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Full Meeting Accounts

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The Organisation Internationale de Métrologie Légale (OIML), established 12 October 1955, is an intergovernmental organization whose principal aim is to harmonize the regulations and metrological controls applied by the national metrology services of its Members.

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Editorial

Jean-François Magaña

JCDCMAS

A meeting of the Joint Committee for the coordination of Technical Assistance to Developing Countries (JCDCMAS) was held on March 11 immediately following the annual OIML - ILAC - Metre Convention meeting. The OIML took over the JCDCMAS Secretariat for the coming year.

JCDCMAS is composed of a number of international organizations dealing with metrology, accreditation and standardization: IAF, IEC, ILAC, ISO, ITC, ITU-T, the Metre Convention, the OIML and UNIDO and its objectives are to promote the consistency and complementarity of metrology, accreditation and standardization issues in Technical Assistance programs for Developing Countries and to provide a coherent approach to donors and implementing organizations on these issues.

A background document has been finalized by the JCDCMAS and a joint PowerPoint presentation of metrology, accreditation and standardization (MAS) will be shortly available. During its period as Secretariat, the OIML plans to undertake further specific JCDCMAS actions aimed at promoting MAS in development programs. ■

Une réunion du Comité Conjoint pour la coordination de l'assistance technique aux Pays en Développement (JCDCMAS) s'est tenue le 11 mars immédiatement après la réunion annuelle OIML - ILAC - Convention du Mètre. L'OIML a pris en charge cette année le secrétariat du JCDCMAS.

Le JCDCMAS est constitué d'un certain nombre d'organisations internationales dans le domaine de la métrologie, de l'accréditation et de la normalisation: IAF, CEI, ILAC, ISO, ITC, IT-U, Convention du Mètre, OIML, ainsi que de l'ONUDI. Ses objectifs sont de promouvoir la cohérence et la complémentarité des thèmes de la métrologie, de l'accréditation et de la normalisation dans les programmes d'assistance aux Pays en Développement, et de fournir une approche cohérente de ces domaines aux organismes donateurs et aux organisations mettant en œuvre des programmes.

Un document de présentation générale a été finalisé par le JCDCMAS et une présentation PowerPoint commune de la métrologie, de l'accréditation et de la normalisation (MAS) sera prochainement disponible. Pendant son mandat de Secrétaire du JCDCMAS, l'OIML prévoit d'engager des actions spécifiques pour promouvoir ensemble la métrologie, l'accréditation et la normalisation dans les programmes de développement. ■

BERLIN 2004

OIML Development Council Meeting

25 October 2004

The OIML Development Council met for the final time in Berlin on 25 October 2004.

Mr. Kochsiek drew the Meeting's attention to the active role played by the PTB in providing training and assistance for Developing Countries, notably the meeting of the Permanent Working Group on Developing Countries (PWGDC, the composition of which had been decided by the President at the previous CIML Meeting) and the Forum which, as Mrs. Annabi remarked, had led to many interesting questions being raised.

Mr. Seiler gave a report on the PWGDC meeting held the previous morning; the main points discussed were the activities to be undertaken, namely:

- Preparation of simplified OIML Recommendations for which there was much need;
- Translation into further languages;
- Provision of teaching materials;
- Collecting and providing equipment; and
- Setting up an internet platform for information exchange.

It was decided to wait for the outcome of the Forum before structuring the work to be done; in the meantime Mr. Seiler gave a preliminary report, summarized below.

The PWGDC had discussed the contributions that each of its Members (who also represented Regions and Regional Metrology and/or Legal Metrology Organizations) could make. One objective was to enable all Regions to benefit from the work done by each other Region, for example sharing teaching materials - possibly aided by the BIML, which would publish information on the OIML web site.

Mr. Dunmill reminded Delegates that at the 2003 Development Council and CIML Meetings it had been decided that the PWGDC would continue the work of the Council, though hopefully more effectively. A smaller group of people would be able to address more practical problems, and react faster. He went on to summarize the history of the Council and reminded those present that a change in its structure required endorsement by the Conference, and then listed a number of decisions which he suggested the Development Council should take during the current meeting.

Firstly, Mr. Dunmill proposed that the Development Council should thank Mr. Seiler and the PTB for the excellent organization of the Forum and related Poster Session (see photo below), which he felt sure all those present had appreciated.

Mr. Llewellyn felt that some clear messages from it were:

- That legal metrology must be seen as part of a package of standards, quality and wider aspects of metrology;
- That the profile of that packet of issues needed to be raised across the world; and
- That this subject was not merely about legal metrology but about relieving poverty in Developing Countries; politically, this was a very important point to make when dealing with governments. This point on its own would have validated the day.

Mr. Dunmill secondly proposed that the Council should endorse the actions and proposals made by the Permanent Working Group and suggested that the Council approve the following decision:

"The Development Council, considering that the organization of the OIML's work on Developing Countries can be more effectively handled by the Permanent Working Group, proposes to the CIML that the tasks allocated to the Development Council by a decision of the 6th International Conference of Legal Metrology in 1980 should be henceforth transferred to the Permanent Working Group, and decides that the existing Development Council should therefore cease to exist."

Mr. Drissi could accept that that this transition to a Working Group was in the interests of efficiency, but asked whether there might not perhaps be some anxiety about how its organization and structure could be verified, since the number of people having access to its information had been reduced.

Mr. Magaña replied that it had been difficult to get on with the work or take any decisions in a hitherto large annual meeting. The PWGDC would perhaps be able to meet more often, and would also be able to communicate by e-mail throughout the year, and with the smaller group it would be easier to make headway with its tasks. More action would be taken to help developing countries and in the future it would be both possible and desirable to organize activities of interest to developing countries, similar to today's Forum. It would also be possible to offer regional activities. All the above would be set up by the PWGDC and information would be communicated among OIML Members by the BIML, using the internet, e-mail and information letters. In this way it would be possible to do more work than previously, and more information would be sent to developing countries.

Mr. Dunmill added that in the early days of the Council there had been more events such as Forums or Workshops, and the reason behind the present change was to try to revert to activities of more practical use to developing countries than had been the case in more recent years, when the same information was at times repeated to the same people, even within the same week.

The Council accepted Mr. Dunmill's motion.

Mr. Dunmill then proposed that the Council express its appreciation to Mrs. Annabi for her contribution to the OIML's work on developing countries during her tenure as Chairperson since 1998, following which the meeting was declared closed. ■

The Decisions of the Development Council Meeting may be consulted on the OIML web site and were also published in the January 2005 Bulletin.

BERLIN 2004

39th CIML Meeting

26 & 29 October 2004

On behalf of the German State Weights and Measures Laboratories and the Ministry of Economy and Labor, Mr. Kochsiek welcomed Delegates to Berlin. He opened his opening address on a very sad note - the passing away of CIML Past President Knut Birkeland some weeks previously. Knut would be greatly missed by his friends and colleagues and was highly appreciated both for his eminent qualities as CIML President, and his never-failing interest in OIML activities.

Regrettably, Mr. Kochsiek continued, one country had had to be struck off the list of Member States, so the number of OIML Member States now stood at 59. He welcomed the eight delegates who had become CIML Members since the Kyoto CIML Meeting and also one new OIML Corresponding Member.

He commented that a very large number of countries had expressed their interest in becoming OIML Members and some of them were well advanced in the process of accession.

He reminded delegates that in June 2005 the OIML would celebrate its 50th Anniversary and that the meetings which had been and would be held were strategic for our Organization. The Conference would be taking key decisions for the future, and this CIML Meeting would have to examine a number of strategic issues:

- The implementation of the MAA;
- The organization set up for addressing Developing Country issues; and
- The election of a President and a First Vice-President.

Mr. Magaña then took the **roll call** of participants. It was found that 54 Member States were present or represented out of a total of 59. The Agenda was approved without comment.

The **Minutes of the 38th CIML Meeting** were approved, then under Item 2 **The situation of certain Members** Mr. Magaña pointed out that the situation of the DPR Korea (which had paid all its current contributions to OIML, and the outstanding debt had decreased, but only very slightly) and Zambia (which had unfortunately been struck off the list of Member States) would have to be considered. A further question concerned Spain: in 1992 a cheque had been lost in the post in France, and had never been found. One or two other countries were a year or two in arrears, but there were no other major problems and there were no problems regarding Corresponding Members either.

Under Item 3.1 **Adoption of the Auditor's reports for 2002 and 2003** Mr. Magaña reminded Delegates that the Accountant had made an error in the 2002 accounts and that at the previous year's CIML it had been decided that these should be reassessed together with the 2003 ones. A new external accountant had now drawn these up and they had been received by Members. Overall the accounts came very close to balancing, and the exceptional expenditure in 2002 and 2003 should not give rise to anxiety over the state of finances in the future. The subject would be discussed in greater depth at the Conference. As there were no comments, it was taken to be the wish of the Committee that these accounts should be presented to Conference.

Mr. Magaña explained that the **Revision of the Financial Regulations** (Item 3.2) had been discussed in the Presidential Council the previous year as Members were not very happy with the way the accounting was shown, because this gave rise to some difficulties in understanding the financial affairs of the OIML. It had therefore been decided that the Financial Regulations should be revised to permit the use of new, modern accountancy schemes. They had to be considered by the

Committee, which would give its opinion, and then they would be presented to the Conference. Mr. Magaña had prepared transparencies to illustrate his comments, which were as follows:

- The accountancy would henceforth be in Euros, and the "gold franc" abolished;
- It would be based on the internationally accepted IPSAS standards (International Public Sector Accountancy System);
- There would be a change from cash accounting to accrual accounting;
- Debts of Corresponding Members could not previously be put among the assets, but could be recorded under the new system. All assets would have to be re-assessed for inclusion;
- It had also been impossible under the old system to record liabilities. The Reserve Fund had had to appear as an asset, which was inappropriate;
- The OIML policy of not using loans for its financing would continue unaltered under the new system;
- In regard to the financial management of the Bureau, there would continue to be cash flow planning and management alongside the new accrual accountancy;
- Analytical Accountancy would also be introduced to better identify the exact cost of meetings, promotional activities, or actions for Developing Countries for example;
- There would also be a facility for managing the budget; and
- The Financial Regulations would also lay down what should be voted by the Conference.

Preparations had already begun for the introduction of the new accountancy system on 1 January 2005, and the software was based on a standard commercially available package.

A number of delegates expressed their approval of the proposed new system, which would certainly be clearer, more transparent and more explicit than the current system. Notably, the introduction of the concept of depreciation of assets, hitherto not accounted for, was appreciated.

Moving on to Item 4 **Presidential Council Activities** Mr. Kochsiek reminded those present that the Council played a role in advising the CIML President and was as such not a formal part of the Organization, since it was not provided for in the Convention. The Council in itself did not have any decision making powers. Since Kyoto, the Council had held three meetings and membership currently consisted of eight CIML Members.

Mr. Magaña then gave a summary of the year's **BIML activities** under Item 5, the main points being:

- The first priority was to support Members and Corresponding Members, and countries generally. A number of meetings, seminars and conferences had been held, attended by BIML staff;
- Staff had continued to supply information on legal metrology to Members and to external bodies with which the OIML liaised (such as the WTO and other Standardization Organizations); this involved publishing Guides and Expert Reports, Information Letters, the web site and the Bulletin;
- Support for Developing Countries;
- Support for Technical Committees, including editing;
- Conducting postal ballots;
- Translation into French of OIML Publications;
- Management of the OIML Certificate System and preparation for the implementation of the MAA; and
- New draft of the Financial Regulations.

New projects included a database containing TC/SC information and another on Certificates, followed by fora for Technical Committees and Members.

Mr. Magaña commented on BIML work in conjunction with the BIPM: present contacts principally involved joint presentations on international metrology, Developing Countries, and various day to day topics. The telephone and e-mail were used extensively instead of meetings.

Moving on to Items 6.1 **Approval of International Documents** and 6.2 **Examination of the situation of certain TCs/SCs** Mr. Szilvássy explained that over the last two months, ongoing postal votes on various Documents had ended very well, so that only one Document (Revision of D 1, for which only 28 "yes" votes had been received) remained for approval on the present occasion. These postal votes had led to the approval of the revision of D 6 and D 8 and also D 14, and to R 33 being withdrawn and replaced by a new Document.

On the subject of the situation of certain TCs and SCs, he announced that on the basis of the agreement between the US and South Africa earlier in 2004, the Presidential Council had agreed to the transfer of the TC 6 Secretariat. Since the new Secretariat had been established in South Africa, work had begun again on various projects; it was now up to the CIML to approve this transfer.

Mr. Szilvássy gave details of the situation of certain TCs/SCs:

- The USA had now finished revising R 111 on Weights and also the revision of R 52 and Germany was now ready to take over the Secretariat of TC 9/SC 3;
- The TC 8/SC 2 Secretariat had long been vacant, but Russia had taken on responsibility for the Test Report Format to R 125;

- The Secretariat of TC 10/SC 3 Barometers had been relinquished about a year previously and a new country was now being sought to take over responsibility for it;
- Germany would relinquish the Secretariat of TC 12; this meant that for two Subcommittees and one Technical Committee there was a need for volunteers to take over the Secretariats. Mr. Harvey said that Australia would be interested in TC 12 but that it was known that Sweden was still leading the work on a draft of a new Recommendation on electricity meters (revision of R 46) and might also wish to take it on.

Two new projects had been proposed by two Subcommittees:

- The revision of the very important joint publication OIML R 99/ISO 3930 between OIML TC 16/SC 1 and ISO TC22/SC5;
- TC 18/SC 2 Clinical Thermometers had met in June in Croatia and accepted to start a new project on infrared ear thermometers instead of revising R 7.

It was proposed that both projects be approved. Mr. Kochsiek and other delegates commented on D 1. Although no specific problems were raised, South Africa stated that they had difficulty with the concept of introducing traceability as an international definition existed but D 1 did not explain how it was to be applied. Traceability within the legal metrology field needed to be made clear.

Mr. Ehrlich said that work on an uncertainty Document was one of TC 3/SC 5's high priority projects, and agreed that it was now long overdue. The JCGM (Joint Committee on Guides in Metrology) was working on a supplement to the GUM incorporating uncertainty in assessment; unfortunately that work had not progressed fast so he and Mr. Sommer had decided to develop a first draft, though the advantage of waiting would have been the possibility of a common terminology. The plan was to have the draft ready by summer 2005.

Under item 6.2 **Implementation of the MAA** Mr. Magaña said that an informal workshop on the MAA chaired by Mr. Ehrlich had been held involving no decisions, but presentations and discussions on the MAA and its implementation. It had been decided in Kyoto that the MAA should be adopted and implemented as soon as possible for two OIML Recommendations: R 60 *Load cells* and R 76 *Nonautomatic weighing instruments*. A Working Group had met in January and in March the Presidential Council had looked into its proposals. A number of decisions relative to its implementation now had to be taken by the CIML regarding the fees and who should pay them, and other aspects.

Mr. Ehrlich explained that in the Workshop there had been a presentation of OIML B 10-1 and then questions had been answered including who could participate and how, relationships between the MAA and other international agreements, such as the BIPM's MRA, possible roles for RLMOs, how manufacturers' testing laboratories might be incorporated, and overall advantages and disadvantages of participation.

The major topics discussed were the costs and the impact on the current OIML Certificate System; other issues raised should be taken into account during a revision of the MAA Document which was expected to take place in 2005. This time frame would allow for the MAA to be implemented for a time and for operating issues to be discovered.

Mr. Magaña reminded the Committee that some decisions now had to be taken. He drew Delegates' attention to certain effects of the MAA:

- Once the Declaration of Mutual Confidence (DoMC) was operational, after a certain transition period, OIML Certificates issued by participating Issuing Authorities for these categories would be issued under the rules of the DoMC and not outside them;
- If an Issuing Authority did not participate in the DoMC, it could issue Certificates up to the end of the transition period, and, for those who participated, as soon as it came into force, all their Certificates for these categories should be issued only under the conditions of the DoMC;
- The transition period would have to be decided by the Committee and its length might vary from case to case;
- Delegates already knew that Issuing Authorities would need to pay fees, either based either on the number of Certificates, at so much per Certificate or, alternatively, on the amount of participation, with each participation of each Issuing Authority giving rise to one fee;
- It had already been decided that another Staff Member would be recruited to manage the MAA (Mrs. Gaucher). The budget for implementation of the MAA was an additional budget, identified in the main budget as a special issue; and
- A certain number of amendments had to be made to Document B 3; this would be done later on so that an amended version including the transition period between the OIML Certificate System and the System enhanced by the MAA could be presented in the light of decisions taken.

Mr. Magaña concluded that the relations between the DoMC and the Certificate System meant that the transition period would be planned and agreed on by the Committee, which would adopt the dates of transition case by case. There were also plans to have a logo on the Certificates covered by the DoMC and Certificates previously issued would still be found in the database on

the OIML web site and remained valid. The new MAA Certificates would be recorded and appear separately.

Detailed discussions on the financing of the MAA followed; these are reported in full in the Minutes of the Meeting which are available on the OIML web site ("General Downloads" page) as this account is a condensed report edited specifically for the Bulletin.

Moving onto Item 7 **Developing Countries**, Mr. Magaña reminded delegates that the Permanent Working Group on Developing Countries had met and discussed a number of items for the benefit of Developing Countries; there had been the successful Forum, which was one of the outcomes of the Working Group; and there had been a meeting of the Development Council (see earlier account). The Committee now had to make a decision based on the conclusions of the Development Council; this would subsequently be submitted by the CIML as its proposal to the Conference.

Mr. Magaña wished to underline to Delegates that the fact that the Development Council was ceasing to exist by no means meant a cessation of the OIML's work for Developing Countries. Information would circulate even better to Developing Countries under the new system, and fora like the recent one, and seminars, would be organized whenever need arose, either internationally at Committee Meetings, or regionally. Activity was therefore expected to increase rather than decrease.

Mr. Dunmill added that the only details which needed to be clarified in the decisions of this Committee were that the Terms of Reference of the Permanent Working Group had yet to be established by the CIML. It was also important to say that the tasks previously undertaken by the Development Council were merely being carried over to the Permanent Working Group, which would act as an advisory body to the CIML.

Mr. Kochsiek reiterated that the intention was to increase the work with Developing Countries; there would be another meeting of the Permanent Working Group in the course of the current week when it would begin its first real actions.

Mr. Harvey suggested that one thing that could be done for Developing Countries was to help them to avoid becoming "dumping grounds" for sub-standard instruments, which was happening in Australia.

Under discussions on the **Draft paper on the coordination with RLMOs** (Item 8.1) Mr. Magaña informed Members that for the moment, the BIML had no mandate to give any directives or guidance to the Regional Organizations, so that what was loosely being described as coordination in fact consisted only of increasing contacts and exchange of information.

Mr. Birch told Members that although he appreciated the point being made by Mr. Magaña, he considered that there was an important issue in terms of improving the effectiveness of the work of both RLMOs and the OIML. The document made a contribution to this objective and he suggested that a meeting should be held in 2005 between the RLMOs and the new PWGDC to consider the effectiveness and activities of those organizations.

Mr. Magaña replied that an important activity planned by the PWGDC was to collect as much information as possible from Regional Organizations on the subject of their training activities and materials, etc., and to circulate this information among other regions. He would review and perhaps re-draft his paper in the light of this comment.

After outlining the points that would have to be discussed in the **Twelfth International Conference of Legal Metrology (Agenda and program)** (Item 9), the Meeting moved on to listen to the **Presentations given by candidates to the CIML Presidency and First Vice Presidency** under Item 10.1.

