

Report on Work Programme and Achievements against APLMF Strategic Plan 2016 -2020

Note: 2020 Achievements and Actions completed in red italics

2020 has been a challenging year as we have grappled with the affects a Covid-19 world has had, on delivering our planned training activities and our annual meetings. However, with excellent infrastructure in place, the Secretariat has been able to continue to support its members and actively promote new ways of communicating and working together using online tools. If APLMF members require further detail regarding any of the items listed in this summary, please contact the APLMF President or Secretariat.

KEY OBJECTIVE 1: SUPPORTING CAPABILITY

Supporting the development and maintenance of the capability of national metrology organisations to enable them to meet the evolving need for an effective legal metrology infrastructure.

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STRATEGIC PRIORTY		ACHIEVEMENTS/ACTIONS
TRAINING AND KNOWLEDGE		
	a) Training Coordinator Role - Training Coordinator to become a core function of APLMF Secretariat	 Disestablished the Training Coordination WG. and established a permanent role within the Secretariat for the training coordinator. The candidate was elected from within the membership for a 3-year term (2019-21).
	b) Metrology Developing Emerging Economies in Asia (MEDEA) Project - Support the development and delivery of training to members and non-members within Asia through MEDEA project and other initiatives	 MEDEA 1 - May 2015-April 2018, 14 training course, 189 participants from 10 member economies attended training courses (not including observers). 2017 joint workshop in Malacca on Modernising National Metrology System. This was to launch the joint Guide 1: National Metrological Infrastructure. This workshop included a segment on writing case studies and a template was provided for economies to use.



- 2018 joint workshop in Hong Kong to determine priority for training topics for MEDEA 2 programme.
- Developing and empowering trainers from developing economies e.g. Rice Moisture (2018- 2 special seminars were run to prepare them). They also delivered a training course in Dec 2018.
 Trainers from Malaysia are developing training which they will deliver in October 2019.
 Indonesia will also deliver training on pre-packaged goods in 2020.
- MEDEA 1 initiative to provide an instrument bank was trialled following donation of 40 items from Australia. Equipment was sent to 5 developing economies; however, the logistics and cost has made it difficult to continue.
- 2018 First CABUREK meeting held in Thailand, 2019 second meeting held in Sri Lanka. CABUREK is a process where participants are supported over 2.5 years as they deliver a project within their own economy. Coaches provide feedback and challenge the participants ideas as they develop over the 2.5 years.
- Guide test procedures were developed as a result of training programs. Economies were surveyed to ensure they agreed with the procedures documented. These were then published as Guide 7. Nine have been published to date and these guide documents will inform the eLearning training the working groups will develop.
- MEDEA 2 May 2018 October 2019, 4 courses held with 99participants, 59 were APLMF full members and 4 were corresponding member economies.

MEDEA 2

- o Nov 2019 Training course on calibration and testing of non-invasive sphygmomanometers was held in Malaysia with 24 participants from 15 economies, 5 of which were APLMF full members.
- o In June a joint APLMF/APMP webinar on Case Studies with Laurie Winkless '<u>MEDEA 2.0 Science Communication for Metrology</u> was successfully run with around 70 participants.
- Due to Covid-19 the following planned courses were postponed:
 - o Approval/Verification of Electricity Meters (China)



	 O Belt Weighing Instruments (Malaysia) Postponed until MEDEA 3 O Pre-Packaged Goods (Indonesia) We are working to convert these training courses into a series of Zoom meetings / online courses which will held before end of March 2021. The topics we are working on are:
c) e-Learning - Identify new approaches for delivering training online and new funding streams to support training for developing economies	 2019 Guide 8: How to develop an eLearning module was provided to WG Chairs and to members for consultation This guide document will assist the WG chairs to develop their eLearning modules in a consistent format. Completed APLMF Non-Automatic Weighing Instrument module as pilot example. This module is currently being set up on the OIML Learning Management System to facilitate APLMF member economy and global use.



