



Chris Pulham - Editor, BIML

Y2K + 1 ... Changes lie ahead

And so we arrive at the end of the year 2000, another full year for the OIML and its Members. As far as the BIML is concerned much has been achieved, as is witnessed by the *Report on BIML Activities* (see page 88). Nearly 1 000 printed pages were produced, and the vast majority of what we set out to publish last year has been printed - despite the various hurdles that had to be overcome along the way.

The year culminated in the highly successful London Meetings, full accounts of which are published in English and in French in this edition. We decided to devote as much space as possible to this key event and go into rather more detail than perhaps in previous years so that Members of the Organization and all those involved with it are fully aware not only of the progress that is being made, but also of the many changes that are taking place.

And changes there are. As Knut Birkeland so wisely said at Seoul, "Don't be afraid of change, be scared to death of *not* changing".

Firstly, the Presidential Council has been reconstituted; the updated membership of the Council, whose role it is to advise the Organization's President on key decisions that have to be made, is printed on the inside front cover.

Secondly, the BIML is pleased to offer a very warm welcome to Jean-François Magana, BIML Appointed Director, who joins the Bureau on January 2. For a number of months Bernard Athané and Jean-François Magana will work side by side establishing strategy, managing the hand-over and ensuring that the elements of the *1999-2002 Action Plan* are successfully transformed into day-to-day actions. Following this period, Bernard Athané will remain with the BIML for a further year or so as Consultant; his work during this period will hinge around this *Action Plan*, a document

which is concise in format but gigantic in its applicational scope. His experience and help in securing its implementation will most surely be appreciated.

The third change has already begun; in fact one could call it more of an evolution or a tendency, and a necessary one at that. Regionalization of legal metrology will be increasingly relevant to the activities of the Organization and its Members. Most OIML Members already belong to one or more regional organizations, which gives them an even broader outlook on legal metrology when considered in conjunction with the OIML's own "international" stance; this option is open to all since membership of the OIML is not a prerequisite for belonging to an RLMO, though one may lead to the other. As if further proof were needed, WELMEC (already ten years old), APLMF (six years old) and SADCMEI (already three years old) are going from strength to strength; SIM and COOMET are developing their legal metrology programs and brand new RLMOs are seeing the day: the IOLMF, and more recently the Euro-Mediterranean Forum (ELMLF), which is already in the (positive) situation of having too many items on its London meeting agenda to discuss in just one half-day session! Proof that this is the right direction to be taking.

Lastly, and this too is an ongoing change, OIML Membership is changing: we regularly welcome new Member States and Corresponding Members, and within these countries the appointed national representatives frequently change too, leading to a wider diversity of ideas and fresh strategic analysis of legal metrology situations.

The BIML and its Staff take this opportunity to wish all OIML Members and Readers of the Bulletin a happy and prosperous New Year, and look forward to another fruitful year of *Change*. ■

Calibration and verification: Two procedures having comparable objectives and results

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Abstract

The most important actions required to ensure the correct indication of measuring instruments are:

- *in industrial metrology, regular calibration of the measuring instruments according to the implemented quality systems; and*
- *in legal metrology, periodic verification or conformity testing of the instruments according to legal regulations.*

Both actions are strongly inter-related and are predominantly based on the same measuring procedures. Historically, however, these actions have been established with separate rules, metrological infrastructures and activities.

This paper, therefore, addresses the differences, common bases and the relationship between calibration and verification. In particular, the relationships between legally prescribed error limits and uncertainty and the uncertainty contribution of verified measuring instruments are discussed.

Introduction

The correctness of measurements and measuring instruments is one of the most important prerequisites for the assurance of the quality and quantity of products and services, and the accuracy of the instruments must be consistent with their intended use.

In compliance with the ISO 9000 standard series and the ISO/IEC 17025 standard, traceability of measuring and test equipment to the realization of SI units must be guaranteed by an unbroken chain of comparison measurements to allow the necessary statements about their metrological quality. The most important actions to ensure the correct indication of measuring instruments are:

- **in industrial metrology:** regular calibration of the measuring instruments according to the implemented quality systems; and
- **in legal metrology:** periodic verification or conformity testing of the measuring instruments according to legal regulations.

Both actions are closely related and are mostly based on the same measuring procedures.

Historically, however, these actions have been established with separate rules and metrological infrastructures and activities. Verification has become a principal part of legal metrology systems and calibration is widely used in quality assurance and industrial metrology - accreditation bodies prefer calibration as a primary action to provide proof of the correctness of the indication of measuring instruments.

As a result, today it must be acknowledged that there is a lack of reciprocal understanding of the identical metrological nature of these activities between the different communities of users. In particular, their specific concerns are insufficiently understood, and there is widespread incomprehension concerning the relationship of error limits and uncertainty of measurement. For instance, the use of legally verified instruments within the framework of quality management sometimes presents problems since only the MPEs for the instruments are provided, without the measurement uncertainties being explicitly given.

1 Calibration

Usually, calibration is carried out in order to provide a quantitative statement about the correctness of the measurement results of a measuring instrument. For economic reasons, laboratories strive for broad recognition of their calibration and measurement results. Confidence in results, therefore, is achieved through both establishing the traceability and providing the uncertainty of the measurement results.

According to the VIM [1], calibration may be defined as a “set of operations that establish, under specified conditions, the relationship between values of quantities indicated by a measuring instrument or measuring system, or values represented by a material measure or a

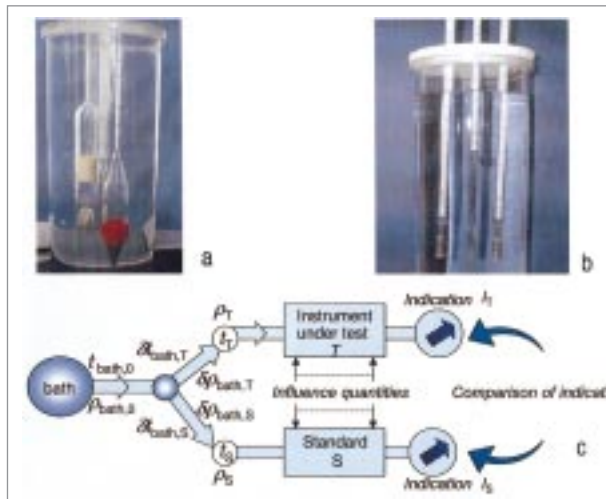


Fig. 1 Examples of calibration by comparison method.

- a: hydrometer calibration in a liquid bath
 - b: thermometer calibration in a liquid bath (without thermostating equipment)
 - c: block diagram of the calibration procedures
- $t_{\text{bath},0}$: liquid temperature
 $\rho_{\text{bath},0}$: liquid density
 δt_{bath} : temperature difference in liquid
 $\delta \rho_{\text{bath}}$: density difference in liquid
 t_T, t_S : determining temperatures for the instrument tested and the standard
 ρ_T, ρ_S : determining densities for the instrument tested and the standard
 I_T, I_S : indications

reference material, and the corresponding values realized by standards". This means that the calibration shows how the nominal value of a material or the indication of an instrument relates to the conventional true values of the measurand. The conventional true value is realized by a traceable reference standard [1]. According to this definition, calibration does not necessarily contain any actions of adjustment or maintenance of the instrument to be calibrated.

Figures 1 and 2 show examples of calibration by means of the comparison method, i.e. by comparison of the indication of the instrument under test, and the corresponding indication of appropriate standards respectively.

Calibration certificates for measuring instruments give the measurement deviation, or correction, and the uncertainty of measurement. Only this combination characterizes the quality of the relation of the measurement result to the appropriate (SI) unit. Figure 3 illustrates the meaning of a (single) calibration result as it is typically presented.

The uncertainty of measurement is a parameter, associated with the result of measurement, that characterizes the (possible) dispersion of the values that could

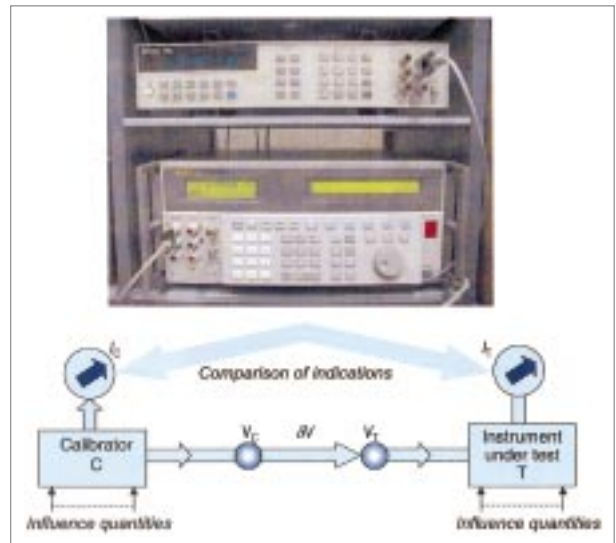


Fig. 2 Example of voltage calibration of a multimeter by comparison of the voltage provided by a calibrator, and the corresponding indication of the multimeter.

Photo of the calibration setup and block diagram of the calibration procedure.

- V_C : voltage provided by the calibrator
- V_T : input voltage of the instrument tested
- δV : unknown voltage deviation due to imperfections in the measuring procedure
- I_C, I_T : indications

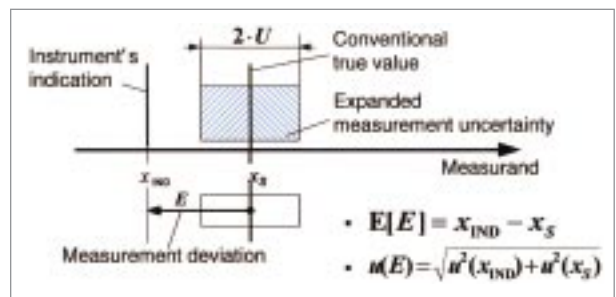


Fig. 3 Meaning of a (single) calibration result as typically presented.

- E : measurement deviation
- $E[E]$: best estimate of the measurement deviation
- x_{IND} : indication of the instrument tested
- x_S : conventional true value
- $u(E)$: standard uncertainty that may be associated with the measurement deviation
- $u(x_{\text{IND}})$: standard uncertainty that may be associated with the value x_{IND}
- $u(x_S)$: standard uncertainty that may be associated with the value x_S

reasonably be attributed to the measurand [1]. In other words, uncertainty is a measure of the incompleteness of knowledge about the measurand. It is determined according to unified rules [2, 3] and is usually stated for a coverage probability of 95 %. Its value, together with

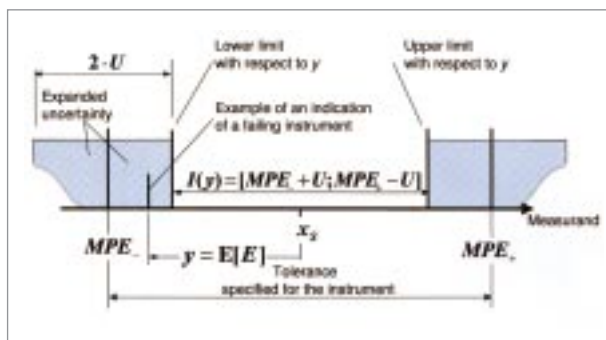


Fig. 4 Relationship between maximum permissible errors and measurement uncertainty upon conformity evaluation in calibration [4] and testing of working standards.

- x_s : conventional true value
- y : best estimate of the measurement deviation, E
- MPE_- : lower maximum permissible error
- MPE_+ : upper maximum permissible error
- $I(y)$: acceptance interval with respect to the measurement deviation, y

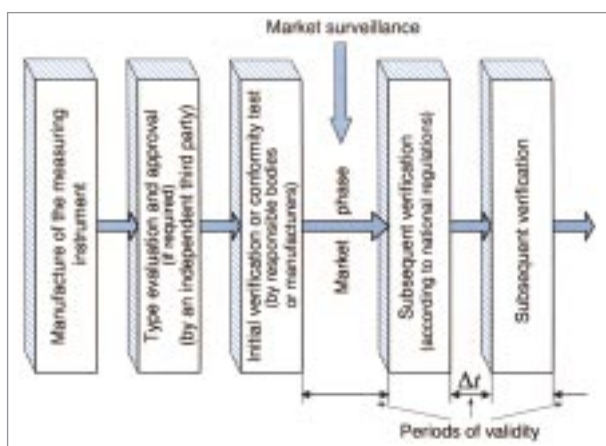


Fig. 5 Typical test sequence over the lifetime of a measuring instrument that is subjected to legal regulations

the determined measurement error; is valid at the moment of calibration and under the relevant calibration conditions.

If a recently calibrated measuring instrument is used under the same conditions as during the calibration, the measurand Y may be reduced to the following parts:

$$Y = X_s + \delta X \quad (1)$$

where X_s represents the corrected indication of the calibrated instrument. δX may be the combination of all other (unknown) measurement deviations due to imperfections in the measuring procedure. Thus, it follows that the associated standard uncertainty of the measurement carried out by means of a calibrated instrument is:

$$u^2(y) = u^2(x_s) + u^2(\delta x) \quad (2)$$

This means that the calibration uncertainty $u(x_s)$ of a newly calibrated instrument enters directly into the total uncertainty of the measurement $u(y)$ as an (independent) contribution.

When the calibrated instrument is used in a different environment, the measurement uncertainty determined by the calibration laboratory will often be exceeded if the instrument is susceptible to environmental influences. A problem can also arise if the instrument's performance is degraded after prolonged use.

Furthermore, the stated uncertainty of measurement can be considered as being related to national standards only for certificates issued by laboratories that have demonstrated their competence beyond reasonable doubt. Such laboratories are normally well recognized by their customers. In other cases, for example, when working standard calibration certificates are used, reference to the national standards cannot be taken for granted and the user must be satisfied as to the proper traceability - or take other actions.

Sometimes, calibration certificates give a conformity statement, i.e. a statement of compliance with given specifications or requirements. In these cases, according to the EA document EA-3/02 [4], the obtained measurement result, extended by the associated uncertainty, must not exceed the specified tolerance or limit. Figure 4 illustrates this approach.

2 Verification and error limits in legal metrology

2.1 Verification

Verification of the conformity of measuring instruments is a method of testing covered by legal regulations. It is a part of a process of legal metrological control that in many economies requires type evaluation and approval

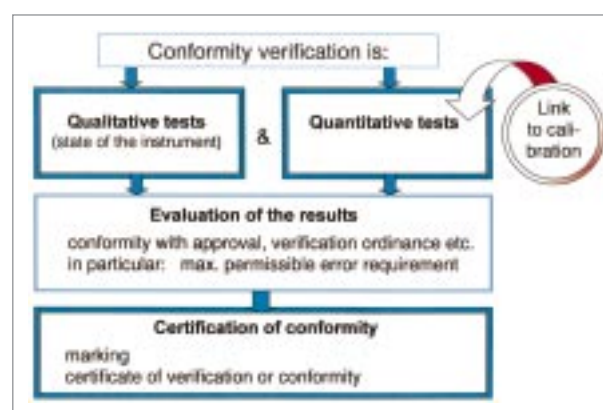


Fig. 6 Elements of verification [5]

Table 1 Comparison of the primary goals and of the actions in calibration and verification

Calibration	Verification
■ Determination of the relationship between the measured values and the corresponding values realized by standards: - under defined conditions - at a specified date and time ■ Statement of both the deviation, or correction, and the uncertainty of measurement ■ Issuing of a calibration certificate	■ Examination of conformity of measuring instruments with legal requirements - qualitative tests - maximum permissible errors (mpe's) ■ Marking of the instrument tested ("passport function") ■ Issuing of a verification certificate as required or requested

of some models of instruments subject to legal regulations as a first step. Figure 5 shows the typical test sequence over the lifetime of a measuring instrument subject to legal regulations.

Type evaluation is usually more stringent than verification. It includes testing the instrument's performance when subjected to environmental influence factors in order to determine whether the specified error limits for the instrument at rated or foreseeable *in situ* operating conditions are met [5].

The basic elements of verification are [5]:

- qualitative tests, e.g. for the state of the instrument (which is essentially an inspection); and
- quantitative metrological tests.

The aim of the quantitative metrological tests is to determine the errors with the associated uncertainty of measurement (cf. 1) at prescribed testing values. These tests are carried out according to well-established and harmonized testing procedures [5].

Following the definition of calibration, as given in 1, the quantitative metrological tests may be considered a calibration. This means that an instrument's assurance of metrological conformity involves both verification and calibration, and the measuring equipment necessary to determine conformity during verification might be the same as that used for calibration, e.g. as shown in Figs. 1 and 2.

The results of the verification tests are then evaluated to ensure that the legal requirements are being met (see 2.2). Provided that this assessment of conformity leads to the instrument being accepted, a verification mark should be fixed to it and a verification certificate may be issued. Figure 6 illustrates these elements of verification.

According to the above definitions and explanations, Table 1 compares the primary goals and the actions of calibration and verification.

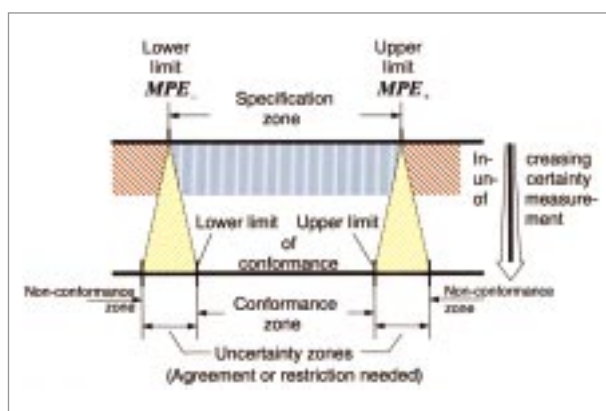


Fig. 7 Specification and measurement uncertainty (according to ISO 14253-1 [6]).

MPE_- : lower maximum permissible error
 MPE_+ : upper maximum permissible error

2.2 Maximum permissible errors on verification and in service

In many economies with developed legal metrology systems, two kinds of error limits have been defined:

- the maximum permissible errors (MPEs) on verification; and
- the maximum permissible errors (MPEs) in service.

The latter is normally twice the first. MPEs on verification equal "MPEs on testing" that are valid at the time of verification. For the measuring instrument user, the MPEs in service are the error limits that are legally relevant.

This approach is explained and illustrated in detail in 4.3 of [5].

The values of the error limits are related to the intended use of the respective kind of instrument and determined by the state of the art of measurement technology.

3 Relationship between legally prescribed error limits and uncertainty

3.1 General

If a measuring instrument is tested for conformity with a given specification or with a requirement with regard to the error limits, this test consists of comparisons of measurements with those resulting from use of a physical standard or calibrated standard instrument.

The uncertainty of measurement inherent in the measurement process then inevitably leads to an un-

certainty of decision of conformity. Figure 7 (taken from the standard ISO 14253-1) [6] makes this problem quite clear: between the conformance zones and the upper and lower non-conformance zones there is in each case an uncertainty zone whose width corresponds approximately to twice the expanded uncertainty of measurement at the 95 % probability level. The uncertainty comprises contributions of the standard(s) used and the instrument under test as well as contributions that are related to the measuring procedure and to the incomplete knowledge about the existing environmental conditions (cf. 3).

