



BIPM REPORT

2008 – 2009

The International Bureau of Weights and Measures (BIPM) continues to meet its original 1875 mission – namely the worldwide uniformity of measurements. Its role and detailed mission have, of course, changed dramatically over the years. In addition to meeting the metrological needs of our Member States as expressed through their Governments and National Metrology Institutes (NMIs), we work with a number of intergovernmental organizations and international bodies to achieve our mission. In some cases, our interactions are with our natural metrology partners, such as with the International Organization for Legal Metrology (OIML) and the International Laboratory Accreditation Co-operation (ILAC), but we are often approached by others and asked to set up collaborations. The links which have been particularly strengthened in the last year include those with the World Anti Doping Agency (WADA), the Food and Agriculture Organization (FAO), the International Federation of Clinical Chemistry (IFCC), and the World Meteorological Organization (WMO). The magnet that draws these bodies to us is the clear and authoritative role we have to play in traceable, accurate measurements based on stable international references.

This approach, it seems to us, is testimony to the wisdom of decisions taken more than a decade ago to extend the BIPM's work into chemical metrology and also because of the establishment of the Mutual Recognition Arrangement of the International Committee for Weights and Measures (CIPM MRA). The success of the CIPM MRA in physics and engineering has demonstrated what can be done to add confidence to the world measurement system in these areas and the trend now is to adopt and adapt its principles in new areas of science and technology. This, we believe, is a sign to our Member States of the importance of the BIPM's moves into new metrology areas and the need to take bold steps to develop international collaborations and partnerships in order to achieve the goals of the Metre Convention.

The benefits of the diversification which has so far been achieved are beginning to show. As we start to prepare for the meeting of the General Conference on Weights and Measures (CGPM) in 2011, our hope is that Member States will give the BIPM their full support.

BIPM's programme of scientific work

2009 saw the beginning of the four-year programme of work approved by the 23rd meeting of the CGPM in 2007. The CGPM, however, decided on a dotation that was less than the International Committee for Weights and Measures (CIPM) had requested, and in accordance, the CGPM requested that the CIPM set priorities for the BIPM work programme.

It was immediately clear to the CIPM that the financial outcome of the 23rd meeting of the CGPM made it impossible fully to implement the increased programme of work originally proposed for the period 2009 – 2012. Priorities therefore were set to match our work to the financial income expected from Member States, Associates, and other sources. Whilst we are pleased to say that a large amount of the BIPM's core scientific work will continue, some projects of importance will be delayed until resources allow, and some current activities will be terminated to allow the launch of higher priority projects.

As the BIPM has a unique role to play in dissemination of mass traceability to all our Member States, and as a redefinition of the kilogram is expected within the next few years, the CIPM's top priority for the BIPM is to support mass metrology. This involves the continuation of the work on the development of a BIPM "watt balance" facility, which will be necessary for realizing the proposed redefinition of the kilogram, and for improving the means of dissemination of the mass scale to our Member States in order to meet their future needs. All the mass related activities proposed in the original programme of work will be retained. However part of the mass activity connected with the preparation, using the best available "new technology", of an ensemble of weights, which will act as the BIPM's working standards, will be delivered through a collaboration with the UK's National Physical Laboratory (NPL) and the Swiss *Bundesamt für Metrologie* (METAS).

The CIPM's next highest priority was the maintenance of the BIPM activities in creation of the world time scale and international time transfer activities. These will also be retained as proposed in the original programme of work.

The electricity programme will be reduced but we will continue to provide on-site comparisons for National Metrology Institutes (NMIs) using the BIPM's travelling standards and we will complete the construction of the calculable capacitor as an international reference facility.

The core elements of the ionizing radiation programme in dosimetry and radioactivity will be maintained, centred on the BIPM's reference facilities.

The chemistry programme will consolidate its activities in gas metrology but will expand its work in organic chemistry, particularly the preparation of pure materials for use in key comparisons.

The international liaison work will concentrate on promoting the benefits of participation in the BIPM programmes and on links with the international accreditation and specification standardization bodies.

However, in order to provide the resources to meet these priorities, other important activities had, unfortunately, to be reduced with the result that:

- fewer "travelling standards" used in the on-site calibration of national time receiving equipment will be purchased. A new project will research alternatives to the current use of travelling standards in this process;
- the facility for the preparation of iodine cell, use for stabilized lasers and gravimetry equipment, was closed at the end of 2008, and the BIPM liaised with a number of other NMIs who were interested in supplying NMIs and other users of this service who require iodine cells;
- a new project for a voltage standard, which would be used for on-site comparisons of electrical standards at NMIs, will be re-organized so as to save staff resources;
- extension of the BIPM reference facilities for activity measurements on alpha particle emitters will be postponed;
- projects on gas metrology would be cancelled or postponed. In particular, a project of relevance to climate change will not be launched; and

- significant cuts in overheads were made through economies, reorganization of support services and delays to building maintenance.

