


THIRTEENTH CONGRESS OF THE  
REPUBLIC OF THE PHILIPPINES  
*First Regular Session*

}

SENATE  
OFFICE OF THE SECRETARY

'04 JUN 30 P10:04

SENATE

RECEIVED BY: 

S. No. 816

---

INTRODUCED BY HON. MANUEL B. VILLAR, JR.

---

**EXPLANATORY NOTE**

The modernization of the National Mapping and Resource Information Authority (NAMRIA) is long overdue. The agency needs fresh funding support and a rationalization charter that can give it the mandate to undertake its critical mapping functions, which is indispensable in a truly effective land use policy of the country.

Approval of this measure is recommended.

  
MANUEL B. VILLAR, JR.

THIRTEENTH CONGRESS OF THE  
REPUBLIC OF THE PHILIPPINES  
*First Regular Session*

}

'04 JUN 30 P10:04

RECEIVED BY:         

SENATE

S. No. 816

---

INTRODUCED BY HON. MANUEL B. VILLAR JR.

---

**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 the House of Representatives of the Philippines in Congress assembled:*

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

SEC. 2. *Declaration of Policy.* – It is hereby declared the policy of the State to ensure the prosperity of a nation and free the people from poverty by adopting policies and programs that will provide adequate social services, promote full employment, a rising standard of living and improved quality of life for all. Policies and development programs, however, must be based on reliable and accurate geographic information. Toward this end, the State shall promote and pursue the modernization of the National Mapping and Resource Information Authority (NAMRIA) to a level where it can effectively and fully perform its mandate to act as the official surveying and mapping agency of the Republic of the Philippines, and provide the government and the private sector with reliable geographic information.

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

(a) “Cartography” refers to the art and science of expressing graphically in maps and charts or other media the known physical features of the earth and other spatial information.

(b) "Geodetic survey" refers to the type of surveying which considers the size and shape of the earth. This type of survey covers a large area and intends primarily to establish a reference system from which all other surveys are referred to.

(c) "Geographic information system (GIS)" refers to a computer-based technology used for capturing, storing, editing, manipulating, analyzing and displaying geographic information. The system provides rapid access and exchange of information. Data inputs include maps, remotely sensed data and statistics.

(d) "Geographic information" refers to the physical features and other spatial information on the earth's surface which are geographically referenced.

(e) "Geomatics" refers to the science and technology of spatial information management including the acquisition, storage, analysis and processing, display and dissemination of geographically referenced information.

(f) "Global positioning system (GPS)" refers to an all-weather, high precision positioning system which determines the three-dimensional coordinates on the earth's surface from satellites to receivers positioned on the earth.

(g) "Geodetic coordinates" refers to the three-dimensional coordinates on the earth's surface as expressed in latitude, longitude and height above mean sea level measured on the spherical earth.

(h) "Geophysical" refers to the structural and physical properties of the earth.

(i) "Ground receiving station" refers to an integrated facility which includes receiving antenna and processing systems used to downlink remote sensing data from earth orbiting satellites for recording and archiving of remotely sensed data.

(j) *"Hydrographic survey" refers to a survey having for its principal purpose the determination of data relating to bodies of water to include: depth of water; nature and configuration of bottom; tidal phenomena; and location of fixed objects for survey and navigational purposes.*

(k) "Nautical charting" refers to the process of compiling, constructing and reproducing a special purpose map (called a chart) for marine navigation or other particular purposes.

(l) "Nautical chart" refers to a special purpose map portraying water bodies in relation to land indicating depths of water, dangers and aids to navigation and other information necessary for safe marine navigation and other practical purposes.

(m) "Physical oceanographic survey" refers to the measurement of tides (sea level), waves and currents, salinity, temperature, density, turbidity, nutrient contents, etc. at various positions and depths, an expedition for the purpose of gathering water samples and measuring the above data.

(n) "Photogrammetry" refers to the science and art of reliable measurement utilizing aerial photography for the purposes of capturing data; and the interpretation of the physical features of the earth and other spatial information.

(o) "Philippine reference system 1992 (PRS 92)" refers to the new national geodetic network that was established in 1992 which will serve as primary reference for all surveys and mapping in the country.

(p) "Remote sensing" refers to the science and technology of obtaining information on the physical features of the earth through sensing devices which are airborne or mounted on satellites evaluating the collected data; and presenting the results in map form and/or statistics.

(q) "Satellite data" refers to remotely sensed data collected by sensors mounted on satellite platforms.

(r) "Thematic map" refers to a map showing qualitative and/or quantitative information on specific features or concepts in relation to the topographic details.

(s) "Topographic map" refers to a graphic representation of the earth's surface showing the relative size, position of features, and relief at a given scale.