Because of the uncertainty of measurement, measurement results affected by measurement deviations lying within the range of the uncertainty zones cannot definitely be regarded as being, or not being, in conformity with the given tolerance requirement.

3.2 Relationship upon verification

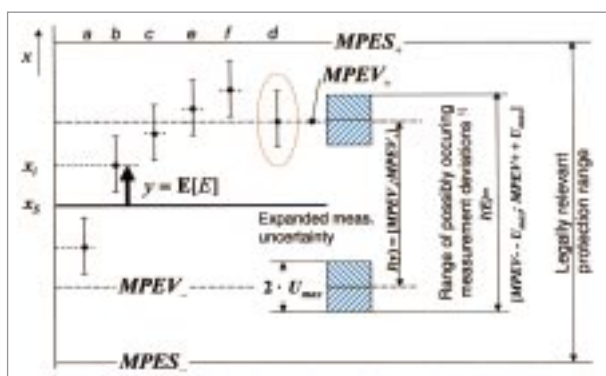


Fig. 8 Illustration of the criteria for the assessment of compliance in legal metrology and of the bandwidth of measurement deviations $I(E)$ of verified instruments that could be expected when taking the uncertainty $U_{\max}$ into account.

- $MPEV$: absolute value of the maximum permissible error on verification
- $MPEV_-$: lower maximum permissible error on verification
- $MPEV_+$: upper maximum permissible error on verification
- $MPES_-$: lower maximum permissible error in service
- $MPES_+$: upper maximum permissible error in service
- $U_{\max}$: upper permissible limit of the expanded uncertainty of measurement according to equation (3)
- y : best estimate of measurement deviation, E
- $I(y)$: acceptance interval with respect to the measurement deviation, y

¹⁾ Due to unavoidable measurement uncertainties from the quantitative tests (cf. Fig. 6), the legally prescribed error limits $MPEV_-$ and $MPEV_+$ can be exceeded by the value of $U_{\max}$ without being recognized. Therefore, an interval $I(E)$ may be defined that characterizes the possible bandwidth of measurement errors when using verified instruments.

In practice, measuring instruments are considered to comply with the legal requirements for error limits if:

- the absolute value of the measurement deviations is smaller than or equal to the absolute value of the legally prescribed MPEs on verification when the test is performed under prescribed test conditions; and
- the expanded uncertainty of measurement of the previous quantitative metrological test (cf. 2.1), for a coverage probability of 95 %, is small compared with the legally prescribed error limits.

The expanded measurement uncertainty at the 95 % probability level, $U_{0.95}$, is usually considered to be small enough if the following relationship is fulfilled:

$$U_{0.95} \leq \frac{1}{3} \cdot MPEV \quad (3)$$

where $MPEV$ is the absolute value of the MPE on verification. $U_{\max}$ is, therefore, the maximum acceptable value of the expanded measurement uncertainty of the quantitative test.

The criteria for the assessment of compliance are illustrated in Fig. 8 (cf.[5]): cases a, b, c and d comply with the requirements of the verification regulations, whereas cases e and f will be rejected. Values in all cases, including their uncertainty of measurement, lie within the tolerances fixed by the MPEs in service.

Consequently, the MPE on verification of a newly verified measuring instrument will in the worst case be exceeded by 33 %. However, as the legally prescribed

MPEs in service are valid for the instrument users, there is, therefore, negligible risk in the sense that no measured value under verification - even if the measurement uncertainty is taken into account - will be outside this tolerance band.

So far, the MPEs on verification may be seen as supporting the conclusion that an instrument would be in conformity with required MPEs in service (MPES) taking into consideration the above-mentioned influences.

The advantages of this verification system are that it is practical in terms of legal enforcement, and - due to the widened tolerance band in service [MPES₋; MPES₊] - it is potentially tolerant of external influences and of drifts in indication over the legally fixed validity periods. Verification validity only expires early in cases of unauthorized manipulations and damage that could reduce the accuracy of the instrument.

3.3 Relationship upon testing of working standards

In legal metrology, working standards are the standards that are used routinely to verify measuring instruments. In several economies, some of the working standards used in legal metrology must be tested or verified according to special regulations. The MPEs of such working standards depend on their intended use. In general, they should be significantly lower than the expanded uncertainties that are required by equation (3).

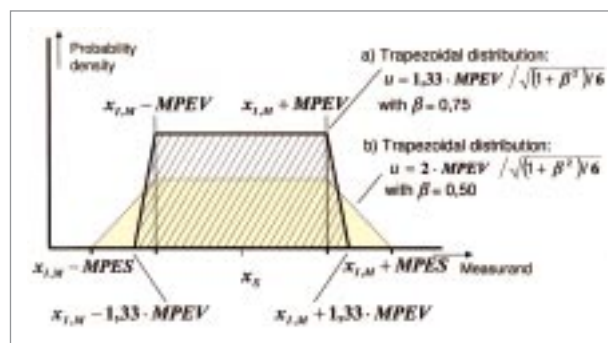


Fig. 9 Suggested probability distributions for evaluating the standard uncertainty contribution of verified measuring instruments.

- a* : immediately after verification
- b* : after prolonged use
- MPEV* : absolute value of the maximum permissible error on verification
- MPES* : absolute value of the maximum permissible error in service
- x_{I,M}* : indication of the verified instrument when using for measurements

Usually, a working standard, e.g. mass (weight) [7], is considered to comply with the respective requirements for legal error limits if the difference between its indication, or measured value, and the corresponding value realized by a reference standard is equal to or less than the difference between the prescribed error limits, MPE_{ws} , and the expanded uncertainty of measurement, $U_{0.95}$:

$$|I_{ws} - x_s| \leq MPE_{ws} - U_{0.95} \quad (4)$$

where:

I_{ws} = the indication of the working standard under test; and

x_s = the value provided by a reference standard.

In practice, this means that with respect to measurement deviations, a tolerance band is defined that is significantly reduced when compared with the range between the legally prescribed error limits [MPE_{ws-} ; MPE_{ws+}] (see Fig. 4). The magnitude of this tolerance band may be described by the interval [$MPE_{ws-} + U$; $MPE_{ws+} - U$].

This approach is consistent with the prescribed procedures for statements of conformity on calibration certificates (cf. 1 and [4]).

4 Uncertainty contribution of verified instruments

In practice, it is often necessary or desirable to determine the uncertainty of measurements that are carried out by means of legally verified measuring instruments. If only the positive statement of conformity with the legal requirements is known, for example in the case of verified instruments without a certificate, the uncertainty of measurements for such instruments can be derived only from the information available about the prescribed error limits (on verification and in service) and about the related uncertainty budgets according to the requirements established in 2.2 and 3.2.

On the assumption that no further information is available, according to the principle of maximum entropy, the following treatment is justified:

- The range of values between the MPEs on verification can be assumed to be equally probable.
- Due to uncertainty in measurement, the probability that indications of verified instruments are actually beyond the acceptance limits of the respective verification declines in proportion to the increase in distance from these limits. A trapezoidal probability

Table 2 System comparison of calibration and verification
(*MPEV* - maximum permissible errors on verification, *MPES* - maximum permissible errors in service)

Characteristics	Verification	Calibration
Bases	■ Legal requirements	■ Technical rules, norms, demands of customers
Objective	■ Guarantee of indications within MPE in service range during the validity period	■ Relation between indication and conventional true value (at nominated defined accuracy level)
Prerequisite	■ Admissibility for use in the regulated area ■ Admissibility for verification directly or with type approval if required	■ Broad recognition of calibration results
Validity of the results	■ Within the period fixed for subsequent verification (as regards MPE in service)	■ At the moment of calibration under specific calibration conditions
Evaluation of the results	■ By the verifying body	■ By the user of the measuring instruments
Traceability	■ Regulated by the procedure	■ Calibration laboratory to provide evidence
Uncertainty of measurement	■ $U \leq 1/3 \cdot MPEV$	■ Depending on the technical competence of the laboratory and of the instrument performance

distribution according to Fig. 9 can, therefore, reflect adequately the probable dispersion of the deviation of verified measuring instruments.

- Immediately after verification, the indications of measuring instruments may exceed the MPEs on verification by the maximum value of the expanded uncertainty of measurements at most.
- After prolonged use and under varying environmental conditions, it can be assumed that the expanded measurement uncertainty, compared with its initial value, may have increased significantly.

In particular, the following evaluation of the uncertainty contribution of verified instruments seems to be appropriate:

- a) Immediately after verification, the trapezoidal probability distribution of the errors according to plot (a) of Fig. 9 can be taken as a basis for the determination of the uncertainty contribution of the instruments. The following may, therefore, be assumed for this standard uncertainty contribution u_{INSTR} [2]:

$$u_{\text{INSTR}} = a \cdot \sqrt{(1 + \beta^2) / 6} \approx 0.7 \cdot MPEV \quad (5)$$

where $a = 1.33 \cdot MPEV$ and $\beta = 3 / 4$.

MPEV is the absolute value of the MPEs on verification.

- b) After prolonged use and under varying environmental conditions, it can be assumed that, in the worst case, the measurement error extended by the measurement uncertainty will reach the values of the MPEs in service. The resulting trapezoidal distribution could more or less be represented by plot (b) of Fig. 9. In this case, the following may be assumed for the standard uncertainty contribution [2]:

$$u_{\text{INSTR}} = a \cdot \sqrt{(1 + \beta^2) / 6} \approx 0.9 \cdot MPEV \quad (6)$$

where:

$$a = 2 \cdot MPEV \text{ and}$$

$$\beta = 1 / 2$$

5 System comparison

Table 2 shows a comparison between verification and calibration, which is partially based on Volkmann [8].

In conclusion, verification offers assurance of correct measurements by a measuring instrument according to its intended use especially for those instruments that

require type evaluation and approval. It is based on technical procedures equivalent to those used in calibration and provides confidence in the correctness of indications of verified instruments although no expert knowledge by the instrument's user is required. Verification, therefore, may be considered a strong tool in both legal metrology and quality assurance when large numbers of measuring instruments are involved. In particular, it excels as a simple means by which enforcement can be realized, and because the user is only affected by the MPEs in service, it provides a high degree of confidence over a long time period.

One disadvantage in verification is that the influence of uncertainty on a decision of conformity of a measuring instrument to specific requirements is not completely clear.

In comparison, traditional calibration is considered an important basic procedure for legal metrology activities and also for fundamental measurement applications in scientific and industrial metrology. It is practically not limited as far as the measurement task is concerned, but does require sound expert knowledge on the part of the instrument's user in carrying out and evaluating measurements. ■

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RESOURCE MANAGEMENT

A proposal for targeting weighing and measuring devices to optimize local metrology authorities' resources

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Introduction

This paper describes the attempt, on the basis of the imminent changes in the Italian provisions concerning the periodic inspection of weighing and measuring devices, to introduce a continuous monitoring system of devices located in the Legal Metrological Authorities' (LMA) jurisdictions.

The objectives the authors aim to achieve are to:

- optimize the resources allocated to LMAs;
- increase inspectors' efficiency and productivity;
- increase the effectiveness of administrative and enforcement actions;
- better protect "honest" businesses; and
- better protect consumers.

In order to achieve satisfactory levels of effectiveness, it became clear that technical and logistics tasks, such as monitoring weighing and measuring devices on a continuous basis (*targeting*) [1], should not be dissociated from a number of other supporting activities, such as:

- training and refresher courses for inspectors;
- promotion of programs and media contacts;
- office automation; and
- technological support.

The experimental *Targeting Plan* is presently restricted to two typical types of weighing and measuring devices subject to legal metrology control:

- small and medium capacity nonautomatic weighing instruments (NAWI); and
- vehicle fuel dispensers.

Definitions

For a better understanding of what follows, some basic definitions are given:

Compliance:

Status of an instrument meeting the requirements set out by regulations.

Non-compliance:

Status other than that of compliance.

History of good or poor compliance:

Control to verify whether or not the characteristics of compliance are preserved.

Excellent user:

User with a good compliance history.

Poor user:

User with a poor compliance history.

Standard inspection frequency:

Inspection performed according to the law by a Weights and Measures Department, on the basis of types of device. Inspections are to be performed during normal office hours.

Increased inspection frequency[2]:

Inspection performed at more frequent intervals than standard inspection, usually to follow up cases of previous non-compliance.

Users database:

Computerized list of all devices in the area, which enables the LMA to retrieve device users by means of several search keys.

Targeting

The targeting procedure consists of monitoring devices on a continuous basis through inspection; the aim is to penalize users who make use of devices with a poor compliance history. This should allow for human resources to be optimized and result in a reduction in the effective rate of non-compliance.

The device users are divided into two groups: the "excellent" and the "poor". The first category is further sub-divided on the basis of the number of instruments used in the business.

The inspection frequency is variable and is based on the different histories of compliance and other factors related to the instruments such as manufacturer, type, capacity, instructions for use, environmental conditions, etc.:

- the "excellent" users' devices are subjected to *standard* inspection frequency;

- the “poor” users’ devices are (conversely) subjected to an *increased* inspection frequency. Normally, users are removed from this list only after successfully passing two consecutive inspections.

The need arises, for users that remain on the “poor” list or those that systematically re-enter it, to thoroughly investigate the reasons behind any case of non-compliance, in order to take appropriate action to reduce or prevent such factors from reoccurring.

For those “excellent” users having many instruments, a two-stage inspection is carried out.

The **first stage** consists of an inspection of a random sample of the instruments used, preceded by a visual inspection of all the devices to verify the fulfillment of the formal requirements. For example, for a service with more than five fuel dispensers or for points of sale using nonautomatic weighing instruments with more than ten devices, the inspector respectively tests only five fuel dispensers or ten weighing instruments.

The **second stage** consists of an inspection of *all* the devices used. However, if the first stage was successful then it is not necessary to proceed to stage two, which shall only be performed if either of the following conditions occur:

- a) one device is found to be outside the maximum permissible errors;
- or
- b) the mean of the calibration errors is less than the acceptance criterion.

Targeting procedures and acceptance methods are described in Annexes 1 and 2.

Training

Training and refresher courses for inspectors require considerable local authority investment, but distinct advantages do result from such investment: better trained inspectors perform higher quality inspections, which result in a reduction in the number of errors in the field and reduced user complaints.

Training also increases inspector productivity, thus reducing the likelihood of accidents at work, gives more credibility and hence increases professionalism.

Training would be supplemented with formal courses lasting at least ten days a year, duly recognized on a national scale by means of a certification method [3].

On the job training is no substitute for formal training, but it does complement and reinforce formal training. “Train the trainer” courses will be needed which allow know-how to be spread among the inspectors.

Promotion programs and media contacts

The promotion programs will be directed at improving voluntary compliance of users through industry training and raising consumer awareness by a variety of educational initiatives:

- lectures promoting the programs to businesses;
- advertising campaigns aimed at consumers and directed towards the concept of “enlightened” purchase of goods;
- educational competitions for which a prize is awarded to the best ideas in the field of consumer protection;
- creation of web pages; and
- instigation of toll-free phone numbers for consumer complaints.

Office computerization

To ensure efficient progress it is absolutely necessary to set up a database of users so that every element that could contribute to making the administrative action more effective can be easily identified. Examples of forms that could serve as database records are given in Annex 3.

The use of data processing media will help particularly in implementing targeted inspections: the reports will identify which users have to be inspected on the basis of the last inspection date and based on compliance history.

The reports will periodically take a “photograph” of targeting activity, identifying both the percentage of inspected “locations” and the impact on the territory.

In Italy, the *InfoCamere Eureka Plan* (in its development phase) attempts to provide a medium suitable for the needs of a modern of legal metrology service; it would be advantageous to develop it as a global tool for all the fields of competence of service.

This plan should then provide for a section dedicated to the traceability of working standards to national prototypes of weights and measures units.

For an efficient implementation of such targeting strategies, it could be opportune to develop an “ad hoc” database so as to render inspection easier in the device field as well as the preservation of data concerning the inspection [4].

Technological facilities

The use of new technologies, applied to the inspections, results in noticeable advantages both in the field of job safety and in the effectiveness and efficiency of inspectors.

The most obvious advantage stemming from the utilization of new technologies is related to the reduction in the time required to carry out inspections, which has a beneficial effect on the costs that the sellers pass on to consumers.

It would be sensible to utilize a fleet of motor vehicles to perform verifications, but such a fleet would have to be equipped with working standards to optimize the verification activity.

Authors' comments

The principles explained should be taken as being subjective and open to suggestions for changes in line with the actual conditions in which each individual metrological service works.

It is a subjective management choice to implement a policy in order to achieve best results in the field; of particular importance is the division of non-compliance into classes showing defects defined as "fatal" and those defined as "tolerable".

It is management's responsibility to set out the user classification methods based on the number of reverifications of instruments between two successive periodic verifications (for example an excessive number of reverifications due to "fatal" defects could truly indicate poor instrument performance, or worse still, could be a sign of intentional tampering with the instrument).

In order to ensure better optimization of human resources, it could furthermore be appropriate to separate the area into territorial jurisdictions for different inspectors and also fix the relevant fields of competence.

In summing up, this proposal is an attempt to introduce a notion of "statistical thinking" into the field of legal metrology, traditionally resistant to this idea.

Annex 1

In order to better understand what follows, the definitions below are used:

"b" Category: the whole set of "excellent" users who use

not more than 10 weighing devices ($n \leq 10$) or not more than 5 fuel dispensing devices ($n \leq 5$)

"B" Category: the whole set of "excellent" users who use more than 10 weighing devices ($n > 10$) or more than 5 fuel dispensing devices ($n > 5$)

"C" Category: the whole set of non-conforming users

V: Inspection phase at which only formal requirements are evaluated

E: Inspection phase at which metrologically relevant characteristics (accuracy, repeatability, etc.) are evaluated

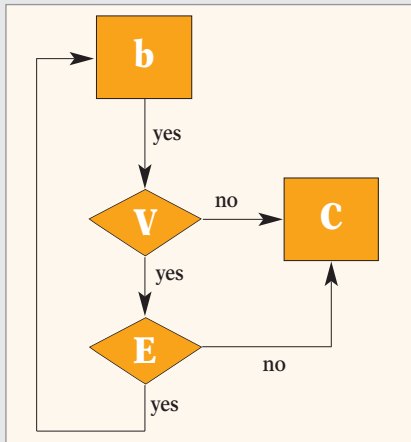
E%: Inspection phase at which only a sample of the users' device population is tested with respect to metrologically relevant characteristics

M: Evaluation of the above-mentioned sample by means of the acceptance criteria (depicted in Annex 2)

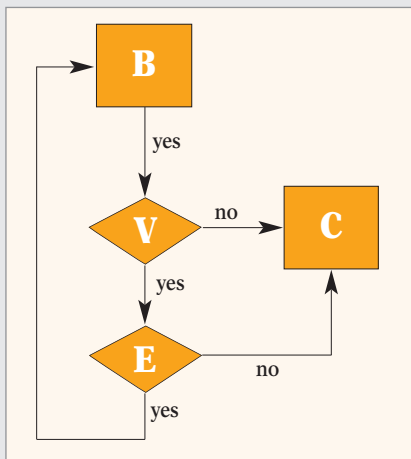
The inspection starts by considering the user's compliance record. To achieve compliance records which effectively depict the real operating conditions, it is necessary, initially, to inspect all the devices by considering both the formal and the metrologically relevant requirements. So the whole user population will be classified in one of the three categories "b", "B" or "C".

