APLMF ASIA-PACIFIC LEGAL METROLOGY FORUM

23rd APLMF Meeting
Tokyo, Japan

Economy Report

MALAYSIA

Instructions :

APLMF representatives are requested to use the structure outlined in this template to develop their Economy Report for the 23rd APLMF meeting (23-25 November 2016, in Tokyo, Japan). Member economies are not obligated to rigidly follow this template, but should endeavour to provide the type and level of information outlined in this document in structuring their Economy Report.

Economy Reports must be **completed and returned** to the Secretariat **by 20 October 2016** – this will provide sufficient time for the Secretariat to upload and circulate your report to attendees one month prior to the meeting. It is expected that all attendees will have looked over and considered the various economy reports prior to the Tokyo meeting.

Accordingly, as attendees will have considered your Economy Report, you will not be required to deliver a detailed presentation. Instead we ask you to identify the highlights in your Report, and provide in a short presentation. A 'presentation template' has not been developed by APLMF as the style of your talk will depend on the highlights you want to share with Forum members.

Presentations are expected to be no longer than 15 minutes in total, including setting aside up to 5 minutes at the end of your presentation to answer any follow-up questions from participants. Final **presentations** (with any speaking notes) are to be **provided to the Secretariat by 15 November** (to enable uploading).

NOTE: Remove the instruction boxes from your final document before submission

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SECTION 1 – Organisation and structure for metrology

Please provide a high-level outline of your economy's metrology structure/infrastructure. Outline any changes that have been made in terms of:

- *Institutions/agencies, personnel numbers and/or key appointments at those organisations, changes in functions/responsibilities*
- *Legislation that you operate under, and any legislative updates or case law that has altered the way you function*
- *International arrangements and engagement activities (eg signing of agreements, training attended / hosted,(including MEDEA training, and projects that you are engaged with international organisations or cross-border.)*

Suggested length 1-3 pages

Organisation Structures

The National Measurement System Act 2007 (NMSA) provides for the establishment of a National Measurement Standards Laboratory (NMSL) to realize, maintain or caused to be maintained national measurement standards (which include certified reference materials) for the purpose of providing national reference and traceability of units of measurements.

Upon the coming into force of the NMSA (15 February 2008) every measurement of a measurable quantity shall be expressed in units of measurements prescribed under the Act, and such measurement made for any written law shall be traceable to the national measurement standards, and if not so made the measurement shall be considered void.

Nevertheless, the NMSA does provide for traceability of measurement outside Malaysia if the establishment of traceability to national measurement standards is not possible or relevant. The source of traceability may be a measurement standards laboratory or a calibration laboratory in another country, which is recognized by the NMSL.

The National Metrology Institute National of Malaysia (NMIM) formerly known as Metrology Laboratory, SIRIM Berhad (NML-SIRIM) was appointed by the Minister (Ministry of Science, Technology and Innovation - MOSTI) as the NMSL by notification in the Gazette. With this appointment, NMIM has now been given the responsibility to realize, establish and maintain or cause to be maintained national measurement standards and the coordinated universal time. It shall disseminate units of measurements that are traceable to national measurement standards, carry out research and develop measurement technology and coordinate and promote the national measurement system. NMIM shall also assist the National Measurement Council on matters relating to measurement technology and measurement standards.

In carrying out its functions, NMIM is conferred powers of the NMSL such as to undertake international comparison of measurement standards, collaborate with other measurement laboratories and institutes of higher learning and represent Malaysia in international measurement activities. Such powers allow the NMSL to demonstrate the equivalence of Malaysia's national measurement standards and NMSL's measurement capability.
Figure 1 shows the National Measurement Infrastructure in Malaysia.

