



ASIA-PACIFIC
LEGAL METROLOGY FORUM

APLMF Strategic Plan

Five year strategy 2016–2021

Draft for consideration at APLMF meeting Tokyo 2016

Vision and Mission

▶ Vision

To be an effective, representative, professional forum, that provides the leadership and networks that build and grow close cooperation amongst members in advancing the field of legal metrology.

▶ Mission

To promote free and open trade through the development and harmonisation of legal metrology across the Asia–Pacific region, leading to improved economic development and social wellbeing for all.

Key Objectives

▶ 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.

▶ 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.

▶ 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 Region Bodies.

Strategic Priorities

To deliver APLMF's objectives and mission, we have identified four strategic priorities and a number of actions to achieve them. Given the limited resources available to the Forum, these actions will need to be implemented over the next two to three years.

It is proposed that this Strategy be refreshed every two years at the annual meeting of the Forum.

Summary of Strategic Priorities and Actions

Operational systems and steering

- Issues-based approach to drive the Working Groups' activities
- Refine and document processes and procedures
- Annual meetings that enhance knowledge sharing, strategic planning and networking opportunities

Communication

- Improving Forum's website functionality and interaction, with regular sharing of information (e.g. email, newsletter, Metrology Asia Pacific portal, system for exchanging information on emerging issues)
- Identify and support activities that promote awareness of legal metrology and the effective use of OIML recommendations and Certificate System

Training and Knowledge

- Support the development and delivery of training to members through MEDEA project and other initiatives
- Identify new approaches for delivering training (e-learning) and new funding streams to support training for developing economies
- Close collaboration with OIML, Pilot Training Centres and RLMO's

International collaboration

- Improve linkages with international and regional bodies, particularly OIML, RLMO's, APEC and other APEC Specialist Regional Bodies (SRBs)
- Active involvement in OIML: RLMO Round table and CEEMS Advisory Group
- Build linkages with industry and non-government bodies

1. Organisational systems and steering

To effectively undertake its role of developing and maintaining mutual confidence in measurement systems among legal metrology authorities in the Asia Pacific region, APLMF needs to have strong organisational and governance systems in place.

The current structures and rules for procedures for APLMF collaborations were established in 2003 – these rules do not always ensure that legal metrology issues are identified and addressed in an efficient and effective manner.

(a) Working Groups

APLMF establishes time-limited working groups to undertake specific tasks, with clearly defined terms of reference.¹ At present, there are seven working groups focusing on key areas for Forum members, including training, mutual recognition, goods packed by measure, utility meters, medical measurement, agricultural measurement and metrological control systems (refer Appendix for details).

The creation of efficient working group processes and arrangements is fundamental for ensuring APLMF members can effectively collaborate on issues of mutual importance. At last year's meeting in Hawaii members identified a range of options for improving the way working groups activities are undertaken and these have formed the basis for the proposed actions:

- ▶ **Refresh topics** – The current working groups have been progressing these topics for more than a decade and it is opportune to reconsider the scope and objectives of the current working groups as part of a general refresh. In particular, topics need to align with the current needs of members and with the work of other regional and international bodies (e.g. link to the Technical Committees and project activities of OIML).
- ▶ **Ways of working** – APLMF will work with Chairs of current working groups to identify possible changes that can improve the collaborative efforts needed to progress working group topics, including developing common procedures and working methods, standardised reporting, supporting Chairs' project management, and ways in which the Chair and members can be better supported.

New guidelines and operating procedures for Working Groups have been developed and will be considered by members at the 23rd Forum. If these are agreed, they will govern the operation of the Working Groups from January 2017.

¹ Article 6 of Rules of Procedure for APLMF Collaborations

1. Organisational systems and steering (*continued*)

(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. However, the current structure of the meeting has hampered the ability of members to make the most of our valuable time together.

In Hawaii last year, members identified a number of ways to make the meeting more efficient. Some of these suggestions have been trialled this year, such as standardised economy reporting templates, circulated ahead of the meeting, so the meeting can focus on discussing key issues or highlights of the reports, supported by simpler presentations.

Other suggestions that the Executive/Secretariat will be working on for adoption at future meetings :

- ▶ Adding a seminar or training session on an emerging topic of interest
- ▶ Promoting greater industry attendance and participation at the meeting
- ▶ Better procedures on the actual meeting days, introductions and circulation of material via website prior to the meeting
- ▶ Identifying key issues ahead of the meeting, to promote greater attendance and engagement by members and industry, other regional bodies etc.

