

Republic of the Philippines
HOUSE OF REPRESENTATIVES
Quezon City, Metro Manila

SIXTEETH CONGRESS
Second Regular Session

House Bill No. **5168**



Introduced by Magdalo Party-List Representatives
Hon. Francisco Ashley L. Acedillo and Hon. Gary C. Alejano

EXPLANATORY NOTE

The National Mapping and Resource Information Authority (NAMRIA) was created in 1987 by virtue of Executive Order No. 192. NAMRIA is the government's central mapping agency, depository and distribution facility for natural resources data of the country. The agency is responsible for the establishment of a nationwide geodetic network of control points that serves as common reference system for all surveys in the country. The research being conducted by the agency is instrumental for development planning, environment and natural resource management, and delineation of maritime territories.

The importance of the realization of the mandates of NAMRIA has been more evident during the amendment of the Philippine Archipelagic Baselines in 2009. NAMRIA undertook the Global Positioning System (GPS) surveys of the proposed basepoints. The agency submitted several baseline configurations for Congress to consider. The new baselines law, Republic Act No. 9522, was eventually passed in March 2009. The RA 9522 is consistent with the UNCLOS and serves as the country's maritime jurisdiction and a means to establish maritime boundaries with neighboring Coastal States.

More recently, NAMRIA spearheaded the Philippine Extended Continental Shelf in the Benham Rise Region in cooperation with other several government agencies and personalities. The extension claim in the Benham Rise Region was approved on 12 April 2012 by the Commission on the Limits of the Continental Shelf (CLCS) of the United Nations. The CLCS approval has effectively added to the Philippine maritime jurisdiction 135,506 square kilometers of seabed area for the exclusive management, exploitation, and benefit of the Filipino nation.

In order for the NAMRIA to realize their mandate as the central surveying and mapping agency of the Republic of the Philippines, and provide the government and the private sector with reliable geospatial information, this proposed measure pushes for the modernization of the NAMRIA for them to effectively contribute to the planning and implementation of development programs of the country.

In view of the foregoing, immediate approval of this measure is earnestly sought.


HON. FRANCISCO ASHLEY L. ACEDILLO


HON. GARY C. ALEJANO

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AN ACT
PROVIDING FOR THE MODERNIZATION OF THE NATIONAL MAPPING AND
RESOURCE INFORMATION AUTHORITY (NAMRIA), AMENDING CERTAIN
PORTIONS OF EXECUTIVE ORDER NO. 192, SECTION 22(a) AND FOR OTHER
PURPOSES

Be it enacted by the Senate and House of Representatives of the Philippines in Congress assembled:

1 **SECTION 1. Short Title.** – This Act shall be known as “NAMRIA Modernization Act.”

2 **SEC. 2. Declaration of Policy.** – It is hereby declared the policy of the State to ensure the
3 prosperity of the nation and free the people from poverty by adopting policies and programs that
4 *will ensure national security, and provide adequate social services, stimulate and improve the*
5 *efficiency of economic activities, empower the people to raise their standard of living, and*
6 *increase their resiliency against climate change, and natural and man-made disasters.*

7 The State recognizes the importance of accurate geospatial information in the planning
8 and implementation of economic development programs. The State shall therefore promote and
9 pursue technology-based infrastructure and facilities for data acquisition, production, integration,
10 sharing and widest dissemination of geospatial information. This shall be achieved through the
11 modernization of the National Mapping and Resource Information Authority (NAMRIA) to
12 enable the agency to effectively and fully perform its mandate to act as the central surveying and
13 mapping agency of the Republic of the Philippines, and provide the government and the private
14 sector with reliable geospatial information.

15 **SEC. 3. Definition of Terms.** –For purposes of this Act, the following terms are thus
16 defined:

17 a) *Aerial Photograph* - refers to a photograph of the earth’s surface taken from an
18 aircraft in flight.