	 Developed funding proposal, that is under consideration by PTB and initiated work with APLMF WG to create a library of modules on core legal metrology areas. The APLMF NAWI e-Learning module has been hosted on the PTB Learning Management System (LMS) and a pilot conducted in October / November 2020. The Fuel Dispenser Module has also been completed (hosted on the NMI Australia LMS) and a pilot is currently underway (October / November 2020).
d) Support OIML International Initiatives - Collaboration with OIML Training Centers and RLMO's	 Nominated Malaysia for an OIML award for their work in establishing their metrological infrastructure. 2018 Joint APLMF/OIML Pre-Packaged Goods course. Published article in April 2019 OIML BULLETIN on 25th Anniversary of APLMF: https://www.oiml.org/en/publications/bulletin/pdf/oiml_bulletin_april_2019.pdf Attended and presented to OIML Regional Legal Metrology Bodies Round Table (RLMO) meeting in October 2019 2019 co-delivered Joint APLMF/OIML Certificate System Workshop in China August 2020 – nominated Indonesia for the OIML Countries and Economies with Emerging Metrology Systems (CEEMS) award based on their work to develop and implement a new method for ensuring that measuring instruments are measuring accurately. The focus of their work is a collaboration between government, business and the community. APLMF President attended and presented to OIML Regional Legal Metrology Bodies Round Table (RLMO) online meeting held in October 2020. APLMF President attended OIML CEEMS online meeting held in October 2020. October 2020 – OIML announced at its 55th International Committee of Legal Metrology (CIML) meeting held online that Indonesia had been awarded the CEEMS Award for 2020. Congratulations to the Directorate of Metrology under the Ministry of Trade, Indonesia.



- e) Evaluation Ensure training continues to meet the needs of members, evaluate programmes and training methods for continued improvement
- Survey Monkey is used as an effective tool for collecting and analysing feedback from training courses and conducting surveys.
- MEDEA 2 -Six month follow up on participant's action plans, results of which are captured in a spreadsheet to enable future analysis of effectiveness of training. PTB can determine easily if there is a pattern of non- reporting from economies and implement consequences for future attendance at courses.
- All courses run up to and including November 2019 have been followed up and included in this
 report. The collated results for all courses run during the MEDEA 2 program will be distributed to
 all Directors by PTB.

COMMUNICATIONS

- a) Communications by the Forum
 -Improve Forum's website
 functionality and ability to share
 information (e.g. email, newsletter,
 Metrology Asia Pacific portal, system
 for exchanging information on
 emerging issues)
- Initially at the 22nd APLMF (2015) we held a workshop to get feedback on ideas to improve communication, website and meeting format.
- 2016 launched new website and have continued to refine and add content,
- 2017 provided member only webpages and in 2019 set up Working Group webpages.
- Quarterly newsletter, actively seeking articles/input from members and International organisations.
- Collateral produced is usually provided digitally, apart from the APLMF/APMP National
 Metrological Infrastructure Joint Guide 1 which was provided in printed format for the launch.
- In 2017 introduced video highlights following 23rd, 24th and 25th APLMF meetings.
- 25th APLMF collated historical information to create a video presentation 'Celebrating 25 Years 1994-2018.
- 2019 continued to communicate effectively, through timely updates to the website, quarterly newsletters and direct communication to members by email. We have also been getting increased engagement from members providing articles for the newsletter.
- 2020 continued to get excellent engagement from members providing interesting articles for publication in the quarterly newsletters, in particular, 6 economies reported on World Metrology Day celebrations. For more details see: https://www.worldmetrologyday.org/



b) Promoting awareness of metrology -

Identify and support activities that promote awareness of legal metrology and the effective use of OIML recommendations and Certificate System