In his presentation, Mr. Johnston - candidate for the CIML Presidency - noted that this was a period of constant change for legal metrology organizations; one example was the MAA. Companies were becoming global and were merging and becoming multinational corporations, and these same companies were demanding access to all the markets in the world. Members' own governments were asking them to eliminate trade barriers, and consumers were after new technology. This was putting pressure on legal metrology organizations, particularly at a time when most of them were facing resource cut-backs. available to legal metrology organizations. He therefore felt it was important that the OIML should continue its leadership in ensuring that the concerns of countries and of legal metrology organizations were expressed and publicized.

Governments were also looking for more private sector involvement in legal metrology, and at the same

time they were expecting the OIML to provide strong support; partnerships with the private sector had to be looked at in order to achieve that.

Mr. Johnston referred to the MAA, thanking Mr. Ehrlich for his continued leadership on this project. If elected President, he could guarantee that he would listen carefully to all of Members' comments and concerns in relation to indirect costs, the distribution of the costs and the complexity of the MAA, with a view to trying to find solutions to them.

Mr. Johnston then moved on to talk about expediting the work of the Technical Committees, an area in which some success had been achieved, but in which it was also necessary to continue to advance. He considered the TCs were the *raison d'être* of the OIML and would be reviewing them in order to determine whether there were any other solutions or streamlining processes that could be put into place, to try and find a way of helping these Committees achieve their objectives. Mr. Johnston reiterated that he was not being critical of the Committees, which were doing excellent work.

Mr. Johnston also felt that the work of establishing liaisons with other standard-setting bodies must continue. Again, in an area of scarce resources it was extremely important to avoid duplication of effort, to find out what other Organizations were doing and learn to adapt and adopt as required.

The OIML also had an excellent long term strategic plan and the Action Plan must be examined on a regular basis.

On the subject of the Presidency of the CIML, Mr. Johnston was concerned that there had only been one candidate for President. If elected, Mr. Johnston would want to discuss the reasons for this, to determine whether measures could be put into place to encourage more people to come forward in future. He was pleased that there were two candidates for First Vice President.

Mr. Johnston had represented Canada as its CIML Member for the last ten years; he had been a member of the Presidential Council since 2001; as President of *Measurement Canada*, he was responsible for the legal metrology organization of Canada; and he was also a member of the Advisory Council for the Institute of National Measurement Standards of the National Research Council of Canada, which had enabled him to gain some insight into other metrology issues. Mr. Johnston informed members that he had thought very carefully about whether or not to run and had discussed the matter with his boss and colleagues. All this underlined the fact that he had not entered lightly into the decision to run; he also mentioned that he had had extensive discussions with Past President Gerard Faber in terms of areas where he could improve.

Following this presentation by Mr. Johnston, the two candidates for Vice President each gave their presentation - Mr. Ehrlich and Mrs. Todorova.

Mr. Kochsiek then proceeded to present four OIML medals and three Letters of Appreciation to metrologists having made an outstanding contribution to legal metrology; Mr. Kochsiek personally had the honor to present the medals and Mr. Issaev the Letters of Appreciation (see photos in the January 2005 Bulletin).

The first recipient of the awards was the Immediate Past President, Mr. Faber, who had been elected President of the CIML in 1994. In this position he rendered outstanding services to the organization by spreading awareness of the significance of legal metrology to a growing number of OIML Members - of which, at present, there were 109. By continuous efforts he had succeeded in adapting the structure of the Organization to modern requirements. Under his Chairmanship, a symposium *Metrology Activities in Developing Countries* had been held, and three seminars organized. Also important was a Round Table discussion on confidence in type approvals for bilateral recognition and the MAA, which had been initiated eight years previously and was now coming to fruition. The OIML Certificate System was prospering too - there were now about 1400 OIML Certificates. The Birkeland Study had provided new impulse for the long term policy of the Organization and contacts with ILAC and the WTO were also formed and deepened. The OIML was now also collaborating in the JCDCMAS and there was full cooperation with the Metre Convention and ILAC; for instance, the work on the revision of the International Document *Law on Metrology* was now finished. Policy papers, horizontal documents and strategy papers were in the process of preparation. The Birch study "*Benefit of Legal Metrology for the Economy and Society*" had been presented the previous year, and met with OIML approval.

Mr. Faber thanked Members for the medal and gift, saying that he looked back on his OIML career with much pleasure and gratitude and would continue to follow the Organization's activities from a certain distance for many years to come.

Mr. Kochsiek said that he now had the pleasure of rewarding three other colleagues. The first of these was Mr. Anthony from CECIP, whose involvement in international legal metrology work had been considerable as well as effective and positive, and he had always played a prominent role in representing the Weighing Instrument Federations, both National and European, with the European Commission, WELMEC and the OIML. He had also been the Chairman of the Legal Metrology Group of CECIP, the European Confederation of Weighing Instrument Manufacturers for more than ten years, and also secretary of the CECIP Business and Trade Group.

Mr. Kochsiek then turned his attention to Mr. Brinkmann, who had worked for forty years at the PTB predominantly in the field of acoustics. He was still

active in this field, as Chairman of ISO TC 43 *Acoustics*. He had also chaired various Technical Committees in a number of international organizations. In the OIML, for example, he had chaired the Secretariat of TC 13, *Measuring Instruments for Acoustics and Vibration*, and in IEC, the Technical Committee *Electro-Acoustics*.

Mr. Kochsiek then introduced the fourth person to be awarded a Medal, Mr. Onoda from Japan who had had contacts with the OIML since 1962 and who had become President of the Japan Gas Meter Association and Vice President of the Japan Water Meter Industry Association, a post which he still held. In 1984 he had been appointed President of the Japanese Weights and Measures Association and in 1990 he had been appointed a member of the Board of Directors of the Japanese Institute of Invention and Innovation. Mr. Onoda had been an active and successful promoter of the SI system in Japan and the OIML was grateful to him for his eminent contribution to the Organization.

In the absence of Mr. Onoda, Mr. Kochsiek asked Mr. Tanaka to receive the medal.

Mr. Kochsiek next invited Mr. Issaev to present OIML Letters of Appreciation to three individuals: Mr. Gupta (from India), Mrs. Vytolskaya (from Russia), and Mr. Wünsche (from Germany).

Proceeding on to Item 10.2 the **Election of the CIML President and First Vice President**, Mr. Kochsiek asked Mr. Magaña to remind Members of the procedure for the election. Following the previous year's meeting the President had decided that a call should be made for candidates to the Presidency of the CIML. The Bureau had sent a letter on behalf of the President to all CIML Members, asking for candidates and setting a deadline. There had initially been two candidates for President, but one had been obliged to withdraw. There were two candidates for the Vice Presidency. Members had received a letter during the summer reminding them of the procedure and naming and giving information on the candidates for both elections.

The secret ballot took place and Mr. Kochsiek appointed Honorary Member Mr. Birch and CIML Past President Mr. Faber to count the votes. Mr. Kochsiek announced the result: 49 "yes" votes, 1 "no" and 4 abstentions for the election of CIML President; he congratulated Mr. Johnston on this result and declared him President Elect.

In accepting the post, Mr. Johnston thanked Members for their vote of confidence in him. It was an honor for him to have received so many votes and he felt honored to accept the post. He reminded Members that Mr. Kochsiek had agreed to remain as acting President until the CIML Meeting in Lyon in June 2005, and he looked forward to working with him over the intervening months in order to ensure a seamless transition to his new responsibilities. He had already explained his priorities to Members and would only mention three of these at the present time: to develop the OIML Long Term Plan and Action Plan; to ensure that the MAA received the care and attention that it deserved in order to assure its success; and to try to slow down when speaking in public, as this was something he found difficult!

Voting then took place for the CIML Vice Presidency. Since the outcome of the votes did not allow a decision to be made according to the rules of the Convention, Mr. Kochsiek was asked to remain as First Vice President until the Meeting in Lyon, at which time another election would be held. In view of the emergency situation, Mr. Kochsiek agreed to do so and hoped that there would be a successful election the following year.

Mr. Magaña explained to Delegates that it was customary, following the Conference, for the Committee to pass a Resolution taking note of the **decisions of the Conference** and expressing its intention to implement them.

Discussion then moved to Item 12.1 on the **40th CIML Meeting** in 2005. Mr. Kochsiek reminded Delegates that the date and location for this Meeting had already been agreed. Mr. Lagauterie said that he took pleasure in informing Members that they would be the guests of the French Government in Lyon in June 2005, under the high patronage of the French President. Mr. Lagauterie invited Members to understand from this gesture the high level of support of the French Government for OIML activities and legal metrology.

The Meeting, which would be held in the International Congress Centre in Lyon adjacent to a park, would be held in conjunction with the 12th International Metrology Congress, about which Members had seen information through links on the OIML web site. Lyon was pleasingly situated between two rivers and was one of the oldest French industrial cities; it was an ancient city, the capital of old Gaul; it was the capital of French gastronomy and of Beaujolais wine; in short, Mr. Magaña was sure that Members would enjoy it.

The Metrology Congress would take place just after the CIML Meeting, which would end on Monday at the end of the morning session. That same afternoon, there would be a preliminary OIML session of the Congress, with some presentations focused on specialized issues of legal metrology but which would be of interest to Members. That evening there would be an OIML reception and the OIML 50th Anniversary celebrations and opening of the Congress, all combined.

On the Tuesday morning, the main Congress would begin, with another legal metrology session, this time on subjects of more general interest. The Congress was normally attended by about 500 people and on this occasion it was proposed to invite manufacturers who held OIML Certificates to participate in the exhibition, because this would be a good opportunity for manufacturers to show their products to the large

number of CIML Members who would be present. Mr. Magaña recommended Members to speak to manufacturers in their countries and tell them that it would be in their interest to exhibit at this event, which would gather people from about a hundred countries.

The Bureau had decided, if the Committee approved, to pay the registration fee for the Congress for one person from each Member State and Corresponding Member, while other representatives of Member States would pay a discounted rate. The Congress would last four days; the program had been finalized and more information would soon be available. There would be a number of very interesting presentations, not only in the legal metrology session but also with legal metrology implications in other sessions.

As had been announced the previous year in Kyoto, there was an offer from South Africa to hold the **41st CIML Meeting (2006)**, and today approval had to be given for a 41st meeting in Cape Town.

Mr. Carstens informed Delegates that the Meeting would be held in the first or second week of October 2006, in a newly built Conference Centre in Cape Town and the adjacent Sheraton Hotel, which also had excellent facilities.

Under Item 13 **Other matters** Mr. Kochsiek announced that Israel had offered to host the 42nd CIML Meeting in 2007; no other country made an offer but no decision needed be taken until the following year.

Under Item 13.1 Mr. Kochsiek asked Mr. Magaña to present to Members the draft paper *"Procedure for the selection of the BIML Director and Assistant Directors"* he had been drawing up.

Mr. Magaña explained that his contract was due to end at the end of 2005 and that of Assistant Director Mr. Szilvássy in 2007. Mr. Magaña proposed that the procedure used for his own selection, which had not previously existed in writing, should be used again. This consisted of: a call for candidates; Selection Committee appointed by CIML meets and makes a proposal; and President puts proposal to CIML.

Replying to a question whether it was possible under this procedure for several candidates to be proposed to the Meeting, Mr. Magaña replied that the more normal situation was for one sole candidate to be chosen by the President and Selection Committee, but there was the possibility in exceptional circumstances of offering two candidates; however, it was felt in principle that the Selection Committee, who had heard the candidates' presentations and conducted interviews with them, were in a better position to make the choice.

There being no further comments, Mr. Kochsiek proposed the adoption of this draft procedure.

The decisions were adopted and in closing the 39th CIML Meeting Mr. Kochsiek thanked those who had organized the events, participated in the discussions and contributed to their success. ■

BERLIN 2004

12th International Conference of Legal Metrology

26, 28 & 29 October 2004

Mr. Kochsiek welcomed delegates to the 12th Conference, which was attended by a record number of people: more than 250 representatives from over 100 countries. He then introduced Professor Göbel, President of the PTB and Mr. Tacke, State Secretary, Federal Ministry of Economics and Labor, who both delivered **opening speeches**.

Mr. Tacke welcomed delegates to Berlin and gave an outline of the history of Berlin, a city which had developed impressively since the reunification in 1990. He then explained that the role of the BMWA extended from economic and labor market policies to technology, energy and foreign trade policies, the aim of which was to create favorable conditions for faster growth and a higher level of employment, and to reduce barriers to trade. Germany was also, he continued, preparing to modernize legal metrology with the goal of adequately structuring legal metrology - for example taking into account software-controlled measuring systems. He was aware that legal metrology had a huge impact on the gross national product of a country and affirmed Germany's support for the activities of the OIML.

Mr. Göbel then welcomed delegates and explained that the PTB was involved in fundamental metrology, metrology for industry, legal metrology and also international metrology: fundamental metrology related to the realization, maintenance and dissemination of the SI units (and the PTB was putting considerable effort into improving the SI units); for industrial metrology, the PTB was cooperating with many of Germany's companies to assist them in finding metrological solutions; for international metrology, the PTB had established close technical and scientific links to the German Calibration Service (DKD), and commented that few explanations were necessary to explain Germany's commitment to legal metrology, which had a long-standing tradition. Germany was heavily involved in a number of international metrology organizations such as the OIML and also provided much technical cooperation support worldwide.

Following the opening speeches the **roll of delegates** was taken: 54 Member States were present (40 was the minimum necessary for a quorum). Mr. Magaña reminded Members of the **voting procedures** then Mr. Kochsiek presented Mr. Röhling for approval as **Conference Chairman**. Mr. Röhling was very familiar with legal metrology, due to his former position as General Director of the Federal Ministry of Economics and Labor. He had been President of the Advisory Board of the PTB and also for several years German Representative in Paris at the OECD. Mrs. Annabi (Tunisia) and Mr. Zhagora (Belarus) were elected as **Vice Presidents**.

The agenda was accepted and then Mr. Magaña explained the purpose and functions of the **Technical and Financial Commissions**. These Commissions were open to any Members who wished to attend; the object of the Technical Commission was to examine and review the Technical Documents which the Conference was to approve and the object of the Financial Commission was to examine the reports on the management of the Bureau in the previous four years, the budget proposed for the following four years, and the proposed alterations in the accountancy procedure, preparatory to the Conference votes on all these matters. Mr. Alan Johnston of Canada had been proposed as Chairman of the Financial Commission and Mr. Tanaka from Japan the Technical Commission.

Mr. Magaña pointed out that the **schedule** was tight; he also reminded delegates that it was important for everybody to be present on the last day for the voting as no proxy votes were permitted in the Conference.

The **Minutes of the Eleventh Conference** were approved unanimously, following which Mr. Kochsiek gave his **Report on activities**, the purpose of which was to enable the Conference to determine to what extent the decisions had been implemented and which current and future objectives it would be necessary to focus on in order to set the guidelines for the forthcoming years, notably in view of the ever increasing trend towards globalization.

He began by describing the present situation and by indicating some items for comparison with the situation four years previously.

In order to put the OIML's objectives into perspective, the Organization must consider whom they were working with and for. Three distinct audiences could be identified:

- Firstly, there was the audience from OIML Members themselves, of which there were now 109, comprising 59 Member States and 50 Corresponding Members. More than five new countries were also in discussion with the OIML at present;

- The second audience was from the numerous International and Regional Organizations whose activities were related to those of the OIML. In the context of globalization, the OIML was under the obligation to generate maximum efficiency out of its limited resources, both human and material. Working closely with these Organizations was essential in order to avoid duplication of work and hence resources. Mr. Kochsiek considered that the last four years had been extremely profitable for the OIML. In particular, its capacity as an observer at the WTO, in the Committee on Technical Barriers to Trade, now enabled the OIML to participate in certain activities of that Committee, notably in Seminars and Workshops concerning the implementation of international standards, with a view to eliminating technical barriers to trade. OIML representatives were in contact with their counterparts from the major International Organizations who were active in the fields of the economy, commerce, development and standardization. Mr. Kochsiek also mentioned that work was also progressing with the JCDCMAS, and regional cooperation had now reached a very acceptable level.
- The third audience was the manufacturers and users of measuring instruments, including consumers, since the conditions in which they lived, whether economic, social or environmental, were largely dependent upon measurements. The total number of OIML Certificates was now approaching 1300 and was an extremely positive aspect of OIML activity, having a direct influence on users.

Mr. Kochsiek said that the finances of the Organization were well ordered, and there were skilled and dedicated staff in the Bureau. The alterations to the BIML offices would begin in November; this was part of the ongoing project to provide additional space for the expanding activities of the Bureau.

Concerning the OIML long term policy, Mr. Kochsiek mentioned four events or reports which had had a major influence on OIML policy and work:

- In 1998, the so-called Braunschweig seminar, *The Role of Metrology for Economic and Social Development*;
- Also in 1998, the Birkeland Report, *Legal Metrology at the Dawn of the 21st Century*;
- In 2002, the seminar in St Jean de Luz, *Legal Metrology in 2020*; and
- In 2003, the Birch Study, *Benefit of Legal Metrology for the Economy and Society.*

He considered that these four items should be re-examined from time to time in order to reflect upon what should be included in the OIML's strategy and Action Plan, which would globally be based on:

- The implementation of the MAA;
- Cooperation with Regional and International Organizations;
- The Permanent Working Group on Developing Countries and developing countries in general, including the writing of technical papers which external experts might produce;
- The outcome of the Forum and Poster Sessions;
- JCDCMAS (comprising the OIML, the Metre Convention, ILAC, IAF, ISO, IEC, ITU-T, IMEKO, ITC and UNIDO), the aim of which was to promote consistency of technical assistance in the fields of metrology, accreditation and standardization and raise awareness of these issues;
- Regular BIML Information Letters in order to provide Members with better information on the life of the Organization;
- The state of implementation of OIML Recommendations, and translations of OIML publications into different national languages;
- The OIML web site, which was constantly being developed and expanded, including online facilities for consulting databases (Members, publications, TC/SC data, OIML Certificates, etc.);
- The election of a new CIML President and First Vice President;
- Marketing and publicity to attract new Members; and
- Preparations for the 50th OIML Anniversary and the 40th CIML Meeting.

In conclusion, the 12th Conference should mark a stepping stone for the Organization. The OIML had received much input from the outside, but still had a role to play in recognizing that legal metrology was essential to improve the quality of trade, and helped the environment and other aspects of human activity.

Mr. Kochsiek continued that his report had shown how the actions of recent years had been in accordance with the Action Plan, an updated version of which would be drawn up as soon as a new President had been elected.

Mr. Safarik-Pstrosz suggested that there should be even more cooperation with the Economic Commission for Europe of the United Nations, which had a relevant regulatory body for trade and enterprise development, Working Party 6, since metrology was a part of WP 6's program, as was market surveillance.

Mr. Magaña, in replying to a question concerning the implementation of OIML Recommendations, said that results of the recent inquiry would be published, but that this had been delayed as not all replies from Members had yet been received.

Moving onto the Item **Member States and Corresponding Members**, Mr. Magaña said that six countries had been in contact with the BIML with a view to becoming Member States and another six wished to become Corresponding Members; this was very encouraging.

