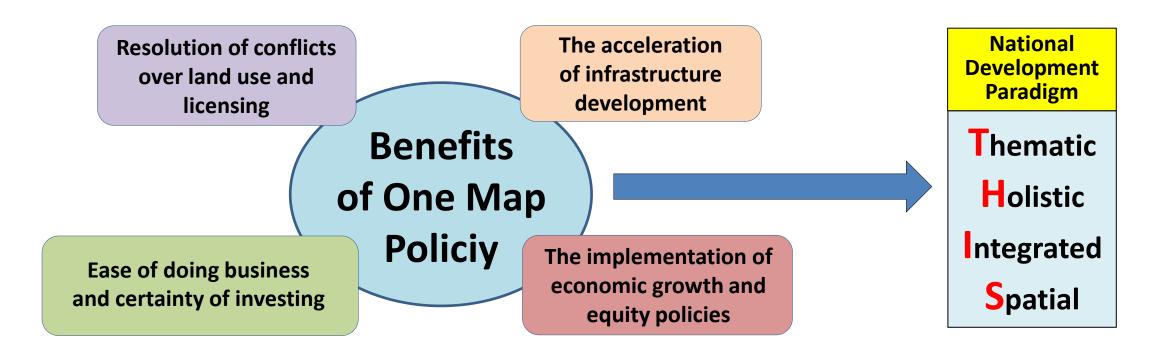
	<u> </u>	
1	Peta Penetapan Kawasan Hutan (hasil Tata Batas), minimal pada skala 1:50.00	KLHK
2	Peta Izin Pemanfaatan Kawasan Hutan (IUPHHK-HA, IUPHHK-HT & IUPHHK-	KLHK
3	Peta Hutan Tanaman Rakyat (HTR), minimal pada skala 1:50.000	KLHK
4	Peta Kawasan Hutan dengan Tujuan Khusus, minimal pada skala 1:50.000	KLHK
5	Peta Izin Usaha Pertambangan skala 1:50.000	ESDM
6	Peta Wilayah Kerja Migas skala 1:50.000	ESDM
7	Peta Hak Guna Usaha, minimal pada skala 1:50.000	ATR/BPN
8	Peta Hak Pengelolaan, minimal pada skala 1:50.000	ATR/BPN
9	Peta Hak Guna Bangunan, minimal pada skala 1:50.000	ATR/BPN
10	Peta Perda Tanah Ulayat, minimal pada skala 1:50.000	Kemendagri
11	Peta Izin Lokasi, minimal pada skala 1:50.000	ATR/BPN
12	Peta penetapan Kawasan Ekonomi Khusus (KEK), minimal pada skala 1:50.000	Kemenko Perekonomian
13	Peta Kawasan Industri Eksisting skala 1:50.000	Kemenperin & Kemenko Per
14	Peta Rencana Kawasan Industri skala 1:50.000	Kemenperin & Kemenko Per
15	Peta Kawasan Perdagangan Bebas dan Pelabuhan Bebas (KPBPB), minimal pad	ATR/BPN
16	Peta Persebaran Lokasi Transmigrasi skala 1:50.000	KPDT
17	Peta Persebaran Kawasan Transmigrasi skala 1:50.000	KPDT
18	Peta PP RTRWN skala 1:1.000.000	ATR/BPN
19	Peta Perda RTRW Provinsi skala 1:250.000	ATR/BPN
20	Peta Perda RTRW Kabupaten skala 1:50.000 dan Perda RTRW Kota skala 1:25.	ATR/BPN
21	Peta Rencana Pembangunan Jangka Menengah Nasional skala 1:250.000	PPN/BAPPENAS
22	Peta RKP skala 1:250.000	PPN/BAPPENAS
23	Peta Penutup Lahan skala 1:50.000	BIG
24	Peta Perpres RTR KSN skala 1:50.000	ATR/BPN
25	Peta kawasan Wilayah Pertahanan skala 1:1.000.000	Kemenhan
26	Peta Rinci Wilayah Pertahanan skala 1:50.000	Kemenhan
27	Peta RZWP3K Provinsi skala 1:250.000	KKP
28	Peta Bagian RZWP3K skala 1:50.000	KKP
29	Peta Rencana Tata Ruang Laut Nasional skala 1:1.000.000	KKP
30	Peta Lokasi Pelabuhan perikanan skala 1:50.000	KKP
31	Peta Sebaran Pelabuhan Umum skala 1:50.000	Kemenhub
32	Peta Sebaran Pelabuhan Penyeberangan skala 1:50.000	Kemenhub
33	Peta Sebaran Terminal Khusus skala 1:50.000	Kemenhub
34	Peta Sebaran Bandara skala 1:50.000	Kemenhub
35	Peta Sebaran Jaringan Rel dan Stasiun KA skala 1:50.000	Kemenhub
36	Peta jaringan listrik skala 1:50.000	ESDM
37	Peta sebaran lokasi gardu Induk skala 1:50.000	ESDM
38	Peta lokasi Pembangkit Listrik skala 1:50.000	ESDM
39	Peta sebaran Pembangkit Listrik skala 1:50.000	ESDM
40	Peta Jaringan Pipa Migas skala 1:50.000	ESDM

