

Republic of the Philippines
HOUSE OF REPRESENTATIVES
Quezon City

Twentieth Congress
First Regular Session

House Bill No. 9972



Introduced by Representative **ANNA YORK P. BONDOC**

AN ACT
ESTABLISHING THE NATIONAL MEASUREMENT INSTITUTE OF THE PHILIPPINES
(NMIPHIL), APPROPRIATING FUNDS THEREFOR, AND FOR OTHER PURPOSES

EXPLANATORY NOTE

This bill seeks to establish the National Measurement Institute of the Philippines (NMIPhil) as an attached agency of the Department of Science and Technology (DOST) to ensure that all medical devices and healthcare technologies operate with accurate, reliable, and internationally traceable measurements. Standardized measurements are fundamental to patient safety and the overall quality of healthcare. With a national authority to maintain measurement standards, healthcare providers can rely on consistent and accurate data, which can enhance the precision of diagnoses, therapies, and regulatory oversight. The creation of NMIPhil will provide a centralized framework for measurement standards to support the consistent and safe operation of medical technologies nationwide.

This proposed measure strengthens the provisions of Republic Act No. 9236, also known as the National Metrology Act of 2003. Despite previous efforts, the Philippines continues to lag behind other Southeast Asian countries in metrology infrastructure. The country currently faces systemic gaps in measurement traceability, calibration, and standardization. Enhancing the national metrology infrastructure would ensure that medical devices and diagnostic instruments consistently meet international standards.

Modern healthcare relies heavily on measurement-driven technologies, such as diagnostic laboratory instruments, imaging systems, patient monitoring devices, and therapeutic equipment, whose outputs directly guide clinical decisions. Studies have shown that over 300 million surgical procedures are performed each year worldwide. Despite awareness of adverse effects, surgical errors continue to occur at a high rate. 10% of preventable patient harm in health care was reported in surgical settings, with most of the resultant adverse events occurring pre- and post-surgery. According to the World Health Organization, most of the

mistakes that lead to harm do not occur as a result of the practices of one or a group of health and care workers but are rather due to system or process failures that lead these health and care workers to make mistakes.

The importance of accurate measurements has been clearly demonstrated during public health emergencies such as the COVID-19 pandemic. Reliable diagnostic testing, precise oxygen delivery, proper vaccine storage, and accurate patient monitoring all depended on trustworthy measurements. Any deviation or inaccuracy could have had serious consequences for patient safety and public health.

In conclusion, the establishment of the National Measurement Institute of the Philippines is essential to prevent such vulnerabilities. Recognizing patient safety as a global health priority and a fundamental element of effective health systems, this bill seeks to institutionalize a robust national measurement framework that will ensure the accurate performance of medical devices, support evidence-based decision-making by healthcare providers, and align the Philippines with international standards for patient care and medical device safety.

In view of the foregoing, the immediate passage of this bill is earnestly sought.


ANNA YORK P. BONDOC

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TWENTIETH CONGRESS OF THE)
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**“AN ACT
ESTABLISHING THE NATIONAL MEASUREMENT INSTITUTE OF THE
PHILIPPINES (NMIPHIL), APPROPRIATING FUNDS THEREFOR, AND FOR OTHER
PURPOSES”**

*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

1 of the Philippines (NMIPhil). The NMIPhil shall be attached to the DOST for policy,
2 program coordination, and administrative supervision.
3

4 The affected National Metrology Division Personnel undertaking relevant tasks
5 shall be transferred to the NMIPhil, along with the records, properties, and corresponding
6 appropriations. They shall continue to perform their respective duties and responsibilities
7 in a holdover capacity 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
12 regional standards;
13 (b) To develop competencies and strengthen the implementation of legal metrological
14 controls 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,
18 and technical support for the government, industry, academe/research institutions,
19 civil society organizations, commerce, and the public in measurement related
20 issues.
21

22 **SEC. 5. Powers and Functions of the Institute.** The Institute shall be responsible
23 for maintaining and disseminating the national measurement standards of the country,
24 and it shall:
25

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

- 1 (g) Represent the Philippines in international and regional metrology organizations
- 2 and committees;
- 3 (h) Levy fees and charges for products and services;
- 4 (i) Support the National Quality Infrastructure (NQI) activities related to metrology;
- 5 (j) Promulgate internal policies, rules, and regulations and disseminate guidelines, as
- 6 well as create programs/projects related to the National Measurement System; and
- 7 (k) Serve as the Administrative Secretariat of the National Metrology Board (NMB),
- 8 overseeing the adoption and implementation of its policies, guidelines, and
- 9 activities.

