SECTION 1 – Organisation and structure for metrology

Organisation Structures

Directorate of Metrology is a government institution which has responsibility in legal metrology activities in Indonesia. Its structure is under the Directorate General of Consumer Protection and Trade Compliance, Ministry of Trade of the Republic of Indonesia. The main roles of Directorate of Metrology are in preparing guidelines, norms, standards, procedures and in the field of legal metrology.

In conducting legal metrological services such as verification and in-service inspection, Directorate of Metrology is supported by local verification offices at regency/city level which is under local government.

Legislative Frameworks

The activity of legal metrology in Indonesia is based on, as following:
- Act 2/1981 on Legal Metrology
- Act 23/2014 on Local Government
- Technical regulations under Ministerial Decree, as following:
- Minister of Trade Decree No. 31/2011 on pre-packaged products;
- Minister of Trade Decree No. 69/2014 on Metrological Resource Management;
- Minister of Trade Decree No. 53/2016 on Permit for producing domestic measuring instruments;
- Minister of Trade Decree No. 78/2016 on Legal Metrology Unit;
- Minister of Trade Decree No. 26/2017 on Metrological Supervision;
- Minister of Trade Decree No. 74/2012 on Imported Measuring Instruments as amended by Minister of Trade Decree No. 23/2018 on Imported Measuring Instrument;
- Minister of Trade Decree No. 67/2018 on Measuring instruments subject to mandatory re/verification;
- Minister of Trade Decree No. 68/2018 on Initial Verification and Subsequent verification.
- Etc.

**International Arrangements and Engagement**

Indonesia through Directorate of Metrology is a member of Regional and International Organizations/For a, as following:
- Member state of *Organization Internationale de Metrologie Legale* (OIML)
- Full member of Asia Pacific Legal Metrology Forum (APLMF)
- Member of Working Group 3 on Legal Metrology of ASEAN Consultative Committee for Standard and Quality

Indonesia also engages with bilateral cooperation in the field of Metrology, as following:
- Timor Leste under South-South Cooperation and Triangulation

Indonesia also actively involves in training course both as trainers/host and participant as following activities:

**a. Trainers**
- Training course on verification of fuel Dispenser, 30 July – 2 August 2018, Dili, Timor Leste
- Training course on verification of NAWI, 7 – 10 August 2018, Dili, Timor Leste

**b. Participants**
- Training course on Type Approval for Non-Automatic Weighing Instruments and Water Meters, 7 – 11 May 2018, Sydney, Australia (self-funded)
- Training Course on the Verification of Non-Automatic Weighing Instruments Including Weighbridges, 2018, Sepang, Malaysia (PTB)
- Operational Planning Workshop for the Project "Metrology Enabling Developing Economies in the Asia Pacific, 2018, Hongkong (MEDEA)
- Training Curse on Verification Weighbridges, 2017, Beijing, China (APLMF)
- Modernizing National Metrological Infrastructure Workshop, 2017, Malaka, Malaysia
- Workshop MEDEA Train the Trainer Course on the Verification of Bulk Flow metering Systems Using a Master Meter, 2017, Pattaya, Thailand (PTB – APLMF)
- Training Course on Traceability in Rice Moisture Measurement, 2017, Sepang, Malaysia (APLMF)
- Training on Software Testing for Measuring Instruments for ASEAN Member States, 2017, Kuala Lumpur, Malaysia (PTB - NMI Malaysia)
SECTION 2 – Key activities of 2017/18

South-South Cooperation and Triangulation in the field of Legal Metrology
Cooperation between Indonesia and Timor Leste under the South-South Cooperation and Triangulation is one of successful effort from Indonesia to assist Timor Leste in developing the metrological infrastructure throughout capacity building. South-South Cooperation and Triangulation is a complimentary scheme underpinning North-South Cooperation, which put Middle Income Countries (MICs) as a vocal point in a new perspective architecture of aid for development effectiveness.

