



**26th ASIA-PACIFIC LEGAL
METROLOGY FORUM AND
WORKING GROUP MEETINGS**
6-8 November 2019, Ha Long City,
Quang Ninh Province, Viet Nam



Minutes



Held at the Wyndham Legend Ha Long Hotel



26th Asia-Pacific Legal Metrology Forum and Working Group Meetings

Hosted by Directorate for Standards, Metrology and Quality (STAMEQ) the 26th APLMF and Working Group Meetings were held from 6th to 8th November 2019 at the Wyndham Legend Ha Long Hotel, Ha Long City, Quang Ninh Province, Viet Nam.

The meetings were attended by delegates from full member economies and representatives of international and regional organisations.

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Mr Stephen O'BRIEN

APLMF Secretariat

President



Mrs Marian HAIRE

APLMF Secretariat

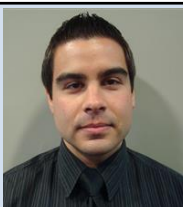
Training Coordinator



Ms Alli SMITH

APLMF Secretariat

Senior Administrator



Mr Mark JONES

Ministry of Business Innovation and Employment
(MBIE), New Zealand

APLMF Secretariat Support

APLMF Secretariat and Member Participants



Australia

Mr Daryl HINES

National Measurement Institute Australia (NMI)

Manager, Policy and Regulatory Services



Australia

Mr Bill LOIZIDES

National Measurement Institute Australia (NMI)

General Manager, Legal Metrology






	Brunei Darussalam	Mr Azmi ABDUL RAHIM	Measurement Standards Laboratory Project Officer
	Brunei Darussalam	Mr Iskandar DAMIT	Measurement Standards Laboratory Head
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	Cambodia	Mr MUY Samrach	National Metrology Centre (NMC) Official
	PR China	Ms CAI Changqing	National Institute of Metrology, China (NIM) Researcher

	PR China	Mr DU Yuejun	State Administration for Market Regulation (SAMR) Deputy Director General
	PR China/BIML	Mr GUO Su	State Administration for Market Regulation (SAMR) BIML - Engineer Chair - WG Metrological Control Systems
	PR China	Ms SONG Shuying	National Institute of Metrology, China (NIM) Vice Director
	PR China	Mr WANG Lei	National Institute of Metrology, China (NIM) Research Fellow Chair: WG Utility Meters
	PR China	Mrs ZHENG Huaxin	State Administration for Market Regulation (SAMR) Director Chair: OIML-CS Working Group
	Indonesia	Ms Nurrika ANGGRAINI	Ministry of Trade Head Division of Programme and Reporting

	Indonesia	Dr Rifan ARDIANTO	Directorate of Metrology Deputy Director of Metrological Analytic Chair: WG Goods Packed by Measure
	Indonesia	Mrs Eri WIJAYANTI	Directorate of Metrology Verification Officer
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	Japan	Dr Tsuyoshi MATSUMOTO	National Metrology Institute of Japan (NMIJ), AIST Associate Manager, International Cooperation Office
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	Kiribati	Mrs Tirenga TAUEA	Ministry of Commerce Industry and Cooperat Senior Regulatory Officer
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	Republic of Korea	Dr DaeKyung KANG	Korea Testing Certification Senior Researcher / Center Leader
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	Republic of Korea	Mr GyeSeong TAK	Korean Agency for Technology and Standards (KATS) Deputy Director
	Republic of Korea	Mr Ji-Hyun UM	Korea Testing Certification Researcher
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	Malaysia	Mrs Suhaidah AMIZAM	National Metrology Institute of Malaysia, SIR Metrologist
	Malaysia	Ms Suliana GHAZALLI	National Metrology Institute of Malaysia, SIR Head of Mass Laboratory Chair: WG NAWI
	Malaysia	Mrs Haslina Abdul KADIR	National Metrology Institute of Malaysia, SIR Deputy Director MEDEA 2 Coordination Committee Co-chair: WG QMAP
	Malaysia	Ms Low SWEE HON	Ministry of Domestic Trade & Consumer Affairs (MDTCA)
	Malaysia	Dr Osman ZAKARIA	National Metrology Institute of Malaysia, SIR Senior Director
	New Zealand	Mr Phil SORRELL	Ministry of Business, Innovation and Employment (MBIE) Team Leader Compliance & Inspection

	Philippines	Ms Loreibelle ABIAN	Industrial Technology Development Institute Science Research Specialist
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	Singapore	Mrs Faith TAN	Enterprise Singapore Senior Investigation Officer
	Chinese Taipei	Mr Yueh-Feng CHANG	Bureau of Standards, Metrology and Inspection (BSMI) Ministry of Economic Affairs Director

	Chinese Taipei	Mr Chia-Hao HSU	Bureau of Standards, Metrology and Inspection (BSMI) Ministry of Economic Affairs Associate Technical Specialist
	Chinese Taipei	Dr Cheng-Tsair YANG	Center for Measurement Standards Doctor
	Chinese Taipei	Mr Jin-Hai YANG	Bureau of Standards, Metrology and Inspection (BSMI) Ministry of Economic Affairs Technical Specialist
	Thailand	Miss Aungkana CHITTANUNTANA	Central Bureau of Weight and Measures (CBWM) Weight and Measures Technical officer, Practitioner Level
	Thailand	Ms Pisakorn PISANKUL	Central Bureau of Weights and Measures (CBWM) Weights and Measures Officer. Senior Professional Level
	Thailand	Ms Apaporn RODYU	Central Bureau of Weights and Measures (CBWM)


	Thailand	Mr Sudchai SRIKHAJORNDET	Central Bureau of Weights and Measures (CBWM) Weights and Measures Technical Officer, Practitioner level
	Thailand	Mr Surachai SUNGZIKAW	Central Bureau of Weights and Measures (CBWM) Department of Internal Trade Director of Bureau of Weighing Instrument Supervision Chair: WG QMAP
	United States of America	Dr Charles EHRLICH	National Institute of Standards and Technology (NIST) Physicist
	United States of America	Mr Ralph RICHTER	National Institute of Standards and Technology (NIST) Senior Engineer
	Viet Nam	Mr NGUYEN Hung Diep	Directorate for Standards Metrology and Quality (STAMEQ) Director of Metrology Department

	Viet Nam	Mr TRAN Quy Giau	Directorate for Standards Metrology and Quality (STAMEQ) Deputy Director of Metrology Department
	Viet Nam	Mr TRAN Van Tung	Ministry of Science and Technology Deputy Minister
	Viet Nam	Mr TRAN Van Vinh	Directorate for Standards Metrology and Quality (STAMEQ) Director-General

Honoured Guests

	<p>Viet Nam</p> <p>Ms VU Thi Thu Thuy</p> <p>Quang Ninh People's Committee</p> <p>Deputy Chairman</p>		
	Germany	Ms Corinna WEIGLT	Physikalisch-Technische Bundesanstalt (PTB) MEDEA Project Coordinator
	<p>Viet Nam</p> <p>Mr VU Xuan Thuy</p> <p>Asia Pacific Accreditation Cooperation (APAC)</p> <p>Executive Committee member</p>		
<h2>Observers/Host Support</h2>			
	<p>Viet Nam</p> <p>Mr CAO Viet Bach</p> <p>Directorate for Standards Metrology and Quality (STAMEQ)</p> <p>Official of Metrology Department</p>		
	Viet Nam	Mr DANG Quang Minh	Quang Ninh Standards, Metrology and Quality Branch Head of Metrology Management Division

Viet Nam			Mr HA The Nam	Quang Ninh Department of Science and Technology Deputy Director
	Viet Nam		Ms HOANG Thi Ninh Thuan	Quang Ninh Department of Science and Technology Deputy Director of Administration Division
Viet Nam			Mr HOANG Vinh Khuyen	Quang Ninh Department of Science and Technology Deputy Director
	Viet Nam		Mr LE Hong Son	Quang Ninh Department of Science and Technology Head of Administration Division
Viet Nam			Ms NGUYEN Thi Thao	Directorate for Standards Metrology and Quality (STAMEQ) Official
	Viet Nam		Mr NGUYEN Van Tan	Quang Ninh Standards, Metrology and Quality Branch Deputy Director
Viet Nam			Mr PHAM Dung Nam	Ministry of Science & Technology Official of General Department
	Viet Nam		Mr PHAN Thanh Son	Directorate for Standards Metrology and Quality (STAMEQ) Official of International Cooperation Department