41	Peta Jaringan Serat Optik, skala 1:50.000	Kemkominfo
42	Peta Jalan Nasional, Jalan Tol, Jalan Provinsi, dan Jalan Kabupaten skala 1:50.0	PUPR
43	Peta Sebaran Lokasi Tempat Pembuangan Akhir (TPA) skala 1:50.000	PUPR
44	Peta Sebaran Lokasi Instalasi Pengolahan Air Limbah (IPAL) dan Instalasi Peng	PUPR
45	Peta Sebaran Lokasi SPAM skala 1:50.000	PUPR
46	Peta sebaran lokasi Bendungan skala 1:50.000	PUPR
47	Peta Daerah Irigasi Permukaan skala 1:50.000	PUPR
48	Peta Sebaran Lokasi Sabo DAM skala 1:50.000	PUPR
49	Peta Sebaran Lokasi Pengaman Pantai skala 1:50.000	PUPR
50	Peta Sebaran Lokasi Rusunawa skala 1:50.000	PUPR
51	Peta Air Tanah skala 1:50.000	PUPR
52	Peta Ketersediaan Air skala 1:250.000	PUPR
53	Peta Penggunaan Tanah skala 1:50.000	ATR/BPN
54	Peta Lahan Gambut skala 1:50.000	Kementan
55	Peta Neraca SD Hutan skala 1:250.000	KLHK
56	Peta Daerah Aliran Sungai (DAS) skala 1:50.000	KLHK
57	Peta Geologi skala 1:100.000	ESDM
58	Peta Kawasan rawan Bencana Gunung Api skala 1:50.000	ESDM
59	Peta Kawasan Rawan Bencana Gempa Bumi skala 1:50.000	ESDM
60	Peta Kawasan Rawan Bencana Zona Kerentanan Gerakan Tanah skala 1:50.0	ESDM
61	Peta Kawasan Rawan Bencana Tsunami skala 1:50.000	ESDM
62	Peta Hidrogeologi skala 1:100.000	ESDM
63	Peta Tanah Semi-detail skala 1:50.000	Kementan
64	Peta Curah Hujan dan Hari Hujan skala 1:50.000	BMKG
65	Peta Potensi Energi Matahari dan Angin skala 1:250.000	BMKG
66	Peta Lahan Sawah skala 1:50.000	ATR/BPN
66	Peta Lahan Sawah skala 1:50.000	Kementan
67	Peta Wilayah Pengelolaan Perikanan Negara Republik Indonesia (WPPNRI) 1-	KKP
68	Peta Jenis dan Kekayaan Perikanan tangkap di WPPNRI skala 1:250.000	KKP
69	Peta Kawasan Bentang Alam Karst skala 1:50.000	ESDM
70	Peta Sumberdaya Mineral skala 1:50.000	ESDM
71	Peta Sumberdaya Batubara skala 1:50.000	ESDM
72	Peta Sumberdaya Panasbumi skala 1:50.000	ESDM
73	Peta Sistem Lahan (Morfologi) skala 1:50.000	BIG
74	Peta Morfometri Bentang Lahan skala 1: 50.000	BIG
75	Peta Batas Administrasi Provinsi skala 1:50.000	Kemendagri
76	Peta Batas Administrasi Kabupaten/Kota skala 1:50.000	Kemendagri
77	Peta Batas Administrasi Desa/kelurahan skala 1:10.000	Kemendagri
78	Peta Batas Darat Negara skala 1:25.000	Kemenlu & BNPP
79	Peta Batas Laut Negara skala 1:1.000.000	Kemenlu
80	Peta Potensi Desa (sosial-ekonomi), minimal pada skala 1:50.000	BPS
81	Peta kawasan Cagar Budaya skala 1:50.000	Kemendikbud
82	Peta Sebaran Lokasi Cagar Budaya, skala 1:50.000	Kemendikbud
83	Peta Penunjukkan Kawasan Hutan skala 1:250.000	KLHK
84	Peta Zonasi Kawasan Konservasi skala 1:50.000	KLHK
85	Peta Zonasi Kawasan Konservasi Perairan skala 1:50,000	KLHK dan KKP





