



Republic of the Philippines
HOUSE OF REPRESENTATIVES
Quezon City

TWENTIETH CONGRESS
Second Regular Session



House Bill No. 10169

Introduced by CIBAC Party-List Representative
EDUARDO "BRO. EDDIE" C. VILLANUEVA

EXPLANATORY NOTE

Accurate and internationally traceable measurements form the foundation of scientific research, industrial productivity, consumer protection, public health, environmental monitoring, trade facilitation, and technological innovation. Virtually every sector of the economy depends upon reliable measurement systems to ensure product quality, regulatory compliance, manufacturing precision, and international market acceptance. As global trade and advanced technologies become increasingly dependent on measurement accuracy, a strong and internationally recognized national metrology institution has become indispensable for national development.

While the Philippines has made significant progress in developing its national measurement capabilities through the National Metrology Division of the Department of Science and Technology–Industrial Technology Development Institute (DOST-ITDI), the country's expanding industrial, scientific, and technological requirements demand a more robust, permanent, and internationally credible institutional framework. Strengthening the National Measurement System will improve the country's competitiveness, facilitate exports, support innovation, enhance consumer confidence, and ensure compliance with international standards and mutual recognition arrangements.

This measure seeks to establish the Philippine National Metrology Institute (PNMI) by transforming the existing National Metrology Division into a dedicated national institution responsible for maintaining national measurement standards, providing calibration and technical services, conducting metrology research, developing human capital, and representing the Philippines in regional and international metrology organizations. The bill likewise strengthens governance through the creation of a Governing Board, institutionalizes regional metrology laboratories, establishes a National Metrology Training Center, and provides a long-term Capacity Enhancement Plan to ensure sustained development of the country's measurement infrastructure.

The proposed legislation likewise promotes stronger coordination among government agencies, industry, academe, and international partners, while supporting

research, innovation, education, and workforce development in measurement science. By reinforcing the National Quality Infrastructure, the measure enhances the country's ability to compete in global markets, improve manufacturing capability, strengthen regulatory systems, and safeguard public welfare through accurate and reliable measurements.

Establishing the Philippine National Metrology Institute is a strategic investment in the country's scientific and technological future. It lays the foundation for a modern, innovation-driven economy supported by internationally recognized measurement standards that advance industrial development, public confidence, and sustainable national growth.

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


EDUARDO "BRO. EDDIE" C. VILLANUEVA



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HOUSE BILL NO. 10169

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AN ACT
ESTABLISHING THE PHILIPPINE NATIONAL METROLOGY INSTITUTE (PNMI),
STRENGTHENING THE NATIONAL MEASUREMENT SYSTEM, AND
APPROPRIATING FUNDS THEREFOR

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

ARTICLE I

GENERAL PROVISIONS

SECTION 1. Short Title. - This Act shall be known as the *"Philippine National Metrology Institute (PNMI) Act."*

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

- (a) enhance and modernize the National Measurement System to advance scientific and technical progress, support industrial competitiveness, protect consumers, and promote public welfare;
- (b) ensure the integrity, traceability, accuracy, and international recognition of measurements in the Philippines;
- (c) strengthen the National Quality Infrastructure through coordination among metrology, standards, accreditation, testing, and conformity assessment institutions;
- (d) support research, innovation, and human resource development in metrology and related sciences;
- (e) promote harmonization with international and regional standards and best practices; and
- (f) establish a permanent and internationally credible national metrology institution.

ARTICLE II

CREATION AND POWERS OF THE PHILIPPINE NATIONAL METROLOGY INSTITUTE (PNMI)

SEC. 3. Creation of the Philippine National Metrology Institute. - The National Metrology Division of the Department of Science and Technology-Industrial Technology Development Institute (DOST-ITDI) is hereby transformed into the Philippine National Metrology Institute (PNMI).

The PNMI shall be attached to the DOST for policy coordination and administrative supervision.

All assets, facilities, equipment, records, and resources presently assigned to the National Metrology Division shall be transferred to the PNMI.