Viet Nam		Ms TRAN Thi Thuy Ha	Directorate for Standards Metrology and Quality (STAMEQ) Official of Metrology Department
	Viet Nam	Ms VU Thi Phuong	Directorate for Standards Metrology and Quality (STAMEQ) Official of International Cooperation Department
	Viet Nam	Ms VU Thi Tu Quyen	Directorate for Standards Metrology and Quality (STAMEQ) Acting Director of International Cooperation
	Viet Nam	Mr VU Van Nha	Quang Ninh Department of Science and Technology Director of Administration Division

Working Group (WG) Meeting – Wednesday 6th November 2019

1. Welcome to the APLMF Working Group Meeting

Mr Stephen O'BRIEN, APLMF President opened the Working Group Meeting commenting:

'There is a saying that, where something is critical to the success of an operational activity, it is said to be where the rubber hits the road' He saw the effective operation of APLMF working groups as critical to the long term success of APLMF. Like the rubber on a car tyre, enabling the car to move forward and get where it wants to go, APLMF relies on the effective operation of its working groups to help achieve our organisational goals, i.e. legal metrology development and reduction of technical barriers to trade. The working groups allow us to share our knowledge and best practice where the real work of APLMF takes place – so it is where the 'rubber hits the road'.

He acknowledged the significant contribution of the project, Metrology Enabling Developing Economies in Asia (MEDEA) sponsored by the German Government and administered by Physikalisch-Technische Bundesanstalt (PTB) providing funding and arranging travel for WG members from developing economies to attend the inaugural workshops. He also recognised that many participants travelled great distances to attend the WG meeting and encouraged all delegates to actively participate. He noted we have the right people, the right venue and the right support in place for this interesting and productive day for Working Groups.

This meeting provided an excellent opportunity for Working Groups not only to significantly progress their work programmes during the three hour workshop, but also to decide how best they can achieve further progress over the next year through maximising the use of electronic resources such as email, teleconferences, drop box and GoogleDrive.

Each WG Chair prepared an agenda for their workshops to ensure that all members of the working group understood the WG structure and provided with necessary documents to allow the members to prepare for the workshop in advance. For example: Draft Guide 8 – How to develop an eLearning module. At the end of the workshop, each WG was required to update their 2020 work plan for presentation later in the day.

Following the opening address, the President introduced the Secretariat team, Ms Alli SMITH, Mrs Marian HAIRE and Mr Mark JONES.

2. Working Group Workshops: morning programme – WG Members

Ms Alli SMITH, Secretariat provided an introduction to the workshops for the four APLMF WGs which were being held for the first time. She noted it was the Chair's role to manage their groups and to maximise the use of the precious three-hour workshop. A small number of observers were permitted to attend each workshop, and any contributions to discussions were encouraged by the Chair.

Working Group members and observers separately moved to their workspaces for the morning workshop sessions on the following WGs.

- Goods Packed by Measure

- Non-Automated Weighing Instruments (NAW)
- Quality Measurement of Agricultural Products (QMAP); and
- Utility Meters

3. Working Group Meeting: afternoon programme – Mr Stephen O'BRIEN, APLMF President

All delegates attending the workshops met together for lunch. Then the afternoon session of the Working Group Meeting commenced. Mr O'BRIEN welcomed all delegates from 15 of our 20 full members economies and guests. He acknowledged a number of new people had joined our meeting particularly delegates from our new member economies; Brunei Darussalam and Kiribati. He asked all participants to introduce themselves giving their name, agency/organisation and economy represented.

The Secretariat provided housekeeping and safety briefings.

4. Training Coordination Report – APLMF Secretariat

Mrs Marian HAIRE, Training Coordinator provided a report including the following content:

- Delivered three training courses in 2019
- Working Groups
 - Greater representation from developing economies
 - Updated Terms of References and work programmes of the WGs
 - Face to face meeting in the workshops - outcomes surpassed expectations and congratulations to Chairs
- Developing eLearning modules
- NAWI (Non-Automatic Weighing Instruments) – the first module completed
- Guide 8 - developed to support WGs
- Quality assurance process implemented for eLearning modules of NAWI
- NAWI module to be hosted on the OIML Website's Learning Management System (LMS)
- Developed a monitoring and evaluation system for training courses
- Publicise case studies
- CABUREK (Capacity Building in technical and scientific organizations using Regional Experiences and Knowledge) - supporting national projects of PTB
- Identified and supported regional trainers
- Recommended future courses in 2020-2021 and liaison with OIML Training Centre (OTC)
- Proposed MEDEA 3 in 2021-2024
- Training Coordinator's Position - nominations 2020

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Question: Mr GUO Su, PR China - Asked where he could find the list of Regional Trainers?

Response: Mrs Marian HAIRE, Training Coordinator - Advised that the list of Regional Trainers can be found on the APLMF website, under the Tab 'Training & Development' > 'Training Overview' – there is a table listing the regional trainers at the bottom.

Comment: Mr GUO Su, PR China announced that the 2020 Electricity Meter course would be held in PR China, the dates to be confirmed, trainers from PR China and Rep Korea and the course will be supported by the OTC with the MEDEA project.

Comment: Mr Stephen O'BRIEN, APLMF President thanked Mrs HAIRE for her report and the great work that had been achieved in training over the last year.

Comment: Mr Bill LOIZIDES, Australia - At the CIML meeting in October 2019, in conversations with both CEEMS (Countries and Economies with Emerging Metrology Systems) and RLMO (Regional Legal Metrology Organization) meetings, Australia offered to provide an eLearning package for OIML R 117 Fuel Dispensers (competency based). That package would be made available firstly to the APLMF members and it was expected to save economies' resources, although a generic version might be required to meet all needs, in particular for the inspectorates (people who carry out verification of instruments) for a competency base or for a 3rd party accreditation.

Response: Mr Stephen O'BRIEN - thanked Mr LOIZIDES for this offer and noted the Australian package on fuel dispensers employed a similar process with that we used for the NAWI's eLearning module, which was based on the work already completed in New Zealand.

5. eLearning Modules

4.1 Guide 8 - How to develop an eLearning Module

Mrs HAIRE, Training Coordinator provided an overview of a new APLMF Guide 8 'Guide on How to develop an eLearning module' using slides with the following contents. The draft was in the final stage and it would be published on the APLMF website in 2020.

- Overview
- Document control of eLearning modules
- Timeline for review of the modules
- Templates and template codes for the modules
- Document Review Process on the final draft of Guide 8

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4.2 eLearning Modules

Mr SORRELL, New Zealand provided an introduction of an eLearning module using an example of NAWI with the following content:

- Intended use
- Demonstration of the NAWI module
- Sample written test procedure for accuracy of the zero-setting device
- Samples of test animations and quiz questions with responses
- Sample assessment questions

- Learning Management System (LMS) on the OIML website
- Administration Rights, restricted access and data to be provided
- Application of the modules to APLMF

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4.3 OIML Workshop October 2019

Mr GUO Su, BIML/PR China reported on results from the eLearning Workshop held during the OIML meeting in October, on behalf CEEMS – AG (Advisory Group) with the following content:

- Recent topics in OIML, APLMF, UNIDO and IEC
- Common priorities in OIML: R 76, R 117, D 1, D 31 and prepackages
- Next Steps for CEEMS and RLMOs

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According to Mr GUO's report the CIML President had noted the priority for eLearning modules at the workshop. Following the discussion between CEEMS AG and the RLMO, the President also noted that it was a role of AG to assist prioritising future eLearning modules to help secure expert input from the TCs/SCs and to collaborate with RLMOs to ensure they are fit for OIML's purpose with appropriate support of the platform, technology and funding. OIML passed a resolution 2019/18 requesting the CEEMS AG to make a summary analysis of the outcomes of the eLearning workshop. As Mr GUO had advised Mrs HAIRE earlier, he would bring this discussion back to BIML and ask for technical support for hosting eLearning modules. In the meantime, there will be an ad-hoc working group of OIML for eLearning and APLMF may be asked to join this group to discuss further improvement of the eLearning platform.

