



ASIA-PACIFIC  
LEGAL METROLOGY FORUM

24th APLMF Meeting  
Siem Reap, Cambodia

# Economy Report

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## *Philippines*

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## SECTION 1 – Organisation and structure for metrology

### Legislative Frameworks

Type	Title	Description
national law	Republic Act 9236 – The National Metrology Act of 2003 (Primary Legislation)	An act establishing a national measurement infrastructure system for standards and measurements, and for other purposes
national law	Republic Act 7394 – The Consumer Act of the Philippines	An act to protect the interest of the consumer, promote his general welfare and to establish standards of conduct for business and industry
by-law	Department of Energy (DOE) Department Circular No. DC 2003-11-010	Providing for the rules and regulations governing the business of retailing liquid petroleum products
by-law	Land Transportation Franchising and Regulatory Board (LTFRB) Memorandum Circular No. 2011-02	Implementing guidelines for calibration and sealing/ resealing of taxi meters for 2011 Fare Adjustment
by-law	Manila Waterworks and Sewerage Systems (MWSS) RO-OPP 052-01	Policy on Water Meters
by-law	Energy Regulatory Commission (ERC) Resolution No. 12 Series of 2009	Rules and procedures for the test and maintenance of electric meters of distribution utilities

### LEGAL REQUIREMENTS FOR TRACEABILITY

All weights, measures and measuring equipment shall be internationally traceable through the National Metrology Laboratory or other laboratories recognized by the National Metrology Board.

### Legal Units of Measurement

The system of unit based on the International System of Units (SI) shall be mandatory throughout the country in regulated areas of application. The use of other units on meritorious cases may be allowed by the Board: Provided, that measuring equipment used for measuring quantities in regulated areas of application shall give results expressed in either SI or Board-Authorized Units: Provided finally, that all measurement standards and measuring equipment use in the regulated areas of application shall be subject to metrological control.

## Organisation Structures

### National Organization for Legal Metrology

#### National Metrology Board

NMB Chairman: Dr. Fortunato de la Peña

#### Industrial Technology Development Institute (Secretariat)

Director: Dr. Maria Patricia V. Azanza

Metrology Building, DOST Compound  
General Santos Avenue  
Bicutan, Taguig City, Metro Manila  
Republic of the Philippines 1631  
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- Republic Act 9236 established a National Measurement Infrastructure System (NMIS) and created the National Metrology Board (NMB).
- The NMB is a policy making and implementing body and in the exercise of its functions, duties and responsibilities, has the power to delegate the authority to concerned entities as deputized entities to implement the provisions of the Act.
- The NMB has the following duties and responsibilities:
  - To ensure the execution, upkeep and conservation of national primary and secondary standards in conformity with the Board-Authorized Units;
  - To promote and to coordinate the use in the country of a uniform system of units and measurement standards of physical quantities;
  - To issue and enforce the necessary guidelines on such areas of metrology but not limited to utilization of measuring equipment and devices, type approval on measuring equipment, verification, calibration, use of control marks and other metrological controls on measurement standards and measuring equipment;
  - To ensure that the accuracy and application of quantities and similar metrological requirement are met in all commercial, economic, scientific, technical and similar endeavours;
  - To fix rates and collect fees for the metrological work similar calibration services rendered for both public and private entities;
  - To carry out the testing for type approval of measuring equipment;
  - To supervise and to assure the execution and calibration of standards and verification equipment;
  - To ensure that persons or business entities regularly engaged in importing, manufacturing, repairing, selling or hiring certain measuring equipment comply with the guidelines of the Board; and
  - To perform such other functions, duties and responsibilities as may be necessary to implement the Act.

- The NMB covers both the “Board” and “Executing Authority.” (see Figure 1)
  - The term “*Board*” is used to mean the team consisting of the members of the National Metrology Board performing policy making, planning, monitoring and other actions and authority exercised collectively. It is composed of the Secretaries or duly recognized representative (at least Undersecretary) of the Department of Science and Technology (DOST), Department of Trade and Industry (DTI), Department of Transportation (DOTr), Department of Health (DOH), Department of Interior and Local Government (DILG), Department of Justice (DOJ), Department of Environment and Natural Resources (DENR) and Department of Agriculture (DA), and representatives from the academe, business sector and professional metrology association.
  - The term “*Executing Authority*” on the other hand is used with respect to NMB in its performance of its technical functions and physical activities as undertaken by it through ITDI and deputized entities physically implementing the Republic Act 9236 – The Metrology Act of 2003.
- The NMB is chaired by the Secretary of the DOST.
- The Industrial Technology Development Institute (ITDI) is a multi-disciplinary agency under the DOST and serves as the Secretariat of the NMB.
- The Philippines through the ITDI is a Full Member of the Asia-Pacific Metrology Programme (APMP) and Asia-Pacific Legal Metrology Forum (APLMF).