Benefits of One Map Policy for Sustainable Development

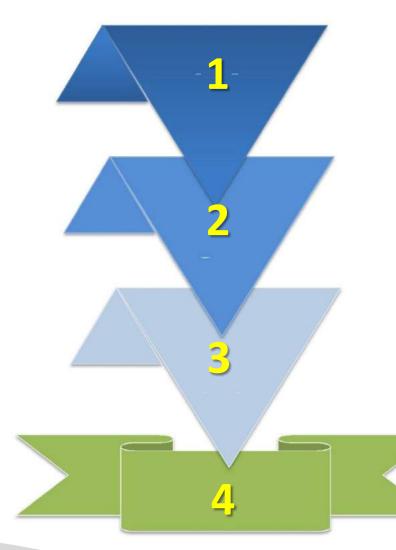


- Supporting national sustainable development planning.
- Supporting the implementation of "THIS" national development paradigm
- Supporting sustainable natural resource management
- Prevention of corruption related to natural resources management





Steps of One Map Policy Activity



COMPILATION

Thematic data collection from Ministries/Agencies as a data producer (Custodianship).

INTEGRATION

Thematic data integration processes which refer to national standard base map produced by BIG.

SYNCRONIZATION

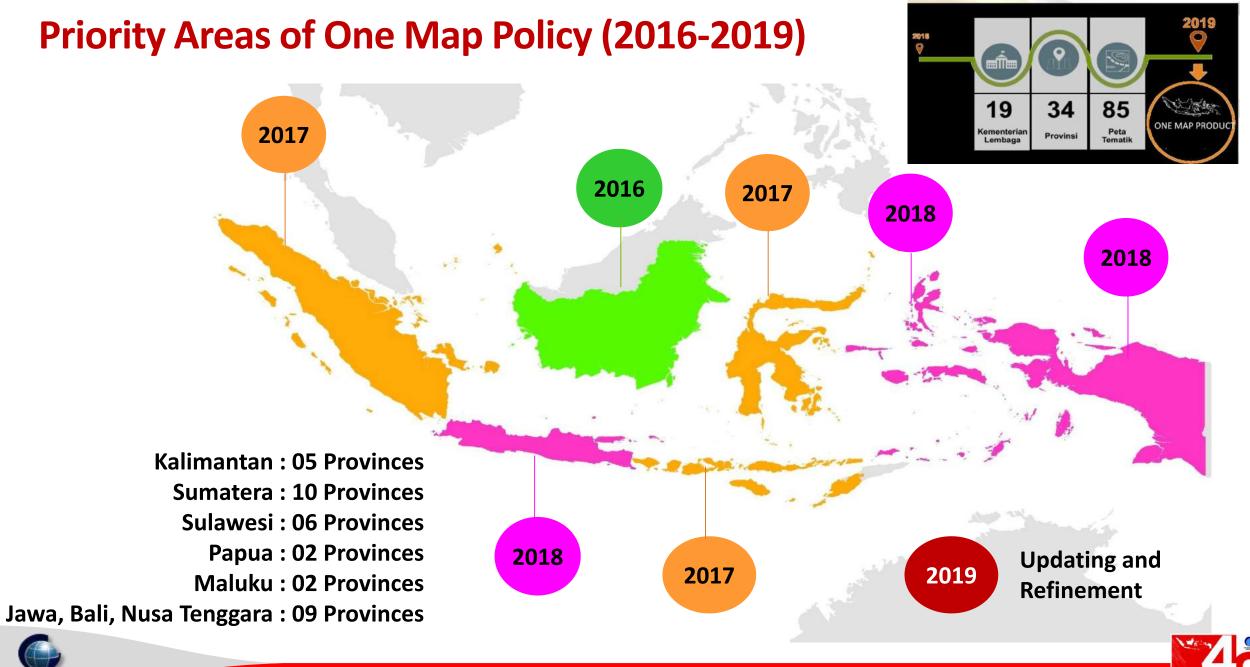
To syncronize thematic data among ministries/agencies which include to solve land use conflict.

