

LAW OF THE REPUBLIC OF INDONESIA  
NUMBER 4 OF 2011  
ON  
GEOSPATIAL INFORMATION

BY THE BLESSINGS OF ALMIGHTY GOD

PRESIDENT OF THE REPUBLIC OF INDONESIA,

- Considering :
- a. that the Republic of Indonesia is an archipelagic state, characterized by all the wealth of natural resources and other resources as a gift from Almighty God that must be well managed with full sense of responsibility to be a source of prosperity for all people of Indonesia both in the present and future;
  - b. that in managing natural resources and other resources, and in managing natural disasters within the Unitary State of the Republic of Indonesia and its jurisdiction, geospatial information is needed;
  - c. that in order geospatial information can be established orderly, integrated, effectively and efficiently, so that the accuracy, update, and legal certainty can be guaranteed, regulation on geospatial information is deemed necessary;
  - d. that based on the considerations as referred to in point a, point b, and point c, it is necessary to establish Law on Geospatial Information;

Observing : Article 5 section (1), Article 20, Article 25A, Article 28F, and Article 33 section (3) and section (4) of the 1945 Constitution of the Republic of Indonesia.

With the Joint Approval of  
THE HOUSE OF REPRESENTATIVES  
and  
THE PRESIDENT OF THE REPUBLIC OF INDONESIA

HAS DECIDED:

To enact : LAW ON GEOSPATIAL INFORMATION.

CHAPTER I  
GENERAL PROVISIONS

Article 1

In this Law:

1. Spatial means the spatial aspect of an object or event that includes location, place, and position.
2. Geospatial means the spatial aspect showing the location, place, and position of an object or event under, on, or above the earth's surface expressed in a particular coordinate system.
3. Geospatial Data, hereinafter abbreviated as GD, means data on geographical location, dimension or size, and/or characteristics of natural objects and/or manmade objects under, on, or above the earth's surface.
4. Geospatial Information, hereinafter abbreviated as GI, means GD that has been processed so that it can be used as a tool in the process of policy formulation, decision-making, and/or implementation of activities related with the spatial aspect of the earth.
5. Base Geospatial Information (*Informasi Geospasial Dasar*), hereinafter abbreviated as IGD, means GI that contains information on object that can be seen or measured directly from the physical appearance on earth, and that does not change in a relatively long time.
6. Thematic Geospatial Information (*Informasi Geospasial Tematik*), hereinafter abbreviated as IGT, means GI that describes one or more specific themes, and uses IGD as its reference and is produced with reference to IGD.

7. Scale means the ratio between distance in a GI and the actual distance on earth's surface.
8. Geodetic Control Point means the position on earth characterized by a particular physical mark which is used as a frame of reference for the position of GI.
9. National Horizontal Control Network (*Jaring Kontrol Horizontal Nasional*), hereinafter abbreviated as JKHN, means the distribution of horizontal geodetic control points connected to each other in one frame of reference.
10. National Vertical Control Network (*Jaring Kontrol Vertikal Nasional*), hereinafter is abbreviated as JKVN, means the distribution of vertical geodetic control points connected to each other in one frame of reference.
11. National Gravity Control Network (*Jaring Kontrol Gayaberat Nasional*) hereinafter is abbreviated JKGN, means the distribution of gravity geodetic control points connected to one another in one frame of reference.
12. Indonesian Topographic Map means a base map providing information specifically for the land area.
13. Indonesian Coastal Map means a base map providing information specifically for the coastal area.
14. National Marine Map means a base map providing information specifically for the marine area.
15. Government means the President of the Republic of Indonesia, who holds government power of the Republic Indonesia under the 1945 Constitution of the Republic of Indonesia.
16. Local Government means the governor, regent or mayor, and the local government institutions as the administrator of the local government.
17. Agency means a non-ministerial government institution of which duty, function and authority on a certain matter, in this case on establishing IGD.
18. Government Institutions means ministries and non-ministerial government institutions
19. Any Person means an individual, group of person, or business entity.

20. Business Entity means a state-owned enterprise, regional-owned enterprise, or business entity with legal status.

## CHAPTER II PRINCIPLES AND OBJECTIVES

### Article 2

GI is established based on the principles of:

- a. legal certainty;
- b. integration;
- c. openness;
- d. update;
- e. accuracy;
- f. expediency; and
- g. democracy.

### Article 3

This Law aims to:

- a. guarantee availability and access to GI that can be accounted for;
- b. realize the effective and efficient establishment of GI through cooperation, coordination, integration, and synchronization; and
- c. encourage the use of GI in the government activities and in various aspects of public life.

## CHAPTER III TYPES OF GEOSPATIAL INFORMATION

### Part One

#### General

### Article 4

Types of GI are:

- a. IGD; and
- b. IGT

Part Two  
Base Geospatial Information

Article 5

The IGD as referred to in Article 4 point a covers:

- a. geodetic control network; and
- b. base maps

Article 6

Geodetic control network as referred to in Article 5 point a covers:

- a. JKHN;
- b. JKVN; and
- c. JKGN.

Article 7

Base maps as referred to in Article 5 point b are in the form of:

- a. Indonesian Topographic Map;
- b. Indonesian Coastal Map; and
- c. National Marine Map.

Article 8

- (1) JKHN as referred to in Article 6 point a is used as the frame of reference for the horizontal position of the GI.
- (2) Coordinates of JKHN are determined by certain geodetic measurement methods, expressed in a specific coordinate reference system, and manifested in the form of a physical mark.
- (3) JKHN is classified based on the level of accuracy of the horizontal coordinates.