Key activities of South-South Cooperation and Triangulation done in 2018, as following:
- Focus Group Discussion on Development of Measurement Law of Timor Leste in 2017
- Training Course on Verification on Fuel Dispenser in 30 July - 2 August 2018 in Dili, Timor Leste
- Training Course on Verification on Non Automatic Weighing Instruments (NAWI) including Weighbridges in 7 – 10 August 2018 in Dili, Timor Leste
- National Seminar on Metrology "Engaging for global challenges: a pathway to improve metrological infrastructures for better national competitiveness" in 20 September 2018 in Dili, Timor Leste

Legal metrology activities at regency/city region
Since 2014, regarding to Act No. 23/2014 on Local Government, legal metrology activities are done by local government at regency/city level. The changing legal metrological structure has impacted to the establishment of local verification offices (LVO) at regency/city, which has a total 508 regency/city. Currently, there are 162 local government who has established local verification office and has performed verification activities. But, 2019 there will be an additional 288 local verification offices. The figure below illustrates the distribution of the local verification offices in Indonesia who has responsibility in verification and in-service inspection of measuring instruments.
Post Border Surveillance
Post border surveillance is a complimentary mechanism to control imported product, including measuring instrument products, entering Indonesia's border. It has been implemented since February 2018 with priority in nine entry gates of imported product such as three airports (Soekarno Hatta, Juanda and Kualanamu) and seven ports (Belawan, Tanjung Priok, Tanjung Mas, Tanjung Perak, Soekarno Hatta, and Dry Port Gikarang). Technically, the post border surveillance is done by verifying the required documents and conducting the on-site inspection if there is a nonconformity in fact based on the INATRADE which connected to INSW.
SECTION 3 – Future focus

Registered Verification Offices and development of e-learning

The current situation of legal verification officers in Indonesia has reached 1044 persons. This number will continuously increase in the next 1-2 years. Therefore, there is a necessary effort to address the issue as follows:

- How to control and to evaluate the performance
- How to increase their capability while there is an inadequate training facility.

In aiming to control the performance of the legal metrology officers distributed in all local verification offices, the concept of certification of verification officers is an option. Some APLMF members have implemented this scheme. It is an opportunity for Indonesia to learn from those members.

The second plan is to develop online training modules. Those materials will be upload in the website and served as self-learning materials. So that it can be used as an alternative learning process, in additional to the conventional learning process in the Indonesia Metrological Training Center. The APLMF Training modules posted in APLMF website can be used as a model to be translate into Bahasa for local used.

Legal Metrology Branding

Traditionally, legal metrology authorities’ performance measures have been based on the ability to provide an efficient response to ensure the fair trade in measurement. A result, the focus of the activities has been on the verification and surveillance of measuring instruments. In effect, the regular verification and surveillance of measuring instruments has provided both the need and justification for maintaining and increasing personnel and equipment to support effectively when legal metrological control is performed. This approach gives disadvantages not only in taking a long timespan but also high cost. Therefore, there is a need to have an alternative approach to increase the performance in providing consumer protection.

Increasing the public awareness of legal metrology can be a solution. In fact, very little attention and few resources have been allocated to dealing with the causes of law breaking or addressing community awareness. Therefore, in the next 1-2 years, Directorate of Metrology is planning to promote legal metrology to public, intensively, by, as following:

- Delivering a set of complex and interesting challenges for consumer protection sector with five strategic themes: 'Always measured”, “Improving Consumer Protection”, “Valuing Our People”, “Delivering Exceptional Service”, and "Working with Others"

Implementation to OIML Certification System

To support the local manufacturer, Directorate of Metrology will implement the OIML Certification System on following categories:

- OIML R137 – Gas Meter
- OIML R76 – Non-Automatic Weighing Instruments
- OIML R49 – Water Meter
Therefore, the training course conducted by APLMF in the field of type evaluation and approval is necessarily needed to underpin in improvement the ability of human resources.