In arriving at the above decisions, the CIPM considered the expected income from new Member States and Associates. The cautious funding scenario adopted by the CIPM was for two new Member States and five new Associates during the 2009-2012 period. In the past few years, the BIPM had increased its efforts to attract new States and this work is starting to pay off so that the number of Members now stands at fifty three (53) – an increase of two – and the number of Associates at twenty eight (28). We have, therefore, already met the Membership target and the BIPM is in discussion with several more States that offer promising opportunities. In addition, a number NMIs have offered additional voluntary financial contributions. We are especially grateful to them, as well as to a number of NMIs and Member States who have supported the BIPM with bilateral arrangements, in aligning programmes of work to achieve common objectives, and in the supply of staff on secondment.

The International System of Units (SI)

Little has changed in the overall approach to a potential redefinition of a number of SI units. The relevant Consultative Committees of the CIPM (CCs) review the situation at each meeting but there is now a firm consensus for:

- a kilogram redefinition based on the Planck constant, h ,
- a definition of the ampere based on a fixed value of the elementary charge, e .
- a redefinition of the kelvin based on the value of the Boltzmann constant, k ; and
- a redefinition of the mole based on a fixed value of the Avogadro Constant, N_A .

However, and despite some impressive progress in the last year at the NMIs, there is still not an adequate degree of convergence of the results from watt balance experiments and from the International Avogadro Coordination project which would give confidence in the selection of a value for the Planck constant. Both approaches are expected to produce new results in the next year or so, and the CIPM will continue to consider whether the time is right for a redefinition and for proposals to be made to the CGPM.

The CIPM Mutual Recognition Arrangement (CIPM MRA) and the Joint Committee of the Regional Metrology Organizations and the BIPM (JCRB)

During this year, the number of signatories of the CIPM MRA rose to seventy-four (74, from 47 Member States, 25 Associates of the CGPM, and 2 international organizations) and it covers a further one hundred and twenty three (123) Designated Institutes (DIs). Worldwide interest in the demonstrable equivalence between the realizations of the SI is increasing amongst accreditors, companies and other user communities. The BIPM therefore continues to promote the concept of traceability to the SI through the realizations made at the NMIs and the DIs, rather than to specific institutes. This subtle, but important, step supports the contribution of the CIPM MRA to the reduction of technical barriers to trade (TBTs).

At the time of writing, the number of CMC entries in the BIPM key comparison database (KCDB)¹ has risen to over 21 000.

The KCDB Newsletter² – now in its tenth edition – continues to promote the work of the BIPM and the successes of the CIPM MRA in helping reduce the costs associated with the establishment of traceability, through the use of local NMIs as well as the scientific benefits of increased confidence in measurement capabilities. There are regular reports from the NMIs which show how the CIPM MRA has saved money to their national economies.

The CIPM and ILAC have agreed on a common definition of the term Calibration and Measurement Capability (CMC), and this term will gradually replace Best Measurement Capability (BMC) which has been in use in the accreditation community. This common nomenclature helps the NMI and accredited laboratory communities to work together to ensure robust traceability of measurement results from accredited laboratories to the units of the SI through its realizations by the NMIs. In response to user requests, the CCs generally now endorse adding the contribution of the “device under test” to the uncertainties which should be associated with calibrations. The CCs and ILAC are also identifying a broader range of service level categories³ for CMCs which will help meet the needs of a number of

¹ <http://kcdb.bipm.org/>

² http://kcdb.bipm.org/kcdb_statistics.asp#news

³ See http://kcdb.bipm.org/AppendixC/M/M_services.pdf for an example of Service Categories in the area of Mass.

NMIs as well as harmonize the scopes of accredited laboratories with the CMCs declared by NMIs.

During the past year, the CIPM also approved two web-based documents: *a guide to current policy decisions in relation to the CIPM MRA*; and a *summary of the procedures for creating and processing CMCs*. These documents are available in the CIPM MRA area of the BIPM's website (www.bipm.org/en/cipm-mra/documents/).

The JCRB continues to oversee the operational aspects of the CIPM MRA. As will be further reported in the section on the last meeting of the CIPM, we are pleased to note the evolution of AFRIMETS in the African continent – the Regional Metrology Organization (RMO) that now covers the national metrology activities of the majority of countries in Africa. The creation of AFRIMETS has stimulated a number of African States to express interest in becoming either a Member State or an Associate. Similar initiatives to create other RMOs are afoot in the Middle East and Gulf Region and the JCRB has met with representatives of GULFMET – a possible future RMO incorporating the national metrology activities of the countries members of the Gulf Cooperation Council (GCC).⁴ The BIPM's position in this matter is to encourage the formation of significant regional groupings and the role that they can eventually play in implementing the CIPM MRA and attracting additional Member States and Associates.

Member States and Associates

The last increase in the number of Members of the BIPM was in 2001 with the Accession of Greece and Malaysia. It is with great pleasure, therefore, that we report that the Republics of Croatia and Kazakhstan became Members after a few years as Associates. This trend is strongly encouraged by the CIPM, as requested by Member States during the meeting of the last CGPM. In addition, the Republics of Ghana, Paraguay, and Peru became Associates of the CGPM during 2008/9. The BIPM is in touch with a number of other States that have declared their intention to become either Member States or Associates as well as with some current Associates that are considering becoming Members.

