



27th ASIA-PACIFIC LEGAL METROLOGY FORUM ONLINE MEETINGS 3-4 December 2020



Economy Report - 2020

Philippines

Report developed/approved by	Michael Jason A. Solis
Position	Supervising Science Research Specialist
Organisation	Industrial Technology Development Institute
Contact details	mjasolis@itdi.dost.gov.ph

SECTION 1 – Organisation and structure for metrology

Organisation Structures

National Organization for Legal Metrology

National Metrology Board

NMB Chairman: Dr. Fortunato de la Peña

Industrial Technology Development Institute (Secretariat)

Director: Dr. Annabelle V. Briones

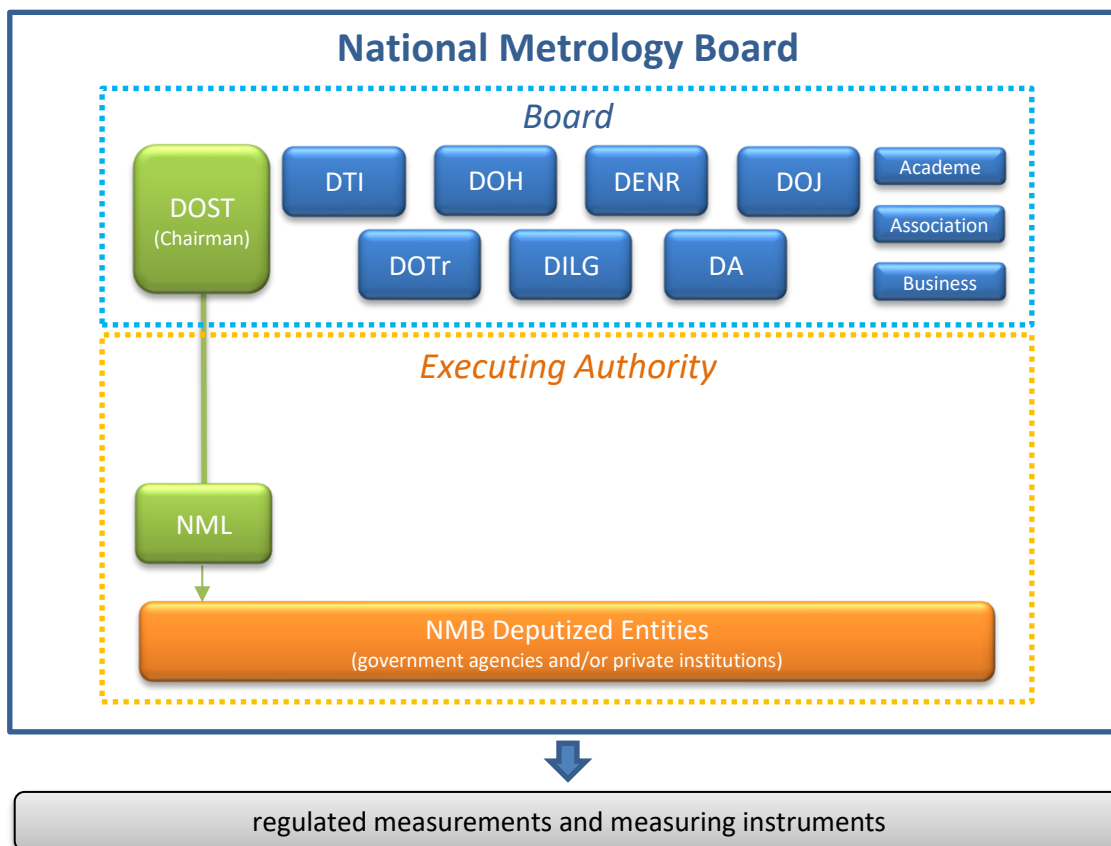
Metrology Building, DOST Compound
General Santos Avenue
Bicutan, Taguig City, Metro Manila
Republic of the Philippines 1631
Telephone No.: +63 2 837 2071 local 2266
Facsimile No.: +63 2 837 2071 local 2266

- 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).



