

**APLMF Presentations Session – Monday 1st November 2021**

**Note:** **you can view or download video presentations, power points and reports**

[**https://www.aplmf.org/28th-online-meeting-documents.html**](https://www.aplmf.org/28th-online-meeting-documents.html)

1. Welcome

Dr Osman ZAKARIA, APLMF President welcomed economy representatives, distinguished guests and participants who took the opportunity to participate in this online meeting of the 28th APLMF Meeting session on the 1st of November 2021. He also invited members to the next day forum ‘members only’ meeting on the 2nd November, for the APLMF formal business session.

He explained due to the uncertainties of Covid the meetings had to be online in the foreseeable future, however, he hoped physical meetings would be possible in 2023. Even though the pandemic has caused major disruption to daily lives, he hoped most of us have adapted to this new norm of online communication by now and that he thanked all participants for their patience and willingness to use this approach.

He invited participants to stay online with today's session that will be in the form of a combination of live presentations and recorded versions on six topics that are of importance to legal metrology. These topics are seen to be significant to the work that we do today, and also how we will be working in the future.

In his opening, he covered the housekeeping matters that participants need to attend to and reminded them of the points that were sent earlier so that participants can go through what was in the guidance document that was sent out.

In his introduction, he outline the order of the day’s sessions including: Improving Compliance Using Collaborative Tools by Mr Neil YATES (NMI Australia),  Summary of Data Metrology by Dr Blair HALL, (MSL, New Zealand), Gold Purity Measurement in Malaysia by Dr FazrulHisyam (NMIM, Malaysia), followed by updates CIML by Mr Ian Dunmill from OIML, PTB and the MEDEA project by Mr Uwe WEISNER and Ms Katja LAMICH and lastly from APMP by Ms Juan (Ada) CAI.

He invited questions for presenters to answer impromptu using the chat box function or via email to Secretariat@aplmf.org after the meeting over the coming week. To enable the meeting to be kept to schedule and to maintain the flow of presentations only a few questions would have the chance to be read and answered live but he noted the Secretariat will compile all the questions and forward them to speakers for responses to be posted by 13th December 2021.

 He hoped all participants would be able to take away some useful insights and information from the sessions.

1. Improving Compliance using Collaborative Tools:

**Presenter: Mr Neil YATES, Manager, Investigations & Compliance Unit, Legal Metrology, NMI Australia.**

**Summary of the live presentation:**

In Australia, three major supermarkets dominate the retail supermarket sector by covering 76% of the overall market sector.

However, they have been identified to high levels of minor non- compliance.

·      Instruments not displaying a physical verification mark

·      Instruments that were marginal fails

* Failure to allow for the whole weight of the packaging (Tended to be incorrect rather than completely missing)

The National Measurement Institute had carried out a concentrated program in 2017 by visiting a huge number of supermarkets in two weeks with 700 inspections in order to get a baseline of the compliance statistics. The inspection/compliance pass rate was found to be 44% mainly due to the failing in non-automatic weighing instruments and failure to display a verification mark.

The traditional possible solutions that enforcement can use are to issue non-compliance notices, warnings, penalty fines, and prosecution. Does this fix the problem though?

Therefore, the team considered a new approach - introducing Undertakings.

Since 2010, Australian legislation has allowed the National Measurement Institute to accept written undertakings given by companies. These are usually related to a compliance matter and generally is a promise or a commitment to do something new or differently.

The three undertakings agreed contained clauses to:

·         Purchase test masses

·         Introduction of QA processes to test accuracy, verification status & cleanliness of NAWI’s

·         Staff training

·         Regular review or tare allowances/trading practices

·         Improved QA checks on pre-packages & bakery products

·         An extension of 3rd party audit process

By doing this, they have significantly improved their compliance processes.

A follow-up inspection program found that the overall pass rate was vastly improved from around 44% to 82%. All the instruments were correctly verified, and the number of inaccurate instruments had been vastly reduced.

With this approach the NMIA has assisted the companies to improve compliance levels. They have embedded this compliance culture within their processes and within the organization. As an organization, it has saved a lot of time and that they are now at the stage where they do not need to visit these major supermarkets anywhere as often as they used to. Now the NMIA can focus their resources into areas which present a greater risk of non-compliance.