Comment: Mr Stephen O'BRIEN, APLMF President noted that this was one of some interesting and worth-pursuing developments where we would be able to turn a regional project into a global project with support of OIML in order to harmonize test procedures across the world.,

Question: Unidentified speaker asked how we link between the eLearning modules created by APLMF and OIML.

Response: Mr Stephen O'BRIEN remarked 'the details are still being worked through' and mentioned; the eLearning modules would require a Learning Management System (LMS) which was a system that allowed people to log in, access the modules, track their progress and analyse the results of the assessment. We were looking to OIML to provide an LMS on their website with links to the APLMF modules on our website; there would only be one module for each topic including APLMF branded components. He added that the idea was not to reproduce eLearning modules, but to utilise what was already available, because there was a significant cost to maintain a learning management system. He noted, however, that we did want to have an identity for our modules and to have links through the APLMF website so that our members could easily access the modules.

6. MEDEA 2 update – PTB, MEDEA Project Coordinator

Ms Corinna WEIGELT, Germany provided a report from PTB using slides with the following content:

- Update on MEDEA 2.0 - Changes in PTB Coordinator and CC (Coordination Committee) members

- Intervention Area A: Sustainability - APLMF WGs, online libraries, knowledge management system (APMP-DEC), monitoring & evaluation system, APMP Focus Group and case studies
- Intervention Area B: Regional Cooperation - CABUREK Workshops and pool of trainers and training modules
- Intervention Area C: Technical Training - Trainings and development of guides in APMP & APLMF
- MEDEA Statistics of Participation
- Upcoming workshop on Case Studies - How to tell better metrology stories
- Outlook in the future - Case studies, e-Learning modules, CABUREK project and trainings
- Lessons Learned

Ms Corinna WEIGELT reiterated the funds for the current MEDEA 2.0 project were running low and changes would be needed to meet expectations for assistance if the planned training programme for 2020 was to be implemented. The economies would then be asked to contribute toward the cost of training which was currently provided by the PTB/APLMF/APMP.

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Comment: Mr Stephen O'BRIEN, APLMF President noted that he was impressed with the case study (awareness raising) workshop, which looked to have a strong focus for people to become champions for legal metrology and it was something we had struggled with for some time. We all understood the importance of what we did but we were transferring that message across to the non-metrologists who need to work together.

Comment: Mrs Marian HAIRE, Training Coordinator commented following what Ms WEIGELT said about the funding and methodologies that we were going to have to implement to allow some of the current training activities to go ahead. Because MEDEA 1 and 2 had been very generous, we have allowed up to 28-30 people to attend a training course. In the past, we usually had around 20, so reducing the number of attendees would be one strategy to continue training. In this plan, we might only have one funded person from each economy, not 2. She referred to the nomination forms used in the past six months which had included a section, where economies could indicate their willingness to contribute e.g. pay the airfare, or accommodation. She added that we were moving into an era where developing economies would need to contribute, if it was indicated that the training was still important and relevant.

Comment: Mr Stephen O'BRIEN noted that when we went through the work programmes for 2020 and beyond, the Executive Committee and Secretariat would need to think about how much of that training could be carried out. For now, we put forward what we wanted to do and then, the challenge would be decisions about when and how we could do it.

7. WG Report – Goods Packed by Measure (PPG)

WG Chair, Dr ARDIANTO, Indonesia provided a report using slides with the following content:

- WG Members
- 2019 Work Programme and progress
- Key activities in 2018/19
- Future focus - 2020 and beyond

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Question: Dr Charles EHRLICH, USA noted Dr ARDIANTO mentioned a template for reference test on R 87 and it sounded like it was completed. He noted that at the recent CIML meeting a new project was approved on a template for pre-packages and he asked if that was the same thing?

Response: Dr Rifan ARDIANTO noted the template for reference test had been developed by New Zealand for PPG training courses and it was in use.

8. WG Report – Metrological Control Systems

WG Chair, Mr GUO SU, PR China provided a report using slides with the following content:

- Members
- Key activities 2018/19
- Monitor Revision of D1
- Survey analysis of CEEMS
- OIML TC framework
- eLearning
- Future focus 2020 and beyond
- Scholarship programme for future leaders in CEEMS
- Emerging issues

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Question: Mrs Marian HAIRE, Training Coordinator asked if the scholarships already existed or was it something planned by the WG in the future.

Response: Mr GUO Su advised the details of the scholarship were available on the CIML webpage. He provided as an example that previously a group of members would attend training for a week, but the idea of the scholarship was like an attachment training; so one or two trainees could go to an economy for 2 or 3 months, so they could have a more comprehensive study on various aspects of legal metrology.

Mr GUO Su undertook to send the details to the Secretariat.

Comment: Mr Stephen O'BRIEN, APLMF President asked Mr GUO to pass on to the former President, Mr PU Changcheng, our best for a well-earned retirement.

9. WG Report - Non-Automatic Weighing Instruments (NAWI)

WG Chair, Mrs Suliana GHAZALLI, Malaysia provided a report using slides with the following content:

- WG Members
- Scope and Objectives for WG
- Planning for Spring Scale and Weighbridge eLearning Modules

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Comment: Mr Stephen O'BRIEN, APLMF President encouraged work on spring balances which was a good example of a piece of equipment that was important to economies around the APLMF table. In Europe and other regions, they were not that interested, so it was great that we could develop a module that was specific to our needs.

10. WG Report - OIML Certificate Systems

WG Chair, Mrs ZHENG Huaxin, PR China provided a report using slides with the following content:

- Establishment of the WG
- WG Members
- Key activities 2018/19
- Future focus 2020 and beyond

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Question: Dr Charles EHRLICH, USA asked for clarification on the survey that was intended to be distributed. Would the survey ask the question 'in which economies are OIML CS certificates accepted?'

Response: Mrs ZHENG noted it would be a questionnaire to all APLMF economies to collect information about 'which economies are interested in OIML-CS'.

Comment: Dr Charles EHRLICH noted this came up at the RLMO round table a couple of weeks ago where there was a question about whether APLMF would be doing such a survey, so he was pleased to hear confirmation.

Comment: Mr Stephen O'BRIEN, APLMF President noted this was an important area of work for APLMF and on Thursday's agenda there would be a panel discussion on the OIML-Certificate System. Within the room there were a number of subject matter experts, along with the working group, so this was an important opportunity to ask questions, so we can understand what the barriers are to some economies adopting the system.

Comment: Mr Bill LOIZIDES, Australia noted that at the recent CIML meeting, with the resignation of Mr Cock OOSTERMAN, Netherlands, he was appointed Interim Chair of the Management Committee of OIML-CS and invited delegates to talk with him during the breaks. Dr Charles EHRLICH is also CIML First Vice President so he could also talk through the maze of the Certification System and also his colleague Mr Darryl HINES from Australia could be available to answer questions.

11. WG Report - Quality Measurement of Agricultural Products (QMAP)

WG Chair, Mr Surachai SUNGZIKAW, Thailand provided a report using slides with the following content:

- Overview QMAP action plan in 2020-2023
- Review of Guide Document on Rice Moisture Measurement and Test Procedure timeline
- Rice Moisture eLearning timeline
- Sugar content training timeline

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Question: Unidentified speaker asked for clarification of why the WG had decided on the topic of sugar for the training course, because it is a big jump from rice moisture to sugar content.

Response: Mr SUNGZIKAW noted that at the previous training courses for Rice Moisture Measurement, feedback from some participants indicated that the measurement of sugar content in sugar cane products has a significant impact in their economies.

12. WG Report - Utility Meters

WG Chair, Mr WAN Lei, PR China provided a report using slides with the following content:

- Membership and history
- Key activities 2018/19
- Future Focus 2020 and beyond

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Comment: Mr Stephen O'BRIEN, APLMF President noted there was a lot of innovation going on in the Utility Meters space and he would be interested to see what happened in the Geographic Information System (GIS) area. He commented that in New Zealand, a new transportation system, Uber had taken over from regular system using taxi meters quite significantly and it is an area most regulators are struggling to control.