- (1) "b" Category users shall be submitted to 100 % device inspections: in the case of a positive result for every device relating to both V and E phases, a user shall still be considered as an "excellent" user; otherwise he or she shall be considered as a non-conforming user (see decisional flow chart "b").
- (2) "B" Category users shall be submitted to reduced device inspections: a sample shall be randomly drawn from the device population and inspected. If a user passes the V, E% and M steps, he or she shall be considered as an "excellent" user; if he or she fails the M step, then he or she shall be submitted to a 100 % device inspection as described in (1) above; if he or she fails the V or E steps, then he or she shall be considered as a non-conforming user (see decisional flow chart B).
- (3) "C" Category users shall always be submitted to 100 % device inspection. In the case of a positive result in respect of both the V and E steps, the user shall be considered as being non-conforming except when he or she shall be upgraded to the "B" or "b" Category according to the number of devices he or she uses. In the case of a negative result, the user shall still be considered as a non-conforming one (see decisional flow chart C).

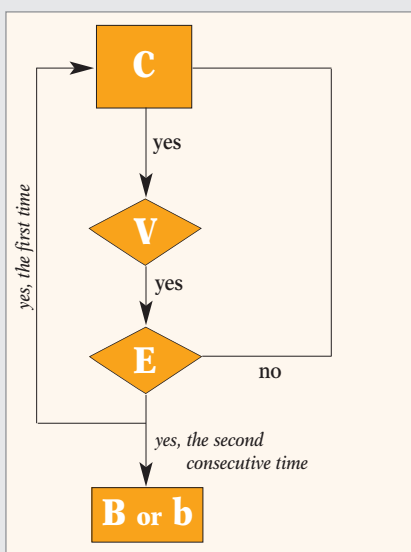
*Decisional
flow charts*



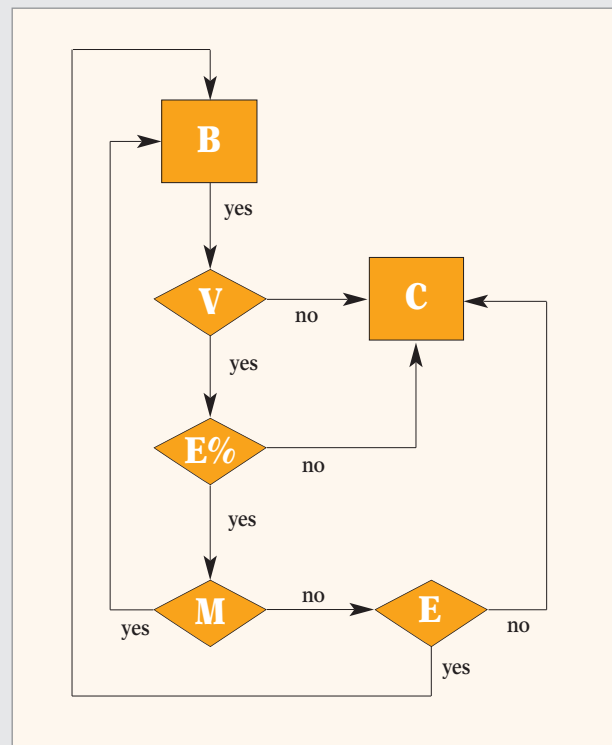
After repair and periodic verification
for b Category



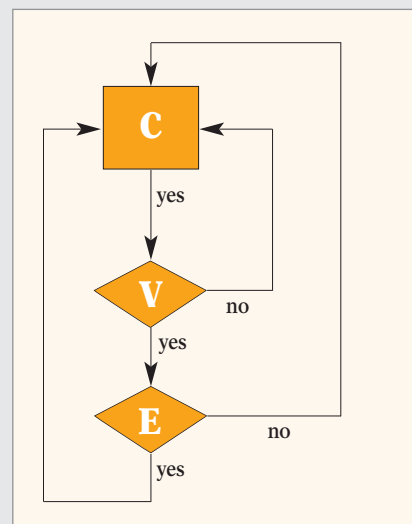
After repair verification for B Category



After periodic verification for C Category



After periodic verification for B Category



After repair verification for C Category

After-repair verification targeting procedure

With regard to after-repair verification, an inspection of the devices for which a repair was needed is carried out.

Apart from the users' conformance history, steps V and E shall be carried out in succession; in the case of a positive result in both these steps, a user shall remain in the original category (see the decisional chart), but in the case of a negative result for one or more of the two steps, the user shall be deemed to be non-conforming.

Human resources allocation

The time elapsed between two successive inspections ("T") is linked to the user's device compliance history: "b" and "B" Category users shall be inspected at the normal inspection frequency, conversely "C" Category users shall be inspected at the increased frequency.

In order to better allocate the human resources available within several jurisdictions, when an after-repair inspection is needed in the time period between 0.5 T and T, an overall inspection shall be carried out as a periodic inspection for every device at the user's location by way of exception to the terms of the inspection validity period.

Annex 2

Two-stage inspection acceptance criteria

With regard to the acceptance variable criteria the following definition is given:

Variable: ratio (x) between the absolute error found and the maximum permissible error (mpe):

$$x = (\text{absolute error found}) / \text{mpe}.$$

A device population to be inspected shall be subjected to a statistical analysis by using a sampling plan having the following property:

Property: a device population having 1 % of devices below the mpe must have an acceptance probability of 95 %.

To perform the statistical analysis a working hypothesis has been considered as reported below:

Working hypothesis: the variable distribution is considered as a normal distribution with zero mean and such a standard deviation value that the above-quoted definition of "property" is true.

Moreover, on the remaining points of the operative curve (OC) which describes the sampling plan, the standard deviation is deemed to be constant. The reasoning behind this assumption is that usually the error spread depends on the kind of devices to be verified and thus the variance around the average error is generally known; conversely, the average error does depend on calibration operations which are being performed on the device population to be inspected. The situation is as defined in Fig. 1.

Weighing devices sampling plan

For weighing device populations having more than 10 items, a sample of 10 from the whole population is drawn.

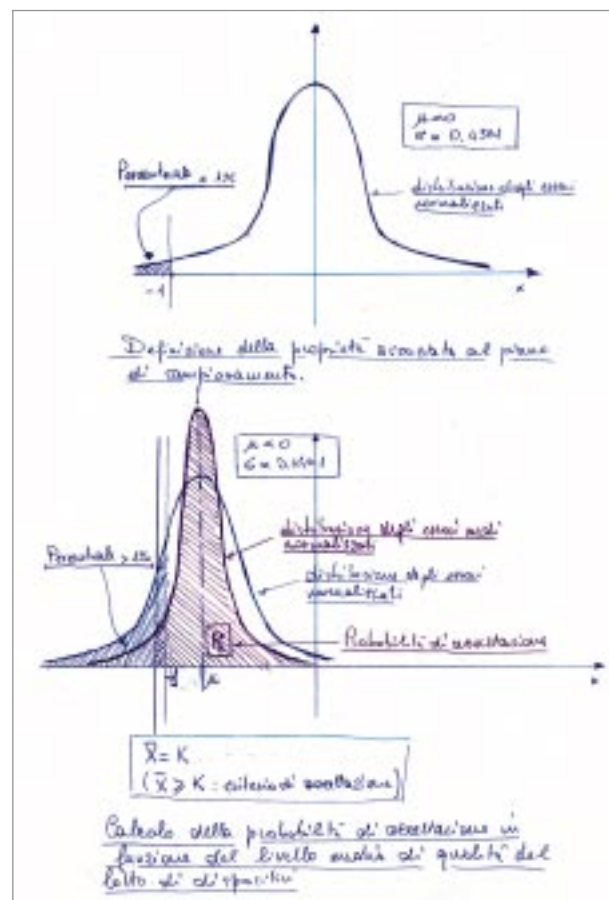


Fig. 1

Annex 3

RETAIL FUEL DISPENSER SURVEY PROGRAM - G.Ardimento - U.P.M. NAPOLI

Record No.: _____ BP: _____ FP: _____ Reg.BP: _____
 IMPIANTO: _____
 Gestore : _____
 Ubicazione: _____

SUPER											
matricola			matricola			matricola			matricola		
data richiesta			data richiesta			data richiesta			data richiesta		
A	OA	F	A	OA	F	A	OA	F	A	OA	F
data verifica			data verifica			data verifica			data verifica		

SUPER SP E MIX											
matricola (sp) (mix)			matricola (sp) (mix)			matricola (sp) (mix)			matricola (sp) (mix)		
data richiesta			data richiesta			data richiesta			data richiesta		
A	OA	F	A	OA	F	A	OA	F	A	OA	F
data verifica			data verifica			data verifica			data verifica		

GASOLIO											
matricola			matricola			matricola			matricola		
data richiesta			data richiesta			data richiesta			data richiesta		
A	OA	F	A	OA	F	A	OA	F	A	OA	F
data verifica			data verifica			data verifica			data verifica		

NOTE: _____

Record No.: _____ BP: _____ FP: _____ Reg. BP: _____
 IMPIANTO: _____
 Gestore : _____
 Ubicazione: _____

SUPER											
matricola			matricola			matricola			matricola		
data richiesta			data richiesta			data richiesta			data richiesta		
A	OA	F	A	OA	F	A	OA	F	A	OA	F
data verifica			data verifica			data verifica			data verifica		

SUPER SP E MIX											
matricola (sp) (mix)			matricola (sp) (mix)			matricola (sp) (mix)			matricola (sp) (mix)		
data richiesta			data richiesta			data richiesta			data richiesta		
A	OA	F	A	OA	F	A	OA	F	A	OA	F
data verifica			data verifica			data verifica			data verifica		

GASOLIO											
matricola			matricola			matricola			matricola		
data richiesta			data richiesta			data richiesta			data richiesta		
A	OA	F	A	OA	F	A	OA	F	A	OA	F
data verifica			data verifica			data verifica			data verifica		

NOTE: _____

pag. _____

The mean variable value x_m has to meet the acceptance criterion $x_m \geq -0.224$ and the OC relating to this criterion is set out below:

AQL *	P _a **
1 %	95 %
5 %	31 %
10 %	5 %
25 %	0.02 %
50 %	0 %
.....	

Fuel dispensers sampling plan

With regard to fuel dispenser populations of more than 5 items, a sample of 5 from the whole population is drawn.

The average relative error value x_m (expressed per thousand) has to meet the acceptance criterion

$$x_m \geq -0.63 \text{ (per thousand).}$$

The OC relating to this criterion is set out below:

AQL *	P _a **
1 %	95 %
5 %	54 %
10 %	24 %
25 %	2 %
50 %	0 %
.....	

Notes:

* AQL: Acceptable Quality Level (i.e. the percentage of non-conforming devices in a batch)

** P_a: Acceptance Probability of the batch under inspection given the corresponding AQL value in the table

References

- [1] City of Seattle Consumer Affairs Unit: Weights and Measures Inspection Plan (1997)
- [2] NIST Handbook 130: Uniform laws and regulations in the areas of legal metrology and engine fuel quality-examination procedure for price verification
- [3] OIML D 14 (1989): Training of legal metrology personnel - Qualification - Training programs
- [4] Jim Truex: Legal Metrology for the Americas Workshop
- [5] Leavenworth-Grant: Statistical quality control, McGraw-Hill
- [6] NCWM Course 302: Retail motor-fuel dispensers and consoles



GIUSEPPE ARDIMENTO



ROSARIO GIOVANNI GAUDIOSI



SILVANA IOVIEÑO

The authors wish to thank Mr. Craig Leisy, Supervisor, Weights & Measures, Seattle Licenses and Consumer Affairs, who kindly gave the authors permission to use the 1997 Seattle Weights & Measures Plan as inspiration for this article.

2 L O I M L N D O N 0 0

Eleventh International Conference of Legal Metrology Thirty-fifth CIML Meeting Development Council Meeting Round Table on "Mutual Recognition" Meeting of Representatives of RLMOs

The Eleventh International Conference of Legal Metrology, Thirty-fifth Meeting of the International Committee of Legal Metrology, Development Council Meeting and Round Table on "Mutual Recognition" took place at the Queen Elizabeth II Conference Centre, Westminster, London from 9–13 October 2000, at the invitation of the United Kingdom National Weights and Measures Laboratory (NWML).

The events were co-organized by the NWML, the BIML and London-based Concorde Services, and the week of meetings ended with a technical visit to NWML and NPL facilities in Teddington.

The official Minutes of all these meetings, together with the Decisions and Resolutions, are being drawn up by the BIML. In the meantime, a summary account of proceedings is given in English and in French on the following pages. ■



Queen Elizabeth II Conference Centre, Westminster, London

Program for the week's meetings



Monday 9 October	08:00 – 09:00	Registration, CIML
	09:00 – 12:30	CIML Meeting
	13:30 – 14:30	Registration, Conference
	14:30 – 17:30	Conference, opening and plenary session
Tuesday 10 October	09:30 – 11:30	Conference, plenary session
	11:30 – 12:30	CIML Meeting
	14:30 – 17:30	Conference, plenary session
	18:30 – 21:00	OIML Concert and Reception
Wednesday 11 October	09:30 – 12:30	Development Council
	14:30 – 16:30	Round Table: <i>Mutual recognition</i>
	16:30 – 18:00	CIML Meeting
Thursday 12 October	08:00 – 09:30	Finance Commission
	09:30 – 11:00	Technical work Commission
	11:00 – 12:00	CIML Meeting
	14:30 – 17:30	Conference, plenary session
	18:00 – 19:30	UK Government Reception
Friday 13 October	09:00 – 10:30	Conference, plenary session, approval of Decisions and Resolutions, closure
	11:00 – 12:00	CIML Meeting
	12:00 – 18:00	Technical visit



Delegates attending the Conference

Eleventh Conference Agenda



1 ORGANIZATION OF THE MEETING

- 1.1 Opening
- 1.2 Roll-call - Verification of credentials - Quorum
- 1.3 Voting procedures during Conference sessions
- 1.4 Election of President and Vice-Presidents of the Conference
- 1.5 Adoption of the agenda
- 1.6 Constitution of working commissions
- 1.7 Establishment of the schedule
- 1.8 Approval of the minutes of the Tenth Conference
- 1.9 Report on activities, by the President of the International Committee of Legal Metrology
- 1.10 Miscellaneous information

2 MEMBER STATES AND CORRESPONDING MEMBERS

- 2.1 New Members - Expected accessions
- 2.2 The situation of certain Members

3 LONG-TERM POLICY

- 3.1 Report on actions carried out since the Tenth Conference
- 3.2 Guidelines for the period 2001-2004

4 LIAISONS WITH INTERNATIONAL AND REGIONAL INSTITUTIONS

- 4.1 Report on liaisons
- 4.2 Addresses by Representatives of Institutions
- 4.3 Discussions and conclusions

5 WORK OF OIML TECHNICAL COMMITTEES AND SUBCOMMITTEES

- 5.1 Work undertaken - State of progress
- 5.2 Implementation of Recommendations by OIML Members
- 5.3 Formal sanction of Recommendations already approved by the Committee in 1997, 1998 and 1999
- 5.4 Draft Recommendations directly presented for sanctioning by the Conference

6 OIML CERTIFICATE SYSTEM FOR MEASURING INSTRUMENTS

- 6.1 Report on the situation of the *System*
- 6.2 Report on the setting up of a recognition agreement for OIML type evaluations
- 6.3 Guidelines for future developments

7 DEVELOPING COUNTRIES

- 7.1 Report on activities for the period 1997-2000
- 7.2 Guidelines for future activity

8 ADMINISTRATIVE AND FINANCIAL MATTERS

- 8.1 Examination of the management of the budget from 1996 to 1999 and the estimates for 2000
- 8.2 Bureau staff and retirement scheme
- 8.3 Credits for the financial period 2001-2004 and Member State contributions for this same period

9 OTHER BUSINESS

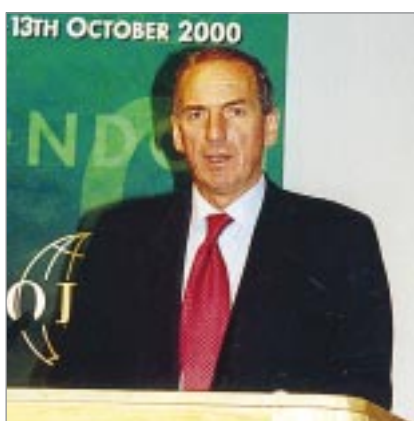
10 CLOSURE

- 10.1 Adoption of decisions and resolutions of the Conference
- 10.2 Date and place of the next Conference

11TH OIML CONFERENCE

Opening Address - Dr. Kim Howells (MP)

MINISTER FOR CONSUMERS AND CORPORATE AFFAIRS



Dr. Kim Howells MP,
welcoming Delegates in his opening speech

Dr. Faber, Ladies and Gentlemen,

I am delighted to welcome you to London - to the Queen Elizabeth II Conference Centre - and to the 11th International Conference of Legal Metrology.

Since taking up my current ministerial responsibilities, I have become increasingly aware how important measurement is in nearly all aspects of our lives. The Olympic Games, which finished last week in Sydney, highlighted over and over again how important, and how precious, a few thousandths of a second or a fraction of a centimetre can be. The measurements with which OIML, and therefore this Conference, are concerned are of far greater significance, because they affect all our lives in so many ways. Fair trade, personal health and safety, and the protection of the environment all depend on our ability to measure accurately and on our confidence in the results.

In this country, as in so many others, the Government has a long record of taking the necessary steps to guarantee the integrity of measurement. In 1215, King John's Magna Carta included an instruction that there should be consistent standards for the measurement of grain, beer, and cloth throughout the country and from the thirteenth century onwards there were frequent Acts of Parliament to improve and develop the regulation of measurement. In the twenty-first century this development is still continuing, reflecting new technologies and a growing awareness of the contribution quality systems and accreditation can make to the reliability of products and the accuracy of measurements. Today it is not only the measurement of food and drink which is of interest to consumers and governments. Recent events in Europe have drawn attention to the measurement of vehicle fuels, where high prices increase consumer concern and provide greater incentive for fraud. Outside the area of trade, medical diagnosis and treatment, for instance, depend on reliable

assessment of symptoms and accurate measurement of doses, whether of medicine or of radiation.

Today in many countries, legislation is largely based on Recommendations prepared by you in the OIML. In the UK, we have aligned our requirements for trade measuring instruments with OIML specifications. Thus collaboration at the international level not only facilitates the sharing of best practice, it is also helping to remove barriers to trade which had grown up as nations developed their national laws.