Q.   Stephen O’Brien, APLMF Past President asked: What responses did you get from the senior management at Supermarkets to this new approach using undertakings?  How did you sell it to them as worthwhile?

A.   The important thing was the work done in 2018 identified the large number of non-compliances. So, when NMI visited and negotiated with the company's senior management, we were able to use the non- compliance as leverage and suggested to them that they need to address these issues, that they couldn’t simply ignore any further and should the NMI decide to go down the prosecution route it could have severely impacted upon the company's reputation. So, we think it is important to get that base compliance before you approach the company and say how all of those statistics prove new approaches/ undertakings are needed.

Q.  Carl Cotton, Canada asked: Can you point us to the sections in the legislation that facilitate this? In Canada we have administrative monetary penalties, and these include the concept of "compliance agreements". However, when we have used AMPs the traders typically just pay or contest. AMPs are a ticketing scheme.

A   Not familiar with administrative monetary penalties but I am happy to forward on the section of the legislation through the APLMF, for you to have a look and for the APLMF to circulate.

Dr. Osman Zakaria noted on the request from Mr Cotton and that the Secretariat will forward the section of the legislation that facilitates the Undertakings to Mr Cotton when they receive the information from Mr Yates; also, the Secretariat will circulate them within the member economies as suggested.

1. Summary of Data Metrology

**Presenter: Dr Blair HALL, Principal Research Scientist and Quality Manager, MSL, New Zealand**

Dr Osman ZAKARIA thanked him for the interesting information sharing from Youtube with regards to the digital metrology control note that it is very important to learn about the current transformation in digital metrology.

**Summary of the live presentation:**

Data metrology (an updates)

This is an updated version to the recording that is available in Youtube (a talk that has been recorded in May 2020).

It was presented in today’s meeting, CIPM has been conducting several conferences, workshops, and teams since 2020.

* SI in FAIR digital data held online 22-26 Feb 2021
* Metroind4.0IoT, special session: Metrology for Interoperability in Industry 4.0 (June 2020 & 2021)
* International Metrology Conference (CIM), 7-9 Sept. 2021
* Sensor and Measurement Science Conference, 3-6 May 2021
* IMEKO World Congress, four sessions on digital metrology, (Aug-Sept 2021)
* CIPM Task Group Digital SI (supported by an expert group
* NCSLI MII-141 Working Group
* IMEKO TC-6 Digital Transformation
* EURAMET TC IM WG on metrology for digital transformation
* SIIM MWG-14 for digital transformation
* APMP DXFG (perhaps after this year’s General Assembly)

An international group by the name Digital-SI Team @Metre Convention supports CIPM by working on digital data metrology and organized events. This group consists of CIPM experts around the world, and this was the team who organized the SI in FAIR digital data held online on 22-26 Feb 2021, successfully engaging around 600 supporters across the world. The SI in FAIR digital data has agreed to outline the important outcomes of the event:



SI Digital: Framework CIPM, provides a sort of common basis for the digital communication support. Explanation on the concept in the Worldwide Quality Infrastructure and how it correlates with Grand Vision Digital Framework was presented and further explanation was pictured on example of the mass measurement.

In summary, the digital systems are going to be highly disruptive, and sort of an opportunity for meteorologists to have the role to play in this new infrastructure. It is something international metrology bodies are getting involved in believing there are things that we can do in digital metrology that are not possible to be done before.

Q. Stephen O’Brien, APLMF Immediate Past President asked: What do you think we need to take into consideration where we are approaching network weighing instruments and measurement instruments for the trade use?

A. I think the usual considerations apply: how is it going to be possible to ensure that the instruments are calibrated and checked, and the signal has to work out.

Q. Dr Osman Zakaria, APLMF President asked: How can you see that scientific data metrology can   support the legal requirement? Do we need to be ready in terms of infrastructure before we can proceed for legal transactions, especially in supporting the trade and other legal metrology requirements?