Mr O'BRIEN noted the discussion around the priority for developing the eLearning modules was very much under the WG's control. We had identified water meters as a prioritized module, but the WG was starting to think about other needs of the economies and it was a better approach rather than arbitrarily developing a module that might not be useful. eLearning modules might not suit every type of instrument, so once the WG had done the analysis, informed decisions about the best approach would be made.

13. Medical Measurement - subject matter expert report

Mr Jin-Hai YANG, Chinese Taipei provided a report on the Pilot Study on Automated Sphygmomanometer's Accuracy using Blood Pressure simulation technique as the APMP MMFG (Medical Measurement Focus Group) Initiative Project.

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Comment: Mr Stephen O'BRIEN, APLMF President noted it was challenging when you were talking about the inaccuracy of medical measurement and it was good to see some training occurring in this area.

Question: Dr Toshiyuki TAKATSUJI, Japan noted the upcoming Sphygmomanometer training course was a good example where APLMF and APMP were jointly collaborating.

Question: Dr Charles EHRLICH, USA asked if there were more than one manufacturer of the digital equipment tested.

Response: Mr YANG advised there were two items tested from two different manufacturers.

14. Promoting Legal Metrology to the Indonesian Public

Dr Rifan ARDIANTO, Indonesia presented on the following content:

- Introduction
- Local government organisations in Indonesia
- Challenges
- Consumer Index of Indonesia
- Paradigm - beyond technology
- What Indonesia has done
 - Through social media
 - Activating the community
- Next steps

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Comment: Mr Stephen O'BRIEN, APLMF President noted this was a good opportunity to share some best practice and to understand what was happening in one of our economies. He commended Indonesia for coming forward to make this presentation.

He congratulated Indonesia on the work they were doing and commented that In New Zealand, Trading Standards were regulators in the consumer space as well and they were facing many of the same challenges. It was great to see the innovations Indonesia had put in place. There were some good case studies that we should be able to share within the region.

Comment: Mr Bill LOIZIDES, Australia applauded Indonesia on the initiative and very much looked forward to the outcome. He asked if they had conducted a survey before starting their campaign and if they had planned to do something else to monitor the effectiveness of the campaign.

Response: Dr Rifan ARDIANTO advised that every year they tried to do another survey to gauge the effect of what had been done.

Comment: Mr Stephen O'BRIEN noted the great examples in the presentation and he would be interested in more detail to promote that work. He thought Indonesia was bridging the gap between explaining what metrology is about and making it real for consumers, which would be a big challenge for many of us.

Mr O'BRIEN asked for feedback on how the workshops went earlier in the day and whether this was a model for the working groups that we want to continue in the future.

Mrs Marian HAIRE, Training Coordinator suggested the WG Chairs gave their feedback on how they felt the workshops went; then any others who attended could also comment.

Dr Rifan ARDIANTO (PPG) – noted the workshop was a good way for the members to meet in person, to share and plan activities in the next and future years. Previously, work was done only by the Chair and there was little input or activity from others. The workshop provided a vehicle to work as a team and it would help to pave the way for more

input from the team via other channels e.g. teleconference and emails. He wasn't sure if it was necessary to do the workshop every year, but he thought every two years would be good.

Mr Phil SORRELL, New Zealand totally agreed, a large amount of quality work came out of the workshops and he saw the future plans of the WGs looked very positive. The opportunity to meet face to face and decide future activities for the working group was very useful.

Ms Suliana GHAZALLI, Chair WG on NAWI thought the workshops were a very good opportunity, particularly for our WG as it was a new working group. She thought meeting face to face annually would be helpful and then continue to work via teleconference.

Mr Kiveen SUYCANO, Philippines supported the Chair's comments regarding the effectiveness of the platform using a workshop to really get communication going, especially with the developing economies. He thought the exchange of important information through a face to face meeting was very helpful.

Mr Surachai SUNGZIKAW Chair, WG on QMAP noted the workshop activity was very good because having a face to face opportunity to discuss the WG activities is much easier to solve issues. For example, when we were formulating a plan for carrying out measurement of sugar content at this morning's session, the participants were able exchange ideas and information more easily.

Ms Haslina KADIR, Co-Chair, WG on QMAP noted that Malaysia was able to share the knowledge how NMIM (National Metrology Institute of Malaysia) established the linkage between the national metrology authority and the legal metrology authority.

Mr WANG Lei, WG on Utility Meters noted that he was the new Chair and was very happy to have this opportunity to meet the other members of the working group and it was a very efficient way to share knowledge and prioritise items for the work plans for the next year or so.

Mr Ralph RICHTER, USA noted he was very enthusiastic about this working group meeting and by being able to meet together, the participants were able to see that almost all the economies had similar issues regarding utility meters. He thought they would be able to work together very well.

Mrs HAIRE noted that the enthusiasm shown by everyone was remarkable. Everything reported was positive, but she asked what could we do to make it better? The following ideas for improvement were put forward:

- seating arrangements where we had a round table for WG members and chairs outside for observers. Mrs HAIRE noted that some working groups solved this themselves and included observers at the table;
- agreed it was useful to limit the number of observers. What we were concerned about was a case where one group had 20 observers and another had only 5 or 6. There would be an imbalance which could have made it awkward. It seemed to work with 4 or 5 observers;
- Improve interaction with the observers. If they were interested to be there to participate in the discussion, their interaction should be promoted more. We had a lot of comment from the observers that positively added to the conversations. (Phil Sorrell, New Zealand);
- more separate space for each working group, with overhead projector/screen.

Ms Corinna WEIGELT, PTB, MEDEA Project Coordinator thought the workshops were a great initiative and it was a good opportunity to bring people together to discuss concrete subjects/topics and draw up working plans. She hoped in the future that similar workshops could be included in the next MEDEA project and believed it would be successful. She was pleased because PTB were able to support this initiative.

Mr Stephen O'BRIEN, APLMF President acknowledged the contribution from PTB through the MEDEA project supporting this initiative. He also thanked all presenters and noted that the tight afternoon programme was still very effective and allowed a lot of information to be shared.

Welcome Dinner hosted by APLMF

Participants and guests enjoyed a welcome dinner hosted by APLMF at the Wyndham Legend Ha Long Hotel which provided another informal opportunity for delegates to network and carry on discussions on topics of interest which had arisen during the day's sessions.

26th Asia-Pacific Legal Metrology Forum Meeting -Thursday 7th to Friday 8th November

15. Opening Ceremony

Our Hosts, Viet Nam opened the 26th APLMF meeting with a fanfare of music and visual graphics on the screen. The opening addresses were given by Mr TRAN Van Tung, Deputy Minister, Ministry of Science and Technology and Mrs VU Thi Thu Thuy, Vice Chairman Quang Ninh Province and APLMF President, Mr Stephen O'BRIEN. Gifts were exchanged.

Mr TRAN Van Tung noted in his address that Viet Nam has always been aware of the significance of legal metrology in government administration since the early times. Only 5 years after independence, on January 20, 1950, President Ho Chi Minh issued an Ordinance No. 8/SL stipulating the unified use of the Metric system as metrology units across the country. To commemorate this historic milestone, the Government marked that day as Viet Nam's Metrology Day in 2001. Every year, all officers and experts involved in Metrology around the country gather to celebrate this day in order to review and assess the metrological activities and discuss action plans for the upcoming years.

Over the past twenty years, Viet Nam, represented by the Directorate for Standards, Metrology and Quality (STAMEQ) under the Ministry of Science and Technology, had been actively involved in regional and international metrology organizations. Viet Nam became a full member of the Asia Pacific Metrology Programme (APMP) in 1995, APLMF in 1996 and the International Legal Metrology Organization (OIML) in 2003. With the responsibility of a member country, Viet Nam successfully hosted the 18th APMP GA and the 9th APLMF Meeting (2002 in Ha Noi), the 48th CIML meeting of OIML (2013 in Ho Chi Minh) and the 32nd APMP GA (2016 in Da Nang). He acknowledged Viet Nam was honoured to once again host the 26th APLMF Forum and Working Group meetings in Ha Long City, Quang Ninh Province, which was not only famous for the world heritage of Ha Long Bay but also a fast-developing and dynamic city especially in the field of tourism.

