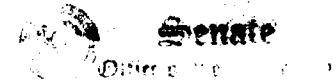


NINETEENTH CONGRESS OF THE )  
REPUBLIC OF THE PHILIPPINES )  
*Third Regular Session* )



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SENATE

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**COMMITTEE REPORT NO. 322**

Submitted by the Committees on Science and Technology; Ways and Means; and Finance, on SEP 16 2024

Re: **Senate Bill No. 2825**

Recommending its approval in substitution of Senate Bill Nos. 2038, 2152, 2156, 2164, 2316, and 2499

Sponsor: **Senator Alan Peter "Compañero" S. Cayetano**

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**MR. PRESIDENT:**

The Committees on Science and Technology; Ways and Means; and Finance, to which were referred **Senate Bill No. 2038**, introduced by Senator Juan Miguel Zubiri, Senator Joel Villanueva, and Senator Francis G. Escudero, *entitled*:

**AN ACT**

**PROVIDING FOR THE MODERNIZATION OF THE PHILIPPINE VOLCANOLOGY AND SEISMOLOGY (PHIVOLCS), PROVIDING FUNDS THEREFOR AND FOR OTHER PURPOSES**

**Senate Bill No. 2152** introduced by Senator Jinggoy E. Estrada, *entitled*:

**AN ACT**

**PROVIDING FOR THE MODERNIZATION OF THE PHILIPPINE VOLCANOLOGY AND SEISMOLOGY (PHIVOLCS), PROVIDING FUNDS THEREFOR AND FOR OTHER PURPOSES**

**Senate Bill No. 2156**, introduced by Senator Ramon Bong Revilla, Jr.,  
*entitled:*

**AN ACT**  
**PROVIDING FOR THE MODERNIZATION OF THE**  
**PHILIPPINE INSTITUTE OF VOLCANOLOGY AND**  
**SEISMOLOGY (PHIVOLCS), PROVIDING FUNDS**  
**THEREFOR AND FOR OTHER PURPOSES**

**Senate Bill No. 2164**, introduced by Senator Francis "Tol" N. Tolentino,  
*entitled:*

**AN ACT**  
**PROVIDING FOR THE MODERNIZATION OF THE**  
**PHILIPPINE INSTITUTE OF VOLCANOLOGY AND**  
**SEISMOLOGY (PHIVOLCS), PROVIDING FUNDS**  
**THEREFOR AND FOR OTHER PURPOSES**

**Senate Bill No. 2316**, introduced by Senator Mark A. Villar, *entitled:*

**AN ACT**  
**INSTITUTING A COMPREHENSIVE EARTHQUAKE**  
**MONITORING AND EARLY WARNING SYSTEM,**  
**APPROPRIATING FUNDS THEREFOR, AND FOR OTHER**  
**PURPOSES**

and **Senate Bill No. 2499**, introduced by Senator Joseph Victor G. Ejercito,  
*entitled:*

**AN ACT**  
**PROVIDING FOR THE MODERNIZATION OF THE**  
**PHILIPPINE INSTITUTE OF VOLCANOLOGY AND**

**SEISMOLOGY (PHIVOLCS), PROVIDING FUNDS  
THEREFOR AND FOR OTHER PURPOSES**

have considered the same and have the honor to report it back to the Senate with the recommendation that the attached **Senate Bill No. 2825**, entitled:

**AN ACT  
PROVIDING FOR THE MODERNIZATION OF THE  
PHILIPPINE INSTITUTE OF VOLCANOLOGY AND  
SEISMOLOGY (PHIVOLCS) AND PROVIDING FUNDS  
THEREFOR**

be approved in substitution of **Senate Bill Nos. 2038, 2152, 2156, 2164, 2316,** and **2499**, with **Senators Zubiri, Estrada, Revilla Jr., Tolentino, M. Villar, Ejercito, A. Cayetano, Villanueva, and Escudero**, as authors thereof.