Here in Europe, the European Commission has just published its proposals for a measuring instruments Directive, which will ensure common regulatory requirements for a wide range of measuring instruments throughout the European Union. One of the unusual features of this Directive is the inclusion of references to OIML Recommendations for the performance requirements for measuring instruments. The UK will work with its partners in Europe, and with you in OIML, so that our legislation is consistent with that in the rest of the world. OIML has an important task here, ensuring that the necessary specifications are available and up-to-date, to form the basis for this new European regime.

It is of course essential to ensure that access to these modern markets and the benefits of good metrological regulation are equally available to developing countries. I see that developing countries are well represented at this Conference and I am interested to learn that your own Development Council will meet here on Wednesday morning. By providing information, advice, and training to developing countries, as well as by listening to their particular concerns, you can facilitate their access to markets and contribute to the removal of technical barriers which discriminate against those countries which are still in a state of industrial development.

By hosting this Conference, my government has indicated its continuing support for international collaboration in the field of metrology. UK representatives play an active role in OIML and in the work of other international bodies with an interest in metrology. My officials at the National Weights and Measures Laboratory participate in OIML in various ways, and they have been instrumental in establishing WELMEC as the European regional cooperation in legal metrology. There are now no fewer than nine similar regional groups, and the meeting on Saturday morning will offer them the opportunity to compare notes with a view to dissolving barriers which may still exist between them.

All in all, you have a full and busy week ahead of you. I wish you a successful Conference and hope that the resolutions at your final session on Friday morning will reflect fruitful discussion and set the agenda for the success of OIML in the coming years. I look forward to hearing a report of your progress from Dr. Bennett and to meeting you all again at the reception on Thursday evening.

Have a good week!

11TH OIML CONFERENCE

Report

CHRIS PULHAM

1 Organization of the Meeting

Following some introductory remarks made by Mr. Faber, the Eleventh International Conference of Legal Metrology was officially opened by Dr. Kim Howells (Member of Parliament), the Minister for Consumers and Corporate Affairs of the United Kingdom. Dr. Howells' speech is reproduced in full opposite.

The roll of Delegates was called and it was established that 48 (47 in some Conference sessions) Member States were present out of a total of 57, thus the required quorum of two thirds was reached. Also present were observers from a number of OIML Corresponding Members and International and Regional liaison Organizations, CIML Immediate Past-President Knut Birkeland and Messrs. Athané, Szilvássy, Dunmill and Pulham from the BIML.

Mr. Athané explained voting procedures at the Conference, as votes would be cast during the week to formally sanction OIML Recommendations and approve financial decisions. The Conference President was elected: Dr. Robert Foster, Director for Innovation Services at the Department of Trade and Industry of the United Kingdom. Seton Bennett (United Kingdom) would stand in as and when required since Dr. Foster had a busy schedule that week, and Mr. Beard (South Africa) and Dr. Pákay (Hungary) were elected as Conference Vice-Presidents.

The Conference adopted the proposed agenda (see earlier) with one slight change: Item 6.2, *Report on the setting up of a recognition agreement for OIML type evaluations* would be dealt with during the Round Table on *Mutual Recognition*, to be held on Wednesday 11.

Two working commissions were formed: one for financial matters and one for technical work. The Conference then approved the minutes of its Tenth Conference (Vancouver, 1996) without comment or modification.

Gerard Faber then presented his *Report on Activities* since the last Conference, the purpose of which was to enable the Conference to determine how decisions made in the past have been implemented, and on which present and future actions the OIML should focus in order to set the guidelines to be followed by the OIML in its strategy over the forthcoming years.

Mr. Faber specified that the OIML does not just operate within a "closed circuit", but rather externalizes its work and seeks to increase its connections and hence its audience. Since the Tenth Conference, the number of OIML Members (its "internal audience") had steadily increased from 96 to a current 105, comprising 57 Member States and 48 Corresponding Members. This progression was regarded as globally satisfactory.

The "external audience" from the numerous international and regional organizations whose activities are related to those of the OIML was also of importance, pursued Mr. Faber. In the context of globalization it is



Opening of the Conference (L to R): Bernard Athané, Robert Foster, Kim Howells MP, Gerard Faber, Seton Bennett

essential that the various international and regional organizations carrying out similar activities closely cooperate and consult each other in order to avoid duplication of work and discrepancies. From this point of view, Mr. Faber felt that the last four years had been extremely profitable for the OIML.

He affirmed that cooperation between the OIML and certain of these organizations was also progressing bilaterally, in particular ISO and the IEC with whom joint projects are being developed; efforts towards increased cooperation were deployed with the Metre Convention, after it had come to light that at present a merger was not possible: this led, for example, to the joint organization by the BIPM, the OIML, IMEKO and the PTB of an important Seminar on the Economic and Social Role of Metrology in 1998.

At the same as we are experiencing cooperation at the worldwide level, said Mr. Faber, we have also experienced (and continue to experience) increasing and extremely promising cooperation at the regional level. At present, many parts of the globe are covered by regional legal metrology organizations (RLMO's) and the CIML's policy concerning this is clear: to encourage appropriate development of regional cooperation by observing RLMO activities and by informing them of the corresponding OIML activities, by ensuring that these regional activities are not in conflict with or do not duplicate international activities, by ensuring that regional needs that may be satisfied at international level are quickly and appropriately satisfied, and, finally, by enabling RLMO's to become acquainted amongst

themselves and establish the contacts which they deem appropriate.

A third category of bodies is extremely interested in our work and whose cooperation with OIML may be essential, added Mr. Faber: the manufacturers and users of measuring instruments, including consumers, whom we can consider as users in a larger sense since, for a great part, the conditions, whether economic, social or environmental, in which they live are dependent on measurements.

One OIML activity which is quickly gaining ground is the OIML Certificate of Conformity System, he continued: over 400 certificates have been issued since the 10th Conference, and the total number of certificates issued is currently round the 700 mark.

Mr. Faber then reminded those present that the 10th Conference had instructed the Committee to work on a certain number of subjects, including:

- activities in favor of developing countries: a full report would be given during the Development Council Meeting;
- closer cooperation between the OIML and the measuring instruments industry (as mentioned above, this cooperation is increasing);
- the development of documents covering various aspects of metrology, not restricted to legal metrology, which had not yet effectively got off the ground: actually, this project would need the assistance of other metrology and standardization organizations, as the OIML cannot deal with such topics alone;
- thoughts on accreditation in legal metrology (related to the item on the measuring instruments industry); and
- reconsideration of OIML's communication policy (for example, increased use of the Internet).

Two decisive elements had helped to determine and finalize the objectives laid down at the 10th Conference, he continued:

- the 1998 Braunschweig International Seminar helped to bring to light a certain number of fundamental aspects of metrology and its role in society's economic and social development; and
- the report *Legal Metrology at the Dawn of the Twenty-first Century* by Knut Birkeland gave additional direction to the OIML's goals.

Numerous thoughts and discussions also developed within the Committee and its Presidential Council, which - together with the BIML - drew up a list of actions aimed at progressively satisfying the needs which were encountered, specific persons or organizations being designated to carry out these actions according to a fixed calendar. The resulting document is the *1999-2002 Action Plan*, distributed in April 1999; by and large, Mr. Faber commented that the majority of the



Tower Bridge

scheduled objectives are being carried out in an appropriate manner; though it was sometimes hard to find enough time to accomplish everything that should be done.

Among the actions which Mr. Faber considered as being top priority for the OIML is the establishment of a Mutual Recognition Agreement concerning the testing of measuring instruments covered by OIML Recommendations. This topic would be the subject of a Round Table, to be held on the Wednesday afternoon.

A second top priority action concerns OIML assistance to countries that are currently developing their metrological infrastructure.

The OIML cannot be held solely responsible for such action; other organizations, and Mr. Faber was especially referring to the BIPM, are concerned by this topic and the OIML is, of course, ready to cooperate with them. But, scientific and technical aspects aside, for this type of action nothing of significance can be set up without the active participation of national, regional and international organizations to settle the financial, material and administrative aspects of this aid.

Top priority should also be given to pursuing and developing cooperation between the OIML and other international and regional institutions with similar objectives.

Finally, warned Mr. Faber, the OIML would have to face up to sometimes profound changes occurring within the national legal metrology organizations of certain of its Members. These changes may take on different aspects but they will, more often than not, result in a decrease in the human and financial resources that our Member States may put at the OIML's disposal.

The privatization of certain fields of activity, already effective or envisaged in a certain number of countries, is often accompanied by eagerness to gain immediate profitability and international cooperation sometimes no longer becomes a priority. In addition, many administrations see their budgets stagnate or diminish, which also results in a decrease in our work capacity.

The OIML will have thus to cope with such evolutions which seem unavoidable even if they may seem regrettable.

Better adaptability in confronting external evolutions, greater use of the work projects of other international and regional organizations, and concentrating on top priority projects, seemed to Mr. Faber as being the methods that should enable the OIML to continue to carry out the role it has been assigned by its Member States and it was now up to those present to make the decisions which will allow us to better plan for such events and to adapt the OIML's strategy to their repercussions.

This concluded Mr. Faber's *Report on Activities* since the 10th Conference.

2 Member States and Corresponding Members

The total number of OIML Members had significantly increased since the Tenth Conference, although a number of Corresponding Members had been delisted for not having paid their subscriptions for over three years. Some Corresponding Members were also envisaging joining as Member States, as they wished to participate more actively in OIML activities, and a number of new countries or economies were expected to join as Corresponding Members in the not too distant future.

However, it was pointed out that two or three Corresponding Members would probably have to be delisted by the end of 2000 for not having paid their subscriptions for over three years; it was also noted that the situation of two Member States would be examined by the Finance Commission, which would then report to the Conference under Item 8.1; in fact to reaffirm the Organization's commitment to helping its Members to face up to their obligations, and not defeat the object of the exercise it was decided not to strike these two Members off the list, provided that their 2000 and subsequent contributions were paid on time. There was general consensus that this decision was the best solution until these countries could pay the remainder of their outstanding dues.

3 Long-Term Policy

Most of the information concerning the actions carried out since the Tenth Conference, including the development of the *1999–2002 Action Plan*, was given in Mr. Faber's *Report on Activities* (see above). The Conference endorsed this *Action Plan* and requested the CIML to monitor its implementation and to extend it as far as necessary in order to cover the 2002–2004 period.

4 Liaisons with International and Regional Institutions

A report on liaisons was presented by Mr. Athané, and a written report was distributed to participants; following individual presentations by representatives of a number of institutions, the floor was opened for discussion.

The OIML currently enjoys cooperation - to varying degrees - with over a hundred other institutions, ranging from frequent contacts (for example ISO) to more

occasional work (for example the WHO). The degree of cooperation was regarded as generally satisfactory, and one prime example of the success of such work is the recently published joint ISO-OIML publication on *Vehicle Exhaust Emissions*. The OIML would also soon be in a position to accept IEC Standards as OIML Recommendations, especially in the field of acoustics: a future sound level meters Standard is likely to replace the existing OIML R 58 and R 88.

Below are brief summaries of the presentations made by representatives of international and regional organizations, including summaries of the current situation in cases where a representative was unable to attend the Conference.

BIPM

Although a merger is currently not possible, it was nevertheless decided by both the BIPM and the OIML to continue to study areas in which cooperation could be mutually beneficial, for example in coordinating aid to developing countries which develop their own national metrology systems, as well as the development of texts that could serve as the basis for national metrology laws. The two Organizations meet annually, and ILAC is also now invited to attend.

ISO and IEC

Cooperation is developing satisfactorily and the OIML is participating more and more actively in ISO DEVCO and CASCO work. Other joint projects are outlined above, and both Organizations agree that continuing to work closely together can cut down on wasted time and resources, by avoiding duplication of work and pooling experts' knowledge.

JCGM

The *Joint Committee for Guides in Metrology*, comprising BIPM, IEC, IFCC, ILAC, ISO, IUPAC, IUPAP and OIML, has to date published two publications: the VIM and the GUM. Meetings on these Guides are scheduled to take place at the BIPM in November 2000 with a view to their revision.

WTO

The BIML regularly attends the World Trade Organization TBT Committee meetings and a regional (Mediterranean) seminar on metrology is soon to be organized by Mr. Magana at the WTO's request and will include BIML participation. It is envisaged that the CIPM President will hold a conference on scientific metrology on that occasion.

UNIDO

Cooperation between UNIDO, the PTB and the OIML in favor of certain least developed African countries is underway.

ILAC / IAF

Mr. Squirrel gave a presentation and delivered a written report on behalf of ILAC Chair Belinda Collins. Cooperation between the OIML and ILAC is developing; the two Organizations share a common interest in the accuracy of test reports, and the BIML will participate in the ILAC 2000 General Assembly in Washington, D.C.; this will also be an opportunity to establish new contacts with the IAF secretariat.

IMEKO

Cooperation is good in all fields of common interest and should also soon develop in the field of software.

CECIP

Mr. Anthony addressed the OIML, stressing how important it was to build up a certain level of confidence between OIML Members; he was surprised to see that OIML certificates are not always accepted by all the Member States. He urged the OIML to involve manufacturers more actively in its activities, and stressed CECIP's desire to maintain the current high level of cooperation with the OIML.

CECOD

Mr. Wim Klein, who was presented with an OIML award for his outstanding contribution to OIML work, addressed Delegates on behalf of CECOD. This was the first time that a CECOD spokesperson was present at an OIML Conference, despite previous close cooperation over Recommendations R 117/R 118. Work was ongoing to ensure that these Recommendations were updated in line with the MID requirements, which would probably take about 2-3 years. He affirmed his satisfaction in working in cooperation with the OIML and looked forward to continued close collaboration.

RLMO's

Regional Legal Metrology Organizations are developing and, as indicated by Mr. Faber in his *Report on Activities*, the OIML is closely following these developments which it encourages, whilst still endeavoring to ensure that these activities at international and regional levels are accomplished without there being any contradiction

between them, nor any overlap in scope. OIML/RLMO cooperation is at the same time satisfying, useful and very promising for the future (see the CIML President's *Report on Activities*).

The OIML has made efforts to participate in all the main RLMO meetings either via CIML Members or BIML Staff, and has most often contributed to the success of seminars and workshops by the participation of experts, supplying OIML documents, etc. The BIML is making a point of being better aware of the results of the work of certain RLMO's and letting other regions benefit from this work (for example, videos developed by the APLMF).

Addresses were given by representatives of the APLMF, the Balkan Cooperation, COOMET, the Euro-Mediterranean Legal Metrology Forum (EMLMF), IOLMF, SADCMEI, SIM and WELMEC. Accounts of recent RLMO meetings have been published in previous issues of the OIML Bulletin; suffice to say that OIML-RLMO cooperation is becoming increasingly close in fields such as prepackages, taximeters, utility meters, legal metrology training and provision of technical assistance, mutual recognition, use of the Internet as a more rapid and universal communication means, etc.

European Union

Mr. Hanekuyk gave up to date information on behalf of the European Commission in view of the development of the European Directive on Measuring Instruments (MID) which will cover nearly all the measuring instruments that are subject to legal metrology controls in the EU and European Free Trade Association (EFTA) countries, as well as in those countries that are candidates to become EU members, i.e. a total of about 25-30 countries, all of whom are OIML Member States or Corresponding Members.

The MID text has been approved by the European Commission and must now be approved by the Council and the European Parliament. Its actual putting into application could be accomplished in four years (though a target date of 1 July 2002 was mentioned by Mr. Hanekuyk) and it is quite possible that between now and then certain metrological requirements will have been modified.

Given the fact that the format of the MID is noticeably different to that of OIML Recommendations, only the aspect of compatibility between MID and Recommendation requirements has been assured: basically, the aim is for instruments that conform to the OIML to be recognized as conforming to the MID.

For this to happen, and thanks to the action of European experts and WELMEC, this aspect was managed in such a way that the major metrological requirements of the MID do not contradict those of the OIML. Moreover, senior Commission staff recognized

that it was appropriate that the "presumption of conformity" chapter in the MID should refer not only to European standards (CEN/CENELEC) but also to the "normative documents" developed by the OIML which are recognized as giving a presumption of conformity to the requirements of the MID. In this way, manufacturers of measuring instruments will generally have the choice between directly applying the requirements of the MID, following European standards or following OIML Recommendations, this third possibility giving them the assurance that they will more readily be able to offer their instruments for sale outside Europe.

These developments at the European level have, moreover, led the BIML to reopen discussions on cooperation with CEN and CENELEC.

Other regional organizations

The BIML cooperates whenever necessary with regional organizations, a part of whose work is directed towards metrology, in particular ARSO.

Manufacturers' and users' associations

Over the last two years, the BIML has tried to identify such associations that are likely to participate in OIML work. Mainly European associations have been contacted, but in some cases worldwide associations are also concerned (distribution of electricity, vehicles that function on natural gas, etc.).

The floor was then opened up for a discussion on cooperation between the OIML and the various institutions, and a number of Delegates suggested items of concern for the future:



Tower of London

- Mr. Magana stressed the need to revise certain OIML Recommendations to bring them into line with the MID.
- Mr. Zhagora wondered why not that many joint publications had been produced, and also suggested that new areas of application of legal metrology should be investigated such as environmental protection systems, accounting systems, auditing systems for materials being used, etc.
- Mr. Da Silva suggested putting Draft Recommendations on the Internet for consultation.
- Mr. Birch reaffirmed the need to establish a global system which ensures a high degree of mutual trust.
- Mr. Anthony commented that many manufacturers are accredited to ISO 9000, but sometimes actual production instruments bear little resemblance to the type or pattern that was approved; this implied that more emphasis should be placed on market surveillance. Type approval is easy to obtain, but ensuring that production conforms to the type is another matter.
- Mrs. Bennett, Australia, replied that this type of surveillance is expensive to implement, and Mr. Vaucher too wondered how such market activity would be financed. Maybe the OIML could propose package solutions, that included re-verification.

In his concluding remarks to the series of presentations and wrapping up discussions, Seton Bennett confirmed his feeling that international and regional cooperation is becoming stronger and more widespread, constantly providing benefits in a diversified range of fields to metrological communities worldwide.



HMS Belfast

5 OIML TC/SC Work

Attila Szilvássy presented a report drawn up by the BIML on this subject.

Since the Tenth Conference there has been an overall decrease in OIML technical activities, despite the Conference's decision to encourage the OIML TC's and SC's to accelerate and improve their activity. This is particularly highlighted by the declining number of technical body meetings and by the decrease in the number of Recommendations produced (15, compared to 25 during the previous 4-year period).

Among the objective reasons for this decline, as a general trend it was recognized that most matters of "classical" legal metrology have already been dealt with and that OIML activity is developing in fields for which most national legal metrology services have no responsibility or competence (e.g. the environment, health). Another reason is the tendency towards staff reductions in line with deregulation; the lack of additional resources (i.e. staff and/or financing) for OIML activities is also a problem.

There were of course subjective reasons such as the low number of P-members in some SC's, inactive P-members in several TC's and SC's (not even participating in activities by correspondence) and the relatively high number of inactive technical bodies.