Next the **OIML Long-term policy** was discussed: since the Eleventh Conference a number of actions had been carried out following the Action Plan:

- To improve and accelerate the technical activity of TCs/SCs (use of e-mail developed – ongoing revision of the Directives for Technical Work – certain Secretariats reallocated to other countries);
- To develop the OIML Certificate System (extended to allow Certificates to be issued for modules of instruments, families of instruments and families of modules – 39 Recommendations currently applicable within the System – web site databases set up);
- Promotion of acceptance of measurement results in international trade (MAA/Checklists – TC 3/SC 5 to produce Guides for the application of accreditation standards for pattern evaluation – work on Guides for accreditation of inspecting bodies - Revision OIML R 87 on pre-packages);
- To promote Legal Metrology in OIML Member States, Corresponding Members and all countries (Birch Study published – numerous Seminars and Workshops organized – Joint Committee for Technical Assistance to Developing Countries set up in 2003, bringing together the OIML, the Metre Convention and Standardization and Accreditation Organizations – most OIML publications now accessible on the web site – other improvements made to the web site – Expert Reports available on line);
- To modernize and improve the work of the Bureau (*BIML Staff Regulations* revised – *OIML Financial Regulations* revised – excellent relationships with RLMOs and cooperation with many other Organizations – setting up of the Permanent Working Group on Developing Countries – Forum on Developing Countries – plan to publish a new OIML General Brochure, possibly jointly with the Metre Convention).

Mr. Magaña reminded Members that this was just a brief summary and referred them to the paper on the subject which had been circulated.

There was a comment that OIML Test Report Formats were only available in PDF format; Mr. Magaña agreed that it would be useful if Word versions could be produced and the BIML would look into the question.

Under the item **Guidelines for 2005-2008** Mr. Magaña said that Members' suggestions for the future direction in which the OIML should move would be welcomed and noted, and would be taken into consideration when the Action Plan was drawn up. One concern expressed by Mr. Schwitz was that it was becoming difficult for countries to be members of at least two international and two Regional Metrology Organizations. He asked the OIML to consider adopting as an aim in the next four years to try to move closer to other Metrology Organizations.

Mr. Magaña replied that for example the OIML and the Metre Convention were working more closely together now than ever before, though the BIPM had agreed that an amalgamation would not be of interest. Joint proposals included a common international brochure, a joint web site portal, joint work on Developing Countries, Document D 1 and the Joint Committee on Guides in Metrology. But there would be no financial gain in merging and little or no overlap in work, and hence no savings for Members. The domains of the two Organizations were quite different, and new international treaties would be necessary, which would be both lengthy and time consuming to set up.

However, day to day joint work was ongoing and was extremely positive, and the possibility of holding joint meetings and even perhaps Conferences with the BIPM had been raised (though this would doubtless make the annual meetings much longer).

Discussion then turned to **Liaisons with international and regional institutions**, on which subject delegates had received a written report.

A General Policy document on contacts between the OIML and other Organizations had been drawn up and approved by the CIML in Kyoto; it laid down guidelines for relationships between the OIML and other Organizations, notably with:

- The Metre Convention;
- ILAC and the IAF (which had also worked together with the OIML and the Metre Convention on the Metrology Law);
- ISO and the IEC (with which the OIML had developed joint standards for certain categories of

instruments and on-going mutual exchange of information);
- ISO CASCO and ISO DEVCO;
- The WTO Technical Barriers to Trade Committee (where the OIML, as an Organization issuing International Standards, was a permanent Observer at all meetings, and had jointly organized regional seminars to spread information to Developing Countries);
- JCDCMAS (Joint Committee for Coordination of Technical Assistance to Developing Countries, with which the OIML had contacts in relation to Developing Countries with the aim of promoting and demonstrating coherence between the areas of metrology, standardization and accreditation, including a joint information document and a joint presentation);
- And also UNIDO, WELMEC, CEN, CENELEC, UN-ECE and the African Economic Committee of the UN.

The floor was then handed over to **Representatives of Institutions in Liaison with the OIML**: a brief summary of these is given below.

ILAC/IAF

Mr. Pierre (ILAC Chairman) addressed the Meeting on behalf of ILAC, which was responsible for laboratories and testing establishments and IAF, responsible for Issuing and Inspecting bodies.

He commented that certain changes had been made recently in IAF: its Mutual Recognition Agreement had been extended from accreditation of quality systems to include accreditation of Issuing Authorities for environmental management and product management.

Next he gave a full explanation of accreditation itself, the aim being to independently, transparently and impartially provide confidence in declarations of conformity in the sectors of calibration, testing, inspection and certification. There was no higher level of testing: nobody checked up on those doing the accreditation, therefore accreditation had to be totally trustworthy, notably by satisfying all the demands of international standards, especially the new ISO Series 17011 (obligatory from 1 January 2006).

The main tasks of ILAC/IAF were to harmonize the practices of their member accreditation bodies, to establish International Recognition Agreements (which depended on peer evaluations), and thirdly to help developing countries set up validation bodies.

Memoranda of Understanding had been signed with EA, the European Accreditation Organization, the EU Commission, EFTA, ISO and the IEC permitting operational collaboration and the exchange of information when problems arose over standards.

Mr. Pierre concluded by saying that although accreditation was not a universal panacea, nevertheless its use aided recognition of compliance agreements and international exchanges just because it was no longer necessary to repeat tests, calibrations and certification which had already been carried out elsewhere.

UNIDO

Mr. Loesener explained that the aim of UNIDO was to fight poverty by facilitating access to and diffusing knowledge, information and skills. By assisting Developing Countries to enhance this type of capabilities, UNIDO helped them to fight poverty and foster social advance through technological progress and productivity growth. Within this framework, UNIDO was keen to work together with the OIML with a view to making substantive progress in building the institutional and technical underpinnings of trade capacity.

Another aim was to improve the dissemination of environmentally sound technologies so as to forge decisive progress towards regenerative approaches to the relationship between productive activities and nature, and to strengthen the participation of the role of Developing Countries in the flow of international trade and investment, by enhancing their ability to assimilate, adapt, develop and disseminate technology, and to comply with sanitary requirements as well as with standards and technical regulations influencing flows of goods and services.

In the last few years UNIDO had implemented almost 200 projects related to trade development and trade policy and regulations, amounting to 35 000 000 USD.

In order to make progress, UNIDO's work should be done in conjunction with others, such as the OIML and the BIPM in metrology, ILAC and IAF in accreditation

and ISO and IEC in standards, through a series of MoUs which UNIDO had recently signed, and the joint work on the JCDCMAS. The adoption of the OIML Document Elements of a Law on Metrology, to which UNIDO had also contributed, would allow better support to be given to Developing Countries in their endeavor to participate in the multilateral trading system.

BIPM

Mr. Castelazo explained that the BIPM was the sister Organization of the OIML and the two worked very closely together, with similar structures. Its original objective had been to maintain the two main prototypes that existed in 1875: the kilogram and the meter. The kilogram still represented a working standard today, being the international standard type; the meter was a historical artefact which no longer served any metrology purpose. The BIPM had evolved over the years to cover many more areas such as electricity and chemistry.

The mission of the BIPM was essentially to promote uniformity of measurements; this was the essential element to underpin agreements in accreditation, in technical regulations, to provide a technical basis for product specifications, national and international regulations, to reduce technical barriers to trade and of course to underpin scientific research.

He affirmed that this work needed to be done in collaboration with other Organizations: most closely with the OIML and ILAC and also, very importantly, with other Organizations by means of the establishment of Joint Committees. For example, one very important Joint Committee was the Joint Committee for Traceability in Laboratory Medicine, which had developed a list of SI traceable reference materials that could be used to satisfy the European In Vitro Diagnostics Directive. Other joint work involved ILAC, the WHO, the World Meteorological Organization, amongst others.

One of the major developments in the last few years had been the Mutual Recognition Agreement. This was a result of a request from the accrediting bodies, who were asking the Metre Convention how confidence could be placed in the declarations of the National Metrology Institutes. Currently the MRA had resulted in a list of calibration and measurement certificates that was recognized internationally, available on the BIPM web site and called the KCDB (Key Comparison Data Base).

Through the MRAs, the CIPM assured confidence in National Metrology Institutes and in the services these offered, and, through the ILAC MRA, the International Community could have confidence in certificates from the accredited laboratories.

Mr. Castelazo continued that the BIPM was moving on to new areas of activity: medicine, food, health and the environment, which had not been included in traditional metrology, and which were areas that had tremendous impact upon society and upon the well-being of people.

In response to a question from Mr. Kildal, he referred to discussions at the BIPM with a view to establishing a Consultative Committee on Materials Measurement, which might potentially have some relationships with the OIML. A meeting had recently been held at the NPL and there was interest in these areas because that field was not properly covered by the existing Consultative Committees. A Working Group would perhaps soon be set up.

WELMEC

Mr. Freistetter (WELMEC Chairman) illustrated the position of WELMEC in Europe before May 2004; since ten more countries had joined Europe, the position was now changed, and there were 28 countries within WELMEC, within the European Economic Area, and Bulgaria and Romania were applicant countries on the brink of joining the European Union. This would result in 30 countries forming a single market, which shared a lot of common legal framework. Mutual recognition was a very important part of this. For a common approach in legal metrology it was important for there to be the same directives in legal metrology and a common interpretation all over Europe.

The MID was one of the most important Directives for legal metrology in Europe and Members would see that it would soon affect not only Europe but the whole world. The MID text could now be found on the internet in every European Union language; it concerned European trade in measuring instruments, parts of measuring instruments, repair, services and measurement of results, so its main importance was the free movement of goods and services by the use of measuring instruments covered by legal metrology control requirements in Europe. And, as Mr. Freistetter had pointed out before, the measuring of test results for these purposes was also quite important.

Ten kinds of measuring instruments were covered by this Directive: water meters, gas meters, electricity meters, heat meters, measuring systems for liquids other than water, automatic weighing instruments, taxi meters, material measures, length measurements and exhaust gas analyzers. Its aim was that for these ten categories, putting them on the market and into use for the first time was regulated; after that, national law was applicable. When the essential overall requirements, the instrument-specific requirements and the conformity assessment procedures had been fulfilled, the instruments received conformity certificates. Also in the Directive was the presumption of conformity, obtainable in two ways: either to follow harmonized mandated

European standards, or (importantly for OIML) to use OIML Recommendations.

Mr. Freistetter went into some detail on the subject of e-marking (in addition to the CE mark): for measuring instruments there would be an additional metrology marking, and the notified body number would be found on each measuring instrument.

He explained that the pillars of the MID were the manufacturer - important with the quality of the measuring instruments; surveillance - a notified body responsible for testing and surveillance quality management systems; and, last but not least, the Member States, with responsibility for market surveillance.

The Directive had been adopted in February 2004, and the last date for national implementation was 30 April 2006. October 2006 would be the starting date for the common application of the MID in Europe.

The MID affected and would continue to affect WELMEC work, and WELMEC had made the appropriate structural changes to cater for it.

WELMEC would also work with the European Commission on market surveillance, conformity assessment, operation of notified bodies, identification of relevant OIML Recommendations for European use, development of Guidance Documents; and WELMEC was forming the administrative cooperation between the leading metrology authorities in Europe.

The WELMEC Type Approval Agreement was based on OIML Recommendations, and it would be necessary to find out how the new MAA requirements would affect it.

Mr. Freistetter concluded by saying that the future of WELMEC lay in supporting the implementation of the MID, identification of unclear areas, cooperation with the Commission, application of software requirements, and the organization of seminars and workshops.

Mr. Magaña added that CEN was in the process of preparing a proposal for a joint program of work with WELMEC, in which context CEN Representatives had visited the OIML to inform themselves about the OIML's work, so that this could be taken into account in this Program of Work.

APLMF

Mr. Ooiwa (APLMF Chairman) explained that the APLMF's main tasks were capacity building in developing countries in the Asia-Pacific region, as well as trying to achieve harmonization of legislative systems among nations.

The APLMF, which comprised 26 Member Economies, worked closely with the Sub Committee for Standards and Performance and with the OIML and other Regional Legal Metrology Organizations to develop a strategy for international harmonization of legal metrology, most activities being carried out in Working Groups, of which there were eight. The main task was training, and also packaging, the MAA, utility meters, medical measurements and agricultural measurements. A Legal Metrology Working Group had recently been established, and also one on Pattern Compliance; the reason for introducing these new Working Groups was the introduction of the MAA. Weighing instruments and peer assessment had recently been introduced for this reason.

The Working Group on Traceability in Legal Metrology had encountered some serious problems in traceability and metrologists had to establish a link between legal metrology and scientific standards so as to fulfill the new task in the global market as it was easy to talk of establishing traceability, but to do so in practice was very difficult. The working plan of the Working Group on Traceability in Legal Metrology was therefore to apply the demands of legal metrology to scientific metrology.

Another new Working Group was on Pattern Compliance. The background was measuring instruments used in legal metrology. Each instrument under verification was supposed to be in compliance with pattern approval but there was no actual rule to maintain pattern compliance of the instruments in use.

Mr. Ooiwa spoke of the APLMF training program for 2005, mentioning prepackaging, sphygmomanometers, nonautomatic weighing instruments and their new course on electricity meters. For that year, six training courses were planned.

The next APLMF meeting would be held in October 2005 in Kuala Lumpur, Malaysia.

EMLMF

Mr. Lagauterie (EMLMF Chairman) reported that the last EMLMF meeting had been held in Malta at the end of June 2004 in conjunction with a seminar on the MID, jointly organized by MSA and PTB. The EMLMF currently had 13 active members, three of which had joined since the previous year; there was also one Corresponding Member.

On the technical side, work had comprised presentations on the key points of the recognition of type approvals and initial verifications; these were followed by a debate about the MAA to show to what extent the MAA would bring answers in the matter of recognition of type approvals.

The President had been re-elected and Mrs. Annabi had been elected Vice President; the conclusion of the last meeting had been that the Forum must act as a source of information on the application of the MID and on the work of WELMEC, because this was very important for the non-European countries in the Forum.

SADCMEL

Mr. Carstens reported on the past year's activities. SADCMEL had been set up with the aim of harmonizing regulations in the legal metrology field by the year 2008. Membership currently stood at 13 countries.

In Mauritius in April 2004, there had been a SQUAMEG (Standards, Quality Assurance, Accreditation and Metrology Executive Group Meeting) and all the specialized groups within the Association had held meetings during this gathering. The SADCMEL Workshop had held a seminar tolerances, identified in April 2003 as a new project. All the documents which had been handed over to SADCMEL for publication as Regional Standards were now in the final stages and had been put out for comment.

The Technical Regulations had been translated into Portuguese with the help of PTB. A meeting in Namibia was planned for November 2004, during which the Tolerance Document would be finalized and a Workshop on the D 1 Document would be held. They hoped to be able to put together a Legal Metrology Act which would be adopted by all Member States.

The SADCMEL Resources for Metrology Education had also held a Meeting this year, in Lesotho, where all the Member States had appointed representatives, and work would now start on getting a resource centre together for Metrology Education for the SADCMEL grouping.

CECIP (European Weighing Instrument Manufacturers' Association)

Mr. Anthony said that CECIP now represented Manufacturer Federations from 15 Member Countries, and had just held its 54th General Assembly. CECIP had long supported the OIML and would continue to do so, being especially active in the ongoing revision of R 76, and also in the soon to be sanctioned R 61. They also had contacts with the European Commission and with WELMEC.

As manufacturers, the members of CECIP had one major aim, or long term vision for the future: they wanted to see a single type approval that operated throughout the world; a step had been made towards achieving this objective had been made with the MAA.

He continued that CECIP had listened with great interest to the debates about the MAA and agreed with its principles, though there would be a necessary cost to be borne by manufacturers and he felt that there was little in the MAA Document that might encourage Member States which did not at present accept OIML Certificates to do so in the future without an increase in the number of Member States which accepted OIML Certificates, especially those representing the very large markets that CECIP wished to see available to them.

CECIP was a little disappointed that the MAA allowed the recognition of additional or extra test requirements over and above the OIML Recommendations. It was to be hoped that that was only a transition stage towards single, unified adoption of OIML Recommendations everywhere.

CECIP was also concerned that under the MAA the OIML was now saying to manufacturers that if they wanted a Certificate of Conformity to an OIML Recommendation for customer support or marketing, for example, they would have to go to an Organization that had joined a Declaration of Mutual Confidence. CECIP felt that the OIML was moving too fast and that it would be better to allow the two systems to run in parallel for a while.

Mr. Anthony also urged the OIML to move forward on pattern compliance, since no reputable manufacturer had any objection to a compliance approval program. No reputable manufacturer would object to a production meets type assessment; at the moment the OIML looked at instruments as they reached the marketplace and was saying "yes, the type approval is good; the type, the design, everything works"; and then walked away from it and left it to the enforcement officers, who did not have the resources, the expertise, the skills or the time to make sure that what they were verifying was actually what the OIML had type approved.

Mr. Kildal wondered whether Mr. Anthony thought the MID would take care of compliance approval, or whether this would still be lacking.

Mr. Anthony replied that in the existing Non-automatic Weighing Instruments Directive, as known in Europe, there were requirements for market surveillance, and indeed WELMEC had made some attempts at a tentative step down the road to market surveillance. This had not really had a resounding impact on the market. The MID probably offered WELMEC an opportunity to go further and to develop programs. Mr. Anthony would certainly like to see WELMEC do that on a European basis and CECIP would be encouraging them and supporting them to do so. But it needed to be done, not just on a European basis but world wide. The OIML might perhaps learn lessons from the experience that WELMEC had had.

Mr. Anthony assured those present that his remarks were intended to be purely constructive and that CECIP would continue work on OIML matters as enthusiastically as it had before.

European Commission

Mrs. Höke, from the European Commission, said she was glad that Mr. Freistetter had had already talked about the MID; this showed how fruitful the cooperation was between WELMEC and the Commission.

The two Commission activities of most interest for the OIML were the MID and the role played in it by OIML Recommendations; and the field of prepackaging. The news on prepackaging was very brief: the Commission had on Monday adopted a proposal on nominal quantities and pack sizes of pre-packaged goods. Basically this would deregulate requirements for such sizes, with the exception of very few sectors: wine, spirits, soluble coffee and sugar. So the overall idea was to deregulate pack sizes for the EU, and the exceptions would be maintained for twenty years.

The other field was the review of metrology requirements for pre-packaged goods. There were regulations which were not in place, but that was about to be reviewed. Her colleagues had prepared a Working Document which intended to bring the existing requirements into line with OIML R 87 in its revised form. This Working Document would be made available on the Commission web site, probably in December, and then there would be a three month consultation period, during which they would be glad to receive comments from all interested parties; this was not limited to the EU: anyone might comment.

Mrs. Höke continued that market surveillance was extremely important in all New Approach Directives, with the objective of enforcing cooperation. Also ongoing was an overall review of the decision which laid down the New Approach criteria; the Commission was reviewing a number of general concepts and within the next year a new basic decision clarifying them would be presented. Market surveillance was recognized as one of the important points for clarification. Under the MID, the Commission would also encourage as much cooperation as possible between Member States in order to provide an exchange on market surveillance.

This concluded the presentations by Liaison Organizations.

Speaking on the **work undertaken by OIML TCs and SCs** since the last Conference in 2000, Mr. Szilvássy reminded Members that technical activities were the core activity of the OIML and a number of actions had been undertaken:

- In 2001 the CIML had adopted a priority list of 39 ongoing projects; 21 of these had already been finalized and had already been published or were in the process of being published. Progress on several others was well under way;
- Two years previously, the Presidential Council had taken an initiative to try to accelerate technical work, and this had already borne fruit;
- Eight new or revised Documents and three revised Basic Publications (MAA, Checklists, the OIML Certificate System) had also been published;
- Several OIML Technical bodies had increased the number of their meetings, which was also a sign of increasing activity;
- Certain countries such as Japan and Canada had offered to take over Secretariats if other countries were not able to do so;
- Reviewing the work of the technical bodies was an ongoing activity in the Bureau and in the Presidential Council. The revision of the Technical Directives was also an important ongoing project to ensure they corresponded to the requirements of the TBT Committee Code of Good Practice in Standardization;

- A big step had been the updating of the OIML database which now contained complete information on Technical Committees and Subcommittees and on the OIML Certificate System. Soon there would be a forum for several Technical Committees;
- Coordination with other liaison Organizations was very important, principally with ISO, the IEC and ILAC.