Article 9

- (1) JKVN as referred to in Article 6 point b is used as the reference frame for the vertical position of the GI.
- (2) Heights of JKVN are determined by certain geodetic measurement method, expressed in a specific vertical datum, specific height system, and manifested in the form of a physical mark.
- (3) JKVN is classified based on the level of vertical accuracy.

#### Article 10

- (1) JKGN as referred to in Article 6 point c is used as the frame of reference for gravity value in GI.
- (2) JKGN are determined by certain geodetic measurement method, referring to an absolute gravity reference point, and manifested in the form of a physical mark.
- (3) JKGN is classified based on the level of gravity value accuracy.

#### Article 11

Every Person is obligated to safeguard the physical mark of the geodetic control network as referred to in Article 8 section (2), Article 9 section (2), and Article 10 section (2).

#### Article 12

The base maps as referred to in Article 5 point b consist of:

- a. coastal lines;
- b. hypsography;
- c. waters;
- d. toponyms;
- e. boundary lines;
- f. transportation and utilities;
- g. buildings and public facilities; and
- h. land cover.

#### Article 13

- (1) The coastal lines as referred to in Article 12 point a are lines where land meets sea as influenced by sea tide.
- (2) The coastal lines as referred to in section (1) consist of:
  - a. lowest tidal coastal line;
  - b. highest tidal coastal line; and
  - c. mean sea level coastal line.
- (3) On the Indonesian Topographic Map, coastal lines are determined by mean sea level.
- (4) On the Indonesian Coastal Map and the National Marine Environment Map, coastal lines are determined by lowest tidal coastal lines.
- (5) The coastal lines as referred to in section (2) are determined by referring to JKVN.

#### Article 14

- (1) The hypsography as referred to in Article 12 point b is an imaginary line describing all points that have the same heights on land or the same depth at seabed.
- (2) On the Indonesian Topographic Map, hypsography is depicted in the form of earth's surface contour lines and height points on land.
- (3) On the Indonesian Coastal Map and the National Marine Map, hypsography is depicted in the form of earth's surface contour lines, height points on land, bathymetry and depth points in sea.

#### Article 15

The toponyms as referred to in Article 12 point d are collected by using toponyms collection methods in accordance with the provisions of legislation.

#### Article 16

- (1) The boundary lines as referred to in Article 12 point e are depicted based on definitive boundary determination document by the authorized Government Institution.
- (2) In the event that the boundary has not been definitively determined by the authorized Government Institution as referred to in section (1), indicative boundary is used and depicted differently with special symbol and/or color.

#### Article 17

- (1) IGD is established gradually and systematically for the whole territory of the Unitary State of the Republic of Indonesia and its jurisdiction.
- (2) IGD as referred to in section (1) is updated periodically within a certain time period.
- (3) In the event of natural disaster, war, formation of new administrative area, or change in administrative areas, or any other event that causes change in any element of IGD as referred to in Article 5 so that the pattern and structure of public life are influenced, updating of IGD

must be performed without waiting for periodic updating as referred to in section (2).

- (4) Further provisions regarding norms, standards, procedures and criteria of updating of IGD are regulated by Regulation of the Agency Head.
- (5) Further provisions regarding updating time period for IGD are regulated in Government Regulation.

#### Article 18

- (1) The Indonesian Topographic Map as referred to in Article 7 point a is established at the scale of 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, and 1:1.000.
- (2) The Indonesian Coastal Map as referred to in Article 7 point b is established at the scale of 1:250.000, 1:50.000, 1:25.000, and 1:10.000.
- (3) The National Marine Map as referred to in Article 7 point c is established at the scale of 1:500.000, 1:250.000, and 1:50.000.

### Part Three

#### Thematic Geospatial Information

#### Article 19

The IGT as referred to in Article 4 point b is required to refer to IGD.

#### Article 20

In production of IGT, it is prohibited from:

- a. changing the position and level of geometric accuracy of parts of IGD; and/or
- b. producing IGT that has a larger scale than IGD to which it is referred.

#### Article 21

- (1) IGT that depicts a boundary that is legally binding is produced based on boundary determination document issued by authorized Government Institution.



- (2) Boundary determination by authorized Government Institution and/or Local Government includes accurate and reliable IGT documents.
- (3) In the event that a boundary has not been definitively determined by authorized Government Institution, indicative boundary is used with a different graphic presentation using special symbol and/or color.

#### CHAPTER IV

#### ADMINISTRATORS OF GEOSPATIAL INFORMATION

##### Article 22

- (1) GI of the type of IGD as referred to in Article 4 point a is only administered by Government.
- (2) Administering IGD as referred to in section (1) is carried out by Agency namely Geospatial Information Agency as replacement of National Coordinating Agency for Survey and Mapping according to the mandate of this Law.
- (3) The Agency as referred to in section (2) is positioned under and responsible to the President.
- (4) Further provisions regarding the task, function, organizational structure, and work procedures of Agency are regulated by Presidential Regulation.

##### Article 23

- (1) GI of the type IGT as referred to in Article 4 point b may be established by Government Institutions, Local Governments, and/or every person.
- (2) Government Institutions and Local Governments administer IGT based on task, function and authority in accordance with the provisions of legislation.
- (3) Government Institutions and Local Governments as referred to in section (2) in administering IGT may cooperate with the Agency.
- (4) Every person may administer IGT only for their own interest and other than those administered by Government Institutions or Local Governments.

