



# Introduction to Geospatial Information Agency of Indonesia

**Belinda Arunarwati Margono PhD**

(belinda.arunarwati@big.go.id)

Principal Secretary

Geospatial Information Agency of Indonesia

**UN-GGCE International Workshop on the Integration of Terrestrial,  
Maritime, Built and Cadastral Domains**

Bogor, 4 December 2024



# AT A GLANCE

About Geospatial  
Information Agency  
of Indonesia



BADAN INFORMASI  
GEOSPASIAL





BADAN INFORMASI  
GEOSPASIAL



## Vision

**become the main driver**  
on implementing geospatial information in  
effective and efficient way to achieve advanced  
Indonesia, that is sovereign, independent, and  
based on local-knowledge cooperation (named  
*gotong royong*).



[www.big.go.id](http://www.big.go.id)



Badan Informasi Geospasial



@infogeospasial



## Mission Geospatial Information Agency of Indonesia



**Increasing** the availability of accurate and comprehensive national geospatial information to support national development.

**Realizing** the implementation of national geospatial information that is effective and efficient through coordination, integration and synchronization.

**Realizing** a quality national geospatial information infrastructure, encompasses aspects of policy, institutions, human resources, technology and standards.

**Implementing** clean, effective and trustworthy governance in supporting the implementation of national geospatial information.





**BIG**, previously known as the *National Survey and Mapping Coordinating Agency (Bakosurtanal)* which was established on October 17, 1969, transformed into (*Geospatial Information Agency*) **BIG** in 2011, is a Non-Ministerial Government Institution (**LPNK**) which carries out government duties in the field of geospatial information (Presidential Regulation No. 127 of 2015)



**1969**

**BAKOSURTANAL**

October 17, 1969  
 National Survey and Mapping  
 Coordinating Agency  
 (Presidential Regulation 83 of  
 1969)

Discussion of the Draft  
 Law on Geospatial  
 Information

**2010**



**2011**

**BIG**

The Geospatial Information  
 Agency was established to  
 replace Bakosurtanal in  
 accordance with the mandate  
 of Article 22 No. 4 of the 2011  
 Geospatial Information Law

BIG is under the  
 coordination of the  
 Ministry of National  
 Development  
 Planning/Bappenas  
 (Presidential Regulation  
 127 of 2015)

**2015**



**2020**

**Job Creation Law**

- **Government Regulation** No. 45/2021 on the Implementation of Geospatial Information
- **Presidential Regulation** No. 11/2021 on Cooperation Between the Central Government and BUMN in the Implementation of Base Geospatial Information
- 7 BIG Regulations derived from **Government Regulation** No. 45/2021 and **Presidential Regulation** 11/2021

Concept of National  
 Geospatial Master Plan as  
 a basis for managing  
 Geospatial Information  
 2025-2029

**2024**





# Organization Structure

**Head of Geospatial Information Agency of Indonesia**

**Principal/Chief Secretary**

**Inspectorate**

**Center for Geospatial Information Competence Development**

**Deputy of Basic Geospatial Information**

**Deputy of Thematic Geospatial Information**

**Deputy of Geospatial Information Infrastructure**

**Directorate of Geospatial Reference Systems**

**Directorate of Land Topographic Mapping**

**Directorate of Marine and Coastal Topographic Mapping**

**Directorate of Boundaries Mapping and Geographical Names**

**Directorate of Thematic Mapping**

**Directorate of Atlas and Geospatial Information Utilization**

**Directorate of Thematic Geospatial Information Integration and Synchronization**

**Directorate of Geospatial Standards and Technology**

**Directorate of Geospatial Information Institutional Affairs and Networks Institutions and**

**Directorate of Geospatial Information Human Resources**

**Bureau of Planning, Human Resources and Organization**

**The Bureau of General Affairs and Finance**

**Bureau of Legal Affairs, Public Relations and Cooperation**



**BIG  
PRODUCTS & SERVICES**

Among others

**1**

**Indonesian Geospatial Reference System**

[srgi.big.go.id](http://srgi.big.go.id)

**2**

**Ina-Geoportal**

[tanahair.indonesia.go.id](http://tanahair.indonesia.go.id)

**3**

**Geographical Name Information System**

[sinar.big.go.id](http://sinar.big.go.id)

**4**

**Petakita**

[petakitav3.big.go.id](http://petakitav3.big.go.id)

**5**

**National Atlas of Indonesia**

[atlas.big.go.id](http://atlas.big.go.id)

**6**

**One Map Policy Geoportal**

[onemap.big.go.id](http://onemap.big.go.id)