⁴ GCC Membership: Bahrain, Saudi Arabia, the sultanate of Oman, Kuwait, Qatar, and the United Arab Emirates.

Meeting of the CIPM

The 97th meeting of the CIPM took place in October 2008 at the BIPM. Drs Kwang Hwa Chung (KR), Hector Nava Jaimes (MX), and Willie E. May (US) took up their seats for the first time, and we welcome them to the CIPM.

As reported above, the main decisions concerned the prioritization of the BIPM's programme of work for 2009 – 2012. We also noted that the CIPM approved the new RMO, AFRIMETS, as a successor to SADC MET and as a member of the JCRB. The CIPM also approved plans for a major event to mark a decade of the CIPM MRA through a major conference and workshop in October 2009.

Other policy decisions and discussions included the *criteria to be used to approve new RMOs*, the *policy to be adopted by NMIs when stating their traceability to the SI when they declare CMCs*, and a number of issues relating to the application of the CIPM MRA.

The CIPM also held a workshop on the long-term direction for the BIPM and its science strategy. This helped identify priorities for the 2013 – 2016 programme of work of the BIPM to be presented to the CGPM in 2011. Potential activities in nanotechnology and the biosciences were amongst the issues which will again be considered by the CIPM in October 2009 when it discusses the first draft programme of work.

Joint Committee for Guides in Metrology (JCGM)

A major achievement of the year was the finalization of the 3rd edition of the VIM (International Vocabulary of Metrology – Basic and General Concepts and Associated Terms). The “VIM3”, which was adopted by the BIPM, was placed on our website for free access by the metrology community.⁵ The Working Group on the Expression of Uncertainty in Measurement, the GUM, also finalized its work on a first supplement to the GUM, dealing with Monte Carlo methods. This supplement to the GUM has also been adopted by the BIPM and published on our website.⁵

⁵ See www.bipm.org/en/publications/guides/.

At the meeting of the JCGM in December 2008, approval was given to a proposal to review the GUM and a proposal to review and eventually update the VIM. The latter would take several years and initial consideration would be given to whether ordinal and nominal terms should be included. The JCGM approved the establishment of an *ad hoc* working group to consider a number of activities in relation to metrological software.

Joint Committee for Traceability in Laboratory Medicine (JCTLM)

In December 2008, the Executive Committee of the JCTLM discussed reports from its two working groups and reviewed the status of the revisions to ISO 15194⁶ and 15193⁷, both of which are the utmost importance to the JCTLM's work. The JCTLM was also concerned to see faster progress on the accreditation of reference laboratories to ISO 15195.⁸ The JCTLM Executive Committee meeting was followed by a workshop on the current state of national and international systems for traceability and discussed options for the preparation of a policy/discussion paper for decision makers on the need for greater attention to traceability in the clinical and laboratory medicine communities.

Liaison with intergovernmental organizations and international bodies

International coordination and liaison continues to consume about 20 % of our resources, distributed between general liaison activities and those carried out by the science sections in direct support of their missions and objectives.

We are pleased to report further progress on the study by the CIPM on measurement and traceability needs in materials science. This led to a decision to ask the Versailles Project on Advanced Materials and Standards (VAMAS) to identify priority topics and for a liaison to be created between VAMAS and the relevant CCs. With this in mind, a Memorandum of

⁶ ISO 15194:2009 In vitro diagnostic medical devices – Measurement of quantities in samples of biological origin – Requirements for certified reference materials and the content of supporting documentation.

⁷ ISO 15193:2009 In vitro diagnostic medical devices – Measurement of quantities in samples of biological origin – Requirements for content and presentation of reference measurement procedures

⁸ ISO 15195:2003 Laboratory medicine – Requirements for reference measurement laboratories

Understanding (MoU) was signed between the BIPM and VAMAS in June 2008.⁹ The issue of materials metrology is now routinely considered by a number of CCs.

Progress has also been made with the WMO in moving towards agreement on the arrangements for their signature of the CIPM MRA. This special arrangement is necessary since the WMO, unlike the other international bodies which have become CIPM MRA signatories, has no laboratories of its own, but rather will be represented in the CIPM MRA by the work of laboratories in the Member States. The BIPM is also working with the WMO to plan a workshop on *Measurement challenges for global observation systems for climate change monitoring: traceability, stability and uncertainty*, 30 March – 1 April, 2010, at the WMO headquarters in Geneva, Switzerland.

As a result of discussions between the BIPM and the OIML, a number of possibilities for closer liaison and integration were discussed. These included co-location of both organizations at the BIPM site or merger of the two organizations. The options were discussed by the Member States of the OIML but were not, however, supported at the moment and are, therefore shelved, at least for the time being.

Finally, the BIPM, in collaboration with OIML, also signed a MoU with the United Nations Industrial Development Organization (UNIDO) in December 2008.¹⁰ The aim of the BIPM-OIML-UNIDO MoU is to encourage collaboration between the three organizations so as to help strengthen metrology infrastructures in a number of regions and to promote the relevance of metrology to trade and capacity building.