Respectfully submitted,



**SEN. ALAN PETER "COMPAÑERO" S. CAYETANO**  
*Chairperson, Committee on Science and Technology*  
*Member, Committee on Finance*



**SEN. WIN GATCHALIAN**  
*Chairperson, Committee on Ways and Means*  
*Vice Chairperson, Committee on Finance*

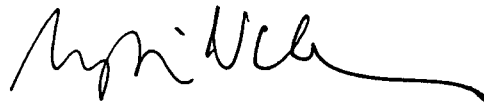


**SEN. GRACE POE**  
*Chairperson, Committee on Finance*  
*Member, Committee on Ways and Means*


*Vice-Chairpersons:*



**SEN. PIA S. CAYETANO**  
*Vice Chairperson, Committee on Science and Technology; and Finance*  
*Member, Committee on Ways and Means*



**SEN. CYNTHIA A. VILLAR**  
*Committee on Finance*



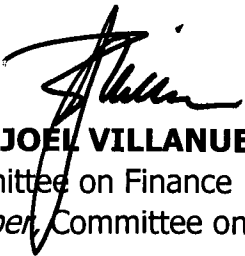
**SEN. RONALD "BATO" DELA ROSA**  
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*Member, Committee on Ways and Means*




**SEN. CHRISTOPHER LAWRENCE T. GO**  
*Committee on Finance*  
*Member, Committees on Science and Technology; and Ways and Means*

**SEN. LOREN LEGARDA**  
Committee on Finance  
*Member, Committee on Ways and Means*

**SEN. IMEE R. MARCOS**  
Committee on Finance  
*Member, Committee on Ways and Means*



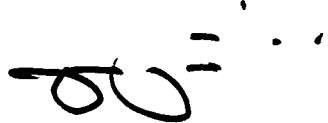
**SEN. JOEL VILLANUEVA**  
Committee on Finance  
*Member, Committee on Ways and Means*



**SEN. JUAN MIGUEL "MIGZ" F. ZUBIRI**  
Committee on Finance  
*Member, Committee on Ways and Means*



**SEN. MARK VILLAR**  
Committee on Finance  
*Deputy Majority Leader*




**SEN. JOSEPH VICTOR "JV" G. EJERCITO**  
Committee on Finance  
*Deputy Majority Leader*

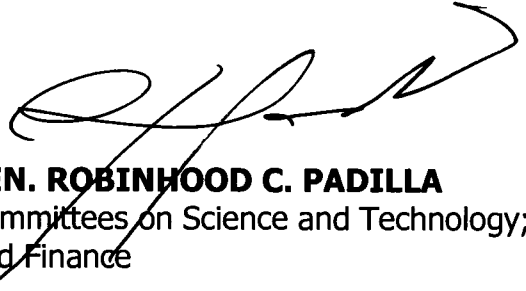
**SEN. RISA HONTIVEROS**  
Committee on Finance  
*Member, Committees on Science and Technology; Ways and Means*  
*Deputy Minority Leader*

*Members:*

**SEN. MARIA LOURDES NANCY S. BINAY**  
Committees on Finance; and Ways and Means



**SEN. MANUEL "LITO" M. LAPID**  
Committees on Finance; and Ways and Means



**SEN. ROBINHOOD C. PADILLA**  
Committees on Science and Technology; and Finance



**SEN. RAMON BONG REVILLA, JR.**  
Committee on Finance

**SEN. RAFFY T. TULFO**  
Committees on Finance; and Ways and Means

*Ex-Officio Members:*



**SEN. JINGGOY EJERCITO ESTRADA**  
Senate President Pro-Tempore



**SEN. FRANCIS "TOL" N. TOLENTINO**  
Majority Leader



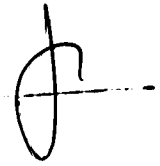
**SEN. AQUILINO "KOKO" PIMENTEL III**  
Minority Leader

**HON. FRANCIS "CHIZ" F. ESCUDERO**  
Senate President

NINETEENTH CONGRESS OF THE )  
REPUBLIC OF THE PHILIPPINES )  
Third Regular Session )

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SENATE  
S. No. 2825

(In substitution of S. Nos. 2038, 2152, 2156, 2164, 2316, and 2499)

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Prepared by the Committees on Science and Technology; Ways and Means; and Finance with Senators Zubiri, Estrada, Revilla Jr., Tolentino, M. Villar, Ejercito, A. Cayetano, Villanueva, and Escudero as authors thereof

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**AN ACT**

**PROVIDING FOR THE MODERNIZATION OF THE PHILIPPINE INSTITUTE OF VOLCANOLOGY AND SEISMOLOGY (PHIVOLCS) AND PROVIDING FUNDS THEREFOR**

*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 the "PHIVOLCS Modernization  
2 Act."