- Many economies are celebrating World Metrology Day on 20 May. This provides a focus to show the value of metrology to society and we encourage members to share their stories in our quarterly newsletter.
- 25th APLMF held sessions on OIML Certificate System, including recent developments, process for economies to be utilising and issuing authorities, identifying impediments and how to promote additional utilising economies, discussion of support and activities within the Region.
- Joint OIML/APLMF Certificate System workshop July, China, attended by representatives from 9 member economies.
- 26th APLMF includes a panel discussion with representation from OIML, PR China as an Issuer and Cambodia as a Utiliser.
- Regular updates from OIML are provided in our 2020 quarterly newsletters.
- OIML-CS Working Group sent out a questionnaire in late September 2020 to gauge issues for economies in adopting OIML-CS. Awaiting results.
- c) Metrology Asia Pacific portal MEDEA has provided funding to
 support development of a shared
 APMP/APLMF information portal
 (Metrology Asia Pacific) that will
 provide links to case studies and
 information held by global
 organisations such as OIML and
 BIPM
- Website framework has been designed and set up.
- Some content has been provided which is being peer reviewed.
- The URL www.metrologyasiapacific.com has been secured but is not currently live. It will link to useful information on authoritative metrology websites including: APMP, APLMF, OIML and the BIPM.
- Final development and launch of the joint APMP-APLMF metrology web portal to facilitate sharing of information resources has been significantly delayed. The delay is due to time required to obtain and edit the content. A workshop is planned in late 2019 to get the project back on track for a launch in early 2020.
- Delays in finalising content for the launch of the joint portal have been experienced due to staff being re-deployed on Covid-19 related projects. Prototype with limited content created and available for APMP and APLMF member review and feedback. Send feedback to: stephen.obrien@mbie.govt.nz.



•	The website is locked during initial review period but can be accessed:
	<u>www.metrologyasiapacific.com</u> / Username: info@aplmf.org / Password: Aplmfpassword1

• The work is continuing finalising a library of information using key international metrology documents and publications. Terms of Reference for a working group and website user guide for the ongoing management of content have been developed. The next steps include, setting up a working group to administer and maintain website from January 2021. Seeking nominations from interested APMP and APLMF members.

KEY OBJECTIVE 02 - ORGANISATIONAL STRENGTH AND STEERING

Building a dynamic, resilient and flexible organisation that has the Governance structures and systems that enable the Forum to provide confidence that member funds are being responsibly managed, share information effectively, deliver services that meet members' needs, and effectively represent members' interests at regional and international level.

STRATEGIC PRIORTY	ACHIEVEMENTS/ACTIONS
a) Working Groups - Strengthen Working Groups' activities, ensuring they support the needs of developing economies.	 2016 workshop to come up with ideas to make working groups more effective. 2017 a Discussion document 'Working Group Transition' on changes to working groups was circulated prior to a workshop to get feedback from members. 2018 - Following decisions made about progressing the WG Transition, Chairs provided recommendations for the future of their groups and provided additional information to standardise the WG webpage. Decisions were made on the disestablishment of 2 working groups, appointment of subject matter experts for these topics, establishment of 2 new working groups, agreed work plans and call for nominations for WG vacancies. 2018 Two new working groups established: OIML Certificates Systems and NAWI (Weighbridges and Spring Balances e-Learning Modules 2019).



	 2019 Chairs of WGs reconfirmed or elected. Each WG now contains a minimum of 3 representatives from developing economies and all have an agreed work plan. 2019 Secretariat is supporting Working Groups by providing access to resources such as teleconference facilities, Google folders and webpages> These are designed to enhance collaboration. 26th APLMF WG programme includes a half day workshop for WG members of 4 of the 6 working groups to meet face to face and progress their work plans. Funding for 14 WG members of developing economies was made available through MEDEA 2. During 2020, in the absence of a face to face meeting, Working Groups (WGs) have been encouraged to meet using Zoom or other online meeting tools to progress their workplans. Most WGs are making some progress, but this has been affected by Covid-19. Full details of what Working Groups have achieved during the period are detailed in their written reports here.
b) Annual Meeting - The annual meeting provides a valuable opportunity to share knowledge and expertise, identify and create a shared understanding of emerging issues and help build a trusted, collaborative environment.	 Since 2017 the Secretariat has been able to upload final documents/presentations to the website during APLMF meetings making them available in real time. Since 2016 provided with a reporting template and a power point template. At the meeting only highlights and future focus were presented. Reports were called for in advance so delegates could read these and were encouraged to mix and discuss issues of importance during breaks. 2017 changed from Economy Report presentations to Poster Sessions encouraging increased participation and engagement. This was very successful and continued in 2018 and 2019. Continued to streamline meetings so that maximum time can be spent on activities that are

online sessions.