The Convention stipulated that the **implementation of Recommendations** was a moral obligation of Member States. In 2000, a list had been published indicating the level of implementation by 39 Member States; this list had been appreciated by the WTO TBT Committee and the UN-ECE Working Party on Technical Harmonization and Standardization Policies. In the current year, a questionnaire had been sent out again, including an additional point on translation of OIML Recommendations and Documents.

As of mid 2004, the BIML now published the results of voting on drafts and other inquiries on the web site.

Mr. Kochsiek said that two Secretariats were vacant, as Germany wished to give up TC 12 but was willing to take over TC 9/SC 3 from the United States.

Mr. Vaucher mentioned the Birkeland Report; this was a good analysis of the present situation and visions for future work. One of its findings had been that metrology requirements were mainly focused on measuring instruments in standardization work, frequently neglecting measuring methods. As an example, there were six Recommendations for weighing instruments as against one for weighing. By the time the MAA was implemented this would become a problem, as a Declaration of Mutual Confidence would be expected for each one. His proposal was that Recommendations should be combined as far as possible while revising them.

Mr. Magaña added that in the Action Plan there was a point about international recognition of measurement and its results, including the measurement of unpackaged quantities for export, which were the subject of major international transactions and which merited the OIML's full attention. It was important that the OIML should hold discussions and avoid being in conflict with other competent organizations.

Mr. Tanaka, who had chaired the Technical Commission, then reported on the outcome of the Technical Commission's meeting held the previous day under the items **Formal sanction of Recommendations already approved by the Committee in 2001, 2002 and 2003** and **Draft Recommendations directly presented for sanctioning by the Conference**. Four subjects had been discussed:

- The state of progress of the work undertaken;
- Implementation of Recommendations by OIML Members (inquiry results delayed due to lack of Member responses);
- Sanctioning of Recommendations (excluding the Test Report Formats, which did not require Conference sanctioning);
- Discussion on DR1, *Instruments for measuring the area of leathers*, which had been approved by CIML postal ballot, resulting in direct submission to the Conference for sanctioning.

It had also been proposed to withdraw Recommendations R 33, *Conventional value of the result of weighing in air,* which had been converted into a new International Document by the same name and approved for publication by the CIML; and R 62, *Performance characteristics of metallic resistance strain gauges*.

Mr. Magaña mentioned one point which had been discussed: to know how interpretations of Recommendations could be made. For example, for a Mutual Recognition Arrangement, OIML Recommendations had to be interpreted. For such interpretations to be sufficiently substantial, they had to be the work of the responsible Technical Committee.

Under the Item **OIML Certification, Mutual Acceptance and/or Recognition** Mr. Szilvássy gave a brief history of the System and commented that the use of Recommendations within the System had significantly increased since the 11th Conference and the number of Recommendations applicable within the System had now reached 45. There was a slight difference between categories and the number of Recommendations. For instance, R 117 and R 118 at the moment made up a single category. The Basic Publication for the Certificate System had been revised; the main task now remaining for the Technical Committees and Subcommittees was to include provisions for modules and families of modules in the revised Recommendations.

Since TC 3/SC 5 had been established, the intention had been to continue cooperation and maintain contacts with several International Organizations in the field of conformity assessment, certification and accreditation, such as ILAC, ISO/CASCO, WTO TBT Committee, Working Party 6 of the UN-ECE and others.

Surveys had been conducted on the Certificate System, and especially this year on the forthcoming implementation of the MAA.

Ongoing revisions for utility meters were well in advance. R 49 was being revised to include hot water meters, the Test Report Format for heat meters was being developed and for gas meters just after them.

Reporting on inquiries carried out between the two Conferences, Mr. Szilvássy said that more than 800 national type approvals had been issued either directly

based on OIML Certificates or taking these into consideration. Replies from 60 manufacturers indicated altogether more than 100 cases where OIML Certificates had been accepted to replace national type evaluation. Another 8 manufacturers had indicated that Certificates and Test Reports had been taken into consideration in about 100 cases. There was a good level of satisfaction on the part of manufacturers and an increase in the acceptance of Test Reports and Certificates.

Fourteen Member States had indicated their intention to participate in the MAA. Different levels of participation could be accepted, and this was a preliminary indication that the two categories (R 60 and R 76) must be started separately, as previously decided.

Mr. Szilvássy concluded by mentioning that the extension of the System to individual certification of measuring instruments would be started as soon as there was some experience with the MAA, in order to avoid problems at the beginning of implementation.

Moving on to the topic of **OIML Certification**, Mr. Magaña began by speaking of the Workshop on the **Mutual Acceptance Arrangement (MAA)**, held the previous Sunday. The main question discussed was the relationship between the MAA and the existing Certificate System. It was hoped that in the long term all Certificates would be issued under the Declarations of Mutual Confidence (DoMC) in the MAA system. As soon as the DoMCs had been signed, their signatories would issue all their Certificates under MAA conditions. This would ensure that no body was issuing two different types of Certificate, which it was thought would be confusing. Secondly, once the MAA was well established all Issuing Authorities would have to be signatories to a Declaration of Mutual Confidence and no further Certificates would be issued outside this system. The length of the transition period remained to be decided, which would allow the old system to co-exist for long enough for no problems to arise.

All Certificates hitherto registered would remain valid (and available on the web site) and would of course not be annulled. Certificates issued under DoMCs would be separately registered in a way that made it possible to distinguish between both types of Certificate and a logo for Certificates issued under the DoMCs would shortly be defined.

The financial implications of setting up the MAA had also been discussed in the Workshop and again in the previous day's Finance Committee.

Mr. Ehrlich added that the Workshop had asked for clarification of the existing MAA Document; it was therefore anticipated that this would be revised within the next year or so to incorporate the requested additions. Mr. Magaña added that some of the points needed not only editorial clarification but also interpretation. However, it seemed preferable to undertake the revision in the light of early experiences of the system rather than immediately. The revision of the Document could probably begin early in 2006 and Readers of the Bulletin are invited to download and consult the current B 10-1 Basic Publication on the MAA.

Mr. Magaña commented that the matter of costs had been discussed several times in the Working Group set up in Kyoto the previous year and later in the Presidential Council. Initially it had been envisaged that Participants would pay a charge for the right to issue Certificates, and that these charges would be adapted to the degree of prosperity of the country in question, in order to make it easier for Developing Countries to take part in the scheme. But this had been perceived as seriously distorting competition, because the cost of a model approval or type test would be considerably lower in a Developing Country; this was not acceptable to the OIML.

Reporting on the work of the **Permanent Working Group on Developing Countries**, Mr. Seiler reminded Members that the PWGDC had been set up at the CIML Meeting in Kyoto the previous year. Members of the Group had been appointed by the CIML President and the Group was formally in place by June 2004. It had met for the first time the previous Sunday and comprised nine individuals.

The main points of discussion had concerned:

- The working procedure. It had been decided that the operation of the Group should be kept informal and that e-mail should be the preferred means of exchanging information;
- The group discussed what could be achieved and what could be contributed by the members of the Group. Since the Group had no budget of its own, and since the members of the Group came from different regions, each having its own Regional Legal Metrology Organization, it had been decided that an inventory should be made of what had already been

elaborated by the Regions or by the Members and whether that could be made available for all interested parties. This might concern so-called simplified OIML Recommendations and verification instructions, translations of OIML Recommendations and Documents into other languages such as Spanish, Portuguese, Arabic, etc. and teaching and training materials. This information would then be put on the OIML web site, directly or via links;

- Further activities would be derived from the outcome of the Forum.

Mr. Seiler told delegates that since so many of them had themselves participated in the **Forum *Metrology Trade Facilitator – what is needed, what is offered***, a brief report was all that was required. *Note:* An account of the Forum can be found in the January 2005 OIML Bulletin and a complete web site has been published by the BIML, including all the presentations and posters: http://forum.oiml.org.

Via the Forum, the poster sessions and the ensuing discussions, the needs of Developing Countries could now be analyzed and would provide input for the future projects of the Permanent Working Group. The Group expected feedback from Members on whether their efforts were helpful and beneficial for Developing Countries, what else could be done, what else could be offered. This feedback would help the Group to find the right direction for their work.

The Group decided to hold its next meeting in Lyon in June 2005.

A final meeting of the OIML Development Council took place on Monday 25 October, and made proposals listing **future activities concerning Developing Countries**. It was notably decided that its work would henceforth be more efficiently managed by the Permanent Working Group on Developing Countries, which would replace it with immediate effect. This PWGDC would act as an advisory body to the President of the CIML on all aspects of the OIML's work which concerned Developing Countries.

Mr. Johnston, who had chaired the Finance Commission, introduced the Item on **Administrative and financial matters** and reported that a certain number of proposals would be made to the Conference concerning the **debts of certain countries**, details of which are given in the full Minutes.

The Commission had expressed its appreciation for the modernization of the financial management and felt that the **revised Financial Regulations** brought to the Conference a different perspective, and recommended that they be approved by the Conference.

The Commission had also noted that the **OIML Retirement Scheme** would be balanced for the next financial period, though needing to extend the additional endowment decided by the 11th Conference. The Commission made several recommendations to the Conference concerning this fund and the new accounts and directed that the President and the BIML Director be granted discharge for the financial management of the budget.

The Finance Committee had not raised objections to Conference approval of the **budget for the financial period 2005-2008** and then went on to discuss the financing of the MAA; the subject of fees had led to lively discussion. The proposal of the CIML Acting President was:

- That the registration fee for an OIML Certificate as it now stood, outside the Declarations of Mutual Confidence, should be raised to 150 Euros;
- That the registration fee for Certificates covered by a DoMC, and then covered by the procedures of quality assurance and under the supervision of the Declaration of Mutual Confidence, Certificates which would bear an OIML logo as well as the Test Report, would be 500 Euros for issuing each Certificate;
- That there would be no registration fee if there was no Test Report but only a Certificate saying that the name of the manufacturer had changed; and
- That each candidate who applied to enter a DoMC should pay a single fee, for his assessment under the Declaration of Mutual Confidence, of 1500 Euros, to cover the work of the Bureau in the initial setting up of the DoMC. This fee was due only by Issuing Authorities and not by participants who did not issue Test Reports. No annual fee was involved.

This compromise proposal would slightly modify the estimates for the budget, but income and outgoings of the MAA would be balanced by the end of the period 2005 to 2008. It was hoped that in four years' time 200 Certificates a year would be issued under the DoMCs, in which case the budget would then be balanced, including the cost of hiring a new BIML Staff Member (who may, once the MAA was running smoothly, be able to devote some time to other OIML projects in addition to the MAA).

Many delegates expressed their support for these proposals, and Mr. Magaña hoped that as many Members as possible would become involved in the MAA in order to ensure its success. He confirmed that the Committee would decide case by case, after each DoMC had been signed, about how long to prolong the old system. There was no fixed length of time after which it would finish and the CIML would make such decisions.

Mr. Kochsiek remembered similar discussions taking place when the Certificate System had begun. At that time, he had persuaded his colleagues to start within the normal budget, very simply and without unnecessary bureaucracy, and to build confidence. As Members could

see, this system had been very successful. Comparing this with the MAA, his feeling had been that most Delegates wished its set-up costs not to be in the normal budget but in an extra budget.

There had been differing opinions on how to levy the costs, whether to charge per Certificate or by annual fees. Mr. Kochsiek thought the present proposal was a compromise to deal with this problem. Following all the discussions, he believed that this compromise proposal should be offered later for a Decision.

Mr. Magaña said that the **Status of OIML Publications**, though listed as a separate point, really came under the heading of the budget since it was proposed that all OIML publications should be available free to all on the web site; however, they would no longer be published on paper. This would allow the OIML to make all its information more readily available and to make the implementation of its Recommendations better known internationally. The budget had been drawn up in the expectation of this being accepted, but there had to be formal approval for it. The proposal met with approval by those present.

At the end of the Conference the roll was taken to ensure that there was a quorum and what number of abstentions and negative votes could be allowed. 53 Member States were represented. This meant that the quorum, which was 40, was reached. The **Decisions and Resolutions** were read out, annotated and approved; these can be downloaded from the OIML web site and were also published in the January 2005 OIML Bulletin.

Concerning the **date and place of the next Conference** it had been decided to wait until 2006 to see whether any Member offered to host the Conference. If this had not happened by then, the BIML would organize a Conference in France.

Mr. Röhling thanked all those who had contributed to the success and pleasant atmosphere of the Conference, notably Mr. Magaña and the Bureau staff; Mr. Kochsiek and the Committee; PTB staff for their help; and the interpreters.

Mr. Kochsiek thanked Mr. Röhling for chairing the Conference so well.

Mr. Magaña thanked all the BIML Staff Members present and Mr. Röhling declared the Twelfth International Conference of Legal Metrology closed. ■

FIRST CHINA METROLOGY FORUM - 2004

The Measuring Instruments Directive (MID)

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The Measuring Instruments Directive (MID)
(Directive 2004/22/EC of the European Parliament and of the Council dated 31 March 2004)

Abstract

Metrological regulation, mostly by control of measuring instruments, is one of the oldest roles of government, and all Member States of the EU have long-established acts and regulations which have been individually enhanced and expanded in modern times to take account of technical developments. We therefore have a great diversity across the EU as regards the technical approach, scope and control regimes for measuring instruments regulation. It has therefore been a considerable challenge to make a Directive which will pull all these requirements into line to establish a single market in measuring instruments, and incidentally to ensure consistent measurement as required for example, in trade, environmental protection and law enforcement. In meeting this challenge, we have relied heavily on principles known in Europe as New Approach and Global Approach, which enable us to ensure consistent regulation of complex products without restricting technical innovation, and to allow for a practical variety of conformity control methods. The paper explains these legislative techniques as applied to the development of the Measuring Instruments Directive (MID). The scope and unique operational features of the MID will be discussed in some detail, having in mind both manufacturers wishing to sell into or operate in the European market and those of us who are concerned with the global harmonisation of legal metrology. The paper given in 2003 at the NCSLI has been brought up to date for discussion at the First China Metrology Forum – 2004.

This article was presented at the 2003 NCSL International Workshop and Symposium and published in the Conference proceedings. The Editors of the OIML Bulletin are grateful to the NCSL for their kind permission to reprint it (updated version).

1 Introduction

Around the world there is quite a lot of interest in the European Measuring Instruments Directive (MID), and in 2003 I was invited to give a paper on this topic to the NCSLI Conference in the USA. I have updated this paper to include the latest developments along with the basic principles. I hope this will lead us to some constructive discussions.

Legal metrology is very largely concerned with the control of measuring instruments - and the MID is for control of measuring instruments in Europe. We should first examine why it is of interest outside Europe:

- The MID is not only an important application of metrology, but is also about product conformity assessment;
- It employs the latest techniques in European legislation and is one of the New Approach Directives;
- It brings together the principles of efficient regulation and minimal restriction of commerce and technology;
- Therefore it may be an indicator for future global developments;
- Last but not least, it will be of interest to anyone who contemplates the export of measuring instruments to Europe.

This paper covers the main features of the New Approach as applied in the Measuring Instruments Directive. It will not be possible to cover all the aspects in detail but an explanation of the basic objectives and operational framework of the Directive will, I hope, stimulate development of the various themes through discussion here and by encouraging ongoing study and cooperation.

Even a basic explanation requires some background so I will begin with a brief look at the general objectives of the MID, its development history and various legislative options available in Europe.

2 History

Control of measurement is amongst the earliest functions of government, and the Member States of the EU all have their own well-established metrology legislation and control procedures. These national procedures predate and overlay the achievements of global scientific metrology from 1875 onwards, and have survived largely intact through the development of the European Union and its "single market". The result is that we have been left with barriers to trade in measuring instruments - a field that should be intrinsically global and international. Manufacturers of measuring instruments have been faced with obtaining separate national approvals for their products and they quite rightly ask: Where is the single market for us? Until now all we have had to offer them is the directive for Nonautomatic Weighing Instruments (NAWI) and a mutual recognition agreement between national laboratories, for some other instruments. (The WELMEC Type Approval Agreement is only intended as a temporary measure until we can enable European approvals through the MID).

However, the solution is a "New Approach" Directive: The MID.

3 EU Directives

The MID is one of a number of "New Approach" Directives. The New Approach is considered to be a significant development in European regulatory procedure.

A European Directive is unlike other forms of EU legislation in that it is binding on the Member States but not directly onto individuals; in this case it is telling the Member States how they may regulate measuring instruments. As with all the EU Directives it is up to the Member States to decide how they will implement a Directive to achieve the specified outcome. Thus there will be separate implementing legislation for each country but all with the same objective, i.e. to remove barriers to trade in measuring instruments.

We should be clear about the limitations of this objective. It will undoubtedly be useful to have consistent requirements across Europe so that we can have confidence in measurements to facilitate trade, law enforcement, environmental protection and so on. However in principle the MID has the Single Market as its legislative basis and sole objective, i.e. it is concerned to regulate only up to the stages of placing on the market and putting into use. Subsequent control, i.e. regulation applicable during the post-market, in-service life of a measuring instrument, is not specifically covered by the Directive (although it would not of course be open to a Member State to set requirements for in-service performance that would in themselves form new barriers to trade).

This paper takes the working structure of the Directive as the agenda for explaining what it does and how it works. The main features of the New Approach will be explained as they arise.

4 Scope and objectives

Initial proposals sought to achieve a single market for all measuring instruments. Why should there be any legislative barriers to trade in measuring instruments? When it became clear that the Directive must specify the metrological performance of the instruments that it covers, then the list of instruments had to be specified. However, the intention is that by selecting a range of the most widely used and regulated instruments we can cover about 95 % of all measuring instruments that are sold in Europe. There are now 10 categories of instruments specified in Article 1. Nearly all of them are most often used in the trade measurement field, i.e. broadly speaking "weights and measures", and only one category - exhaust gas analysers - is clearly for environmental protection. However, by the scope of allowable prescription, as detailed in Article 2 and in the definition of "legal metrological control" in Article 3(c), the Directive allows for coverage of all the other good reasons for metrological regulation. Some of the 10 categories, e.g. that of automatic weighing instruments, have very distinct sub-categories, so the actual number of instrument types covered is debatable but it is clearly a very wide and diverse range of products - everything from beer glasses to gas analysers. This is a considerable challenge for the efficient specification of performance and conformity assessment.

Another key point about the scope of the Directive is almost hidden in Article 2 "Member states **may** prescribe the use of measuring instruments... Thus, where a Member State has no prescription for a particular instrument or a particular application of it, then the Directive is not applicable. In this respect it is optional - Member States may decide where to regulate - but when they do regulate then by Article 3, "This Directive establishes the requirements... for those tasks mentioned in Article 2(1)", the regulation must be consistent with the Directive so that there are no barriers to trade. This may not be a single market because arguably, there will also be a separate unregulated market in certain countries, but it should achieve the real objectives of the single market by preventing legislative barriers to trade.

5 The New Approach

One important objective in the development of the MID has been to ensure that the regulations necessary for consumer protection and so on, do not restrict or inhibit technical developments and efficient manufacture. Previous "Old Approach" Directives specified the performance requirements in ways which implied particular test regimes and particular technologies. It often took a long time to agree this level of detail so there was a risk that the legislation might be overtaken by technical progress and become obviously irrelevant (as happened for mechanical taximeters). An even more undesirable outcome might be that innovative development and the application of new technologies would be inhibited by the need to comply with non-essential requirements.

