SECTION 1 – Organisation and structure for metrology

Organisation Structures

National Organization for Legal Metrology

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 Republic Act 9236 - Metrology Act of 2003. The NMB is chaired by the Secretary of the Department of Science and Technology (DOST).
The NMB has the following duties and responsibilities:

- To ensure the execution, up keeping 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 endeavors;
- 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 Industrial Technology Development Institute (ITDI)**

ITDI is a multi-disciplinary agency under the DOST and serves as the Secretariat of the NMB. It is also one of the agencies under the Department of Science and Technology (DOST). The Philippines through the ITDI is a Full Member of the Asia-Pacific Metrology Programme (APMP) and Asia-Pacific Legal Metrology Forum (APLMF).

**Custodian of National Standards**

**National Metrology Laboratory (NML)**

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

Energy Regulatory Commission (ERC)

ERC is an independent, quasi-judicial regulatory body tasked to promote competition, encourage market development, ensure customer choice and penalize abuse of market power in the electricity industry. ERC was created under Section 38 of the Republic Act No. 9136, otherwise known as the EPIRA Law. ERC performs type approval/acceptance and regulates the use electricity meters of distribution utilities.

Land Transportation and Franchising Regulatory Board (LTFRB)

The LTFRB was created under Executive Order No. 202. Its mandate is to promulgate, administer, enforce, and monitor compliance of policies, laws, and regulations of public land transportation services. LTFRB regulates the use of taximeters.

Local Government Units (LGUs)

LGUs are provinces and independent cities under the supervision of the President of the Philippines. LGUs are tasked in the calibration and sealing of fuel dispensers in their respected jurisdiction.

Oil Industry Management Bureau (OIMB)

OIMB is mandated to formulate and implement policies, plans, programs and regulations on the downstream oil industry, including the importation, exportation, stockpiling, storage, shipping, transportation, refining, processing, marketing and distribution of petroleum crude oils, products and by products, and monitors developments in the downstream oil industry.

Fair Trade Enforcement Bureau (FTEB)

FTEB oversees the overall implementation of trade and consumer protection laws. FTEB handles import regulation, sales promotion, product standards monitoring, business licensing, enforcement, mediation, and adjudication as regards the Consumer Act, Price Act, and Business Name Laws.

Food and Drug Administration (FDA)

The FDA is the national health product regulatory agency created by Republic Act (RA 3720), as amended by Executive Order No. 175 and RA 9711. FDA regulates the drugs, medical devices, food, cosmetics and toys, and household/urban hazardous substances.

National Food Authority (NFA)

The NFA is mandated to ensure national food security and stabilize supply and prices of staple cereals both in the farm and consumer levels.
Metropolitan Waterworks and Sewerage System (MWSS)

The MWSS is mandated primarily from Republic Act 6234 which states the basic goals of the System and declares as its major policy the proper operation and maintenance of waterworks system to ensure an uninterrupted and adequate supply and distribution of potable water for domestic and other purposes and the proper operation and maintenance of sewerage systems. MWSS regulates the use of water meters.

Legislative Frameworks

An act establishing a national measurement infrastructure system for standards and measurements, and for other purposes

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

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

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

Manila Waterworks and Sewerage Systems (MWSS) RO-OPP 052-01
Policy on Water Meters

Energy Regulatory Commission (ERC) Resolution No. 12 Series of 2009
Rules and procedures for the test and maintenance of electric meters of distribution utilities
International arrangements and engagement

- OIML/APLMF Training on Pre-packaged Goods, April 10 - 13, 2018 in Nanning, P.R. China (Attended by M.J. Solis and L.N. Abian)

- The four-day training course aimed to emphasize the practical application of Average Quantity System (AQS) in the verification of the quantities declared on the labels of pre-packaged goods. The activity was composed of exercises and lectures covering the OIML R 79 Labelling requirements for pre-packaged goods, OIML R 87 Quantity of product in pre-packages, best practices of inspection and guidelines on system requirements for a certification system for pre-packages.
• 30\textsuperscript{th} ASEAN Consulative Committee for Standards and Quality (ACCSQ) Working Group 3 on Legal Metrology (WG3) Meeting and its Related Events, October 23 - 26, 2018 in Yogyakarta, Indonesia (Attended by M.M. Ruiz)

- discussed the Harmonization of Verification Procedures for Non-Automatic Weighing Instruments - NAWI and Standardization of NAWI Guidelines, Harmonization of Requirements for Pre-packaged Products and Development of ASEAN Guidelines on Type Approval Control
- discussed different approaches of major economies outside ASEAN in Integrating Legal and Scientific Metrology at the National Level. Also discussed how their legal metrology systems integrate with scientific metrology programmes, and vice versa.
- discussed jointly with ASEAN Expert Group on Metrology (EGM) the goals and objectives of future WG 3 / EGM collaboration to include development of a Roadmap for Integrating Legal and Scientific Metrology at the National Level.
• 31st ASEAN Consultative Committee for Standards and Quality (ACCSQ) Working Group 3 on Legal Metrology (WG3) Meeting and its Related Events, March 18 to 22, 2019 in Jakarta, Indonesia Attended by (M.M. Ruiz)

- further discussed the Harmonization of Verification Procedures for Non-Automatic Weighing Instruments - NAWI and Standardization of NAWI Guidelines; Harmonization of Requirements for Pre-packaged Products; and Development of ASEAN Guidelines on Type Approval Control.
- participated in ACCSQ WG3 – PTB Planning Workshop for the next phase of the ASEAN-PTB Cooperation Project where the past project was evaluated, priority areas for the new project were reviewed
• Quality Infrastructure for Innovative and Competitive AEC Workshop (as part of the ASEAN Next 2019: Science, Technology, Innovation (STI) Leading towards Community Happiness) on March 20-21, 2019 held in Bangkok, Thailand (Attended by S.P.B. Leones, Jr.)