10
11 The NMB may assign additional powers and functions to the Institute: *Provided,*
12 That it shall be in accordance with the objectives of the Institute as stated in this Act.

13
14 **SEC. 6. *Organizational Structure.*** The NMIPhil shall be headed by an Executive
15 Director, to be appointed by the President upon the recommendation of the Secretary of
16 the DOST, and shall receive the benefits, privileges, and emoluments equivalent to the
17 rank of Executive Director IV. The Executive Director shall be responsible for
18 promulgating and implementing policies, rules, and regulations and directing and
19 controlling the activities of the NMIPhil.

20
21 The Executive Director shall be assisted by three (3) Deputy Executive Directors
22 for scientific and industrial metrology, legal metrology, and quality management system,
23 and finance, administration, who shall likewise be appointed by the President and shall
24 receive the benefits, privileges and emoluments equivalent to the rank of Deputy
25 Executive Director III.

26
27 The Executive Director and the Deputy Executive Directors must be Filipino
28 citizens of good moral character of proven integrity, with advanced degrees in metrology,
29 physical sciences, engineering, or related fields of study, with at least five (5) years of
30 related supervisory experience.

31
32 The Secretary of the DOST shall determine the organizational Structure and
33 staffing pattern of the NMIPhil in accordance with the revised compensation and position
34 classification system subject to the evaluation and approval of the Department of Budget
35 and Management and in compliance with the civil service laws, rules and regulations, and
36 other pertinent laws.

37
38 **SEC. 7. *Main Office, Regional Metrology Laboratories, and Other Centers and***
39 ***Facilities.*** – The NMIPhil shall have its Main Office in New Clark City, Capas, Tarlac under
40 the administration of the Bases Conversion and Development Authority (BCDA). A parcel

1 of land shall be leased exclusively for the NMIPhil offices, laboratories and training center
2 based on the terms and conditions agreed upon by the NMIPhil and BCDA, and in
3 accordance with existing laws, rules and regulations.

4
5 A National Metrology Training Center under the NMIPhil will be established to
6 undertake training on metrology for building the competence and capabilities of
7 metrology-related entities and implementing legal metrological controls in the country.

8
9 The NMIPhil shall work closely with the DOST in facilitating the human resource
10 development and calibration standards of the DOST Regional Metrology Laboratories
11 (RMLs), being the existing government regional providers of metrological services, to
12 ensure their knowledge and capabilities align with the specific metrological requirements
13 and needs of their specific regions.

14
15 **SEC. 8. *Executive Board of the Institute.*** The National Metrology Board (NMB)
16 shall be the Executive Board of the Institute. It shall be the national authority responsible
17 for harmonizing, delineating, overseeing, and coordinating the implementation of the
18 regulation of measurements and measuring instruments in the country by National
19 Regulatory Authorities (NRAs), Local Government Units (LGUs), and their contracted
20 public and private entities.

21
22 In fulfilling its mandate, the NMB shall adhere and may create a technical working
23 group/s to assist them to the attainment of the objectives of this Act and other mandated
24 national policies and regulations related to metrology and pursue conformance with the
25 relevant international and regional agreements and guidelines.

26
27 **SEC. 9. *Composition and Meetings of the NMB.*** – The NMB shall be composed of
28 the following:

- 29
30 (a) The DOST, with the DOST Secretary as Chair or an Undersecretary as alternate
31 Chair;
32
33 (b) The Department of Trade and Industry (DTI), with the DTI Secretary as vice-chair
34 or the Undersecretary for Competitiveness and Innovation as alternate vice-chair;
35
36 (c) The Department of Health (DOH), or his or her duly authorized representative who
37 must at least be a Director IV;
38
39 (d) The Department of Energy (DOE), or his or her duly authorized representative who
40 must at least be a Director IV;
41