A. The legal metrology has the opportunity to go a little bit more slowly than scientific metrology because the scientific metrology has the responsibility to lay the foundation for legal metrology. This should be in the digital system framework for example that has to be clearly sorted and must be clear why and how much information can be communicated in the digital system. So, before there is an acceptable format for calibration certificate the setting certificate shall be made to satisfy the legal requirements. Also, it might be a mistake if the legal metrology moves too early because you might move in the wrong direction. So, in this question, first and foremost scientific ones and then you can watch and see what happens from there.

Q. Michael Jason, Philippines asked: In Industry 4.0, does it also involve creating reference standards in the digital form like the digital twin of a kg test weight? As I understand, the relationship of metrology and IR4.0 also includes monitoring of the measurement instrument and standard for a big data digital twin.

A. Yes, my understanding agrees with you, there is a lot of monitoring of instruments and machines and so on in IR4.0 and there is a great deal of use of Artificial Intelligence to try and predict failures and things like that and to anticipate the needs and so on. The digital twin is an interesting one, I don't think you can have a digital reference standard but the digital twin it seems to me can be very helpful in terms of understanding the uncertainty associated with a particular standard, so I think there is a work going on here where you can explore the behaviour of the simulation of your artifact to better understand how stable and accurate, and also to understand how the measurements process apply to that and how accurate the processes.

Yes, I do see a role of digital twins alongside actual standards but not to replace them entirely.

Q. Darryl Hines, Australia asked: How important will digital metrology rely on consistent language?

A. Consistent language is going to be very important. There will be a need for controlled vocabularies. Moreover, there are fundamental concepts that have to be defined carefully too. I think that you will start to see international efforts that are trying to address this soon.

Q. Carl Cotton, Canada asked: Wondering if any statutes address this concept (AI, real time monitoring). Seems like there will be a need for flexibility (performance-based requirements for some organizations that are early adopters and more prescriptive requirements for others). Lots of questions from us on statutes as we are looking at addressing some of these issues.

A. Legislation and statutes are outside my area of expertise, I'm afraid.

Dr Osman thanked Dr Blair Hall and said that it was a very interesting topic that everyone in the member economies can share around and how important the knowledge in digital transformation is in supporting the metrology control.

1. Gold Purity Measurement in Malaysia

**Presenter: Ts. Dr Mohd Fazrulhisyam Bin MOHD NOR, Metrologist, National Metrology Institute of Malaysia, NMIM**

In recent years, there are increasing numbers of gold fraud in Malaysia and at some places the cases are beyond control. With an abundance of complaints from consumers reporting that the gold that they purchased from jewellery shops turned out to be a fake one and that any return is prohibited therefore, the authority had decided to prevent the fraud from getting worse and conquer the market. They have aggressively provided further protection to consumers by strengthening their regulations that shall be abided by all gold players in the gold market.

The Certified Reference Materials or MyReM developed by NMIM is a mechanism introduced to the industry of how the gold purity measurement is traceable. As it has recently been adapted by the authority, the enforcement has just started and the MyReM has been well adopted by major gold players. Malaysia Co-operative Societies Commission is the agency that is responsible to advise the government on the matters regarding consumers and gold industry in Malaysia. By using the MyReM. The MyReM was developed based on the Malaysia Trade Description Act 2011 (Act 730) and Description and marking articles of or containing precious metal (MS 1247:2005). The gold products in the Malaysian market are dominated by the jewellery and the bullion (bar or coin). There are two methods in applying the test, by non-destructive and Destructive methods. The gold purity of a substance is defined by their karat content for instant; 24 karat – 100% pure gold, 22 karat - 91.6 % pure gold, 18 karat- 75% pure gold, 14 karat – 58.5 % pure gold, 10 karat – 41.7% pure gold. The other precious metals are platinum, vanadium and silver. Gold Purity Measurement is very important to prevent fake gold and losses to consumers. MyReM Gold is a 20g with purity of 999, 916 and 850. It is used to verify Ar Rahnu instruments before operating. When a pawn shop uses mrem gold, it will be traceable to MyReM gold meaning traceable to SI units. The impacts are huge.