SEC. 4. Objectives. - The PNMI shall pursue the following objectives:

- (a) strengthen the National Measurement System to ensure accurate, reliable, and internationally traceable measurements in the Philippines;
- (b) support the development of a robust National Quality Infrastructure to promote scientific advancement, industrial competitiveness, and innovation;
- (c) enhance the country's capability to support trade facilitation, consumer protection, public health and safety, and other national development priorities through reliable measurements;
- (d) promote harmonization of national metrological standards with international standards and strengthen the Philippines' participation in regional and global metrology systems;
- (e) develop and sustain national technical capability, institutional capacity, and human resources in metrology and measurement science; and
- (f) promote a culture of measurement excellence in support of national development and global competitiveness.

SEC. 5. Powers and Functions. - The PNMI shall:

- (a) establish, maintain, improve, and disseminate national measurement standards and ensure their traceability to international references;
- (b) provide calibration, measurement, reference, and other technical services necessary to support the National Measurement System;
- (c) conduct and promote research and development in metrology, measurement science, and related scientific and technical fields;
- (d) support designated institutions and laboratories in specialized measurement services and technical capability development;
- (e) participate in international comparisons, mutual recognition arrangements, and regional and international metrology cooperation mechanisms;
- (f) provide technical support to government agencies, industry, academe, and other stakeholders on matters relating to metrology and measurement systems;
- (g) undertake education, training, and capacity-building programs, including support for regional metrology development;
- (h) collect reasonable fees and charges for services rendered, subject to existing laws;

- (i) formulate policies, guidelines, programs, and technical procedures related to the National Measurement System, consistent with this Act; and
- (j) exercise such other powers necessary to carry out the purposes of this Act, consistent with law and subject to approval of the Governing Board.

ARTICLE III

GOVERNANCE AND ORGANIZATION

SEC. 6. Governing Board. - There is hereby created a Governing Board which shall serve as the policy-making body of the PNMI.

The Governing Board shall be composed of nine (9) members, as follows:

- (a) The Secretary of the DOST, as Chairperson;
- (b) The Secretary of the Department of Trade and Industry (DTI) or his/her representative;
- (c) The Secretary of the Department of Economy, Planning, and Development or his/her representative;
- (d) The Secretary of the Department of Agriculture (DA) or his/her representative;
- (e) The Secretary of the Department of Health (DOH) or his/her representative;
- (f) The Director General of the Philippine Space Agency (PhilSA) or his/her representative;
- (g) The Executive Director of PNMI;
- (h) One (1) representative from higher education institutions with expertise in metrology or related sciences;
- (i) One (1) representative from the private sector with recognized expertise in industry or measurement science; and

Representatives of ex officio members shall be duly authorized in writing and shall in no case be lower than the rank of Undersecretary, or its equivalent, where applicable.

SEC. 7. Powers and Functions of the Governing Board. - The Governing Board shall:

- (a) formulate policies on metrology and the National Measurement System, and approve strategic, institutional, and long-term development plans of the PNMI, including the Capacity Enhancement Plan;
- (b) review and approve the PNMI's annual and multi-year budget proposals, major investments, and priority programs and projects, consistent with national development priorities and available resources;
- (c) provide policy direction and promote effective coordination with relevant government agencies, institutions, and stakeholders on matters relating to metrology, the National Measurement System, and related activities under this Act;
- (d) adopt and oversee governance, risk management, and accountability mechanisms, including performance monitoring and evaluation systems for the PNMI;

- 1 (e) ensure alignment of PNMI policies, programs, and priorities with national
2 development plans, international commitments, and relevant laws; and
3 (f) exercise such other powers and functions as may be necessary to carry out
4 the objectives of this Act.

5
6 **SEC. 8. Executive Director.** - The PNMI shall be headed by an Executive
7 Director to be appointed by the President upon the recommendation of the Secretary
8 of the DOST. The Executive Director shall receive the benefits, privileges, and
9 emoluments equivalent to the rank of Executive Director V.

10
11 The Executive Director shall possess recognized qualifications in metrology,
12 engineering, physical sciences, or related fields, with substantial managerial and
13 technical experience.