This problem has been discussed several times by the Presidential Council and addressed during CIML Meetings: the results are taken into account in the 1999–2002 *Action Plan*.

Over the last four years:

- 12 draft Recommendations (7 revised and 5 new) were approved by the 32nd to 34th CIML Meetings;
- 3 new drafts are to be directly presented for sanctioning by the 11th Conference;
- 3 draft annexes (Test report formats), 3 new International Documents and the VIML were approved by the CIML (by postal vote); and
- the OIML Certificate System was extended by 14 new categories of measuring instruments.

Mr. Szilvássy continued by pointing out that during the last period, several activities and actions - initiated by the Presidential Council or by the BIML - were carried out in order to facilitate improvements in technical activities, including:

- The revision and publication of the *Guide for CIML Members*;
- Actions for important strategy issues and technical activities addressed by the CIML and included in the 1999–2002 *Action Plan*;
- Regular updating and inclusion on the OIML web site of the series of documents on OIML Technical

Committees including the document on external liaisons;

- Summaries of OIML TC/SC technical activities based on the Annual Reports published every year in the April issue of the OIML Bulletin;
- In addition to the monitoring of technical activities, updating documents and regular distribution of information on OIML technical work, regular contacts with the Secretariats of TC's and SC's by BIML staff in order to identify difficulties and to try to find appropriate solutions to problems;
- Increased checking of OIML Recommendations and Documents by BIML staff prior to publication for both editorial and technical content.

In 2000 a total of 67 OIML technical bodies (18 TC's and 49 SC's) are responsible for 122 work projects. Two Technical Committees - TC 5 and TC 13 - have been vacant since last year and TC 8/SC 2 became vacant recently.

On the subject of the implementation of OIML Recommendations by Member States, Mr. Szilvassy reminded participants that the degree of implementation must be reviewed every four years. The last inquiry having been carried out in 1996, a new one was instigated by the BIML in April 2000. But in order for the BIML to be able to draw up and publish the fully updated versions of the two documents in question and draw more accurate and well-founded conclusions, it is necessary that those OIML Member States that have not yet replied send their responses to the BIML as soon as possible.

Mr. Szilvassy went on to comment that a number of existing differences (and/or additional requirements) in national regulations (especially in OIML Member States) compared to OIML Recommendations need to be eliminated, since they create unnecessary barriers to trade and - at the same time - hinder acceptance of OIML type test results/OIML certificates.

Although the necessary measures to be taken are not explicitly included in the 1999-2002 Action Plan they are formulated in the *OIML Long-term policy - Assessment of OIML strategies and activities* and endorsed by the Tenth Conference in its decision. This issue is to be regarded as a permanent task for all OIML Member States.

The moral obligation of Member States to implement OIML Recommendations in national regulations is also reinforced by the WTO TBT Agreement.

In addition, there is a proposal from UN/ECE (circulated by the WTO TBT Committee) to develop a global model for implementing *Good regulatory practice for the preparation, adoption and application of technical regulations via the use of international standards*. The acceptance of this proposal and the provisions of such a document will most likely enhance the necessity for

internationally harmonized national regulations based on international standards.

The probable approval of the MID in the near future and the development of *Normative Documents* based on OIML Recommendations by joint efforts of EU Member States (that are also OIML Member States) and the BIML will have a positive effect on improving the implementation of OIML Recommendations.

Under the supervision of Mr. Johansen (Denmark), the Conference then proceeded to formally sanction the 12 new or revised Recommendations already approved by the Committee in 1997, 1998 and 1999 (R's 49-1, 60, 65, 81, 85, 93, 99, 125, 126, 127, 128 and 129). All these Recommendations were successfully sanctioned.

The Conference then sanctioned three draft Recommendations (*Octave and one-third-octave band filters*, *Polymethylmethacrylate dosimetry systems* and *Alanine EPR dosimetry systems*) directly.

6 OIML Certificate System

Prof. Kochsiek distributed a detailed report drawn up by the BIML listing the main developments since the 10th Conference; the most important of these is the result of surveys carried out in 1997, 1998 and 2000, which indicate that:

- the System and the acceptance of certificates (test results) are evolving by themselves on a voluntary basis;
- results achieved and further developments are encouraged both by manufacturers and by OIML Members; and
- actions envisaged in the 1999-2002 Action Plan are in line with the needs and proposals of manufacturers and OIML Members.

Concerning future developments of the System, he pointed out that two sets of activities are being carried out in parallel:

- the first set is directly related to the promotion and development of the System itself; and
- the second set is related to the promotion of the acceptance of OIML type test results/OIML certificates and to confidence building between the parties concerned (see actions as formulated in B.1-B.3 of the 1999-2002 Action Plan).

Other relevant facts and figures were given (as at 2000.09.15):

- 671 certificates registered;
- 30 Recommendations applicable within the OIML Certificate System;

- 209 applicants and manufacturers from 31 countries have been granted certificates;
- 23 Issuing Authorities in 20 Member States established.

A problem was put forward for consideration: statistics on the evolution of the System clearly show not only that a natural time delay exists between the approval and publication of a Recommendation and the issuing of the first OIML certificates, but also that there is a growing gap between the categories of measuring instruments applicable within the System (currently 30) and the categories for which OIML certificates have actually been issued (currently only 11).

The situation is likely to improve taking into account the lead time, the applicability in the near future of the revised Recommendations on utility meters (R 49, R 75, etc.) and the future implications of the Measuring Instruments Directive (MID) of the EU.

Nevertheless, Recommendations will exist for categories of measuring instruments for which there is practically no interest for their real application within the System.

In concluding, it was therefore proposed that consideration be given by all interested parties (especially the TC's/SC's responsible for the development of given Recommendations) as to whether it is really worth developing Test Report Formats (which require considerable time and energy to produce) for categories of measuring instruments for which practically no interest can be envisaged for issuing (and accepting) OIML certificates.

Prof. Kochsiek concluded this Item by mentioning that the Round Table on *Mutual Recognition* would doubtless provide more ideas for the further development of the System.

7 Developing Countries

Mrs. Annabi chaired the Development Council meeting together with Ian Dunmill; a full account is published separately.

8 Administrative and Financial Matters

Mr. Birch led discussions on this item. As already reported in paragraph 2 of this report, the question of whether or not two particular Member States should be struck off the list for not having paid their subscriptions for over three years was debated at some length, as was the issue of whether the monies paid in 2000 should be set against their arrears or against this year's contri-

butions; the latter solution was chosen and the Conference adopted a resolution not to strike them off, assuming that future years' dues were paid on time.

The Conference examined the management of the budget since the 10th Conference, and deemed that it had been managed satisfactorily by the CIML President and BIML Director. Reports on fiscal years 1996–1999 were distributed but no observations were made by Delegates; the report also included estimates for 2000.

The budget for the next four years drawn up by Mr. Athané was accepted with some modifications, notably a reduction in travel expenses for OIML Representatives or BIML Staff representing the Organization in meetings abroad.

The amount to be set aside in the Reserve Fund was reduced to zero since the reserve fund was deemed to be at a high enough level to cope with any unforeseen and non-budgeted expenses.

The 4-year budget, explained Mr. Athané, took into account the items listed on the 1999–2002 *Action Plan* (which would affect the BIML's workload for a number of years), the resulting BIML staff requirements, and constraints resulting from the current worldwide economic situation. The BIML would do its best, he assured Delegates, to cope with an ever-increasing workload despite the fact that the BIML staffing level had remained constant for some time.

Mr. Athané also suggested that in the not too distant future, BIML salaries should be reconsidered to bring them more into line with other similar Organizations operating out of Paris; no resolution was proposed on this topic.

The actual contributory shares and other details are set out in full in the *Decisions* of the Conference, and in the official *Minutes*.

9 Other Business

Awards were presented by Mr. Faber to Mr. W. Klein (Tokheim) and to Prof. Dr. C. Volkmann (PTB) (received by Prof. Kochsiek on his behalf) for their outstanding contribution to OIML technical work, and this gesture was unanimously approved by the audience.

10 Closure

The decisions and resolutions were adopted and it was decided to wait for two years before deciding where to hold the Twelfth Conference; if no invitation was forthcoming, the BIML would organize the Conference in France. ■



Cleopatra's Needle



Big Ben

35TH CIML MEETING

Report

CHRIS PULHAM

Agenda

Opening address

Roll-call - Quorum

Approval of the agenda

- 0 Appointment of an *Honorary Member* of the Committee
- 1 Approval of the minutes of the 34th CIML Meeting
- 2 Member States and Corresponding Members
Situation of certain Members
- 3 Financial matters
Adoption of the Auditor's report for 1999
- 4 Presidential Council activities
- 5 BIML activities
- 6 Technical activities
Examination of the situation of certain TC's/SC's, if appropriate
- 7 Eleventh International Conference of Legal Metrology: Agenda and program
- 8 CIML Presidency
- 9 Director of the BIML
- 10 Eleventh International Conference of Legal Metrology: Examination of the decisions made by the Conference
- 11 Future meetings
 - 11.1 36th CIML Meeting (2001)
 - 11.2 37th CIML Meeting (2002)
- 12 Adoption of decisions

Closure

35TH CIML MEETING

Opening Address - Mr. Gerard Faber

PRESIDENT, CIML

My Dear Colleagues,

It is my pleasure to welcome you to this, the Thirty-Fifth Meeting of the International Committee of Legal Metrology held in London in conjunction with our Organization's Eleventh Conference.

My opening address will be very brief since I will be delivering a rather more detailed report on OIML activities this afternoon after the opening of the Conference.

However, I cannot start without first expressing our deep appreciation to Seton Bennett and his colleagues who have worked so hard during the past twelve months to ensure the success of these meetings. Dear Seton, I am sure that, at the end of the week, all of us will be fully satisfied and it will be my pleasure to express my thanks on behalf of all the participants.

Now, according to tradition I would like to welcome those CIML Members who have joined our Committee on the occasion of, or following, our Tunis meeting.

These are:

- Mr. Boudissa, Algeria, who was appointed CIML Member at the time of our Tunis meeting but whom I had therefore not been able to welcome at the opening of the meeting;
- Mr. Eggermont, Belgium;
- Mr. Botev, Bulgaria;
- Mr. Eisa, Egypt;
- Mr. Teklehaimanot, Ethiopia;
- Mr. Valkeapää, Finland;
- Mr. Gunaryo, Indonesia;
- Mr. Imai, Japan, who already occupied the position of CIML Member some time ago;
- Mr. Rysbekov, Kazakhstan;
- Mr. Chun Haeng Cho, Republic of Korea;
- Mr. Iacobescu, Romania;
- Mr. Björkqvist, Sweden; and
- Mr. Ehrlich, USA.

To all these numerous new colleagues, whether they are present or not at this meeting, I am pleased to offer my sincere welcome and thanks for their participation in our work.

Let me now evoke certain items that we will have to decide upon during the various sessions of this CIML Meeting.

First of all, this morning, we will have to make the final preparations for the Conference. This should not take too much time.

We will also have to look at matters which are typically the Committee's responsibility, such as the situation of certain Technical Committees and Sub-committees.

Finally, the Committee will have to make decisions which will be vital for the future of our Organization: the election of the CIML President and of the CIML Second Vice-President, and the appointment of the future BIML Director.

Discussions on these subjects may take some time, as well as the secret ballots by which you will express your choices. Therefore, as already indicated in the program which you have found on your tables this morning, the CIML will have to meet on several occasions during this week. Of course, during each of these meetings, the quorum of three-quarters of CIML Members present or represented will have to be reached. May I therefore ask you not only to make sure that you are duly present or represented at each of these CIML Meetings, but also to listen to any announcement concerning possible changes in the program.

Thank you for your attention, and may our meetings be successful. ■



Gerard Faber

35TH CIML MEETING

Opening Address - Dr. Seton Bennett

CHIEF EXECUTIVE, NWML – CIML MEMBER FOR THE UK

Mr. Faber,
Ladies and Gentlemen,

On behalf of the National Weights and Measures Laboratory and the Department of Trade and Industry, I would like to welcome you to London and in particular this morning to the Thirty-Fifth Meeting of the International Committee of Legal Metrology. I know many of you have been to London before, but perhaps for some of you this is your first visit. The famous eighteenth century writer Dr. Samuel Johnson said that the man who is tired of London is tired of life and I hope that while you are here you will find a lot of interesting and exciting things to do.

One year ago in Tunis we had an excellent meeting in a fascinating city and some of us were privileged to tour around that wonderful country. London is very different to Tunis and the United Kingdom very different to Tunisia, but I hope that you will find much here of interest.

This Conference Center is, as you can see, a relatively new building standing among many older buildings very close to the heart of London, the heart of Government. We are within a few hundred meters of the Parliament building, of Downing Street where the Prime Minister lives, of Westminster Abbey and of most of the large

Government offices. From the windows here you have I think one of the best views in London where you can see not only some of the oldest structures in London but also some of the newest. Westminster Abbey is more than nine hundred years old. The London Eye, the big wheel, which you cannot miss, has been open for only about eight months, so you have the old London and the new London together.

The Parliament building itself which you can also see from the window here does have one connection with legal metrology because that building was built in the middle of the nineteenth century, following a fire in 1834 which destroyed not only the old Parliament building, but also the British standards, the yard and the pound, and that caused great consternation and it took some twenty or thirty years to really reconstruct the pound and the yard.

One of the consequences of that was the establishment of a separate department to take care of weights and measures and that department eventually became the National Weights and Measures Laboratory. So we can thank that fire both for the splendid new Parliament building and also for my laboratory!

But you did not come to see these buildings, you came here for a week of meetings, and this will be a very busy week with the CIML, the OIML Conference, the meeting of the Development Council, the meeting yesterday of the Euro-Mediterranean Legal Metrology Cooperation, the meeting of the Presidential Council and on Saturday the meeting of Regional Organizations.

I hope it will be an interesting and fruitful week for you all, and I have three wishes for you this week: first of all that you have an excellent and successful meeting, that everything we discuss will come to good conclusions; my second wish is that you will enjoy your stay in London and that you will have a chance to see the city; and my third wish is that I will have the opportunity to speak with each of you in the course of the week. Welcome to London. ■



Seton Bennett

The Thirty-fifth meeting of the International Committee of Legal Metrology took place in conjunction with the Eleventh International Conference from 9 through 13 October 2000.

Opening addresses were given by Seton Bennett and Gerard Faber - these texts are reproduced in full on pages 34-35. The roll of Delegates was called: fifty-two CIML Members were present or represented out of a total of fifty-seven so the quorum of 3/4 was reached.

Mr. Faber specially welcomed Mr. Birkeland, CIML Immediate Past President and Honorary Member of the Committee. After the Agenda (see insert) was approved, Mr. Faber explained that the main purpose of the London meeting - apart from regular business - would be to appoint the new BIML Director to succeed Mr. Athané, and to elect the CIML President.

0 Appointment of an *Honorary Member* of the Committee

The Committee was unanimous in accepting Mr. Faber's proposal to appoint Dr. Samuel Chappell, Former CIML First Vice-President and US Member, *Honorary Member* of the Committee (see photo, page 37). Mr. Faber evoked Dr. Chappell's career and the role he played in developing US participation in OIML activities and in contributing to the improvement of many aspects of OIML work.



Westminster Abbey

2 Member States and Corresponding Members

After the minutes of the 34th CIML Meeting were approved (**Item 1**), a list was distributed to Delegates informing them of the latest Member State population counts; these figures serve as a basis for determining each country's annual contribution. The list also identified those Member States that benefit from a lower contributory class than that assigned by their population count. In fact, this new classification of Member States was the same as for previous years, despite the fact that certain populations might have changed and certain developing Member States might have requested to remain in the same contributory class.

3 Financial matters

The Committee adopted the Auditor's report for 1999; this document would be submitted to the Eleventh Conference during the week.

4 Presidential Council activities

The Presidential Council met twice in 2000; its main responsibilities are firstly to advise the President, and secondly to prepare and implement the decisions made by the CIML or by the Conference concerning budgetary and long term policy decisions. The February 2000 meeting held at the BIML had mainly focused on the financial situation of the OIML and preparation of the 2001-2004 budget, and a thorough examination of the Action Plan. Mr. Faber added that in addition, the Council examined the preparations for the Round Table on *Mutual Recognition* and the BIPM/ILAC/OIML meeting which followed the Council meeting.

5 BIML activities

This report is printed in full later in this issue of the Bulletin. Mr. Athané pointed out that the report showed a significant increase in certain BIML activities connected, for example, with participating in OIML technical work, representing the OIML in meetings of other international and regional bodies, acting as secretariat of the Development Council, issuing publications and



- ① Gerard Faber (Netherlands)
Elected to continue as CIML
President for 3 years
- ② Lev Issaev (Russian Federation)
Elected CIML Second Vice-President
for 6 years
- ③ Ghâïet-El-Mouna Annabi (Tunisia)
Elected to continue as Development
Council Chairperson for 2 years
- ④ Jean-François Magana (France)
Appointed future BIML Director
- ⑤ } Wim Klein (Tokheim, Netherlands) and
⑥ } Christian Volkmann (PTB, Germany)
Each presented with an award from the
OIML for their outstanding contribution
to the technical work of the Organization
- ⑦ Sam Chappell (United States)
Appointed CIML Honorary Member



Conference and CIML Meeting: Appointments • Elections • Nominations

developing communication means, etc. Mr. Athané said he was convinced that the future BIML Director, with the assistance of the current BIML Staff, will be able to pursue its progression and development in terms of quality and quantity of BIML work.

6 Technical activities

Mr. Szilvássy indicated that a more complete report would be presented to the Conference and that the CIML should only examine the situation of a small number of Technical Committees or Sub-Committees. Please also refer to pages 30–31 of this Bulletin for further information.

The situation of TC 5, TC 13, TC 8/SC 2 and TC 16/SC 1 was discussed, then concerning the *1999–2002 Action Plan* Mr. Szilvássy said that a list of high priority work projects had been prepared by the BIML based on an inquiry carried out recently and that this list would be submitted to the Conference. In addition, a list of priority projects was being developed; the two lists would subsequently be distributed to Members.

An additional paper on TC/SC work was being prepared and would be distributed by the end of 2000; the paper lists ongoing projects and details of the process for reviewing existing publications with their proposed reconfirmation, revision or withdrawal.



Tower of London

7 Eleventh International Conference of Legal Metrology

The CIML accepted the draft agenda and schedule proposed for the Eleventh Conference and endorsed the proposals from the United Kingdom and from the CIML President to nominate Dr. Foster as Conference President and Dr. Pákay and Mr. Beard as Conference Vice-Presidents.

8 CIML Presidency

The two Candidates, Dr. Bennett from the United Kingdom and Mr. Faber from The Netherlands, introduced themselves and presented their views concerning the future of the OIML. Mr. Faber pointed out that he would be available for three years only.

Following two consecutive secret ballots, the CIML elected (with the required majority) Mr. Faber as its President for the next three years.

The three Candidates for CIML Second Vice-President, Dr. Imai (Japan), Dr. Issaev (Russian Federation) and Mr. Johnston (Canada) introduced themselves and presented their views concerning the future of the OIML.