Dr Osman added that in Malaysia the trend of purchasing gold is getting stronger therefore the work done by NMIM on the research and development was at the right time. It is totally good and interesting to learn that the application has been implemented. The fact that the scenario of fake gold conquers the gold industry in Malaysia, this R & D work has very much impacted their businesses. It is proven how the scientific metrology directly supports the legal metrology to provide the solution to the problem that has been a major fraud. This is best practices by NMIM

Q.     Darryl Hines, Australia asked: What are the different purity values of the certified gold reference materials used for testing the instruments?

A   The difference between our Malaysia reference material (MyReM) with other gold reference material is that our MyReM have a density value. So, we can use it for calibration of densimeter and density meter.

Q.   NMI how do you promote this effort to the client and with other stakeholders and how to ensure they are following the best practices and that the consumer will experience a fair trade.

A.     Need to know what the requirement by the industry is, identify problems and needs, we can easily work from there.

Q.     Rifan Ardianto, Indonesia asked: If there is a complaint from a consumer, do they provide a report to the legal metrology authority or other agency?

A.    Yes, 11 complaints in 2020. Some of them report to the legal metrology authority.

1. BIML 2021 highlights:

**Presenter: Mr Ian DUNMILL, Assistant Director, BIML**

Mr Ian Dunmill thanked APLMF for the invitation as this is the first time for him presenting at APLMF Forum Meetings.

As an introduction, Mr Ian Dunmill explained the main activities of the two, OIML and CIML, for members to understand further on the organizations especially those who are not familiar with it.

OIML – The conference is the highest body of our organization consisting of delegations from member states and is responsible for setting strategy & budget for the organisation.

CIML – The working body of the conference that approves the account on an annual basis as follows technical publication, etc.

Mr Ian Dunmill brought attention to the recent 56th CIML Meeting and the Important resolutions of the 56th CIML Meeting.

The Important resolutions of the 56th CIML Meeting are:

-Decision that in-person and online participation in all OIML meetings is considered to be equivalent.

-Approved principles and proposals concerning Member States and Corresponding Member Classes and Fees

-Approved budget for the 2022-2025 financial period, asked OIML Conference to take this into account

-Approved policy on OIML Operating Reserve fund

-Digitalisation: Support for OIML Digitalisation Task Group to examine the options and solutions for the DX in legal metrology; Support for signing off the Joint Statement of Intent on digital transformation

-Technical work: Publication approvals

-Technical work: New projects

-OIML Certification System (OIML-CS)

Moving on to the decision in 16th International Conference:

        Endorsed CIML decision on:

- in-person and online participation in all OIML meetings is considered to be equivalent (decided it also applies to the International Conference on Legal Metrology).

- principles and proposals concerning Member States and Corresponding Member Classes and Fees

- budget for the 2022-2025 financial period, asked OIML Conference to take this into account

- policy on OIML Operating Reserve fund

        Decided on the overall credits necessary from members for the 2022-2025 financial period

        CEEMS AG works since 55th CIML Meeting

        Publication of the Revision of D1

        Current projects

        e-Learning – developing new strategy and content

        OIML CEEMS Award 2021 announced at 56th CIML Meeting

Another project that is progressing is the *Application of online technology to capacity building and other CEEMS activities*, that consists of 8 chapters. The materials of the chapters have been progressively contributed by members.

Dr Osman thanked Mr Ian Dunmill and reiterated that the update from CIML is significant to the APLMF members as it is all about the recent OIML meeting with regards to the Legal Metrology.