3     **Sec. 2. Declaration of Policy.** – It is the policy of the State to utilize scientific and  
4 technical knowledge and information as an effective instrument to ensure the safety,  
5 well-being and economic security of the people; to safeguard the environment; and to  
6 promote national progress and sustainable socioeconomic development through various  
7 applications of geosciences and allied sciences. The State adheres to existing treaties and  
8 international agreements related to geologic activities to which the Philippines is a  
9 signatory, to ensure international cooperation, peace and security. The State recognizes  
10 the need to strengthen the capability of government personnel tasked to monitor



1 volcanic and seismological activities, perform related services and provide adequate  
2 and timely information to the public. Towards this end, the State shall undertake the  
3 modernization of the Philippine Institute of Volcanology and Seismology (PHIVOLCS) to  
4 improve its technological operational capacity, strengthen its role as the principal  
5 authority mandated to mitigate hazards of volcanic eruptions, earthquakes, tsunami, and  
6 other related geotectonic phenomena through reliable and accurate detection, forecast,  
7 and warning systems and to attain its vision as a center of excellence for geotectonic  
8 information services.

9 **Sec. 3. Objectives.** – The PHIVOLCS Modernization Program shall have the following  
10 objectives:

- 11 a) To upgrade physical resources and operational standards through the acquisition  
12 and development of state-of-the-art instruments, equipment, facilities and systems  
13 to enhance capabilities in providing critical, timely, accurate and reliable  
14 volcanological and seismological data and localized warning and information  
15 services for decision-support in disaster preparedness, climate change adaptation,  
16 the security and management of water resources, agriculture, transportation,  
17 health, tourism and other sectors;
- 18 b) To advance research and development capabilities by adopting a systematic  
19 approach and integrating all developed methodologies focused on the improvement  
20 of vital operations and specialized functions and services;
- 21 c) To expand volcanological and seismological monitoring stations on strategic sites  
22 in the country to broaden the base for the delivery of services in the countryside;
- 23 d) To strengthen a state-of-the-art data center consistent with international  
24 standards, in order to centralize the provision of volcanic, earthquake, tsunami and  
25 other related information to the public and stakeholders involved in Disaster Risk  
26 Reduction and Management (DRRM);
- 27 e) To facilitate the appreciation and enhance delivery of information, products and  
28 services, including education and advocacy on geoscience and geotectonic  
29 phenomena, their dangers and impacts, and the risks and vulnerabilities of  
30 communities and the different sectors of society to decision makers, national and

1 local DRRM planning, media, and the general public towards sustainable  
2 socioeconomic development;

3 f) To strengthen linkages and cooperation at the national level among the various  
4 providers and users of geological, seismological and other services; and

5 g) To provide a more competitive base pay and benefits for the PHIVOLCS personnel  
6 to promote professionalism and commitment to the service.

7 **Sec. 4. Definition of Terms.** – As used in this Act:

8 1) *Disaster Risk* – the potential loss of life, injury, or destroyed or damaged assets  
9 which could occur to a system, society or a community in a specific period of time,  
10 determined probabilistically as a function of hazard, exposure, vulnerability and  
11 capacity.

12 2) *Hazard* – a process, phenomenon or human activity that may cause loss of life,  
13 injury or other health impacts, property damage, social and economic disruption or  
14 environmental degradation.

15 3) *Risk transfer* – the process of formally or informally shifting the financial  
16 consequences of particular risks from one party to another whereby a household,  
17 community, enterprise or state authority will obtain resources from the other party  
18 after a disaster occurs, in exchange for ongoing or compensatory social or financial  
19 benefits provided to that other party.

20 4) *Seismology* – the scientific study of the sudden, violent movements of the earth  
21 connected with earthquakes.

22 5) *Tsunami* – a series of large waves of extremely long wavelength and period usually  
23 generated by a violent, impulsive undersea disturbance or activity near the coast or  
24 in the ocean.

25 6) *Volcanology* – is the multidisciplinary study of volcanoes, volcanic processes,  
26 eruptions, hazards, impacts, and other related aspects including the monitoring,  
27 modeling, assessment and communication of these.

28 7) *Vulnerability* – the conditions determined by physical, social, economic and  
29 environmental factors or processes which increase the susceptibility of an individual,  
30 a community, assets or systems to the impacts of hazards.

1 8) *Whole-of-Government Approach* – an approach that instills and fosters collaboration  
2 among all the government instrumentalities both at the national and local levels  
3 toward shared sustainable development goals and outcomes.