This difficulty is something that all technical legislators should be aware of. In Europe the solution was codified by the Council resolution of 7 May 1985 on a New Approach to Technical Harmonisation and Standards. Briefly, the idea is that a Directive should specify only the genuinely essential requirements for a product, leaving the detail of performance requirements and testing to be specified in product standards. The standards bodies, in close collaboration with industry, develop what we know as mandated harmonised standards, compliance with which gives a "presumption of conformity" with the relevant Directive. The mandated harmonised standards are approved by the Commission and listed in the Official Journal as such. They give one way of demonstrating compliance - it is always open to the manufacturer to demonstrate compliance with the essential requirements by other means - as might be necessary if the equipment incorporated new technologies not covered by the standard. The outcome is a potentially most useful relationship between the Standards process and the legislation.

A further main element of the New Approach is Council Decision 93/465/EEC (sometimes known as the Global Approach) whereby a whole range of possible conformity assessment procedures are specified. These are often referred to as "the modules", presumably because the whole procedure may necessarily consist of a combination of such modules. The Council decision specifies the traditional procedures such as type approval and verification and also allows for all the other useful options to be used where appropriate. Thus in principle the procedure could be anything from a simple declaration of conformity by the manufacturer to a full design approval. The most significant development is in allowing the manufacturers to take more responsibility for control of conformity by virtue of having an approved quality system.

To complete this explanation of European procedure it is necessary to explain CE marking. A CE mark, applied by a manufacturer, is a declaration of conformity with all the relevant Directives. It is not an award or a quality mark, merely a declaration of compliance.

6 Working Structure of the MID

The structure of the MID is really rather simple. It contains the "recitals" which give the legal background, Articles 1 to 27 which specify all the main operational provisions, and a number of very important Annexes.

The annexes specify general and specific Essential Requirements for measuring instruments, requirements for "notified bodies" designated for conformity assessment roles, requirements for technical documentation and finally the "modules" or conformity assessment procedures.

Articles 1, 2, 3, and 5 deal with the scope and objectives, as explained above.

Article 4 has some important definitions while 6 to 8 cover legal metrological control. Duties are placed on various parties in order to achieve the objectives. Thus the manufacturers must meet the essential requirements and affix the CE mark, Member States must allow free movement of conforming products and take steps against non-conforming products and also decide which accuracy classes may be used in certain applications.

Articles 9 to 12 are about assessment of conformity. Manufacturers must decide which conformity procedures they will apply, from the range of options specified in the "modules" (Annexes A to H1), and allowed by the instrument specific annexes MI001 to MI010. The procedure may depend on their provision of documentation to cover design, performance and manufacture as required. Member States must designate bodies to carry out conformity assessment roles and notify them to the Commission and other Member States (hence the term Notified Bodies).

7 OIML

Article 13 directs the Member States to presume conformity with essential requirements when instruments comply with the harmonised standards whose references have been published by the Commission in the Official Journal, and also (in a provision which is rather unique to our field) when they comply with the relevant parts of OIML Recommendations where these

are identified as normative documents under Article 16(1)(a). Thus a manufacturer may have three routes to demonstrating compliance - he may invoke either the standard, or the OIML Recommendation, or the essential requirements. We still do not know how extensively the provision for normative documents will be used, but where appropriate it will allow access to markets in Europe on the basis of compliance with what may be existing de-facto global product standards.

It must be emphasised that the provision to adopt OIML Recommendations as normative documents does not imply that European legal requirements are being determined by OIML Technical Committees. If an existing OIML Recommendation is adopted as a normative document for the MID then that will stand as a European requirement and would not be modified as a matter of course if the OIML Recommendation were to be revised.

A far more important aspect of the relationship between the MID and the OIML is that by their membership of the OIML the EU Member States are committed to global harmonisation of legal metrology and participate fully in developing the international Recommendations for measuring instruments. The practical implementation of this policy is that where possible the MID essential requirements are based on the relevant OIML Recommendations which will thus be implemented into national legislation in due course. Naturally there are cases where new requirements have been developed for the MID but in general there is a high level of consistency between the OIML and the MID. In the area of conformity assessment procedures, the MID generally implements the OIML Recommendations but also moves on a lot further to include the other options available for New Approach Directives.

8 MID Working structure

Committees: There are established procedures whereby a committee of representatives of the Member States may be convened by the Commission to act in certain carefully prescribed ways to facilitate operation of EU Directives. Article 14 prescribes use of the 98/34/EC Committee, which deals with Harmonised Standards. Articles 15 and 16 specify operation of the Measuring Instruments Committee (MIC). The MIC will have two possible roles: It may advise the Commission with regard to identifying OIML Recommendations to be designated as normative documents, or it may act in a regulatory role to enable the Commission to make changes to technical requirements. The intention is to enable small practical changes without the need for an amending Directive.

Article 17 covers the duties of manufacturers in respect of marking, i.e. it specifies use of the CE Mark, the metrology mark - M - and the notified body number. The MID is unusual in requiring use of a supplementary metrology mark M that indicates conformity with the Directive. This is a consequence of the optionality of application allowed by Article 2. A Member State may decide not to regulate a particular type of measuring instrument under the MID but it may still be necessary to apply the CE mark to indicate compliance with other applicable directives (e.g. for the EMC and Machinery Directives) so the additional mark is necessary for measuring instruments if they also comply with the MID.

Articles 18 to 21 specify the duties of the Member States in respect of market surveillance and ongoing control. Market surveillance should be thought of as the means by which the Member States ensure that the Directive is working. In engineering terms, it is like an overall feedback on the conformity control system, whereby Member States can test the instruments being placed on the market to see that they comply with requirements and take corrective action in the case of non-compliance. This can be most efficiently done on a sampling basis and in collaboration with other Member States.

Articles 22 to 25 deal with practical and administrative provisions: repeal of some existing Directives, transition arrangements, transposition of the Directive into national legislation and the possibility of revision of the Directive. Article 23 prescribes a derogation of up to 10 years for existing approvals. In other words the Member States must allow existing products to remain on the market until their existing approvals expire or for a maximum of 10 years after the Directive comes into force. This is of course important to the general objective of the Directive which is to facilitate trade in measuring instruments.

9 Essential requirements

The MID is unusual for a New Approach Directive in that it contains about 70 pages of essential requirements (Annexes 1 and MI-001 to MI010). It is fair to ask whether all these requirements are really essential and whether MID qualifies as a New Approach Directive. In principle it certainly does, but some explanation is called for.

Firstly, this Directive covers a very wide range of products which all need to be individually specified. Secondly, the level of protection afforded to consumers and traders is a matter of policy, i.e. it must be decided and agreed by the Member States. Thus for each

Member State the limits of error and the parameters to make their specification meaningful are fundamental to the objectives of long-established national legislation and are now to be harmonised for agreement at European level. To most of the Member States it was not acceptable that fundamental regulatory parameters should be left to be determined at a later date by the standards bodies or, as was proposed at one time, by the Commission and committee procedures. However the essential requirements are limited to basic metrological parameters and are intended wherever possible to be independent of technology.

For the sake of efficient documentation the generally applicable essential requirements are specified in Annex 1 while the rest are specified by instrument specific annexes MI-001 to MI-010. The MI annexes specify essential features, rated operating conditions, limits of error and permissible effects of disturbances.

10 Conformity assessment options

Annexes A to H1 are usually known as the conformity assessment modules. It might be more useful to refer to them (or to the designated combinations of modules) as conformity control procedures, because in essence they control the conformity of products on the market. In accordance with Article 9 the manufacturer may choose which modules are to be applied, from a list in the specific annexes for instrument types. A good deal of thought went in to deciding which modules to allow.

One might expect there to be some cases where Module A, i.e. a simple self-declaration with no third party involvement, would not be acceptable. In the field of measuring instruments it appears to be not acceptable anywhere - Module A is specified in some detail but is not applicable to any of the instruments included in the Directive. However, Module A1, which is the same as Module A but with third party product checks on a sampling basis, is acceptable for material measures, and in this case Module H, which is a declaration of conformity based on full quality assurance, is also acceptable.

In deciding the acceptable range of procedures, the general objective has been firstly to allow as many options as possible, secondly to allow transfer of responsibility to manufacturers (by virtue of Quality Assurance systems) and finally to ensure adequate protection in the market by use of appropriate procedures. It was found that with such a wide variety of measuring instruments there could be no simple rule to establish appropriate procedures. However, by taking into account three qualitatively different characteristics of each category, namely the **technology**, **functionality** and **application**, and by considering the practical outcome of the various modules, a fairly sound list has been arrived at.

11 Progress

As regards the practical progress of the Directive, we can say that after a very long development period it has finally been adopted. Some amendments required by the European Parliament were accepted by the Council and the Directive was adopted on 30 April 2004. There will now be 2 years for the Member States to implement it into their own legislation and a further 6 months grace while all parties align their systems accordingly. Therefore, the Directive will come into force on 30 October 2006 for all Member States at the same time.

Seen in a global and historical context, the MID represents real progress in that:

- It is an example of globally agreed requirements being implemented in regional and national legislation;
- It will remove barriers to trade in measuring instruments within Europe and establish common requirements for the European market;
- Common requirements will enhance confidence in measurement to the benefit of trade and environmental protection;
- It has probably contributed to the evolution of conformity control procedures and given a higher profile to the New Approach, as developed in Europe, in the world as a whole. ■

SIM

The Inter-American Metrology System (SIM) 2003/2004

DIANNE LALLA-RODRIGUES
Director,
Antigua and Barbuda Bureau of Standards

Overview

Although efforts to form a metrological cooperation in the western hemisphere in the 1960's were thwarted, this did not deter the dedicated metrologists of the region who were given new hope when the fourth meeting of the Inter-American Council for Education, Science and Culture (Consejo Inter-Americano para la Educación, la Ciencia y la Cultura, CIECC), in Mar del Plata, Argentina, in 1972, passed Resolution #174, establishing a regional system for metrology and calibration (Sistema Inter-Americano de Metrología y Calidad, SIMYC).

In 1974, the Organization of American States (OAS) and the National Bureau of Standards (NBS, now National Institute of Standards and Technology, NIST, USA) organized an international meeting on industrialization and standardization in Gaithersburg, Maryland, where regional metrology needs were discussed. The OAS (former Departamento de Asuntos Científicos y Tecnológicos, DACYT) convened a meeting in Buenos Aires, Argentina, at the Instituto Nacional de Tecnologìa Industrial (INTI), in 1975, to design a special project in the area of metrology, focusing on scientific, industrial and legal metrology. In 1979, as part of the special project on metrology, the Inter-American Metrology System (SIM) was created, consisting of thirteen Latin American countries.

In 1992, the OAS and NIST were invited to help in reconstructing SIM as Sistema Inter-americano de Metrologia. Thus, in 1993 and 1994, these two organizations, with support from the US Department of State and the National Metrology Center of Mexico (CENAM), organized three regional metrology workshops in Caracas, Venezuela, Buenos Aires, Argentina and San José, Costa Rica, with participation of representatives from the government, scientific and industrial sectors in each country. Since 1995, much effort has gone into the organization of interlaboratory comparisons of national standards and great effort was dedicated to the development of human resources in metrology. In 1997, with the participation of experts from 22 SIM members, an Inter-American Metrology Workshop was organized in Rio de Janeiro, Brazil, to implement an Inter-American Chemical Metrology Program, which is underway. From here SIM blossomed into an organization which today consists of thirty-four members.

Many other measurement institutions such as IMGC (Italy), IEN (Italy) and PTB (Germany) have contributed significantly to the establishment and development of SIM, however the OAS has been and continues to be a formidable source of support for the activities of SIM, which in turn has become a model for the OAS, as regards the manner in which its member countries can work together for mutual benefit. SIM has been able to train more technical people in the Americas than any other OAS supported program. The rebirth of the SIM with 100 % participation by OAS nations marks the first successful inter-American effort toward realizing two major goals set forth at the "Summit of the Americas" held in December 1994: *"increasing cooperation in science and technology within the Americas, and promoting prosperity and free trade by eliminating technical trade barriers"*.

The purpose of SIM is clearly articulated in its mission, vision and objectives which are all centered on building and supporting a metrological structure which ensures equity in the marketplace, facilitates international trade, ensures uniformity of measurements and improves the quality of life for all citizens of the region. By its very nature SIM had been useful as an effective method of expertise exchange. Countries that had developed working weights and measures services have provided assistance to countries which did not have such services. Assistance in the form of intercomparisons, calibrations, purchase and donation of equipment, standards and chemical reference materials, meetings, seminars, workshops, creation of the SIM website, online access to databases. Activities are coordinated on a regional basis and conducted on a subregional (NORAMET, CAMET, CARIMET, ANDIMET, SURAMET) basis in accordance with the structure of SIM. In view of the new reality of market globalization and the emergence of trade agreements such as the WTO, FTAA, and CSME among others, it is evident,

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necessary and of high priority to continue and where possible enhance these support activities in the area of metrology and to provide formal mechanisms for technical support of these activities within the trade agreements.

The importance of SIM and its achievements to date is evidenced by the fact that SIM will be one of the issues to be discussed as a model of multi-national cooperation and training at the Meeting of Ministers of Science and Technology in the Americas being held in Lima, Peru, in November 2004.

SIM MISSION

To promote and support an integrated measurement infrastructure in the Americas that ensures equity in the market place, improves the quality of life and facilitates international trade.

SIM VISION

A representative, transparent and integrated regional metrology organization committed to ensuring uniformity of measurements in the Americas.

Figure 1 Structure of SIM

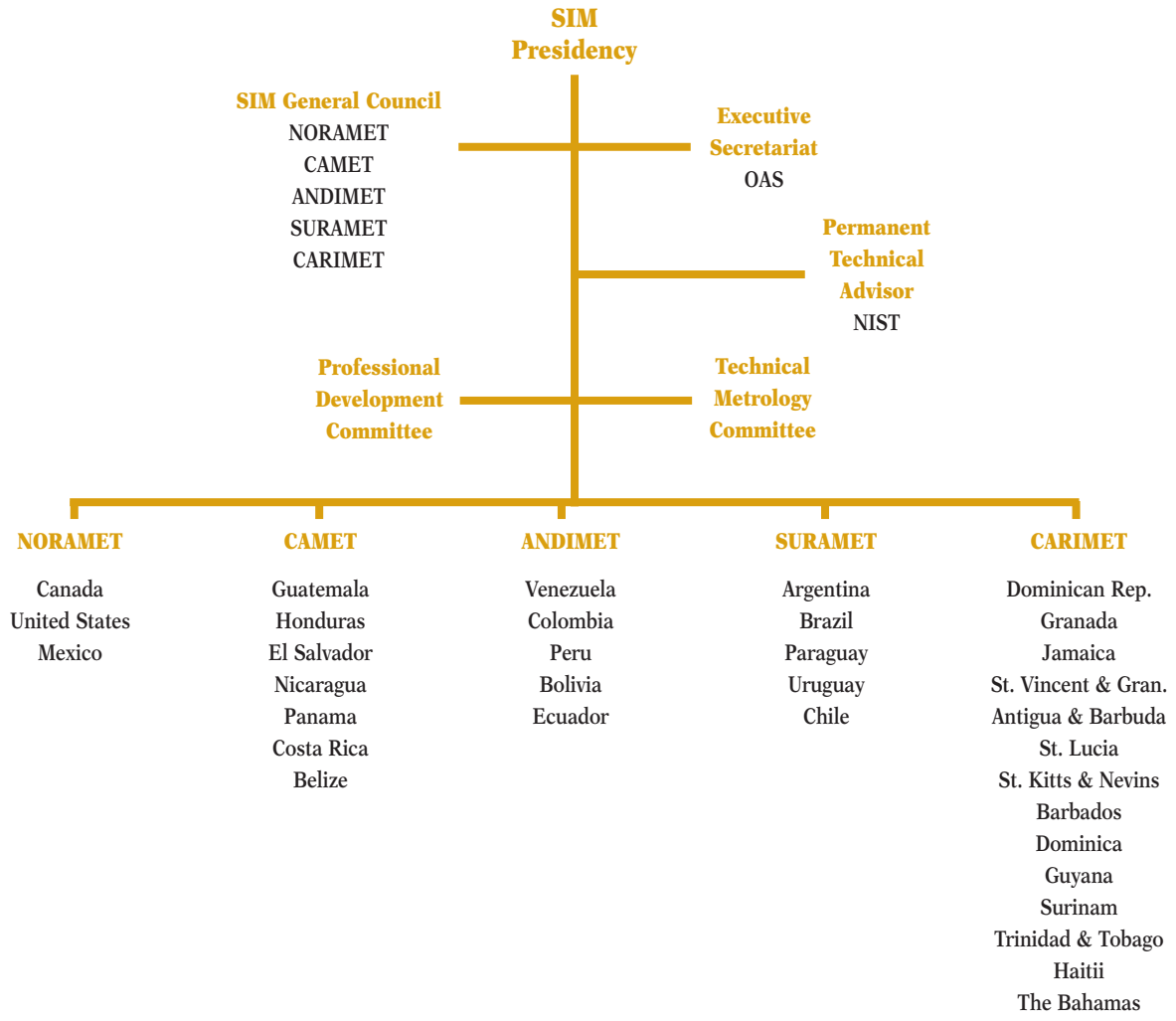
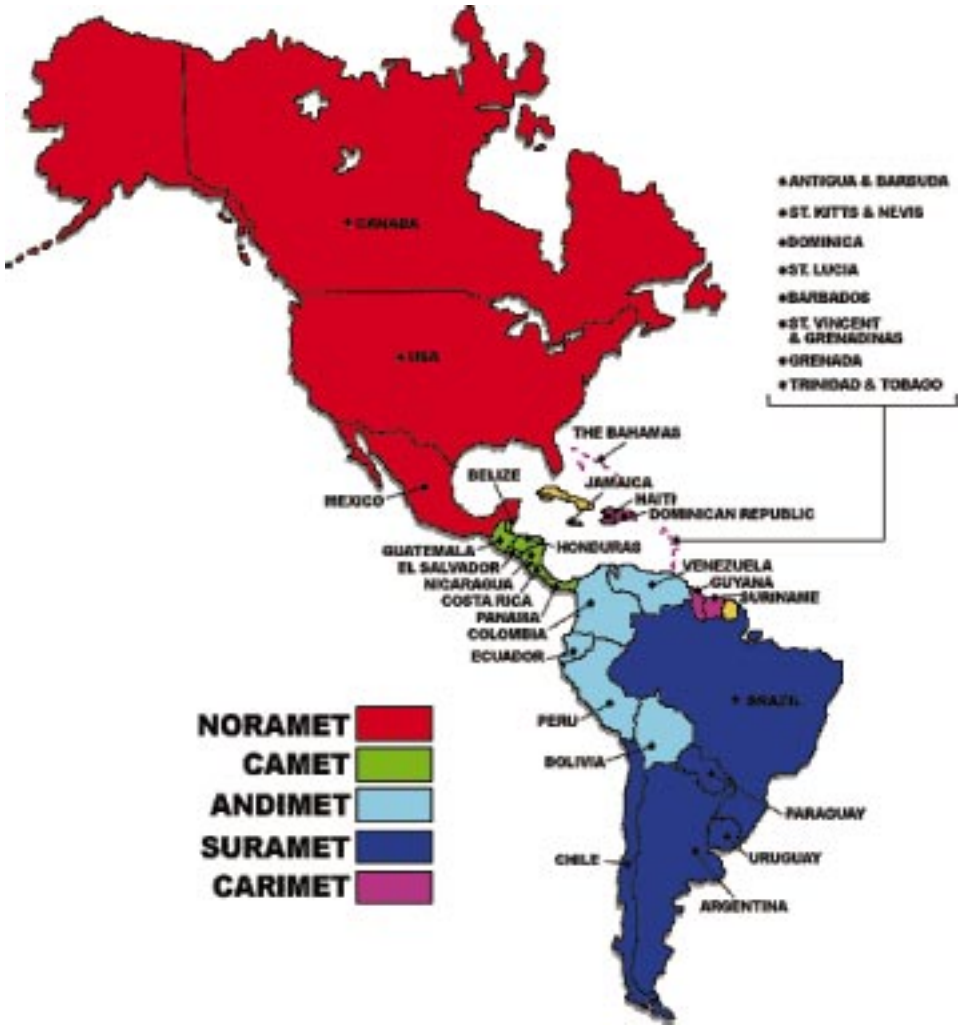


Figure 2 SIM Region and Sub-Regions



Professional Development Committee (PDC)

The aim of the PDC is to develop the technical skills among laboratory personnel with respect to metrology and metrology related activities in the Region. In keeping with this mandate this Committee continues to organize and execute training programs especially for developing NMIs. Technical expertise is drawn from amongst members (especially from the NORAMET Region) who give willingly of their time and expertise in order to raise the measurement capabilities, a feat which in the final analysis will benefit the entire Region -the developed as well as the developing nations.