(t) "Land classification" refers to a system of determining and segregating which part of the unclassified lands of the public domain are to be declared as forestland and those as alienable or disposable lands.

(u) "Land reclassification" refers to a system of determining and segregating declared forestlands to determine which part is to be permanent forestlands and for other purposes based on a set of criteria.

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

(a) To enhance and modernize its present capabilities to undertake programs and projects in furtherance of its mandate of acting as the central surveying and mapping agency of the government;

(b) To implement an equipment-priority acquisition program consonant with technological advances and calculated to bolster its physical capabilities to hasten the conduct and implementation of needed nationwide geodetic, geophysical, topographic, hydrographic, oceanographic and land classification surveys essential in its surveying and mapping mandate;

(c) To establish a one-stop-shop of geographically referenced ocean and land database and related information; and

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

SEC. 5. *General Mandate and Responsibility.* – Executive Order No. 192, Section 22(a) is hereby amended to strengthen the mandate of the NAMRIA. The NAMRIA shall have the following general mandate and responsibilities:

(a) *Official Surveying and Mapping Agency.* – To act as the government's official surveying and mapping agency and to provide these services to government instrumentalities and the private sector, as it pertains to geophysical, cartographic, hydrographic, oceanographic, natural resources database surveys and land classification;

(b) *Official Natural Resource Database Depository.* – To be the depository and distribution agency for ocean, inland waters, land and natural resource database; and

(c) *Ocean and Land Research and Development.* – To undertake continuing ocean and land research including natural resources database development activities.

SEC. 6. *Specific Powers and Functions.* – In order to implement the general mandate and accomplish the responsibilities of the NAMRIA in the preceding section, it shall have the following specific powers and functions:

(a) To authorize the conduct of a nationwide geodetic, geophysical, topographic, hydrographic, oceanographic, natural resources database surveys and land classification inclusive of land use, inland and offshore water;

*(b) To establish and implement technical standards and specifications on land and water surveys, map and chart production;*

(c) To gather, collate, assess and interpret survey results and transpose these into maps and data needed for economic, political and environmental planning purposes;

(d) To keep an updated and accurate land and natural resource inventory with the view of sharing and disseminating these to government agencies and instrumentalities, local government units and to the general public;

(e) To conduct continuing land and water research and studies;

(f) To provide a continuing education and training program for the NAMRIA personnel and the public in the fields of mapping, surveying, remote sensing and GIS;

(g) To enter into contracts with domestic or foreign companies regarding the acquisition of surveying and mapping technological equipment needed by the NAMRIA at such terms and conditions most beneficial and as may be allowed by existing laws;

(h) To receive by devise, bequest, gift, grant or donation, services, moneys, or properties, whether real or personal, from domestic or foreign sources, intended to promote the objectives of the NAMRIA and to convey and use such gifts, grants or donations;

(i) To sell, dispose or liquidate the NAMRIA's products and assets for the purpose of generating funds for its modernization and implementation of its mandate;

(j) To create subsidiary corporations to enhance its capabilities in implementing its mandates;

(k) To enter into, make, perform and carry out contracts of every class and description regarding the conduct of mapping and surveys, including loan agreements, mortgages and other types of security arrangements necessary or incidental to the realization of its purposes with any person, firm or corporation, private or public, and with any government or entity;

(l) To promulgate such rules and regulations as may be necessary to carry out its objectives recognizing the functions and the duplication or overlapping of functions of other existing regulatory agencies and to lessen government expenditures;

(m) To exercise such other incidental powers and authority which are necessary or will further enhance the accomplishment of the NAMRIA's goals and objectives; and

(n) To provide support in the implementation of the Strategic Environmental Plan of Palawan pursuant to Republic Act No. 7611 and such other political units as may be similarly situated.

*SEC. 7. Board of Governors.* – The NAMRIA shall be governed by a policy-making board of eleven (11) members, consisting of key officials of the following agencies, with no less than the rank of undersecretary:

(a) The Department of Environment and Natural Resources (DENR), as chairman;

(b) The Department of Agriculture (DA), as member;

(c) The Department of Public Works and Highways (DPWH), as member;

(d) The Department of National Defense (DND), as member;

(e) The Department of Transportation and Communications (DOTC), as member;

(f) The Department of Agrarian Reforms (DAR), as member;

(g) The Department of Interior and Local Government (DILG), as member;

(h) The Department of Finance (DOF), as member;

(i) The Department of Science and Technology (DOST), as member;

(j) The National Economic and Development Authority (NEDA), as member; and

(k) The National Mapping and Resource Information Authority (NAMRIA), as member and secretary of the Board.

