  

**MEDEA: “Metrology – Enabling Developing Economies in Asia”**

**Training Course on the Verification of Non-automatic Weighing Instruments including Weighbridges**

**8–11** **May 2018** **at NMIM, Sepang, Malaysia**

Introduction

Accurate measurement in the marketplace is an important component of an economies’ metrological system and is closely linked to quality of life. APLMF has conducted training courses on non-automatic weighing instruments (NAWIs) for the past 20 years in order to support developing economies to implement harmonized verification procedures to ensure consumers and vendors are benefiting equally from a sound measurement infrastructure that inspires confidence and trust within the community.

Objective

This program is designed for people who verify NAWI including shop scales and weighbridges. Participants will learn how to verify these instruments in accordance with OIML recommendations. All participants are expected to have previous practical experience in the field. This training is composed of lectures and practical activities. The lectures will outline the test procedures and the reference standards of measurement used to ensure they are operating correctly within the maximum permissible error. The practical component will provide an opportunity for participants to demonstrate their ability to test a NAWI in accordance with OIML recommendations. In the case of weighbridges participants will observe a weighbridge being verified using NMIM’s unique facility especially constructed for delivering training.

This course provides participants with the knowledge and skills to:

* understand the role of trade measurement within an economy
* identify the major components of a NAWI
* analyse the NAWI operating environment to determine how it could impact on its performance
* identify sources of any possible operational error
* verify a NAWI in accordance with the test procedures and workplace health and safety guidelines

**Organiers:**

1. Physikalisch-Technische Bundesanstalt (PTB), Germany
2. Asia-Pacific Legal Metrology Forum (APLMF)

**Supporting Organizations:**

1. National Measurement Institute, Malaysia (NMI,M)
2. National Measurement Institute, Australia (NMI,A)

**Trainers:**

1. Mr Matthew Lux, NMI,A
2. Ms. Suhaidah Amizam, NMI,M
3. Mr. Muhammad Fadhil Sahrom, NMI,M
4. Mr. Kiveen Suycano, National Metrology Laboratory of the Philippines

**Guest Speaker**

1. Mr. Peter J.Berinus Agang, Principal Assistant Director, Ministry of Domestic Trade Co-Operatives and Consumerism

2. Mettler Toledo (M) Sdn Bhd

**Venue and Accommodation:**

* + Training will take place at the hotel and the National Metrology Institute of Malaysia ,(NNIM). Accommodation for overseas participants will be organised in the Nilai Springs Hotel. The hotel will be booked and paid directly by PTB.
  + A transfer will be organised to take you from the airport in Kuala Lumpur to your hotel. The driver will wait at the exit of the baggage claim area. Please look for a placard with PTB, NMIM & APLMF logo at the **Airport Taxi counter** after baggage claim point. This is just before you exit customs. The cost of the transfer will be covered by PTB.
  + If you need a visa to enter Malaysia, fill the attached **“Visa Assistance Form”** and send it to the **host in Malaysia** by **31 March, 2018.**

# PTB Support:

**Up to two overseas participants from each developing economy in Asia** will receive an economy return flight ticket, free accommodation, free airport transfer and full board at the hotel. Participants from economies classified as developing countries under the OECD Development Co-operation Directorate (ODCD-DAC)[[1]](#footnote-1) are eligible.

Flight tickets will be booked directly by PTB (please contact Anna Höpfner). The hotel will be paid by PTB.

# Registration:

Please complete the attached “[**Nomination Form**”](http://www.aplmf.org/uploads/5/7/4/7/57472539/medea_nomination_form_fuel_dispensers_2016_v4.docx) and send it to the APLMF Secretariat and Anna Höpfner by **15 March, 2018**.

# Currency and Credit Cards:

The official currency is Ringgit (MYR). Most credit cards (Visa, Master Card, etc.) are accepted in Hotels and big department stores. The exchange rate for 1 USD is around MYR 3.9.

**Climate:**

The average temperature range is about 32-34°C in May in Kuala Lumpur.

**Electricity supply:**

Voltage of power supply is 220 volts AC with 50 Hz. The power plug used in Malaysia are 3 pin plugs of type G (or BF).