Article 24

- (1) The Agency may integrate:
  - a. more than one IGT that is administered by Government Institutions or Local Governments to create one new IGT; and
  - b. IGT that is administered by more than one Government Institution or Local Government to create one new IGT.
- (2) The Agency may administer IGT that has not been administered by Government Institutions other than the Agency or that has not been administered by Local Governments.

CHAPTER V

ADMINISTRATIONS OF GEOSPATIAL INFORMATION

Part One

General

Article 25

Administration of GI is carried out through the following activities of:

- a. acquiring GD;
- b. processing GD and GI;
- c. storing and securing GD and GI;
- d. disseminating GD and GI; and
- e. utilizing GI.

Part Two

Acquisition of Geospatial data

Article 26

- (1) Acquiring GD as referred to in Article 25 point a is a process or a way to acquire GD by using methods and instruments of acquiring GD.
- (2) The GD as referred to in section (1) consists of:
  - a. Base GD; and
  - b. Thematic GD.

Article 27

- (1) Acquiring GD is performed by:
  - a. survey with measurement and/or recording instrumentation, carried out on land, on water platform, aerial platform, and/or, space platform;
  - b. census; and/or
  - c. other ways in accordance with the development of science and technology.
- (2) Acquiring GD as referred to in section (1) must be performed with standards that include:
  - a. geospatial reference system; and
  - b. data types, definitions, criteria, and format.
- (3) Further provisions regarding the ways and standards of acquiring GD as referred to in section (1) and section (2) are regulated by Regulation of Agency Head.

Article 28

- (1) Acquiring GD requires permit if:
  - a. it is performed in a restricted area;
  - b. it has the potential for danger; or
  - c. it employs any foreign platform other than satellite.
- (2) Permit as referred to in section (1) is to guarantee safety and security of persons executing data acquisition and of the public.
- (3) Further provisions regarding the ways to obtain permit as referred to in section (1) are regulated by Government Regulation.

Article 29

- (1) Government Institution or Local Governments in acquiring GD in a certain area, must inform the owner, ruler, or beneficiary of that area.
- (2) The owner, ruler, or beneficiary of that area as referred to in section (1) may refuse or recommend some other time for acquiring data only if there exists in those areas something that may raise danger to the person acquiring data.

- (3) Refusal and/or recommendation as referred to in section (2) must be submitted within 7 (seven) days after the person acquiring data informs the owner, ruler, or beneficiary of those areas.
- (4) Person acquiring data may proceed with data acquisition activity in those areas if the owner, ruler, or beneficiary of those areas has not given an answer within 7 (seven) days as referred to in section (3).

### Part Three

#### Processing of Geospatial Data and Information

##### Article 30

Processing of GD and GI as referred to in Article 25 point b is a process or a way of processing of geospatial data and information.

##### Article 31

- (1) Processing of GD and GI is carried out by using software that:
  - a. is licensed; and/or
  - b. is free and open.
- (2) The Government may give incentive to every person that builds, develops, and/or uses GD and GI processing software that is free and open.
- (3) Further provisions regarding the forms and ways to give incentive as referred to in section (2) are regulated by Government Regulation.

##### Article 32

- (1) GD and GI processing must be performed within the country.
- (2) In the event that human resources and/or instruments required for processing are not available domestically, processing may be performed overseas.
- (3) Overseas processing as referred to in section (2) is performed after getting permit from the Agency in accordance with the provisions of legislation.

Article 33

GD and GI processing includes GD processing and GI presentation.

Article 34

- (1) GD processing as referred to in Article 33 must be performed in accordance to standards that cover:
  - a. well-defined and fixed projection system and coordinate system that can be transformed into the national standard coordinate system; and
  - b. format, database, and metadata that can be easily integrated with other GI.
- (2) Standard as referred to in section (1) is determined by the Agency Head.

Article 35

GI presentation as referred to in Article 33 may be in the form of:

- a. information table with coordinate;
- b. printed map, in the form of sheet as well as atlas;
- c. interactive map, including that can be accessed through information and communication technology;
- d. multimedia map;
- e. globe; or
- f. three-dimensional models.

Article 36

The GI presentation in the forms as referred to in Article 35 point b to point g is required to use scale determined based on accuracy level of data source and purpose of GI.

Part Four

Storing and Security of Geospatial Data and Information

Article 37

Storing and security of GD and GI as referred to in Article 25 point c is a way of placing GD and GI in a secure and damage-

free and not easily missed place to guarantee the availability of GI.

Article 38

- (1) Storing and security as referred to in Article 37 are performed in accordance with the storing procedure standard and storing mechanism for archiving GD and GI.
- (2) Storing and security as referred to in section (1) is performed by using electronic or printed storage media.
- (3) Further provisions regarding storing procedure standard and storing mechanism for archiving GD and GI as referred to in section (1) are regulated by Regulation of the Agency Head.

Article 39

- (1) Government Institutions submit IGT copy that they have administered to Government Institution that is responsible for the national library affairs and for the national archive affairs, with the right to access their submitted IGT.
- (2) Local Governments submit IGT copy that they have administered to the institution that is responsible for the local library affairs and for the local archive affairs, with the right to access their submitted IGT.
- (3) Further provisions regarding the procedure for submitting IGT as referred to in section (1) and section (2) are regulated by Government Regulation.

Article 40

- (1) Security of GD and GI is also performed for the physical mark as referred to in Article 8 section (2), Article 9 section (2), and Article 10 section (2).
- (2) Security of GD and GI as referred to in section (1) is performed to guarantee that GI:
  - a. will be available continuously and in its entirety; and
  - b. will be guarded for its confidentiality for restricted GI.