DATA SHARING

Product of one map will be shared through InaGeoportal to ministries/agencies involved.







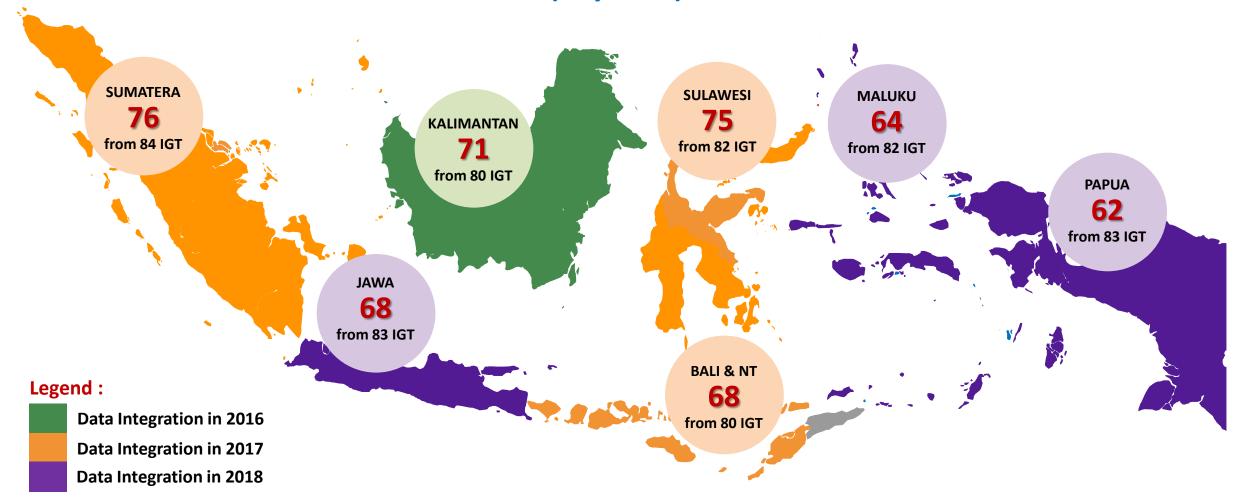




Status of One Map Policy (OMP) Data Integration



(July 2018)





The Geoportal of One Map Policy will be officially launched by the Indonesian President on Nov. 2018

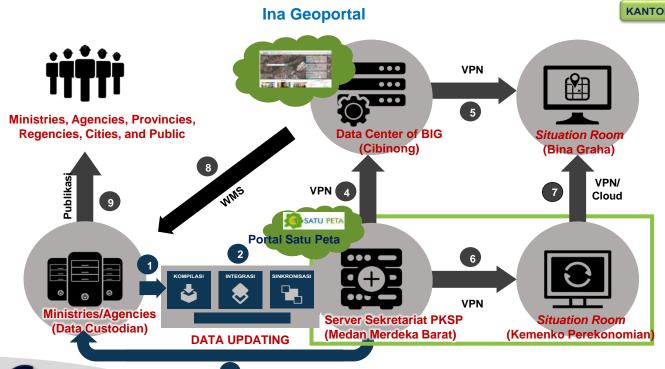
KERJA KITA PRESTASI BANGSA 10 ontoportopo 2018