14
15 **SEC. 9. Deputy Executive Directors.** - The Executive Director shall be assisted
16 by three (3) Deputy Executive Directors, who shall be appointed in accordance with
17 existing laws and civil service rules, and who shall supervise their respective functional
18 areas, as follows:

- 19
20 (a) Deputy Executive Director for Scientific and Technical Services, who shall
21 oversee national measurement standards, calibration and measurement
22 services, metrology research and development, and technical laboratory
23 operations;
24 (b) Deputy Executive Director for Programs, Capacity Development, and
25 Regional Operations, who shall oversee the National Metrology Training
26 Center, human resource development programs, the Capacity Enhancement
27 Plan, and coordination and technical oversight of Regional Metrology
28 Laboratories; and
29 (c) Deputy Executive Director for Administration, Finance, and Institutional
30 Support, who shall oversee finance, human resources, procurement,
31 planning, information systems, and general administrative services.

32
33 The specific powers and functions of the Deputy Executive Directors shall be
34 further defined in the implementing rules and regulations and in the approved
35 organizational structure of the PNMI.

36
37 **SEC. 10. Organizational Structure.** - The PNMI, in coordination with the
38 Department of Budget and Management (DBM) and the Civil Service Commission
39 (CSC), shall determine its internal organizational structure, technical staffing, and
40 administrative support, subject to existing laws.

41
42 **SEC. 11. Main Office and Regional Metrology Laboratories.** - The Main Office
43 of the PNMI shall be located in New Clark City, Capas, Tarlac.

44
45 To promote broader access to metrology services, strengthen regional
46 measurement capabilities, and support the effective implementation of the National
47 Measurement System, the Regional Metrology Laboratories (RMLs) of the DOST
48 Regional Offices are hereby recognized as regional extensions of the PNMI.

1 The RMLs shall support the PNMI in the performance of its mandate, including,
2 but not limited to:

- 3
- 4 (a) providing calibration and related metrology services in the regions,
5 consistent with national measurement standards and traceability
6 requirements;
- 7 (b) supporting the dissemination and application of national measurement
8 standards at the regional level;
- 9 (c) strengthening regional technical capability through training, laboratory
10 development, and technical assistance;
- 11 (d) supporting industry, research institutions, and other stakeholders in
12 improving access to measurement services;
- 13 (e) supporting the implementation of the National Quality Infrastructure and
14 related national programs; and
- 15 (f) performing such other functions as may be assigned by the PNMI consistent
16 with this Act.

17 The technical scope, standards, quality requirements, and coordination
18 arrangements of RMLs shall be determined by the PNMI in accordance with this Act
19 and its implementing rules and regulations: Provided, That RMLs shall remain under
20 the supervision and administrative control of the DOST Regional Offices, while being
21 subject to the technical oversight, standards, and guidance of the PNMI.

22
23 **SEC. 12. National Metrology Training Center.** - A National Metrology Training
24 Center is hereby established under the PNMI to serve as the principal institution for
25 education, training, and capability development in metrology and measurement
26 science.

27
28 The National Metrology Training Center shall support the PNMI in strengthening
29 national technical capacity and human resource development and shall, among
30 others:

- 31
- 32 (a) develop and implement education and training programs in metrology,
33 calibration, measurement science, and related technical fields;
- 34 (b) provide specialized training for government personnel, laboratories, industry,
35 academe, and other stakeholders requiring metrology-related competencies;
- 36 (c) support the development of technical expertise and professional
37 competencies necessary for the National Measurement System and the
38 National Quality Infrastructure;
- 39 (d) support scholarship, fellowship, and other capability development programs
40 authorized under this Act;
- 41 (e) promote collaboration with academic institutions, training institutions, and
42 international metrology organizations for technical education and knowledge
43 exchange; and
- 44 (f) perform such other related functions as may be necessary to carry out the
45 purposes of this Act.
- 46

47 The organization, programs, and operational requirements of the National
48 Metrology Training Center shall be determined by the PNMI in accordance with this
49 Act and its implementing rules and regulations.

