

ASIA-PACIFIC LEGAL METROLOGY FORUM

AGENDA

SIXTH ASIA-PACIFIC LEGAL METROLOGY FORUM MEETING 8 – 9 September 1999

Bale Banjar Room
Hotel Putri Bali, Nusa Dua, Bali
Indonesia

REGISTRATION OF DELEGATES

6 September 1999 (Monday)	17:00 – 19:00
7 September 1999 (Tuesday)	08:00 – 08:50

Chairman: Mr Bambang H. Hardiwiardjo
Deputy Director General for Accreditation & International Cooperation,
National Standardization Agency, BSN, Indonesia;
Vice-Chairman of National Accreditation Body of Indonesia.

1. Welcome Address by Chairman of the Forum meeting, Mr Bambang H. Hardiwiardjo
 2. Opening Remarks by Mr John Birch AM Convenor of APLMF
 3. Roll call of members – attendance/apologies of members at Forum meeting.
 4. Confirmation of Report of the Fifth Forum meeting held in Seoul, Republic of Korea, on 25 – 27 October 1998
 5. Report of the APLMF by the Convenor, Mr John Birch AM, including report by the APLMF Executive Committee.
 6. Discussion on implementation of the Memorandum of Understanding for members of the Asia-Pacific Legal Metrology Forum.
 7. Report of the Working Groups meetings held on 7 September 1999:
 - 7.1 Working Group on Mutual Recognition Arrangements;
-

- 7.2 Working Group on Training;
 - 7.3 Working Group on Utility Meters;
 - 7.4 Working Group on Goods Packed by Measure; and
 - 7.5 Working Group on Rice Moisture Measurement.
8. Report on train-the-trainer course on Verification and In-service Inspection of Non-automatic Weighing Instruments held in Bandung, Indonesia from 24 August–3 September 1999.
9. Report on progress of the Forum Work Plan:
- Working Group on Medical Measurements with a project on sphygmomanometers (blood pressure meters).
 - Translation of the legislation into English for those economies where their legislation is currently not in English.
 - Survey the involvement of consumers with the forum and to determine ways in which they can participate in Forum activities.
 - Finalize and publish the resource document on the modernisation of legislative and administrative systems.
 - Establish a program on analysing the economic impact of legal metrology within member economies and the region.
 - Circulate the results of the intercomparisons to participants for their comments before the finalisation of the report.
 - Organise a supplementary round of intercomparisons for other members who now wish to participate in the intercomparison following the discussion on the Mutual Recognition Arrangement and participation of training courses on pattern approval.
 - Circulate a questionnaire to members to indicate their interest in participating in a mass intercomparison.
 - Consideration be given to organising an intercomparison on master meters to identify flow measurement capability.
 - Finalise the survey on prepacked goods by obtaining information from other regions, particularly relating to the requirements for standard sizes, permitted deficiencies due to dehydration and drained weights.
 - Request OIML to give priority to extending the OIML recommendation on nett contents to include metrological control of packing facilities involving quality systems, accreditation of test facilities, statistical sampling of output and certification by the legal metrology authority.
 - Request OIML to consider the development of an international system of marking for labeled measurement to facilitate international trade in prepacked goods (this would be an extension of the European E mark system).

- New Working Groups to be formed on:
 - Taximeters;
 - Metrological control of measurements in international trade of bulk commodities; and
 - Environmental measurements, particularly air pollution.
 - Finalise the survey report on utility meters to include information on heat meters and the refurbishment or reconditioning of utility meters.
 - Request CIML to give priority to:
 - Developing an International Recommendation for electricity meters that would allow their incorporation in the OIML certificate system; and
 - Developing statistical sampling plans that may be applied for the reverification of utility meters.
 - Complete the train the trainer course for the verification of non-automatic weighing instruments with a trial in the first half of 1999 and run as a full course in the second half of the year.
 - Develop a train the trainer course for the pattern approval and verification of driveway petroleum and LPG dispensers.
 - Develop a Regional Directory of Training and a regional network of metrology training providers.
 - Promote in cooperation with OIML the use the Pattern Approval of Non-automatic Weighing Instruments training module and run further workshops as requested.
 - Continue to seek a suitable expert to conduct a study within Thailand and Vietnam about the rice moisture measurement problem.
 - Contact the manufacturers of the most commonly used rice moisture instruments regarding their specifications.
 - Encourage those economies that have not yet replied to the rice moisture measurement questionnaire to do so.
 - Support the development of an Asia–Pacific Mutual Recognition Agreement on Pattern Evaluation to be complementary to the OMIL Agreement but allowing recognition of individual tests and open to all Forum members.
 - Recognise that the Mutual Recognition Agreement would have significant impact on industry and request Forum members to discuss these issues with industry in their economy.
 - Recommend that a profile of pattern approval capability to prepared by member economy to improve confidence between forum members.
10. Discussion on topic nominated by host economy – “Measuring Bulk Materials in Trade by Draft Survey, Problem and Implementation” – Presentation by Mr Hari Prawoko, Dipl Ing Inspector of the Inspectorate of Metrology.

