



**27th ASIA-PACIFIC LEGAL
METROLOGY FORUM
ONLINE MEETINGS
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Working Group Report - 2020

APLMF Secretariat Training Coordinator Report - 2020

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SECTION 1 – Overview of the Training Coordinator's role

Training Coordination is an important responsibility within the Secretariat team. The work is discussed at the Secretariat's monthly catch-up meetings to ensure the team is informed and understand their responsibilities with respect to training delivery.

The Training Coordinator represents APLMF on the Coordination Committee that manages the implementation of MEDEA 2 and is a member of the Technical Committee that manages the implementation of CABUREK.

SECTION 2 – Key activities of 2019/20

This report provides a summary of the training activity conducted by APLMF since the 26th APLMF meeting held in Ha Long City, Vietnam on 6-8 November 2019 and an update on the MEDEA 2 project from the perspective of the MEDEA Coordination Committee. In addition, progress on the MEDEA 3 proposal will be discussed. Due to the disruptions caused by the COVID-19 pandemic face to face training courses are being replaced by online training for the foreseeable future. The Working Group Chairs are busy working to develop new ways of presenting training.

In June via the MEDEA 2 programme a joint APLMF/APMP webinar was presented by Laurie Winkless on developing great Case Studies. This was very successfully run with around 70 participants. The presentation was live streamed with Slido used to compile questions from the participants. This workshop was run in conjunction with the APMP mid-year meeting. It was deemed a success and planning is underway to provide a follow-up on-line session in 2021.

As part of MEDEA 2 intervention 1 - Sustainable Regional Cooperation we agreed to:

- 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

It is worthwhile to see what progress we have made against the goals for intervention 1.

Strengthening the Working Groups

The Working Groups continue to meet regularly. They are all looking to achieve some success with their work programmes. All WGs have met and have made some progress. Despite the setbacks caused by COVID 19 significant progress has been made by the following WGs:

- QMAP: produced a draft of their meter to meter comparison method for the verification of rice moisture meters. It is an excellent document and will be distributed for comment in early 2021. It will be published as an addendum to Guide 6: Guide on Rice Moisture Meters.
- PPG: produced a draft of the test procedures for their eLearning module and have planned an online training course to be delivered in March 2021
- Utility meters: decided their focus for eLearning will be electricity meters and they also plan to deliver an online electricity course in 2021
- NAWI: has completed the test procedures for their module on eLearning for spring scales and weighbridges. They are now working on the animations
- OIML CS: conducted a survey regarding the uptake of the OIML CS system

- MCS: developed a scholarship system for 2 metrologists to spend 3 weeks in China

eLearning Modules

Our first eLearning module, NAWI, is complete. PTB have agreed to host it on their Learning Management System (LMS) as OIML cannot support us at this time. We have invited developing economies to participate in a pilot, so we can test our processes before rolling it out for general use. Approximately 20 participants completed the module during the period 26 October – 6 November. The LMS awards a badge to participants who successfully complete all the sections within the module and get the correct answers to all the assessment questions.

Australia has prepared a fuel dispenser eLearning module and a pilot has also been initiated. This module will be hosted on the Australia's LMS.

The WG Chairs continue to work with their members to develop eLearning modules. Several WGs have made good progress but all have discovered it takes longer to prepare eLearning materials than first anticipated. The table created at last year's meeting is shown below with revised delivery dates:

Delivery date	eLearning Topic	WG responsible
2020	NAWI	New Zealand
2020	Fuel Dispensers	Australia
2022	AQS	Goods Packed by Measure
2023	Rice moisture meters	QMAP
2022	Spring balances	NAWI
2022	Weighbridges	NAWI
2021	OIML CS	OIML Certificate system
2021	Taxi meters	Metrological Control Systems
2022	Electricity meters	Utility Meters
2022	Bulk fuel	Metrological Control Systems
2022	CNG	Metrological Control Systems

APLMF has implemented an excellent monitoring system. We continue to gather feedback from participants and monitor how effectively they are at implementing what they learn at training courses.

The web portal has made some progress and will be available soon to showcase our success stories and case studies. A Web Portal working group will soon be established with joint membership from APLMF and APMP. A Terms of Reference document has been written outlining the responsibilities for that WG. In 2021 we plan to provide this WG with additional support to ensure they are successful in writing, sourcing, and publishing case studies.

As part of MEDEA 2 intervention 2 - Regional Cooperation Instruments we agreed to:

- 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

Here is our progress made against intervention 2.

The Technical Committee (TC) overseeing CABUREK consists of a trainer, Corinna Weigelt from PTB, 5 coaches and Abdul Rashid Zainal Abidin from Malaysia who manages the monitoring of participants projects. Marian Haire and Alan Johnston are the coaches representing APLMF. There have been many more TC meetings this year due to the disruption caused by COVID and trying to see how we could keep the participants focused and continuing with their projects.

Three participant CABUREK meetings were conducted on-line using zoom and Mural. Not all participants were able to attend all meeting but for those that did they were able to report on their progress and share with their colleagues and coaches. We are hopeful that all CABUREK participants will have fully developed operation and implementation plans completed by March 2021. They are all preparing a poster to summarise their project. COVID has also disrupted some participants' opportunity to complete their projects but despite this they will all have learnt a lot about managing a complex and difficult challenge.

Identify and support regional trainers from developing economies

Ms Lita Annita Fajarani from Indonesia is taking a lead role in presenting an on-line training course for prepackaged goods to be delivered in March 2021. She will be supported by Davis White from New Zealand.

