MEDEA: “Metrology – Enabling Developing Economies in Asia”

Training Course on the Verification of Fuel Dispensers
11 to 13 July 2016 in Pattaya City, Thailand

Introduction
Accurate measurement of fuel dispensers is an important area of measurement in an economies’ metrological system and is closely linked to quality of life. The APLMF has been conducting training courses on the verification of fuel dispensers 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 fuel dispensers or who have a responsibility for ensuring that fuel dispensers are verified in accordance with OIML recommendations. All participants are expected to have had 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 test a fuel dispenser to ensure it is operating correctly and delivering fuel within the maximum permissible error. The practical component will include a demonstration of how to test a fuel dispenser in the field and provide an opportunity for participants to demonstrate their ability to test a fuel dispenser in accordance with OIML recommendations.

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 fuel dispenser
- analyse the fuel dispenser's operating environment to determine how it could impact on its performance
- identify sources of any possible operational error
- verify a fuel dispenser in accordance with the test procedures and workplace health and safety guidelines
Organizers:
1. Physikalisch-Technische Bundesanstalt (PTB)
2. Asia-Pacific Legal Metrology Forum (APLMF)

Supporting Organizations:
1. Department of Internal Trade (DIT), Ministry of Commerce, Thailand
2. National Measurement Institute, Australia

Trainers:
1. Ms Pisakorn Pisankul, Bureau of Weights and Measures, Thailand
2. Mr Nopporn Choopol, Bureau of Weights and Measures, Thailand
3. Mr Jose Marco Latosa, Industrial Technology Development Institute, Philippines
4. Mr Samrach Muy, National Metrology Center, Cambodia
5. Mr Brad Larter, National Measurement Institute, Australia

Venue and Accommodation:
- Pattaya City is located 130 km south of Bangkok. Accommodation for overseas participants will be organised in the Holiday Inn, Pattaya. The hotel will be booked and paid directly by PTB.
- To access the venue, you will need to take the airport limousine to transfer to the hotel. The cost of the transfer will be covered by PTB. If you need a visa to enter Thailand, fill the attached “Visa Assistance Form” and send it to the host in Thailand by May 8th, 2016.

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 a daily allowance. Participants from economies classified as developing countries under the OECD Development Co-operation Directorate (ODCD-DAC)¹ are eligible. Only participants from institutions that have participated in the Regional Capability Survey² are eligible.

Flight tickets will be booked by PTB (please contact Stefanie Scheschinski). The hotel will be paid directly by PTB. Participants will receive a daily allowance paid in cash during the workshop.

² Only economies that submitted the Regional Capability Survey are eligible to receive funding by the MEDEA project.
**Presentation from each economy:**
At least one participant from each economy is required to provide a brief presentation about the legal metrology system on the verification of fuel dispensers in their economy. A guide on what to include in your presentation are shown below:

- Who you are and what your role is within your economy
- Explain about your organization and department
- Describe your professional experience in the area of verification of measuring instruments
- Outline the legal metrology system used to control fuel dispenser in your economy
- What is the current situation in your economy about the compliance to the international standards
- Describe any problems or issues you have in order to implement the legal metrology system

**Registration:**
Please complete the attached "Nomination Form" and send it to the APLMF Secretariat and Stefanie Scheschinski by April 10th, 2016.

**Currency and Credit Cards:**
The local currency is Baht. Major credit cards (Visa, Master Card, etc) are accepted in Hotels and big department stores. The exchange rate for 1 USD is about 31 Baht.

**Climate:**
The average temperature is about 35°C in June in Pattaya

**Electricity Supply:**
Voltage is 220-240 volts AC, 50/60 cycles per second. The power plugs used in Thailand are 2 pin Power plugs.

**Local Time:**
GMT +7
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

PTB Contact Person:
Ms. Stefanie Scheschinski (Registration, Flights, Hotel Reservations)
Bundesallee 100, 38116 Braunschweig, Germany
Tel: +49 531 592 8218
E-mail: stefanie.scheschinski@ptb.de

Host in Thailand (Visa assistance, Venue and access information)
Mr. Sakchai Hasamin
Weights and Measures Bureau
Department of Internal Trade, Ministry of Commerce
563 Nonthaburi 1 Rd., Tambol Bangkrasor, Amphoe Muang,
Nonthaburi 11000, Thailand
Tel: +66-2547-4357, Fax: +66-2547-4356
E-mail: sakchai.h@dit.mail.go.th
## Training Course on the Verification of Fuel Dispensers
### 11-13 July 2016
### Pattaya, Thailand

### Monday 11 July
**Venue:** Holiday Inn Pattaya

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<tr>
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<tr>
<td>08:30 – 09:00</td>
<td>Registration</td>
<td>Host</td>
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| 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  
Economy reports - explains how fuel dispensers are verified in each economy | APLMF and a trainee from each economy |
| 10:45 – 11:15 | **Coffee Break**                                                      |                                |
| 11:15 – 12:30 | Economy reports continue                                               | APLMF and a trainee from each economy |
| 12:30 – 14:00 | Lunch break                                                           |                                |
| 14:00 – 15:30 | Working safely with petroleum products  
Construction of a fuel dispenser               |                                |
| 15:30 – 16:00 | **Coffee Break**                                                      |                                |
| 16:00 – 17:00 | Traceability                                                          |                                |
| 18:00 – 20:00 | **Welcome dinner**                                                    | Host                           |

### Tuesday 12 July
**Venue:** Holiday Inn Pattaya

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| 9:00 – 10:30 | Preparation for testing  
Equipment for testing petrol and diesel                                      |                                |
| 10:30 – 11:00 | **Coffee Break**                                                      |                                |
| 11:00 – 12:30 | Visual Inspection  
Functional Tests                                                 |                                |
| 12:30 – 14:00 | Lunch                                                                  |                                |
| 14:00 – 15:30 | Performance Tests                                                      |                                |
| 15:30 – 16:00 | **Coffee Break**                                                      |                                |
| 16:00 – 17:00 | Question and answer session                                            | All trainers                   |

### Wednesday 13 July
**Venue:** A Petrol Station

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<tr>
<td>8:30</td>
<td>Travel to the training venue</td>
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| 9:00 – 10:30 | Observe demonstration of individual tests  
Group discussion of procedures                                  |                                |
| 10:30 – 11:00 | **Coffee Break**                                                      |                                |
| 11:00 – 12:30 | Students practice technique in small groups  
Participants work together to answer test questions       |                                |
| 12:30 – 14:00 | Lunch                                                                  |                                |
| 14:00 – 15:30 | Each student demonstrates the procedure of testing a fuel dispenser.  
Participants work together to answer test questions       | All trainers                   |
| 15:30 – 16:00 | **Coffee Break**                                                      |                                |
| 16:00 – 17:00 | Discussion of test question answers                                    | All trainers                   |