11. Country Report presentation by member economies: “Current Developments in the Legal Metrology System and Directions of Future Change”.
12. Development of programs in other areas of legal metrology.
13. Discussion on APEC Standards and Conformance issues and report of meeting between Specialist Regional Bodies (SRBs) (APLAC, APLMF, APMP, PAC, PASC) and APEC Standards and Conformance Sub-Committee.
14. Discussion on OIML issues.
15. Discussion on liaison with other regional legal metrology organisations.
16. Discussion on bilateral and multilateral assistance for development of legal metrology in the region.
17. Discussion on Work Program for 1999/2000
18. Election of Convenor (President) for 2000 – 2001.
19. Address by the out-going Convenor.
20. Address by the in-coming Convenor (President).
21. Date and location of next Forum meeting in 2000.
22. Concluding remarks by the Chairman of the Forum meeting.
23. Any other matters.
24. Conclusion of Sixth Forum meeting.

REPORT OF THE SIXTH APLMF MEETING

1. Welcome Address by the Chairman of the Forum meeting

The Chairman of the Forum meeting, Mr Bambang H. Hardiwardjo, Deputy Director General for Accreditation & International Cooperation, National Standardization Agency, BSN, Indonesia and Vice-Chairman of National Accreditation Body of Indonesia, extended a warm welcome to all delegates to the Forum meeting in Bali.

He was pleased to be invited to chair the APLMF Forum, having been involved with the area of standards and conformance in the Asia-Pacific region for a number of years and particularly the work of APLAC, PAC and ILAC. He congratulated and thanked the staff of the Directorate Metrology Indonesia and the APLMF secretariat for the excellent organisation of the Forum and officially declared open the meeting.

2. Opening Remarks by Mr John Birch AM, Convenor of APLMF

Mr Birch welcomed delegates to the Forum meeting.

He thanked the Chairman and the organising committee and staff members from Directorate Metrology for their efforts in the organisation and hosting of the Forum meetings in Nusa Dua, Bali. He reviewed the progress of the Forum over the past five years in achieving its principal objectives and the contribution and active participation of all member economies in Forum activities.

He informed members that the Working Groups on Mutual recognition arrangements, Training, Utility meters, Goods packed by measure, and Rice moisture measurement, held meetings and the respective Chairman of the Working Groups will present recommendations to the Forum.

3. Roll call of members

The secretary conducted a roll call of economies present. The roll call confirmed a total of forty-two delegates and observers from seventeen member economies present. Mr B Athane, the Director of BIML and Dr K Birkeland, the past President of the OIML also attended as observers. The Forum noted that apologies for were received from Colombia (who was accepted as a member at the last Forum meeting), Lao PDR, Peru, Singapore, Dr E Seiler from the PTB, the Asian Development Bank and Dr S Bennett, Chairman of WELMEC.

A list of delegates and observers attending the Forum is attached in Appendix 1.

4. Confirmation of Report of the Fifth Forum meeting held in Seoul, Republic of Korea, on 25 – 27 October 1998

The secretary informed members that proposals for amendments of the draft report from Indonesia and Chinese Taipei had been incorporated in the final report. Delegates present then confirmed and adopted the Report of the fifth Forum.

5. Report of the APLMF by the Convenor, Mr John Birch AM, including report by the APLMF Executive Committee.

- 5.1 Mr Birch presented the Report to the members. He reviewed the progress of the Forum in achieving its objectives of development of mutual confidence between members; removal of technical barriers to trade; promotion of mutual recognition arrangements and cooperation with OIML.
- 5.2 He was pleased to note that mutual confidence amongst members has developed as a result of personal contact at Forum meetings and information provided in the in the two editions of the Directory Legal Metrology in the Asia–Pacific, newsletters, the internet web site and surveys. In the area of removal of technical barriers to trade, this has been promoted through the workshop on Modernisation of Legislative and Administrative Structures, intercomparison testing and by a wide range of training courses aimed at harmonising testing procedures in the region. Since its establishment, the Forum has actively supported the initiatives in OIML as well as maintained very close rapport with the BIML
- 5.3 The Executive Committee comprising members from Mr J Birch, Convenor, Mr A Johnston from Canada, Dr H Imai from Japan and Dr Ariffin from Malaysia communicated regularly on a range of issues and was particularly valuable in providing advice on discussions on the MoU.