- 1 b) *Base map* - refers to a map or chart showing certain fundamental information, used as
2 a base upon which additional data of specialized nature are compiled or overlaid.
3
- 4 c) *Elevation* - refers to the vertical distance of a feature of the earth's surface from a
5 reference level such as sea level.
6
- 7 d) *Environment and Natural Resource (ENR) Datasets* - refers to datasets on specific
8 characteristics of land and water areas such as land cover and land use, as well as
9 their legal and regulatory status such as protected areas, national parks, mineral
10 reservations, etc.
11
- 12 e) *Geospatial*- refers to the geographic location and characteristics of natural or
13 constructed features and boundaries on, above, or below the earth's surface; esp.
14 referring to data that is geographic and spatial in nature.
15
- 16 f) *Geospatial Information* - is information describing the location and names of natural
17 and cultural features beneath, on or above, or below the earth's surface. It includes the
18 basic information found on a topographic map, but also includes different location-
19 related datasets combined into complex layers that show information such as land use
20 and population density.
21
- 22 g) *Geodetic network* - refers to a network or system of points selected in a definite
23 manner, marked on the ground and accurately surveyed, serving as control
24 points for topographical surveying and geodetic measurements on the ground.
25
- 26 h) *Geodetic survey* - refers to the type of surveying which considers the size and shape
27 of the earth. This type of survey covers a large area and intends primarily to establish
28 a reference system from which all other surveys are referred to.
29
- 30 i) *Geodetic reference system* - refers to a coordinate system and a set of reference
31 points, used to locate points or objects on the Earth.
32
- 33 j) *Geographic information system (GIS)* - refers to a computer-based technology for
34 capturing, storing, editing, manipulating, analyzing and displaying geographic
35 information. The system provides rapid access and exchange of information. Data
36 inputs include maps, remotely sensed data and statistics.

- 1 k) *Geodetic coordinates* - refers to the three-dimensional coordinates on the earth's
2 surface as expressed in latitude, longitude and height above mean sea level measured
3 on the spherical earth.
4
- 5 l) *Geophysical* - refers to the structural and physical properties of the earth.
6
- 7 m) *Hydrographic survey* - refers to a survey having for its principal purpose the
8 determination of data relating to bodies of water to include: depth of water; nature
9 and configuration of bottom; tidal phenomena; and location of fixed objects for
10 survey and navigational purposes.
11
- 12 n) *Land classification* - refers to a system of determining and segregating which part of
13 the unclassified lands of the public domain are to be declared as forestland and those
14 as alienable or disposable lands.
- 15 o) *Mapping* - refers to the representation on a plane surface, at a given scale, of the
16 physical features (natural or artificial) of a part or the whole of Earth's surface, by
17 means of signs and symbols.
18
- 19 p) *Nautical charting* - refers to the process of compiling, constructing and reproducing a
20 special purpose map (called a chart) for marine navigation or other particular
21 purposes.
22
- 23 q) *Nautical chart* - refers to a special purpose map portraying water bodies in relation to
24 land indicating depths of water, dangers and aid to navigation and other information
25 necessary for safe marine navigation and other practical purposes.
26
- 27 r) *Physical oceanographic survey* - refers to the measurement of tides (sea level), waves
28 and currents, salinity, temperature, density, turbidity, nutrient contents, etc. at various
29 positions, depths and time; an expedition for the purpose of gathering water sample
30 and measuring the above data.
31
- 32 s) *Satellite Imageries* - refers to imageries of the earth's surface taken from an artificial
33 satellite in orbit.

1 t) *Surveying* - refers to the orderly process of determining data relating to any
2 physical characteristics of the Earth such as the location or boundaries of land or
3 bodies of water.

4
5 u) *Topographic map*- refers to a graphic representation of the earth's surface showing
6 the relative size, position of features, and relief at a given scale.

7
8 v) *Topographic Survey*- refers to the surveys made to determine the configuration of the
9 Earth's surface and to locate natural and cultural features on it.