- 1 (e) The Department of Agriculture (DA), or his or her duly authorized representative
2 who must at least be a Director IV;
3
- 4 (f) The Department of Environment and Natural Resources (DENR), or his or her duly
5 authorized representative who must at least be a Director IV;
6
- 7 (g) The Department of Interior and Local Government (DILG), or his or her duly
8 authorized representative who must at least be a Director IV;
9
- 10 (h) The Department of Public Works and Highways (DPWH), or his or her duly
11 authorized representative who must at least be a Director IV;
12
- 13 (i) The Department of Transportation (DOTr), or his or her duly authorized
14 representative who must at least be a Director IV;
15
- 16 (j) The Department of Justice (DOJ), or his or her duly authorized representative who
17 must at least be a Director IV;
18
- 19 (k) The Department of National Defense (DND), or his or her duly authorized
20 representative who must at least be a Director IV;
21
- 22 (l) The Director of the National Measurement Institute of the Philippines (NMIPhil);
23
- 24 (m) The President of the Union of Local Authorities of the Philippines (ULAP) or his/her
25 duly authorized representative;
26
- 27 (n) One (1) Representative each from the:
28 i. Manufacturing industry associations;
29 ii. Associations of local manufacturers of measuring instruments;
30 iii. Association of private calibration laboratories; and
31 iv. Professional Metrology Association of National membership.
32

33 The Representatives of the private sector shall serve for three (3) years, to be
34 appointed by the Secretary of the DOST from nominees submitted by their respective
35 organizations.
36

37 The Board shall convene at least once a year. Special meetings may be convened
38 upon the request of the Chair or majority of the members of the NMB.
39

40 **SEC. 10. Compensation and Other Benefits.** The NMB Chair and members, or his
41 or her representatives, and members of the technical working group shall be entitled to

1 *per diems*, allowances, and other reimbursable expenses for their attendance to regular
2 and special meetings subject to pertinent laws, rules and regulations.
3

4 **SEC. 11. *Powers and Functions of the NMB.*** – The NMB shall have the following
5 additional powers and functions:
6

- 7 (a) Promulgate national policies and guidelines that will guarantee the adoption by all
8 NRAs and LGUs of uniform regulation of measurements and measuring
9 instruments throughout the country;
10
11 (b) Oversee the implementation and application of regulation of measurements and
12 measuring instruments by NRAs, LGUs, and other public and private entities
13 contracted by them;
14
15 (c) Harmonize and/or delineate the authority of NRAs and LGUs to regulate the
16 importation, sale, and repair of measuring instruments, to implement regulation of
17 measurements and measuring instruments, and to impose fees, charges, and
18 fines, and, as necessary;
19
20 (d) Call upon any government department, agency or instrumentality, LGUs, private
21 sector organizations and entities, and non-government organizations to provide
22 data, information, expertise, and recommendations in formulating and
23 promulgating policies and guidelines for efficient and effective regulation of
24 measurements and measuring instruments;
25
26 (e) Create technical working committees and perform other functions that may be
27 necessary for the attainment of its mandates.
28

29 **SEC. 12. *Human Resource Development Program.*** – The scholarship and financial
30 assistance grants shall be provided for undergraduate and graduate studies in metrology
31 and related fields, as well as for specialized training programs and studies patterned after
32 the existing program of the DOST-Science Education Institute related to science and
33 technology field particularly on the determination of the applicable rates and
34 administration of the scholarship and financial assistance, in coordination with the DOST,
35 Commission on Higher Education (CHED), Technical Education and Skills Development
36 Authority (TESDA), Higher Education Institutions (HEIS), and other entities providing
37 support for metrology development in the country. Cooperation with international
38 organizations on human resource development and capacity enhancement shall also be
39 undertaken.
40

1 **SEC. 13. *Capacity Enhancement Plan.*** The DOST Secretary and the Director of
2 the NMIPhil, in consultation with the Secretary of the DBM, shall formulate the NMIPhil
3 Capacity Enhancement Plan.

4
5 The plan, to be implemented within ten (10) years, shall indicate, among others:

- 6
7 (a) The Objectives and Key Performance Indicators;
8
9 (b) Requirements in terms of equipment, facilities and personnel, and the concomitant
10 technical expertise necessary to attain the plan's objectives;
11
12 (c) The projects to be undertaken, which shall indicate the equipment and technology
13 acquisitions, including major construction or upgrade of facility and;
14
15 (d) The schedules and estimated cost of each project.