1. Physikalisch-Technische Bundesanstalt (PTB) and MEDEA 3.0 updates 2021

**Presenters: Mr Uwe Miesner and Ms Katja Lamich (PTB), Project Coordinator
International Cooperation in Asia, Physikalisch-Technische Bundesanstalt (PTB), Germany**

Mr Uwe Miesner greeted the audience and thanked The Chair for allocating a presentation slot for PTB to provide updates particularly regarding MEDEA cooperation. He also introduced Ms Katja Lamich as new Coordinator in the MEDEA Project. Mr Miesner and Ms Katja Lamich presenting their slides in a video presentation. The updates of PTB Cooperation in Asia including:

* Promoting Regional Cooperation in metrology in the Asia-Pacific region
* PTBs Capacity Development in 2021
* PTB International Cooperation with Asia
* Reform of Germany Development Cooperation (BMZ 2030)
* MEDEA 3.0
* SDGs in focus
* MEDEA 3.0 Activities
* Application of RDT
* Planning Workshops
* What comes next

The Chair thanked Mr Miesner and Ms Katja for sharing interesting activities on MEDEA for the coming years. He learned that PTB is now emphasizing several work plans for developing economies especially for APLMF, so this is a great opportunity for member economies. He advised members who are working on something along the lines of these initiatives and need more detail regarding it to write to the secretariat and secretariat will provide the questions to Mr Miesner and Ms Katja. The Chair reiterated that MEDEA 3.0 is very important for the organization's next programme especially activities in the Legal Metrology forum as a lot of activities could be participated by members.

1. Update on APMP 2021 activities:

**Presenter: Ms Juan (Ada) CAI**

**Executive Secretary, APMP/Vice Director, International Cooperation Dept, National Institute of Metrology (NIM), China**

The Chair introduced the guest speaker Ms Ada as the Executive Secretariat of APMP.

Ms Ada greeted the audience and thanked the meeting for providing APMP with one session to present the updates on APMP activities. Ms Ada started the presentation with an Overview of APMP and continued with the following topics:

* Introduction to APMP
* Membership
* Responsibilities evolving with time
* Focus Groups
* Organizational Structure
* APMP Strategic Plan 2021-2023
* APMP Covid 19 Response Program
* Project highlight: Ventilator
* Project highlight: SARS-CoV-2- Nucleic Acids RMs
* Project highlight: PPE
* Digital Transformation- a new focus group on the way
* APMP GA and Related Activities

The Chair thanked Ms Ada Cai for her presentation, he reminded the audience, if there is any question, they can email them to the secretariat@aplmf.org and they will forward them to Ms Ada Cai.

In his summary, Dr Osman thanked everyone for their time and how he appreciated them staying online even though the meeting had been conducted for nearly 2 hours. He emphasized that although it was a long online meeting there were many key takeaways from all the presentations. In his wrap up, he touched on the first presentation by Mr Neil Yates, that talked about how Australia successfully deals with the parties, and how they managed to encourage them to apply and implement the Best Practices in legal metrology and that members could learn from.

In Dr Blair Hall's presentation Dr Osman highlighted the importance of moving towards the digital transformation technology. He stressed that the data transfer in scientific and legal metrology could be digitalized, and he regarded the application of this DX as equally significant to scientific and legal metrology.

The third presentation from Dr Mohd Fazrul talked about the Gold initiative and the Best Practice in Malaysia's gold industry. As this is currently being implemented by Malaysia, Dr Osman encouraged members to learn from the sharing and to apply the Best Practices in their trade and business.

Dr Osman suggested the audience to note on the update delivered by Mr Ian Dunmill from OIML, as a lot has been shared by Mr Ian especially with regards to the recent OIML meetings and conferences. He noted that some of the audience might already have attended the CIML conferences, so it is important for members to share the update within their own colleagues.

The next presentation was by PTB -Mr Uwe Miesner and Ms Katja Lamich updated the members with their list of plans in MEDEA 3.0 and how they planned to support developing economies. For this Dr Osman shared with the members that APLMF  had drafted a good programme in coming years, and it was always part of Secretariat and the Executive Committee planned to get members be involved in MEDEA 3.0.

Lastly, Dr Osman reiterated that one of the initiatives from APMP as presented by Ms Ada Cai was the involvement of APMP and APLMF, the collaboration of developing MEDEA-APMP-APLMF Web Portal and members invited to visit the website. He added that the integration of Scientific and Legal metrology was a significant approach for the betterment.

He thanked all the audience for listening to the three-recorded and three live sessions, on the first day of 28th APLMF Meetings as the first day showed how the Scientific and Legal metrology brings more benefit with information dissemination in both.