10
11 **SEC. 4. Objectives of the NAMRIA Modernization Program.** – The NAMRIA
12 modernization program shall be implemented in accordance with the following objectives:

13
14 (a) To enhance and modernize its present capabilities to undertake programs and
15 projects in furtherance of its mandate as the central surveying, mapping and resource
16 information agency of the government;

17
18 (b) To implement a modern data acquisition program and to upgrade its capabilities in
19 the conduct of geodetic, geophysical, topographic, hydrographic, oceanographic and
20 land classification and related surveys;

21
22 (c) To improve and accelerate the production and management of analog and digital
23 geospatial products and services;

24
25 (d) To establish a national geospatial data infrastructure that will ensure inter-operability
26 of geospatial data, and facilitate the integration, sharing, and dissemination of
27 geospatial data produced by different agencies and organizations; and

28
29 (e) To implement a continuing human resource development and management program
30 for its personnel, as well as to reorganize, revitalize and restructure its organizational
31 set-up, as needed, in order to meet the demands of its modernization program.

32
33 **SEC. 5. Components of the NAMRIA Modernization Program.** – The NAMRIA
34 modernization program shall consist of the following components:

35
36 (a) *National Topographic Base Mapping Program.* The program involves the continuing
37 acquisition of high-resolution imageries of the earth's surface (such as satellite

1 imageries and aerial photographs), high-resolution elevation data, as well as digital
2 map production systems to provide nationwide map coverage and periodic updating
3 thereof.

4 (b) *National Geodetic Network Development*. The program involves development and
5 maintenance of a globally consistent geodetic reference system that will serve as
6 reference for all surveying and mapping activities in the country.

7 (c) *Hydrographic, Oceanographic and Nautical Charting Program*. The program
8 involves the measurement of the physical features of the oceans and seas for the
9 production of nautical charts for safety of navigation within Philippine waters and
10 sustainable use of the country's coastal and marine resources.

11
12 (d) *Environment and Natural Resources Mapping Program*. The program involves the
13 production of up-to-date environment and natural resources datasets and maps for use
14 of government agencies, local government units, business and the general public.

15
16 (e) *Philippine Geospatial Data Infrastructure*. The program involves the establishment
17 and management of an online access facility to enable integration and sharing of
18 geospatial data generated by government agencies, the academe and other
19 organizations using a common set of standard topographic base maps.

20
21 (f) *Human Resource Development* - The program includes upgrading the skills of
22 NAMRIA's personnel, both civilian, commissioned and enlisted services; develop,
23 implement and institutionalize a program designed to optimize personnel capabilities
24 through sustained trainings.

25
26 (g) *Research, Development and Extension*. The program involves the assessment of
27 existing and development of new systems and procedures to enhance the delivery of
28 NAMRIA products and services, and support the development of the geospatial
29 information industry in the country.

30
31 **SEC. 6.** All government agencies, Local Government Units, State Universities and
32 Colleges, Government Owned and Controlled Corporations, and other Government
33 Instrumentalities are mandated to coordinate their geospatial information activities with
34 NAMRIA to avoid duplication of efforts and optimize the use of geospatial resources.

1 **SEC. 7. *Appropriations.*** - The amount necessary for the implementation of this Act shall
2 be included in the annual General Appropriations Act

3
4 **SEC. 8. *Use of Income.*** - The NAMRIA is hereby authorized to utilize any income
5 derived from its products and services in furtherance of the objectives of this Act.

6
7 **SEC. 9. *Reporting Requirements.*** - Within the first quarter of the succeeding year, the
8 Administrator of the National Mapping and Resource Information Authority through the
9 Secretary of the Department of Environment and Natural Resources shall submit to the House
10 Committee on Appropriation, the Senate Committee on Finance, and the Committees on Science
11 and Technology of both Houses of Congress, a detailed report on the utilization of prior year's
12 expended balances/savings in appropriations to implement the NAMRIA's modernization
13 program.

14
15 **SEC. 10. *Transitory Provision.*** - All existing laws, rules and regulations governing the
16 NAMRIA shall continue to be in effect until repealed, revised, or amended.

17
18 **SEC. 11. *Repealing Clause.*** - All laws, executive orders, rules and regulations
19 inconsistent with or contrary to this Act are hereby deemed repealed or amended.

20
21 **SEC. 12. *Separability Clause.*** - If any provision of this Act shall be unconstitutional or
22 invalid, the other provisions not otherwise affected shall remain in full force and effect.

23
24 **SEC. 13. *Effectivity Clause.*** - This Act shall take effect after fifteen (15) days from its
25 publication in at least two (2) newspapers of national circulation.

Approved,