Custodian of National Standards

National Metrology Laboratory of the Philippines – national metrology institute

Officer-in-Charge: Engr. Manuel M. Ruiz

Metrology Building, DOST Compound

General Santos Avenue

Bicutan, Taguig City, Metro Manila

Republic of the Philippines 1631

Telephone No.: +63 2 837 2071 local 2199

Facsimile No.: +63 2 837 2071 local 2272

Email: nmlphil@itdi.dost.gov.ph

metrology@itdi.dost.gov.ph

Website: www.nml.gov.ph

- The National Metrology Laboratory of the Philippines (NML) is a division under the ITDI and serves as the de facto 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:

- 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.

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.

International arrangements and engagement

Nothing to report in this section for 2019/2020.



SECTION 2 – Key activities of 2019/20

NML-RML Consultative Meeting

The NML-RML Consultative Meeting was held last October 28, 2019 to discuss the state of metrology in the Philippines at the regional level in the perspective of the Department of Science and Technology (DOST) - Regional Metrology Laboratories (RMLs) and its alignment with national and international requirements in ensuring traceability of measurements to further improve the government's effort in safeguarding the Filipinos against the harm brought about by wrong measurements.

It became an opportunity for the RMLs to provide their comments and establish their place in the infrastructure and the sustainability of their activities to support nation building through metrological services. It also served as a forum for the participants to share their insights and suggestions.

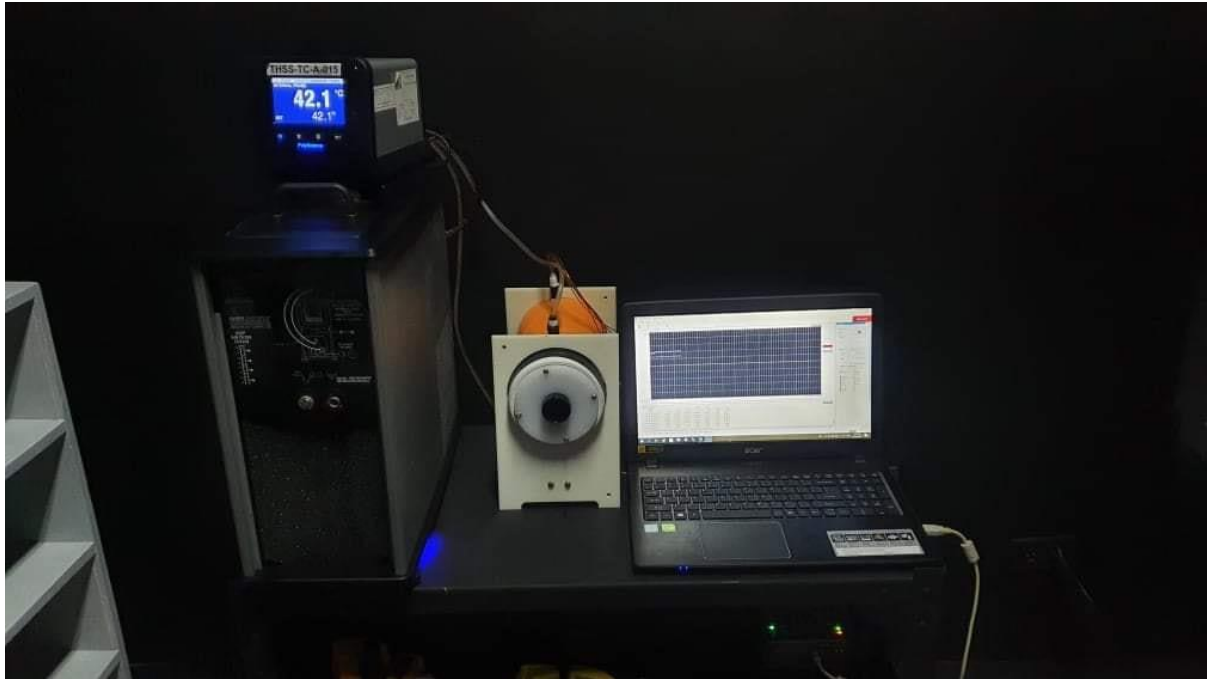


World Metrology Day 2020

The NML celebrated World Metrology Day 2020 by providing awareness to the public on how metrology contribute to the fight against COVID-19 through infographics and posters. Samples of the posters are shown below.