Part Five

Dissemination of Geospatial Data and Information

Article 41

Dissemination of GD and GI as referred to in Article 25 point d means access granting, distributing and sharing of GD and GI that can be performed by using electronic media and printed media.

Article 42

IGD as referred to in Article 4 point a is classified as open.

Article 43

- (1) IGT produced by Government Institutions and/or Local Governments is classified as open.
- (2) Certain IGT produced by Government Institutions and/or Local Government may be classified as restricted in accordance with the provisions of legislation.

Article 44

- (1) Administrators of GI that are classified as open, disseminate GI as referred to in Article 41 in effective and efficient ways.
- (2) Administrators of GI as referred to in section (1) produce and announce minimum service standard for dissemination of administered GI .
- (3) The Government may give appreciation award for every person that contributes in dissemination of open GI.

Article 45

- (1) Government builds GI network for electronic dissemination of GI.
- (2) GI network as referred to in section (1) is built gradually and integrated at national GI network and local GI network.
- (3) The national GI network as referred to in section (2) is implemented by the Agency.

- (4) The local GI network as referred to in section (2) is implemented by Local Governments and integrated in the national GI network by the Agency.
- (5) Provisions regarding GI network are implemented in accordance with the provisions of legislation.

#### Article 46

In the event that GI has legal consequences, it is required to be legally signed by the competent authorities before it is announced and disseminated.

### Part Six

#### Utilization of Geospatial Information

#### Article 47

- (1) Utilization of GI as referred to in Article 25 point e is an activity to obtain benefit, either directly or indirectly.
- (2) Further provisions regarding procedures for obtaining benefits as referred to in section (1) is determined by the administrator of GI.

#### Article 48

To obtain and use GI administered by Government Institutions and Local Governments, certain costs may be incurred in accordance with the provisions of legislation.

#### Article 49

- (1) Users of GI are entitled to know the quality of GI that they obtained.
- (2) Administrators of GI are obligated to publish the quality of each GI that they administer, in the form of metadata and/or data history.
- (3) Users of GI are entitled to reject non-qualified GI results.
- (4) Metadata and/or data history as referred to in section (2) are made in a specific format determined by the Agency Head.



Article 50

Government Institution, Local Government, and every person who create derivative products of a certain GI for commercial purposes, is obligated to obtain permit from the owner of the GI.

Article 51

Government Institutions and Local Governments must use accurate GI in decision making process and/or in determination of policies that involve geospatial aspects.

Article 52

For the purpose of disaster management, every person must give its IGT when it is requested by Government Institutions or Local Governments authorized in disaster management.

Part Seven

Geospatial Information Infrastructure

Article 53

- (1) The Government is obligated to facilitate the development of GI infrastructure to enable establishment of GI.
- (2) GI infrastructure as referred to in section (1) consists of policies, institutional aspects, technologies, standards, and human resources.
- (3) Further provisions regarding the policies, institutional aspects, technologies, standards, and human resources as referred to in section (2) are regulated by Government Regulation.

CHAPTER VI

EXECUTOR OF GEOSPATIAL INFORMATION

Article 54

Establishment of GI by Government Institutions or Local Governments may be carried out by any person.

Article 55

- (1) An individual who carries out establishment of GI as referred to in Article 54 is obligated to fulfill the qualifications of competency issued by competent authorities in accordance with the provisions of legislation.
- (2) A group of individuals who carries out establishment of GI is obligated to fulfill the qualifications of competency issued by competent authorities in accordance with the provisions of legislation.

Article 56

- (1) A business entity that carries out establishment of GI is obligated to fulfill:
  - a. administrative requirements; and
  - b. technical requirements.
- (2) The administrative requirements as referred to in section (1) at least cover:
  - a. Indonesian certificate of incorporation; and
  - b. business license, in accordance with the provisions of legislation.
- (3) The technical requirements as referred to in section (1) cover:
  - a. having a certificate declaring that the business entity fulfills the classification and qualification as a provider of services in the field of GI; and
  - b. having certified professionals in the field of GI.
- (4) Certification process as referred to in section (3) point a is conducted by independent institutions that have obtained accreditation from the Agency.
- (5) Certificate of professionals as referred to in section (3) point b is issued by competent authorities under Regulation of the Agency Head.
- (6) Further provisions regarding procedures of the certification process as referred to in section (4) are regulated by Regulation of the Agency Head.

CHAPTER VII  
CAPACITY BUILDING ACTIVITIES

Article 57

- (1) The Agency conducts capacity building activities to improve the understanding, direction, planning, and evaluation of IGT establishment.
- (2) Capacity building activities to IGT establishment as referred to in section (1) are directed towards:
  - a. establishers of IGT; and
  - b. users of GI.
- (3) Capacity building activities to the establishers of IGT as referred to in section (2) point a are conducted through:
  - a. regulation in the form of issuing legislation, guidelines, standards, and technical specifications as well as its dissemination;
  - b. provision of guidance, supervision, education, and training;
  - c. planning, research, development, monitoring, and evaluation; and/or
  - d. establishing functional position nationally for human resources in Government Institutions and Local Governments.
- (4) Capacity building activities to the users of GI as referred to in section (2) point b are conducted through:
  - a. dissemination of the availability of GI and its possible utilization; and/or
  - b. education and technical training of the use of GI.
- (5) Further provisions regarding capacity building activities as referred to in section (1) to section (4) are regulated by Government Regulation.

CHAPTER VIII  
PROHIBITIONS

Article 58

Any person without rights and against the law is prohibited from removing, damaging, taking away, moving, or changing

the physical mark that is part of JKHN, JKVN, JKGN, and survey instruments that are being used.