Following three consecutive secret ballots the CIML elected (with the required majority) Dr. Issaev as its Second Vice-President for the next six years.

Photos are featured on page 37.

9 Director of the BIML

The Candidate nominated by the Selection Committee, Mr. Magana (France) introduced himself and presented his views concerning the role of the BIML within the OIML.

Following a secret ballot, the Committee appointed (with the required majority) Mr. Magana as the future BIML Director (photo page 37).

10 Eleventh International Conference

Mr. Faber rapidly reviewed the decisions made by the Eleventh Conference and suggested that the Committee

should charge the Presidential Council with their implementation, though some actions should perhaps be initiated by the CIML President or Presidium. The Committee expressed its agreement with this procedure.

11 Future meetings

Mr. Issaev confirmed that the CIML was invited to hold its **36th Meeting** in Moscow over the period 22–27 September 2001. This invitation was accepted and the Committee requested its President and the BIML to start preparations in due course in close connection with the host country.

Mr. Zarin confirmed that Israel was willing to host the **37th CIML Meeting** in 2002. The Committee noted this invitation with thanks and decided that the final decision would be made at its next meeting.

12 Adoption of decisions

The text of the proposed decisions was read and adopted by the Committee with some minor corrections.

Closure

Mr. Faber expressed his satisfaction with the output of the 35th CIML Meeting and said that the thanks he had expressed at the closure of the Eleventh Conference were of course equally applicable to this meeting. He also noted that the CIML Presidium now included three persons originating from Europe and that he would duly consider this fact when establishing the new Presidential Council so that the various regions of the world be represented equally. ■



Knightsbridge

DEVELOPMENT COUNCIL

Report

IAN DUNMILL & CHRIS PULHAM

The Development Council meeting was held on 11 October 2000, chaired by Mrs. Ghaïet-El-Mouna Annabi. Also present at the presiding table were Messrs. Faber, Kochsiek, Athané and Dunmill. 37 Member States and nine Corresponding Members attended and Representatives from eight Regional Legal Metrology Organizations (RLMOs) as well as from CECIP, CECOD and the BIML were also present.

0 Election of the Chairperson

Mrs. Annabi had indicated her willingness to continue as Chair, and despite a call for other nominations, no other candidacies had been put forward. Many comments had been made to Mr. Faber expressing appreciation for the way in which Mrs. Annabi had chaired the Council for the last two years, and so she was unanimously re-elected for another period of office. She indicated her hope that ongoing actions would continue throughout the next two years.

Agenda

- 0 Election of the Chairperson
- 1 Report and discussion on activities since the 1999 Council meeting in Tunisia
- 2 Working Groups
- 3 Reports by representatives of RLMOs
- 4 Proposal for the 2001–2002 work program
- 5 Information on project proposals
- 6 Information on special activities of Members
- 7 Other matters
- 8 Next meeting
- 9 Conclusion and closure

1 Report and discussion on activities since the 1999 Council meeting in Tunisia

Mrs. Annabi explained that three out of five OIML Members are considered by the OECD as developing countries; this therefore indicates the importance of the Council and its work, particularly in the areas of training and technical assistance. OIML interest in the problems of developing countries had continued to grow over the years and new actions on publications, seminars / training courses and information must be instigated. Mrs. Annabi then gave a brief report on the past year's activities:

Recomposition of the Development Council

Since the establishment of the Council, it had become unclear which countries were officially enrolled. At the Tunis meeting, 37 countries were represented. An inquiry had established a list of countries wishing to register as members but this list is in no way restrictive and in fact any country wishing to participate may do so.

Revitalization of working groups

There are now three working groups (*Training, Information and Equipment*), all of which have established terms of reference and working programs during the past year.

External liaisons

Mrs. Annabi reported that this action, which is the responsibility of the Chair (assisted by the BIML) consists of establishing contacts with appropriate international and regional organizations, since finance is one of the main problems encountered. Contacts had been made with ISO DEVCO, UNIDO and the United Nations Economic Commission for Africa; other contacts were formed at the *Metrology 2000* event (May 2000, Havana, Cuba).

Regulation

The revision of OIML D 1 *Law on Metrology* had begun this year and an initial proposal has been prepared for further action by the appropriate TC/SC.

Work of TC's and SC's

The Council would try to participate in those TC's/SC's which were of direct interest to developing countries. This year, it had been represented at meetings of TC 3/SC 5 *Conformity assessment* and TC 6 *Prepackages*, though other TC's/SC's may be equally relevant.

Development Council web site and lists of experts / training courses

The Council site is now operational, accessible via the main OIML site. It is intended to be available in three languages, English, French and Spanish. A list of some fifty experts (sorted by subject, region and language spoken) and forty training courses have now been established and published, though they are still open for any CIML Member to propose additions. It was important for them to be kept up to date. "Validation" of the training courses was still under consideration.

Mr. Magana pointed out that he had also given information on scientific metrology experts and training courses, and asked whether contacts had been made with the BIPM in order to examine common interests. Mr. Athané replied that the two organizations should cooperate to offer common services to countries which are developing their metrological infrastructures. It was hoped that the BIPM, which does not yet have a specialized body dealing with development assistance, would now be able to devote more time to cooperation with the OIML, in particular in the field of development assistance. This subject would be discussed during the next joint meeting on 21 February 2001, and it would appear to be a good solution for the Council to become a common body with the BIPM.

Mr. Birch commented that the changing relationship between the Development Council and the RLMOs needed to be considered. One of his main concerns was the low level of active involvement by developing countries in the Organization, as shown by the low level of response to the inquiries conducted this year. He said it was encouraging that the OIML's own funding of the Development Council had increased. Often, however, the costs of training course attendance had been paid, but this is very specific to particular individuals. Another perhaps more effective method may be to fund the participation of developing countries in the operation of the Council itself (and in its working groups) and in TC's and SC's.

Mr. Imai reported that a developing countries working group had been set up within the Asia Pacific Metrology Program (APMP) and that its relationship with various international and regional organizations will be examined.

Mr. Boudissa confirmed the need to benefit from the experience of developed countries and stressed that Council activities should be costed and timed.

Mr. Athané commented that one reason why the OIML was promoting regional cooperation was to make it possible for non OIML Members which are able to join regional cooperations, to benefit indirectly from the work of the OIML.

2 Working Groups

Mr. Dunmill reported that it had been decided to re-establish the membership for each of the working groups.

2.1 WG 1 – Training

Mr. Wallerus reported on progress: since 1999 the number of participants in this group has doubled to about twenty. A working program was proposed whose most important item was the revision of OIML D 14 *Training of legal metrology personnel*. Courses need to have definite content, be of fixed duration, and be based on OIML Recommendations or ISO standards. Training institutions need to have requirement for the equipment, accommodation and personnel. Trainers should have some kind of teaching qualification as well as professional experience and examinations should be recognized by different countries.

He also pointed out that the DAM now also intended to offer workshops for trainers, which, in addition to the technical content, will offer training on teaching methods and practice.

Mr. Magana said that he had identified two main topics in the work of this group: the definition of the required content of training courses, and the quality of the training given.

Mr. Boudissa realized that funding was required for any developing country to put a training program into place, and that this was therefore the most important theme to enable the Development Council to proceed with its work program. He also pointed out that there is often a language problem in the training courses and asked that consideration be given to offering courses in a variety of languages.

Mr. Kochsiek reported that the European Commission had been approached for funding on a number of occasions without success.

2.2 WG 2 – Information

Mr. Mardin reported that the response to a BIML questionnaire to launch the work of this group, as well as its work program, was rather disappointing since only five replies have been received. However, these would form a good initial basis.

Mr. Birdseye reported that he and Mr. Laamoumri had been looking at the recognition of type approvals, certification, etc. within the EMLMF. They had discovered that information exchange between metro-

logical authorities was the most important aspect in improving the operation of the OIML Certificate System from the point of view of developing countries. Information on certification, non-compliance, identification of equipment, market surveillance, etc. could be made available, for example by means of web sites, and the coordination of this information at an international level could be done through this working group.

2.3 WG 3 – Equipment

Mr. Mardin reported that it was planned to develop a classification of equipment and he hoped that developing countries would be able to provide information on their needs in this respect. Any assistance in providing equipment will be subject to funding being located.

3 Reports by representatives of RLMOs

3.1 Asia-Pacific Legal Metrology Forum (APLMF)

Mr. Birch reported that the APLMF now had 25 members (including nine OIML Member States and nine Corresponding Members), indicating that regional organizations complement, rather than compete with, the OIML. Over the last few years the APLMF has made use of written reports submitted by countries before meetings in order to identify key issues and to overcome language barriers which may exist at meetings; he recommended the use of such reports to the Development Council. At the last meeting, these reports illustrated the large amount of legislative activity and the degree of modernization of legislation which was occurring in the region.

3.2 South-East European Cooperation

Mr. Grkov reported that this is a very new regional organization. He said that not all the countries have a national quality infrastructure, concerning standardization, metrology, accreditation and conformity assessment. He also gave details of a training course on the expression of uncertainty, which will include both theoretical and practical aspects of the subject.

3.3 Cooperation in Metrology of Central and Eastern European countries (COOMET)

Mr. Zhagora reported that the Community of Independent States (CIS) had concluded several mutual recogni-

tion agreements which are very effective; every year hundreds of type approvals are added to the registry. He also reported that concerning the harmonization of metrology legislation, there is a model law which it is intended may be used by COOMET members. He felt that there should be close cooperation between the OIML and the BIPM so as to ensure the equivalence of national measurement systems.

3.4 Euro-Mediterranean Legal Metrology Forum (EMLMF)

Mr. Magana said that this emerging cooperation had not yet been formalized by a memorandum of understanding. Two meetings had been held: the first in Tunis in 1999 and the second in London. He hoped that more countries would participate, particularly those from the Mediterranean area. He explained that there were four working groups:

- *Training*, which has looked at the training needs in the region;
- *Mutual information*, which hoped to produce a regional legal metrology directory;
- *Mutual recognition*, working to resolve the problems of existing agreements, as well as being concerned with future agreements; and
- *Equipment and technical assistance*, which has not yet begun its work.

3.5 Indian Ocean Legal Metrology Forum (IOLMF)

Mr. Birch reported that a workshop in November 1998 in Sri Lanka had developed a number of programs of regional importance, and explained that two programs of current interest were concerned with the modernization and harmonization of legal metrology legislation and with prepackaged goods. He suggested that these were areas in which the establishment of additional Development Council working groups would enable the views of developing countries to be put forward on these topics.

3.6 Southern African Development Community Legal Metrology Cooperation (SADC MEL)

Mr. Beard reported that six of SADC MEL's 14 members were not OIML Members, but that it was the aim of the organization that all members should eventually join the OIML. Training was considered as a regional priority,

but there were currently no courses aimed specifically at OIML Recommendations. He indicated that none of SADCMEI's member countries were fully developed and that therefore they intended to cooperate as fully as possible with the Development Council.

3.7 Inter-American Metrology System (SIM) - Legal Metrology Working Group

Mr. da Silva reported that SIM currently has 34 members which are also members of the Organization of American States (OAS). Established in 1979, SIM is primarily devoted to the development of metrology in its member states, with an emphasis on less developed countries. It works in cooperation with the BIPM and the OIML in order to improve free trade and the quality of life in the region.

In 1997, SIM and the OIML signed a memorandum of cooperation which aims to improve the development of legal metrology in the American countries. There are two Legal Metrology working groups: *Laws and regulations* and *Metrological control*. At the last meeting of the legal metrology working group in July 2000, a task group on the metrological control of measuring instruments was established in order to provide and improve confidence in legal measuring instruments used for trade, health and environmental protection, thereby minimizing technical barriers to trade.

3.8 European Cooperation in Legal Metrology (WELMEC)

Mr. Magana reported on the following important developments within WELMEC:

- The proposed *European Measuring Instrument Directive* has now been published by the European Commission and is expected to be adopted within two to three years. This Directive is in line with OIML Recommendations, so measuring instruments which comply with certain OIML Recommendations will be able to be placed on the European market more easily.
- WELMEC is also doing much work in the field of pre-packages. A guide for packers has been published which explains the European prepackaging legislation. As European legislation is likely to be changed, it is important that WELMEC members are also active in the OIML prepackaging work, ensuring that both requirements are harmonized.
- Market surveillance is also an important subject for WELMEC, as it is for developing countries, so as to ensure the quality of the instruments placed on their markets.

4 Proposal for the 2001–2002 work program

Mr. Dunmill reminded delegates of the work conducted this year, in particular the re-establishment of the working groups and the setting up of the Council web site. He felt that this existing program should be maintained for the coming year to enable the working groups to proceed with the programs which they have established this year.

Technical work

The Development Council should continue to participate actively in the revision of D 1 *Law on Metrology* and to maintain and increase its interest in certain important TC's and SC's so as to ensure that the interests of developing countries are taken into account.

Web site

This could be further improved during the year and it is hoped that a Spanish version would also become available. Information on experts and training courses must be kept up to date.

Training courses

The Development Council needs to examine the possibilities for "validation" of training courses.

External liaisons and funding

Mr. Dunmill explained that useful contacts had been made during the last year, but that other points on the work program had needed to be put in place before funding for any specific projects could be sought. Mr. Athané added that on the subject of external liaisons, it would be useful to pursue closer liaison with ISO DEVCO and with the BIPM.

Mr. Birch suggested that the establishment of a Development Council working group on *Legislation* would provide a focus for the views of developing countries to be put forward to the revision of D 1. Similarly, a working group on *Prepackaged goods* would enable developing countries' views to be added to the technical work in this field. He hoped that chairs or co-chairs from developing countries could be identified for each of the working groups.

Mr. Yankine said that Burkina Faso was already heavily involved with WTO activities in connection with which they have established a consultative committee; he felt that it was very important for the OIML to continue its close involvement with the WTO.

5 Information on project proposals

5.1 UNIDO - OIML - PTB

Mr. Kochsiek reported that the Presidential Council had decided to launch this joint project during its meeting in February 2000. A work plan had been established for the following 18 months and UNIDO had recently indicated that the funds were now available. Certain least developed countries in Africa had been contacted and it was intended that experts would begin to work in these countries in December. The aim of the project was to demonstrate how legal metrology contributes to the state income through taxes and royalties based on correct measurements, fair trade and consumer protection. The chosen countries had been selected due to their lack of legal metrology infrastructure. UNIDO have also indicated that if this project is successful, more funding may be available in 2001–2002 for similar projects in other regions.

6 Information on special activities of Members

6.1 PTB

Mr. Kochsiek reported that the PTB carries out work for developing countries in the areas of advisory services, basic and/or advanced training, supply of materials and equipment, accreditation or certification. Detailed information is given in the "Update" Section.

7 Other matters

Mr. Magana suggested that promoting the use of the Internet amongst members could save a lot of money and therefore enable more developing countries to participate actively in the work. The problem is that some do not yet have easy access to the Internet. He felt that the CIML should draw these governments' attention to this need.

8 Next meeting

The next meeting could be held in conjunction with the 36th CIML Meeting, lasting perhaps last half a day, plus at least a further half day dedicated to a working group, or to several working groups holding sessions in parallel. The specific program would depend upon the state of progress of the working groups' activities and upon the possible creation of additional working groups as mentioned.

9 Conclusion and closure of the meeting

In concluding, Mr. Faber said that the importance of the Council's work was increasing and that he hoped that means could be found to raise funds. He also commented on the extensive discussions which had taken place, particularly on the subject of training in legal metrology. He said he believed that the Development Council was progressing in the right way and thanked both Mrs. Annabi for chairing the meeting and also delegates for their contributions. ■



Development Council Table. *L to R*: Bernard Athané, Ian Dunmill, Ghaïet-El-Mouna Annabi, Manfred Kochsiek, Gerard Faber

ROUND TABLE

Mutual recognition

ATTILA SZILVÁSSY

In his opening address, Mr. Faber reminded participants that the Round Table was not actually part of the Conference and requested them to express their views not as national representatives, but rather as experts.

Dr. M. Kochsiek, Round Table Chairman, said that the objectives were to inform attendees about activities of other organizations in the field of mutual recognition and to obtain inputs for the development of the OIML Mutual Acceptance Arrangement (MAA) and the proposed OIML IQ mark for prepackages.

Presentations on the present situation

Mr. Vaucher (Switzerland) gave additional information on the *Convention du Mètre* MRA, which was a prerequisite for other MRAs in the field of metrology. As for the OIML arrangement he said that regulatory bodies had to agree to accept test results; the MAA must be as simple as possible and it should be left to participants to decide to use accreditation or self assessment.

Mr. Hayward (UKAS) gave an outlook on the international situation of laboratory accreditation and gave information on the objectives of the ILAC MRA that had been prepared based on the MRAs of two regional groupings (EA and APLAC).

Mr. Engler (The Netherlands) gave information on the Netherlands' experience on bilateral agreements on recognition of test reports. He said that the NMi supports recognition and that there was no conflict between the NMi bilateral agreements and the proposed OIML MAA. He further added that the MAA should concentrate on the acceptance of the test reports and that priority should be given to accreditation for demonstrating competence.

Dr. Chappell (USA) gave a detailed transparency presentation on the ongoing activities of TC 3/SC 5 to develop the necessary documents for the MAA. In his second presentation he gave an overview on the proposed voluntary OIML International Quantity (IQ) Mark System which is included in the draft of revision of R 87 *Net content in packages*.

Discussions

Mr. Magana (France) made a general remark that it was necessary for the requirements for evaluating the competence of type testing laboratories to be equivalent to those applied by ILAC (EA and APLAC).

Mr. Lagauterie (France) drew attention to ambiguities in the draft OIML MAA document: the subject of acceptance should be the test reports associated with OIML certificates, and not the type evaluations.

Mr. Johansen (Denmark) said that many points needed to be clarified in the recent MAA draft. He expressed concerns about the real necessity of this document. He explained that the OIML Certificate System was functioning well and there had already been a number of cases of voluntary acceptance. For confidence building, he emphasized, accreditation is needed.

Mr. Stoichituiu (Romania) reminded delegates of the conclusions to the Round Table on accreditation held in Vancouver in 1996 and said that only accreditation can serve as a basis for mutual confidence and for agreements on mutual recognition.

Mr. Birch (Australia) reminded the participants of the need for a Global Measurement System. Unfortunately for the time being there is no international legal metrology system that can provide support for the Global System. Mr. Birch said that self assessment as proposed by the MAA would not provide the transparency and consistency necessary for international acceptance.

Dr. Issaev (Russia) reminded participants that *self declaration* had already been discussed several times and accepted as a necessary option. Further, he stressed the need for the OIML MAA and the necessity to enable developing countries to participate in the Arrangement.

Dr. Bennett (UK) explained that an agreement shall pass four tests: (i) confidence; (ii) transparency; (iii) accessibility for all those interested; and (iv) benefit for interested parties. The OIML MAA in its present form does not pass these tests, and much has to be done to improve its transparency and accessibility.