World Metrology Day (WMD)

The 2009 theme of “Measurement in Commerce” provided the BIPM with an opportunity to highlight the 10-year anniversary of the CIPM MRA. The BIPM, in collaboration with the United States’ National Institute of Standards and Technology (NIST), the National Metrology Institute of Japan (NMIJ), the National Metrology Institute of South Africa

⁹ See http://www.bipm.org/utis/en/pdf/MOU_VAMAS.pdf for the full text of the BIPM-VAMAS Memorandum of Understanding.

¹⁰ See <http://www.bipm.org/en/bipm/mou/unido.html> for the full text of the BIPM-OIML-UNIDO Memorandum of Understanding.

(NMISA), the UK's National Physical Laboratory (NPL), the OIML and NCSL International produced a poster and an informational leaflet to support and promote the annual message from the BIPM Director. The WMD material was widely distributed and appeared on an international web site dedicated to the observance of this day.¹¹

Fifty different posters in twenty-five languages were produced as well as the informational leaflets in two languages. We received many reports of national activities in Member States and Associates, however it was particularly interesting to hear that a number of NMIs in States which are neither Members States nor Associates also took advantage of the WMD to hold national promotional events. These national events focused on drawing attention to the importance of metrology and persuading Governments of the value of becoming involved in the work of the BIPM.

BIPM's measurement services and quality system

The BIPM continues to provide a number of measurement services to NMIs from our Member States. All the external, as well as a number of the internal, BIPM calibration services satisfy the requirements of the BIPM's self-declared quality system which is structured as per the requirements of ISO/IEC 17025.¹² In March 2009, the BIPM presented its quality system to quality experts from the RMOs and received a number of helpful comments. There is now a link between the appropriate pages in the KCDB and the uncertainties associated with the BIPM's calibration and measurement services. As a result, NMIs which take traceability to the SI through the BIPM, can now point clearly to the uncertainties they need to take into account when formulating their own CMCs. This has been widely welcomed.

BIPM staff matters

Professor Michael Kühne assumed his post as Deputy Director and Director Designate of the BIPM in April 2009. Michael joins the BIPM from the PTB in Germany, where he was a

¹¹ See <http://www.worldmetrologyday.org/> for further details.

¹² ISO/IEC 17025:2005 General requirements for the competence of testing and calibration laboratories.

member of their Presidential Board, and he is to replace Prof. Andrew Wallard as director of the BIPM at the end of 2010.

In June 2008, an Amendment to the Headquarters Agreement between the BIPM and the French Government was ratified by the French Parliament. The Amendment, amongst other things, provides for the recognition of the jurisdiction of the international administrative tribunal of the International Labour Organization (ILO) for staff disputes.

The CIPM also approved a number of minor amendments to the BIPM *Staff Rules and Regulations*.

One distinct trend in recent years has been the increasing number of short term or seconded staff. In 2008/9 we hosted seven (7) secondees and recruited 3% of the staff on short term appointments. This way of working helps the BIPM maintain its direct links with the NMIs or other institutions which provide secondees and also is an excellent way of helping us with the development of specific expertises.

ILAC UPDATE

44th CIML Meeting, 27 – 30 October 2009

Mombasa, Kenya

A general update on ILAC activities from October 2008 to September 2009 follows:

ILAC Meetings

All ILAC committees held their end of year meetings in Stockholm, in October 2008. The minutes of committee meetings are published in the member's area of the ILAC website, on the respective committee pages, for the information of members. Minutes from Executive Committee meetings are also available in the member's area of the website, up to and including the Stockholm 2008 Meeting.

Special thanks go to our colleagues from SWEDAC, the hosts of the 2008 annual meetings, for the excellent logistical arrangements and support provided throughout the meetings.

Cofrac hosted the first ILAC Executive meeting for 2009 in Paris. The Executive commenced their meeting on the Sunday in order to have an additional day for the review of the committee action plans against the newly published ILAC Strategic Plan. The ILAC Arrangement Committee (ARC) held its first meeting of the year during the same week (4 & 5 March) as did the ILAC Laboratory Committee (LC), that met on 5 (half day) and 6 March. Also held in Paris during the same week, were the annual meetings between BIPM, OIML, ILAC and IAF together with a meeting of the Joint Committee on Coordination of Technical Assistance to Developing Countries in Metrology, Accreditation and Standardisation (JCDCMAS).

The mid year meetings of the ILAC Executive and the ILAC Arrangement Management Committee (AMC) were hosted by UKAS in London, during the week of 22 June 2009. The week also included meetings of the IAF, ILAC and ISO Joint Working Group, the Joint Committee for Closer Cooperation (JCCC) and the various ILAC and IAF arrangement management committees. The meeting of the IAF, ILAC and ISO Joint Working Group was the first to be held with the new ISO Secretary-General, Rob Steele. The meeting was very productive, with discussions on areas of common interest for all three organisations taking place and progress being made on actions from the previous meeting.

The final Executive meeting for the year will be held in Vancouver, in October, as part of the ILAC and IAF Annual meetings.