*SEC. 8. Powers and Functions of the Board of Governors.* – The Board of Governors shall be vested with the following powers and functions:

(1) To promulgate and prescribe policies, rules, regulations, standards, penalties, fines and other security measures related to the performance of the powers and functions of the Authority;

(2) To approve the organizational structure and staffing pattern of the Authority;

(3) To recommend to the President, the appointment of the deputy administrators: *Provided*, That the officers and personnel of other ranks shall be appointed by the Administrator in accordance with the staffing pattern approved by the Board: *Provided, further*, That the Board may empower the Administrator to engage on a contractual basis or other arrangements for the temporary services and fix compensation of highly qualified professionals, experienced technical advisers or consulting firms in accordance with existing laws; and

(4) To exercise such functions and powers necessary to the attainment of the objectives of the NAMRIA.

SEC. 9. *Office of the Administrator.* – The Administrator shall be appointed by the President of the Philippines. He must be a Filipino citizen, of good moral character, and with recognized managerial competence and experience in the administration of production and service-oriented organizations. The Administrator shall have the rank and privileges of an undersecretary. The Administrator shall be assisted by three (3) deputies with an equivalent rank of an assistant secretary who shall likewise be appointed by the President.

SEC. 10. *Functions and Responsibilities of the Administrator.* – The Administrator, being the Chief Operating Officer of the NAMRIA, has the following functions and responsibilities, to wit:

(a) Prepare and submit for consideration of the Board a comprehensive national geodetic, geophysical, hydrographic, oceanographic, mapping and land classification surveys and resource information programs;

(b) Carry out the functions of the Authority in accordance with the guidelines set by the Board;

(c) Prepare and submit periodic reports to the Board containing the programmed activities and financial operations of the Authority;

(d) Prepare and submit annual work programs, budget estimates and annual equipment procurement program for the approval of the Board;

(e) Submit for consideration of the Board, policies and measures necessary in the pursuance of the objectives of the Authority;



(f) Subject to the approval of the Board, determine the staffing pattern and number of personnel of the Authority; define their duties and responsibilities; classify and fix their salaries and remuneration in accordance with the revised compensation and position classification system; and

(g) Perform such other functions as may be directed from time to time by the Board.

SEC. 11. *Components of the NAMRIA Modernization Program.* – The NAMRIA modernization program shall consist of the following components:

(a) Restructuring and Organizational Development – The restructuring of the NAMRIA is necessary to efficiently and effectively carry out its general mandate and responsibilities.

(b) Technology and Strategic Systems Development – The NAMRIA modernization program entails the acquisition and installation of appropriate systems and technologies to improve its products and services.

(c) Human Resources Development – To effectively carry out the objectives of the modernization program and to attain the highest degree of efficiency, the NAMRIA is empowered to: upgrade the skills of its personnel, both civil, commissioned and enlisted services; develop, implement and institutionalize a program designed to optimize personnel capabilities through a sustained training, and develop strategies to uplift/upgrade the status of the NAMRIA personnel performing highly technical tasks/responsibilities to a level commensurate to that required of scientists level personnel as embodied in Republic Act No. 8439.

SEC. 12. *Development of the NAMRIA Capabilities.* – The NAMRIA modernization program shall be geared towards the development of the following capabilities:

(a) Mapping Capability – The NAMRIA, being the official mapping and surveying agency of the government, shall continuously develop its capabilities in providing topographic, hydrographic, oceanographic and land resource information in the form of digital maps and charts within a geographic information system environment. The enhancement of surveying and mapping capabilities shall enable the NAMRIA to:

(1) enhance its capabilities for surveying, mapping, charting and production of other geographic information;

(2) conduct periodic integrated resource and environmental survey for the generation of updated, standardized and reliable quality maps and charts and resource information; and

(3) offer map users with various land and water resource information.

(b) Information Technology Capability – The NAMRIA shall develop its technology structure by establishing a one-stop-shop of geographically-referenced ocean and land resource information. The enhanced information technology capabilities shall enable the NAMRIA to:

(1) eliminate data duplication and at the same time, provide avenues for data sharing with other government agencies and instrumentalities;

(2) in coordination with other concerned government agencies, provide a rapid response system to generate maps and charts for disaster management on land and at sea, floodrisk and volcanic flows management, soil erosion hazards, aquifer and water supply, and for high priority planning and development areas;

(3) keep up with the demand for complete and updated land, water and natural resources database and digital maps;

(4) provide better access to its products and services such as, but not limited to, global electronic networks; and

(5) speed-up its base mapping and revision and other technological programs.