Over the past year (Nov 2002 – Aug 2003) there have been a number of requests for training courses, including attachments particularly from the ANDIMET, SURAMET and CARIMET regions. The attachment program for ANDIMET has been launched under the PTB-ANDIMET collaboration program. In CARIMET the NMIs form part of the National Standards Bodies and some attachment opportunities were accomplished under the guise of the Caribbean Regional Organization for Standardization and Quality (CROSQ).

Other training programs include:

Quality Systems, January 2003, Antigua & Barbuda
(34 participants, 18 participating countries)

Large Mass, March 8 2003, Peru
(7 participants, 7 participating countries)

Chemical Metrology Seminar, May 6 2003, Jamaica
(25 participants, 11 participating countries)

Mass, June 9 & 10 2003, Nicaragua
(7 participants, 7 participating countries)

Temperature, June 9 & 10 2003, Nicaragua
(6 participants, 6 participating countries)

Metrology for Globalization, October 29 & 29 2003, Chile
(80 participants, 20 participating countries)

There has been keen interest and active participation by SIM members in these events. The PDC organized awareness seminar, usually held in conjunction with the General Assembly was also very successful. The success of these activities can be attributed to the SIM/OAS Project and the structure of the project. This project is approved on a multi-annual basis, which allows for more latitude and consistency in meeting the regional requests and needs.

Technical Metrology Committee (TC)

The TC coordinates the work undertaken by SIM members to improve their metrological capabilities and promote mutual confidence in measurement activities. This is achieved through inter-comparisons, operational documents, coordination meetings, information exchange (building of databases) and development and implementation of quality systems. The TC Chair is one of the SIM Representatives to the JCRB in order to keep abreast of developments in this arena especially as it relates to the CIPM-MRA, quality systems and measurement capabilities (CMCs). The TC operates through Technical Working Groups (TWG), which are organized in parallel with the "Convention du Mètre" Consultative Committees: nine Fundamental Metrology Working Groups, three Documentation Working Groups and two **Legal Metrology Working Groups**.

Currently the Technical Committee devotes most of its resources to two tasks:

- Activities related to the CIPM-MRA – comparisons, evaluation of CMCs, development and implementation (Quality Systems Working Group) and review (Quality Systems Task Force) of Quality Systems.
- Promotion of the capabilities of developing NMIs – supplementary comparisons and pilot studies, collaboration with PDC in human resource development.

Quality Systems Working Group (QSWG) & Task Force (QSTF)

In 2002 the QSWG was reorganized with the main objectives of providing a means for developing NMIs to obtain information on the development and implementation quality systems, providing a forum for discussion on the challenges faced. To this end a number of training activities have taken place: Antigua (January 2003), Peru (March 2003), CENAM (2003). In all instances the more advanced NMIs have provided technical expertise in an effort to assist the less developed NMIs in the development of their quality systems. The earlier programs focused on the elements of a quality system, using ISO 17025 as the basis. The latter, which was held in conjunction with the LMWG, at CENAM in Dec 2003, focused on schooling the participants in drafting quality policies, procedures and the basics of the quality manual.

Recently there has been collaborative effort between APMP and SIM, part of which revolves around the issue of quality systems and the standardization of test procedures for the various technical metrology areas. The first meeting was held in Ottawa 2003, at which the issues affecting the implementation of quality systems were outlined and work began on drafting procedures. The Quality Systems Coordinators agreed to continue training in the area of development and documentation of a system. The second meeting is at present currently ongoing in Malaysia and will build on the work done to date.

Figure 3 Current status of Quality Systems (NMIs with CMCs)

Country	System	Form of review
Argentina	17025	Accreditation
Brazil	17025	Self Declaration
Canada	17025	Accreditation
Chile	17025	Accreditation
Ecuador	17025	Accreditation
Mexico	17025	Self Declaration
United States	17025	Self Declaration
Uruguay	17025	Accreditation

The QSTF was formally established in October 2002, the main purpose being to review the quality systems of those SIM members who are signatories of the MRA and wish to have their CMCs published. The QSTF held its first meeting in September 2002, Ottawa where the "SIM Procedure for Review of the Quality System" was drafted. The second meeting held in Costa Rica in February 2004 begun the process of evaluation of the Quality System of three NMIs: LATU (Uruguay), CENAM (Mexico), and NIST (USA). This work will continue at meetings in Mexico (May 2004) and Venezuela (November 2004). To date only eight members are signatories of the CIPM-MRA. There are also a number

of members who are not signatories to the MRA but who are in the process or whose quality systems are already accredited: Peru, Venezuela, Jamaica, and Costa Rica.

As a result of and taking into consideration the main objective of SIM, which is to establish a harmonized metrology system in the Americas, the TC agreed that the process of reviewing CMCs and QSs would be open to *all* Members. The results of those members who are signatories to the MRA will be submitted to the JCRB for publication. It should be noted that all members have used ISO 17025 as the base document.

Conclusion

The Members of SIM are committed to its mission and vision and will continue to pursue all efforts in the areas of *Professional Development and Technical Capability,* which would enable us to achieve our mission.

The *PDC* has determined that it needs to:

- Intensify sub-regional collaboration in order to more adequately meet the individual professional development needs of members, especially since the interests of the CIPM-MRA signatories do not necessarily coincide with those of the non-signatories;
- Seek additional support for infrastructure development (possibly through respective governments) by using sub-regional seminars to create awareness;
- Increase the participation of members in the activities of the Metrology Working Groups (MWG) considering the increasing importance of the role of the WGs;
- Determine a strategy for including the MWG chairs in professional development activities as closer coordination is required under SIM in order to achieve harmonized goals as an RMO; and
- Solicit additional financial support from other International Organizations.

The *TC* will seek to:

- Continue and enhance its activities in the areas of intercomparisons, supplementary comparisons and pilot studies in order to develop technical skills;
- Seek out projects to help in building infrastructure in developing NMIs;
- Continue collaborating with other RMOs in the development process; and
- Provide more support for the development of quality systems especially among the less developed NMIs.

Overall the PDC and TC will, under the guidance of the SIM Council and the General Assembly, seek to collaborate on these activities, and wherever necessary include the various technical working group chairs in order to maximize the benefits of all training activities and all technical and financial assistance.

SIM will continue in its quest to develop a strong inter-American infrastructure that uses metrology and quality to enhance trade and commerce. Members will focus on improving their national measurement and standards activities, and then harmonizing these activities with each other and the SIM as a whole. SIM will be one of the issues to be discussed at the Meeting of Ministers of Science and Technology in the Americas being held in Lima, Peru, in November 2004. ■

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E-mail: dianne.rodrigues@antigua.gov.ag

OIML Certificate System:
Certificates registered 2004.11–2005.01
Up to date information (including B 3): www.oiml.org

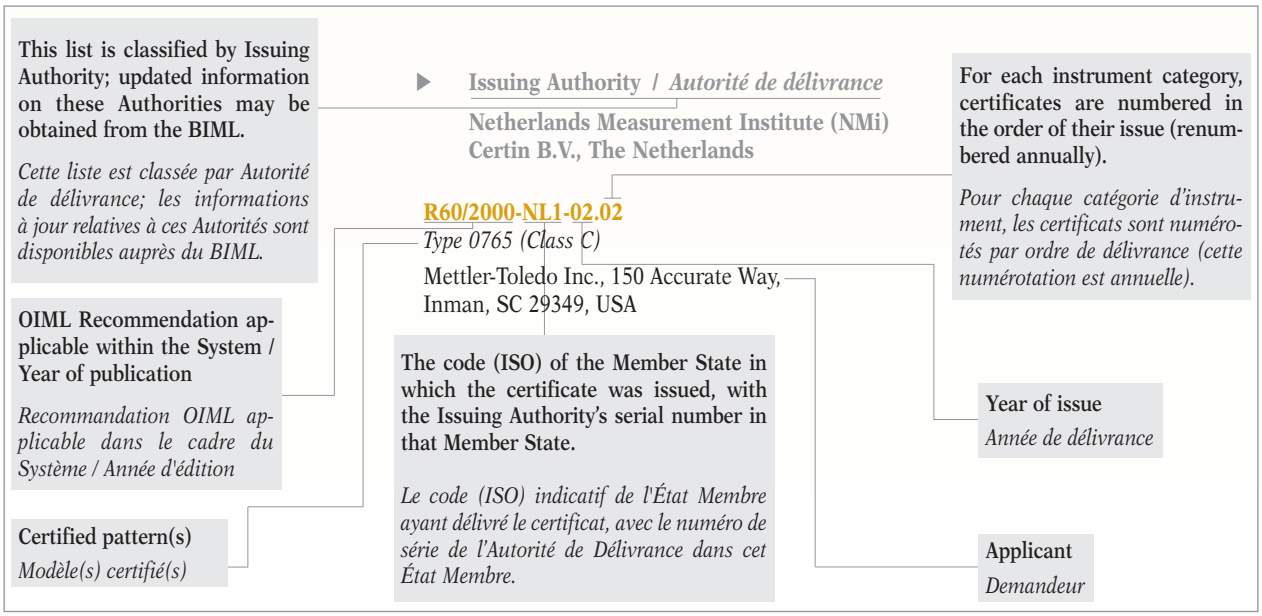
The *OIML Certificate System for Measuring Instruments* was introduced in 1991 to facilitate administrative procedures and lower costs associated with the international trade of measuring instruments subject to legal requirements.

The System provides the possibility for a manufacturer to obtain an OIML Certificate and a test report indicating that a given instrument pattern complies with the requirements of relevant OIML International Recommendations.

Certificates are delivered by OIML Member States that have established one or several Issuing Authorities responsible for processing applications by manufacturers wishing to have their instrument patterns certified.

The rules and conditions for the application, issuing and use of OIML Certificates are included in the 2003 edition of OIML B 3 *OIML Certificate System for Measuring Instruments*.

OIML Certificates are accepted by national metrology services on a voluntary basis, and as the climate for mutual confidence and recognition of test results develops between OIML Members, the OIML Certificate System serves to simplify the pattern approval process for manufacturers and metrology authorities by eliminating costly duplication of application and test procedures. ■



Système de Certificats OIML:
Certificats enregistrés 2004.11–2005.01
Informations à jour (y compris le B 3): www.oiml.org

Le *Système de Certificats OIML pour les Instruments de Mesure* a été introduit en 1991 afin de faciliter les procédures administratives et d'abaisser les coûts liés au commerce international des instruments de mesure soumis aux exigences légales.

Le Système permet à un constructeur d'obtenir un certificat OIML et un rapport d'essai indiquant qu'un modèle d'instrument satisfait aux exigences des Recommandations OIML applicables.

Les certificats sont délivrés par les États Membres de l'OIML, qui ont établi une ou plusieurs autorités de délivrance responsables du traitement des demandes présentées par des constructeurs souhaitant voir certifier leurs modèles d'instruments.

Les règles et conditions pour la demande, la délivrance et l'utilisation de Certificats OIML sont définies dans l'édition 2003 de la Publication B 3 *Système de Certificats OIML pour les Instruments de Mesure.*

Les services nationaux de métrologie légale peuvent accepter les certificats sur une base volontaire; avec le développement entre Membres OIML d'un climat de confiance mutuelle et de reconnaissance des résultats d'essais, le Système simplifie les processus d'approbation de modèle pour les constructeurs et les autorités métrologiques par l'élimination des répétitions coûteuses dans les procédures de demande et d'essai. ■

INSTRUMENT CATEGORY
CATÉGORIE D'INSTRUMENT

Diaphragm gas meters
Compteurs de gaz à parois déformables

R 31 (1995)

▶ Issuing Authority / *Autorité de délivrance*

Netherlands Measurement Institute (NMi) Certin B.V., The Netherlands

R031/1995-NL1-2004.02
G4(S)
Destas Dijital Elektronik San. TIC A.S., Seyhly Mah Mimarsinan Cd. Hilak Sk. No. 33, 34906 Kurtkoy, Pendik, Istanbul, Turkey

INSTRUMENT CATEGORY
CATÉGORIE D'INSTRUMENT

Automatic catchweighing instruments
Instruments de pesage trieurs-étiqueteurs à fonctionnement automatique

R 51 (1996)

▶ Issuing Authority / *Autorité de délivrance*

Physikalisch-Technische Bundesanstalt (PTB), Germany

R051/1996-DE1-1998.01 Rev. 3
EC... / HC... (Classes X(1) and Y(a))
OCS Checkweighers GmbH, Max-Planck-Str. 7, D-74523 Schwäbisch Hall, Germany

R051/1996-DE1-2004.05
Litronic-MPS II
Liebherr-Mischtechnik GmbH, Im Elchgrund 12, D-88427 Bad Schussenried, Germany

Updated information on OIML certificates:

www.oiml.org

INSTRUMENT CATEGORY
CATÉGORIE D'INSTRUMENT

Metrological regulation for load cells (applicable to analog and/or digital load cells)
Réglementation métrologique des cellules de pesée (applicable aux cellules de pesée à affichage analogique et/ou numérique)

R 60 (2000)

▶ Issuing Authority / *Autorité de délivrance*

DANAK The Danish Accreditation and Metrology Fund, Denmark

R060/2000-DK1-2003.02 Rev. 2
Type WSSB (Class C)
Welvaarts weegsystemen, De Tweeling 4, NL-5215 MC Hertogenbosch, The Netherlands

R060/2000-DK1-2004.04
SSB-DT-R2 (Class C)
Dan-Transducer ApS, Thorsvang 11, DK-3400 Hillerod, Denmark

▶ Issuing Authority / *Autorité de délivrance*

Netherlands Measurement Institute (NMi) Certin B.V., The Netherlands

R060/2000-NL1-2004.07 Rev. 1
TLC, HLC and THC for accuracy classes C and D
Hottinger Baldwin Messtechnic Wägetechnik GmbH, Im Tiefen See 45, D-64293 Darmstadt, Germany

R060/2000-NL1-2004.14 Rev. 1
CB14 (Class C)
Minebea Co. Ltd., Kuruizawa Factory Miyota-Machi, Kitasakugun, Nagano-Ken, Japan

R060/2000-NL1-2004.15
0785 (Class C)
Mettler-Toledo Inc., 150 Accurate Way, SC 29349 Inman, United States

R060/2000-NL1-2004.16
RC3D (Class C)
Flintec GmbH, Bemannsbruch 9, D-74909 Meckesheim, Germany

R060/2000-NL1-2004.17
SBC/1R (Class C)
Mettler-Toledo (Changzhou) Precision Instruments Ltd., 5 HuaShanZhong Lu, ChangZhou, JiangSu, China

R060/2000-NL1-2004.18
CB004-xxx-NS and CB004-xxx (Class C)
Minebea Co. Ltd., Kuruizawa Factory Miyota-Machi, Kitasakugun, Nagano-Ken, Japan

R060/2000-NL1-2004.19
0805 (Class C)
Mettler-Toledo Inc., 150 Accurate Way, SC 29349 Inman, United States

R060/2000-NL1-2004.20
TSSP (Class C)
Cardinal Scale Manufacturing Co., 203 East Daugherty St., 64870 Missouri, Webb City, Missouri, United States

▶ Issuing Authority / *Autorité de délivrance*
National Weights and Measures Laboratory (NWML), United Kingdom

R060/2000-GB1-2004.04
GS-1 A (Class C3)
Gicam S.N.C Di Carrara Danilo & Co, Piazza XI Febbraio, 2, IT-22015 Gravedona (CO), Italy

R060/2000-GB1-2004.05
TA-4 (Class C3)
Gicam S.N.C Di Carrara Danilo & Co, Piazza XI Febbraio, 2, IT-22015 Gravedona (CO), Italy

R060/2000-GB1-2005.01
TA-2 (Class C3)
Gicam S.N.C Di Carrara Danilo & Co, Piazza XI Febbraio, 2, IT-22015 Gravedona (CO), ITALY

R060/2000-GB1-2005.02 Rev. 1
LP600 (Class D0.5)
Intercomp, 3839 County Road 116, MN-55340, Minnesota, Minneapolis, Minnesota, United States

▶ Issuing Authority / *Autorité de délivrance*
Physikalisch-Technische Bundesanstalt (PTB), Germany

R060/2000-DE1-2001.02 Rev. 1
PW2 (Classes D1, C3, C3 MI 6, C3 MI 7,5 and C6)
Hottinger Baldwin Messtechnic Wägetechnik GmbH, Im Tiefen See 45, D-64293 Darmstadt, Germany

INSTRUMENT CATEGORY
CATÉGORIE D'INSTRUMENT

Automatic gravimetric filling instruments
Doseuses pondérales à fonctionnement automatique

R 61 (1996)

▶ Issuing Authority / *Autorité de délivrance*
Netherlands Measurement Institute (NMi) Certin B.V., The Netherlands

R061/1996-NL1-2004.02
*CCW-M-****(*)-*/**-**, CCW-EM-****(*)-*/**-**, CCW-NZ-****(*)-*/**-**, CCW-RZ-****-*/**-**-N, CCW-DZ-****-*/**-**-N for*
Ishida Co., Ltd., 44, Sanno-cho, Shogoin, Sakyo-ku, 606-8392 Kyoto-city, Japan

▶ Issuing Authority / *Autorité de délivrance*
Physikalisch-Technische Bundesanstalt (PTB), Germany

R061/1996-DE1-2004.06
VELOTRONIKS HS IV for accuracy class Ref (0.2)
Greif-Velox Maschinenfabrik GmbH, Kronsforder Landstr. 177, D-23560 Lübeck, Germany

INSTRUMENT CATEGORY
CATÉGORIE D'INSTRUMENT

Nonautomatic weighing instruments
Instruments de pesage à fonctionnement non automatique

R 76-1 (1992), R 76-2 (1993)

▶ Issuing Authority / *Autorité de délivrance*
Korean Agency for Technology and Standards, MOCIE, Republic of Korea

R076/1992-KR1-2004.02
INBODY3.2 (Class III)
BIOSPACE Co., Ltd, #823, Yeoksam 1-dong, Gangnam-gu, 135-784 Seoul, Korea (R.)

