

REPUBLIC OF THE PHILIPPINES  
HOUSE OF REPRESENTATIVES  
Quezon City

20th Congress  
First Regular Session

House Bill No. 2802



Introduced by REP. VANESSA C. AUMENTADO

**EXPLANATORY NOTE**

Measurement is very important for science, business, trade, public safety, and protecting consumers. The National Metrology Act of 2003, also known as Republic Act No. 9236, set up the Philippines' national measurement infrastructure system. The Industrial Technology Development Institute (ITDI) was given the job of creating, keeping up, and spreading measuring standards by this statute. But even though these first steps were good, the National Metrology Division (NMD) of the ITDI still relies on foreign National Metrology Institutes for measurement traceability. This makes it much harder for our country to quickly respond to changing measuring needs.

The fast advancements in technology over the past few years have made the gaps even more obvious because of a lack of money, staff, and facilities. The Philippines has regularly rated lowest in annual funding, staffing, calibration and measurement capabilities (CMCs), and the number of accredited calibration laboratories compared to other countries in the region. This hurts the economy and public safety. These problems have a direct effect on national standards, technical laws, and conformity assessments, which are all important for trade, consumer protection, and the progress of society as a whole.

The COVID-19 pandemic showed how important it is to get the right measurements for medical treatments, from simple temperature checks and blood pressure monitoring to more complicated genetic tests of viruses. Also, this crisis sped up the digital transition in many fields, where data from measurements now plays a big role in making decisions. Industries need reliable, traceable, and accurate measurement standards to let sensor-

1 based decision-making, AI technologies, and big data analytics keep up with this  
2 technological leap.

3  
4 A strong and up-to-date measuring infrastructure is necessary since it is so important for  
5 keeping the economy competitive, public health accurate, consumers safe, the  
6 environment safe, and energy use efficient. This bill talks about the need for  
7 modernization by suggesting that the government spend money on new buildings, high-  
8 tech equipment, and trained staff to make sure that measurements are accurate and  
9 trustworthy.

10  
11 The current NMD will be transformed into a fully functional National Measurement Institute  
12 of the Philippines (NMIPhil). This would modernize our National Measurement System  
13 (NMS). This modernization will make sure that measurements are accurate and can be  
14 traced, bringing national practices in line with regional and international norms and  
15 meeting commitments to the ASEAN Economic Community (AEC), World Trade  
16 Organization (WTO), and other international accords.

17  
18 In addition, this bill is in line with the Department of Science and Technology's (DOST)  
19 top priorities, which include promoting capacity-building programs and a strong metrology  
20 culture in the Philippines. The goal is to change how people think about "medyo tama"  
21 or "sakto na" and move them toward exact, internationally accepted measurements.  
22 Because of these things and the huge benefits to the economy, public safety, and the  
23 country's general competitiveness.

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25 In view of this, passage of this bill is earnestly sought.

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**MARIA VANESSA C. AUMENTADO**

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“AN ACT  
ESTABLISHING THE NATIONAL MEASUREMENT INSTITUTE OF THE  
PHILIPPINES, AND APPROPRIATING FUNDS THEREFOR”

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

**SECTION 1. *Short Title.*** – This Act shall be known as the “National Measurement Institute of the Philippines (NMIPhil) Act.”

**SEC. 2. *Declaration of Policy.*** – It is hereby declared the policy of the State to:

- (a) Develop the National Measurement System (NMS) to advance scientific and technical progress in the national economy and ensure measurement integrity in the Philippines while aligning with the regional and international standards;
- (b) Support the National Quality Infrastructure (NQI) institutions, namely, the National Standards Body, National Accreditation Body, and National Metrology Institute, to uphold standards, accreditation, and measurement accuracy to enhance the competitiveness of Philippine products and services; and
- (c) Promote the adoption of international standards and best practices in metrology.

**SEC. 3. *Establishment of the National Measurement Institute of the Philippines.*** The National Metrology Division of the Industrial Technology Development Institute of the Department of Science and Technology (DOST-ITDI) is hereby transformed as the country’s national metrology institute to be known as the National Measurement Institute of the Philippines

1 (NMIPhil). The NMIPhil shall be attached to the DOST for policy, program coordination, and  
2 administrative supervision.

3  
4 The affected National Metrology Division Personnel undertaking relevant tasks shall be  
5 transferred to the NMIPhil, along with the records, properties, and corresponding appropriations.  
6 They shall continue to perform their respective duties and responsibilities in a holdover capacity  
7 so as not to hamper the regular operations.