# Indonesian Geospatial Reference System

UN-GGCE International Workshop  
**JOINING LAND AND SEA**  
The Integration of Terrestrial, Maritime, Built, and Cadastral Domains

## Services

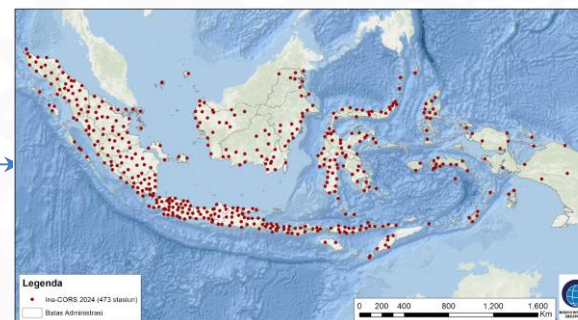
<https://srgi.big.go.id/>

- Jaring Kontrol Geodesi
- Model Geoid
- Model Deformasi
- Model Pasut
- Atmosfer
- Transformasi Koordinat

- Geodetic Control Network
- Geoid Model
- Deformation Model
- Tidal Model
- Coordinate Transformation
- Ina-Cors
- Ina-Tide



**Geodetic Control Network:**  
Spread throughout the territory of the Republic of Indonesia



**INA-CORS Stations:**  
**472 Location**



**INA-PASUT Stations:**  
**290 Location**

Streaming data  
5 seconds & FTP 5 minutes





## **BENEFITS OF** Sharing Thematic Map produced by government institutions (K/L/P) through **Geoportal One Map Policy**

### Data Sharing Terms

01

#### Presidential Decree No. 20 of 2018

About Access Authority for Sharing Geospatial Data and Information through JIGN

02

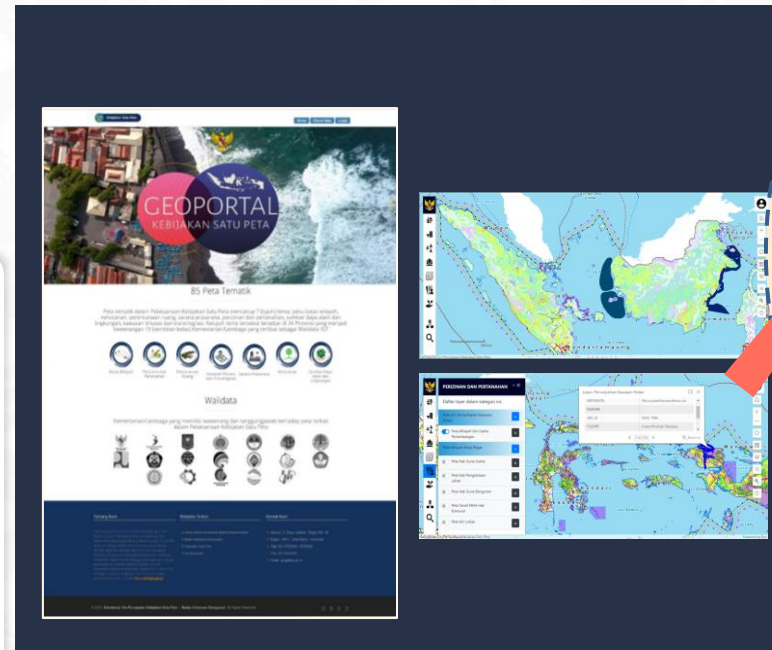
#### Regulation of the Coordinating Minister for the Economy No. 6 of 2018

About the Authority to Access Sharing of Geospatial Data and Information through JIGN