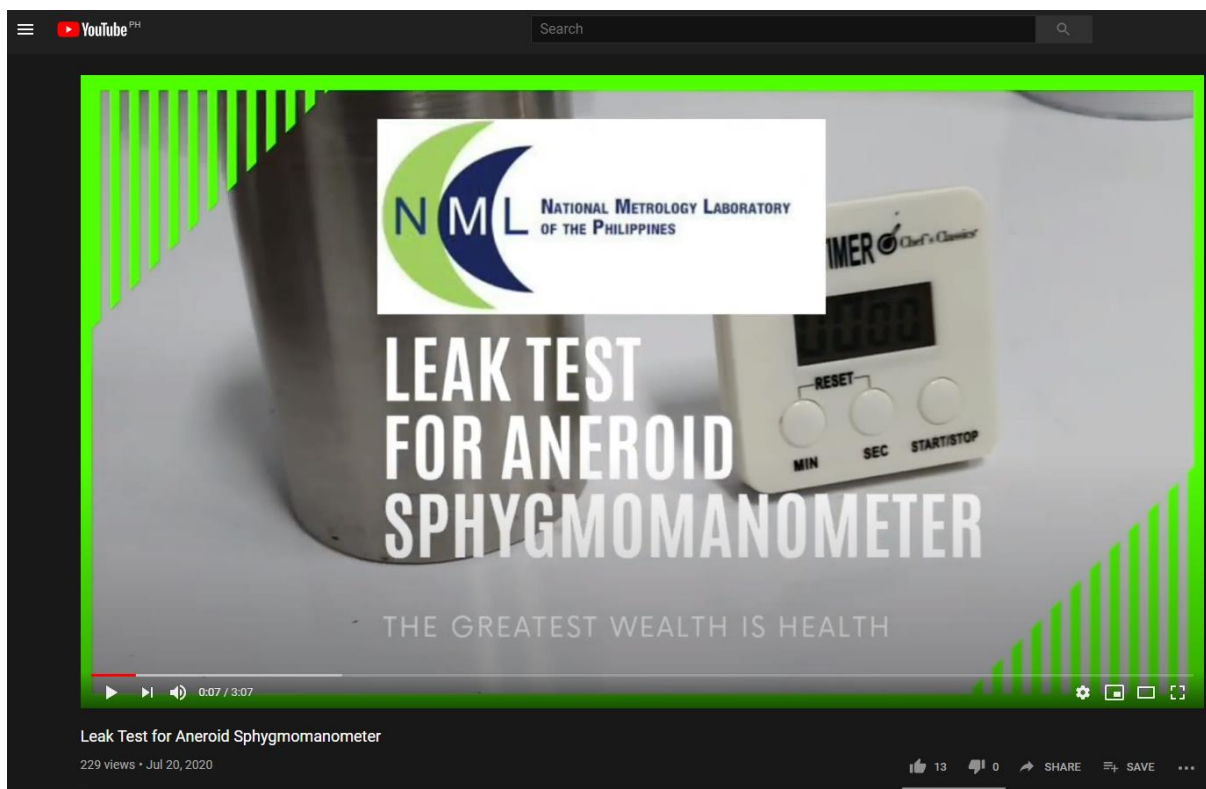






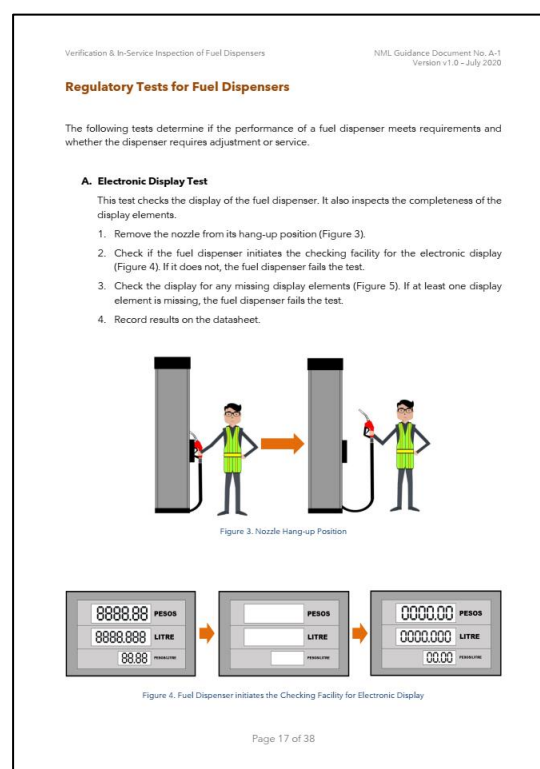
Guidance Video on Leak Test for Aneroid Sphygmomanometer

A video was developed by the Pressure and Force Standards Section of the National Metrology Laboratory to provide information on how to conduct a leak test on aneroid sphygmomanometers.



Development of a Guidance Document on Verification and In-Service Inspection of Fuel Dispensers

The National Metrology Laboratory of the Industrial Technology Development Institute issues this guidance document to support the regulation of fuel dispensers and provide guidance to regulators in conducting efficient and internationally accepted tests for the metrological control of fuel dispensers, enabling the protection of both consumers and retailers from unfair trade. This guidance document describes the best practice approach for the Philippines in securing and assuring the reliability of fuel dispensers used locally. Fuel dispensers described herein are assumed to have acquired type approval and intended for refueling motor vehicles that use liquid petroleum products such as gasoline, diesel, and kerosene. This document does not cover fuel dispensers with non-digital displays and Liquefied Petroleum Gas (LPG) dispensers.



Modernization of the National Metrology Law (Republic Act 9236)

The NML is pushing for the modernization of the country's National Measurement System to guarantee accurate and reliable measurement in fair trade, safety, health, environment protection, and law enforcement to keep up in the changing times. Moreover, the revision of the current metrology law will help the NML keep up with the country's international commitments to the Association of Southeast Asian Nations, *Asia-Pacific Economic Cooperation*, and the World Trade Organization. The House of Representatives Committee on Science and Technology (HoR-COST) has finished preparing the Committee Report on the NMS bill to be forwarded to the Committee of Appropriations. NML is now gearing up for another round of metrology and national measurement infrastructure awareness webinar series to be presented to the different committees of the Senate in November.