He looked forward to welcoming everyone back to the APLMF business session the next day.



**APLMF Member Only Session - Tuesday 2nd November 2021**

**Note:** **You can view or download video presentations, power points and reports** [**here.**](https://www.aplmf.org/28th-online-meeting-documents.html)

**Note: Items 4-11 relate to the Member Only session and are available** [**here**](https://www.aplmf.org/member-area.html) **in the member only area of the APLMF website.**

The APLMF President, Dr Osman ZAKARIA, introduced the two special guests, Dato’ Dr Ahmad Sabirin ARSHAD, the President and CEO of SIRIM Berhad of Malaysia and Dato’ Lokman Hakim ALI, the Secretary General of Ministry of International Trade and Industry of Malaysia.

1. **Welcome – Dato’ Dr Ahmad Sabirin ARSHAD, SIRIM Berhad President, Malaysia**

Dato’ Dr Ahmad Sabirin ARSHAD welcomed all distinguished guests to the meeting and gave an overview of SIRIM and its activities.

1. **Opening – Dato’ Lokman Hakim ALI Secretary General, Ministry of International Trade and Industry, Malaysia**

The honourable guest, Dato’ Lokman Hakim ALI as the representative of the host economy for this online meeting, delivered the opening remarks. He welcomed all distinguished guests to the meeting and thanked APLMF for giving Malaysia the opportunity to the host the APLMF presidency and secretariat for 2021-2022. He shared a brief history of the establishment of the legal metrology system in Malaysia, its application and importance to the country. Dato’ ALI urged all countries to immediately take on their own strategies and work together to coordinate a global response in helping countries that are less prepared to build a sound metrology system. He wished for APLMF would have fruitful deliberation and officiated the meeting.

1. **Keynote Address - Digital Transformation in Legal Metrology - An Update - Dr Roman SCHWARTZ, President, International Organization of Legal Metrology (CIML)**

The meeting listened to a pre-recorded keynote address entitled OIML's Contribution to Digital Transformation by Dr Roman SCHWARTZ, CIML President. He provided updates in the following topics during his keynote address:

1. Recap: Internet of Things and its Impact of Legal Metrology
2. What is meant by ‘digital transformation’
3. Digital representation of a measurement instrument
4. OIML’s contribution to digital transformation
	* Development of internationally harmonised software requirements
	* Organisation of workshops – Free download from <https://www.oiml.org/en/publications/bulletin>
5. The new BIPM/OIML joint task group
6. Draft joint statement of intent on the digital transformation
7. Next steps:
	* The Joint Statement of Intent on the digital transformation in the international scientific and quality infrastructure is expected to be signed in CIPM and CIML meetings, which would be held in October 2021
	* Other stakeholders in the scientific and quality infrastructure will be invited to join and sign the Joint Statement of Intent
	* It is expected that an OIML Digitalisation Task Group will be established after the 2021 CIML meeting, where interested CIML Members and Corresponding Members will be invited to nominate experts to discuss and agree on the Terms of Reference and on a work plan
	* After its establishment, the OIML Digitalisation Task Group will get in touch with respective Task Groups of other QI stakeholders, such as the CIPM Digitalisation Task Group, to explore possible areas for cooperation and collaboration, and use cases such as common ‘language’ for Digital Certificate of Conformity in Metrology (D-CoCM)s and DCCs

Dr ZAKARIA thanked Dr SCHWARTZ for his very interesting presentation. It is available on the APLMF website [here](https://drive.google.com/file/d/1VJtQF0cZ27kcfnQabl9gd1w9KvvIk6ry/view?usp=sharing).

**Member Only Session**

Dr ZAKARIA welcomed national representatives and distinguished guests to the members’ session of the 28th APLMF meetings which was the second time the meetings was held online. He apologised for the previous day’s hiccups where some members were not able to log in to the webinar. Steps were taken to address the problem.

Dr ZAKARIA thanked the six presenters who made the previous day a successful event and presented on topics that are of strategic importance to legal metrology. Live presentations on Improving Compliance Using Collaborative Tools, a Summary of Data Metrology, Gold Purity Measurement in Malaysia as well as three recorded updates from three important organisations, which are CIML, PTB and APMP were done on the first day.