(c) Hydrographic, Oceanographic, Geodetic Surveys and Nautical Charting Capabilities – The NAMRIA shall modernize survey practices and increase its capabilities for hydrographic, oceanographic, geodetic and geophysical surveys and nautical charting. The enhanced capabilities shall enable the NAMRIA to:

(1) produce up-to-date paper and electronic nautical charts of the Philippine waters to ensure safety of navigation and provide basic reference in planning and executing all marine activities;

(2) in coordination with relevant agencies, delineate the different maritime zones of the country;

(3) provide technical data needed in the judicious delimitation of international maritime boundaries;

(4) generate marine scientific information for use in addressing marine environmental concerns and assessment and efficient management of ocean resources;

(5) fully densify the national geodetic network to facilitate the integration of existing cadastral and other data into the Philippine Reference System of 1992 (PRS 92), and establish a viable network maintenance program; and

(6) assist national and local government units in coordination with the Land Management Bureau (LMB) and other government agencies on the resolution of administrative boundary conflicts.

(d) Land Classification and Evaluation Surveys Capability – The NAMRIA shall modernize land classification, assessment and evaluation survey practices to enhance its capability in providing land status information. This will enable the NAMRIA to:

(1) rationalize the present system of land classification in the country;

(2) hasten the classification of unclassified lands of the public domain and generate a national graphical and statistical database of classified, alienable/disposable and forestlands;

(3) hasten the demarcation of the permanent limits of forestlands and reassess/evaluate potential areas suitable for agriculture and other land uses; and

(4) enhance the process of issuance of land status information.

(e) Remote Sensing and Geomatics Research Capability – Given the mandate to undertake researches and develop new and innovative techniques in generating geographic information, the NAMRIA shall facilitate the creation of a Geomatics Research Center (GRC) and a National Remote Sensing Center (NRSC). The creation of a GRC and a NRSC shall enable the NAMRIA to:

(1) establish and operate a multi-satellite, multipurpose earth receiving station (ERS) for real time and near real-time data acquisition;

(2) engage in exploratory projects which can improve current methodologies in the information science;

(3) acquire expertise in servicing the geographic information requirements for all sectors in the country;

(4) provide consultancy services to local and international public and private entities in the fields of remote sensing hydrographic, oceanographic and topographic, geographic information system and information technology;

(5) participate in international programs and keep abreast with advances in technology;

(6) optimize the use of its resources by experimenting on the possible linkages between technologies; and

(7) establish standards and procedures in geographic information system (GIS) databases, remote sensing, mapping and surveying.

SEC. 13. *Appropriations.* – The amount necessary for the initial implementation of this Act shall be charged against the unexpended balance of the current year's appropriations of the National Mapping and Resource Information Authority (NAMRIA). Thereafter, such amount as may be necessary for the continued implementation of the NAMRIA's modernization program shall be included in the annual General Appropriations Act.

SEC. 14. *Use of Savings.* – The NAMRIA shall submit to Congress, within the first quarter of the succeeding year, a report on the amount of all unused or undisbursed funds remaining from the previous NAMRIA appropriations. The NAMRIA is hereby empowered to use all of its savings to implement its modernization program.

SEC. 15. *Procurement System and Tax Exemption.* – The NAMRIA is hereby given the authority to strengthen its systems and procedures for equipment acquisition, taking into account new requirements under the NAMRIA modernization program.

The NAMRIA's purchase of equipment for mapping and survey materials such as photogrammetric, cartographic, survey, data processing and remote sensing equipment and materials, supplies, and spare parts, whether made locally or imported, shall be exempt from customs duties and taxes: *Provided, however,* That importation of these items shall be subject to the following conditions:

(a) That the importation shall be certified by the Board of Governors chaired by the Department of Environment and Natural Resources (DENR);

(b) That the importation shall be actually, directly and exclusively used in connection with the NAMRIA modernization program; and

(c) That said equipment and materials, supplies, and spare parts are not available locally in sufficient quantity, of comparable quality and at reasonable prices.

SEC. 16. *Reporting Requirements.* – Within the first quarter of the succeeding year, the Administrator of the National Mapping and Resource Information Authority through the Secretary of the Department of Environment and Natural Resources shall submit to the House Committee on Appropriations, the Senate Committee on Finance, and the Committees on Science and Technology of both Houses of Congress, a detailed report on the utilization of prior year's expended balances/savings in appropriations to implement the NAMRIA's modernization program.

SEC. 17. *Transitory Provision.* – The personnel of the NAMRIA shall, in a hold-over capacity, continue to perform their respective duties and responsibilities and receive the corresponding salaries and benefits until the new classification of positions is approved by the Board of Governors.

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

SEC. 19. *Separability Clause.* – If any provision of this Act shall be unconstitutional or invalid, the other provisions not otherwise affected shall remain in full force and effect.

SEC. 20. *Effectivity Clause.* – This Act shall take effect after fifteen (15) days from its publication in at least two (2) newspapers of national circulation.

Approved,