forward looking with an ever-increasing level of active engagement from participants.

• 2020 will see the first online APLMF meetings. The Secretariat/Executive decided to run two

• Thursday 3rd December (Seminar presentations) – 90 minute Zoom meeting presentations with questions. The Secretariat called for submissions from members for presentation topics and 3 were chosen. Two of the three presenters pre-recorded their presentations and 2 of the 3 will



attend the session to answer questions. Questions for the 3rd presenter will be recorded and answered post meeting and provided on the website:

- 'Software Examination for Legal Metrology in Malaysia', Presenter: Mr Muhammad
 Azwan Ibrahim
- 'Update on the Conformity To Type (CTT) Market Surveillance Regional Pilot', Presenter:
 Mr Daryl Hines (Australia)
- o 'Internet of things and how networking of instruments is changing metrology', Presenter: Mr Roman Schwartz, (CIML President).
- Friday 4th December (Forum meeting) 120 minute 'Zoom' 'Member Only Session' to discuss the business of APLMF including short highlight presentations from APMP, OIML and PTB. These presentations have been supplemented by written reports. Working Groups and Member economies were also requested to submit their usual written reports which are published on the website. Members are encouraged to read the reports and then contact the authors directly should they have items of interest they wish to pursue.
- c) Membership Growing the engagement and contribution of members, both in terms of specialist support and financial support, is important for creating a sustainable and value-adding regional body. A sound financial base is also important for enabling this Forum to deliver services that meet the needs of members
- 2016 Unpaid fees from financial years prior to 2015 were written off.
- 2016 Membership fees unpaid for more than two consecutive years would result in downgrading of membership status.
- New members: 2017 Brunei Darussalam, 2019 Kiribati.
- 2017 introduced discussion papers 'APLMF Membership Criteria' and 'Membership fees', 2018 Membership Fee Decision paper was circulated and agreed to increase fees over 4 years starting in 2020 and introduce a process to review indexing and fees every 2 years to keep pace with inflation. A fee was also introduced for corresponding members and an official 'observer category' introduced effective 2020.
- 2019 Membership fee invoices for 2020 with the increased membership fee will be sent out in Dec 2019, along with the first invoices for Corresponding member fees.
- 2020 -there has been some interest from Fiji for membership, but this has not as yet materialised into a signed MOU.



- In December 2019 when Corresponding Members were advised of the introduction of a USD250 fee, they were encouraged to consider joining as full members and provided with the information to facilitate this. This information was provided again in January 2020, when the invoices for fees were sent out. Of the Corresponding membership, only Russia have paid the USD250 fee introduced in 2020 at the time of completing this report. A decision needs to be made as to how we proceed in 2021 if payments are not made for 2020.
- In November 2020, the Secretariat has been engaged by Colombia in email conversations regarding their Corresponding Membership and has provided additional information encouraging them to consider Full Membership. Colombia has been active with APLMF recently taking part in the 2 eLearning pilots and registered to attend the 27th APLMF online presentations on 3rd December.
- Chile is listed as a corresponding member, however, the APLMF Secretariat has been unable to locate any contact details for Chile and we recommend Chile be removed from the website as a Corresponding member.
- d) Governance The APLMF Executive
 Committee/Secretariat will
 continue to document all APLMF
 processes and procedures to
 maintain an appropriate level of
 governance and improve the
 transparency for all member
 economies. This documentation
 will also support the future transfer
 of the APLMF Presidency and
 Secretariat to another member
 economy
- Introduced additional 2 or 3 Executive Committee telephone conferences between annual meetings to make decision making more robust and efficient.
- Introduced a process of consultation and decision making that is inclusive and effective to progress items between meetings.
- Documented agreed strategy over 5 years with bi-annual reviews.
- Set up Xero (accounting system) to manage finances, providing robust and regular reporting.
- GoogleDrive is used to store and manage document filing and providing google folders for training course materials has meant participants can prepare ahead for their courses and have access to the materials during and after the course.
- Economy Directories: Provided existing word version or template. 10/20 directories have been updated.
- A Secretariat Manual has been developed providing comprehensive documentation of Secretariat processes/procedures for regular tasks, this is an ongoing task.
- 2019 MOU and Rules of Procedure reviewed and provided to members for consultation.