8  
9 **SEC. 4. *Objectives of the Institute.*** – The objectives of the Institute are:

- 10  
11 (a) To adopt and establish metrological standards according to the international and regional  
12 standards;  
13 (b) To develop competencies and strengthen the implementation of legal metrological controls  
14 in the country;  
15 (c) To disseminate knowledge on measurement standards development;  
16 (d) To foster a metrology culture that will instill an appreciation of metrology; and  
17 (e) To provide the highest measurement accuracy in the country, necessary advice, and  
18 technical support for the government, industry, academe/research institutions, civil society  
19 organizations, commerce, and the public in measurement related issues.

20  
21 **SEC. 5. *Powers and Functions of the Institute.*** The Institute shall be responsible for  
22 maintaining and disseminating the national measurement standards of the country, and it shall:

- 23  
24 (a) Maintain and update the national measurement standards, ensuring compliance with  
25 international requirements to support the compliance of all metrology laboratories and  
26 standards;  
27 (b) Provide metrological traceability to the international system of units (SI) and allow non-SI  
28 units for measurements done in the country;  
29 (c) Facilitate international harmonization of measurements through participation in relevant  
30 metrological activities and collaborate with calibration laboratories and other metrological  
31 bodies for capacity building and protocol harmonization;  
32 (d) Appoint designated institutes for specific tasks to hold and maintain specific measurement  
33 standards and provide services that are not covered by the national metrology institute;  
34 (e) Conduct or adopt a system of type evaluation/approval activities for regulated measuring  
35 instruments, including accepting capabilities from recognized international metrology  
36 institutes;  
37 (f) Enhance the country's metrological human resources through education and capacity-  
38 building programs;  
39 (g) Represent the Philippines in international and regional metrology organizations and  
40 committees;  
41 (h) Levy fees and charges for products and services;

- (i) Support the National Quality Infrastructure (NQI) activities related to metrology;
- (j) Promulgate internal policies, rules, and regulations and disseminate guidelines, as well as create programs/projects related to the National Measurement System; and
- (k) Serve as the Administrative Secretariat of the National Metrology Board (NMB), overseeing the adoption and implementation of its policies, guidelines, and activities.

The NMB may assign additional powers and functions to the Institute: *Provided*, That it shall be in accordance with the objectives of the Institute as stated in this Act.

**SEC. 6. Organizational Structure.** The NMIPhil shall be headed by an Executive Director, to be appointed by the President upon the recommendation of the Secretary of the DOST, and shall receive the benefits, privileges, and emoluments equivalent to the rank of Executive Director IV. The Executive Director shall be responsible for promulgating and implementing policies, rules, and regulations and directing and controlling the activities of the NMIPhil.

The Executive Director shall be assisted by three (3) Deputy Executive Directors for scientific and industrial metrology, legal metrology, and quality management system, and finance, administration, who shall likewise be appointed by the President and shall receive the benefits, privileges and emoluments equivalent to the rank of Deputy Executive Director III.

The Executive Director and the Deputy Executive Directors must be Filipino citizens of good moral character of proven integrity, with advanced degrees in metrology, physical sciences, engineering, or related fields of study, with at least five (5) years of related supervisory experience.

The Secretary of the DOST shall determine the organizational Structure and staffing pattern of the NMIPhil in accordance with the revised compensation and position classification system subject to the evaluation and approval of the Department of Budget and Management and in compliance with the civil service laws, rules and regulations, and other pertinent laws.

**SEC. 7. Main Office, Regional Metrology Laboratories, and Other Centers and Facilities.** – The NMIPhil shall have its Main Office in New Clark City, Capas, Tarlac under the administration of the Bases Conversion and Development Authority (BCDA). A parcel of land shall be leased exclusively for the NMIPhil offices, laboratories and training center based on the terms and conditions agreed upon by the NMIPhil and BCDA, and in accordance with existing laws, rules and regulations.

A National Metrology Training Center under the NMIPhil will be established to undertake training on metrology for building the competence and capabilities of metrology-related entities and implementing legal metrological controls in the country.

1 The NMIPhil shall work closely with the DOST in facilitating the human resource  
2 development and calibration standards of the DOST Regional Metrology Laboratories (RMLs),  
3 being the existing government regional providers of metrological services, to ensure their  
4 knowledge and capabilities align with the specific metrological requirements and needs of their  
5 specific regions.

6  
7 **SEC. 8. *Executive Board of the Institute.*** The National Metrology Board (NMB) shall be  
8 the Executive Board of the Institute. It shall be the national authority responsible for harmonizing,  
9 delineating, overseeing, and coordinating the implementation of the regulation of measurements  
10 and measuring instruments in the country by National Regulatory Authorities (NRAs), Local  
11 Government Units (LGUs), and their contracted public and private entities.

12  
13 In fulfilling its mandate, the NMB shall adhere and may create a technical working group/s  
14 to assist them to the attainment of the objectives of this Act and other mandated national policies  
15 and regulations related to metrology and pursue conformance with the relevant international and  
16 regional agreements and guidelines.