Article 59

- (1) Any person is prohibited from modifying IGD without permission of the Agency and disseminating the results.
- (2) Any person is prohibited from disseminating IGD that has been modified without permission as referred to in section (1).

Article 60

- (1) Any person is prohibited from modifying IGT without permission of the establisher of the IGT and disseminating the results.
- (2) Any person is prohibited from disseminating IGT that has been modified without permission as referred to in section (1).

Article 61

Any person is prohibited from creating GI presentation that does not correspond with the level of accuracy of the data sources causing the loss of people and/or goods.

Article 62

Any person is prohibited from disseminating GI that has not been legally signed by the competent authorities as referred to in Article 46.

CHAPTER IX

ADMINISTRATIVE SANCTIONS

Article 63

- (1) Any person violating the provisions of Article 20, Article 36, Article 46, Article 49 section (2), Article 50, or Article 55 may be subject to administrative sanctions.
- (2) The administrative sanctions as referred to in section (1) are in the form of:

- a. written warning;
  - b. temporary suspension of part or all of its activities;
  - c. administrative fines; and/or
  - d. revocation of license.
- (3) Further provisions regarding procedures of the implementation of administrative sanctions as referred to in section (2) are regulated by Government Regulation.

## CHAPTER X CRIMINAL PROVISIONS

### Article 64

- (1) Any person committing any acts as referred to in Article 58 are sentenced with imprisonment for a maximum of 2 (two) years or fined for a maximum of Rp500,000,000.00 (five hundred million rupiah).
- (2) If the acts as referred to in section (1) result in harm to or loss of person or property, the perpetrator is sentenced with imprisonment for a maximum of 5 (five) years or fined for a maximum of Rp1,250,000,000.00 (one billion two hundred and fifty million rupiah).

### Article 65

- (1) Any person committing any acts as referred to in Article 59 section (1) is sentenced with imprisonment for a maximum of 1 (one) year or fined for a maximum of Rp250,000,000.00 (two hundred and fifty million rupiah).
- (2) Any person committing any acts as referred to in Article 59 section (2) is sentenced with imprisonment for a maximum of 1 (one) year or fined for a maximum of Rp250,000,000.00 (two hundred and fifty million rupiah).
- (3) If the acts as referred to in section (1) result in harm to or loss of person or property, the perpetrator is sentenced with imprisonment of a maximum of 3 (three) years or fined for a maximum of Rp750,000,000.00 (seven hundred and fifty million rupiah).

Article 66

- (1) Any person committing any acts as referred to in Article 60 section (1) is sentenced with imprisonment for a maximum of 6 (six) months or fined for a maximum of Rp125,000,000.00 (one hundred and twenty-five million rupiah).
- (2) Any person committing any acts as referred to in Article 60 section (2) is sentenced with imprisonment for a maximum of 6 (six) months or fined for a maximum of Rp125,000,000.00 (one hundred and twenty-five million rupiah).
- (3) If the acts as referred to in section (1) result in harm to or loss of person or property, the perpetrator is sentenced with imprisonment for a maximum of 3 (three) years or fined for a maximum of Rp750,000,000.00 (seven hundred and fifty million rupiah).

Article 67

Any person committing any acts as referred to in Article 61 is sentenced with imprisonment for a maximum of 3 (three) years or fined for a maximum of Rp750,000,000.00 (seven hundred and fifty million rupiah).

Article 68

- (1) Any person committing any acts as referred to in Article 62 is sentenced with imprisonment for a maximum of 2 (two) years or fined for a maximum of Rp500,000,000.00 (five hundred million rupiah).
- (2) If the acts as referred to in section (1) result in harm to or loss of person or property, the perpetrator is sentenced with imprisonment for a maximum of 3 (three) years or fined for a maximum of Rp750,000,000.00 (seven hundred and fifty million rupiah).

CHAPTER XI  
TRANSITIONAL PROVISION

Article 69

- (1) At the time this Law comes into force, the establishers of GI may still conduct their activities with the provision that within a period of 3 (three) years, they are required to adjust their activities under this Law.
- (2) Before the Agency intended in this Law is formed, the establishment of IGD is conducted by the National Coordinating Agency for Surveys and Mapping.

CHAPTER XII  
CLOSING PROVISIONS

Article 70

- (1) Government Regulation and other implementing regulations of this Law are issued not later than 2 (two) years since this Law takes effect.
- (2) At the time this Law comes into force, all legislation that regulates and/or is related to the establishment of GI, are remain in effect insofar not contradictory to this Law.

Article 71

This Law comes into force on the date of its promulgation.

In order that every person may know hereof, it is ordered to promulgate this Law by its placement in State Gazette of the Republic of Indonesia.

Enacted in Jakarta  
on 21 April 2011

PRESIDENT OF THE REPUBLIC OF INDONESIA,

signed

DR. H. SUSILO BAMBANG YUDHOYONO

Promulgated in Jakarta  
on 21 April 2011

MINISTER OF LAW AND HUMAN RIGHTS  
OF THE REPUBLIC OF INDONESIA

signed

PATRIALIS AKBAR

STATE GAZETTE OF THE REPUBLIC OF INDONESIA OF 2011 NUMBER 49

Jakarta, 1 November 2019

Has been translated as an Official Translation  
on behalf of Minister of Law and Human Rights  
of the Republic of Indonesia

DIRECTOR GENERAL OF LEGISLATION,



WIDODO EKATJAHJANA



ELUCIDATION OF  
LAW OF THE REPUBLIC OF INDONESIA  
NUMBER 4 OF 2011  
ON  
GEOSPATIAL INFORMATION

I. GENERAL

Article 28F of the 1945 Constitution of the Republic of Indonesia mandates that every person has the right to communicate and obtain information to develop personal and social environment, and the right to seek, obtain, possess, store, process and convey information by using all available channels. Information in a broad sense, as mandated in this article includes Geospatial Information.