The Convenor’s Report is attached in Appendix 2.

6. Discussion on implementation of the “Memorandum of Understanding” for members of the Asia–Pacific Legal Metrology Forum

- 6.1 Mr Birch informed members that since the last Forum which adopted the MoU for circulation and signing by members, the MoU was circulated in April. A number of economies had signed and returned their completed forms to the secretariat.

The ten economies are: Australia, PR China, Kong Kong, China; Indonesia, Republic of Korea, Mongolia, New Zealand, Chinese Taipei and Thailand.

The following economies handed in the completed forms at the meeting: Japan – Ministry of International Trade & Industry and National Research Laboratory of Metrology, Philippines and Vietnam.

- 6.2 However, some concerns on the MoU had been raised by Dr S Chappell, USA, and these needed to be addressed by members. The significant change related to the wording “mutual recognition arrangements”/“mutual recognition agreements”. The USA has concerns about the use of “agreements” as it is believed that such agreements would require the approval of government. The other substantive change proposed by the USA deals with amendment of the MoU. The USA position was that as the MoU is a voluntary agreement, all members should agree to any amendment. The Executive Committee had

discussed these issues earlier and recommended to Forum members that the USA proposition be accepted.

- 6.3 Forum members discussed the MoU and the proposed changes and agreed that for both consistency and flexibility, the expression “mutual recognition arrangements” be used. The Forum also noted that other Asia–Pacific Specialist Regional Bodies have also adopted the use of the word “mutual recognition arrangements”. On the amendment to the MoU, members agreed that since unanimity may be difficult to achieve if members do not vote on the proposition, the clause “with no dissenting votes” be included in the new MoU.
- 6.4 A new draft of the MoU had been circulated to Forum members for discussion at the meeting.
- 6.5 The Forum then considered the views of members and agreed:
- To adopt the changes as proposed by the USA in the new MoU; and
 - That those economies requiring further consultation with their respective economies on the new proposal to do so and inform the secretariat on their decision.
- 6.6 Forum members were requested to indicate their views and the following decision was recorded:

Australia	support the proposal
Canada	support the proposal
PR China	support the proposal
Hong Kong, China	support the proposal
Indonesia	support the proposal
Japan	support the proposal
Republic of Korea	support the proposal
Malaysia	require further consultation
Mongolia	support the proposal
New Zealand	support the proposal
Papua New Guinea	support the proposal
Philippines	support the proposal
Russia	support the proposal
Chinese Taipei	support the proposal
Thailand	support the proposal
United States of America	support the proposal
Vietnam	support the proposal

7. Report of the Working Groups meetings held on 25–26 October 1998:

7.1 Working Group on Mutual recognition arrangements

Mr Birch who chaired the Working Group on Mutual recognition presented the Report of the WP. The Forum thanked Dr Chappell for his presentation of the report on the OIML Mutual Acceptance Agreement of Test Reports and noted

that there has been significant progress on the development of the Agreement and a fifth draft will be considered by the CIML in Tunis in October.

The text of the report is attached in Appendix 3.

The list of delegates and observers to the Working Group meeting is attached in Appendix 8.

7.2 Working Group on Training

Ms K Marston (Australia) who chaired the meeting of the Working Group presented the report to the Forum.

A report on training activities during 1999 was presented and suggestions for the training program for 2000 was discussed. The Forum considered the report and endorsed the recommendations of the working group:

- The train the trainer modules for the pattern approval and for the verification and in-service inspection of non-automatic weighing instruments be promoted and run as requested;
- Train the trainer modules for the pattern approval and verification of petroleum and LPG dispensers be developed and training courses run before the end of 2000;
- A Regional Directory of Training and a regional network of trainers be developed; and
- Discussions be held with BIML on the development of an international legal metrology training network and international accreditation of legal metrology training courses.

The Forum also endorsed the training priorities and program for 2000 and the next three years in the following areas:

- Standards laboratory officers training;
- Goods packed by measure;
- High capacity weighing and high capacity flow measurement as extension of the introductory courses;
- Compressed natural gas dispenser pattern approval and verification;
- Radar speed devices and evidential analysis devices;
- Automotive emission measurements and other environmental measurements;
- Measurement uncertainty in legal metrology; and
- Application of accreditation and quality certification in legal metrology.