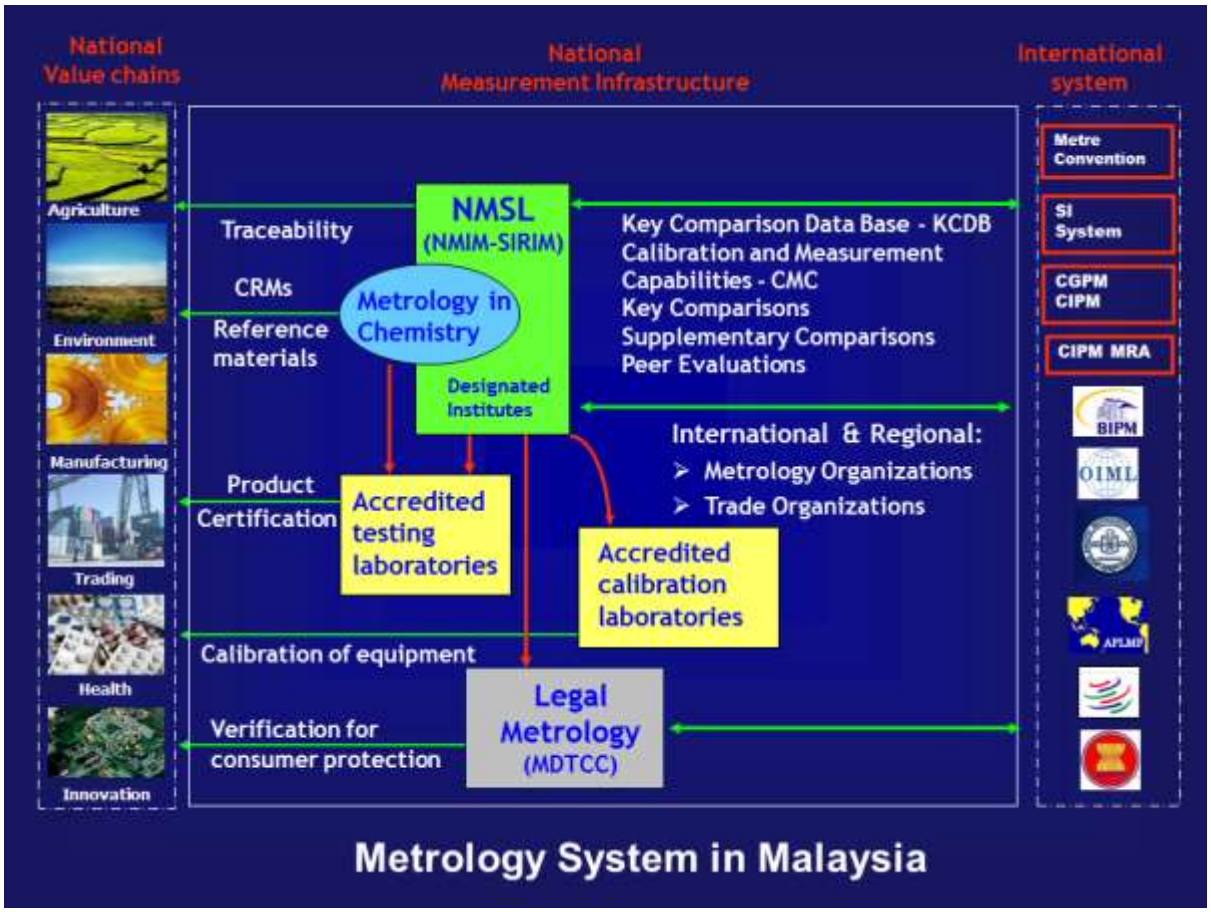

Figure 1: National Measurement Infrastructure

Legislative Frameworks

The NMSA provides the basis for establishing Malaysia's legislative infrastructure to ensure traceability of measurement to the International System of Units (SI) and establishes the national measurement system for Malaysia. The Act links measurement units used in Malaysia to the SI system and require that SI units be the only legal units in Malaysia. It provides for the realization, establishment, custody, maintenance, determination and reproduction of the Malaysian Standards. The Act sits above all legislations involved in measurements and require these legislations to be coherent in their approach to measurement traceability. The Act however contains no enforcement provisions and no penalties. These provisions come in the Acts and legislations concerning the respective field of measurements.

The NMSA takes account of Malaysia's present and future needs within the context of the international standards and conformance environment. It facilitates harmonization arrangements with other countries by structuring the Malaysian standards and conformance infrastructure such that it is consistent with internationally recognized protocol. As a signatory of the WTO TBT Agreement it is inevitable that Malaysia's standards and conformance infrastructure needs to fit into the global measurement system. This goes a long way towards promoting trade acceptance and attracting foreign investments.

Figure 2 shows the National Legislative Frameworks in Malaysia. The national measurement frameworks is well supported by Malaysia's membership and obligations with international organizations such as the International Bureau of Weights and Measures (BIPM), World Trade Organization (WTO), International Organization of Legal Metrology (OIML) and Asia Pacific Metrology Programme (APMP). There exists a comprehensive traceability system for all measurements whether for legal, scientific or industrial purpose which passes on accurate measurements to the various fields in the national value chain.