Geospatial Information (GI) is a tool in policy formulation, decision making, and/or implementation of activities related to the geospatial aspects. GI is very useful in a decision support system in order to optimize the development in the field of economy, social, cultural and national resilience, particularly in natural resource management, spatial planning, planning of investment and business locations, determination of boundary lines, land management and tourism. Geospatial information is also necessary for activities in disaster management, environmental conservation, defense and security.

Realizing the importance of GI in the national development of various sectors, GI must be guaranteed for its update and accuracy and be established in an integrated way. This is to avoid any mistakes, errors, and overlap of information that could result in legal uncertainty, budget inefficiency and ineffectiveness in information utilization. GI generally is classified as open and must be easily accessible to users so that it can be utilized optimally. Openness of GI is one of the indicators of good quality public service offered by the government in providing GI for the public interest.

To bring integration and legal certainty in the establishment of GI, it is necessary to define categorization of GI. In general, GI is divided into Base Geospatial Information (*Informasi Geospasial Dasar*, IGD) and Thematic Geospatial Information (*Informasi Geospasial Tematik*, IGT). IGD includes reference for position and base maps, as IGT covers a wide range of themes, such as forestry, agriculture, fisheries, and mining. IGD is the reference for creating various IGT. Therefore, an important characteristic of IGD is that its features do not change for a relatively long time period in accordance to the characteristics of these features.

In addition to categorization of GI, institutional issues in establishment of GI need also to be regulated. This regulation is intended to ensure certainty on who is responsible for certain data and information. Further, regulation is needed on human resources and business entities in the field of GI, so that the GI industry can grow and develop properly. Advances in GI industry will ensure the availability, accessibility, and utilization of GI in the public and in the national development process.

## II. ARTICLE BY ARTICLE

### Article 1

Sufficiently clear.

### Article 2

#### Point a

The term "legal certainty" means that the establishment of GI is based on legislation that provide certainty of rights and duties for the stakeholders.

#### Point b

The term "integration" means that the establishment of GI is conducted together by the Government, Local Governments and any persons, complementing and strengthening each other in fulfilling the needs of GI, avoiding duplication, and encouraging the shared utilization of GI.

#### Point c

The term "openness" means that the establishment of GI is intended to be utilized by many parties by providing easy access to the public to obtain GI.

Point d

The term "update" means that presented and/or available GI must be able to describe phenomena and/or their changes according to the latest circumstances.

Point e

The term "accuracy" means that in the establishment of GI, best effort must be made to generate GD and GI that is accurate, precise, correct, and of high quality in accordance with what is required.

Point f

The term "expediency" means that GI must be able to provide maximum benefits to the public.

Point g

The term "democracy" means that the establishment of GI is widely implemented by involving the public.

Article 3

Sufficiently clear.

Article 4

Sufficiently clear.

Article 5

Sufficiently clear.

Article 6

Sufficiently clear.

Article 7

Sufficiently clear.

Article 8

Section (1)

The term "frame of reference for the horizontal position" means that JKHN is used as the reference for geometric horizontal position.

#### Section (2)

The term "certain geodetic measurement methods" means ways of measurement to obtain the horizontal position with the required accuracy, utilizing horizontal geodetic positioning technology, both in stationary (static) or moving (kinematic/dynamic) mode, sporadically or continuously, either passively or actively.

The term "specific coordinate reference system" means a system to describe the coordinates of horizontal geodetic control points.

The term "physical mark" means a natural or artificial object that is permanent and stable, and it is used as a horizontal geodetic control point.

#### Section (3)

The term "level of accuracy of the horizontal coordinates " means a measure of the proximity of the horizontal coordinate measurements to the actual value.

### Article 9

#### Section (1)

The term "frame of reference for the vertical position" means that JKNV is used as the reference for height or vertical position.

#### Section (2)

The term "certain geodetic measurement method" means ways of measurement to obtain the vertical position with the required accuracy, utilizing vertical geodetic positioning technology.

The term "specific vertical datum" means the reference plane defined to describe the height or vertical position.

The term "specific height system" means the system chosen to transform the height data from gravity potential units into metric units.

The term "physical mark" means a natural or artificial object that is permanent and stable, and it is used as a vertical geodetic control point.

#### Section (3)

The term " level of vertical accuracy" means a measure of the proximity of height-value measurement to the real height value.

## Article 10

### Section (1)

The term "frame of reference for gravity value " means that JKGN is used as the reference for determination of the gravity value.

### Section (2)

The term "certain geodetic measurement method" means ways of measurement to obtain the gravity value with the required precision, utilizing gravity measurement technology.

The term "absolute gravity reference point" means the gravity value that has been determined by independent gravity measurements.

The term "physical mark" means a natural or artificial object that is permanent and stable, and it is used as a gravity geodetic control point.

### Section (3)

The term " level of gravity value accuracy" means a measure of the proximity of the gravity measurements to the actual value of gravity.

## Article 11

The term "physical mark of the geodetic control network" means a unity of the mark of the geodetic control point and the permanent and stable object where it is positioned, that is used for JKHN, JKVN, and JKGN.