After reformation more than 30 years, Viet Nam has become much more integrated into the world economy, especially with the ratification of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP Agreement) in 2018. In order, to facilitate trade and international economic integration, Viet Nam has made great efforts to develop a sound legal framework, including legal metrology, in harmony with regional and international practices. Recently, the field of metrology has faced many new challenges with the urgent need to build National Quality Infrastructure (NQI) At the same time, metrology needs an approach to take advantage of, and cope with the challenges from the advent of the 4th Industrial Revolution (Industry 4.0).

Additionally, Viet Nam's Metrology Law was passed by the National Assembly in November 2011 and came into effect in July 2012, which marked the introduction of the first highest legal document governing metrological activities in Viet Nam. Metrology Law as well as sub-Law regulations and the metrology technical documents (DLVN) were the culmination of years of cooperation with international and regional organizations on metrology including APLMF. Through cooperation with international partners such as PTB, APLMF has assisted Viet Nam as well as other member economies in order to develop human resources, to update knowledge on the latest international documents and to build a system for metrology regulations applicable to the country in alignment with the international practices.

On behalf of the Government of Viet Nam, Mr TRAN expressed his sincere appreciation to APLMF and the international partners for their continuous support to his economy in developing legal and technical documents for metrology. He noted that the Ministry of Science and Technology would always support the Directorate for Standards, Metrology and Quality in order that Viet Nam may contribute more to the APLMF activities.

16. Official Group Photograph



Dignitaries: Ministry of Science & Technology and Quang Ninh People's Committee.

Delegates from Member Economies: Australia, Brunei Darussalam, Cambodia, PR China, Indonesia, Japan, Kiribati, Republic of Korea, Malaysia, New Zealand, Philippines, Singapore, Chinese Taipei, Thailand, United States of America and Viet Nam.

Invited guests: APAC, APMP and PTB.

17. Introduction to 26th APLMF meeting

Mr Stephen O'BRIEN, APLMF President thanked our hosts and dignitaries, Mr TRAN Van Tung, Deputy Minister, Ministry of Science and Technology and Mrs VU Thi Thu Thuy, Vice Chairman Quang Ninh Province and Mr TRAN Van Vinh for such a warm welcome. The high level of honoured guests and officials indicated the commitment Viet Nam has to legal metrology including APLMF. He thanked Mr TRAN Van Vinh, Director General, STAMEQ for assisting him as Co-Chair for the day.

18. Report on 2019 APLMF work programmes

Mr O'BRIEN, APLMF President provided a report including the following content:

- General Overview
- Achievements of special note
- Strategically important activities
- International collaborations

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19. 2020 APLMF Secretariat and WG Action Plans

Mrs Marian HAIRE, Training Coordinator provided a report including the following content:

- To transition APLMF Presidency & Secretariat to Malaysia
- To organise 27th APLMF & Working Group Meetings in 2020 – Philippines
- To finalise updates to MoU, Rules of Procedure and Strategic Plan 2020-2025
- To launch Metrology Asia Pacific Portal
- To implement MEDEA 2 and plan for MEDEA 3
- To promote International relationships
- To deliver training courses and to support Working Group Chairs to develop eLearning modules
 - Goods Packed by Measure
 - Metrological Control Systems
 - NAWI
 - OIML Certification System
 - Quality Measurement of Agricultural Products
 - Utility Meters

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Comment: Mr Stephen O'BRIEN, APLMF President noted that in respect to planning training courses for 2020, we did have the challenge of funding and we would have to prioritise and identify with PTB how we can maximise value with the funding resources available with the MEDEA project.

20. Economy Poster Sessions

All 16 attending economies presented the highlights from their economy in a poster form with the following procedure:

- 5 poster sessions - 3-4 posters at each session
- Poster owner spends a couple of minutes introducing their poster
- Delegates are split across the posters, have 5 minutes to ask questions with discussion and then move to the next poster
- Delegates are encouraged to continue their conversations during the breaks

Note: All economy reports and posters can be viewed [here](#).

Below are the headings from each of the 16 Economy posters:



20.1 Australia - Mr Darryl HINES

- Testing and Evaluating Instruments
- Training and Technology Transfer
- Trade Measurement Services
- Update on Measurement and Law Review
- Partnerships and Engagements in Region

20.2 Brunei Darussalam - Mr Zami Abdul RAHIM

- Protecting the Consumer
- Working with Industry
- National Metrology Board
- Metrology Authority
- Enforcement metrology Traceability

20.3 Cambodia - Mr KHLAUT Ousa

- Verification Services
- Environment & Trade Protection
- Integration and Harmonisation
- Cooperation Projects
- Official's Capacity
- Working Standards

20.4 PR China - Mrs ZHENG Huaxin

- Developing National Law and Regulations System
- Developing Market Surveillance
- Enhancing International Activities

- Enhancing Metrology Infrastructure
- Establish Metrology Strategy Design and System

20.5 Indonesia - Dr Rifan ARDIANTO

- South-South Cooperation and Triangulation on the field of Legal Metrology
- Public awareness on Legal Metrology initiative
- Inspection for Measuring Instruments
- eLearning modules
- Regional Legal Metrology branding even
- Implementation of OIML Certification System

20.6 Japan - Dr Tsuyoshi MATSUMOTO

- Reformation of Legal Metrology System
- NMIJ's Cooperation with OIML and APLMF
- AOTS Training Course
- Promotion and awareness raising events
- Post-Market Surveillance on measuring instruments

20.7 Kiribati - Mrs Tirenga TAUEA

- Metrology Legislation
- International memberships
- Enforcement
- Verification of weighing instruments

20.8 Republic of Korea - Ms Ji Yeon KIM

- New Additions to Legal Measuring Instruments
- Smart Meters
- Management system for weighing instruments under 10 tons
- Improvement of Metrology Information Management System

20.9 Malaysia - Mr Peter AGANG

- Collaboration with stakeholders
- Hosted training courses
- New services
- Protecting consumers
- New initiatives
- New regulated instruments
- R&D on Legal Metrology

20.10 New Zealand – Mr Phil SORRELL

- Beer Brewing Industry test procedures and equipment specifications
- TIKa – investigations case management system
- Enforcement – project-based way of working

- Environmental conscious New Zealand

20.11 Philippines - Mr Sabino Paulo Jr LEONES

- Attendance at international meetings and training courses
- Raising awareness through TV/Radio and seminars
- New facilities for Mass, Flow, Pressure and Force at NML
- Metrology Legislation

20.12 Singapore - Mrs Faith TAN

- Market surveillance and inspection
- Launch Singapore Standards SS 648 Code of Practice for Bunker Mass Flow Metering
- Education and awareness
- Digital transformation of Weights and Measures Administration
- Regulatory review
- Development of Technical Reference for Liquefied natural Gas Bunkering (TR 56)

20.13 Chinese Taipei - Mr Chia-Hao HSU

- Amendment of regulations governing self-verification conducted by Measuring Instrument Enterprises
- Amendment of Enforcement Rules of the Weights and Measures Act
- Responding to Utility Meters Go Safer and Go Smart
- Review of regulations governing management of metrological technical personnel
- Promotion of self-verification scheme
- Review of Type approval technical specifications of gas and water meters

20.14 Thailand - Mr Surachai SUNGZIKAW

- Fuel Dispenser Guidelines for ASEAN
- Cooperation with Laos to deliver training
- Weights and Measures regulations
- Focus on training courses

20.15 USA - Mr Ralph RICHTER

- Multi-unit and variety pre-packages
- Legal Metrology issues related to alternative-fuel vehicles
- Taximeter code
- Sub-metering
- Weigh-in-Motion truck scales
- Harmonise with OIML

20.16 Viet Nam - Mr NGUYEN Hung Diep

- Celebrate Metrology Days
- Establish Decision 996/QD-TTg
- Metrological regulations into various fields
- New Metrological regulations

- Prepare Viet Nam's National Quality Infrastructure for Industry 4.0
- Implement Decision 996/QD-TTg for improving National Metrology Infrastructure

Mrs Marian HAIRE, Training Coordinator noted the poster sessions were a good opportunity for us to identify potential economies to be nominated for the OIML Award. She suggested that the participants identify and highlight an economy which has some great initiatives. The Secretariat could then follow this through.