(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. The existing fee structure and levels have remained unchanged since 2007.

The APLMF Executive will look at ways to grow the membership of this regional body as well as options for increasing the financial and non-financial (in-kind) contributions of member economies and other organisations/international bodies.

(d) Governance

The APLMF Executive / Secretariat will be working 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.

¹ Article 6 of Rules of Procedure for APLMF Collaborations

2. Communication

APLMF operates over a widely dispersed geographic environment, with economies that are at different stages of economic and social development, and who have differing levels of legal metrology systems and infrastructure.

Part of APLMF's role is to support member economies through promotion of Legal Metrology 'best practice' and harmonisation within the region.

APLMF will identify and support activities that promote awareness of legal metrology and the effective use of OIML International Recommendations and OIML Certificate Systems where possible by members.

(a) Improved communications by the Forum

The initial refresh of the APLMF website, email newsletter and improved availability of Forum and training documentation have improved communication.

www.aplmf.org

- ▶ There is further work to be done to improve the website (e.g. members-only area, greater use of graphics and videos, hot topics, improved content and better use of e-communications).
- ▶ The Executive / Secretariat is also investigating systems for improving the speed and effectiveness of exchanging information between member economies on emerging metrology and potential compliance issues. The results of this investigation will be reported back to the Forum for future consideration.

2. Communication *(continued)*

(b) Promoting awareness of metrology

Metrology is not well understood outside of some specialist bodies and parts of government organisations. Metrology is such a fundamental aspect of economic operations, its importance can often go unnoticed by industry, the public and government agencies.

A key aspect of communication activities of APLMF is promoting the awareness of metrology within the region, and supporting national metrology authorities in their efforts to promote awareness in their own economies. The annual World Metrology Day is an example of the type of activities that this Forum needs to effectively support.

(c) Metrology Asia Pacific –portal

As part of this general promotion of metrology, MEDEA has provided funding to develop 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.

National metrology authorities and organisations can use this information for their own promotion activities. This portal will be launched mid-2017.

- ▶ The Executive is keen to work with members to identify both priorities for promotion activities and resources to support regional and domestic activities.
- ▶ This will be an ongoing strategic priority for work, and it is expected that the nature of the work may change over time as members test what promotion activities work well, what improvements can be made to the design and content of information available through the Portal, and where the international bodies need to take a lead role.

3. Training and knowledge

Training is a key strategic priority for the Forum, as an effective legal metrology system is built on the capability of those working in member economies to develop and maintain their national systems.

(a) Training Coordinator role

Given the central and ongoing importance of training, it is proposed that training coordination become a core function of the APLMF Secretariat in close collaboration and supported by the Executive and Working Group Convenors, rather than being delivered by a Working Group (which are established to deliver time-limited tasks). The Executive will appoint a person this new Training Coordinator role for a fixed period of up to 3 years from member economies to help support the delivery of this new function.

(b) MEDEA project and beyond

APLMF has been fortunate to have the financial and administrative support of *Physikalisch-Technische Bundesanstalt* (PTB) for the delivery of Metrology – Enabling Developing Economies in Asia (MEDEA) training over the last three years. However, this training support will come to an end at some stage and APLMF needs to identify additional funding sources to continue to provide access to training in the region.

Another successful aspect of the MEDEA project is the close working relationship with APMP. The Forum intends to build on this success by exploring opportunities for future co-operation between the metrology regional bodies.

(c) Online learning

Given the resourcing constraints the Executive will be looking at opportunities to deliver more training via e-channels and the development of online training modules to compliment its current training courses. On-line training modules will be developed on a trial basis for core legal metrology areas of operation such as the verification of *non-automatic weighing instruments* with the future goal of developing a library of such modules as a resource for member economies. This work will involve consolidation and use of existing member economy and RLMO resources in close cooperation with OIML to ensure consistency and international harmonisation.

3. Training and knowledge *(continued)*

(d) Support of OIML International Initiatives

The Forum will also monitor and seek to support initiatives identified by OIML Countries and Economies with Emerging Metrology Systems (CEEMS) Advisory Group and the *OIML Pilot Training Centre* lead by China.