- 2019 Strategic Plan reviewed for 2020 2025 will be presented at APLMF 26 and then circulated to members for consultation.
- 2020 The MOU and Rules of Procedure are still under review. A lot of feedback was received for these documents and a second draft will be circulated for feedback during 2021.
- APLMF Strategic Plan 2021-2026 has been finalised and published on the APLMF website in November 2020.
- Arrangements are in place for the transfer of the APLMF Secretariat and Presidency from New
 Zealand to Malaysia with effect from 1 January 2021 for an initial term of 2 years. Dr Osman
 Zakaria, Senior Director, National Metrology Institute of Malaysia (NMIM) will take over the role
 of APLMF President supported by a Secretariat team from NMIM and SIRIM Berhad, Malaysia.
 The transfer will be acknowledged in an official transfer at the 27thAPLMF online meeting on 4
 December 2020.
- The current Secretariat has been in regular contact with Malaysia to plan and support a smooth transition of the Secretariat from New Zealand. New Zealand Secretariat support will continue to be provided by New Zealand for a period of three months and as needed from then on.
- Brunei Darussalam, Cambodia, Chinese Taipei, Thailand and USA provided their Directory updates. 17 of our 20 Economies have now updated their Economy Directories since 2016.
- The APLMF Secretariat and Executive Committee have confirmed that due to the Covid-19 global pandemic the 28th APLMF meetings in 2021 be held online



KEY OBJECTIVE 03 - INTERNATIONAL REPRESENTATION AND COLLABORATION

Active participation with regional and international bodies to ensure the views of members are promoted and that international activities and regional collaboration support greater harmonisation, member development and mutual recognition between members. This collaboration will focus on the work of the International Organisation of Legal Metrology (OIML) and Regional Legal Metrology Organisations; and Asia Pacific Economic Co-operation (APEC) and APEC Specialist Regional Bodies.

STRATEGIC PRIORTY ACHIEVEMENTS/ACTIONS



INTERNATIONAL COLLABORATION

 a) OIML - Improve linkages with international and regional bodies, particularly OIML, RLMO's, APEC and other APEC Specialist Regional Bodies (SRBs)

- APLMF Secretariat has actively participated in OIML meetings and seminars.
- APLMF has collaborated with APMP and PTB via the MEDEA 1 and 2 programmes to provide quality and relevant training within the Region e.g. 2017 Workshop on Modernising National Metrology, 2019 Workshop on OIML CS and the CABUREK project is also joint initiative.
- Identifying APLMF developing economies who are involved with APMP Focus Groups to have them report back at APLMF meetings 4 reports this year.
- Participating in APMP meetings and MEDEA Coordination Committee Meetings and workshops.
- 2019 APLMF Secretariat has participated in the following meetings:
- Asia Pacific Economic Cooperation (APEC) Sub-Committee on Standards and Conformance in Santiago, Chile 25-28 February 2019:
 - Chaired Specialist Regional Bodies (SRBs) Forum meeting
 - Delivered SRB Forum workshop open to all APEC economy representatives (chairing and presenting APLMF work programme)
 - Presented at Senior Officials meeting of APEC Sub-Committee on Standards and Conformance
- 54th CIML Meetings 21-25 October 2019 Bratislava, Slovak Republic. Including:
 - Presented on behalf of APLMF and supported delivery of OIML Workshop on 'e-Learning'
 - Represented APLMF at OIML Regional Legal Metrology Bodies Round Table (RLMO) meeting
 - Represented APLMF at Countries and Economies with Emerging Metrology Systems (CE EMS) Advisory Group (AG) meeting.
- APLMF members were involved in OIML Working Group that has completed a final draft international guidance document on Conformity to Type (market surveillance systems for ensuring that production instruments met their approved type).