4 9) *Whole-of-Society Approach* – an approach that encourages the meaningful and  
5 active participation and synergy of the different stakeholders of society toward  
6 climate change adaptation, and disaster risk reduction and management at the  
7 national and local levels.

8 **Sec. 5. Mandate.** – The PHIVOLCS is mandated to:

9 1) Predict volcanic eruptions, earthquakes, tsunamis, and related geotectonic  
10 phenomena through reliable and accurate detection, forecast, and warning  
11 systems;

12 2) Determine how volcanic eruptions, earthquakes, tsunamis, and related  
13 geotectonic phenomena occur; the possible hazards; and the areas at risk; and

14 3) Reduce the impacts of volcanic eruptions, earthquakes, tsunamis, and related  
15 geotectonic events and enhance disaster preparedness with timely and accurate  
16 information products and services.

17 **Sec. 6. Organizational Structure.** – The PHIVOLCS shall be an attached agency of  
18 the Department of Science and Technology (DOST) for purposes of policy and program  
19 coordination to ensure alignment in national science and technology policies and  
20 priorities. It shall be headed by an Executive Director V, with the rank and compensation  
21 of a Department Undersecretary, who shall be appointed by the President of the  
22 Philippines upon recommendation by the Secretary of the DOST.

23 The Executive Director V shall be assisted by three (3) Deputy Executive Director V for  
24 Operations Services; Research and Development and Science and Technology (S&T)  
25 Services; and Administration, Finance and Information and Communication Technology  
26 Services, all with the rank and compensation of a Department Assistant Secretary, to be  
27 appointed by the President of the Philippines.

28 **Sec. 7. Qualifications.** – The Executive Director V must be a natural-born citizen and  
29 a resident of the Philippines; of good moral character; has an advanced degree in  
30 geosciences, engineering, or other related fields; and with at least five (5) years of

1 expertise and competence in volcanology, geophysics, or allied sciences: *Provided*, That  
2 the Executive Director V and the three (3) Deputy Executive Directors V shall be Career  
3 Executive Service Officers (CESOs).

4 **Sec. 8. Components of Modernization.** – The PHIVOLCS Modernization Program  
5 shall have the following components:

6 a) *Upgrade and Maintenance of Physical Resources and Operational Standards.* – It  
7 shall entail the acquisition of and/or upgrade to state-of-the-art instruments,  
8 equipment, facilities, systems, and operational techniques, with emphasis on  
9 volcano, earthquake, and tsunami monitoring and disaster-resilient warning and  
10 communication system: *Provided*, That prior to such acquisition and/or upgrade, an  
11 inventory of existing government volcanological and seismological instruments  
12 nationwide shall be undertaken;

13 b) *Volcano Monitoring Network and Information System Development.* – It shall involve  
14 sustained development of volcano monitoring networks and observatories for all  
15 active volcanoes of the Philippines, whether active or dormant, to ensure early  
16 warning of volcanic activity;

17 c) *Earthquake Monitoring Network and Information System Development.* – It shall  
18 entail the establishment, operation, and maintenance of an advanced system for  
19 earthquake and tsunami monitoring throughout the Philippines that operates with  
20 high performance standards; gathers critical data; and effectively provides  
21 information products and services independently and directly to meet the needs of  
22 the stakeholders;

23 d) *Reliable Monitoring.* – It shall ensure uninterrupted monitoring of volcanoes,  
24 earthquakes, and other related geotectonic phenomena throughout the Philippines,  
25 including earthquakes that may cause a tsunami or precede a volcanic eruption,  
26 with special focus on regions of moderate to high hazard and risk;

27 e) *Enhancement of Earthquake Monitoring Network for the Protection or Conservation*  
28 *of the Built Environment.* – It shall thoroughly measure strong earthquake shaking  
29 at ground sites and in buildings and critical structures. Focus should be in urban

1 areas and near major active fault zones to gather critical data and information for  
2 reducing earthquake impacts on buildings and structures;

3 f) *Development of Forecasting Capability for Impending Major Earthquakes or*  
4 *Tsunami Events.* – It shall develop machine-learned capability to determine  
5 earthquake parameters and the resulting information will automatically be broadcast  
6 to mobile phones, social media accounts, and other platforms whenever a significant  
7 earthquake or tsunami occurs;

8 g) *Enhancement of Research and Development Facility.* – It shall involve the  
9 enhancement of research and development facilities including the establishment of  
10 state-of-the-art earthquake and volcano research laboratories, focusing on the  
11 transdisciplinary approach on the generation of knowledge for the provision of  
12 science-based recommendations;