The preparations for the Vancouver meetings continue and our hosts for this year, CALA, are working very hard to ensure the success of the annual event. Members should note that the meeting schedule for Vancouver reflects the first steps towards a reduction in the overall length of the annual meetings, with a further step in this process having now also been confirmed for the 2010 annual meetings in Shanghai.

The ILAC Arrangement

As at 18 September 2009, there were **65 Signatories** (Full Members) to the ILAC Arrangement, representing **50 economies**.

Further progress was made during the recent meetings in London, towards establishing the ILAC and IAF MLMRA for Inspection and ILAC and IAF have now invited the current Recognised Regional Cooperation bodies to apply for evaluation to join the IAF/ILAC Inspection MLMRA.

ILAC also continues to focus on enhancing a more widespread understanding of the socio-economic benefits of the Arrangement amongst the international community, particularly governments and regulators.

ILAC Membership

ILAC membership as at 18 September 2009 is as follows:

- 65 Full Members (Signatories to the ILAC Arrangement) representing 50 economies;
- 25 Associates representing 24 economies;
- 20 Affiliates representing 18 economies;
- 4 Regional Cooperation Bodies
- 1 National Coordination Body
- 25 Stakeholders

The ILAC membership (total 140 bodies) now covers a total of 88 different economies worldwide and approximately 33,000 laboratories and over 6,000 inspection bodies are accredited by the 90 ILAC Full Members and Associates.

Joint ILAC/IAF Activities

IAF/ILAC A5:04/2009 Multi-Lateral Mutual Recognition Arrangements (Arrangements): Application of ISO/IEC 17011:2004 has been published on the ILAC and IAF websites. The document came into effect as of the date of publication on each website.

Revisions of the A-Series documents - *IAF/ILAC-A1:200X IAF/ILAC Multi-Lateral Mutual Recognition Arrangements (Arrangements): Requirements for Evaluation of a Regional Group* and *"IAF/ILAC-A2:200X IAF/ILAC Multi-Lateral Mutual Recognition Arrangements (Arrangements): Requirements for Evaluation of a Single Accreditation Body"*, are currently out for a 60 day comment period with both memberships. The comment period closed on 21 September and the Joint Working Group on the A-Series Maintenance will review the comments during their Vancouver meeting.

Further discussions regarding the future development of ILAC and IAF were held during the first half day of the Stockholm Joint General Assembly (JGA). It was agreed during the JGA that a Task Force would be established to consider, in detail, the issues highlighted by the members as requiring further investigation before consideration could be given to following any particular direction.

The Task Force is comprised of the Chairs and Vice-Chairs of ILAC and IAF, the Chair or nominated representative from each region, a representative of the unaffiliated bodies and stakeholder representatives from three areas namely; the ILAC laboratory Committee, the IAF industry representative and the IAF conformity assessment bodies representative. The Task Force finalised the terms of reference (after receiving feedback from members) and they held face to face meetings on 15 and 16 January 2009 in Paris and on the 14 and 15 May in London.

The work undertaken by the Task Force was reviewed during the JCCC meeting in London, in June, and details of the information package to be provided to members, in preparation for the discussions in Vancouver in October, were finalised. This information package will be distributed to the members of both organisations in September.

ILAC and IAF have been invited to provide input into the revision of the ISO Strategic Plan, and comments from members of both organisations have been sought. A Joint Task Group has been formed to review the input received and to prepare the ILAC/IAF response for consideration by both Executive Committees. The Executive input is currently being finalised with the closing date for input to ISO being 30 September 2009.

ILAC Executive

The voting draft of the ILAC Strategic Plan was finalised by the Executive during the Stockholm meetings. A 30 day voting period was conducted at the end of 2008 and the document was published on the ILAC website in December 2008.

The 30 day ballot on the revision of the former ILAC S1 document, *Classification and Publication of ILAC Documents* has concluded successfully and the Secretariat has now published this document as *ILAC-R1:09/2009 Classification and Publication of ILAC Documents*. The resulting changes to the ILAC publications and the document classification system have now also been finalised and can be seen on the ILAC website under Publications and Resources Section.

ILAC Liaisons

The review of liaison activities continues to be a major focus of the ILAC Executive Committee, who seeks to ensure that ILAC interests are represented in areas which have an impact on the activities of ILAC and its members. The Executive has confirmed the prioritisation and funding policies for ILAC's liaison activities in general and the liaison activity list for 2009 was finalised during the March 09 Executive meeting. It was subsequently reviewed and updated where necessary, during the June 09 Executive meeting. The proposals for liaison activity and funding in 2010 will be considered during the Vancouver Executive in October this year.

Since the October 2008 annual meetings, ILAC has participated in a number of liaison activities including, CASCO CPC (Chairman's Policy Committee), WG 27 (Drafting requirements for use in conformity assessment applications), WG 29 (Revision of ISO Guide 65 – Product Certification), CASCO WG28 (Revision of ISO Guide 43 – Proficiency Testing), CASCO Plenary, ISO TC212 (Technical Committee - Clinical laboratory testing and in vitro diagnostic test systems), the IAF, ILAC and ISO Joint Working Group, BIPM, OIML, CITAC, CCQM, EURACHEM, ISO REMCO and BERM 12.