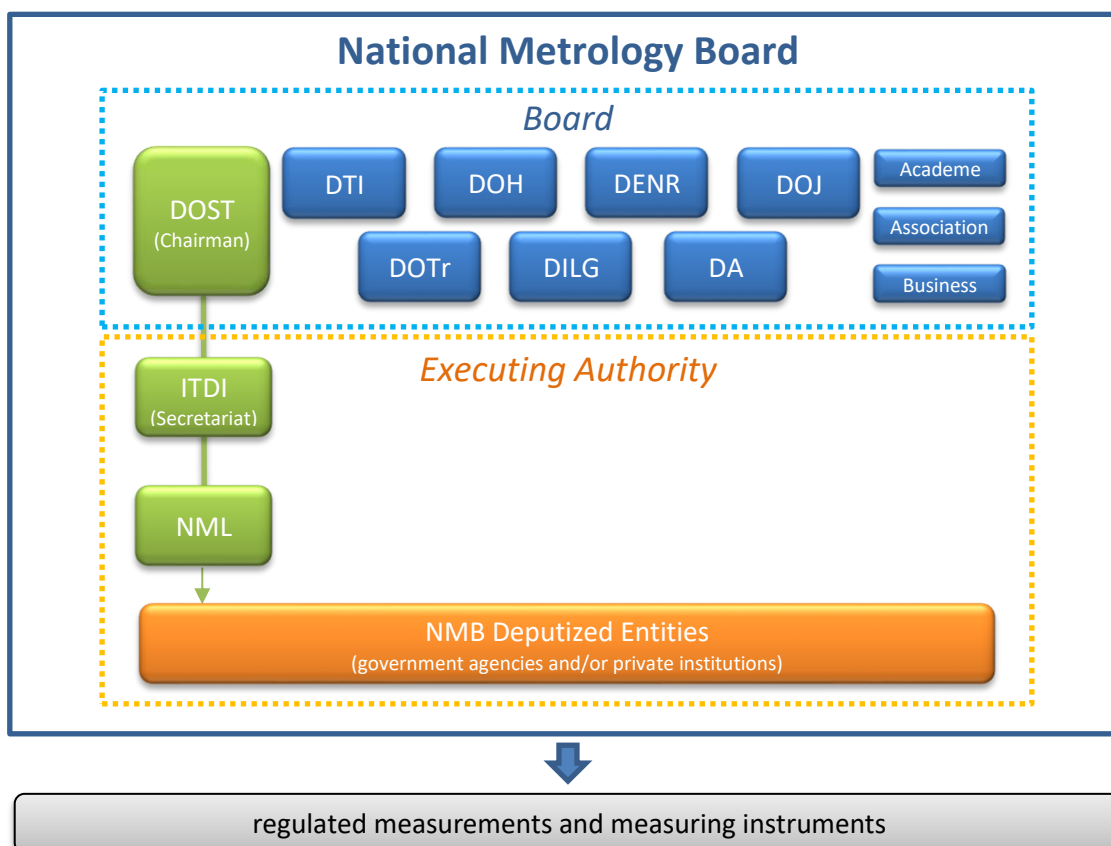


Figure 1. The National Metrology Board

**Custodian of National Standards**

National Metrology Laboratory of the Philippines – national metrology institute

Chief: Ms. Aurora V. Kimura

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Bicutan, Taguig City, Metro Manila  
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- The National Metrology Laboratory of the Philippines (NML) is a division under the ITDI and serves as the national metrology institute of the Philippines. It is mandated to lead the public and private laboratories in carrying out the technical, calibration and laboratory functions to effectively implement the provisions of Republic Act 9236.
- The Philippines through the NML is an Associate of the General Conference on Weights and Measures (CGPM).

**Regional and Local Verification Organizations**

For the purpose of enforcing its mandate under this Act, ITDI as the Secretariat of the NMB shall recommend to the NMB, the delegation of specific authority and functions of the NMB to other departments and agencies of the government and private institutions as deputized entities to assist in the implementation of Republic Act 9236. ITDI shall call on the personnel of these deputized entities to assist in the implementation of the Act.

The NMB has not yet formally deputized the following entities but they are conducting controls as mandated by Philippine laws and by-laws:

- Industrial Technology Development Institute
- Fair Trade Enforcement Bureau (FTEB)
- Oil Industry Management Bureau (OIMB)
- Food and Drug Administration (FDA)
- National Food Authority (NFA)
- Local Government Units (LGUs)
- Energy Regulatory Commission (ERC)
- Land Transportation Franchising and Regulatory Board (LTFRB)
- Metropolitan Waterworks and Sewerage System (MWSS)
- Maynilad Water Services, Inc.
- Manila Water Company, Inc.

**Instrument Calibration and Evaluation Systems**

The Philippine Accreditation Bureau of the DTI accredits testing and calibration laboratories in the Philippines under the terms of ISO/IEC 17025.