13 h) *Enhancement of Public Information and Linkages with Local Government Units*  
14 *(LGUs) and other Stakeholders.* – It shall include continuous sharing of information  
15 with LGUs and other stakeholders that will help in disaster planning, preparation,  
16 and disaster mitigation, among others;

17 i) *Enhancement of Data and Information Dissemination Services.* – It shall involve the  
18 development of communication strategies to ensure the use of easily  
19 understandable local language, non-technical terms, and familiar graphical  
20 presentations, in combination with science-based information that will ensure the  
21 delivery of accurate, up-to-date and timely earthquake, tsunami, and volcano-  
22 related information to create greater public awareness and draw appropriate  
23 response for disaster risk reduction: *Provided,* That the PHIVOLCS shall partner with  
24 the Komisyon sa Wikang Filipino (KWF), various Sentro ng Wika at Kultura  
25 institutions, Philippine Commission on Women, and other rights-based organizations  
26 for the development or enhancement of socially-inclusive products. The PHIVOLCS  
27 shall collaborate with public and private organizations to effectively disseminate data  
28 and products;

29 j) *Strengthening of the Human Resource Development Program (HRDP).* – The HRDP  
30 shall be aligned with the agency's strategic goals. The PHIVOLCS, in consultation

1 with the Department of Budget and Management (DBM), shall create new plantilla  
2 positions. The HRDP shall likewise ensure that personnel have equal opportunities  
3 for continuous learning to be competent, motivated, and rewarded.

4 It shall prioritize the complementation and capacity-building of a wide range of  
5 experts in volcanology, seismology, engineering, information technology,  
6 communication, social and other related sciences to efficiently develop, operate,  
7 and maintain advanced monitoring systems and distill and communicate accurate  
8 volcanic, earthquake, and tsunami information for public guidance. Support for  
9 continued professional learning shall ensure skills development and motivation that  
10 will translate to better S&T services;

11 k) *Provision of Risk Information.* – This involves the sharing of risk information with  
12 LGUs and other stakeholders that helps in the disaster planning, preparation,  
13 disaster mitigation, risk transfer, among others, to provide social and economic  
14 protection and increase resilience in times of disaster;

15 l) *International Cooperation.* – Enhance interaction and cooperation with the  
16 international community and ensure that the Philippines has official representation  
17 in the geoscientific community;

18 m) *PHIVOLCS Hazards and Risk Information Platforms.* - The PHIVOLCS shall exert  
19 sustained efforts to collaborate with the LGUs so that the agency's hazards and risk  
20 information systems, such as GeoRiskPH and Rapid Earthquake Damage  
21 Assessment System (REDAS) platforms, can be updated regularly for disaster  
22 planning, preparation, disaster mitigation, among others; and

23 n) *Establishment of Permanent PHIVOLCS Main Office Building and Facilities.* – This  
24 includes land acquisition for the Data Receiving/ Operation Centers for real-time  
25 volcano, earthquake and tsunami monitoring, among others. This shall ensure  
26 stability and protection of government investments on scientific, technical  
27 equipment and research laboratories.

28 **Sec. 9. Whole-of-Government- and -Society Approach.** – This Act shall be  
29 implemented using a whole-of-government- and -society approach to ensure proper and  
30 effective coordination of various aspects in disaster risk mitigation, and response across

1 all areas of government policy spanning local governance, education, communication,  
2 science and technology, among others. The PHIVOLCS shall engage with the private  
3 sector, civil society, academic community, and other stakeholders to pursue areas of  
4 collaboration consistent with Sec. 5 of this Act. The PHIVOLCS Modernization Program  
5 shall be aligned with national policies and priorities. Accordingly, the PHIVOLCS shall:

- 6 a) Incorporate its latest geohazard maps and scientific studies in the appropriate  
7 seismic provisions in the National Structural Code of the Philippines and its future  
8 revisions;
- 9 b) In consultation with the Department of Education (DepEd) and other concerned  
10 agencies, include the teaching of volcano, earthquake, tsunami and other hazards  
11 related to geotectonic phenomena as part of the regular school curriculum;
- 12 c) In coordination with the Commission on Higher Education (CHED), the PHIVOLCS  
13 shall support the development and promotion of volcanology, seismology and other  
14 related courses in State Universities and Colleges (SUCs) and higher education  
15 institutions (HEIs) in communities at risk to active volcanoes, earthquakes, and  
16 tsunamis; and
- 17 d) Closely coordinate with Telecommunications Service Providers (TSPs) in the  
18 allocation of ports, Virtual Private Networks (VPNs), and other related facilities that  
19 will help ensure the unimpeded transmission of critical real-time data to-and-from  
20 the PHIVOLCS stations and equipment. TSPs shall delegate a PHIVOLCS  
21 counterpart that will ensure the expeditious resolution of concerns crucial to the  
22 effective implementation of this Act.