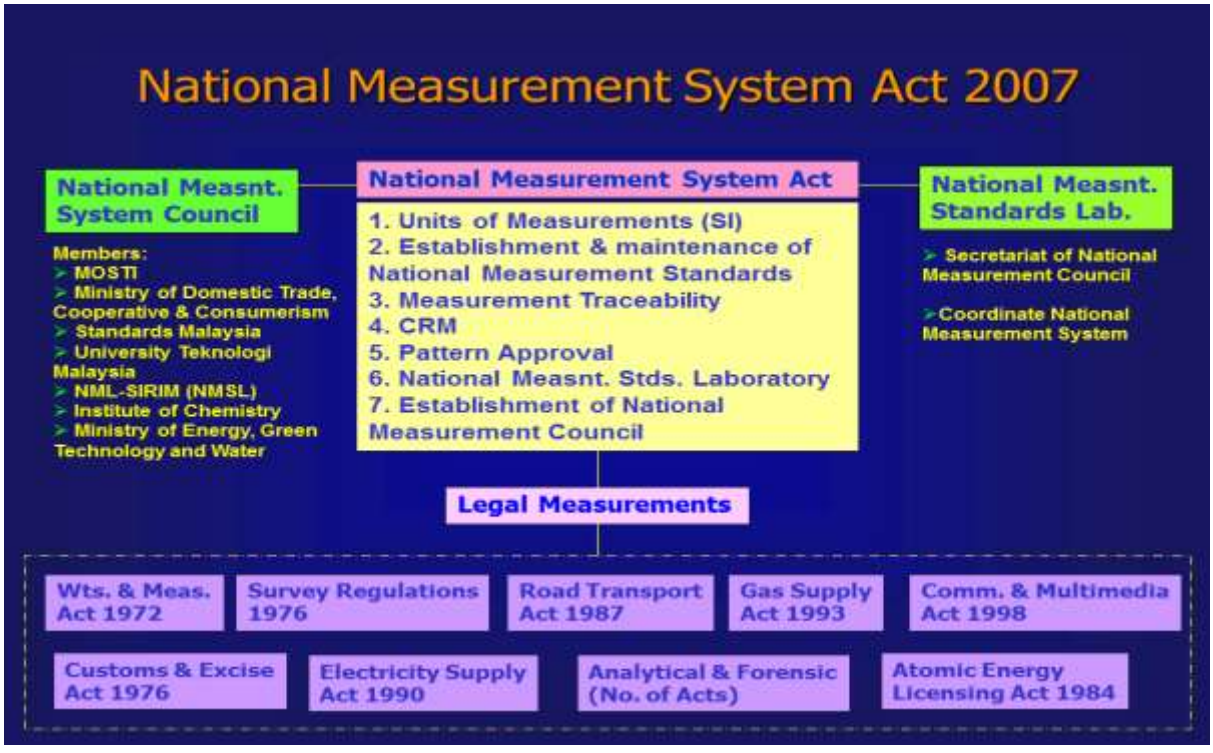

Figure 2: Legislative Frameworks

International arrangements and engagement

To date Malaysia is a signatory of the Metre Convention and CIPM MRA, a corresponding member of the International Legal Metrology Organization (OIML), and a full member of the Asia-Pacific Metrology Programme (APMP) and Asia-Pacific Legal Metrology Forum (APLMF). At the ASEAN level, it is the current Chair of the ASEAN Consultative Committee for Science and Quality (ACCSQ) and also the Chair of the ASEAN Consultative Committee for Science and Quality Working Group on Legal Metrology (ACCSQ-WG 3). Malaysia's participation in the CIPM MRA has enabled certificates of calibration issued by NMIM to be recognized by other national measurement standards laboratories outside Malaysia. It has also strengthened NMIM's power to recognize a certificate of any reference material issued by any person or body as provided in the Act.

SECTION 2 – Key activities of 2015/16

Outline the key activities that your organisation(s) have undertaken in your economy during the last year.

Key themes
It would be useful to group these activities in terms of key areas/themes, for example, activities that you have undertaken in relation to:

- *Supporting industry, with provision of training, inspection and enforcement, certification, promotions (eg World Metrology Day activities), any focus on key industry sectors (eg fuel, electrical, medical, transportation, manufacturing, etc), stakeholder engagement on legislation changes etc*
- *Protecting consumers, including promotional or awareness raising activities, enforcement actions, publications and any focus on key consumer groups (eg elderly, youth etc)*
- *Research or surveys that have had an impact on your work programme or enforcement activities*

Key projects:

Please also separately note any key projects that you have undertaken during the period. Provide a brief description of the project – what was the scope, what were you seeking to change, what were your targets or goals (outputs and outcomes).

Share any key learnings — what worked well, what did not, why the project was a success, how it could be improved, etc. Think about what aspects it would be useful for other member economies to know about, particularly if they were to undertake a similar project. Any key learnings should form part of the formal presentation of your Economy Report at the Tokyo meeting.