The text of the report is attached in Appendix 4.

The list of delegates and observers to the Working Group meeting is attached in Appendix 8.

7.3 Working Group Utility meters

Mr Birch who chaired the Working Group meeting presented the report of the working group.

The Forum noted:

- The progress of the OIML development of international recommendations in water and electricity meters over the past year and the re-establishment of the Technical Committees on Electricity Meters and Statistical Sampling which will complement the work of the APLMF on implementation of OIML recommendations.
- The changing relationship between legal metrology and utility metering, particularly with the commodification of water and the application of competition principles to electricity and gas metering. There was a need to establish metrological requirements for pattern approval and verification of utility meters in order to maintain confidence in the system and minimise disputation and transaction costs.

The Working Group resolved that:

- A survey on the acceptance of the international recommendations in the region and the extent of regional harmonisation on utility meters be conducted.
- That an intercomparison on the testing of utility meters will be considered as this would support the incorporation of these meters into Mutual Acceptance Agreement.

The text of the report is attached in Appendix 5.

The list of delegates and observers to the Working Group meeting is attached in Appendix 8.

7.4 Working Group on Goods packed by measure

Mr J Barker (New Zealand) who chaired the WP meeting presented the report. The Forum considered the report and adopted the following resolutions:

- APLMF support the need for harmonisation of international standards in relation to Goods Packed by measure, including:
 - (a) standard sizes;
 - (b) permitted deficiencies due to dehydration; and
 - (c) drained weights.
- An APLMF input into the development of harmonised international standards on Goods Packed by Measure is necessary to ensure the Asia-Pacific Region's views and requirements are fully considered by those developing such international standards.
- The survey on prepacked goods requirements in other regions be continued.

- APLMF continue to discuss with OIML the need for priority to be given to extending the OIML recommendation on net contents to include metrological control of packing facilities involving quality systems, accreditation of test facilities, statistical sampling of output and certification by the legal metrology authority.
- APLMF continue to discuss with OIML the consideration of developing an international system of marking of labelled measurement to facilitate international trade in prepacked goods (an extension of the European E mark system).
- The secretariat survey member economies to provide the contact details of the organisation/s within the member economy who have responsibility for administration of their economies legal provisions in relation to Goods Packed by Measure.
- Consideration be given to establishing a small "ad hoc" working group to develop proposals on requirements for goods packed by measure, for discussion and decision by APLMF.

The text of the report is attached in Appendix 6.

The list of delegates and observers to the Working Group meeting is attached in Appendix 8.

7.5 Working Group on Rice moisture measurement

Ms K Marston (Australia) who chaired the Working Group meeting presented the report. The Forum considered the report of the Working Group and adopted the following resolutions:

- That the APLMF conduct an investigation into the rice moisture measurement problem following the project directions presented in the progress report.
- That members assist the project coordinator in identifying suitable experts to conduct the pilot studies identified in the project directions paper.
- That the APLMF seek funding to conduct the project.

The text of the report is attached in Appendix 7.

The list of delegates and observers to the Working Group meeting is attached in Appendix 8.

8. Report on train-the-trainer course on Verification and In-service Inspection of Non-automatic Weighing Instruments held in Bandung, Indonesia from 24 August–3 September 1999.

Ms K Marston presented the report of the training course which was successfully conducted in Bandung, Indonesia from 24 August–3 September 1999 prior to the Forum

meetings by Ms Marston and Mr D Larkin from the Department of Trade Measurement, NSW, Australia. The Forum extended its appreciation to the Directorate of Metrology for the hosting of the training course which was attended by a total of twenty-three participants, eighteen from Indonesia, three from Japan and one each from Chinese Taipei and Vietnam.

9. Report on progress of the Forum Work Plan:

The Forum discussed the various activities under the Work Plan and noted the following actions were taken:

- Working Group on Medical Measurements with a project on sphygmomanometers (blood pressure meters).

A working group has been established for this activity and discussions will be held with Chinese Taipei on a work program over the next twelve months. The Forum was informed that OIML will be holding a seminar on this issue in Berlin. Dr Chappell informed the Forum that the revision of the recommendation on sphygmomanometers is expected to be completed within the next year and suggested that the APLMF liaise with the secretariat of this committee, Austria.

- Translation of the legislation into English for those economies where their legislation is currently not in English.

The Forum was informed that due to funding constraints, this activity was not a high priority at the moment and that greater priority was needed in the area of modernising the needs of legal metrology.

- Survey the involvement of consumers with the forum and to determine ways in which they can participate in Forum activities.

Forum members noted the importance of involvement of consumers in Forum activities.