23 **Sec. 10. Collaboration or Linkages with Local Government Units (LGUs).** –

24 The PHIVOLCS shall develop and strengthen collaboration with LGUs to cover the  
25 following areas:

- 26 a) *Disaster Risk Mitigation.* – In the implementation of the National Building Code of  
27 the Philippines and its IRR, the PHIVOLCS shall closely collaborate with LGUs to  
28 ensure that its geohazard maps and other research outputs are incorporated in the  
29 disaster risk mitigation plans such as the Comprehensive Land Use Plan;

1 b) *Public Intermediary.* – The local government, together with national and local news  
2 media and the emergency management community, shall act as intermediaries  
3 between the PHIVOLCS and the general public, institutional decision makers, and  
4 emergency responders in crafting plans attuned to the local needs of its constituents  
5 to increase public resilience to earthquakes, tsunami and volcanic eruptions; reduce  
6 or eliminate long-term risk to human life and property; and shorten recovery periods  
7 based on risk assessments;

8 c) *Information Dissemination.* – The PHIVOLCS shall work closely with the national and  
9 local disaster agencies to craft appropriate information messages, to regularly test  
10 and evaluate their dissemination communication channels, and to help identify gaps  
11 and dissemination problems, so that the accurate volcanic unrest, earthquake,  
12 tsunami, and related hazard information reach the intended users in a timely  
13 manner;

14 d) *Awareness and Promotion.* – The PHIVOLCS shall encourage the LGUs and other  
15 stakeholders to promote in local and international recognition programs their own  
16 interfaces with the enhanced PHIVOLCS services in order to help increase the  
17 coverage and benefits of these to the public. In collaboration with the PHIVOLCS, a  
18 regular public education and awareness campaign on the hazards of volcanic  
19 eruptions, earthquakes, tsunamis, and disaster risk reduction procedures shall be  
20 designed and implemented by the LGUs concerned, considering the special needs  
21 of different communities, such as the marginalized, the indigenous peoples and  
22 persons with disabilities. Information on volcanic, seismic, tsunami risks and  
23 measures taken if the threat of hazard is present in the area shall be simplified and  
24 made available in a commonly understood local language or dialect;

25 e) *Data Inputs and Exchange.* – The PHIVOLCS shall enlist the contribution of the LGUs  
26 in the review of local research and update of information used in DRRM. This is to  
27 ensure that the exposure database of PHIVOLCS is updated and the LGU is kept  
28 abreast with the latest information for application to their own readiness, so that  
29 appropriate guidelines are consistently crafted and that local support infrastructure  
30 to the enhanced PHIVOLCS systems are funded; and



1 f) *Other Assistance.* – The PHIVOLCS shall seek the assistance of the LGUs in the  
2 identification and acquisition of lands under their jurisdiction where new PHIVOLCS  
3 offices and/or stations for equipment shall be established.

4 **Sec. 11. Components of the HRDP.** – The HRDP component shall include:

5 a) *Increase in Plantilla Positions.* – The PHIVOLCS, in consultation with the DBM, shall  
6 determine the needed human resource requirements for the modernization  
7 program;

8 b) *New Salary Scale for PHIVOLCS Personnel.* – The DBM shall develop a new salary  
9 scale for the PHIVOLCS personnel in consonance with Republic Act No. 8439,  
10 otherwise known as the “Magna Carta for Scientists, Engineers, Researchers and  
11 other Science and Technology Personnel in Government”, as amended, with a  
12 corresponding increase in the base pay, allowances and other benefits;

13 c) *PHIVOLCS Personnel Retention Incentive.* – An additional incentive to be known as  
14 the “Personnel Retention Incentive” shall be provided to qualified technical  
15 PHIVOLCS personnel, to be determined by the PHIVOLCS in consultation with DBM  
16 in an amount not exceeding twenty percent (20%) of the monthly basic salary  
17 subject to the IRR which shall be hereinafter formulated; and

18 d) *Scholarship Program.* – Not later than three (3) years from the enactment of this  
19 Act, scholarships shall be provided for undergraduate and graduate studies in  
20 volcano- and seismology-related fields as well as for specialized training programs,  
21 in coordination with the DOST, Commission on Higher Education (CHED) and HEIs.  
22 Cooperation on human resources upgrading and capability enhancement with  
23 regional and International organizations shall also be undertaken.