▶ **Issuing Authority / *Autorité de délivrance***

Netherlands Measurement Institute (NMi) Certin B.V., The Netherlands

R076/1992-NL1-2001.02 Rev. 1
Type Spider SW, BC, FC and SC - IND 4... (Classes III and IIII)
Mettler-Toledo (Albstadt) GmbH, Unter dem Malesfelden 34, D-72458 Albstadt, Germany

R076/1992-NL1-2003.44 Rev. 1
IG-series (Class III)
Ishida Co., Ltd., 44, Sanno-cho, Shogoin, Sakyo-ku, 606-8392 Kyoto-city, JAPAN

R076/1992-NL1-2004.21
C2000 (Class III)
Dräger Medical Infant Care, Inc., 330 Jacksonville Road, PA 19040 Hatboro, United States

R076/1992-NL1-2004.22
PD-II (Class III)
CAS Corporation, CAS Factory # 19 Kanap-ri, Kwangjeok-myon, Yangju-kun, Kyungki-do, Korea (R.)

R076/1992-NL1-2004.23
SA / CA (Class I)
Shinko Denshi Co., Ltd, 3-9-11 Yushima, Bunkyo-ku, 113-0034 Tokyo, Japan

R076/1992-NL1-2004.24
BI-10000 Helios and BI-10000 Atoll (Class III)
Mettler-Toledo (Changzhou) Scale & System Ltd., 111 Changxi Road, Changzhou, Jiangsu 213001, China

R076/1992-NL1-2004.25
MS-1000CE (Class III)
Shinko Denshi Co., Ltd, 3-9-11 Yushima, Bunkyo-ku, 113-0034 Tokyo, Japan

R076/1992-NL1-2004.26
SM-800.., SM-880.. (Class III)
Teraoka Weigh-System PTE LTD, 4 Leng Kee Road, #06-01 SIS Building, 159088 Singapour, Singapore

R076/1992-NL1-2004.27
IND 310 (Class III)
Mettler-Toledo Inc., 1150 Dearborn Drive, 43085-6712, Ohio, Worthington, Ohio, United States

R076/1992-NL1-2004.28
WS series (Hawk / HTGB / WS) (Class III)
Mettler-Toledo (Changzhou) Precision Instruments Ltd., 5 HuaShanZhong Lu, ChangZhou, JiangSu, China

R076/1992-NL1-2004.29
WT series (Hawk / HTGB / WS) (Class III)
Mettler-Toledo (Changzhou) Precision Instruments Ltd., 5 HuaShanZhong Lu, ChangZhou, JiangSu, China

R076/1992-NL1-2004.30
WS...S series (Hawk harsh / HTHB) (Class III)
Mettler-Toledo (Changzhou) Precision Instruments Ltd., 5 HuaShanZhong Lu, ChangZhou, JiangSu, China

R076/1992-NL1-2004.31
WT...S series (Hawk harsh / HTHB) (Class III)
Mettler-Toledo (Changzhou) Precision Instruments Ltd., 5 HuaShanZhong Lu, ChangZhou, JiangSu, China

R076/1992-NL1-2004.32
Viper ... and BBK 4... (Classes II and III)
Mettler-Toledo (Albstadt) GmbH, Unter dem Malesfelden 34, D-72458 Albstadt, Germany

R076/1992-NL1-2004.33
Viper ... and BBA 4... (Class III)
Mettler-Toledo (Albstadt) GmbH, Unter dem Malesfelden 34, D-72458 Albstadt, Germany

R076/1992-NL1-2004.34
RN20.. / Viva.. (Class III)
Mettler-Toledo (Changzhou) Scale & System Ltd., 111 Changxi Road, Changzhou, Jiangsu 213001, China

R076/1992-NL1-2004.35
JPG/JWG (Class III)
Jadever Scale Co. Ltd., No. 5, Wu-Chuan 2 RD., Wu-Ku Hsiang, Taipei Hsien, Chinese Taipei

R076/1992-NL1-2004.36
K-series (Class III)
DIBAL S.A., c/ Astintze Kalea, 24, Poligono Industrial Neinver, E-48016 Derio (Bilbao-Vizcaya), Spain

R076/1992-NL1-2004.37
LP, LP-1, LP-1.6, LP-T and XP (Class III)
CAS Corporation, CAS Building #440.1 Sungnae-Dong, Kangdong-KU, Seoul, Korea (R.)

R076/1992-NL1-2004.38
ASEP and ASEP-P series
Universal Weight Enterprise Co. Ltd., 2-5 Fl., No. 39 Pao Shing Road, Hsin Tien City, Taipei Hsien 231, Chinese Taipei

R076/1992-NL1-2004.39
HJ®-..K.. Series (Class II)
Shinko Denshi Co., Ltd, 3-9-11 Yushima, Bunkyo-ku, 113-0034 Tokyo, Japan

R076/1992-NL1-2004.40
AW-4600 (Class III)
Teraoka Seiko Co., Ltd., 13-12 Kugahara, 5-Chome, Ohta-ku, 146-8580 Tokyo, Japan

▶ Issuing Authority / *Autorité de délivrance*
National Weights and Measures Laboratory (NWML), United Kingdom

R076/1992-GB1-2004.06 Rev. 1
NCR 7876-2000, NCR 7876-8000, NCR 7876-5000 Scanner/Scale (Class III)
NCR Corporation, 2651 Satellite Blvd, 30136, Georgia, Duluth, Georgia, United States

R076/1992-GB1-2004.10
E1065 / E1070 (Class III)
Avery Weigh-Tronix, Foundry Lane, Smethwick B66 2LP, West Midlands, United Kingdom

R076/1992-GB1-2004.11
M? 1xx series (Class III)
Avery Weigh-Tronix, Foundry Lane, Smethwick B66 2LP, West Midlands, United Kingdom

▶ Issuing Authority / *Autorité de délivrance*
Physikalisch-Technische Bundesanstalt (PTB), Germany

R076/1992-DE1-2004.01 Rev. 1
SIWAREX FT... (Classes III and IIII)
Siemens AG, Östliche Rheinbrücken straße 50, D-76187 Karlsruhe, Germany

R076/1992-DE1-2004.05
SIWAREX CS (Classes III and IIII)
Siemens AG, Östliche Rheinbrücken straße 50, D-76187 Karlsruhe, Germany

▶ Issuing Authority / *Autorité de délivrance*
Slovak Legal Metrology (Banska Bystrica), Slovakia

R076/1992-SK1-2004.01
SDK 3, SDK 5, SDK 15 (Class III)
Granit s.r.o., Kamenna 4, 010 01 Zilina, Slovakia

INSTRUMENT CATEGORY
CATÉGORIE D'INSTRUMENT

Multi-dimensional measuring instruments
Instruments de mesure multidimensionnels

R 129 (2000)

▶ Issuing Authority / *Autorité de délivrance*
Netherlands Measurement Institute (NMi) Certin B.V., The Netherlands

R129/2000-NL1-2004.02
MS-1000 CE
Shinko Denshi Co., Ltd, 3-9-11 Yushima, Bunkyo-ku, 113-0034 Tokyo, Japan

R129/2000-NL1-2004.03
DM3500
Accu-Sort Europe GmbH, Ruhlsdorfer Strasse 95, D-14532 Stahnsdorf, Germany

▶ Issuing Authority / *Autorité de délivrance*
Norwegian Metrology Service, Norway

R129/2000-NO1-2004.01
Cargoscanner CS5200 Beam family: CS5200.1, CS5200.2 & CS5200.3 (Class A)
Cargoscan AS, Grenseveien 65/67, N-0663 Oslo, Norway

INSTRUMENT CATEGORY
CATÉGORIE D'INSTRUMENT

Automatic instruments for weighing road vehicles in motion
Instruments à fonctionnement automatique pour le pesage des véhicules routiers en mouvement

R 134 (2003)

R 134 (2003): In motion road weighing instruments

▶ Issuing Authority / *Autorité de délivrance*
National Weights and Measures Laboratory (NWML), United Kingdom

R134/2003-GB1-2004.01
Supaweigh 3000 and 4000 for accuracy class 1
Central Weighing Ltd, Unit 142, Hartlebury Trading Estate, Kidderminster DY10 4JB, Worcestershire, United Kingdom

OIML technical activities

- 2004 Review
- 2005 Forecasts

Activités techniques de l'OIML

- Rapport 2004
- Prévisions 2005

The information given on pages 42–49 is based on 2004 Annual Reports submitted by OIML secretariats. Work projects are listed for each **active** technical committee and sub-committee that produced and/or circulated a WD or CD during 2004, together with the state of progress at the end of 2004 and projections for 2005, where appropriate.

Les informations données en pages 42–49 sont basées sur les Rapports Annuels de 2004, fournis par les secrétariats OIML. Les thèmes de travail sont donnés pour chaque comité technique ou sous-comité **actif** qui a produit et/ou distribué un WD ou un CD pendant 2004, avec l'état d'avancement à la fin de 2004 et les prévisions pour 2005, si approprié.

KEY TO ABBREVIATIONS USED

WD	Working draft (Preparatory stage) *Projet de travail (Stade de préparation)*
CD	Committee draft (Committee stage) *Projet de comité (Stade de comité)*
DR/DD/DV	Draft Recommendation/Document/Vocabulary (Approval stage) *Projet de Recommandation/Document/Vocabulaire (Stade d'approbation)*
Vote	CIML postal vote on the draft *Vote postal CIML sur le projet*
Approval	Approval or submission to CIML/Conference for approval *Approbation ou présentation pour approbation par CIML/Conférence*
R/D/V/B	Recommendation/Document/Vocabulary/Basic Publication (Publication stage) For availability: see list of publications *Recommandation/Document/Vocabulaire/Publication de Base (Stade de publication)* *Pour disponibilité: voir liste des publications*
Postponed	Development of project suspended pending completion of relevant document by other international organization(s) *Développement du projet suspendu en attendant l'achèvement d'un document correspondant par une (d')autre(s) organisation(s) internationale(s)*

OIML TECHNICAL ACTIVITIES	2004	2005
TC 1 Terminology		
• Revision of VIM (Draft drawn up by WG2 of the JCGM)	OIML comments to Draft	New Draft
TC 2 Units of measurement		
• Amendment* D 2: Legal units of measurement *harmonized with resolution of 22nd CGPM (Paris, 1999)	Amendment Published	-
TC 3 Metrological control		
• Revision D 1: Law on metrology	Approval	D To be published
TC 3/SC 2 Metrological supervision		
• Revision D 9: Principles of metrological supervision	Approval	D To be published
• Revision D 16: Principles of assurance of metrological control	WD	1 CD
TC 3/SC 4 Application of statistical methods		
• Extension of the validity of verification of utility meters on the basis of sampling inspections	1 CD	2 CD
TC 3/SC 5 Conformity assessment		
• Mutual acceptance arrangement on OIML type evaluations (B 10-1)	B	-
• Expression of uncertainty in measurement in legal metrology applications	2 WD	3 WD/1 CD
• Checklists for Issuing Authorities and testing laboratories carrying out OIML type evaluations (B 10-2)	B	
• Interpretation document on application of ISO/IEC 17025 for assessment of laboratories performing type evaluations	WD	1 CD
• Interpretation document on application of ISO/IEC Guide 65 for assessment of legal metrology certification bodies	WD	1 CD
TC 4 Measurement standards and calibration and verification devices		
• Principles for the selection and expression of metrological characteristics of standards and devices used for calibration and verification	1 CD	2 CD
• Revision D 5: Principles for establishment of hierarchy systems for measuring instruments	1 CD	2 CD

OIML TECHNICAL ACTIVITIES	2004	2005
• Revision D 6 + D 8: Measurement standards. Requirements and documentation	Approval	D To be published
• Revision D 10: Guidelines for the determination of calibration intervals of measuring equipment (Revision developed by ILAC)	ILAC vote	Approval/D
TC 5/SC 1 Electronic instruments		
• Revision D 11: General requirements for electronic measuring instruments	Approval	D
TC 5/SC 2 Software		
• Software in legal metrology	2 WD	1 CD
TC 6 Prepackaged products *(Change of Secretariat in 2004)*		
• Revision R 87: Net content in packages	R	-
• Establishment of OIML IQ-mark for prepackaged products	-	New CD
TC 7 Measuring instruments for length and associated quantities		
• Revision R 35: Material measures for length for general use.		
Part 1: Metrological requirements	3 CD	DR
Part 2: Test methods	-	WD/1 CD
Part 3: Test Report Format	-	WD/1 CD
TC 7/SC 1 Measuring instruments for length		
• Revision R 30: End standards of length (gauge blocks)	-	CIML decision to withdraw R 30
• Revision R 66: Length measuring instruments	-	Proposal to withdraw R 66
TC 7/SC 3 Measurement of areas		
• Instruments for measuring the areas of leather (R 136)	Approval	R To be published
TC 7/SC 4 Measuring instruments for road traffic		
• Revision R 21: Taximeter systems	1 CD	2 CD/DR
• Revision R 55: Speedometers, mechanical odometers and chronotachographs for motor vehicles	-	New review

OIML TECHNICAL ACTIVITIES	2004	2005
TC 8 Measurement of quantities of fluids		
• Vessels for public use (Combined revision of: R 4: Volumetric flasks (one mark) in glass; R 29: Capacity serving measures; R 45: Casks and barrels; and R 96: Measuring container bottles)	1 CD	2 CD
TC 8/SC 1 Static volume measurement		
• Revision R 71: Fixed storage tanks	1 CD	2 CD
• Revision R 80: Road and rail tankers	1 CD	2 CD
• Revision R 85: Automatic level gauges for measuring the level of liquids in fixed storage tanks	1 CD	2 CD
• Installation for gauging road and rail tankers	Postponed	-
TC 8/SC 2 Static mass measurement		
• Annex to R 125: Test report format for evaluation of mass measuring systems for liquids in tanks	3 CD/DR	BIML proposal to revise R 125
TC 8/SC 3 Dynamic volume measurement (liquids other than water)		
• Revision R 86: Drum meters for alcohol and their supplementary devices (Combined with revision R 117 and R 105) (New R 117-1)	2 CD	DR
• Revision R 117: Measuring systems for liquids other than water (Combined with revision R 105 and R 86) (New R 117-1)	2 CD	DR
• Revision R 118: Testing procedures and test report format for pattern evaluation of fuel dispensers for motor vehicles (Based on combined revision of R 117, R 105 and R 86) (New R 117-2)	2 CD	3 CD
TC 8/SC 4 Dynamic mass measurement (liquids other than water)		
• Revision R 105: Direct mass flow measuring systems for quantities of liquids (Combined with revision R 117 and R 86) (New R 117-1)	2 CD	DR
TC 8/SC 5 Water meters		
• R 49-3: Water meters intended for the metering of cold potable water. Test Report Format	R	-
• Revision R 49-1: Water meters intended for the metering of cold potable water and hot water (Revision combined with that of R 72)	2 CD	3 CD/DR
• Revision R 49-2: Water meters intended for the metering of cold potable water and hot water (Revision combined with that of R 72)	2 CD	3 CD/DR

OIML TECHNICAL ACTIVITIES	2004	2005
TC 8/SC 6 Measurement of cryogenic liquids		
• Annex D to R 81: Test report format	-	R To be published
TC 8/SC 7 Gas metering		
• Metering systems for gaseous fuel	3 CD	DR/Vote
• Compressed gaseous fuel measuring systems for vehicles	4 CD	DR
TC 8/SC 8 Gas meters		
• Combined revision of R 6, R 31 and R 32	1 CD	2 CD
TC 9 Instruments for measuring mass and density		
• Revision R 74: Electronic weighing instruments	Postponed (Pending revised D 11)	New review
TC 9/SC 1 Nonautomatic weighing instruments		
• Revision R 76: Nonautomatic weighing instruments	1 CD	2 CD/DR
TC 9/SC 2 Automatic weighing instruments		
• Revision R 61: Automatic gravimetric filling instruments	R	-
• R 134-2: Automatic instruments for weighing road vehicles in motion. Total vehicle weighing. Part 2: Test Report Format	R	-
• Revision R 134-1: Automatic instruments for weighing road vehicles in motion. Part 1: Metrological and technical requirements. Tests	DR	Vote
• Revision R 134-2: Automatic instruments for weighing road vehicles in motion. Part 2: Test Report Format	-	1 CD
• Revision R 51: Automatic catchweighing instruments	4 CD (DR not approved)	(New) DR/Vote
• Revision R 106: Automatic rail-weighbridges	-	1 CD
• Revision R 107: Discontinuous totalizing automatic weighing instruments	-	1 CD
TC 9/SC 3 Weights		
• Revision R 52: Hexagonal weights, ordinary accuracy class from 100 g to 50 kg	R	-
• Revision R 111: Weights of classes E_1, E_2, F_1, F_2, M_1, M_{1-2}, M_2, M_{2-3} and M_3	Approval (CIML postal approval)	R To be published
• Revision R 33: Conventional value of the result of weighing in air (Revised R 33 adopted as Document D 28 and R 33 withdrawn)	Approval	D To be published

OIML TECHNICAL ACTIVITIES	2004	2005
TC 9/SC 4 Densities		
• Hierarchy scheme for density measuring instruments	2 CD	3 CD/DR
TC 10/SC 1 Pressure balances		
• Pressure transducers with uniform output signal	2 CD	3 CD
TC 10/SC 2 Pressure gauges with elastic sensing elements		
• Pressure transmitters with elastic sensing elements	1 CD	2 CD
• Combined revision of R 101 and R 109: Indicating and recording pressure gauges, vacuum gauges and pressure vacuum gauges with elastic sensing elements (ordinary and standard instruments)	1 CD	2 CD
TC 10/SC 5 Hardness standardized blocks and hardness testing machines		
• Revision R 39: Rockwell hardness testing machines	3 CD	DR/Vote
TC 11 Instruments for measuring temperature and associated quantities		
• R 75-3: Heat meters. Test report format	1 CD	2 CD/DR
TC 11/SC 3 Radiation thermometers		
• Revision R 48: Tungsten ribbon lamps for calibration of optical pyrometers	R	-
• Standard black-body radiator for the temperature range from – 50 °C to 3000 °C	WD	1 CD
• Procedures for control of main parameters and characteristics of thermographic instruments	1 CD	2 CD
TC 12 Instruments for measuring electrical quantities		
• Revision R 46: Electricity meters	1 CD	2 CD
TC 13 Measuring instruments for acoustics and vibration		
• Revision R 102: Sound calibrators	WD	1 CD

OIML TECHNICAL ACTIVITIES	2004	2005
TC 16/SC 1 Air pollution		
• Amendment to ISO 3930/OIML R 99	Amendment	Amendment To be published by ISO
• Revision OIML R 99/ISO 3930: Instruments for measuring vehicle exhaust emissions	Revision of R 99 proposed	WD/1 CD
• Continuous measuring instruments for NO_x emissions	-	WD
• Continuous measuring instruments for SO_2 emissions	WD	1 CD
• Continuous measuring instruments for CO emissions	-	WD
TC 16/SC 2 Water pollution		
• Revision R 100: Atomic absorption spectrometers for measuring metal pollutants in water	1 CD	2 CD
• Revision R 83: Gas chromatograph/mass spectrometer/data system for analysis of organic pollutants in water	1 CD	2 CD
• Revision R 116: Inductively coupled plasma atomic emission spectrometers for measurement of metal pollutants in water	1 CD	2 CD
TC 16/SC 3 Pesticides and other pollutant toxic substances		
• Revision R 82: Gas chromatographs for measuring pollution from pesticides and other toxic substances	2 CD	3 CD/DR
TC 17/SC 1 Humidity		
• Revision R 59: Moisture meters for cereal grains and oilseeds	2 CD	3 CD/DR
TC 17/SC 2 Saccharimetry		
• Automatic refractometers. Methods and means of verification	WD	1 CD
TC 17/SC 3 pH-metry		
• Revision R 54: pH scale for aqueous solutions	1 CD	2 CD
TC 17/SC 4 Conductometry		
• Revision R 56: Standard solutions reproducing the conductivity of electrolytes	2 CD	3 CD/DR
• Revision R 68: Calibration method for conductivity cells	WD	1 CD
• Methods of measurement of the conductivity of electrolytic solutions (Project combined with the revision of R 68)	WD	1 CD

OIML TECHNICAL ACTIVITIES	2004	2005
TC 17/SC 5 Viscometry		
• Reference standard liquids (newtonian viscosity standard for the calibration and verification of viscometers)	1 CD	2 CD
TC 17/SC 7 Breath testers		
• Revision R 126: Evidential breath analyzers	1 CD	2 CD
TC 17/SC 8 Instruments for quality analysis of agricultural products **(New SC established in 2002)**		
• Measuring instruments used for protein determination in grains	WD	2 WD/1 CD
TC 18 Medical instruments		
• Ophtalmic instruments: Impression and applanation tonometers	WD	1 CD
TC 18/SC 2 Medical thermometers		
• New project: Clinical infrared ear thermometers	-	WD
TC 18/SC 4 Bio-electrical measurements		
• Revision R 90: Electrocardiographs (including the Test report format)	1 CD	2 CD/DR
• Digital electrocardiographs and electrocardioscopes	1 CD	2 CD
• Revision R 89: Electroencephalographs	WD	1 CD
TC 18/SC 5 Measuring instruments for medical laboratories		
• Spectrophotometers for medical laboratories (R 135)	R	-

TC/SC NEWS

OIML TC 8/SC 5 Meeting

Paris (Saint Denis), France

5 October 2004

RICHARD PATON
NEL, United Kingdom

OIML TC 8/SC 5 met on 5 October 2004 in Paris (Saint Denis) hosted by AFNOR and with the support of the BIML. There were 23 delegates representing eleven P-Members and the BIML.