 Informally contacted the Australia Government regarding their initiative of AUD2Billion infrastructure financing facility for the Pacific in response to resolution from the 25th APLMF meeting. Advised that the key input into this work was to be a Pacific Quality Infrastructure Initiative – Regional Workshop held in Fiji 2-6 September where several speakers provided an understanding of Quality Infrastructure elements. Dr Angela Samuels attended and provided a report. APLMF President will monitor activities planned as a result of this workshop and seek opportunities for legal metrology development to be included. In 2020 APLMF member economy representatives, including Phil Sorrell from the APLMF Secretariat, actively participated in the OIML Working Group responsible for the review and update of OIML International Document D1 National metrology systems – Developing the institutional and legislative framework. This important document is currently in the process of CIML approval and is expected to be published in early 2021.
 November 2020 APLMF President attended and presented an APLMF update to online meetings of Asia Pacific Metrology Programme (APMP) Developing Economies' Committee (DEC-41) and attended APMP General Assembly.
Ongoing - seeking nominations for OIML Award for excellent achievements in legal metrology in a developing economy.
ADLINE Connectories has postively mantisimated in ADEC Cub Committee on Ctandards and

- Specialist Regional bodies (SRBs) -Represent APLMF on OIML: RLMO Round table and CEEMS Advisory Group
- APLMF Secretariat has actively participated in APEC Sub-Committee on Standards and Conformance (SCSC), Chaired the Specialist Regional Bodies (SRB) Forum and participated in the Senior Officials Meeting (SOM) 1 and 3.
- 2018 ASEAN representative presented an update for the first time.
- Attended and presented to Pacific Area Standards Congress, 42nd Annual General Meeting Wellington, New Zealand Wed 10 April 2019.
- 2019 Chaired Specialist Regional Bodies (SRBs) Forum. Held 2 teleconferences that reviewed SRB's individual work programmes. Produced a summary of these work programmes mapped to the relevant APEC work priorities and provided it to APEC delegates.



		 2020 Chair of Specialist Regional Bodies (SRBs) Forum moved from APLMF to APMP. February 2020, New Zealand / APLMF representatives were unable to attend Asia-Pacific Economic Co-operation (APEC) and Specialist Regional Bodies Forum (SRB) meetings held face to face: https://www.apec.org/Groups/Committee-on-Trade-and-Investment/Sub-Committee-on-Stand ards-and-Conformance All subsequent APEC meetings hosted by Malaysia 2020 and New Zealand 2021 to be held on-line. For more information about APEC 2021 see: https://www.apec2021nz.org/
c)	Other International bodies - Build linkages with industry and non-government bodies	 2019 Collaborative relationship with MEDEA and have entered an MOU with PTB relating to training. 2019 Established a link on APLMF website to ASEAN Type Approval Guidelines.
d)	Pacific Islands - How to best support PI economies and respond to development needs for their emerging metrology systems	 2018 - Contacted Fiji encouraging them to join APLMF 2019 - Kiribati Joined APLMF as a full member has been participating in training courses and attended the 26th APLMF meetings in 2019 (Vietnam). 2020 - The Secretariat has had ongoing email dialogue with Fiji and we are encouraging them to join APLMF. 2020 - In October Vanuatu requested information about developing legislation on legal metrology and the Secretariat has referred them to various guides/documents.