21. International Organisation of Legal Metrology (OIML) Introduction and Overview of OIML and BIML activities

Dr Charles EHRICH, CIML First Vice President/USA provided a report of the 54th CIML meeting held 22-25 October 2019, Bratislava, Slovak Republic including the following content:

- eLearning workshop
- CEEMS Advisory Group Meeting
- RLMO Round Table
- New Second Vice President, Dr Bob Joseph MATHEW of Switzerland
- Outline of the resolutions of the 54th CIML Meeting

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Question: Mr Stephen O'BRIEN, APLMF President asked where Regional Legal Metrology Organisation (RLMO) Round Table is likely going? He thought Dr Charles EHRLICH was taking over as the Chair and it was a good opportunity to ask the question whether we could do more and if so, what contribution was expected.

Comment: Mr Charles EHRLICH representing OIML/BIML suggested that if participants of the Round Table had questions or suggestions, they could talk with him during the meeting or send him an email.

22. Physikalisch-Technische Bundesanstalt (PTB) - International Cooperation

Ms Corinna WEIGLT, MEDEA Coordinator provided a report including the following content:

- Quality Infrastructure Toolkit
- International cooperation with Asia
- Strengthening Quality Infrastructure in ASEAN
- Strengthening regional integration and cooperation in the field of quality infrastructure in South Asia (SAARC)
- Strengthening Accreditation Networks in Asia-Pacific (SANAP II)
- Strengthening Quality Infrastructure in Myanmar, Mongolia
- Bilateral Projects in Asia
- MOU between APLMF and PTB

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Comment: Mr Stephen O'BRIEN, APLMF President noted the signed MOU between APLMF and PTB provided a framework for collaboration. He was interested in the amount of work PTB is doing within the Asia-Pacific Region on developing quality infrastructures. He noted many economies would be interested in this work because we were involved in common issues on the Quality Infrastructure with measurement, accreditation or standards rather than individual problems.

23. Asia Pacific Metrology Programme (APMP)

Dr Toshiyuki TAKATSUJI, Japan provided a report including the following content:

- Overview of APMP membership
- APMP organisation overview
- Quality Infrastructure
- APEC Specialist Regional Bodies
- Strategic Activities
- Focus Group Activities
- MEDEA 2 activities
- Support for developing economies
- APMP Guidelines -Hybrid Comparison Scheme as evidence supporting CMC (Calibration and Measurement Capability) claims
- APMP General Assembly and related meetings 2019

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Comment: Mr Stephen O'BRIEN, APLMF President noted he was planning to attend a Directors workshop meeting as APMP developed their new strategy and he had been invited to speak on behalf of APLMF. He acknowledged that the ties between APLMF and APMP were strong and we were working together well.

24. Asia Pacific Accreditation Cooperation (APAC) - Mr VU Xuan Thuy

Mr VU Xuan Thuy, Viet Nam provided a report including the following content:

- Establishment of APAC, as a result of merger of APLAC and PAC
- APAC Mutual Recognition Arrangement
- Capacity Building
- Future APAC Annual Meetings

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Comment: Mr Stephen O'BRIEN, APLMF President noted he was impressed by the fact that APAC had their meeting hosts organised for the next 4 or 5 years. He commented this arrangement was a goal for us in the future.

Question: Mr Charles EHRLICH USA asked about the connection between APLAC and APAC.

Response: Mr VU Xuan Thuy APAC clarified that from 1 January 2019 APLAC and PAC merged to become APAC, this provided a single accreditation body in the region.

25. Association of South East Asian Nations (ASEAN) update - Progress of ACCSQ WG on Legal Metrology

Mr KHLAUT Ousa, Cambodia provided a report including the following content:

- Introduction
- 31st and 32nd ACCSQ WG3 and related meetings
- Activities

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26. APMP Focus Group Update - Clean Water & Food Safety

Ms Haslina bte Abdul KADIR, Malaysia provided a report including the following content:

- Background of Clean Water Focus Group
- 1st Focus Group Symposium, Workshop and Meeting - Sept 2017
- Planned activities
- Overview of Food Safety Focus Group and Annual Meetings
- How the Food Safety Focus Group works and its main activities

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27. APMP Focus Group Update - Energy Efficiency

Dr Toshiyuki TAKATSUJI, Japan provided a report including the following content:

- Objective, membership
- Key Focus – Energy Security and promoting Metrology Impact
- Activities 2018-2019

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28. APMP Focus Group Update - Medical Metrology

Mr Jin-Hai YANG, Chinese Taipei provided a report including the following content:

- Preliminary result of pilot study of Automated Sphygmomanometers in APMP
- Accuracy test in the study of FGI project

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29. APMP Focus Group Update - Climate Change & Clean Air

Mr Ji-Hyu UM, Rep. Korea provided a report including the following content:

- History
- Terms of Reference
- Expected outcomes/impacts
- Response to Stakeholders' needs by advancing metrology
- NMI's Status on gas metrology
- Action roadmap and implementation
- Outlook and updates since APMP 2018
- Workshops

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Mr Stephen O'BRIEN, APLMF President thanked all the presenters for the update on work being done by the APMP Focus Groups that were identified last year, as a particular area of interest for APLMF.

30. Panel Discussion - OIML Certification

Mr Phil SORRELL, Facilitator/New Zealand thanked delegates for participating in the panel discussion and noted this was the first panel discussion session in APLMF meetings and its success relied on interaction between the audience and the panellists. He noted we had 12 issuing authorities, 31 utilizers or associates in the OIML-Certificate System as of November 2019; it meant that we had a globally accepted System under OIML. Over the last few years, there had been a series of seminars, workshop and awareness raising opportunities in APLMF, GULFMET, WELMET, COOMET and specific OIML seminars in Colombia, Shanghai and Hangzhou. An excellent workshop in Hangzhou attended by approximately 140 people was supported by APLMF and OIML and hosted by the People's Republic of China. He noted the number of certificates counted by manufactured location, indicated that 42% were in the Asia Pacific Region, 42% in the EU and 16% in the Americas. He introduced the panellists who would answer questions, address concerns and share ideas or experiences regarding the common issues they had with implementing and adopting the OIML Certificate System.

After Mr SORRELL's introduction, panellists spoke on the following topics:

- Update on OIML-CS from 54th CIML meeting - Mr Bill LOIZIDES (Leader of the Management Committee)

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- Introduction of OIML Issuing Authority, People's Republic of China - Mrs CAI Changqing

Download: [Presentation](#)

- Introduction of Utilizer – Republic of Korea - Dr DaeKyung KANG

Questions and answers from the floor

Question: Dr Rifan ARDIANTO, Indonesia asked about the cost to become a utilizer.

Response: Mr Bill LOIZIDES, Australia representing CIML OIML-CS clarified as follows: There was no cost to become a utilizer or associate. If your institute wanted to become an Issuing Authority in Scheme A, there is the associated costs of a test laboratory and there may be other costs as an Issuing Authority if you have to establish a quality assurance system on ISO/IEC 17065.

Question: Dr Rifan ARDIANTO asked if there were any costs after being a utilizer – any annual fee?

Response: Mr Bill LOIZIDES representing CIML confirmed as follows. There were no additional fees. The application form declared that your economy was participating in the Single Certification System and certificates issued by Issuing Authorities would be accepted. If an economy had special requirements, they should be noted on the application form so that others were aware of those. By completing the paperwork, your Economy had declared to participate in the OIML Certificate System.

Question: Unidentified speaker asked if Corresponding Members of OIML can become an Issuing Authority.

Response: Mr Bill LOIZIDES indicated an economy would need to be a Full Member of OIML to become an Issuing Authority. Corresponding Members of OIML could be a utilizer or associate. The only difference between a utilizer and associate was membership of OIML.

Question: Mr Bill LOIZIDES asked Republic of Korea if it cost them anything to become a utilizer or associate.

Response: Dr Daekyung KANG Republic of Korea confirmed there was no fee to become a utilizer.

Comment: Mr Phil SORRELL also confirmed that New Zealand was a utilizer and there was no cost for utilization.

Question: Unidentified Speaker from Chinese Taipei noted that his economy was not yet participating in the Certificate System and there were currently not enough experts who know the System.