Suggested length 1-5 pages

Working with industry

The amendment to SOLAS Regulation VI/2, which states the requirement for verified gross mass of a container carrying cargo, will come into force on 1 st July 2016. All shippers are required to determine the method used for obtaining the accurate gross mass based on the guidelines given by MSC.1/Circ.1475 and to submit a complete company's registration application to Marine Department before 1 st June 2016. In the case of non-compliance to the requirement mentioned in paragraph-2, a packed container shall not be loaded onto a ship to which the SOLAS regulations apply.

Protecting consumers

The following photos shows a joint spot-check operation between MDTCC, Metrology Corporation of Malaysia (MCM) and Malaysia Palm Oil Board (MPOB) in ensuring accuracy of the verified weighbridges used in palm oil industries are well within MPE, at the same time to check any possibility of manipulation that might took place.

The following 2 photos show an example of MDTCC's mobile customer service counter which was temporarily opened at few selected remote area (within certain period of time) to receive any complaints from consumers regarding to trade related matters such as short-weighing etc. This counter also provides information and consultation services to the consumers about their rights; complete with suitable weighing instruments for comparison purposes of what they have purchased.

Major projects - What we did and what we learned

AMMENDMENT OF WEIGHTS AND MEASURES ACT – ACT 71
Amendment of the Act is expected to be tabled in the parliament in March 2017

NEW REGULATED INSTRUMENTS
Additional regulations will be introduced in the Weights and Measures Act in 2017, where rice moisture and tyre pressure measurements will be included. On top of that, egg grading machine will also be regulated, based on its measured weight - with reference to the existing Malaysia Standards on egg grading.

REAR SIDE MARKING FOR COMMERCIAL VEHICLES

COMMERCIAL VEHICLE REAR AND SIDE MARKINGS

The rear and side markings are to enhance visibility and assist motorists in the early detection and identification of trucks and lorries. Laws require vehicles in the transportation industry to be marked with conspicuity material.

With **MS 828:2011** compliant conspicuity marking tapes, you can quickly install and get your truck to comply with the

WHAT IS MS828:2011

MS 828:2011 is the Malaysian Standard that specifies requirements for retro-reflective markings on the rear and sides of heavy goods vehicles. The requirements include design, colorimetric, photometric and mechanical properties. The retro-reflective markings must carry the “MS 828:2011 SIRIM logo mark” which means the tape complies to the standard.

Automated Enforcement System (AES)

The installation of another 1,200 Automated Enforcement System (AES) cameras at highways nationwide should not be viewed as a measure to educate motorists to obey traffic rules.Research conducted by Malaysian Institute of Road Safety Research (MIROS) in 2014 showed that the 14 AES cameras have proven to be effective in reducing road fatalities due to speeding and running a red light.

According to the institute's findings, there was a 87.6 per cent reduction in red light running violations after the cameras were installed at certain traffic light junctions. Installing more AES cameras at strategic locations would discourage motorists from speeding throughout the whole stretch of the highways concerned. Usually, when motorists enter the camera zone, they tend to slow down and then speed once past the zone. But they won't be able to do that after more cameras are installed.

The AES camera could hardly be considered as a "trap" because it was easily visible and there were ample signboards to alert motorists.View of reports that Malaysia has one of the highest number of road accidents in the world, it has to implement effective measures to bring down the accident and fatality rates. The system had worked well in several developed countries in Europe, as well as Australia and the United States. Globally, more than 90 countries have been using the AES since the late 1970s.

SECTION 3 – Future focus

Outline what issues or activities are on the horizon for your economy, for example:

- *legislation in the pipeline or in early stages of development*
- *major engagement or collaboration with industry, or other economies or organisations*
- *specific focus on improving capability in industry or organisation*
- *new safety requirements that may impact on industry, consumers or trade*
- *new testing regimes to be introduced.*

Outline any emerging issues that you think could be challenging, or require new structures, additional funding, research etc. These issues could be emerging areas of concern relating to new technologies or new practices/ products that are not currently monitored, or emerging public pressure in your economy for greater enforcement in particular areas (eg food or product safety concerns). It would be helpful to outline where you think international cooperation and collaboration with APLMF could assist in addressing these challenges and issues.

Suggested length (1-3 pages)

New initiatives planned (next 1-2 years)

E-Repairer

We are in the final stage of introducing a new system so called E-Repairer to track the status of all regulated measuring instruments under Weights and Measures Act. This system will be able to track detailed information about the instruments such as name-model-serial number-class of instrument, owner of instrument, verification date and verification due date.

Emerging issues – challenges and opportunities

Verification / Software Examination

We are still having a problem related to verification of softwares used in regulated measuring instruments especially for weighbridges, which we suspect that the most manipulations are happening in our country. Therefore we are looking forward towards capacity building in this field through training programs offered by any institutions or authorities outside Malaysia which is the best solution to effectively reduce manipulations.