- Finalize and publish the resource document on the modernisation of legislative and administrative systems.

The secretariat is in the process of finalising the document and it will be circulated to members as soon as it is completed.

- Establish a program on analysing the economic impact of legal metrology within member economies and the region.

Mr J Barker informed the meeting that New Zealand had commissioned an economic impact study in its economy. The Forum was informed that NIST had also conducted studies on this issue.

- Circulate the results of the intercomparisons to participants for their comments before the finalisation of the report.

The results on the two intercomparisons on non-automatic weighing instruments and load cells are currently being analysed and a draft report is under preparation.

- Organise a supplementary round of intercomparisons for other members who now wish to participate in the intercomparison following the discussion on the Mutual Recognition Arrangement and participation of training courses on pattern approval.

A supplementary intercomparison on non-automatic weighing instruments (Instrument B) had been circulated to Indonesia, Canada (re-test), Papua New Guinea and Russia. Instrument A has been sent by Chinese Taipei to Malaysia. Member economies were requested to send their reports to the secretariat if they had not do so.

- Circulate a questionnaire to members to indicate their interest in participating in a mass intercomparison.

As a result of the questionnaire, a number of economies had indicated interest in the intercomparison and testing will be commencing soon.

- Consideration be given to organising an intercomparison on master meters to identify flow measurement capability.

Mr Birch informed the Forum that funding from the APEC funds of the Department of Industry, Science and Resources, Australia, has been obtained for the intercomparison on master meters, and testing on this will commence soon.

- Finalise the survey on prepacked goods by obtaining information from other regions, particularly relating to the requirements for standard sizes, permitted deficiencies due to dehydration and drained weights.

The secretariat had circulated the WELMEC document on non 'e' marked products to members for information.

- Request OIML to give priority to extending the OIML recommendation on nett contents to include metrological control of packing facilities involving quality systems, accreditation of test facilities, statistical sampling of output and certification by the legal metrology authority.

Action on this issue has been taken.

- Request OIML to consider the development of an international system of marking for labeled measurement to facilitate international trade in prepacked goods (this would be an extension of the European E mark system).

Action on this issue has been taken.

- New Working Groups to be formed on:
 - Taximeters;
 - Metrological control of measurements in international trade of bulk commodities; and
 - Environmental measurements, particularly air pollution.

The new Working Groups have been established and the list of economies/members interested in this work is given in the 'Survey of APLMF work plan' in the document folder.

- Finalise the survey report on utility meters to include information on heat meters and the refurbishment or reconditioning of utility meters.

Discussed in the Working Group on utility meters.

- Request CIML to give priority to:
 - Developing an International Recommendation for electricity meters that would allow their incorporation in the OIML certificate system; and
 - Developing statistical sampling plans that may be applied for the reverification of utility meters.

Discussed in the Working Group on utility meters.

- Complete the train the trainer course for the verification of non-automatic weighing instruments with a trial in the first half of 1999 and run as a full course in the second half of the year.

Discussed in the Working Group on Training.

- Develop a train the trainer course for the pattern approval and verification of driveway petroleum and LPG dispensers.

Mr Birch informed the Forum that funding has been obtained for the development of this course and the course is expected to be held in 2000.

- Develop a Regional Directory of Training and a regional network of metrology training providers.

A survey on the Regional Directory has been circulated to members.

- Promote in cooperation with OIML the use the Pattern Approval of Non-automatic Weighing Instruments training module and run further workshops as requested.

Discussed in the Working Group on Training.

- Continue to seek a suitable expert to conduct a study within Thailand and Vietnam about the rice moisture measurement problem.

Discussed in the Working Group on Rice moisture measurement.

- Contact the manufacturers of the most commonly used rice moisture instruments regarding their specifications.

Discussed in the Working Group on Rice moisture measurement.

- Encourage those economies that have not yet replied to the rice moisture measurement questionnaire to do so.

Discussed in the Working Group on Rice moisture measurement.

- Support the development of an Asia-Pacific Mutual Recognition Agreement on Pattern Evaluation to be complementary to the OMIL Agreement but allowing recognition of individual tests and open to all Forum members.

Discussed in the Working Group on Mutual recognition agreements.

- Recognise that the Mutual Recognition Agreement would have significant impact on industry and request Forum members to discuss these issues with industry in their economy.

Discussed in the Working Group on Mutual recognition agreements.

- Recommend that a profile of pattern approval capability to be prepared by member economy to improve confidence between forum members.

A survey on the development of this profile will be conducted and the results of this will complement the information in the Directory of Legal Metrology in the Asia-Pacific.