➢ The aim of this workshop is to help ASEAN economies in building a national quality infrastructure (NQI) system for the effective operation of domestic markets, and its international recognition is important to enable access to foreign markets.
- OIML / APLMF Certification System Workshop on July 15 to 17, 2019 in Hangzhou, P.R. China (Attended by M.M. Ruiz / K.P. Suycano)

- 32nd ASEAN Consultative Committee on Standards and Quality, Working Group on Metrology (ACCSQ WG3) Meeting from October 14 to 18, 2019 in Bandar Seri Begawan, Brunei Darussalam (Attended by M.M. Ruiz)

  - This seminar focused on providing participants with a detailed understanding of the OIML-CS and how it can support an economy to implement a new national type approval system, without the need to invest in expensive test facilities.

  - will cover Harmonization of Technical Requirements of Legal Metrology
  - will discuss the Concept Notes prepared by PTB as part of its on-going cooperation with WG3 namely: the Concept Note on the Guideline for the verification of fuel dispensers; the Concept Note on the Guideline for the verification of flow meters; the Concept Note on the Training on Type Approval Control; and the Concept Note on the Major high profile metrology promotional event (an event targeted for World Metrology Day 2020)
SECTION 2 – Key activities of 2018/19

Working with industry

Verification of Non-Automatic Weighing Instruments (NAWI) based on OIML R 76
April 29-30, 2019
LGU San Juan, Metro Manila

Verification of Non-Automatic Weighing Instruments (NAWI) based on OIML R 76
December 13 & 19, 2018
Shimadzu Philippines Manufacturing Inc.
Phase 3, Lot 15, Block 15, Cavite EPZ, Rosario, Cavite
OneLab Forum 2019 with the theme “Redefinition of the International System of Units (SI) and Current Trends in Measurement” on April 2, 2019 at the Acacia Hotel, Alabang, Muntinlupa City

World Metrology Day 2019 Celebration on May 20-21, 2019 wherein we inaugurated the Mass Standards Laboratory and conducted a Technical Session regarding the redefinition of the kilogram

OneLab Forum 2019 with the theme “Redefinition of the International System of Units (SI) and Current Trends in Measurement” on May 17, 2019 at Davao City
Redefinition of the International System of Units (SI) and Current Trends in Measurement Seminar on July 24, 2019 at Cebu City

Protecting consumers

TV guesting at GMA Network regarding market scales (August 12, 2019)
TV Guesting at GMA on August 12, 2019

Major projects - What we did and what we learned
The New Mass Laboratory is now equipped with automated comparators. Calibration range is also extended.

New Force Laboratory was established with a capacity of up to 2000 kN for testing machines. Also opened service on the calibration of axle weighers.
New Flow Laboratory - flow meters, water meters
SECTION 3 – Future focus

New initiatives planned (next 1-2 years)

- Philippines will confirm its hosting of the 35th ACCSQ WG 3 Meeting to be held on the 2nd half of 2020.
- The revision of the Republic Act 9236 did not pushed through as planned during the last two years (2017-2018) due to political reasons. A national and local election was done in May 13, 2019. This resulted in the change of leadership both in the Senate and House of Representative. The New Metrology Law is now re-filed as House Bill No. HB00952 at the 18th Congress of the House of Representatives last July 2019 also known as "AN ACT STRENGTHENING THE NATIONAL MEASUREMENT INFRASTRUCTURE SYSTEM (NMIS) AMENDING RA 9236 ALSO KNOWN AS THE NATIONAL METROLOGY ACT OF 2003 AND FOR OTHER PURPOSES."

The New Metrology Law 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.

It was also filed last August 2019 at the Senate House as House Bill No. 487 also known as "AN ACT MODERNIZING THE NATIONAL MEASUREMENT SYSTEM (NMS) OF THE PHILIPPINES, CREATING FOR THIS PURPOSE THE NATIONAL MEASUREMENT IN STITUTE OF THE PHILIPPINES, APPROPRIATING FUNDS THEREFORE AND FOR OTHER PURPOSES."

- A National Quality Infrastructure Bill of the Department of Trade and Industry (DTI) was also filed last July 2019 as House Bill 0449 at the 18th Congress. This bill will strengthen the three pillars of the NQI namely Standards, Metrology and Accreditation. This bill is also known as "AN ACT PRESCRIBING THE PHILIPPINE NATIONAL QUALITY INFRASTRUCTURE, RATIONALIZING THE NATIONAL QUALITY BODIES, PROVIDING FOR THEIR POWERS AND GRANTING THEM FUNCTIONS, AND FOR OTHER PURPOSES."

- Philippines will be hosting of the 35th ACCSQ WG 3 Meeting to be held on the 2nd half of 2020.