16
17 Through its sectoral councils, the DOST shall be responsible for, among others,
18 facilitating the development of the National Metrology Research and Development
19 Roadmap and ensuring continuous fund support for its implementation.

20
21 To fund the establishment of NMIPHIL, an amount of Three billion pesos
22 (P3,000,000,000.00) to be taken from the share of the national government in the gross
23 income of the Philippine Amusement and Gaming Corporation. For three (3) years from
24 the start of the effectivity of this act, a minimum amount of One billion pesos (P
25 1,000,000,000.00) per year shall be released to the NMIPhil. The entire amount, including
26 any interest income thereon, shall be used exclusively for the construction and purchase
27 of facilities, equipment, information technology systems, and instruments for metrology
28 research and development, calibration purposes, implementation of the resource
29 development and capacity building program, and other activities outlined in the capacity
30 enhancement plan.

31
32 **SEC. 14 . *Acquisition and Upgrading of Physical Resources and Operational***
33 *Techniques.*— To efficiently and effectively address the expanding measurement needs
34 of society, industry, research institutions, and the academe, the acquisition and/or
35 upgrade of state-of-the-art instruments, equipment, facilities, and systems shall be
36 immediately pursued and complemented with technical capability-building programs for
37 NMIPhil personnel.

38
39 **SEC. 15. *Loans, Grants, Bequests, and Donations, Whether from Local or Foreign***
40 *Sources.* The Secretary of the DOST is authorized to solicit and manage loans, grants,

1 bequests, and donations from local and foreign sources, including entering into loan
2 agreements with foreign financial institutions, in compliance with existing laws, rules and
3 regulations.

4
5 **SEC. 16. *Multi-year Contracts and Other Contractual Arrangements.*** — The
6 NMIPhil may enter into multi-year contracts or other contractual arrangements with
7 suppliers and contractors in the implementation of the NMIPhil capacity enhancement
8 plan and other programs and projects subject to the requirements and guidelines
9 prescribed by the DBM and other pertinent laws, rules and regulations.

10
11 **SEC. 17. *Public Information and Advocacy.*** — The NMIPhil, in collaboration with
12 other concerned government agencies and stakeholders, shall engage in information
13 campaigns and advocacy programs to increase the public's awareness on metrology and
14 instill greater appreciation of metrology by the public.

15
16 **SEC. 18. *Education and Curriculum Development.*** The NMIPhil, Department of
17 Education, CHED, TESDA and other public and private agencies shall formulate the
18 design and details of a curriculum on metrology and its inclusion in all levels of the
19 Philippines' education system.

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

23
24 **SEC. 19. *Appropriations.*** — The amount necessary for the initial implementation of
25 this Act shall be charged against the current year's appropriation of the DOST-ITDI.
26 Thereafter, such amount shall be included in the General Appropriations Act.

27
28 Fifty percent (50%) of the fees and charges collected as a result of the metrological
29 work and calibration services shall be used by the Board, the NMIPhil and the DOST-
30 RMLs in the enhancement of their capabilities and modernization of metrological and
31 measurement standard activities. The remaining amount shall be remitted to the National
32 Treasury.

33
34 **SEC 20. *Implementing Rules and Regulations (IRR).*** — Within ninety (90) days
35 from the start of the effectivity of this Act, the DOST, in consultation with the relevant
36 national government departments and agencies, LGUs, the private sector, and other
37 concerned organizations, shall issue the necessary implementing rules and regulations
38 of this Act.

1 **SEC 21. *Separability Clause.*** – If, for any reason, any provision of this Act is
2 declared unconstitutional, the other section or provisions hereof which are not hereby
3 affected shall continue to be in full force and effect.
4

5 **SEC. 22. *Repealing Clause.*** – All laws, decrees, orders, rules, and regulations or
6 portions thereof inconsistent with this Act, including Sections 5, 6, and 18 of Republic Act
7 No. 9236, are hereby repealed or modified accordingly.
8

9 **SEC 23. *Effectivity.*** – This Act shall take effect fifteen (15) days after its complete
10 publication in the Official Gazette or in at least two (2) newspapers of general circulation,
11 whichever comes earlier.
12

13 Approved,
14