10. Discussion on topic nominated by host economy – “Measuring Bulk Materials in Trade by Draft Survey, Problem and Implementation” – Presentation by Mr Hari Prawoko, Dipl Ing Inspector of the Inspectorate of Metrology.

The Directorate of Metrology proposed the above topic for discussion at the Forum meeting. Mr Hari Prawoko, Inspector from the Inspectorate of Metrology made the presentation which stimulated a lively discussion on the issues of draft surveys as used in some member economies.

Mr Birch highlighted the issues involved in bulk weighing involved of commodities such as mineral concentrates in international trade and the work of ISO/TC 83 in this area. Dr K Birkeland and Mr J Barker spoke on their experiences in bulk commodity weighing.

The Forum made reference to the workshop on “Introduction to High Capacity Weighing” held in Shanghai last year and noted the paper on “Trade by Draft Survey or Belt Weighing” by J P Kelly circulated earlier which complemented discussions on this topic.

The Forum thanked the speakers for their presentations and contributions on various aspects on measuring bulk materials.

11. Country Report presentation by member economies: “Current Developments in the Legal Metrology System and Directions of Future Change”.

The Forum noted the presentations of delegates from each economy present on “Current Developments in the Legal Metrology System and its Future Directions”. The following delegates made presentations:

Australia	Mr John Birch
Canada	Mr Alan Johnston
PR China	Mr Han Jianping
Hong Kong, China	Mr Peter KK Chan
Indonesia	Mr Rasben Simanullang
Japan	Mr Toru Kojima
Republic of Korea	Mr Roh Jae-Son
Malaysia	Mr Chen Soo Fatt
Mongolia	Mr N Bayarmagnai
New Zealand	Mr John Barker
Papua New Guinea	Mr Kialou Angat
Philippines	Mr Rodrigo Dacuyan
Russia	Dr Y Gusakov
Chinese Taipei	Mr Hsing-Ming Lin
Thailand	Mr Noravat Suwarn
United States of America	Mr Aves Thompson
Vietnam	Dr Huynh Van Quang

11.1 There was a discussion by members on developments made by member economies at the end of the presentations. Dr K Birkeland commented on the presentations in the light of the ‘Survey of legal metrology technical infrastructure survey’ that he conducted in 1996.

11.2 He noted that there were significant changes in the development of some member economies in terms of changes in overall development and the legislative and administrative systems as well as an increase in the development of training courses provided by the APLMF and participated by member economies.

11.3 He stressed that economic considerations and funding availability were important factors in the development of the economy’s legal metrology system.

11.4 He highlighted a number of strategies and directions for activity which included the support of activities that reduce barriers to trade and the development of mutual arrangements amongst economies.

11.5 A compilation of the ‘Country Reports’ will be circulated to member economies for future reference.

12. Development of programs in other areas of legal metrology.

The Forum noted that there are other areas of legal metrology that are increasingly important and agreed that Forum members include them in their national programs. These are in the areas of chemical metrology, particularly in certified reference materials, health and environmental measurements including pollution.

13. Discussion on APEC Standards and Conformance issues and report of meeting between Specialist Regional Bodies (SRBs) (APLAC, APLMF, APMP, PAC, PASC) and APEC Standards and Conformance Sub-Committee.

13.1 Mr Birch informed members that close cooperation and rapport exist amongst all the SRBs and wherever possible, representatives attend the forum/general assemblies of member organisations.

The Forum noted the reports submitted by APLAC and APMP and their activities over the past year and that both these regional bodies were in the process of finalising their MoUs and establishing a fee structure for their operation.

13.2 Mr J Barker, who represented the APLMF at the meeting of the APEC Standards and Conformance Sub-Committee in Wellington in August, presented the report of the meeting.

The Forum noted:

- That there was a need for the development of linkages between the SRBs for effective representation at the SCSC meetings.
- That a mechanism needed to be developed by the SRBs to access the funding that is available from APEC.
- That a Statement of Commitment between the SRBs and SCSC will be drafted.
- That the question of the status of the SRBs (guest or observer at SCSC) would be taken up with the Senior officials.
- That a workshop on 'Good Regulatory Practice' was held in association with the meeting. The workshop discussed the APEC Draft Guide on Good Regulatory Practice and the value of mutual recognition and accreditation schemes in the promotion of good regulatory practice.

13.3 Dr K Seta, Japan as the APMP secretary-elect, presented the report of the APMP.

The Forum noted the report of the APMP and its many activities and that Japan will provide the Chair for the APMP in the coming general assembly in November in Chinese Taipei.