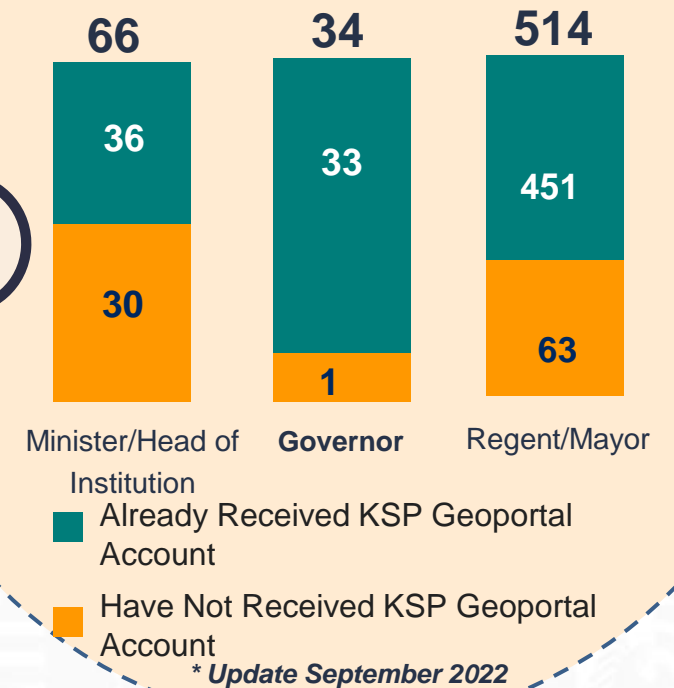
03

#### Regulation of the Coordinating Minister for the Economy No. 7 of 2018

About Geospatial Data and Information Sharing Governance through JIGN



### Geoportal Account Distribution Achievements



### Accessibility

- Thematic geospatial information resulting from the One Map Policy Integration since the launch of Geoportal in 2018 has been utilized to support the implementation of various spatial-based National Programs/Policies.
- Mandate arrangements are needed by Ministers/Heads of Institutions; Governors; and Regents/Mayors who have access to Work Units in their environment so that thematic geospatial information resulting from the One Map policy can be utilized more widely



# Geospatial Information Network Node

<https://simojang.big.go.id/dashboard>

7

GEOPORTAL ADDRESSES OF PROVINCES THROUGHOUT INDONESIA

**SIMOJANG** use to Monitor the Performance of Network Nodes displayed in this application

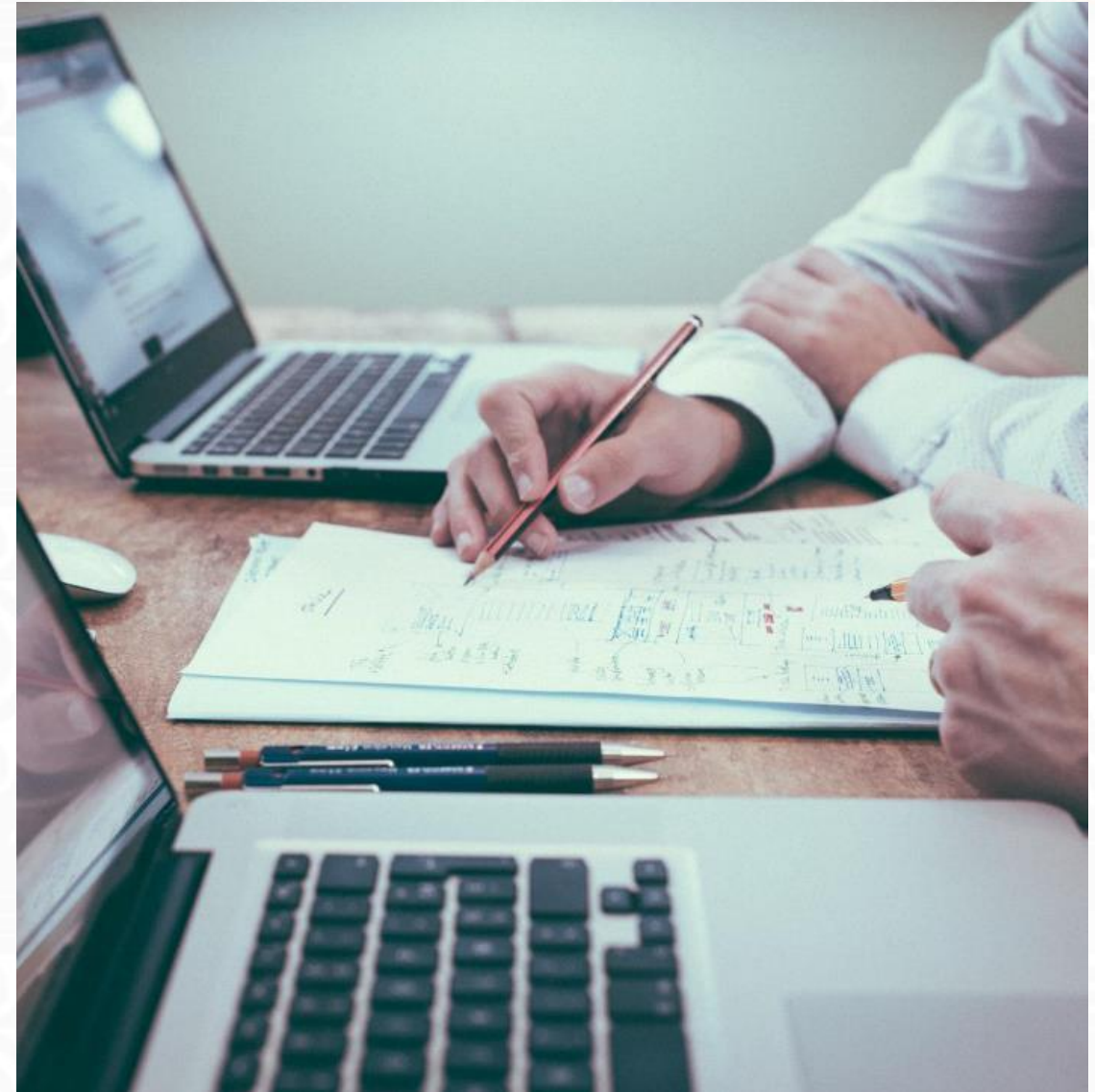
The screenshot shows the SIMOJANG dashboard interface. At the top, there is a navigation menu with options: Beranda, Bhumandala Awards, Berita Geospasial, Publikasi, and Petunjuk Teknis. A search bar and a 'Masuk' button are also present. The main area features a map of Indonesia with various colored dots representing network nodes. A legend on the right side of the map identifies the symbols: a blue circle for 'Provinsi', an orange circle for 'Kabupaten / Kota', a green circle for 'Kementerian / Lembaga', and a red circle for 'PPIIG'. Below the map, there are three summary cards: 'Kinerja Simpul Jaringan Nasional' (6 Ungguy, 43 Optimal, 15 Operasional, 26 Berkembang, 529 Tidak Ada Data), 'Koneksi Geoportal Nasional' (276 Terkoneksi, 41 Terputus, 302 Belum Terkoneksi), and 'Distribusi Metadata'. The bottom of the dashboard includes social media icons and the website URL [www.big.go.id](http://www.big.go.id).