As regards the proposed OIML IQ mark Dr. Bennett expressed doubts on its possible acceptance, and concern over the additional burden that such a mark can cause for small packers.

Mr. Andersson (USA) said that the USA is interested in the MAA and would apply the OIML Certificate System. He mentioned the US experience in raising mutual confidence at national level without obligatory accreditation. He drew attention to the importance of market surveillance and of regular conformity control of measuring instruments in production.

Mr. Faber (The Netherlands) said he believed in the establishment of a Global Measurement System. He felt

that the OIML MAA was very important and urgent; it should also be very precise, complete and transparent, and should be developed step by step.

Mr. Kildal (Norway) said that the *Convention du Mètre* MRA was heading along the right lines towards the Global Measurement System. Since the OIML Certificate System itself was functioning well, in order to improve the OIML MAA (if it was found necessary at all) he proposed to take other international documents and existing systems into consideration.

In summarizing the discussions, Dr. Chappell said that he felt encouraged by all the contributions and requested the participants to send in their comments on both the draft MAA and the proposed IQ mark.

Conclusion of the discussions

Mr. Athané (BIML) formulated the conclusions to the Round Table as follows:

After having listened to reports on the subject what is happening in the field of mutual recognition agreements or arrangements within CIPM, ILAC, WTO and also at the bilateral level, the Round Table heard information concerning the state of progress of work in OIML TC 3/SC 5 and TC 6. The points of view on these activities - in particular in relation to TC 3/SC 5 - as expressed by certain participants differed considerably and opposite opinions were expressed particularly concerning the necessity for the work of TC 3/SC 5 and of accreditation, and the sufficiency of self declaration.

However, there was a consensus concerning the fact that the mutual recognition of test results associated with OIML certificates of conformity is a necessary objective to achieve, but the ways to achieve this have still to be identified. ■

LONDON 2000

Meeting of representatives of RLMOs

14 October 2000

SETON BENNETT, Chief Executive, NWML and CIML Member for the UK

The growth of regionalisation and the growing importance of regional economic groupings are increasingly influencing the development of legal metrology. Most, if not all, OIML members are also participants in regional legal metrology organisations (RLMOs), which are proving to be effective organisations for the discussion and resolution of regional issues. The nine or ten existing RLMOs have different agendas, reflecting the political, commercial, and technical priorities in their respective regions. These regional issues (some common - some specific) are also of interest to the rest of the OIML.

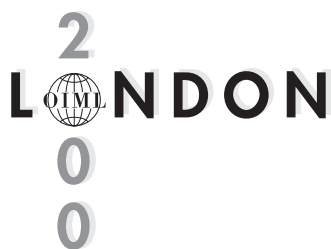
Representatives of eight RLMOs met in London on Saturday, 14 October, following the OIML Conference and CIML Meeting, to

exchange information about their activities, to identify topics of common interest, and to explore ways of working together. The RLMOs represented ranged from the mature (WELMEC, COOMET, APLMF) to some new, fledgling organisations (Euro-Mediterranean Forum and Balkan Cooperation). In a few hours of discussion, similarities and differences were highlighted as each representative gave an account of current priorities.

There was some discussion of the extent of membership overlap. Although in some cases there is considerable overlap (e.g. WELMEC and the Euro-Mediterranean Forum) it is quite clear that there are few common topics on the various agendas, and the meeting concluded that it would neither be practicable nor desirable to attempt to limit the membership of individual countries to a single RLMO. One topic of almost universal interest, however, is that of mutual recognition, which might have progressed more easily in the OIML if regional agreements had been in place. Discussion revealed that expectations of an agreement vary, but there is a need for transparency and general access to any agreement, with greater flexibility to allow more than one agreement for each category of instruments. The needs of developing countries and the possibility of including non-OIML states must also be considered.

The relationship between RLMOs and the OIML is necessarily an informal one, but the BIML has a role as an information centre. Discussion of draft Recommendations in RLMOs would encourage wider participation in the preparation of texts, aided by the intended publication of all drafts on the Internet. Mr. Athané said that the BIML would take responsibility for organising future meetings of RLMO representatives and would add regional meetings to the OIML web site diary.

It was agreed that the meeting had been valuable and that the next opportunity to meet would be in Moscow in September 2001. ■



Onzième Conférence Internationale de Métrologie Légale
Trente-cinquième Réunion du CIML
Réunion du Conseil de Développement
Table Ronde sur la "Reconnaissance mutuelle"
Réunion des Représentants des RLMO

La Onzième Conférence Internationale de Métrologie Légale, la Trente-cinquième Réunion du Comité International de Métrologie Légale, la Réunion du Conseil de Développement et la Table Ronde sur la "Reconnaissance Mutuelle" se sont tenues au Centre de Conférence Queen Elizabeth II, à Westminster, Londres, du 9 au 13 octobre 2000, sur l'invitation du Laboratoire National des Poids et Mesures (NWML) du Royaume-Uni.

Ces événements ont été co-organisés par le NWML, le BIML et la société londonienne Concorde Services, et les réunions de la semaine se sont conclues par une visite technique du NWML et des installations du NPL à Teddington.

Le Compte Rendu officiel de toutes ces réunions, ainsi que les Décisions et Résolutions, sont en cours de rédaction par le BIML. En attendant, un résumé des débats est donné en anglais et en français sur ces pages du Bulletin. ■

Programme pour la semaine de réunions

Lundi 9 octobre	08:00 – 09:00	Inscription, CIML
	09:00 – 12:30	Réunion du CIML
	13:30 – 14:30	Inscription, Conférence
	14:30 – 17:30	Conférence, ouverture et session plénière
Mardi 10 octobre	09:30 – 11:30	Conférence, session plénière
	11:30 – 12:30	Réunion du CIML
	14:30 – 17:30	Conférence, session plénière
	18:30 – 21:00	Concert et Réception OIML
Mercredi 11 octobre	09:30 – 12:30	Réunion du Conseil de Développement
	14:30 – 16:30	Table Ronde: <i>Reconnaissance Mutuelle</i>
	16:30 – 18:00	Réunion du CIML
Jeudi 12 octobre	08:00 – 09:30	Commission des Finances
	09:30 – 11:00	Commission Technique
	11:00 – 12:00	Réunion du CIML
	14:30 – 17:30	Conférence, session plénière
	18:00 – 19:30	Réception du Gouvernement du Royaume-Uni
Vendredi 13 octobre	09:00 – 10:30	Conférence, session plénière, approbation des décisions et résolutions, clôture
	11:00 – 12:00	Réunion du CIML
	12:00 – 18:00	Visite technique

Onzième Conférence: Ordre du jour



1 ORGANISATION DE LA RÉUNION

- 1.1 Ouverture
- 1.2 Appel des Délégués - Constatation des pouvoirs - Quorum
- 1.3 Modalités de vote lors des sessions de la Conférence
- 1.4 Élection du Président et des Vice-Présidents de la Conférence
- 1.5 Adoption de l'ordre du jour
- 1.6 Constitution des commissions du travail
- 1.7 Établissement de l'emploi du temps
- 1.8 Adoption du compte rendu de la Dixième Conférence
- 1.9 Rapport d'activité, par le Président du Comité International de Métrologie Légale
- 1.10 Informations diverses

2 ÉTATS MEMBRES ET MEMBRES CORRESPONDANTS

- 2.1 Nouveaux Membres - Perspectives de nouvelles adhésions
- 2.2 Situation de certains Membres

3 POLITIQUE À LONG TERME

- 3.1 Rapport sur les actions menées depuis la Dixième Conférence
- 3.2 Directives pour la période 2001-2004

4 LIAISONS AVEC DES INSTITUTIONS INTERNATIONALES ET RÉGIONALES

- 4.1 Rapport sur ces liaisons
- 4.2 Interventions de Représentants d'Institutions
- 4.3 Discussions et conclusions

5 TRAVAUX DES COMITÉS TECHNIQUES ET SOUS-COMITÉS OIML

- 5.1 Travaux entrepris - État d'avancement
- 5.2 Mise en application des Recommandations par les Membres de l'OIML
- 5.3 Sanction formelle des Recommandations déjà approuvées par le Comité en 1997, 1998 et 1999
- 5.4 Projets de Recommandations directement soumis à la sanction de la Conférence

6 SYSTÈME DE CERTIFICATS OIML POUR LES INSTRUMENTS DE MESURE

- 6.1 Rapport sur la situation du *Système*
- 6.2 Rapport sur l'établissement d'un accord de reconnaissance des essais de modèle OIML
- 6.3 Directives pour les développements futurs

7 PAYS EN DÉVELOPPEMENT

- 7.1 Rapport d'activité pour la période 1997-2000
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8 QUESTIONS ADMINISTRATIVES ET FINANCIÈRES

- 8.1 Examen de la gestion budgétaire de 1996 à 1999 et des estimations pour 2000
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9 AUTRES QUESTIONS

10 CLÔTURE

- 10.1 Adoption des décisions et résolutions de la Conférence
- 10.2 Date et lieu de la prochaine Conférence

11^{ÈME} CONFÉRENCE DE L'OIML

Discours d'ouverture - Dr. Kim Howells (Membre du Parlement)

MINISTRE DE LA CONSOMMATION ET DES AFFAIRES D'ENTREPRISES

Dr. Faber, Mesdames et Messieurs,

Je suis ravi de vous accueillir à Londres - au Centre de Conférence Elizabeth II - et à la Onzième Conférence Internationale de Métrologie Légale.

Depuis que j'ai pris mes responsabilités ministérielles actuelles, je suis devenu de plus en plus conscient de l'importance de la mesure dans pratiquement tous les aspects de nos vies. Les Jeux Olympiques, qui se sont achevés la semaine dernière à Sydney, ont souligné à quel point quelques millièmes de seconde ou une fraction de centimètre sont importants et précieux. Les mesures auxquelles l'OIML, et par conséquent cette Conférence, ont à voir, ont une signification autrement plus grande, parce qu'elles affectent toutes nos vies dans de si nombreux domaines. La loyauté commerciale, la santé et la sécurité des personnes, et la protection de l'environnement dépendent tous de notre capacité à mesurer avec précision et de notre confiance dans les résultats obtenus.

Dans ce pays, comme dans tant d'autres, le gouvernement a pris depuis longtemps les mesures nécessaires pour garantir l'intégrité de la mesure. En 1215, la Grande Charte de King John comportait l'instruction d'avoir des étalons correspondants pour mesurer le grain, la bière et le tissu dans tout le pays et à partir du treizième siècle de fréquentes Lois du Parlement ont amélioré et développé la réglementation de la mesure. Au vingt-et-unième siècle ce développement continue encore, reflétant les nouvelles technologies et une prise de conscience croissante de ce que les systèmes de contribution à la qualité et l'accréditation peuvent apporter à la fiabilité des produits et à l'exactitude des mesures. Aujourd'hui ce n'est pas seulement la mesure de la nourriture et de la boisson qui intéresse les consommateurs et les gouvernements. Des événements récents en Europe ont attiré l'attention sur la mesure du carburant pour les véhicules, et l'augmentation des prix a éveillé l'intérêt des consommateurs et a incité à la fraude. En dehors du domaine du commerce, le diagnostic et le traitement médical, par exemple, dépendent de l'évaluation fiable des symptômes et du dosage précis tant des médicaments que des radiations.

Aujourd'hui dans de nombreux pays, la législation est largement basée sur les Recommandations préparées par l'OIML. Au Royaume-Uni, nous avons aligné nos exigences pour les instruments de mesure du commerce sur les spécifications de l'OIML. De la sorte la collaboration au niveau international ne facilite pas seulement de meilleurs échanges, mais permet également la suppression des barrières au commerce qui se sont installées à mesure que les nations ont adopté de nouvelles lois.

Ici en Europe, la Commission Européenne vient de publier des propositions pour une Directive pour les instruments de mesure, qui permettra d'établir des exigences réglementaires communes pour un large éventail d'instruments de mesure à travers toute l'Union Européenne. L'un des aspects inhabituels de cette Directive est l'inclusion de références à des Recommandations OIML dans les exigences de performance des instruments de mesure. Le Royaume-Uni va travailler avec ses partenaires en Europe, et avec l'OIML, de façon à ce que notre législation soit en accord avec celle du reste du monde. L'OIML a une tâche importante à ce niveau, à savoir de permettre que les spécifications nécessaires soient disponibles et régulièrement mises à jour, afin de former la base de ce nouveau régime européen.

Il est bien sûr essentiel que l'accès à ces marchés modernes et les avantages d'une bonne réglementation métrologique bénéficient aussi aux pays en développement. Je constate que les pays en développement sont bien représentés à cette Conférence et je suis heureux d'apprendre que votre Conseil de Développement se réunira ici mercredi matin. Par l'apport d'informations, de conseils, et de formations aux pays en développement, et en étant à l'écoute de leurs préoccupations particulières, vous pouvez leur faciliter l'accès aux marchés et contribuer à supprimer les barrières techniques qui établissent une discrimination envers ces pays qui sont encore au stade du développement industriel.

En accueillant cette Conférence, mon gouvernement a manifesté son soutien constant à la collaboration internationale dans le domaine de la métrologie. Les représentants du Royaume-Uni jouent un rôle actif dans l'OIML et dans le travail d'autres organismes internationaux concernés par la métrologie. Mes fonctionnaires du NWML participent au travail de l'OIML de diverses manières, et ont contribué à la création de WELMEC en tant que coopération régionale européenne en métrologie légale. Il n'y a maintenant pas moins de neuf groupes régionaux similaires, et la réunion de samedi matin leur donnera l'occasion de comparer leurs notes en vue de casser les barrières qui peuvent encore exister entre eux.

Bref, vous avez devant vous une semaine très chargée. Je vous souhaite une Conférence réussie et j'espère que les résolutions que vous prendrez lors de la session finale de vendredi matin seront le produit d'une discussion fructueuse et préparera la réussite du travail de l'OIML dans les années à venir. J'espère que le Dr. Bennett me transmettra le rapport de vos progrès et avoir le plaisir de vous rencontrer à nouveau lors de la réception de jeudi soir.

Passez une bonne semaine! ■

11^{ÈME} CONFÉRENCE DE L'OIML

Rapport

CHRIS PULHAM

TRADUCTION: LAURENCE LICHTIG

1 Organisation de la Réunion

Suite à quelques remarques d'introduction faites par M. Faber, la Onzième Conférence Internationale de Métrologie Légale est officiellement ouverte par Dr. Kim Howells (Membre du Parlement), Ministre de la Consommation et des Affaires d'Entreprises du Royaume-Uni. Le discours de Dr. Howells est reproduit intégralement sur la page précédente.

Il est procédé à l'appel des Délégués et il est constaté que 48 (47 à certaines sessions de la Conférence) États Membres sont présents sur un total de 57, et que le quorum requis de deux-tiers est atteint. Sont également présents les observateurs de certains Membres Correspondants de l'OIML et d'Organisations Internationales et Régionales en liaison, le Président sortant du CIML Knut Birkeland et MM. Athané, Szilvássy, Dunmill et Pulham, membres du BIML.

M. Athané explique les procédures de vote de la Conférence pour la semaine à venir, afin de sanctionner formellement les Recommandations OIML et d'approuver les décisions financières. Le Président de la Conférence est élu: Dr. Robert Foster, Directeur des Services de l'Innovation au Ministère du Commerce et de l'Industrie du Royaume-Uni. Seton Bennett (Royaume-Uni) le remplacera en cas de besoin car Dr. Foster a un programme chargé cette semaine, et

M. Beard (Afrique du Sud) et Dr. Pákey (Hongrie) sont élus Vice-Présidents de la Conférence.

La Conférence adopte l'ordre du jour proposé (voir plus haut) avec un léger changement: le Point 6.2, *Rapport sur l'établissement d'un accord de reconnaissance des essais de modèle OIML* sera traité lors de la Table Ronde sur la *Reconnaissance Mutuelle*, qui se tiendra mercredi onze.

Deux commissions de travail sont formées: l'une pour les questions financières et l'autre pour le travail technique. La Conférence approuve ensuite le compte rendu de la Dixième Conférence (Vancouver, 1996) sans commentaires ni modifications.

Gerard Faber présente ensuite son *Rapport d'activité* depuis la dernière Conférence, dont le but est de permettre à la Conférence de déterminer comment les décisions prises dans le passé ont été mises en oeuvre, et sur quelles actions présentes et futures l'OIML devra se concentrer afin de déterminer les idées directrices qui devront être suivies par l'OIML dans sa stratégie pour les années à venir.

M. Faber précise que l'OIML ne doit pas seulement fonctionner en "circuit fermé", mais plutôt extérioriser son travail et chercher à augmenter ses liens avec l'extérieur et par là-même son audience. Depuis la Dixième Conférence, le nombre des Membres de l'OIML (son "audience interne") a régulièrement augmenté, passant de 96 à un nombre actuel de 105 Membres, comprenant 57 États Membres et 48 Membres Correspondants. Cette progression est considérée comme globalement satisfaisante.

L'"audience externe" provenant de nombreuses organisations internationales et régionales dont les activités sont liées à celles de l'OIML a aussi son importance, poursuit M. Faber. Dans le contexte de la globalisation, il est essentiel que les diverses organisations internationales et régionales ayant des activités similaires coopèrent étroitement les unes avec les autres et se consultent entre elles pour éviter la duplication du travail et les divergences. De ce point de vue, M. Faber pense que ces quatre dernières années ont été extrêmement profitables à l'OIML.

Il affirme que la coopération entre l'OIML et certaines de ces organisations progresse de façon bi-latérale, en particulier entre l'ISO et la CEI avec lesquelles des projets communs sont en cours de développement; des efforts en vue d'une coopération accrue sont déployés avec la Convention du Mètre, après qu'il soit devenu clair qu'une fusion n'était pas possible à l'heure actuelle; ceci a conduit, par exemple, à l'organisation conjointe par le BIPM, l'OIML, IMEKO et la PTB d'un important Séminaire sur le Rôle Économique et Social de la Métrologie en 1998.

De même que nous assistons à une coopération au niveau mondial, explique M. Faber, nous avons aussi fait l'expérience (et cela est encore le cas) d'une coopération



Buckingham Palace

accrue et extrêmement prometteuse au niveau régional. À l'heure actuelle, de nombreuses parties du globe sont couvertes par des organisations régionales de métrologie légale (RLMO) et la politique du CIML sur ce point est claire: encourager un développement approprié de la coopération régionale en observant les activités des RLMO et en les informant sur les activités correspondantes de l'OIML, en s'assurant que ces activités régionales n'entrent pas en conflit avec des activités internationales et ne répètent pas ces activités, en s'assurant que les besoins régionaux qui peuvent être satisfaits au niveau international puissent l'être rapidement et de façon appropriée; enfin, en permettant aux RLMO de se connaître entre elles et d'établir les contacts qu'elles jugent appropriés.

Une troisième catégorie d'organismes est extrêmement intéressée par notre travail et leur coopération avec l'OIML peut s'avérer essentielle, ajoute M. Faber: les constructeurs et les utilisateurs d'instruments de mesure, y compris les consommateurs, que nous pouvons considérer comme utilisateurs au sens large dans la mesure où, pour la plus grande part, les conditions économiques, sociales ou liées à l'environnement, dans lesquelles ils vivent, dépendent des mesurages.