The Forum thanked Dr Seta for his report and emphasised that the APMP and APLMF continue the close cooperation that exists between the two organisations.

14. Discussion on OIML issues.

Mr Athane presented a report on OIML to the APLMF delegates.

- 14.1 He highlighted that it is OIML policy to encourage regional cooperation and to participate in it and was pleased with the close rapport between the APLMF and OIML. For example, the OIML, as requested by the APLMF, is progressing in fields such as mutual recognition arrangements, certification, water meters, packaged goods and starting in fields such as electricity meters, heat meters and use of statistical methods.
- 14.2 He emphasised that regional bodies should be aware of OIML activities of interest to them and to ensure that there is no regional conflict with corresponding international activity.
- 14.3 He informed members of the next CIML meeting in Tunis on 6–8 October and that invitations to attend have been extended to regional organisations having legal metrology interest and to OIML Corresponding Members to attend as observers.
- 14.4 He informed members on the seminar on ‘Software in legal metrology’, which is a technical seminar organised by the French Legal Metrology Administration and the BIML in Paris in September/October 1999 and the possibility of creating ‘virtual measuring instruments’ with interactive softwares covering their evaluation/verification being made available to everybody through the internet.

The Forum expressed its appreciation to Mr Athane for his presentation.

The full text of the report is in Appendix 9.

15. Discussion on liaison with other regional legal metrology organisations.

Mr Birch informed that there is close collaboration between the APLMF and other regional organisations.

The Forum noted:

- The work of WELMEC (European Cooperation on legal metrology) and particularly the work on WG 6 on Pre-packed goods.
- The progress of the work of the Indian Ocean Legal Metrology Forum (IOLMF), of which Mr Birch is the interim Convenor.
- The development and activities of the South African Legal Metrology Cooperation (SALMEC) and the South African Development Community Metrology Cooperation (SADCMET) and that Mr Birch presented a paper at the 75th Anniversary of Trade Measurement Conference organised by the South African Bureau of Standards.

- That Mr Birch presented a paper at the International Conference on Metrology, Quality and Global Trade held at the National Physical Laboratory in New Delhi, India.
- The development of *Mercusor*, a legal metrology regional body of South American countries and its liaison with the APLMF.

The Forum also noted the development of the sub-regional programs involving Australia and New Zealand within the CER (Closer Economic Cooperation) agreement.

Mr Athane highlighted the work of other regional bodies and the Forum noted the following regional organisations eg. COLAMEL, established in February 1999, COMAC, EUROMET and others.

The Forum noted that a new regional organisation called MEDA, comprising countries in the Mediterranean will be proposed at a meeting prior to the OIML conference in Tunis in October.

16. Discussion on bilateral and multilateral assistance for development of legal metrology in the region.

The Forum noted that the Australian government had funded the activities of the APLMF secretariat since 1994 and that as another economy will assume the responsibilities of the secretariat soon, there was a need to seek funding from other agencies as well for implementation of the various projects of the Forum.

The Forum noted the following agencies ADB, APEC, UNDP, UNESCO and UNIDO provided funding and agreed to investigate the possibility of obtaining funding from funding agencies such as ADB, APEC, UNDP, UNESCO and UNIDO for the implementation of the Forum's projects.

17. Discussion on Work Program for 1999/2000

The Forum discussed the work program to be carried out in the next few years and adopted the following work program.

Work Program for 1999/2000

- Establish a Working Group on Medical Measurements with a project on Sphygmomanometers (blood pressure meters).
- Monitor the need for translating measurement legislation into English for those economies where their legislation is currently not in English.
- Consider ways to involve consumers in Forum activities.
- Finalise and publish the resource document on modernisation of legislative and administration systems.