24 **Sec. 12. Disaster Preparedness, Public Information and Dissemination**  
25 **Services.** – The modernization of the PHIVOLCS shall enhance public information,  
26 education and advocacy on earthquake, tsunami and volcanic hazards and risks. To  
27 facilitate the appropriate appreciation and delivery of science-based information to target  
28 stakeholders for proper response actions before, during, and after the occurrence of these  
29 hazards, there shall be provision for:

- 1 a) Data Receiving Center (DRC). – A fully-equipped state-of-the-art DRC shall serve as  
2 PHIVOLCS’s centralized reception, processing, visualization and dissemination hub  
3 for real-time earthquake, tsunami and volcano monitoring and data;
- 4 b) Modern Learning Hub. – The PHIVOLCS shall establish a Modern Learning Hub  
5 consisting of:
- 6 i. Library – A state-of-the-art library that utilizes both traditional and modern  
7 research and learning facilities. The library shall continue to be updated with  
8 most recent scientific journals that are relevant to the mandates of the  
9 PHIVOLCS;
  - 10 ii. Exhibit Area – An exhibit area that can accommodate large groups and is  
11 equipped with the latest audio-visual equipment and simulation facility;
  - 12 iii. Training Center - a fully-equipped and well-staffed training center that shall  
13 serve as a platform for planning, implementing, monitoring, and evaluating  
14 capacity development programs for various stakeholders regarding mitigation  
15 and preparedness for volcanic eruptions, earthquakes, and tsunami-related  
16 hazards; and
- 17 c) Media Room. - A fully-equipped media room shall be set up as a venue for press  
18 conferences and interviews.

19 **Sec. 13. Formulation and Submission of the PHIVOLCS Modernization**  
20 **Program.** – The Executive Director of the PHIVOLCS, in coordination with the Secretary  
21 of the DBM and the Director-General of the National Economic and Development Authority  
22 (NEDA), shall formulate the PHIVOLCS Modernization Program and oversee its  
23 implementation based on the policy objectives provided in this Act.

24 The PHIVOLCS Modernization Program shall indicate among others:

- 25 a) The PHIVOLCS’ requirements in terms of personnel, equipment and facilities  
26 during the various stages of modernization;
- 27 b) The modernization projects, which shall indicate the equipment and technology  
28 acquisitions, including major construction or upgrade of facility and the  
29 particular objective and component to which such intended acquisition,  
30 construction and upgrading belongs to; and

1 c) The priorities, schedules and estimated cost of each modernization project.

2 Within ninety (90) days from the effectivity of this Act, the PHIVOLCS Modernization  
3 Program shall be submitted to the President for approval.

4 **Sec. 14. Period of Implementation.** – The modernization program under this Act  
5 shall be implemented for a period of five (5) years: *Provided*, That payments for multi-  
6 year contract obligations incurred under this Act may extend beyond this period:  
7 *Provided, further*, That PHIVOLCS shall continue to modernize and constantly update its  
8 operational capabilities to keep pace with best international practices.

9 **Sec. 15. PHIVOLCS Modernization Fund.** – There is hereby created the PHIVOLCS  
10 Modernization Fund to be used exclusively for the PHIVOLCS Modernization Program,  
11 which shall be sourced from the following:

12 a) An amount of Seven billion pesos (Php7,000,000,000.00) shall be appropriated by  
13 Congress under the General Appropriations Act (GAA). It shall be treated as a  
14 distinct and separate budget item from the regular appropriation for the DOST. For  
15 five (5) years following the effectivity of this Act, an amount of One billion two  
16 hundred fifty million pesos (Php1,250,000,000.00) per year for the first four (4)  
17 years shall be appropriated for the PHIVOLCS Modernization Fund, and the amount  
18 of Two billion pesos (Php2,000,000,000.00) shall be appropriated in the fifth year.  
19 The entire amount of Seven billion pesos (Php7,000,000,000.00), including any  
20 interest income thereon, shall be used exclusively for capital outlay; and

21 b) The Secretary of the DOST, with the approval of the NEDA and subsequently the  
22 Department of Finance (DOF), is hereby granted the authority to enter into loan  
23 agreements with foreign financial institutions, and to receive grants, bequests and  
24 donations, whether from local or foreign sources.