Plug and socket of Type G (or BF)

**Local Time:**

GMT +8

# Contact Persons:

* + **APLMF Secretariat**

C/- Trading Standards

Ministry of Business, Innovation & Employment (MBIE)

PO Box 1473, Wellington 6140, New Zealand

Telephone: 0064-4-4601367

Ms. Alli Smith

E-mail: [APLMF.Secretariat@mbie.govt.nz](mailto:APLMF.Secretariat@mbie.govt.nz)

* + **PTB Contact Person:**

Ms. Anne Hoepfner **(Registration, Flights, Hotel Reservations)**

Bundesallee 100, 38116 Braunschweig, Germany

Tel: +49 531 592 8218

E-mail: [Anne.Hoepfner@ptb.de](mailto:Anne.Hoepfner@ptb.de)

* **Host in Malaysia (visa assistance, venue and accommodation)**

Mr. Zainal Hj. Mustapa

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Selangor, Malaysia

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**Training Course on the Verification of Non-automatic Weighing Instruments (NAWI) including Weighbridges**

**8–11 May 2018** **at NMIM, Sepang, Malaysia**

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| **Tuesday 8 May Venue: Nilai Springs Hotel** | | |
| **Time** | **Details** | **Presenter** |
| 08:30 – 09:00 | Registration | Host |
| 09:00 – 09:40 | Welcoming address from the host economy  Opening ceremony (APLMF Secretariat)  Group photo taking | APLMF and Host |
| 09:40 – 10:00 | Introduction | APLMF and Host |
| 10:00 – 10:45 | Overview of the course  Review how NAWI are verified within the region | All |
| 10:45 – 11:15 | ***Coffee Break*** |  |
| 11:15 – 12:00 | Legal Metrology System in Malaysia | Mr. Peter J. Berinus Agang, MTDCC |
| 12:00 – 12:45 | Issues and matters related to NAWI (Weighbridge) | Ms. Suhaidah Amizam, NMIM |
| 12.45 – 14.30 | ***Lunch*** |  |
| 14:30 – 15:30 | Traceability | Mr. Muhammad Fadhil Sahrom, NMIM |
| 15:30 – 16:00 | ***Coffee break*** |  |
| 16:00 – 17:00 | Overview of ASEAN Guidelines of Non-Automatic Weighing Instruments | Ms. Suhaidah Amizam, NMIM |
| 18:00 – 17:00 | Welcome dinner at Putrajaya | All & Invited Guest |
| **Wednesday 9 May Venue: Nilai Springs Hotel** | | |
| **Time** | **Details** | **Presenter** |
| 9:00 – 10:45 | Construction of NAWI / weighbridges | Mr. Muhammad Fadhil Sahrom, NMIM |
| 10:45 – 11:15 | ***Coffee Break*** |  |
| 11:15 –12.45 | Calculating Maximum Permissible Error | Ms. Suhaidah Amizam, NMIM |
| 12:45 – 14:30 | ***Lunch*** |  |
| 14:30 –15:30 | Test Procedures (Visual inspection, Repeatability, Eccentricity) | Mr. Kiveen Suycano, NMLP |
| 15:30 – 16:00 | ***Coffee break*** |  |
| 16:00 – 17:00 | Test Procedures (Accuracy of Zero, Discrimination, Weighing Test) | Mr. Kiveen Suycano, NMLP |
| **Thursday 10 May Venue: NMIM, SIRIM** | | |
| **Time** | **Details** | **Presenter** |
| 9:00 – 10:30 | Weighing Test using Substitution Material, Calculating the actual weight of the substitution load | Mr. Kiveen Suycano, NMLP |
| 10:30 – 11:00 | ***Coffee Break*** |  |
| 11:00 – 12:30 | Observation of platform scales (1 000 kg) being verified | All Trainers |
| 12:30 – 14:30 | ***Lunch*** |  |
| 14:30 – 15:30 | Observation of weighbridge being verified | All Trainers |
| 15:30 – 16:00 | ***Coffee Break*** |  |
| 16:00 – 17:00 | Cont… Observation of weighbridge being verified | All Trainers |
| **Friday 11 May Venue: Nilai Springs Hotel** | | |
| **Time** | **Details** | **Presenter** |
| 9:00 – 10:00 | Group 1 presentations – Discussion and feedback | Participants |
| 10:00 – 10:30 | ***Coffee Break*** |  |
| 10:30 – 11:30 | Group 2 presentations – Discussion and feedback | Participants |
| 11:30 – 12:30 | Group 3 presentations – Discussion and feedback |  |
| 12:30 – 13:30 | ***Lunch*** | Participants |
| 13:30 – 14:30 | Group 4 presentations – Discussion and feedback |  |
| 14:30 – 15:00 | ***Coffee Break*** | Participants |
| 15:00 – 16:30 | Presentation of action plans | APLMF |
| 16:30 – 17:00 | Closing Ceremony | APLMF and Host |
| 18:00 – 17:00 | Farewell dinner | All & Invited Guest |

1. see <http://www.oecd.org/dac/stats/daclist.htm>. [↑](#footnote-ref-1)