- Finalise the reports of the intercomparisons on non-automatic weighing instruments and load cells.
- Commence the intercomparison on mass standards and master meters.
- APLMF support the need for harmonisation of international standards in relation to Goods Packed by Measure, including:
 - (a) standard sizes;
 - (b) permitted deficiencies due to dehydration; and
 - (c) drained weights.
- APLMF to provide input into the development of harmonised international standards on Goods Packed by Measure, which is necessary to ensure the Asia-Pacific's Region views and requirements are fully considered by those developing such international standards.
- The survey on prepacked goods requirements in other regions be continued.
- APLMF continue to discuss with OIML the need for priority to be given to extending the OIML recommendation on nett contents to include metrological control of packing facilities involving quality systems, accreditation of test facilities, statistical sampling of output and certification by the legal metrology authority.
- APLMF continue to discuss with OIML the consideration of developing an international system of marking of labelled measurement to facilitate international trade in prepacked goods (an extension of the European E mark system).
- The secretariat survey member economies to provide the contact details of the organisation/s within the member economy who have responsibility for administration of their economies legal provisions in relation to Goods Packed by Measure.
- Consideration be given to establishing a small "ad hoc" group within the Working Group on Goods packed by Measure, to develop proposals or requirements for goods packed by measure, for discussion and decision by APLMF.
- Following the adoption of the recommendation on water meters by the CIML, the secretariat to survey the application of this recommendation by member economies.
- Support OIML Technical Committees on:
 - (a) Electricity meters; and
 - (b) Statistical sampling.
- The train the trainer modules for the pattern approval and for the verification and inservice inspection of non-automatic weighing instruments be promoted and run as requested.
- Train the trainer modules for the pattern approval and verification of petroleum and LPG dispensers be developed and training courses run before the end of 2000.

- A Regional Directory of Training and a regional network of trainers be developed.
- Discussions be held with BIML on the development of an international legal metrology training network and international accreditation of legal metrology training courses.
- Consideration be given to developing training courses in:
 - (a) Standards laboratory officers training;
 - (b) Goods packed by measure;
 - (c) High capacity weighing and high capacity flow measurement as extension of the introductory courses;
 - (d) Compressed natural gas dispenser pattern approval and verification;
 - (e) Vehicle speed measuring devices and evidential analysis devices;
 - (f) Automotive emission measurements and other environmental measurements;
 - (g) Measurement uncertainty in legal metrology; and
 - (h) Application of accreditation and quality certification in legal metrology.
- Consider the Rice Moisture project by investigating the:
 - (a) Variation in the measurement results using different instruments with the same sample. This is probably due to the lack of a program of pattern approval of the prototype. Then conduct regular verification and inservice inspection of instruments used in the field to maintain acceptable level of consistency;
 - (b) Poor quality of the instruments being used and their inability to stay in calibration for a reasonable period of time. This is related to the lack of pattern approval;
 - (c) Variation in the samples used. This could be due to the way in which the samples are taken from the bulk grain, how it is stored and handled after being taken;
 - (d) Quality and consistency of the standard reference materials used in calibrating the moisture meters, and lack of traceability back to a national standard;
 - (e) Metrological control system which is necessary to control fraud and ensure the integrity and transparency of the measurements.
- Accept the offer of PTB to pattern evaluate a number of rice moisture measuring instruments.
- Support the work of TC3 SC5 Conformity Assessment in developing a Mutual Acceptance Agreement on test reports.
- Survey action being taken by member economies to ensure compliance of production instruments with type.
- Establish a Working Group on application of weighing in bulk commodity shipping measurements in place of draft surveys.

- Establish a Working Group on Legislation and Administration to promote regional harmonisation of legislation and administration and prepare an analysis of coordination structures in legal metrology.
- Develop a project on economic analysis of legal metrology with the aim of setting priorities based on economic and social impacts.
- Circulate information to member economies on Measurement Canada's Market Place Intervention Model and New Zealand's economic analysis of trade measurement.

18. Election of Convenor (President) for 2000 – 2001.

Mr Birch informed the Forum that the positions of President and Secretariat will terminate at the end of this year as he will be retiring from the National Standards Commission in 2000 and member economies were requested to nominate for these positions. This request has been circulated through a number of issues of the Circulars but to-date, no nominations or proposals have been received. Members were urged to give serious consideration to this issue.

Mongolia proposed Mr Birch as President and this supported by Philippines, Russia, Chinese Taipei and Thailand. As there were no other nominations received, Mr Birch agreed to continue as President for the time being until a new President and secretariat assume the responsibility.

19. Date and location of next Forum meeting in 2000.

The Forum accepted the invitation of Chinese Taipei to host the seventh Forum meeting in 2000. However, the exact dates and venue for the Forum will be determined between the host economy the President at a later stage.

20. Concluding remarks by the Chairman of the Forum meeting.

The Chairman, Mr Bambang Hardiwardjo, thanked the Convenor and Secretariat, Director and staff of Directorate of Metrology for successfully organising and hosting the Forum meeting and delegates present for their contribution to the discussions of the Forum.

Mr Birch expressed his appreciation to the Chairman for chairing and conducting the Forum meeting and the organising committee and staff of Directorate of Metrology for the very excellent organisation of the Forum and Working Groups meetings.

21. Any other matters and conclusion of Sixth Forum meeting.

As there were no other matters for discussion, the meeting concluded at approximately 5.00 pm.