ARTICLE IV

INSTITUTIONAL COORDINATION AND INTERNATIONAL ENGAGEMENT

SEC. 13. Interagency and Stakeholder Cooperation. - The PNMI shall establish and maintain cooperation mechanisms with relevant government agencies, local government units (LUs), academe, and the private sector to support the implementation of this Act and the development of the National Measurement System.

SEC. 14. Non-Duplication, Coordination, and Functional Alignment. - Nothing in this Act shall be construed to diminish or duplicate statutory powers vested in existing agencies.

The PNMI shall exercise its functions in coordination with relevant government agencies through interagency arrangements and technical protocols.

Consistent with Republic Act No. 12231, or the Government Optimization Act, functions, programs, or organizational units may be transferred, integrated, or otherwise optimized, where necessary and in accordance with applicable laws, to promote coherence, efficiency, and alignment of government functions.

SEC. 15. International Representation. - The PNMI shall represent the Philippines in international and regional metrology organizations, including the International Bureau of Weights and Measures (BIPM), the International Organization of Legal Metrology (OIML), the Asia Pacific Metrology Programme (APMP), and other relevant bodies.

ARTICLE V

HUMAN CAPITAL AND CAPACITY DEVELOPMENT

SEC. 16. Human Resource Development Program. - The PNMI shall formulate and implement a continuing Human Resource Development Program to support workforce planning, competency development, professional advancement, and long-term human resource requirements of the National Measurement System.

The Human Resource Development Program shall be implemented through and in coordination with the National Metrology Training Center, and may include competency development, specialized training, scholarship, fellowship, and other capability development mechanisms for PNMI personnel, government personnel, laboratories, academe, industry, and other stakeholders, as may be appropriate.

For this purpose, scholarship and financial assistance mechanisms may be established in coordination with the DOST, the Commission on Higher Education (CHED), the Technical Education and Skills Development Authority (TESDA), and partner institutions, subject to existing laws, rules, and regulations.

SEC. 17. Education and Curriculum Development. - The PNMI, through the National Metrology Training Center and in collaboration with the Department of Education (DepEd), CHED, TESDA, and other relevant institutions, shall promote the development and integration of metrology education, as well as specialized academic

1 and technical training programs, to support the long-term development of national
2 expertise in metrology and measurement science.

3
4 For this purpose, the PNMI may support initiatives for:

- 5
6 (a) curriculum development and integration of metrology concepts in relevant
7 educational and technical programs;
8 (b) development of specialized courses, training modules, and academic
9 programs in metrology and related disciplines;
10 (c) faculty development, technical instruction, and knowledge exchange
11 programs;
12 (d) collaboration with academic, scientific, and international institutions for
13 education and technical cooperation; and
14 (e) such other educational initiatives necessary to support the human resource
15 and institutional development objectives of this Act.
16

17 **SEC. 18. Capacity Enhancement Plan.** - Within one (1) year from the
18 effectivity of this Act, the Executive Director shall prepare and submit to the Governing
19 Board for approval a ten (10)-year Capacity Enhancement Plan to guide the long-term
20 development and strengthening of the PNMI and the National Measurement System.
21 The Capacity Enhancement Plan shall include, among others:

- 22
23 (a) strategic objectives, performance indicators, and priority outcomes;
24 (b) requirements for facilities, equipment, laboratories, human resources, and
25 technical capability development;
26 (a) priority programs and projects for strengthening national and regional
27 metrology capabilities;
28 (c) a National Metrology Research and Development Roadmap identifying priority
29 research areas, emerging technologies, and strategic directions for advancing
30 metrology and measurement science in the Philippines;
31 (d) implementation schedules, estimated costs, and resource requirements; and
32 (e) such other measures necessary to support the long-term development,
33 international competitiveness, and sustainability of the PNMI.
34

35 The Capacity Enhancement Plan shall be subject to periodic review and updating,
36 as may be necessary, consistent with the purposes of this Act.
37

38 **ARTICLE VI**

39 **FUNDING AND FISCAL ADMINISTRATION**

40
41
42 **SEC. 19. Appropriations.** - The amount necessary for the initial
43 implementation of this Act shall be charged against the current year appropriations of
44 the DOST, including available appropriations of the National Metrology Division of the
45 DOST-ITDI, as may be applicable. Thereafter, such sums as may be necessary for
46 the continued implementation of this Act shall be included in the annual General
47 Appropriations Act.
48