## Article 12

### Point a

Sufficiently clear.

### Point b

The term "hypsography" means generally elevation data, which can be described in various ways, such as height spots, height matrix (digital elevation model), imaginary lines connecting the points with the same height (contour lines), or colors reflecting certain heights.

### Point c

The term "waters" means a line where land meets water body surface (water mass) in a particular area, such as sea, rivers, lakes, and swamps.

Point d

The term "toponyms" means the name given to topographic features, either natural or man-made features.

Point e

The term "boundary lines" means an imaginary line that describes the boundaries among villages, sub-districts, regencies/municipalities, provinces, and countries.

Point f

The term "transportation and utilities" means a point or a line that describes the physical infrastructure for the movement of people and/or goods from one place to another.

Point g

The term "buildings and public facilities" means a point or a line that describes man-made objects and various public facilities in the form of building.

Point h

The term "land cover" means a line that describes the boundaries of a certain cover above the earth's surface consisting of the natural landscape and/or artificial landscape.

Article 13

Section (1)

The term "sea tide" means the rise and fall of sea level position due to the influence of gravity of the moon and the sun.

Section (2)

Point a

The term "lowest tidal" means a time when the sea water is at the lowest position in a particular period, determined based on the provisions of the International Hydrographic Organization (IHO).

Point b

The term "highest tidal" means a time when the sea level is at the highest position in a particular period, determined based on the provisions of the International Hydrographic Organization (IHO).

Point c

The term "mean sea level" means the sea level as the result of averaging tidal measurements over a certain time period,

determined based on the provisions of the International Hydrographic Organization (IHO).

Section (3)

Sufficiently clear.

Section (4)

Sufficiently clear.

Section (5)

The term "coastal line determined by referring to JKVN" means that the coastal line and JKVN are integrated, as tidal observation is needed in building JKVN and JKVN is needed in determining the coastal line.

Article 14

Section (1)

Sufficiently clear.

Section (2)

The term "contour line" means an imaginary line connecting points having the same height.

Section (3)

The term "bathymetry" means an imaginary line connecting points having the same depth.

Article 15

Sufficiently clear.

Article 16

Section (1)

Sufficiently clear.

Section (2)

The term "symbol" means a depiction of the boundaries by using special signs according to the rules of cartography.

Article 17

Section (1)

The term "gradually" means that the IGD is established in stages, region by region, scale by scale, or over a certain time period based on the priority.

The term "systematically" means that the IGD is established regularly in accordance with the system and technical aspect of mapping.

The term "jurisdiction" means the area outside the territory of the Unitary State of the Republic of Indonesia that includes the Exclusive Economic Zone, Continental Shelf, and the Contiguous Zone in which the country has sovereignty right and other authority as regulated under legislation and international laws.

Section (2)

The term "certain time period" means the period to update IGD that is determined based on the condition, technology, needs, priorities, and available budget.

The term "periodically" means a period of time, e.g. every 3 (three) years, 5 (five) years, or 10 (ten) years.

Section (3)

Sufficiently clear.

Section (4)

Sufficiently clear.

Section (5)

Sufficiently clear.

Article 18

Sufficiently clear.

Article 19

The term "refer" means that IGD is used as the geometric reference for creating IGT.

Article 20

Point a

The term "level of geometric accuracy" means a measure of the proximity related to the position, shape, length, area, and/or height.

Point b

Sufficiently clear.



Article 21

Section (1)

The term "boundary" means the boundary line of right on land and management area boundary, as it is known in Law on Spatial Planning, Law on Disaster Management or other similar law on region.

Section (2)

The term "IGT document" means a document that contains GI as a supporting document in determining boundary.

Section (3)

Sufficiently clear.

Article 22

Sufficiently clear.

Article 23

Section (1)

Sufficiently clear.

Section (2)

Sufficiently clear.

Section (3)

Sufficiently clear.

Section (4)

The term "for their own interest" means for private purposes and not for distribution.

Article 24

Sufficiently clear.

Article 25

Sufficiently clear.

Article 26

Section (1)

Sufficiently clear.

Section (2)

Point a

The term "Base GD" means GD that contains objects that can be seen directly or measured from the physical appearance on the earth's surface and that do not change in a relatively long time.

Point b

The term "Thematic GD" means GD that describes one or more specific themes.

Article 27

Section (1)

Point a

The term "measurement and/or recording instrumentation carried out on land" means the equipment operated on the earth's surface or under the earth's surface, such as a meter, theodolite, total station, Global Positioning System (GPS), laser scanner, gravimeter, and other equipment used to collect data.

The term "measurement and/or recording instrumentation on water platform" means the equipment installed on the water platform, such as echo-sounder, secchi-disc, and water-checker.

The term "measurement and/or recording instrumentation on aerial platform" means the equipment installed on the flying vehicle such as camera, radar sensor and lidar sensor.

The term "measurement and/or recording instrumentation on space platform" means the equipment mounted on the satellite such as optical sensor, radar sensor, and lidar sensor.

Point b

The term "census" means data collection without using any equipment, but by performing counting or calculation in a certain location, such as counting the number of houses, conducting interviews, or distributing questionnaires.

Point c

Sufficiently clear.

Section (2)

Point a

The term "geospatial reference system" means a geodetic datum, coordinate reference system, and projection system.

Point b

Sufficiently clear.

Section (3)

Sufficiently clear.

## Article 28

Section (1)

Point a

The term "restricted area" means an area which is declared as restricted by the relevant authority for a certain time period.

Point b

Sufficiently clear.

Point c

Sufficiently clear.