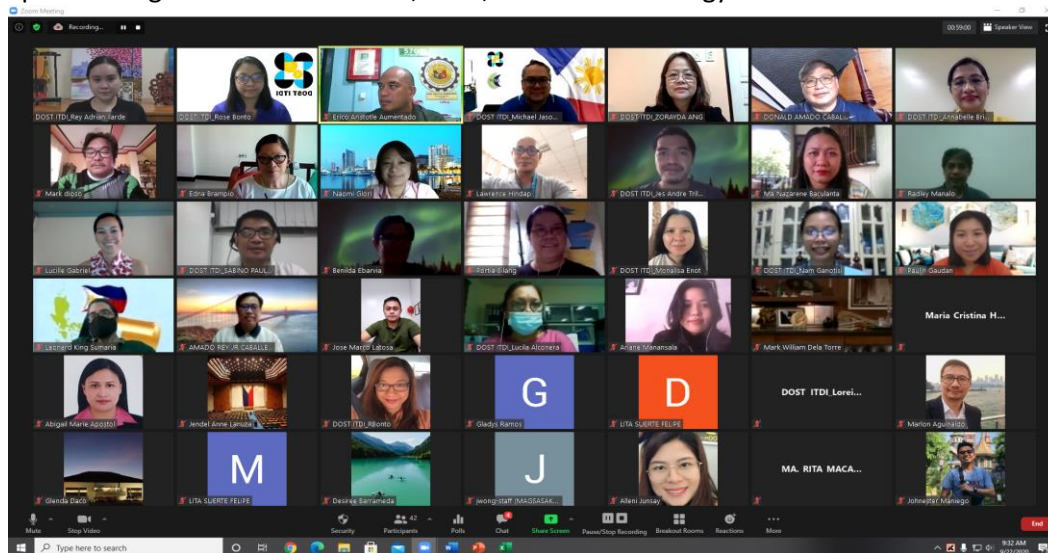


Conduct of Webinar Series on Metrology to Congress

As a continuous effort to ensure accurate and reliable measurement for the Filipinos amidst the pandemic, the National Metrology Laboratory (NML) in cooperation with the Department Legislative Liaison Office of the Department of Science and Technology, conducted a webinar series on metrology to lobby for the legislation of the National Measurement System (NMS) Bill.

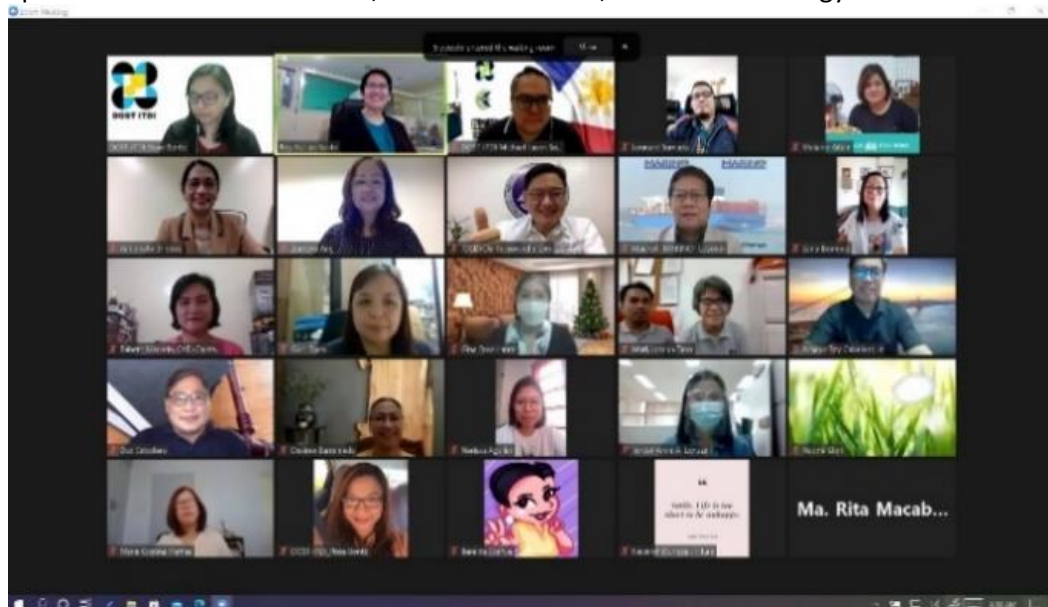
Webinar 1: Introduction to Metrology, September 22, 2020