The members were informed that for the following week, the secretariat would continue to take written questions for the presentations. The video presentations and the Question and Answers would be made available on the APLMF website.

The second day's session was about the members’ only meeting, focusing on APLMF business. The agenda was available on the meeting documents page of the APLMF website, which members have access to. The full meeting agenda of the second day included updates from the Secretariat, finance and activity reports. Dr ZAKARIA informed that the full reports which relate to the agenda were in the meeting documents section of the APLMF website and they were taken as read. The meeting looked at an overview of summaries of those presentations.

Members of the audience were welcome to ask any written questions or comments during the meeting by using the Question and Answer function at the bottom of their screen.

Before starting the session, Dr ZAKARIA noted that the meeting was being recorded, for the purpose of transcribing for the formal record of the meeting and by participating in the meeting members have agreed to be recorded.

1. **Roll Call**
2. **APLMF Secretariat Report – Presentation**

Dr ZAKARIA started with the Secretariat Report presentation, which is available [here.](https://docs.google.com/document/d/12hYUZd1G20DigFUd0Ks7g2RzzzR9gqhS/edit?usp=sharing&ouid=106958824757793194705&rtpof=true&sd=true)

Mr Stephen O’BRIEN congratulated Malaysia for the job well done by the secretariat team.

Dr Charles EHRLICH (United States) acknowledged Dr ZAKARIA’S excellent contribution to the RLMO Roundtable and OIML. He expressed appreciation for the active participation there and looked forward to that continuing and getting more participation from APLMF members in that meeting in the coming year.

Dr ZAKARIA thanked MBIE New Zealand, Mr O’BRIEN and Ms Allison SMITH for supporting and training the Malaysian team in continuing the secretariat work.

1. **Interim Financial Report Jan-Oct 2021**

A review of the interim finance report was given. The meeting noted that this report is an interim report because the APLMF financial year finishes at the end of December. Dr ZAKARIA gave an update on the APLMF current financial status. The full report is available in the [**here**](https://www.aplmf.org/member-area.html)in the member only area of the APLMF website.

Questions by Members:

Q1. Dr Toshiyuki TAKATSUJI (Japan) Will the bank account in New Zealand be closed? And which currency is used in the Malaysian account?

A1. The New Zealand account will still be open to allow payments of membership fees but it will be closed by the first quarter of 2022 and the money will be transferred to Malaysia. The currency which is used is US Dollars.

Q2. Ms Oerenga TAKARIA (Kiribati) Why is Kiribati’s contribution for the membership fee was not reflected in the report although it has already paid the membership fee for 2021?

A2. It is recorded at the bottom of the list on the first page of the report. The fund was received in September, which is after the closing of the account.

1. **Training Coordinator’s 2021 Report and WG Action Plans for 2022**

Dr Tsuyoshi MATSUMOTO gave an update on the training coordinator’s report. The respective working group reports are on the [website](https://www.aplmf.org/28th-online-meeting-documents.html). Dr ZAKARIA also informed that on the website are also the reports from the economies that have sent in reports for this year. He requested for the members to have a look at those reports.

1. Overview from the Training Coordinator
2. Key activities of 2020-2021
	* APLMF/MEDEA online training courses in 2021
	* MEDEA Project
	* Procedure for online training courses/workshops
	* APLMF Working Groups
	* Subject Matter Experts
	* eLearning modules
	* Liaisons with other RLMOs
3. Future focus – Recommendations
	* Proposed training courses in 2022 and later
	* Work Plans of Working Groups (WGs) for 2022 and later
	* Need for reviewing the Working Groups (WGs)
	* Liaison with OIML
4. Future focus – Emerging issues
	* Recommendation from the coordinator to MEDEA 3

Questions by Members:

Q1. Dr Rifan ARDIANTO (Indonesia) For supporting middle and least developed country, are the identification of those countries based on the Rapid Diagnostic Toolkit (RDT) developed by PTB and World Bank?