## Range of Equipment Subject to Legal Metrology

All tests and/or measuring instruments (TMI) used for transactions under the regulated areas of application, whether locally manufactured/assembled or imported, shall be verified by the Executing Authority or PAB-accredited calibration laboratories. The Executing Authority or the PAB-accredited calibration laboratory shall issue the corresponding Certificate of Verification and a verification sticker bearing the date of verification, name of owner/user, description of the equipment and its intended use.

Currently, the regulated areas of application are the following as mandated by Philippine laws and by-laws:

- Prepackaged products
- Nonautomatic Weighing Instruments
- Fuel Dispensers
- Road tankers
- Electric Meters
- Taxi Meters
- Water Meters

## Type Approval

Republic Act 9236 requires that any measuring equipment used in regulated areas of application shall be type-approved prior to use. However, the type approval system in the Philippines has not yet being implemented.

## Verification, (Conformity Assessment), Inspection and Reverification

Concerned government departments have policies and procedures on the control of regulated measurements and measuring instruments. Unfortunately, some are not according to OIML recommendations.

## International arrangements and engagement

- The Philippines participated in the Seminar on the OIML Certification System (OIML-CS) held from 13 to 15 June 2017 in Shanghai China.



- The Philippines participated in the 27<sup>th</sup> ACCSQ Working Group on Legal Metrology held from 12 to 14 July 2017 in Yangon, Myanmar.



## SECTION 2 – Key activities of December 2016 to September 2017

The key activity of the Philippines related to legal metrology is the modernization of the national measurement system through the revision of the existing Republic Act 9236, otherwise known as the National Metrology Act of 2003.

The House of Representatives' Committee on Science and Technology officially created the Technical Working Group for the Modernization of the National Measurement System through the revision of Republic Act 9236 on 9 February 2017.

The House of Representatives' Committee on Science and Technology and authors of the Bill were formally briefed by the ITDI on planned revision of Republic Act 9236 on 7 March 2017.

The initial draft of the substitute bill for House Bill Nos. 3578, 3717, 4059, 4320 and 4368 was prepared by the National Metrology Division of ITDI, with inputs from the Department Legislative Liaison Specialist Ms. Lita S. Suerte-Felipe and S&T Committee Secretary Donald Caballero.

The first public hearing on the proposed Modernization of the National Measurement System was conducted on 4 May 2017 in Dauis, Bohol organized by ITDI with DOST Regional Office 7 and Committee on Science and Technology.

The National Metrology Division together with the Department Legislative Liaison Office improved and finalized the substitute bill based on the comments and issues raised during the Public Hearing on 6 September 2017.








## SECTION 3 – Future focus

### New initiatives planned (next 1-2 years)

Key initiatives planned for the next two years will be focused on the revision of Republic Act 9236 (see roadmap below). This will not only modernize the national measurement system of the country but also establish the position and capabilities of the National Metrology Division of the Industrial Technology Development Institute as the national metrology institute of the Philippines.

## Modernization of the National Measurement System through Legislation **ROADMAP** (3<sup>rd</sup> Quarter 2017 to and 3<sup>rd</sup> Quarter 2018)

				
3 <sup>rd</sup> Quarter 2017	4 <sup>th</sup> Quarter 2017	1 <sup>st</sup> Quarter 2018	2 <sup>nd</sup> Quarter 2018	3 <sup>rd</sup> Quarter 2018
<ol style="list-style-type: none"> <li>1. Draft substitute metrology bill submitted to DLLO by ITDI</li> <li>2. Final draft of substitute bill submitted to House/Senate Committee on S&amp;T</li> <li>3. Committee report prepared and submitted to Plenary Affairs Bureau</li> <li>4. Project proposal for funding of legislative process submitted to PCIEERD</li> </ol>	<ol style="list-style-type: none"> <li>1. Presidential Certification as Urgent of the bill acquired</li> <li>2. Project proposal approved by DOST</li> </ol>	<ol style="list-style-type: none"> <li>1. Bill scheduled for 2<sup>nd</sup> Reading</li> <li>2. Plenary hearings conducted</li> <li>3. Bill scheduled for 3<sup>rd</sup> Reading</li> <li>4. Benchmarking /Technical Visit by lawmakers conducted</li> </ol>	<ol style="list-style-type: none"> <li>1. Bill finalized and approved by the Conference Committee</li> <li>2. Approved bill submitted to the Office of the President</li> <li>3. Approved bill signed into law by the President</li> <li>4. Law published in the general circulation publication and Official Gazette</li> </ol>	<ol style="list-style-type: none"> <li>1. Technical Working Group for Drafting of IRR formed</li> <li>2. Public hearings for IRR conducted</li> <li>3. Awareness campaign conducted</li> <li>4. IRR issued</li> </ol>