Mohammad Azwan from Malaysia has been identified as a trainer for software verification training course. I am delighted to see that he nominated to make a presentation as part of this meeting. He will deliver an online course on software verification as part of MEDEA 3.

As part of MEDEA 2 intervention 3 - Technical Training we will deliver the following courses and create guide documents as required:

- Verification of NAWI including weighbridges – completed
- Verification of rice moisture meters – completed
- Pattern approval and verification of utility meters (water, gas and electricity) – water completed
- Pre-Packaged Goods – planned for March 2021 as an online course
- Verification of belt weighers (automatic weighing) – postponed until MEDEA 3
- Software verification – postponed until MEDEA 3
- OIML certification system – completed
- Verification of Bulk Flowmeters – added to replace belt weighers and will be presented online by Australia in Feb 2021

The MEDEA 2 Coordination Committee (CC) meets regularly 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

Much of the work this year has been focused on preparing the submission for the MEDEA 3 project. It was agreed we are more likely to have a successful bid if we focus on supporting economies to make progress towards the Sustainable Development Goals (SDGs). A survey was conducted to see what the situation was with respect to delivering training online and, also to find out which of the Sustainable Development Goals were most appropriate to the work of our members. The goals that received the highest numbers of votes were:

- 9 Industry, innovation, and infrastructure (13 votes)

- 3 Good Health and wellbeing (12 votes)
- 7 Affordable and clean energy (6 votes)

As a result, we have agreed to ensure all our deliverables will link in with the achievement of the SDGs keeping in mind the results of this survey. The MEDEA 3 Proposal is also linked to the World Bank Toolkit on quality infrastructure, especially the parts of the Rapid Diagnostic Toolkit on metrology and legal metrology for monitoring the progress of developing capabilities and capacities in metrology. This kit is quite complex so a workshop was held on 19 November to discuss how we can effectively use it so to assist us to monitor progress. We expect we will ask economies to complete a modified version of this toolkit 3 times during MEDEA 3 and hopefully it we will be able to identify improvements in the capability and capacity. MEDEA 3 will seek to support economies who have well defined plans and who are keen to implement change.

The budget for MEDEA 3 program which will span 2021 – 24 and should be considered shortly.

SECTION 3 – Future focus – Recommendations

We are also working to convert training to a series of Zoom meetings which we hope to be able to offer during the remaining period of MEDEA 2 before end of March 2021 and start to deliver against MEDEA 3. The topics we are working on are shown in the table below:

Topics	Supported by	Delivery Dates
Verification of Bulk Flowmeters	Australia	February 2021
Foundation Course on Pre-Packaged Goods	Indonesia and New Zealand	3, 10, 17 & 24 March
Pattern approval and verification of electricity meters	Korea and China	January 2021
Writing Case Studies	Laurie Winklass	May/June 2021
Pattern approval of software	Malaysia	End of 2021
Belt weighers	Australia	2022
Weighing in Motion	Malaysia	2022

We envisage course material will be divided into 2-hour sessions which would be held on the same day of the week for 4 consecutive weeks or over 4 days within the same week.

Each session will contain lectures, questions, and exercises for participants to complete before the next session. The exercises connect the knowledge into a sequence.

There will be a limit of 12 participants to ensure everyone can participate effectively. Each course will be recorded so others can view them later from our website.

Participants will be selected from those that apply based on their experience and their action plans.

We will Conduct a test run with participants the week prior to starting each course to ensure they can access the technology and to introduce themselves. During this session we will explain the protocols we will use. e.g. all on mute unless they are asking a question. Raise your hand to show they have a question. etc.

We hope to provide invitations to these upcoming online courses in the coming weeks. All of these events will be recorded and placed on our website for others to access.

It is important to continue delivering training under the OIML Training Centre. We agreed to do this once each year on an ongoing basis.

Once the eLearning modules are available the next step will be to add assessment components and to provide successful participants with a certificate of achievement/competence.

Working Groups Plans for next 12 months

The WG will continue to deliver against their workplans as follows:

QMAP: will complete the verification of rice meters using the comparison method

PPG: will deliver an online training course and continue to develop their eLearning module

NAWI: will continue to develop their spring scales and weighbridge eLearning module

Utility Meters: will deliver an online course on pattern approval and verification of electricity meters and start to plan for an eLearning module

MCS: will plan an online joint OPT/APLMF event and implement the scholarship scheme

CS: will provide analysis of the survey conducted in 2020 and start to develop an eLearning module

SECTION 4 – Future focus – emerging issues

The independent evaluation of MEDEA 2 has been completed and deemed the project successful overall. A copy of the report can be found on the members section of our website. The following recommendations need to be considered as we implement MEDEA 3.

- The metrology portal is an important tool for selling the importance of metrology to non-metrologists. We need to support those who nominate to be part of the Web Portal WG.
- CABUREK: As a model to learn from each other, learning in small groups is effective but should be further improved and spread. MEDEA 3.0 needs to focus on supporting economies to implement programs over a longer period.
- Concentrate on eLearning, online trainings but combine with face-to-face events whenever possible and applicable.
- Provide management and leadership trainings for NMIs, including communication/cooperation with Government + networking.
- Support middle and least developed economies by cooperation, sharing, exchange of experiences and success stories
- NMIs to take more initiative and align their plans with national strategies.
- More capacity building is needed, Capacity Development on organizational and societal level/not only on individual level
- Monitoring and evaluation (M+E) critical for judging the effectiveness of projects. All partners should have a clear understanding of the role of M+E when developing a metrology system. Developing good indicators can be an effective way to support economies to achieve their goals.
- Include knowledge transfer as a component of all training.