A1. The policy document of MEDEA 3 "Procedures for Implementation" as of 12 October 2021 defines the **eligible economies** for the support (flight tickets, accommodations, full board or a daily allowance, health insurances and other costs necessary for training) from the MEDEA fund as follows.

**Bangladesh, Bhutan, Cambodia, Laos, (Myanmar), Nepal, Fiji, India, Indonesia, Mongolia, Pakistan, Papua New Guinea, Philippines, Sri Lanka, Vietnam, China, Malaysia, Thailand, Kiribati, Kyrgyzstan, Kazakhstan and Uzbekistan**

The above selection has been made based on the **DAC List** provided by DAC (Development Assistance Committee) of OECD (Organisation for Economic Co-operation and Development). This list shows all economies eligible for ODA (official development assistance) using GNI (gross national income) per capita as the base index for the selection. See the website below for the list.

<http://www.oecd.org/dac/financing-sustainable-development/development-finance-standards/daclist.htm>

MEDEA 3 decided to use the **RDT** (Rapid Diagnostic Toolkit) of the World Bank and PTB to help developing economies to monitor the development of their NMIs/LMAs. The application of this toolkit with an annual report to PTB is a **precondition** to receive the funding. APMP, APLMF and PTB will use the Toolkit for monitoring purposes so that the economies and networks get a better idea where future support might be needed. However, the results of RDT do not affect the eligible economies.

Mr Stephen O’BRIEN (New Zealand) commented that New Zealand is supportive of forming the Working Group on Fuel suggested by Dr MATSUMOTO. The price of fuel is increasing all the time in New Zealand and the Government is trying to control fuel as part of the initiatives around greenhouse gases. In the future economies will need to maintain the measurement accuracy of fuel and it is a good time for APLMF to reinstate this Working Group.

Dr MATSUMOTO thanked Mr O’BRIEN and assured that invitation to all economies will be sent out about the establishment of the new Working Group.

1. **Resolutions**
2. The APLMF Secretariat Report against APLMF Strategic Plan 2021-2025
3. The Training Coordinator’s Report 2021
4. Secretariat Interim Financial Report from January to September 2021
5. Confirmation of 2022 Work Programme
6. Membership
7. Changes in Working Groups
8. 29th APLMF Forum Meeting in 2022
9. OIML Awards in October 2021
10. APLMF Distinguished Service Awards (2021)
11. APLMF Service Awards (2021)
12. **APLMF Secretariat Work Programme and High level Budget 2022**

The meeting had a review of the 2022 Secretariat Work Program and the high level budget.

1. **Awards**

The last agenda of the day was the Awards presentation. The meeting noted and congratulated the following recipients who were presented with the awards:

OIML Awards Conferred in October 2021

Letter of Appreciation: Mr Ken Butcher (NIST, USA)

CEEMS Award: Mr Sophors Em (NMC, Cambodia)

APLMF Distinguished Service Awards 2021

Mr Stephen O’Brien, APLMF President in 2016-2020

Mrs Marian Haire, Chair of WG on Training Coordination and Training Coordinator in 2002-2021

APLMF Service Awards 2021

Ms Alli Smith (New Zealand) – APLMF Senior Administrator in 2015-2021

Mr Julian Crane (New Zealand) – Technical Support and Training in 2015-2020

Mr Phil Sorrell (New Zealand) – Technical Support and Training in 2015-2021

Mr Kim Truscott (New Zealand) – APLMF Technical Support in 2017-2019

Dr Huang Hongtao (NIM, PR China), Mr Ji-Hyun Um (KTC, R. Korea), Mr Min-Joo Ham (KTC, R. Korea) and Mr Zheng Jianzhong (ZJIM, PR China) for Training Course on Electricity Meters (18-21 January 2021)

Mr William Hartmann (NMIA, Australia) for Training Course on Bulk Flow Metering (22-25 February 2021)

Dr Rifan Ardianto, Ms Lita Annita Fajarani (Ministry of Trade, Indonesia) and Mr Davis White (MBIE, New Zealand) for Training Course on Pre-packaged Goods (3-24 March 2021)

1. **Wrap up and close the meeting**