17  
18 **SEC. 9. *Composition and Meetings of the NMB.*** – The NMB shall be composed of the  
19 following:

- 20  
21 (a) The DOST, with the DOST Secretary as Chair or an Undersecretary as alternate Chair;  
22  
23 (b) The Department of Trade and Industry (DTI), with the DTI Secretary as vice-chair or the  
24 Undersecretary for Competitiveness and Innovation as alternate vice-chair;  
25  
26 (c) The Department of Health (DOH), or his or her duly authorized representative who must  
27 at least be a Director IV;  
28  
29 (d) The Department of Energy (DOE), or his or her duly authorized representative who must  
30 at least be a Director IV;  
31  
32 (e) The Department of Agriculture (DA), or his or her duly authorized representative who must  
33 at least be a Director IV;  
34  
35 (f) The Department of Environment and Natural Resources (DENR), or his or her duly  
36 authorized representative who must at least be a Director IV;  
37  
38 (g) The Department of Interior and Local Government (DILG), or his or her duly authorized  
39 representative who must at least be a Director IV;  
40

- 1 (h) The Department of Public Works and Highways (DPWH), or his or her duly authorized  
2 representative who must at least be a Director IV;  
3  
4 (i) The Department of Transportation (DOTr), or his or her duly authorized representative  
5 who must at least be a Director IV;  
6  
7 (j) The Department of Justice (DOJ), or his or her duly authorized representative who must at  
8 least be a Director IV;  
9  
10 (k) The Department of National Defense (DND), or his or her duly authorized representative  
11 who must at least be a Director IV;  
12  
13 (l) The Director of the National Measurement Institute of the Philippines (NMIPhil);  
14  
15 (m) The President of the Union of Local Authorities of the Philippines (ULAP) or his/her duly  
16 authorized representative;  
17  
18 (n) One (1) Representative each from the:  
19 i. Manufacturing industry associations;  
20 ii. Associations of local manufacturers of measuring instruments;  
21 iii. Association of private calibration laboratories; and  
22 iv. Professional Metrology Association of National membership.  
23

24 The Representatives of the private sector shall serve for three (3) years, to be appointed by  
25 the Secretary of the DOST from nominees submitted by their respective organizations.  
26

27 The Board shall convene at least once a year. Special meetings may be convened upon the  
28 request of the Chair or majority of the members of the NMB.  
29

30 **SEC. 10. Compensation and Other Benefits.** The NMB Chair and members, or his or her  
31 representatives, and members of the technical working group shall be entitled to *per diems*,  
32 allowances, and other reimbursable expenses for their attendance to regular and special meetings  
33 subject to pertinent laws, rules and regulations.  
34

35 **SEC. 11. Powers and Functions of the NMB.** – The NMB shall have the following  
36 additional powers and functions:  
37

- 38 (a) Promulgate national policies and guidelines that will guarantee the adoption by all NRAs  
39 and LGUs of uniform regulation of measurements and measuring instruments throughout  
40 the country;  
41

- 1 (b) Oversee the implementation and application of regulation of measurements and measuring  
2 instruments by NRAs, LGUs, and other public and private entities contracted by them;  
3  
4 (c) Harmonize and/or delineate the authority of NRAs and LGUs to regulate the importation,  
5 sale, and repair of measuring instruments, to implement regulation of measurements and  
6 measuring instruments, and to impose fees, charges, and fines, and, as necessary;  
7  
8 (d) Call upon any government department, agency or instrumentality, LGUs, private sector  
9 organizations and entities, and non-government organizations to provide data, information,  
10 expertise, and recommendations in formulating and promulgating policies and guidelines  
11 for efficient and effective regulation of measurements and measuring instruments;  
12  
13 (e) Create technical working committees and perform other functions that may be necessary  
14 for the attainment of its mandates.  
15

16 **SEC. 12. *Human Resource Development Program.*** – The scholarship and financial  
17 assistance grants shall be provided for undergraduate and graduate studies in metrology and related  
18 fields, as well as for specialized training programs and studies patterned after the existing program  
19 of the DOST-Science Education Institute related to science and technology field particularly on  
20 the determination of the applicable rates and administration of the scholarship and financial  
21 assistance, in coordination with the DOST, Commission on Higher Education (CHED), Technical  
22 Education and Skills Development Authority (TESDA), Higher Education Institutions (HEIS), and  
23 other entities providing support for metrology development in the country. Cooperation with  
24 international organizations on human resource development and capacity enhancement shall also  
25 be undertaken.  
26

27 **SEC. 13. *Capacity Enhancement Plan.*** - The DOST Secretary and the Director of the  
28 NMIPhil, in consultation with the Secretary of the DBM, shall formulate the NMIPhil Capacity  
29 Enhancement Plan.  
30

31 The plan, to be implemented within ten (10) years, shall indicate, among others:  
32

- 33 (a) The Objectives and Key Performance Indicators;  
34  
35 (b) Requirements in terms of equipment, facilities and personnel, and the concomitant  
36 technical expertise necessary to attain the plan's objectives;  
37  
38 (c) The projects to be undertaken, which shall indicate the equipment and technology  
39 acquisitions, including major construction or upgrade of facility and;  
40

1 (d) The schedules and estimated cost of each project.