ILAC and IAF were represented at the 13th International Legal Metrology Conference, held in October 08 in Sydney, Australia and ILAC also participated in the WADA Laboratory Committee meetings in December 08, March 09 and June 09. Technical Panel meetings and workshops were held in conjunction with IEC and IAF, and meetings of the BIPM Joint Committee for Guides in Metrology (JCGM) and the Joint Committee for Traceability in Laboratory Medicine (JCTLM) were also attended by ILAC representatives.

ILAC is commencing general discussions with the World Health Organisation (WHO) to determine how we might best cooperate to achieve some progress in areas of mutual interest and involvement. A meeting was held in July 09 in Lyon, France between WHO representatives and the ILAC Chair, Daniel Pierre, to continue these discussions.

The ILAC Chair, Daniel Pierre, has also been invited to speak on behalf of ILAC at a major symposium being held by BIPM, in October this year. The Symposium is being held to mark the 10th Anniversary of the CIPM Mutual Recognition Arrangement.

ILAC Secretariat

The Secretariat continues to develop the ILAC website, with several improvements being carried out in conjunction with the ILAC MCC.

Following the completion of the revision of the ILAC Strategic Plan, the Secretariat is now preparing a revision of ILAC S5, which is the ILAC Complaints Procedure for consideration by the Executive. Once the Executive have finalised their input the draft document will be sent to ILAC members for a 60 day comment period.

The following documents have been published on the ILAC website since the 2008 ILAC General Assembly:

*IAF/ILAC A5:04/2009 Multi-Lateral Mutual Recognition Arrangements (Arrangements):
Application of ISO/IEC 17011:2004;
ILAC P12:04/2009 Harmonisation of ILAC Work with the Regions;
ILAC G8:03/2009 Guidelines on the Reporting of Compliance with Specification;
ILAC-G7:06/2009 Accreditation Requirements and Operating Criteria for Horseracing
Laboratories;
ILAC-R1:09/2009 Classification and Publication of ILAC Documents;
ILAC-R3:09/2009 ILAC Strategic Plan (previously ILAC-S3:12/2008);
ILAC-R7:09/2009 Rules for the Use of the ILAC MRA Mark.*

The ILAC-MRA Mark registration process continues and, as at 7 September 2009, 47 ILAC Full Members had signed Licensing Agreements with ILAC, for the use of the Combined MRA Mark (the Combined MRA Mark is the ILAC-MRA Mark used in combination with the accreditation body's own mark).

The April 2009 edition of ILAC News was distributed in hard copy and an electronic version is available to download from the ILAC website under the 'News' section. Past editions of ILAC News are also available to download from the website. The October edition of ILAC News is currently being distributed via post.

Further information on ILAC can be obtained from the ILAC website at www.ilac.org, or by emailing the Secretariat on ilac@nata.asn.au.



IAF Update to the 44th CIML Meeting

27 – 30 October 2009

Mombasa, Kenya

October 2008 to September, 2009

1. IAF Membership and new MLA Signatories

The number of IAF members now totals 83 Members, with 57 Accreditation Body Members, 15 Association Members (9 Certification/Registration /Inspection Body Associations & 6 Industry/User Associations), 4 Regional Groups with Special Recognition being EA (European Cooperation for Accreditation), IAAC (Inter American Accreditation Cooperation), PAC (Pacific Accreditation Cooperation) and SADCA (Southern African Development Community in Accreditation), 1 Partner Member (ISO) and 6 Observer Members.

At the October 2008 Joint IAF-ILAC Annual Meetings held in Stockholm, Sweden, the Directorate of Accreditation (DA) Albania, the National Institute for the Defense of Competition and Protection of Intellectual Property - Technical and Commercial Regulations Commission of Peru (INDECOPI-CRT), the American National Standards Institute (ANSI) USA, and the Bureau of Accreditation (BoA) Vietnam were admitted as Accreditation Body Members.

At a Signing Ceremony held during the week's meetings CNAS (China, PAC) and ANSI (USA, PAC) were accepted for membership in the IAF MLA for Product, BoA (Vietnam, PAC) was accepted for membership in the IAF MLA for QMS and TURKAK (Turkey, EA) was accepted for membership in the IAF MLA for EMS and Product, as a consequence of PAC or EA MLA membership (as indicated).

Since the above Annual Meetings, ECA (Costa Rica) has been admitted as a MoU Member and GLOBALG.A.P. as an Association Member, with ballots currently being conducted for the membership applications of A2LA (USA) as an Accreditation Body Member and IAQG and EOQ as Association Members.

2. IAF User Advisory Committee

The IAF Strategic Plan, Strategic Objective #1 commits IAF to establishing mechanisms for obtaining input from end-users about how well accredited certification is meeting their expectations, in order to influence IAF in ways to continually improve outcomes. Following the positive response from the Industry Days held in San Francisco, Beijing and Bonn during 2007/2008, IAF formed the User Advisory Committee (UAC) under the chairmanship of Guenther Beer, Head of Regulation & Conformity Assessment for Siemens (Germany) and also IAF Director for Industry/User Associations.