<https://www.oiml.org/en/structure/advisory-group>

(e) Evaluation

To ensure that training continues to meet the needs of members, it is important that training outcomes are evaluated so that programmes and training methods can continue to be improved. It is also important for the Forum to jointly identify the training needs as well as areas for expertise/sharing of ideas on both current and emerging metrology issues. It is proposed that this analysis form part of Working Group discussions and report-back to the annual meeting to get consensus on areas that will be the focus for the Forum.

Key Training Priorities (next two years):

- ▶ Establish the new Training Coordinator role
- ▶ Support MEDEA training initiatives
- ▶ Identify alternative funding sources for legal metrology training
- ▶ Trial development of on-line training modules
- ▶ Investigate new approaches to delivering training

4. International collaboration

International collaboration and engagement will remain a priority – APLMF will continue to seek ways to align its priorities and work programme with the activities of OIML and other Regional Legal Metrology Organisations, increase collaboration with APMP and look for opportunities to work more effectively with and support APEC goals and priorities.

If APLMF is to remain a competent and responsive regional legal metrology organisation, in terms of successfully representing members views, then engagement with other regional and international bodies is important. The Forum will seek to support the mutual recognition and harmonisation of metrology on a regional basis, but also internationally, in order to reduce trade barriers for APEC and APLMF member economies globally.

(a) OIML

APLMF collaborates closely with the *International Organisation of Legal Metrology* (OIML), including providing feedback on the development of technical and other documents and attendance at international meetings (as appropriate). APLMF will also seek to maintain linkages and build relationships with other Regional Legal Metrology organisations through active participation in the OIML RLMO Round Table and co-operation where possible on a bilateral basis with:

- ▶ WELMEC – European Cooperation in Legal Metrology
- ▶ SIM – Sistema Interamericano de Metrologia
- ▶ AFRIMETS – Intra-Africa Metrology System
- ▶ COOMET – Euro-Asian Cooperation of National Metrological Institutions

(b) Specialist Regional Bodies (SRBs)

APLMF also maintains close links with *APEC Sub-Committee Standards and Conformance* (APEC SCSC), working through the **SRB Forum**.

The SRB Forum is made up of the five Specialist Regional Bodies (SRBs), who individually and jointly provide specialist advice and support to APECs work programme in the standards and conformance area. The five SRBs are:

- ▶ Asia-Pacific Legal Metrology Forum (APLMF)
- ▶ Asia-Pacific Metrology Programme (APMP)
- ▶ Pacific Accreditation Cooperation (PAC)
- ▶ Asia Pacific Laboratory Accreditation Cooperation (APLAC)
- ▶ Pacific Area Standards Congress (PASC)

4. International collaboration (*continued*)

The SRB Forum is changing the way it works to enhance its ability to provide effective links between SRBs and APEC and coordinate SRB's advice and expertise. APLMF will continue to work with the other SRBs to bed-in the new operating model.

APLMF is also working closely with APMP to delivery training as well as the MEDEA project of promoting awareness of metrology (including the development of the Metrology Asia Pacific joint web portal, development of case studies). The Forum intends to build on this success by exploring opportunities for future co-operation between the metrology regional bodies.

(c) Other international bodies

APLMF will make it a priority to build on existing connections and generate new connections internationally, such as providing a voice for Asia metrology in Europe, improving our connections with the Association of Southeast Asian Nations (ASEAN) Legal Metrology Working Group, creating better linkages with technical metrology, connecting with international industry and consumer representative bodies.

(d) Pacific Islands

The Forum will consider how to best support Pacific Island economies and respond to the development needs for their emerging metrology systems.



Appendices

- ▶ APLMF MoU – Specific Objectives
- ▶ Working Groups
- ▶ International organisations (including Specialist Regional Bodies)

Specific objectives

(as set out in the Memorandum of Understanding [MoU], 1 October 2003)

- ▶ To identify and promote the removal of technical or administrative barriers to trade in the field of legal metrology.
- ▶ To develop and maintain mutual confidence in measurement (metrological control) among legal metrology authorities in the Asia-Pacific region.
- ▶ To provide a forum for exchange of information among legal metrology authorities.
- ▶ To promote mutual recognition arrangements among Members and with other regional groups and individual economies.
- ▶ To cooperate with the International Organisation of Legal Metrology (OIML) and promote the use and acceptance of OIML International Recommendations and other publications and the OIML Certification System.
- ▶ To collaborate with other regional bodies in the field of legal metrology.
- ▶ To coordinate regional training courses in legal metrology and facilitate exchange of staff among authorities.
- ▶ To facilitate the provision of cooperation and assistance in the development of the legal metrology infrastructure of members.