25 The PHIVOLCS Modernization Fund shall be administered by the Executive Director of  
26 the PHIVOLCS in accordance with existing government budgeting, accounting and  
27 auditing rules and regulations.

28 **Sec. 16. Official Site.** – The PHIVOLCS shall acquire available land within the greater  
29 Metropolitan Manila as a first choice for establishing its new headquarters under this bill.  
30 Alternatively, a land area, equivalent to at least five (5) hectares, which is under the

1 administration of BCDA within the Clark Special Economic Zone in Tarlac, shall be  
2 allocated for the free and exclusive use of PHIVOLCS.

3 **Sec. 17. Tax Exemptions.** – Donations, grants, gifts, endowments, legacies, and  
4 contributions used actually, directly and exclusively by the PHIVOLCS shall be exempt  
5 from donor's tax and the same shall be considered as allowable deduction from gross  
6 income for purposes of computing the taxable income of the donor, in accordance with  
7 Section 34 (H)(2)(a) of the National Internal Revenue Code of 1997, as amended:  
8 *Provided,* That such other transfers of ownership and/or possession of real or personal  
9 properties of all kinds shall be exempt from all taxes.

10 **Sec. 18. Procurement of Scientific and Technical Materials, Equipment, and**  
11 **Services.** – The PHIVOLCS shall adopt the most appropriate and expeditious method of  
12 procurement that it deems fit depending on the existing conditions and requirements that  
13 justify the use of a particular alternative modality provided for under Republic Act No.  
14 12009, otherwise known as the "New Government Procurement Act" and its IRR.

15 **Sec. 19. Simplification of Documentation Requirements.** –

- 16 a) Consignments of equipment sent by international collaborative research partners  
17 shall be cleared or released based on a simplified equipment declaration, which  
18 shall contain the minimum information as may be required by the Bureau of  
19 Customs (BOC), to identify the equipment and object, accompanied by a  
20 declaration of undertaking to complete the information or submit the necessary  
21 supporting documents within a specified period;
- 22 b) The requirements for the declaration, release, and clearance for all imports of  
23 equipment by or on behalf of international collaborative research partners and any  
24 supporting documents relating thereto shall be simplified and lodged without fee;
- 25 c) Waiver of economic prohibitions and restrictions for categories of special goods and  
26 equipment that may be indicated by the PHIVOLCS;
- 27 d) Clearance without regard to the country of origin or the country from which the  
28 goods have arrived, subject to monitoring for reasons of public health and security;  
29 and

1 e) Immediate release of urgent and necessary monitoring equipment when there is  
2 an ongoing volcanic eruption.

3 **Sec. 20. Annual Report.** – The Executive Director of the PHIVOLCS shall prepare  
4 an annual report on the status of the implementation of the PHIVOLCS Modernization  
5 Program which shall be submitted through the DOST Secretary, to the President of the  
6 Philippines and to the Chairpersons of the respective Committees on Science and  
7 Technology of the Senate and the House of Representatives not later than June 30 of the  
8 succeeding year.

9 **Sec. 21. Appropriations.** – The amount necessary to carry out the initial  
10 implementation of this Act shall be charged against the current year's appropriations of  
11 the DOST-PHIVOLCS. Thereafter, such amount needed for the continued implementation  
12 of the modernization program shall be included in the annual General Appropriations Act.

13 **Sec. 22. Implementing Rules and Regulations (IRR).** – Within ninety (90) days  
14 from the effectivity of this Act, the PHIVOLCS, in consultation with relevant stakeholders,  
15 shall formulate the rules and regulations to effectively implement the provisions of this  
16 Act.

17 **Sec. 23. Separability Clause.** – If any provision or part of this Act is declared  
18 unconstitutional, the remainder thereof not otherwise affected shall remain in full force  
19 and effect.

20 **Sec. 24. Repealing Clause.** – All laws, presidential decrees, executive orders, letters  
21 of instruction, proclamations or administrative regulations that are inconsistent with the  
22 provisions of this Act are hereby repealed, amended, or modified accordingly.

23 **Sec. 25. Effectivity.** – This Act shall take effect after fifteen (15) days following the  
24 completion of its publication in the Official Gazette, or in a newspaper of general  
25 circulation.

*Approved,*