

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.