Response: Mr Bill LOIZIDES noted as follows. During the poster sessions, it was clear that there were many economies with expertise. As the formal nomination process mentioned on the OIML website, fill an application form with your details and submit it to the Review Committee of OIML-CS. The Committee assesses the qualifications of the applicant and then makes a recommendation to the Management Committee for approval of the applicant as an expert. At the last Management Committee meeting, they requested experts in water meters, electricity meters and gas meters. Generally, the more experts there were, the cheaper it would be for the economy to become an Issuing Authority. If a number of economies had expertise, they could be called upon by OIML-CS and new arrangements with those economies could be made to supply their expertise.

Question: Mr Phil SORRELL noted that 15 experts were registered on the OIML website. He asked if there were any plans to encourage more people to apply as experts.

Response Mr Bill LOIZIDES noted that presentations like the panel discussion might raise awareness for economies to put forward their experts into various fields.

Comment: Mrs Marian HAIRE queried whether economies understand what standard of expertise is required?

Response: Mr Bill LOIZIDES noted the level of expertise expected was covered in the OIML application form and it sets out qualifications for a legal expert i.e. the credentials necessary for the particular OIML recommendation to be endorsed in.

Question: Cambodia asked for elaboration of the benefits of being an issuing authority, utilizer or associate.

Response: Mr Bill LOIZIDES advised as follows. To become an issuing authority, full membership of OIML was required. Also, a test laboratory needs to be appointed by the issuing authority in the declaration form to OIML-CS. He introduced an example of Switzerland appointing a manufacturer as their test laboratory outside of their country. Your institute could become an issuing authority if you reached an agreement with a test laboratory for which an accreditation processes on ISO/IEC 17025 is required. An economy may either get a test laboratory accredited or

appoint an existing accredited test laboratory. For example, Cambodia could appoint NIM as their test laboratory in PR China. They could then issue a single certification for their manufacturer in Cambodia. If Cambodia was not an issuing authority, the manufacturer had to go, for example, to PR China to get the certificate or any of the other issuing authorities. The key was that the issuing authority had to declare an associated test laboratory.

Mr LOIZIDES also noted a utilizer would not need a test laboratory, it just declared that the economy would accept the test results in the OIML Certification system in its economy, although this declaration did not prevent an economy having another certification system. You were declaring e.g. when the test result with a single certificate came in for a new NAWI, you wouldn't ask for further testing. But, it wouldn't prevent you from issuing your own permit for importing this product based on a national requirement. The only difference between a utilizer and an associate is based on your membership of OIML. Utilizer is for full members and an associate is for corresponding members.

Question: Unidentified speaker asked why we should encourage the use of the OIML Certification System?

Response: Mr Bill LOIZIDES advised that there is a trust in the OIML Certification System and it would reduce technical barriers to trade. Regardless where the instrument was tested, it would be assured that the testing used the same decision rules, the experts had equivalent qualifications and testing methods were under the same system.

Comment: Mrs CAI Changqing, Panellist noted that PR China was also a utilizer and local manufacturers see the benefit of saving money and time.

Comment: Mr Bill LOIZIDES noted that Mrs CAI's point was a very good one. An economy could be both an issuing authority and a utilizer. For example, Australia was an issuing authority for two recommendations, but a utilizer for another two. So, we would accept certificates from other issuing authorities for those two types and we wouldn't do further testing. The other benefit for the manufacturers was that they got their products to market faster. If many additional requirements were imposed on manufacturers, it could be a barrier to enter your market.

Comment: Dr DaeKyung KANG, Panellist noted that in the Republic of Korea, the manufacturers for NAWI wanted to export their products to Europe or United States for example. Such countries wanted their own certification for the NAWI in this case, the manufacturer could reduce the certification fees because they could also sell their products in Rep. Korea by utilizing the foreign certificate and so, he thought this was a benefit for the utilizers.

Question: Unidentified Speaker asked a question whether an economy could put a specific requirement on the declaration and if it is possible, whether the economy was required to provide a justification.

Response: Mr Bill LOIZIDES noted that every economy may have a special requirement based on historical reasons or environmental conditions. The special requirements declared by a country might be an additional test and the manufacturer could look at all requirements in the country. When the manufacturer sent an instrument to a test laboratory in PR China for example, they know which additional tests need to be done. So, they could export to the countries that would surely accept their products. If the special requirement was declared, the manufacturer would be clear on what the required test were in advance.

No specific justification is required for the special requirements in the declaration. The importance is the transparency of the declaration.

Comment: Mr Phil SORRELL noted the declarations are on the OIML website as well.

Question: Mr Phil SORRELL asked each of the panel members what lessons they had learned that would help others to get through and become a utilizer or an issuing authority.

Comment: Mrs CAI Changqing noted that the procedure for becoming an issuing authority could improve your quality system. In the past, in PR China, no quality system was required for the issuing authority. But after participating in OIML-CS, the authority first needed to improve their quality system. They had also become more familiar with the international rules and standards e.g. ISO/IEC 17065 and OIML D 32. So now, their colleagues in NIM are also familiar with these rules. This experience has improved the quality system of the issuing authority for testing laboratories. It also provided many benefits for local manufacturers as they can ask NIM directly in their own language to understand the international standards.

Comment: Dr DaeKyung KANG noted that KTC in Rep, Korea operated as a utilizer for the past two years but had a plan to be an issuing authority in the future. KTC would look to build the testing facility to improve its capability for reliable testing performance.

Question: Mrs Marian HAIRE, Training Coordinator asked when you get the certificate do you get the test report so these can be evaluated?

Comment: Mr Bill LOIZIDES, Panellist advised that an issued certificate came with the test report. You could go through the results and ask questions back to the issuing authority or the test laboratory.

Question: Mrs Marian HAIRE, Training Coordinator noted they are getting that certificate for free which is a big gift. She highlighted another issue seen during training courses, that some economies did not seem to use OIML-CA when they introduce type approval for a particular instrument, wanting to get into pattern or design approval for a particular instrument. She asked had them why they aren't using the OIML CS? She thought there was some fear of losing capability.

Comment: Mr Bill LOIZIDES noted as follows. Australia was struggling with the same question. Significant cost was required to maintain an issuing authority and test laboratories. If there was a competent issuing authority in neighbour economies, it would be more efficient to use that authority. On the other hand, because the competence of our experts should be kept, Australia were sending them to other economies in EU, for example, to maintain their expertise

Comment: Mrs Marian HAIRE commented that Mr LOIZIDES' comment was the right answer to the issue. She summarised the importance of maintaining expertise by examining the test reports. She highlighted another question, that even if we had a way of ensuring the competence of the present issuing authorities, we couldn't assure the competency also in the future. We have a way of maintaining measurement standards but Conformity to Type might be another part of the puzzle. There should be confidence in this whole system.

Comment: Mr Bill LOIZIDES noted as follows. This was a fantastic question. He explained that one of the concerns at CIML Presidential Council level, was the conformity to type testing. He invited CIML First Vice President, Dr Charles EHRlich to contribute to this topic. Within a manufacturing process, having an applicable OIML recommendation specified necessary checking procedures and the OIML was considering this was an appropriate option. In the past, the OIML only issued a type approval certificate and did not see the manufacturing process as assuring compliance to the specification. The necessary part was the market surveillance before the product was sold or used in the field. The OIML was discussing these topics and considering new items to be included into the next phase of recommendations, test procedures for market surveillance. A number of delegates in OIML had been discussing these things regarding revision of the recommendation. We were grappling with these issues.

Comment: Mr Darryl HINES, Australia noted there were enough procedural documents and quality systems in place to give assurance to Mrs HAIRE'S question in order that confidence in the system would be under the governance and

framework which were in place. Australia had been doing a lot of work with colleagues from other economies for developing those procedural documents to reinforce that confidence.

Mr Phil SORRELL, Facilitator thanked the panel for putting themselves forward for this session.

Mr Stephen O'BRIEN, APLMF President thanked Mr SORRELL, the panellists and delegates for their participation.

31. Pre-market Surveillance - Pilot Project Plan - Mr Darryl HINES

Mr HINES, Australia noted his presentation followed on from the panel discussion on the OIML Certification System. He asked if anyone had considered the design of the instruments after type approval and whether the ongoing manufacturing of those instruments complied with the original design. He introduced an example in which an instrument could have been type approved 10 years ago and the manufacturing process had changed in this period and it required the components to change. He thought the instruments were not as they had been at the type approval.