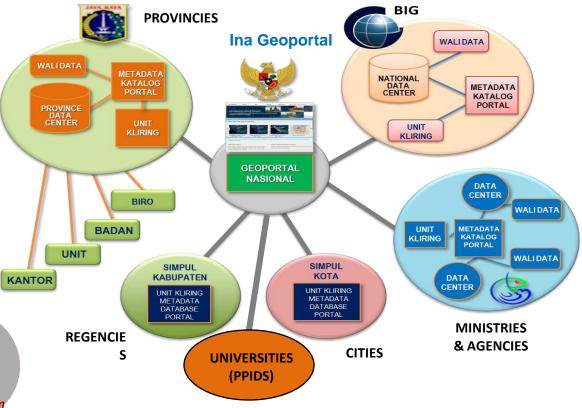
OMP Results is housed in **InaGeoportal BIG**



KERJA KITA PRESTASI BANGSA 17 UNITUGNADO 2011

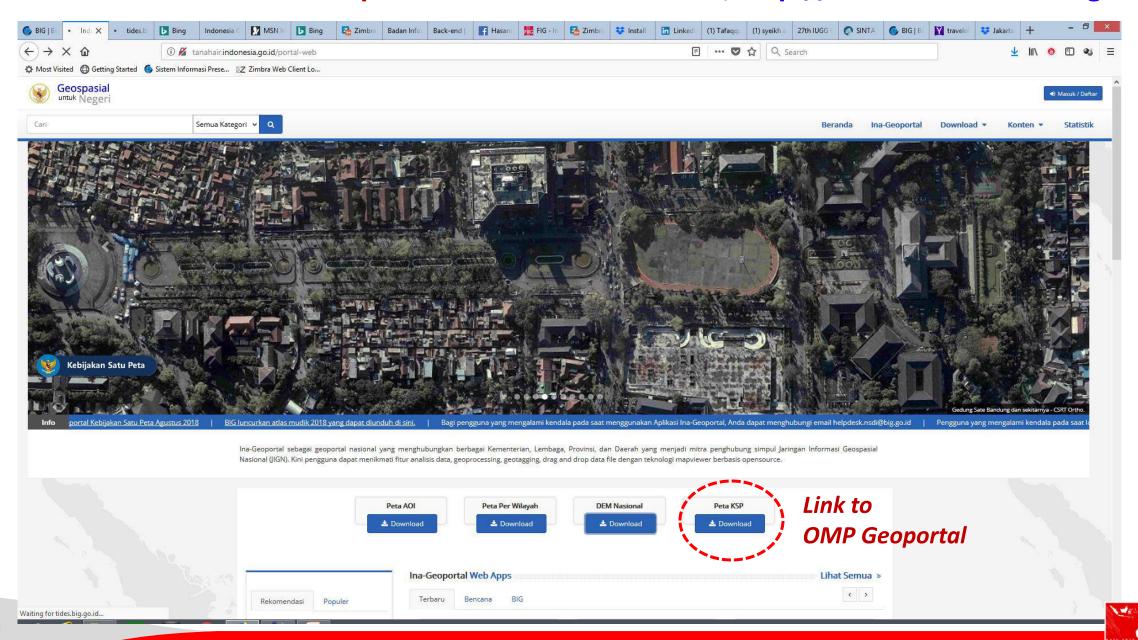
National Geospatial Information Network (NGIN)