49 **SEC. 20. Fees and Charges.** - Subject to budgeting, accounting, and auditing
50 laws, the PNMI may collect reasonable fees and charges for services rendered. A

1 portion of such fees may be retained and used exclusively for capability enhancement
2 and modernization, subject to applicable budgeting, accounting, and auditing laws,
3 rules, and regulations. The remaining balance shall be remitted to the National
4 Treasury in accordance with existing laws.

5
6 **SEC. 21. Grants, Donations, and Other Funding Sources.** - The PNMI may
7 receive grants, donations, endowments, and other lawful funding support, subject to
8 existing laws, rules, and regulations.

10 **ARTICLE VII**

12 **ACCOUNTABILITY AND OVERSIGHT**

13
14 **SEC. 22. Annual Reporting.** - The PNMI shall submit an annual report to the
15 President, Senate, and House of Representatives containing its accomplishments,
16 financial utilization, progress under the Capacity Enhancement Plan, and
17 recommendations for policy or legislative action.

18
19 **SEC. 23. Audit and Performance Review.** - The PNMI shall be subject to audit
20 and performance review consistent with existing laws.

21
22 **SEC. 24. Periodic Congressional Review.** - Congress shall undertake a
23 review of the implementation of this Act within five (5) years from its effectivity.

25 **ARTICLE VIII**

27 **TRANSITORY AND FINAL PROVISIONS**

28
29 **SEC. 25. Transitory Provisions.** - Within three (3) years from the effectivity of
30 this Act, the functions, assets, personnel, and resources of the National Metrology
31 Division of the DOST-ITDI, and such other functions, programs, organizational units,
32 assets, personnel, and resources as may be necessary for the establishment and
33 operation of the PNMI, shall be transferred, integrated, or otherwise optimized,
34 consistent with Republic Act No. 12231 and other applicable laws.

35
36 Nothing in this Act shall be construed to authorize the transfer or diminution of
37 statutory powers vested in other agencies, except as may be authorized by law and
38 consistent with Section 14 of this Act.

39
40 The security of tenure, salaries, benefits, and other vested rights of affected
41 personnel shall be protected, and no officer or employee shall be separated, removed,
42 or adversely affected in rank, status, or compensation solely by reason of the
43 implementation of this Act, consistent with applicable laws, rules, and regulations.

44
45 Existing contracts, agreements, and obligations shall remain valid and shall
46 continue to be honored in accordance with their terms.

47
48 **SEC. 26. Implementing Rules and Regulations.** - The rules and regulations
49 necessary for the effective and efficient enforcement of the provisions of this Act shall
50 be formulated by the DOST, through ITDI, in consultation with relevant government

1 agencies, LUs, the private sector, and other stakeholders, and shall be implemented
2 within ninety (90) days from the effectivity of this Act.

3
4 Unjustified or willful failure or refusal of the concerned government agencies to
5 promulgate the implementing rules and regulations (IRR) within the specified period
6 shall subject the heads of these government agencies to administrative penalties
7 under applicable civil service laws.

8
9 Should the IRR contain provisions that are contrary to this Act, the heads of the
10 government agencies responsible for such provision, when done in bad faith or with
11 gross negligence, shall be held administratively liable.

12
13 **SEC. 27. Repealing Clause.** – All laws, presidential decrees, executive orders,
14 letters of instruction, proclamations, administrative orders, issuances, rules, and
15 regulations that are inconsistent with the provisions of this Act are hereby repealed,
16 amended, or modified accordingly.

17
18 **SEC. 28. Separability Clause.** – If any portion or provision of this Act is declared
19 unconstitutional, the remainder hereof not otherwise shall remain in force and effect.

20 **SEC. 29. Effectivity.** – This Act shall take effect fifteen (15) days after following
21 its publication in the Official Gazette or in a newspaper of general circulation.

22
23 *Approved,*