The meeting learnt with satisfaction that all three parts of R 49 *Water meters* would be published by the end of 2004. It also recognized the hard work put in by Mr. Terry Lancaster from Australia, and his working group, which had succeeded in preparing draft revisions of R 49 Parts 1 and 2 to include hot water meters and combination meters for discussion at the meeting.

The meeting discussed the status of R 49 in relation to the MID. It was agreed that R 49 would be proposed to the EU Commission as a normative document. The following resolution was agreed:

OIML TC 8/SC 5 endorses the R 49 series of Recommendations as being recommended as normative documents under the MID subject to final confirmation that no incompatibility exists.

It was probable that the equivalent CEN standard would also be proposed to the commission as a harmonized standard. This stressed the need for OIML TC 8/SC 5 to work closely with CEN (and ISO). It was agreed that the PTB (Germany) would examine R 49 and inform SC 5 if there was any incompatibility between R 49 and the essential requirements of the MID. During the discussions on the revised documents it was noted that the MID suggested that some environmental and mechanical influence factor testing, not normally required under R 49, ISO or CEN, may be needed to meet the requirements of the MID. As the extent of such testing will need detailed examination SC 5 decided to keep monitoring this and to allow modifications to R 49 to take place once the position is made clearer by the relevant authorities in the EU Commission or WELMEC.

The draft revisions of R 49 Parts 1 and 2 to include hot water meters and combination meters were reviewed and all outstanding comments resolved to a level that will allow the documents to go to ballot during 2005.

The work of OIML TC 3/SC4 *Application of statistical methods for measuring instruments* on a document *Extension of the validity of verification of utility meters on the basis of sampling inspections* was brought to the attention of the group by the BIML. It was considered unacceptable that this group had not established liaison with TC 8/SC 5 as the provisions for water meters were vital to the utility metering group. BIML Assistant Director Attila Szilvássy assured the Working Group that the 2 CD of this document would be sent for comments to all four OIML technical bodies responsible for the Recommendations on utility meters, including TC 8/SC 5.

Future work for TC 8/SC 5 would include the review of the following OIML International Documents:

- D 4 *Installation and storage conditions for cold water meters*; and
- D 7 *Evaluation of flow standards and facilities used for testing water meters*.

The group agreed to meet again in October 2005. Provisionally 4 October was identified, and this was later agreed with the ISO and CEN committees. ■

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TC/SC NEWS

OIML TC 3/SC 4 Working Group Meeting

Braunschweig, Germany

15–16 September 2004

HARTMUT APEL
PTB, Germany

Introduction

The TC 3/SC 4 Working Group on the *Extension of the period of validity of the verification of utility meters on the basis of sampling inspections* met on 15 and 16 September 2004 at the Physikalisch-Technische Bundesanstalt (PTB) in Braunschweig, Germany. The aim of this first international meeting was to discuss the 1st Committee Draft (1 CD), which had been sent out to P- and O-members in April 2004. 22 countries submitted a total of over 280 comments and although some members agreed in general terms to the text of the 1 CD version as presented, quite a few remarks were not only controversial but even tackled fundamental questions of legal metrology in the context of the scope of statistical surveillance and the possible level of consumer protection.

Attendance

The meeting was attended by 16 participants from six OIML Member States and also by a representative of a German Verification Directorate specializing in statistical control procedures, and BIML Assistant Director Mr. A. Szilvássy. The majority of the delegates represented National Metrology Institutes, however, four members contributed to the meeting with their knowledge and experience from the sectors of industry (measuring instrument production), the energy distribution network and the public energy supply to private households.

Due to this variety of different interests involved and the partially contradictory comments received, the Chairman and Convenor of TC 3/SC 4, Mr. H. Apel (PTB), led discussions with the aim of reaching a consensus in such a way that purely technical issues were discussed separately from topics dealing with general problems in legal metrology and the scope of statistical surveillance.

Discussion items

Sampling plan

The model chosen for carrying out the sampling plan for inspecting utility meters as indicated in Annex 2 of the 1 CD is indexed by limiting quality values (LQ) equal to 8 % under ISO 2859-2. A comment was received from Mr. F. Palcat (Canada) stating that this implies "lots that have 8 % non-conforming items in them are considered acceptable 10 % of the time. Another way of viewing this criterion is in terms of a statistical tolerance interval in which it translates to 90 % confidence that 92 % of the meters in the lot are conforming." Accepting this criterion would lead to the result that the whole population of the utility meters installed in the net does comply with the metrological requirements as established by the legal regulations.

In particular, those countries with higher national standards of consumer protection consider that the level of confidence to be applied as specified by the sampling plan is not high enough, and therefore not suitable to satisfy their national requirements for a (complete) re-verification procedure. In a few countries only very

small LQ values (e.g. 1 % or less) are considered to be acceptable for legal metrology purposes. On the other hand most OIML Member States do not regulate their utility meters or do not apply any statistical control whatsoever. Thus, a compromise will have to be achieved which could be accepted by as many Member States as possible. The TC 3/SC 4 Working Group, however, supported the sampling plan as set out in the 1 CD; it reflects more than 20 years of satisfactory experience within the German re-verification system. Whether the suggested LQ values provide an appropriate control of the population of utility meters in the net is in the end a political question on the desired level of consumer protection and will have to be answered by the legal metrology authorities. And this will be stated more clearly in the Foreword to the 2 CD.

Durability

With the widely accepted European Measuring Instruments Directive (MID) stretching far beyond its designated regional boundaries, a particular metrological problem will emerge.

Whereas in the (traditional) preventive surveillance system of measuring instruments in use a certain minimum durability of the devices was required by the regulations and as far as possible safeguarded by endurance tests and certified by type approvals, this procedure will not necessarily prevail under the MID conditions. The European regulations generally delegate the responsibility for the instrument's performance to the manufacturers or importers of the devices who will primarily themselves determine the technical characteristics of the measuring instruments - which are not necessarily in accordance with possible different national legal requirements, as even within the single European market these are left up to the decision of each EU member country.

This situation can lead to different levels of quality as defined hitherto by a fixed period of utility within maximum permissible errors. Thus, it will be difficult to pre-establish a fixed period of validity for re-verification intervals. Considering these, the 1 CD text proposes an extension of the period of validity of verification of all meters forming part of a homogenous lot under inspection to 50 % of the period valid for the initial verification. This latter period has to be fixed by the national verification authority according to the level of performance (i.e. durability tests) of the utility meters prevailing in the country. It seems from the comments received, that this approach still has to be discussed again in depth.

Some participants feared on the grounds of several years of practice that a single extension of 50 % of the initial verification period could create openings for abuse unless very tight auditing controls are put into place.

The difference between rejection of the lot or a possible prolongation might depend on a single utility meter under statistical inspection and hence generate an interest to discover ways to exploit some of the compromises which are inherent in the text, i.e. within the policy on how to select spare meters.

Suggestions were presented to the Working Group destined to provide more flexibility for decisions on the extension of the re-verification period - either by defining different specification limits for different extensions or different proportions of marginally conforming and non-conforming for a single specification limit. Further suggestions were put forward, for example to also consider the past performance of the lot in question or utility meters of similar lots from the same manufacturer in order to take advantage of any trend information that may be revealed over time.

However substantiated and technically proven all these suggestions might be, altogether they will lead to such a flexibility and possible different interpretation by member countries that worldwide harmonization of legal metrology requirements might be jeopardized.

Compilation of comments received

The Secretariat distributed to its members all comments on the 1 CD which had been received on time and even after the deadline had closed. However, a small number of substantial comments were received during and after the Working Group session - thus too late to be dealt with in the course of the meeting. They will be made available together with the 2 CD.

Summary

The meeting of the TC 3/SC 4 WG can be regarded as having been very successful. The moderate number of attendees allowed lively discussions and constructive contributions. The participants learnt from each other's viewpoints and generally speaking, consensus was reached on most of the technical issues to be discussed. The outcome of these discussions has already been introduced into the 2 CD, which will also be given a new title, better suited to its purposes: *Surveillance of utility meters in service on the basis of sampling inspections*. This title encourages legal metrology authorities to interpret the statistical results of the surveillance in closer conformity with their respective national legislation.

Some points on the agenda, however, and related to general policy topics such as those mentioned above, will still have to be discussed further. Some technical issues on which there was a lack of clear consensus or which could not be sufficiently clarified during the meeting were referred back to delegates who made a request for textual modifications. At the request of the Convenor they accepted assignments to draft concrete proposals for revising the text in particular sections of the document. Participants expressed their satisfaction with the accomplishment of the meeting in working towards the new Committee Draft (2 CD).

The OIML TC 3/SC 4 Secretariat and in particular its Convenor would like to thank the CIML Members, the meeting participants, the technical experts of the National Metrology Institutes and delegates of the private sector for their many useful comments either written or presented orally.

Following the meeting, visits were organized to some PTB laboratories in Braunschweig dealing with the testing and certification of utility meters.

Next steps

The drafting of the new 2 CD is in progress and is expected to be ready for distribution to all P- and O-members during the early months of 2005. Some representatives of OIML countries who are not yet members of the TC 3/SC 4 WG expressed their keen interest in becoming actively involved in the drafting of the new document. They are herewith invited again to communicate this desire to the BIML and to the author of this report. With a view to discussing the basic issue questions mentioned above it is expected to hold a further meeting for vote and comments on the revision of the 2 CD as soon as possible.

Since four OIML technical bodies are responsible for Recommendations on utility meters (TC 8/SC 5 for water meters, TC 8/SC 8 for gas meters, TC 11 for heat meters and TC 12 for electrical energy meters) the new 2 CD will also be sent to the Secretariats of these Committees for their comments.

The date and venue of the next meeting are yet to be defined and will be announced to all members of the Working Group and will be published on the OIML web site, together with the new draft under consideration. ■

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TC/SC NEWS

OIML TC 12 (Working Group) Meeting

Borås, Sweden

24–27 January 2005

STEFAN SVENSSON
TC 12 WG Secretary

OIML R 46: Electricity meters

OIML TC 12 and its Working Group for the revision of R 46 *Electricity meters* held a meeting in Borås (Sweden) on 24–27 January 2005. The first Committee Draft (1 CD) was issued in the Summer of 2004 and received a very large response with almost 800 comments from 18 countries. The number of attendees also confirmed the high level of interest in the work of TC 12: 23 delegates from 14 countries were present.

The meeting began with a presentation of the state of the revision of the Recommendation and some of the major changes that the Secretariat was proposing to the draft based on the 797 comments received. One of these proposals was that the text describing the rated operating conditions be transformed into a more instructive and clear table.

Another revised part was the text describing the maximum permissible error, an item which is split into:

- "Base maximum permissible error" which is valid at reference conditions, and
- The requirements on the response to influence factors, which has been set as requirements on the variation from the base maximum permissible error (in the same manner as the IEC product standards for electricity meters).

During the meeting the requirements on the variation of error due to influence factors was further discussed and the term was changed from "maximum permissible additional error" to "maximum permissible error shift".

A number of complementary requirements for marking plate, testability, suitability and sealing and software protection were discussed and added.

The scope was also discussed and it was decided to concentrate efforts on having a standard for active energy meters ready as soon as possible. This means that all references and requirements for reactive energy meters and apparent energy meters were removed for the time being. It was also decided to proceed with one document for all active meters, covering all accuracy classes, all technologies and all connections modes. This will mean that all or at least the majority of requirements are common for all meters, while at the same time some tests are unnecessary or are not valid for some technologies or connection modes.

One issue that was discussed in depth was certain connection modes which in fact require the electricity delivery system and/or the loads to behave in a certain way in order to perform correct measurements. In a number of countries some of these are quite common but in others they are not to be allowed. It was decided to discuss this in an informative Annex and leave the decision to legislators.

Some of the tests were also thoroughly discussed, e.g. the impulse voltage test and the temperature test. In the case of the temperature test, major changes were made to facilitate faster and more simple tests using testpoints such that a meter with a large temperature range can always be approved for a narrower temperature range without additional tests.

During the meeting the list of comments was reviewed; this took almost four days, but the Secretariat was happy with the good spirit in which the meeting was held. In some cases time did not allow all the changes to the text to be finalized during the meeting and so the Secretariat and certain delegates were charged with adding these texts later. Also, most of the necessary changes and completion of the terminology section was left to the Secretariat.

Once the text on terminology and other completions are made, the new Committee Draft will be issued for comments and a further meeting will be held some time during the Autumn of 2005. ■

CIML Presidential Council Meeting

Paris, France

8–9 March 2005

The Presidential Council met in Paris on 8 and 9 March 2005 and welcomed two new members: Mr. Grahame Harvey (Australia) and Mr. Bruno Vaucher (Switzerland).

The meeting addressed several key issues:

- Strategy and Action Plan
- Financial issues
- Implementation of the MAA
- Liaisons and RLMOs.

In addition, a detailed review of the progress of the ongoing TC/SC projects was conducted and actions to be taken were discussed.

The OIML is pleased to welcome the following new

CIML Members

- **Republic of Kenya:**
  Mr. Francis M. Kamau
- **New Zealand:**
  Mr. Tony Lee

Corresponding Member

- **Kyrgyzstan**

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OIML Meetings

21–22 April 2005 - Vienna

TC 8/SC 1 *Static volume measurement*
Revisions of R 71, R 80 and R 85

9–10 May 2005 - Paris

TC 17/SC 7 *Breath testers*
Revision of R 126

2–3 June 2005 - Delft, The Netherlands

TC 8/SC 8 *Gas meters*
Combined revision of R 6, R 31 and R 32

18–20 June 2005 - Lyon

40th CIML Meeting

June 2005 - Berlin (Date & venue to be confirmed)

TC 17/SC 8 *Instruments for quality analysis of agricultural products*
Draft of "Measuring instruments used for protein determination in grains"

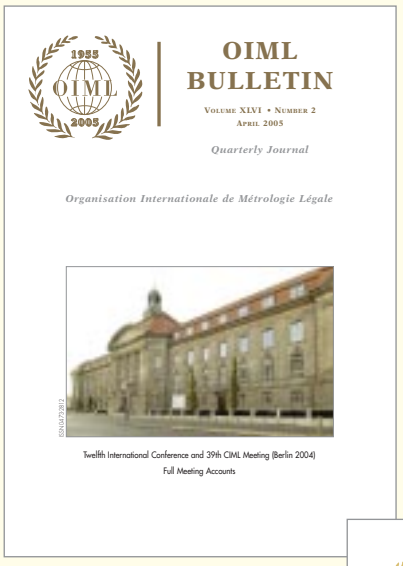
4 October 2005 (Date & venue to be confirmed)

TC 8/SC 5 *Water meters*
Combined revision of R 49 and R 72 and review of Publications

Committee Drafts

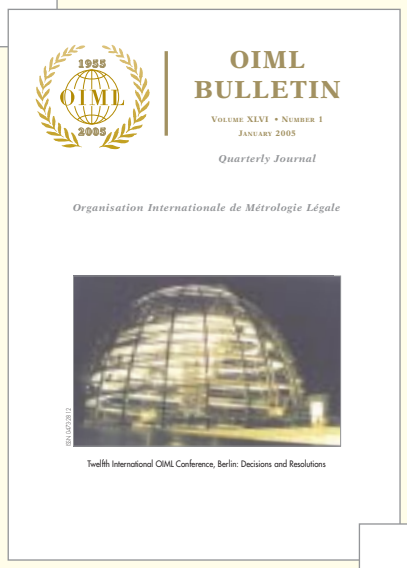
Received by the BIML, 2004.11 – 2005.01

Revision R 35: Material measures of length	**E**	**3 CD**	**TC 7**	**UK**
Revision R 76-1: Nonautomatic weighing instruments. Part 1: Metrological and technical requirements - Tests	**E**	**1 CD**	**TC 9/SC 1**	**DE + FR**
Combined revision of R 49 & R 72: Water meters intended for metering cold potable water and hot water - Parts 1 & 2	**E**	**2 CD**	**TC 8/SC 5**	**UK**
Revision R 51: Automatic catchweighing instruments (Parts 1 & 2)	**E**	**4 CD**	**TC 9/SC 2**	**UK**

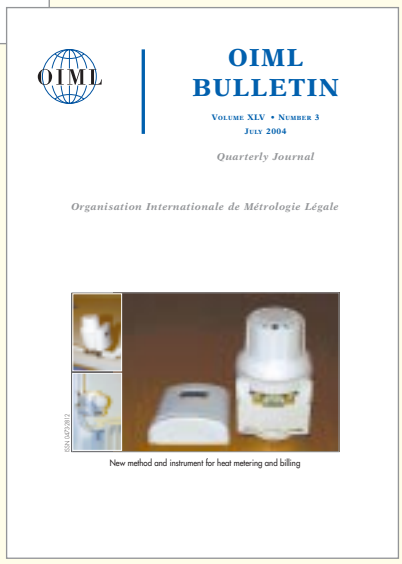


Call for papers

OIML Members
RLMOs
Liaison Institutions
Manufacturers' Associations
Consumers' & Users' Groups, etc.



- Technical articles on legal metrology related subjects
- Features on metrology in your country
- Accounts of Seminars, Meetings, Conferences
- Announcements of forthcoming events, etc.



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- the paper originals of any relevant photos, illustrations, diagrams, etc.;
- a photograph of the author(s) suitable for publication together with full contact details: name, position, institution, address, telephone, fax and e-mail.

Note: Electronic images should be minimum 150 dpi, preferably 300 dpi.

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