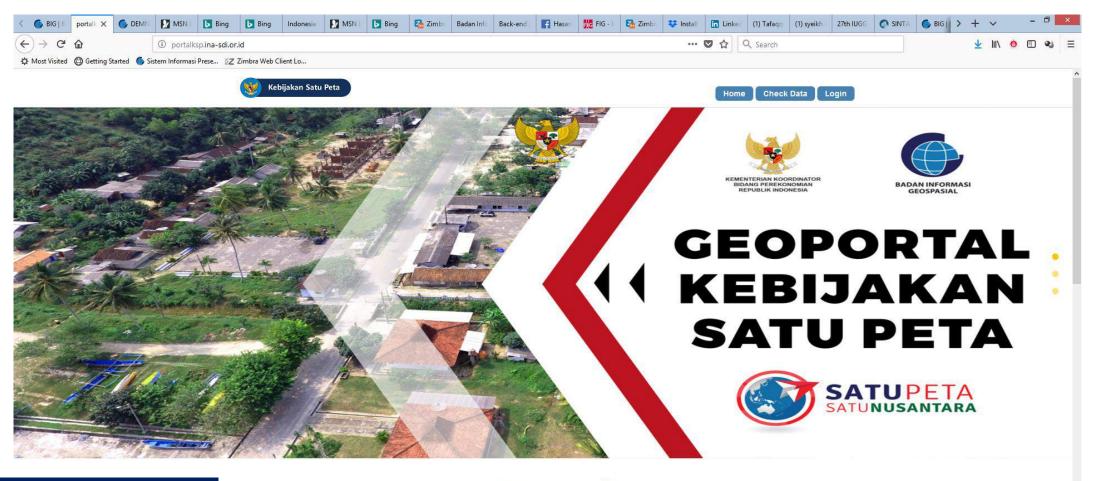


Status of NGIN Nodes			
	TARGET	CONNECTED	
Ministries/Agencies	57	23	
Provinces	34	34	
Regencies/Cities	514	22	
Universities	34	19	

Ina-GeoPortal: National Geospatial Information Network, http://tanahair.indonesia.go.id



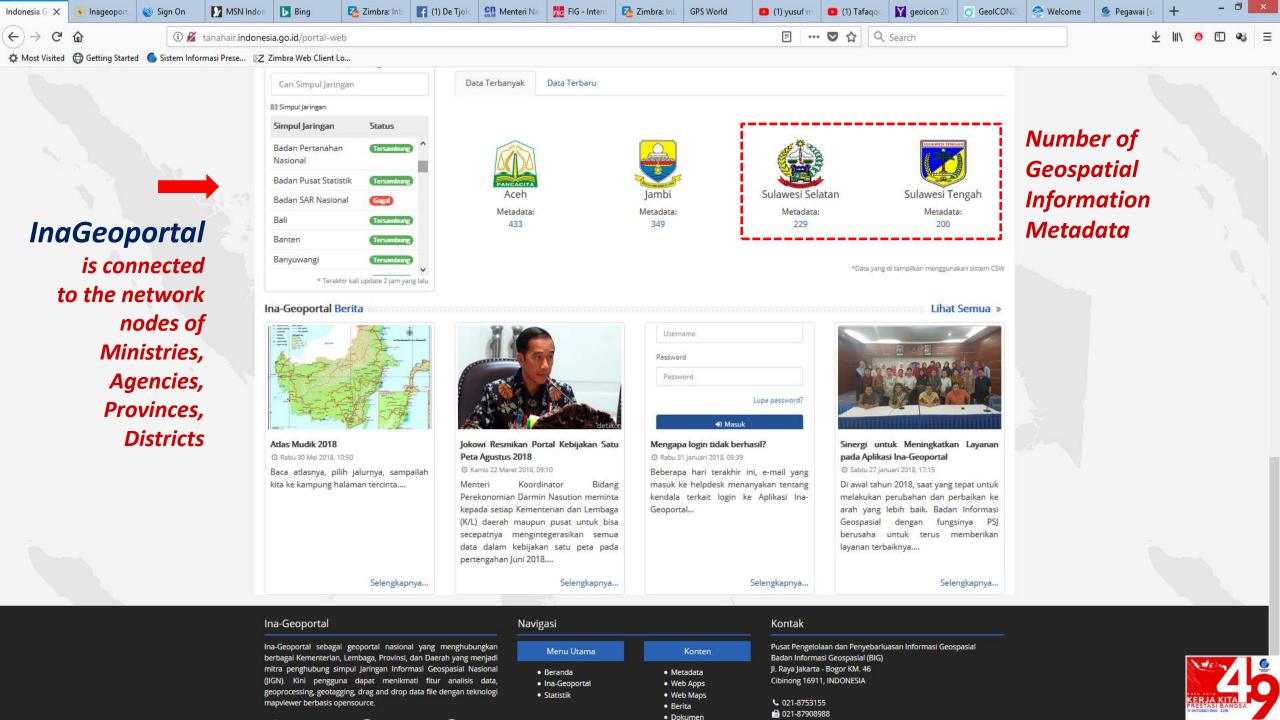
OMP-Geoportal inside InaGeoportal, http://portalksp.ina-sdi.or.id/



OMP-Geoportal is only available for OMP stakeholders, and governed by data sharing protocol.