Speaker: Engr. Loreibelle N. Abian, SRS I, National Metrology Division



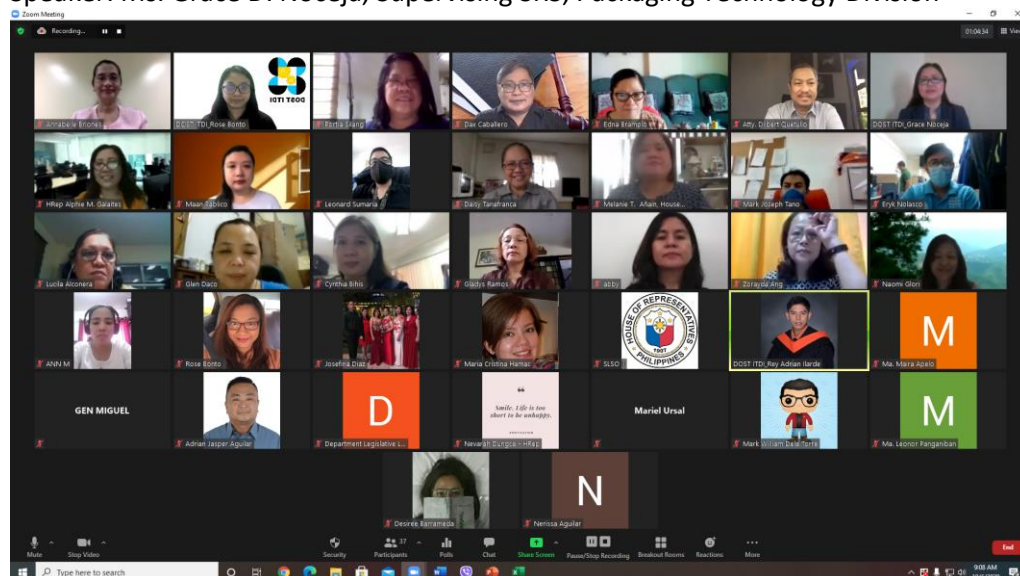
Webinar 2: Metrology-in-Chemistry, September 30, 2020

Speaker: Dr. Benilda S. Ebarvia, Assistant Scientist, National Metrology Division



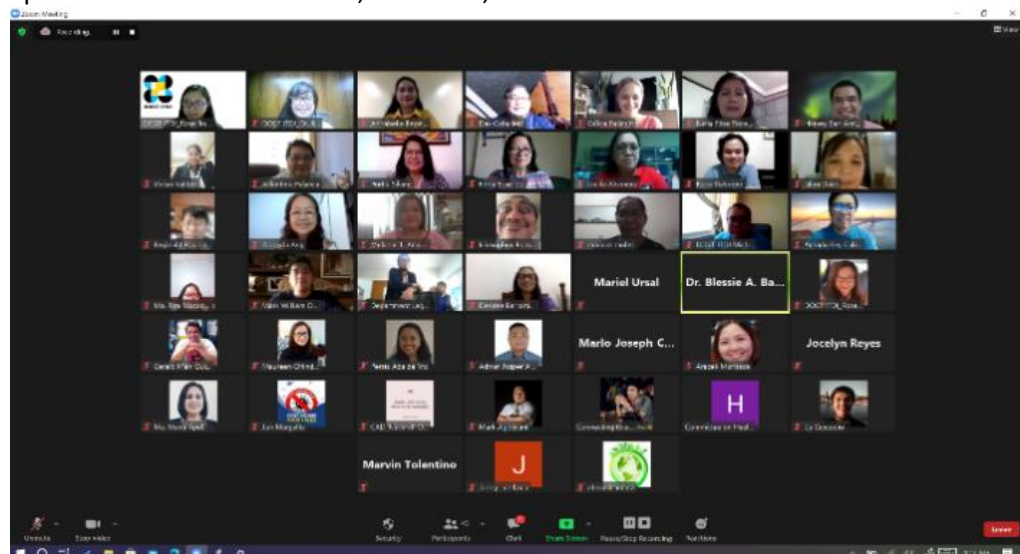
Webinar 3: Packaging Technology, October 6, 2020

Speaker: Ms. Grace D. Noceja, Supervising SRS, Packaging Technology Division



Webinar 4: Additive Manufacturing, October 13, 2020

Speaker: Dr. Blessie A. Basilia, Chief SRS, Materials Science Division



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. 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.

In addition, efforts shall be made to adopt regional and international standards such as the ASEAN Common Requirements for Prepackaged Products and ASEAN Nonautomatic Weighing Instruments Guidelines.