Section (2)

Sufficiently clear.

Section (3)

Sufficiently clear.

## Article 29

Section (1)

The term "area" means an area owned by the Government, Local Government, or any person.

The term "ruler" means Government Institution, Local Government, or any person who has full control over the area.

Section (2)

The term "danger" means a condition of danger jointly agreeable by the owner, authorities, or beneficiary of the area, and the person acquiring data.

Section (3)

Sufficiently clear.

Section (4)

Sufficiently clear.

Article 30

Sufficiently clear.

Article 31

Section (1)

Point a

Sufficiently clear.

Point b

The term "free and open" means that the software is free of charge or no payment is required for obtaining it, and the user can apply modification to the software.

Section (2)

Sufficiently clear

Section (3)

Sufficiently clear.

Article 32

Sufficiently clear.

Article 33

Sufficiently clear.

Article 34

Section (1)

Point a

The term "projection system" means a mathematic depiction system of the irregular earth on a plane.

The term "national standard coordinate system" means a system that becomes the national standard for uniquely determining the position of an object on the earth's surface.

Point b

The term "format" means a way of storing data digitally, e.g. in the format of SHP, DXF, and JPEG.

The term "database" means a structured data storage system on digital media.

The term "metadata" means the data that describes the history and characteristics of the GD and GI.

Section (2)

Sufficiently clear.

Article 35

Point a

The term "information table with coordinate" means a collection of one or more coordinates with the information attached to these coordinates.

Point b

The term "printed map" means geospatial information presented on a sheet of paper with a certain size and scale based on the cartographic rules.

Point c

The term "digital map" means a map in particular digital format that can be accessed by using a particular hardware and software.

Point d

The term "interactive map" means a digital map that provides the facility for interaction between users and the map.

Point e

The term "multimedia map" means a digital map that is equipped with impaired media (audio visual) facilities.

Point f

The term "globe" means a presentation of geospatial information on a spherical object.

Point g

The term "three-dimensional model" means a presentation of geospatial information that shows relief or elevation of the earth's surface.

Article 36

The term "accuracy level of data source" means the level of detail of the data source that can still be read clearly and the measure of proximity of the data value to the true value.

Article 37

The term "storing" means a way to store GI, so that it can be easily stored, searched, retrieved, and used.

The term "security" means a way to store GI, so that it is not easily damaged, not easily lost, and not easily retrieved illegally.

Article 38

Section (1)

Sufficiently clear.

Section (2)

The term "electronic storage media" means a media that can only be used with electronic devices, either off the media, e.g. tapes, floppy disks, and DVDs, or in a computer network.

The term "printed storage media" means media that can be used directly by human's visual, for example on paper or transparent media.

Section (3)

Sufficiently clear.

Article 39

Sufficiently clear.

Article 40

Sufficiently clear.

Article 41

Sufficiently clear.

Article 42

The term "open" means that IGD is accessible and can be obtained by any person.

Article 43

Section (1)

Sufficiently clear.

Section (2)

The term "restricted" means certain IGT is exempted based on legislation regulating disclosure of public information.

Article 44

Sufficiently clear.

Article 45

Section (1)

The term "GI network" means a system for managing GI in a cooperative, orderly, measurable, integrated, and sustainable as well as efficient manner.

The term "electronic dissemination of GI" means that GI is distributed digitally over the internet or in form of data in electronic storage media such as tapes, floppy disks, and DVDs.

Section (2)

Sufficiently clear.

Section (3)

Sufficiently clear.

Section (4)

Sufficiently clear.

Section (5)

Sufficiently clear.

Article 46

The term "has legal consequences" means valid and binding.

The term "competent authorities" means the authorized officers related with GI in accordance with their duties and authorities, such as IGT consisting of production forest areas are legally approved by the Minister of Forestry or his/her representative.

Article 47

Sufficiently clear.

Article 48

Sufficiently clear.

Article 49

Section (1)

The term "quality" means the level of accuracy, detail, update and completeness of the information.

Section (2)

The term "data history" means information about the process of collecting and processing data.

Section (3)

The term "non-qualified GI" means GI that is not correct, not detail, not up-to-date and/or incomplete so that it does not meet the requirement of a specific user.

Section (4)

Sufficiently clear.

Article 50

Sufficiently clear.

Article 51

Sufficiently clear.

Article 52

Sufficiently clear.

Article 53

Sufficiently clear.

Article 54

Sufficiently clear.

Article 55

Section (1)

The term "qualifications of competency" means the necessary skills or abilities as a performer of GI.



Section (2)

Sufficiently clear.

Article 56

Section (1)

Sufficiently clear.

Section (2)

Sufficiently clear.

Section (3)

Sufficiently clear.

Section (4)

The term "certification conducted by independent institutions" means that there is an institution acting independently in assessing the party to be certified.

The term "accreditation from the Agency" means the recognition from the Agency for the ability and independence of the certification institution.

Section (5)

Sufficiently clear.

Section (6)

Sufficiently clear.

Article 57

Sufficiently clear.

Article 58

Sufficiently clear.

Article 59

Sufficiently clear.

Article 60

Sufficiently clear.

Article 61

Sufficiently clear.

Article 62

Sufficiently clear.

Article 63

Sufficiently clear.

Article 64

Sufficiently clear.

Article 65

Sufficiently clear.

Article 66

Sufficiently clear.

Article 67

Sufficiently clear.

Article 68

Sufficiently clear.

Article 69

Sufficiently clear.

Article 70

Sufficiently clear.

Article 71

Sufficiently clear.