85 Peta Tematik

Peta tematik dalam Pelaksanaan Kebijakan Satu Peta mencakup 7 (tujuh) tema, yaitu batas wilayah, kehutanan, perencanaan ruang, sarana prasarana, perizinan dan pertanahan, sumber daya alam dan lingkungan, kawasan khusus dan transmigrasi. Ketujuh tema tersebut tersebar di 34 Provinsi yang menjadi kewenangan 19 (sembilan belas) Kementerian/Lembaga yang terlibat sebagai Walidata IGT



Status of Network Nodes of Ministry/Agency





10 ALREADY OPERATIONAL BUT NOT YET OPTIMAL*

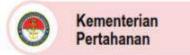




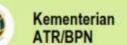


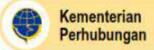
















Kementerian PUPR



BIG











BMKG

Kementerian Desa, PDT, dan Transmigrasi









* Already connected to NIGN but no supporting regulation yet





Status of Network Nodes of Provinces



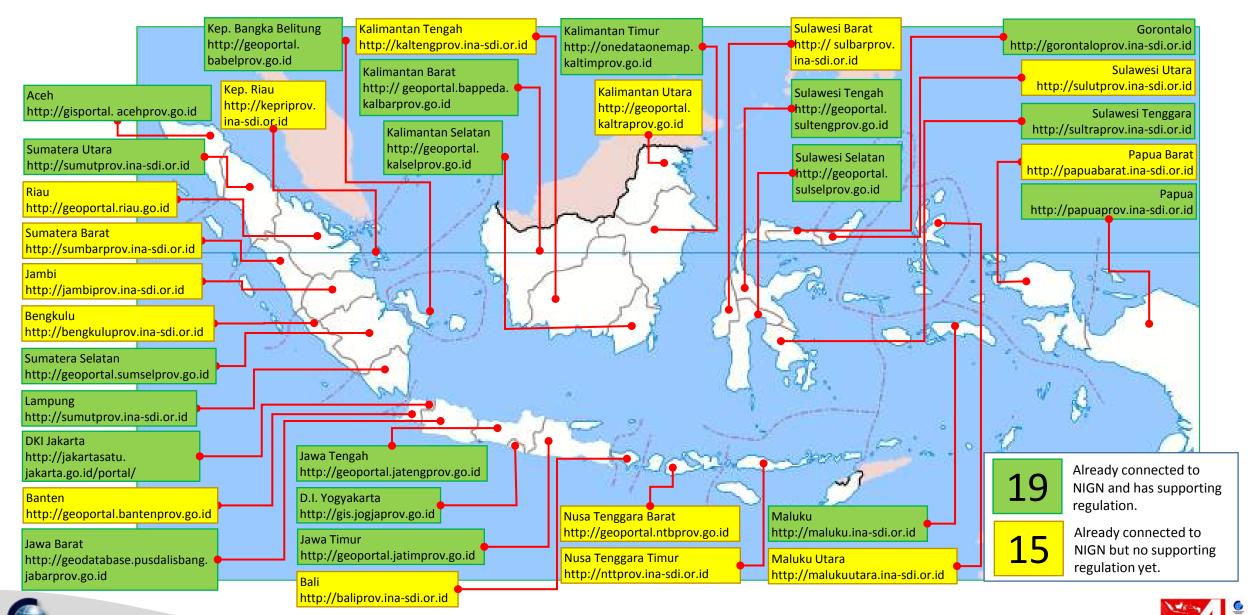
19 ALREADY OPERATIONAL BUT NOT YET OPTIMAL*







Geoportal Address of Provinces (August 2018)



Closing Remark (1): OMP and Sustainable Development

NSDI: NATIONAL SPATIAL DATA INFRASTRUCTURE

- Presidential Decree
- No. 27/ 2014 (NSDI)

GEOSPATIAL DATA PRODUCTION

Geospatial Information Law No. 4 / 2011

ONE MAP POLICY Coordination & Supervision

Presidential Regulation No. 9 / 2016 Acceleration of OMP Implementation GEOSPATIAL INFORMATION UTILIZATION & MODELING

