SECTION 1 – Details of the membership of the Working Group

The role of Training Coordination is now part of the Secretariat. The work is discussed at the Secretariat’s monthly catch-up meetings to ensure the team is informed and understands their responsibilities with respect to training delivery.

This report provides a summary of the training delivered by APLMF since the 24th APLMF meeting held in Siem Reap, Cambodia on 25-27 October 2017 and an update on the MEDEA 2 project from the perspective of the MEDEA Coordination Committee.

At the 24th APLMF meeting members agreed to deliver the following training courses as part of the MEDEA project sponsored by PTB.

<table>
<thead>
<tr>
<th>Course</th>
<th>Venue/host</th>
<th>Trainers</th>
<th>Delivery dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepackaged goods</td>
<td>China</td>
<td>New Zealand</td>
<td>10-13 April 2018</td>
</tr>
<tr>
<td>OPTC-MEDEA</td>
<td></td>
<td>Guest speaker</td>
<td></td>
</tr>
</tbody>
</table>
Training Coordination

<table>
<thead>
<tr>
<th>Training Activity</th>
<th>Location</th>
<th>Country</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verification of NAWI including weighbridges</td>
<td>Sepang, Malaysia</td>
<td>Australia and Malaysia</td>
<td>8-11 May 2018</td>
</tr>
<tr>
<td>Specialist training for WG on QMAP</td>
<td>CBWM, Nonthaburi</td>
<td>Thailand and Japan</td>
<td>3-6 July 2018</td>
</tr>
<tr>
<td>NAWI eLearning</td>
<td>online</td>
<td>Secretariat</td>
<td>November 2018</td>
</tr>
<tr>
<td>Verification of rice moisture meters</td>
<td>Pattaya, Thailand</td>
<td>Thailand</td>
<td>3-7 December 2018</td>
</tr>
<tr>
<td>Pattern approval and verification of water meters</td>
<td>Sepang, Malaysia</td>
<td>Malaysia</td>
<td>2019</td>
</tr>
</tbody>
</table>

The first three training courses have been delivered and a report is available on the website under Training and Development>Medea Training Program. The first online module will be shown to members during the 25th APLMF forum meeting. The QMAP WG met in July to transfer the responsibility for this WG. Additional members were also inducted into the WG during that meeting. A Rice Moisture training course has been advertised for December 2018.

The German Ministry has approved 1.3 Million EUR for a MEDEA 2 project which will run from May 2018 to April 2021. The objective of the project is to strengthen the regional specialist metrology networks, APMP and APLMF, in their capacity to support their members - especially those from the developing economies. Three interventions to achieve this objective were identified as: "Sustainable regional cooperation", "Regional cooperation instruments" and "Technical Training".

The MEDEA 2 Planning Workshop was held in Hong Kong on 4-5 July 2018. The purpose of this workshop was to identify where best to provide support for developing economies. Directors representing scientific and legal metrology from all economies in the region were invited to participate in a highly interactive planning workshop. 32 participants from 19 developing economies made suggestions and voted on those that would best support their economy's development.

This workshop provided everyone with the opportunity to:

- Share understanding of the objectives, outputs and indicators of the MEDEA 2 Project
- Share ideas and have a common understanding of what is meant by sustainability
- Develop an operational plan for the MEDEA 2 project period 2018-2021
- Have a shared understanding of a new methodology called CABUREK (Capacity Building in Technical and Scientific Organizations Using Regional Experience and Knowledge) and identify topics to work on using the methodology.

To drive intervention 1 - Sustainable Regional Cooperation we will:

- Strengthen the Working Groups to ensure they have representatives from developing economies and are delivering appropriate support
- Deliver online training and a knowledge management system
- Develop a sound monitoring and evaluations system
- Publicise case studies that promote the value of legal metrology

To drive intervention 2 - Regional Cooperation Instruments we will:

- Implement the CABUREK tool which will focus on raising awareness of legal metrology issues with developing economies and market surveillance. CABUREK will support teams who will lead projects within their own economies but will come together to share experiences and to learn from experts and coaches.
• Identify and support regional trainers from developing economies who will then be available to deliver training to less developed economies

To drive intervention 3 - Technical Training we will deliver courses and create guide documents on the:

• Verification of NAWI including weighbridges
• Verification of rice moisture meters
• Pattern approval and verification of utility meters (water, gas and electricity)
• Verification of belt weighers (automatic weighing)
• Software verification
• OIML certification system

The indicators which will show success are as follows:

• We have published case studies showing how APLMF is integrating and supporting developing economies.
• Our Working Groups have at least six new members from the Developing Economies.
• Three additional regional experts from developing economies have delivered at least one training course in a new topic.
• The CABUREK tool has been implemented in the region.
• Publication of five new guide documents outlining suitable test procedures for the verification of different instrument types.
• At least seven (APLMF and APMP) training programs delivered each year.

The MEDEA 2 Coordination Committee (CC) has started to meet to plan how best to deliver this comprehensive program. Your representatives on the CC are:

• Marian Haire APLMF Training Coordinator
• Stephen O’Brien, President APLMF
• Haslina Binti Abdul Kadir, NMIM, Malaysia

The full report of the planning workshop can be found here.

The Technical Committee overseeing CABUREK will have two people responsible for monitoring progress of the various projects. They will be Abdul Rashid Zainal Abidin from Malaysia and Marian Haire representing APLMF.

A key feature of this year’s work is to support the establishment of working groups that have strong representation from developing economies. The new chair and co-chair of the Quality Measurements of Agricultural Products have established a new working group and have strategies in place to ensure all members are contributing to the delivery of training across the region. In preparation for the December course they are holding a 2-day pre-meeting to ensure they are capable of preparing the standard reference materials required to conduct this training. They are keen to ensure each member economy in the region is supported so they can implement a suitable measurement infrastructure in their own economy.

A survey was conducted on the test procedures for Non-Automatic Weighing Instruments (NAWI) including weighbridges. An updated survey for prepackages has also been developed and distributed in October 2018. Once results of both these surveys are collated then these test procedures will be uploaded to Guide 7 on the APLMF website. It is important that all economies provide feedback on these test procedures, so we can be sure they represent our practice within the region.

The following additional test procedures were added to APLMF Guide 7 after economies returned their survey results:
• Verification of NAWI (without weighbridges)
• Verification of rice moisture meters
• Verification of taxi meters
• Verification of bulk flowmeters
• Verification of domestic water meters.

Guide 7 provides economies with an excellent reference to assist them when they are determining how they will implement verification in the field.

SECTION 3 – Future focus – Recommendations

With the development of on-line training there will be less face to face training taking place. Online training is meant to provide economies with the basics. By using online more staff can be trained. The next step in the development of on-line training materials is to establish small working groups who will develop the materials using the NAWI module as a template. Since the initial topics fall under the scope of the metrological control WG we will be seeking new members for this WG who can take on this work. Please consider if you have a staff member who would be willing to participate in this work. The work will be completed during the life of the MEDEA 2 project.

The table below sets out the list of training courses that have been approved as part of the MEDEA 2 project. Please come to the meeting with ideas about how your economy can contribute or suggest ways you need to be supported. Host and trainers will need to be identified.

<table>
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<th>Trainers</th>
<th>Delivery dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pattern approval and verification of water meters</td>
<td>Sepang, Malaysia</td>
<td>Malaysia</td>
<td>2019</td>
</tr>
<tr>
<td>Pattern approval and verification of electricity meters</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pattern approval and verification of gas meters</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verification of rice moisture meters</td>
<td></td>
<td></td>
<td>2019 2020</td>
</tr>
<tr>
<td>Verification of belt weighers</td>
<td></td>
<td></td>
<td>2019</td>
</tr>
<tr>
<td>Software verification of measuring instruments</td>
<td></td>
<td></td>
<td>2019 2020</td>
</tr>
<tr>
<td>Type Approval using OIML CS</td>
<td></td>
<td></td>
<td>2019</td>
</tr>
</tbody>
</table>

SECTION 4 – Future focus – emerging issues

OIML has initiated a regional pilot training centre (OPTC) in our region which is currently being organised by China. APLMF has agreed to deliver one course each year in partnership with the OPTC. For 2019 the obvious joint program would be the Type Approval using OIML CS. Please be prepared to explain what you want this training to deliver.