The first meeting of the Committee took place during the IAF-ILAC Joint Annual Meetings in Stockholm in October 2008 and the opportunity was taken to discuss IAF, its objectives, strategy, motivation and goals. The UAC proposed amendments to their Terms of Reference for approval by the IAF Executive Committee, how it would function in an operational sense and reviewed in detail the draft Joint IAF-ISO Communiqués on Expected Outcomes for ISO 9001 and ISO 14001 Accredited Certification. The suggested changes were referred to the responsible IAF Task Group and corresponding modifications were made to the Communiqués improve understanding and clarity.

The second UAC meeting was recently held in London. Members were given a presentation by Randy Dougherty, IAF Technical Committee Chairman, covering Global Confidence in Certification which had been developed by the IAF Communications and Marketing Committee (CMC) to help people not directly involved in accreditation and certification with understanding what this meant. The meeting was also provided with an introduction to IAF's Structure, Operations and Core Processes covering the Technical Committee. The Chairman of the CMC, Graham Talbot of UKAS and EA Chairman, was able to attend an afternoon session of the UAC and members provided input into the development of an End User Survey identifying the type of questions that it was hoped would produce useful information for the long-term.

3. New IAF Publications

Following the publication of ISO/IEC 17021 in 2006 and the withdrawal of ISO/IEC Guides 62 and 66, the IAF Technical Committee proposed that the annexes to IAF GD 2 and GD 6 (the IAF Guidance Documents for the application of ISO Guides 62 and 66) would be reviewed and republished as stand-alone IAF application requirements, as necessary. IAF has now published revisions of four of these annexes which are available from the IAF website (www.iaf.nu) under Publications, then Mandatory Documents. The MD series publications are currently:

- IAF MD 1:2007 Certification of Multiple Sites Based on Sampling (Issue 1, issued on 20 November 2007; Application from 15 September 2008);
- IAF MD 2:2007 Transfer of Accredited Certification of Management Systems (Issue 1, issued on 14 December 2007; Application from 15 September 2008);
- IAF MD 3:2008 Advanced Surveillance and Recertification Procedures (ASRP) (Issue 1, issued on 1 February 2008; Application from 15 September 2008);

- IAF MD 4:2008 Use of Computer Assisted Auditing Techniques (“CAAT”) for Accredited Certification of management Systems (Issue 1, issued on 15 May 2008; Application from 15 September 2008;
- IAF MD 5:2009 Duration of QMS and EMS Audits (Issue 1, issued on 1 February 2009; Application from 1 May 2009;
- IAF MD 6:2009 Application of ISO 14065:2007 Greenhouse gases: Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition (Issue 1, issued on 15 February 2009; Application from 15 February 2010).

IAF and ILAC have also recently published IAF/ILAC A5:04/2009 IAF/ILAC Multi-Lateral Mutual Recognition Arrangements (Arrangements): Application of ISO/IEC 17011:2004 which is now available from the IAF website under Publications, Joint IAF-ILAC (A Series)

4. Future Development of IAF and ILAC

Discussions regarding the future development of IAF and ILAC were held during the first half day of the 2008 Joint General Assembly (JGA) last October in Stockholm. It was agreed during the JGA that a Task Force would be established to consider, in detail, a number of issues highlighted by members as requiring further investigation before consideration could be given to following any particular direction.

This Task Force is composed of the Chairs and Vice-Chairs of IAF and ILAC, the Chair or nominated representative from each region (EA, IAAC, PAC & SADCA), stakeholder representatives from three areas namely the IAF industry representative, the IAF conformity assessment bodies representative, the ILAC laboratory Committee and a representative of the unaffiliated bodies. The Task Force developed their terms of reference which was circulated to all members of IAF and ILAC for comments, which were reviewed at meeting of the Task Force held in mid January 2009.

A second meeting of the Task Force was held in May with the following documents being produced. These will be made available to all IAF and ILAC members for discussion at the next JGA in Vancouver in October:

- Tasks and Objectives of the International Infrastructure;
- Compiled Comments on Options (after May meeting);
- Cost Considerations;
- Future of ILAC and IAF (May 2009); and
- Summary of Responses to Questions (Paris Task Force meeting)

At a meeting of the Joint Committee on Closer Cooperation (JCCC) in June it was also agreed that the JGA in Vancouver would be asked to consider the following 3 possible options with a view to going ahead with one of them:

- Option 1: Current situation;
- Option 2: Two legal entities with partial integration; or
- Option 3: Single entity.

5. International Accreditation Day

Following the great success of the first International Accreditation Day held on June 9th 2008, this year the celebrations continued with IAF and ILAC members highlighting the benefits of their activities. The theme for 2009 was 'competence', being a core principle of what accreditation delivers. Both the IAF and ILAC websites carried promotional posters and a joint statement from the Chairs of the two organizations, these being able to be

downloaded together with supporting statements from the World Health Organization (WHO), the International Standards Organization (ISO), the International Bureau of Weights and Measures (BIPM), the International Electrotechnical Commission (IEC), and the World Anti-Doping Agency (WADA).