National Planning Law

POLICY

GOVERNANCE

HUMAN RESOURCES **National**

Network

Geospatial

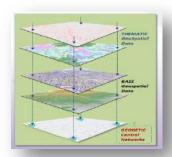
Information

DATA & STANDARD

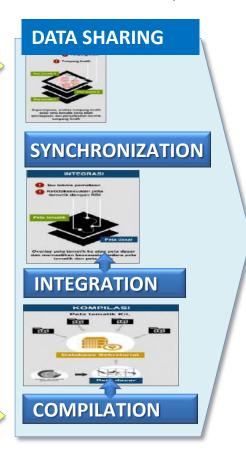
TECHNOLOGY

STATISTIC DATA
(Social and Economy)





GEOSPATIAL INFORMATION







By integrating multi sectors, product of one map will be used for developing or for updating district spatial planning which contributes to sustainable development

National
Sustainable
Development
Program



Harmony With
Nature:
SocialEconomic
Environment





Closing Remark (2)

- ✓ Geoportal housing OMP data will be launched on November 2018.
 The synchronization stage is continuing.
- ✓ Data Sharing of OMP data is based on regulation.
- ✓ The National Geospatial Information Network is being completed to support data sharing of OMP data.
- ✓ Several issues for OMP continuation:

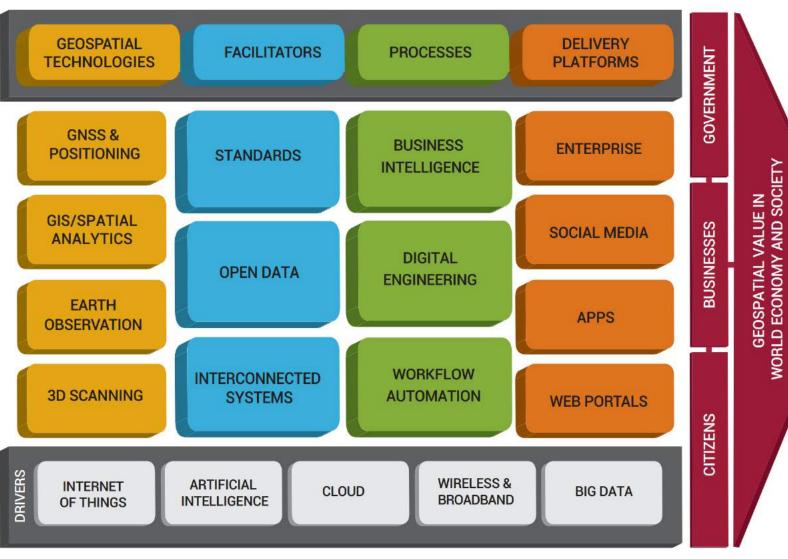
• Utilization of OMP Data in Decision Making Process of Central and Local Governments			
• Toward Larger Scale of 1:5.000 • Human Resource Development			
 Inclusion of other Thematic Maps 	Institutional and Policy Enhancement		
Adding more Stakeholders, e.g. NGO and Private Sector			





Closing Remark (3)

One Map Policy and InaGeoportal should consider new developments in the geospatial digital ecosystem







Closing Remark (4)

PEMERINTAH INDONESIA 4.0

MANFAAT LANGSUNG BAGI RAKYAT: Reforma Agraria-Perhutanan Sosial, Penyelesaian Konflik, Akurasi Bansos-Jamsos (KIS-KIP-PKH-BPNT), Pencatatan Sipil, Modernisasi Perpajakan, Pencegahan Korupsi, Pencapaian SDGs

One Map Policy

should be integrated with other data-related government initiatives.



SISTEM PEMERINTAHAN BERBASIS ELEKTRONIK – SPBE:

Pemerintah bersih, terbuka, transparan, hemat, efisien, efektif, bebas korupsi, cerdas

Rencana Induk Anggaran & Belanja, Pengadaan

Proses Bisnis Data dan Informasi

Infra SPBE

Aplikasi SPBE Keamanan Informasi Layanan SPBE







KERJA 5 As (KERAS, CERDAS, TUNTAS, MAWAS, IKHLAS)