Working Groups

Working Group	Established	Current Chair	Scope	Objective(s)
Training Coordination	1994	Mrs Marian Haire Australia	Training is an important component in developing regional confidence in measurement and testing and it has been a key delivery action of the Forum in the region.	To establish a regionally consistent training program that will provide highly competent staff and a comparable legal metrology system in the region.
Goods Packed by Measure <i>Originally known as Prepacked Articles.</i>	1994	Mr Kevin Gudmundsson New Zealand	Legislative and administrative requirements for prepacked articles, including short measure, identification of the packer on the packet, standard sizes, permitted deficiencies, drained weight and deceptive packaging	To harmonize the requirements for prepacked articles in the Asia-Pacific economies with a view to removing technical barriers to trade.
Mutual Recognition Arrangements	1994	Dr Charles Ehrlich United States of America	The identification of the requirements for mutual recognition arrangements between legal metrology authorities in the region and other regional legal metrology bodies is key to removing barriers to free trade in the region.	To support free trade in measuring instruments and the removal of technical barriers to trade through mutual recognition arrangements of measurement and testing in legal metrology.
Utility Meters	1995	Mr Alan Johnston Canada	Utility meters covered include a wide range of measuring instruments: water meters, gas meters, electricity meters, taximeters, telephone meters and heat meters. Given the significant of international trade in these meters, focus is on ensuring harmonisation of pattern approval requirements for meters.	To ensure that requirements for utility meters are harmonized within the Asia-Pacific region.
Medical Measurement	1996	Ms Shiu-Chyin Chuang Chinese Taipei	Accuracy and reliability of medical measuring instruments, with a focus on the harmonisation, pattern approval and verification of electronic sphygmomanometers (instruments for measuring blood pressure).	To ensure the accuracy and reliability of medical measuring instruments in human medication and to promote harmonization and pattern approval in the region.
Quality Measurement of Agricultural Products	1996	Dr Tsuyoshi Matsumoto Japan	Development of requirements to calibrate, verify and test rice moisture meters as well as other instruments/ requirements for quality analysis of agricultural products (eg moisture and protein in cereal grains and oilseeds).	To ensure the accuracy of measurement used for agricultural products.
Metrological Control Systems	1996	Mr Guo Su People's Republic of China	Focus currently on ionizing radiation metrology for human health and security in medicine on legal metrology system and application of pressure metrology in industry safety.	Developing a total systems approach which ensures that individual elements of the measurement process are assessed in terms of a total process to ensure efficiency in control mechanisms.

International organisations

	World	Europe	Asia	Eurasia	Africa	Latin America Caribbean
Metrology industrial / scientific	 Bureau International des Poids et Mesures BIPM Bureau International des Poids et Mesures	 EURAMET European Association of National Metrology Institutes	 APMP Asia Pacific Metrology Programme	 COOMET Euro-Asian Cooperation of National Metrological Institutes	 AFRIMETS Intra-Africa Metrology System	 SIM Sistema Interamericano de Metrología
Metrology legal	 OIML Organisation Internationale de Métrologie Légale	 WELMEC European Cooperation in Legal Metrology	 APLMF Asia-Pacific Legal Metrology Forum			
Accreditation of Laboratories	 ILAC International Laboratory Accreditation Cooperation	 EA European co-operation for Accreditation	 APLAC Asia Pacific Laboratory Accreditation Cooperation		 AFRAC African Accreditation Cooperation	 IAAC InterAmerican Accreditation Cooperation
Accreditation of Certification Bodies	 IAF International Accreditation Forum		 PAC Pacific Accreditation Cooperation			
Standards	 ISO International Organization for Standardization	 CEN Comité Européen de Normalisation	 PASC Pacific Area Standards Congress	 EASC Euroasian Interstate Council	 ARSO African Organisation for Standardisation	 COPANT Comisión Panamericana de Normas Técnicas
Standards electrotechnical	 IEC International Electrotechnical Commission	 CENELEC European Committee for Electrotechnical Standardization			 AFSEC The African Electrotechnical Standardization Commission	
QI networks					 PAQI Pan African Quality Infrastructure	QICA Quality Infrastructure Council for the Americas

Interconnections of Specialist Regional Bodies (SRBs) and international/regional organisations