6. Joint ILAC/IAF Activities

The decision making process for dealing with joint activities between ILAC and IAF, which have to date been managed through the JCCC, may change in the near future. At the JCCC meeting in June it was proposed that joint activities should be co-ordinated by joint meetings of the full Executives of both IAF and ILAC, instead of the JCCC which was made up of a specific number of representatives,. This proposal will be considered by both Executive Committees at their next meetings and if supported will be submitted for approval by the JGA. Currently operating under the stewardship of the JCCC are the following:

- Joint Inspection Group (JIG);
- Joint Development Support Committee (JDSC);
- Joint Working Group on Maintenance of A-Series Documents (including training);
- Joint Sessions (JMC) of the ILAC Arrangement Management Committee (AMC) and the IAF Multilateral Arrangement Management Committee (MLA MC);
- Joint Working Group on Communications.

7. Recent IAF Decisions of Interest

- The final draft statements of expected outcomes for ISO 9001 and ISO 14001 certification had been approved by IAF members at a ballot which closed in mid May. The statements had also been circulated for comment to ISO/TC 176, ISO/TC 207, ISO CASCO CPC. The final drafts were approved by the IAF-ILAC-ISO JWG at its meeting on the 24th of June. Copies of the statements have been published as two joint Communiqués which can be found on the IAF website (www.iaf.nu) under News.
- An IAF-ISO Action Plan developed by the Convener of the IAF Re-engineering Task Force and the CASCO Secretary was reviewed by the IAF TC in Mumbai in February/March 2009. As a result, the TC decided to establish four new task groups to address some of the actions in the Plan as follows:

1. Development of an IAF document for conducting “validation audits” by ABs of certified organizations to check the validity of the accredited certification;
2. Identifying specific sanctions to be applied by ABs towards CBs, where there was evidence of accredited certifications not being effective;
3. Identifying 4 to 5 key indicators capable of being measured which would adequately reflect the quality of the work carried out by the CB; and
4. Development of an IAF informative document for ABs and CBs on how to collect market feedback.

8. Next Meetings

IAF will next meet in Vancouver, Canada, for its 23rd Annual Meeting, from the 10th to the 20th of October, 2009. This meeting will be held in association with ILAC and will be hosted by the Canadian Association for Laboratory Accreditation Inc (CALA).

For further information about IAF please go to the IAF web site at <<http://www.iaf.nu>>, or contact the Secretariat at email <secretary1@iaf.nu>.

Prepared by the IAF Secretary – September 2009

CIML 2009

CECIP Activity Report



Economic Situation:

European weighing industry recognized big effects resulting from the actual financial crisis.

Sales turn over went down about 25%.

As a consequence industry had to reduce costs accompanied by reduction of employees.

Several companies had to close.

Nevertheless CECIP proceeds with its activities in legal metrology.

OIML MAA and Manufacturer's Test Laboratories (MTL):

As a consequence to the last year discussion about integration of MTL into the MAA two manufacturers agreed to a peer assessment procedure carried out by auditors of OIML.

The reason was to demonstrate quality and especially how impartiality and independence can be reached to solve a potential conflict of interest. The MTL had to fulfil all the requirements laid down under the MAA without any exception.

The result was a very positive one and the CPR decided to give the proposal to TC3/SC5 to implement the possibility of integration of MTL into the MAA.

We hope that TC3/SC5 will support this idea in the next meeting in the beginning of 2010 and that there will be a resolution for this in the CIML meeting in 2010.

Manufacturer's Test Laboratories (MTL) under the MAA

=> The best way to Conformity to Type:

The main reason for industry to establish MTL years ago was the awareness that such is needed to supervise production and to check conformity with metrological requirements. Therefore the best way for OIML to ensure conformity to type under legal control is to establish and supervise MTL which are recognized under the MAA under a high level.

To finish this item we want to point out that the peer assessment was an interesting experience not only for the auditors but for the MTL as well. The two laboratories were very pleased about the competence of the OIML auditors and say **Thank You** to their politeness and that they took all the trouble combined with such an experiment.

CECIP Activities concerning OIML:

OIML Recommendations play an important role as so called normative documents to European legislation. Therefore those are of big interest for manufacturers.

CECIP actually participates in the work concerning

- new document "The role of Measurement Uncertainty in Conformity Assessment Decisions in Legal Metrology"
- revision of R50 Continuous totalizing automatic weighing instruments and hopefully for the future in
- revision of R60 Load Cells

The revision of document D11 General Requirements for Electronic Measuring Instruments is of big interest as well.

CECIP Activities in Europe:

- Participation in the revision of the European Standard for non-automatic weighing instruments with the intention to reach as much conformity to OIML R76 as possible.
- Participation in the process of the revision of the 2 European directives for measuring instruments.
- Supporting a good functioning system of market surveillance under the New Legislation Framework (NLF) of the EU.

You may have recognized:

CECIP changed its outfit

but

not its activities in legal metrology

If you like to get more information about CECIP please visit our homepage under cecip.eu

From the beginning of 2010 it will be in new design and with actual information about members and activities.