He introduced a proposal from Australia for a regional pilot project. This project aimed to look at whether the measuring instruments that had been manufactured and not yet introduced into the marketplace, would still be compliant with their original design at the type approval under OIML-CS. He provided a presentation with the following content:

- Project overview – objectives, proposal and participating OIML-CS test laboratories
- Project timeline
- Instrument selection/testing
- Reporting
- NMIA (National Measurement Institute, Australia) Example test plan

Download: [Presentation](#)

Comment: Mr Bill LOIZIDES, Australia added proposals as follows. He would negotiate further with his colleagues in NIM (PR China) and would seek a resolution to that project which might progress at the Management Committee Meeting of OIML-CS planned in March 2020 in New Delhi. If APLMF members wished to participate, NMIA in Australia would accept instruments from their economy and begin the testing. There might be freight charges for shipping. Their intention was to receive the instrument from an economy, complete the testing and pay the cost of returning the instrument to the economy, although fuel dispensers would be more difficult. Australia had reached out to some of the wholesalers and importers who were willing to participate, and there had been agreement from them to visit their warehouses and select instruments for testing. He noted they were looking for up to 3 instruments over the year to conduct the pilot.

Comment: Mr Stephen O'BRIEN, APLMF President thanked Mr HINES for the presentation and this initiative.

Question: Mrs Marian HAIRE, Training Coordinator noted her interest in the number of instruments on which Australia was looking to test during the project. She wondered if it was a statistically significant number of samples.

Response: Mr Darryl HINES Australia clarified the proposal is to test 3 instruments at each of the 3 test laboratories which could also be different manufacturers of a similar instruments over the 12 month period of the pilot, so 9 instruments in total as a starting point for the pilot. The pilot is to identify risks.

Comment Mr Bill LOIZIDES, Australia noted as follows. Instruments from another economy would be delivered at a cost to the economy, so Australia was doing it for free as a service to our region to see if there was a problem. It was a pilot project as mentioned during the OIML-CS panel discussion. OIML was looking at conformance to Conformity to Type (CTT). Europe have had a pre-market surveillance system similar to this proposal. Germany did the surveillance and they sent instruments between test laboratories to make sure the sampled instruments met the approved type. Thus, this country had CTT compliance models through monitoring the manufacturing process, with risk reports. This process was a Block Chain - every stage of the process was regulated with a quality process for identifying the manufacturing issues so every step was agreed. This approach would also become important; he recalled a number of economies talked during their poster presentations about industry and eMetrology. This proposal was a starting point of that surveillance programme, where it might not be statistically valid, but we should start somewhere in our region. Our concern was that if some instruments do not meet stringent requirements in Europe, where were they going? He suggested, they were not being destroyed, but they were going somewhere else.

Comment: Mr Ralph RICHTER, USA noted following Mr LOIZIDES comments regarding the non-compliant instruments not being destroyed. He suggested that rather than looking for the instruments on a shelf in Australia, there were plenty of member economies attending this meeting where it is much more likely to find these unsatisfactory instruments.

Comment: Mr HINES, Australia noted his agreement with Mr RICHTER's comments.

Comment: Mrs Marian HAIRE noted these economies would know which instruments were suspect, so they could choose the one to be sent to Australia for testing.

Comment: Mr Phil SORRELL noted New Zealand endorsed Australia's pilot project and would fully support it in any way they could and will look at sourcing instruments if possible.

Comment: Mr Stephen O'BRIEN, APLMF President noted the point Mr RICHTER made that instruments for testing would certainly be able to be sourced, it would be good to make sure they were coming from some of the developing economies. He encouraged some of the developing economies to take this opportunity. He agreed with Mrs HAIRE that the pilot was not statistically meaningful. If some issues were found with instruments, even with this small sample, that would give us some serious concerns that would warrant expanding into a fuller programme. Even if nothing was found; it would tell us some information. There was certainly debate going on in OIML as to whether CTT should be treated seriously, so this pilot might give us some evidence. APLMF would be supporting Australia with this initiative and Mr O'BRIEN noted appreciation for the efforts of the issuing authority in supporting the testing for this pilot.

Mr O'BRIEN, in closing the meeting for the day, thanked everyone for their participation and the interest shown.

Farewell Dinner

Delegates were taken on a short bus trip to Muong Thanh Hotel in Ha Long City for a traditional Vietnamese banquet with a musical performance from members of the local university. At the banquet, Mrs VU Thi Thu Thuy, Leader of the Quang Ninh People's Committee gave a short address, followed by a response from APLMF President Mr Stephen O'BRIEN.

32. Friday 8th November - Member Only Session - Mr Stephen O'BRIEN

Minutes of Section 31 of the meeting can be found on the [member only area of the website](#) and includes the following items:

32.1 Roll Call

32.2 Welcome to new members

32.3 Update on transition of Presidency/Secretariat to Malaysia

32.4 Hosts for future APLMF and Working Group meetings

32.5 Membership Status Changes

32.6 Secretariat's Interim Financial Report

32.7 Progress on updates to MoU and Rules of Procedure for APLMF Collaborations

32.8 Confirmation of APLMF 2020 Work Programme

32.9 2020 high level budget

32.10 Confirmation of the regional pilot Pre-market Surveillance

32.11 Modification of Procedure to Develop Guide Documents (Step 3)

32.12 Update on Strategic Plan 2020-2025

32.13 Presentation of Service Awards

33. Open Session Closing Remarks

Mr NGUYEN Hung Diep, Director Metrology Department, STAMEQ thanked the APLMF President Mr Stephen O'BRIEN, members of the Secretariat, distinguished guests and delegates from member economies for choosing to hold the 26th APLMF and Working Group Meetings in Viet Nam. He noted it was a wonderful opportunity for Viet Nam to host the meeting. He hoped that all attendees would carry with them fantastic memories of the people and country of Viet Nam and return to Viet Nam many times in the future. He also thanked Quang Ninh People's Committee for their support in facilitating the Directorate of STAMEQ to host a successful meeting. He also thanked APLMF Secretariat for its support of their team to prepare for the meeting and the tour of Ha Long Bay later that day. He wished the delegates and guests safe travel and looked forward to future APLMF meetings.

Mr Stephen O'BRIEN thanked Mr NGUYEN Hung Diep for his comments and also passed on his appreciation to STAMEQ and the Quang Ninh People's Committee for supporting this meeting. On behalf of APLMF, he formally thanked Mr TRAN Van Vinh who unfortunately, wasn't able to attend the Friday meeting due to work commitments, but certainly Mr NGUYEN and his team at STAMEQ had done a fantastic job of hosting the 26th APLMF meetings. We have had a spectacular venue with views of the beautiful harbor where we would enjoy the tour in the afternoon. We had some spectacular food and entertainment at the hosted dinner, but the key thing was the fantastic and welcome we received from the STAMEQ staff who supported our meeting. Their job was well done to support legal metrology, APLMF secretariat and making us feel welcome.

In closing the meeting, Mr O'BRIEN noted there was a lot of work going on within APLMF and it was great to see that our working groups have been re-energized. He noted he was impressed with the enthusiasm at Working Group meetings. He found the fact that we have got the right people involved and work programmes had been reviewed thoroughly, this enabled APLMF to head to the future in good shape. He also acknowledged APLMF was in good stead and he was looking forward to making the smooth transition to Malaysia and supporting the great work they will do in the future.

He reiterated the words of our host adding his appreciation to the Secretariat, the fantastic job that Ms SMITH, Mrs HAIRE and Mr JONES had done in supporting this meeting and noted that there was a huge amount of work that goes on behind the scene.

He thanked the staff of the Wyndham Legend Ha Long Hotel and Hoa Binh Tourist for providing the spectacular location to stay, meeting rooms, restaurants/catering, audio visual support, tours and transportation.

He also passed on his appreciation to the members and their delegates, observers and invited guests for attending and participating in our meetings and he wished them all safe travels as they returned home.

He formally closed the 26th APLMF and Working Group Meetings held in Quang Ninh Province, Ha Long Bay, Viet Nam.

34. Cultural Tour of Ha Long Bay hosted by STAMEQ

Delegates boarded a cruise boat for a trip on the Bay, including a visit to the ancient limestone caves.