2  
3 Through its sectoral councils, the DOST shall be responsible for, among others, facilitating  
4 the development of the National Metrology Research and Development Roadmap and ensuring  
5 continuous fund support for its implementation.

6  
7 To fund the establishment of NMIPHIL, an amount of Three billion pesos  
8 (P3,000,000,000.00) to be taken from the share of the national government in the gross income of  
9 the Philippine Amusement and Gaming Corporation. For three (3) years from the start of the  
10 effectivity of this act, a minimum amount of One billion pesos (P 1,000,000,000.00) per year shall  
11 be released to the NMIPhil. The entire amount, including any interest income thereon, shall be  
12 used exclusively for the construction and purchase of facilities, equipment, information technology  
13 systems, and instruments for metrology research and development, calibration purposes,  
14 implementation of the resource development and capacity building program, and other activities  
15 outlined in the capacity enhancement plan.

16  
17 **SEC. 14 . Acquisition and Upgrading of Physical Resources and Operational**  
18 **Techniques.**— To efficiently and effectively address the expanding measurement needs of society,  
19 industry, research institutions, and the academe, the acquisition and/or upgrade of state-of-the-art  
20 instruments, equipment, facilities, and systems shall be immediately pursued and complemented  
21 with technical capability-building programs for NMIPhil personnel.

22  
23 **SEC. 15. Loans, Grants, Bequests, and Donations, Whether from Local or Foreign**  
24 **Sources.**— The Secretary of the DOST is authorized to solicit and manage loans, grants, bequests,  
25 and donations from local and foreign sources, including entering into loan agreements with foreign  
26 financial institutions, in compliance with existing laws, rules and regulations.

27  
28 **SEC. 16. Multi-year Contracts and Other Contractual Arrangements.** — The NMIPhil  
29 may enter into multi-year contracts or other contractual arrangements with suppliers and  
30 contractors in the implementation of the NMIPhil capacity enhancement plan and other programs  
31 and projects subject to the requirements and guidelines prescribed by the DBM and other pertinent  
32 laws, rules and regulations.

33  
34 **SEC. 17. Public Information and Advocacy.** – The NMIPhil, in collaboration with other  
35 concerned government agencies and stakeholders, shall engage in information campaigns and  
36 advocacy programs to increase the public's awareness on metrology and instill greater appreciation  
37 of metrology by the public.

38  
39 **SEC. 18. Education and Curriculum Development.** The NMIPhil, Department of  
40 Education, CHED, TESDA and other public and private agencies shall formulate the design and

1 details of a curriculum on metrology and its inclusion in all levels of the Philippines' education  
2 system.

3 The NMIPhil will have a close collaboration with the public and private higher education  
4 institutions including state universities and college in metrological research and development,  
5 including creating specialized subjects or courses related to metrology.  
6

7 **SEC. 19. Appropriations.** – The amount necessary for the initial implementation of this  
8 Act shall be charged against the current year's appropriation of the DOST-ITDI. Thereafter, such  
9 amount shall be included in the General Appropriations Act.  
10

11 Fifty percent (50%) of the fees and charges collected as a result of the metrological work  
12 and calibration services shall be used by the Board, the NMIPhil and the DOST-RMLs in the  
13 enhancement of their capabilities and modernization of metrological and measurement standard  
14 activities. The remaining amount shall be remitted to the National Treasury.  
15

16 **SEC 20. Implementing Rules and Regulations (IRR).** – Within ninety (90) days from the  
17 start of the effectivity of this Act, the DOST, in consultation with the relevant national government  
18 departments and agencies, LGUs, the private sector, and other concerned organizations, shall issue  
19 the necessary implementing rules and regulations of this Act.  
20

21 **SEC 21. Separability Clause.** – If, for any reason, any provision of this Act is declared  
22 unconstitutional, the other section or provisions hereof which are not hereby affected shall  
23 continue to be in full force and effect.  
24

25 **SEC. 22. Repealing Clause.** – All laws, decrees, orders, rules, and regulations or portions  
26 thereof inconsistent with this Act, including Sections 5, 6, and 18 of Republic Act No. 9236, are  
27 hereby repealed or modified accordingly.  
28

29 **SEC 23. Effectivity.** – This Act shall take effect fifteen (15) days after its complete  
30 publication in the Official Gazette or in at least two (2) newspapers of general circulation,  
31 whichever comes earlier.  
32

33 *Approved,*