# 8

## Training Services

- ❑ Surveyor Functional Training Mapping
- ❑ Geographic Information System
- ❑ Remote Sensing
- ❑ Survey and Mapping:
  - Boundary Arrangement
  - Spatial Map Preparation
- ❑ Technical Training:
  - Photogrammetry
  - Hydrography
  - Cartography
- ❑ Geospatial Information Competence:
  - WebGIS Creation and Management
  - GIS Operator Terrestrial Survey Operato



# Geospatial Training Facilities

Reference Room / Library



Four (4) Classroom with Capacity of 25 Student/Class equipped with Laptops/Computer for the students

there are 10 bedrooms for participants who will stay overnight



Gym





# BIG LIBRARY

Online Public Access Catalogue:  
<http://perpustakaan.big.go.id/opacbig>

# Technical training



## Photogrammetry

10 days 82 Study hours

3-DIMENSIONAL MAPPING AND DATA PROCESSING, USING DEM/DTS/DSM



## Hydrography Surveying

10 days 82 Study hours

BATHYMETRIC SURVEY AND MAPPING, MARINE AND WATER BOUNDARIES



## Cartography

10 days 82 Study hours

EXPERTISE IN CREATING INFORMATIVE DIGITAL AND PRINTED MAP DESIGNS THAT COMPLY WITH CARTOGRAPHIC PRINCIPLES

# Competency Training



## Creating and Managing Web GIS

SELECTED COMPETENCY UNIT FOR

SUB FIELD OF GIS LEVEL 6

“GIS ANALYSIS”

“GIS PROGRAMER / DEVELOPER”

SUB FIELD OF CARTOGRAPHY LEVEL 6/7

“CARTOGRAPHY ANALYSIS”

## GIS Operator

KKNI COMPETENCY SUB FIELD OF GIS LEVEL 4  
“GIS OPERATOR”

## Terrestrial Survey Operator

KKNI COMPETENCY SUB FIELD OF TERRESTRIAL  
SURVEY LEVEL 2/3/4  
“JUNIOR / MIDDLE / MAIN TERRESTRIAL  
SURVEY OPERATOR”



## COOPERATION AND COLLABORATION

The Geospatial Information Agency has long collaborated in various sectors. We believe that together we can organize a better Indonesia.



**AFFIRMATIVE TERRITORY BOUNDARIES**



**MAPPING OF SPECIFIC IMPORTANT THEMES, SUCH AS RICE FIELD, OIL PALM, MANGROVE, BIODIVERSITY**



**CONTINENTAL SHELF SURVEY**



**INDONESIA TSUNAMI EARLY WARNING SYSTEM, LAND-SUBSIDENCE**



**PARANGTRITIS GEOMARITIME SCIENCE PARK**



**THEMATIC GEOSPATIAL INFORMATION ANALYSIS SERVICES**



**SUPPORT DISABILITY - BRAILLE ATLAS**







UN-GGCE International Workshop  
**JOINING LAND AND SEA**  
The Integration of Terrestrial, Maritime, Built, and Cadastral Domains

**THANK YOU**



[www.big.go.id](http://www.big.go.id)



Badan Informasi Geospasial



@infogeospasial