L'une des activités de l'OIML qui gagne rapidement du terrain est le Système de Certificats de Conformité OIML, poursuit M. Faber: plus de 400 certificats ont été délivrés depuis la 10^{ème} Conférence, et le nombre total de certificats délivrés n'est pas loin actuellement de la barre des 700.

M. Faber rappelle ensuite à l'assemblée que la 10^{ème} Conférence a demandé au Comité de travailler sur un certain nombre de sujets, y compris:

- les activités en faveur des pays en développement; un rapport détaillé sera effectué lors de la Réunion du Conseil de Développement;
- une coopération plus étroite entre l'OIML et l'industrie des instruments de mesure (comme mentionné plus haut, cette coopération est en augmentation);
- le développement des documents couvrant divers aspects de la métrologie, ne se restreignant pas à la métrologie légale, qui n'ont pas encore effectivement pris leur envol; en fait, ce projet nécessiterait l'aide d'autres organisations de métrologie et de normalisation, car l'OIML ne peut pas aborder seule de tels sujets;
- des réflexions sur l'accréditation en métrologie légale (liées au point sur l'industrie des instruments de mesure); et
- le réexamen de la politique de communication de l'OIML (par exemple, l'utilisation accrue d'Internet).

Deux éléments décisifs ont aidé à déterminer et à finaliser les objectifs fixés par la 10^{ème} Conférence, poursuit M. Faber:

- le Séminaire International de Braunschweig en 1998 a contribué à mettre l'accent sur un certain nombre d'aspects fondamentaux de la métrologie et sur son rôle dans le développement économique et social; et
- le rapport de Knut Birkeland *La Métrologie Légale à l'Aube du Vingt-et-unième Siècle* a donné une nouvelle orientation aux objectifs de l'OIML.

De nombreux points de vue ont été échangés et des discussions ont eu lieu au sein du Comité et de son Conseil de la Présidence, qui - avec la collaboration du BIML - ont permis d'établir une liste d'actions visant à satisfaire progressivement les besoins ressentis, des personnes ou des organisations spécifiques étant désignées pour accomplir ces actions selon un calendrier déterminé. Le document qui en a résulté est le *Plan d'Action 1999-2002*, distribué en avril 1999; de façon générale, M. Faber commente que la majorité des objectifs prévus est réalisée de façon appropriée, bien qu'il ait été quelquefois difficile de trouver assez de temps pour accomplir tout ce qui devait être fait.

Parmi les actions que M. Faber considère comme de toute première priorité pour l'OIML figure la mise au point d'un Accord de Reconnaissance Mutuelle concernant l'essai des instruments de mesure couverts par les Recommandations OIML. Ce point fera l'objet d'une Table Ronde, qui se tiendra mercredi après-midi.

Une deuxième action prioritaire concerne l'aide de l'OIML aux pays qui développent actuellement leur infrastructure métrologique.

L'OIML ne peut pas être tenue seule responsable dans ce domaine; d'autres organisations, et M. Faber se réfère particulièrement au BIPM, sont concernées par ce point et l'OIML est, bien sûr, prête à coopérer avec elles. Mais, mis à part les aspects scientifiques et techniques, pour ce genre d'actions, rien de significatif ne peut être élaboré sans la participation active des organisations nationales, régionales et internationales pour résoudre les aspects financiers, matériels et administratifs de cette aide.

Priorité doit également être donnée à la poursuite et au développement de la coopération entre l'OIML et d'autres institutions internationales et régionales ayant des objectifs similaires.

Enfin, M. Faber met en garde son auditoire sur le fait que l'OIML aura parfois à faire face à de profonds changements intervenant au sein d'organisations nationales de métrologie légale de certains de ses Membres. Ces changements peuvent comporter des aspects différents, mais ils résulteront, plus souvent que prévu, dans une réduction des ressources humaines et financières que les États Membres mettent à la disposition de l'OIML.

La privatisation de certains domaines d'activité, déjà effective ou envisagée dans certains pays, s'accompagne souvent d'une volonté d'obtenir une rentabilité immé-

diante, et la priorité de la coopération internationale disparaît. De plus, de nombreuses administrations voient leur budget stagner ou diminuer, ce qui aboutit aussi à un déclin de notre capacité de travail.

L'OIML aura ainsi à faire face à ces évolutions qui semblent inévitables même si elles peuvent sembler regrettables.

Une meilleure capacité d'adaptation dans la confrontation aux évolutions externes, une plus grande utilisation des thèmes de travail des autres organisations internationales et régionales, et le fait de se concentrer sur des thèmes de première priorité, semblent être, de l'avis de M. Faber, des méthodes qui permettront à l'OIML de continuer à assumer le rôle que lui ont assigné ses États Membres et il dépend maintenant des personnes ici présentes de prendre les décisions qui nous permettront de mieux prévoir de tels événements et d'adapter la stratégie de l'OIML à leurs répercussions.

Ainsi se conclut le *Rapport d'activité* de M. Faber depuis la 10^{ème} Conférence.

2 États Membres et Membres Correspondants

Le nombre total des Membres de l'OIML a augmenté significativement depuis la Dixième Conférence, bien qu'un certain nombre de Membres Correspondants aient été radiés pour n'avoir pas payé leurs cotisations pendant plus de trois ans. Certains Membres Correspondants envisagent également de devenir des États Membres, dans la mesure où ils désirent participer plus activement aux activités de l'OIML, et un certain nombre de nouveaux pays ou économies souhaitent devenir Membres Correspondants dans un avenir assez proche.

Cependant, il est signalé que deux ou trois Membres Correspondants devront probablement être radiés à la fin de l'année 2000 pour n'avoir pas payé leurs cotisations pendant plus de trois ans; il est aussi à noter que la situation de deux États Membres sera examinée par la Commission des Finances, qui fera ensuite un rapport à la Conférence sous le Point 8.1; en fait pour réaffirmer l'engagement de l'Organisation d'aider ses Membres à faire face à leurs obligations et ne pas aller à l'encontre du but recherché, il a été décidé de ne pas rayer ces deux pays de la liste des États Membres, à condition que leurs cotisations pour l'année 2000 et les suivantes soient payées en temps voulu. Par consensus général, cette décision est jugée comme étant la meilleure solution en attendant que ces pays puissent payer le montant de leurs arriérés.

3 Politique à Long Terme

La plupart des informations concernant les actions entreprises depuis la Dixième Conférence, y compris le développement du *Plan d'Action 1999-2002*, ont été données dans le *Rapport d'activité* de M. Faber (voir plus haut). La Conférence approuve ce *Plan d'Action* et demande au CIML de surveiller son exécution et de l'étendre autant que nécessaire de façon à couvrir la période 2002-2004.

4 Liaisons avec les Institutions Internationales et Régionales

Un rapport sur les liaisons est présenté par M. Athané, et un rapport écrit est distribué aux participants; suite à des présentations individuelles faites par les représentants d'un certain nombre d'institutions, la parole est donnée à l'assemblée.

L'OIML coopère actuellement - à des degrés divers - avec une centaine d'autres institutions, ce qui implique des contacts fréquents (par exemple avec ISO) et un travail plus occasionnel (par exemple avec l'OMS). Le degré de coopération est considéré comme généralement satisfaisant, et l'un des principaux exemples du succès de ce travail est la publication récente d'un document commun ISO-OIML sur les *Gaz d'Échappement des Véhicules*. L'OIML sera aussi bientôt en mesure d'accepter les Normes CEI comme Recommandations OIML, en particulier dans le domaine de l'acoustique: une future Norme sur les sonomètres va probablement remplacer les Recommandations existantes R 58 et R 88.

Ci-dessous sont brièvement résumées les présentations faites par les représentants des organisations internationales et régionales, ainsi que la situation actuelle dans le cas où leur représentant n'était pas en mesure d'assister à la Conférence.

BIPM

Bien qu'une fusion ne soit pas actuellement possible, il a été néanmoins décidé par le BIPM et l'OIML de continuer à étudier les domaines dans lesquels la coopération pourrait être mutuellement bénéfique, par exemple en coordonnant l'aide aux pays en développement qui mettent en place leur propre système national de métrologie, ainsi que l'élaboration de textes qui puissent servir de base à des lois nationales de métrologie. Les deux Organisations se rencontrent chaque année, et ILAC est maintenant également invitée à ces réunions.

ISO et IEC

La coopération se développe de façon satisfaisante et l'OIML participe de plus en plus activement au travail d'ISO DEVCO et de CASCO. D'autres thèmes communs ont été présentés plus haut, et les deux Organisations sont d'accord sur le fait que la poursuite du travail en commun peut empêcher une perte de temps et de ressources, en évitant la répétition du travail et en mettant en commun les connaissances des experts.

JCGM

Le Comité Mixte pour les Guides de Métrologie, comprenant le BIPM, la CEI, l'IFCC, ILAC, l'ISO, IUPAC, IUPAP et l'OIML, a à ce jour publié deux documents: le VIM et le GUM. Des réunions au sujet de ces Guides sont prévues pour novembre 2000 au BIPM afin de procéder à leur révision.

OMC

Le BIML assiste régulièrement aux réunions du Comité TBT de l'Organisation Mondiale du Commerce et un séminaire régional (méditerranéen) sur la métrologie doit être organisé bientôt par M. Magana à la demande de l'OMC et inclura la participation du BIML. Il est envisagé que le Président du CIPM tiendra à cette occasion une conférence sur la métrologie scientifique.

ONUDI

La coopération a commencé entre l'ONUDI, le PTB et l'OIML en faveur de certains pays africains les moins développés.

ILAC / IAF

M. Squirrel effectue une présentation et prononce un rapport écrit au nom de Belinda Collins, Présidente d'ILAC. La coopération entre l'OIML et ILAC se développe; les deux organisations partagent un intérêt commun pour la précision des rapports d'essai, et le BIML participera à l'Assemblée Générale d'ILAC 2000 à Washington, D.C.; cela permettra également d'établir de nouveaux contacts avec le secrétariat d'IAF.

IMEKO

La coopération est fructueuse dans tous les domaines d'intérêt commun et devrait aussi se développer bientôt dans le domaine des logiciels.

CECIP

M. Anthony s'adresse à l'OIML, insistant sur l'importance qu'il y a à instaurer un certain niveau de confiance entre les Membres de l'OIML; il est surpris de voir que les certificats OIML ne sont pas toujours acceptés par tous les États Membres. Il conseille vivement l'OIML de faire participer plus activement les constructeurs à ses activités, et met l'accent sur le désir du CECIP de maintenir le haut niveau actuel de coopération avec l'OIML.

CECOD

M. Wim Klein, qui a reçu une distinction honorifique de l'OIML pour sa remarquable contribution au travail de l'OIML, s'est adressé aux Délégués au nom du CECOD. C'est la première fois qu'un porte-parole du CECOD est présent à une Conférence de l'OIML, mis à part une récente collaboration étroite pour les Recommandations R 117/R 118. Le travail continue pour s'assurer que ces Recommandations sont mises en conformité avec les exigences MID, ce qui prendra probablement environ 2-3 années. Il exprime sa satisfaction de travailler en coopération avec l'OIML et se réjouit de poursuivre cette collaboration.

RLMO

Les Organisations Régionales de Métrologie Légale se développent et, comme l'indique M. Faber dans son *Rapport d'activité*, l'OIML suit attentivement ces progrès qu'elle encourage, tout en faisant tout pour s'assurer que ces activités soient accomplies aux niveaux international et régional, sans qu'il n'y ait de contradiction entre elles ou de chevauchement des domaines. La coopération OIML/RLMO est à la fois satisfaisante, utile et très prometteuse pour l'avenir (voir le *Rapport d'activité* du Président du CIML).

L'OIML s'est efforcée de participer à toutes les réunions principales des RLMO soit par l'intermédiaire des Membres du CIML soit grâce au Personnel du BIML, et a contribué la plupart du temps au succès des

séminaires et des ateliers par la participation d'experts, en fournissant des documents OIML, etc. Le BIML met un point d'honneur à être mieux informé des résultats du travail de certaines RLMO et à faire profiter de ce travail d'autres régions (par exemple les vidéos réalisées par l'APLMF).

Des interventions sont effectuées par des représentants de l'APLMF, de la Coopération Balkanique, de COOMET, du Forum Euro-Méditerranéen de Métrologie Légale (EMLMF), de l'IOLMF, de SADCMEI, de SIM et de WELMEC. Des comptes rendus de réunions récentes des RLMO ont été publiés dans des numéros précédents du Bulletin OIML; il suffit de dire que la coopération OIML-RLMO augmente de plus en plus dans les domaines des préemballages, des taximètres, des compteurs d'eau, d'électricité et de gaz, de la formation en métrologie légale, de l'assistance technique, de la reconnaissance mutuelle, de l'utilisation d'Internet comme moyen de communication plus rapide et universel, etc.

L'Union Européenne

M. Hanekuyk donne des informations mises à jour provenant de la Commission Européenne en vue du développement de la Directive Européenne sur les Instruments de Mesure (MID) qui concernera pratiquement tous les instruments de mesure soumis à des contrôles de métrologie légale dans les pays membres de l'Union Européenne et de l'Association Européenne pour le Libre Échange (AELE), ainsi que dans les pays candidats à l'appartenance à l'Union Européenne, soit au total 25 à 30 pays, tous étant des États Membres ou Membres Correspondants de l'OIML.

Le texte de la MID a été approuvé par la Commission Européenne et doit maintenant être approuvé par le Conseil et le Parlement Européen. Selon M. Hanekuyk, sa mise en application réelle pourrait être accomplie en quatre ans (avec cependant comme échéance espérée le 1^{er} juillet 2002), et il est tout à fait possible qu'entre temps certaines exigences métrologiques aient été modifiées.

Compte tenu du fait que le format de la MID est nettement différent de celui des Recommandations OIML, seule la question de la compatibilité entre les exigences de la MID et des Recommandations a été prise en compte; en fait, le but recherché est que les instruments conformes à une Recommandation OIML soient reconnus comme conformes à la MID.

Afin que ceci se réalise, et grâce à l'action des experts européens et à WELMEC, cette question a été gérée de sorte que les principales exigences métrologiques de la MID ne contredisent pas celles de l'OIML. De plus, les membres les plus anciens de la Commission ont reconnu qu'il était approprié que le chapitre de la MID ayant trait

à la "présomption de conformité" se réfère non seulement aux normes européennes (CEN/CENELEC) mais aussi aux "documents normatifs" élaborés par l'OIML, qui sont reconnus comme donnant une présomption de conformité aux exigences de la MID. De cette manière, les constructeurs d'instruments de mesure pourront généralement choisir entre le fait d'appliquer directement les exigences de la MID, de suivre les normes européennes ou de suivre les Recommandations OIML, cette troisième possibilité leur donnant la certitude qu'ils seront à même de vendre plus facilement leurs instruments à l'extérieur de l'Europe.

Ces événements intervenus au niveau européen ont, de plus, conduit le BIML à réengager les discussions en coopération avec le CEN et le CENELEC.

Autres organisations régionales

Le BIML coopère chaque fois que nécessaire avec les organisations régionales, dont une partie du travail concerne la métrologie, en particulier ARSO.

Associations de constructeurs et d'utilisateurs

Pendant les deux dernières années, le BIML a essayé d'identifier les associations susceptibles de participer au travail de l'OIML. Les associations principalement européennes ont été contactées, mais dans certains cas des associations mondiales sont également concernées (distribution d'électricité, véhicules fonctionnant au gaz naturel, etc.).

La discussion est ouverte sur la coopération entre l'OIML et les diverses institutions, et un certain nombre de Délégués suggèrent les points préoccupants pour l'avenir:

- M. Magana met l'accent sur la nécessité de réviser certaines Recommandations OIML afin de les aligner avec la MID.
- M. Zhagora demande pourquoi si peu de publications communes ont été élaborées, et suggère aussi que de nouveaux domaines d'application de la métrologie légale soient étudiés tels que les systèmes de la protection de l'environnement, les systèmes de comptabilité, les systèmes de vérification du matériel utilisé, etc.
- M. Da Silva suggère d'organiser la consultation des Projets de Recommandations sur Internet.

- M. Birch réaffirme le besoin d'établir un système global qui assure un degré élevé de confiance mutuelle.
- M. Anthony explique que de nombreux constructeurs sont accrédités par ISO 9000, mais que parfois les instruments de production actuels ressemblent peu au type ou au modèle qui ont été approuvés; ceci implique qu'il faut mettre davantage l'accent sur la surveillance des marchés. L'approbation de modèle est facile à obtenir; mais s'assurer que la production est conforme au modèle est une autre question.
- Mme Bennett, Australie, répond que la mise en place de ce type de surveillance est coûteuse, et M. Vaucher se demande également comment une telle activité du marché serait financée. Peut-être l'OIML pourrait-elle proposer des solutions globales, qui inclurait une vérification.

En guise de conclusion à cette série de présentations et pour terminer les discussions, Seton Bennett confirme son sentiment que la coopération internationale et régionale devient plus forte et plus largement répandue, offrant constamment aux communautés métrologiques mondiales des avantages dans des domaines de plus en plus diversifiés.

5 Travail des TC/SC OIML

Attila Szilvássy présente un rapport élaboré par le BIML sur ce sujet.

Depuis la Dixième Conférence on observe une diminution globale des activités techniques de l'OIML, malgré la décision de la Conférence d'encourager les TC et SC de l'OIML à accélérer et à améliorer leur activité. Ceci est particulièrement mis en valeur par le nombre décroissant de réunions d'organismes techniques et par la diminution du nombre de Recommandations produites (15, comparé aux 25 publiées pendant la période des 4 dernières années).

Parmi les raisons objectives de ce déclin, il faut reconnaître que la plupart des sujets de métrologie légale "classique" ont déjà été traités et que l'activité de l'OIML se développe dans des domaines dans lesquels la plupart des services nationaux de métrologie légale n'ont pas de responsabilité ni de compétence (par exemple l'environnement, la santé). Une autre raison est la tendance à la réduction du personnel suite à la déréglementation; le manque de ressources supplémentaires (c'est-à-dire de personnel et/ou de financement) pour les activités de l'OIML est aussi un problème.

Il existe bien sûr des raisons subjectives telles que le faible nombre de membres-P dans certains SC, le fait que des membres-P restent inactifs dans plusieurs TC et SC (ne participant même pas aux activités par corres-

pondance) et le nombre relativement élevé d'organismes techniques inactifs.

Ce problème a été discuté plusieurs fois par le Conseil de la Présidence et abordé pendant les Réunions du CIML: les résultats sont pris en compte dans le *Plan d'Action 1999-2002*.

Ces quatre dernières années:

- 12 projets de Recommandations (7 révisées et 5 nouvelles) ont été approuvées par les Réunions du CIML de la 32^{ème} à la 34^{ème};
- 3 nouveaux projets doivent être directement proposés à la sanction de la 11^{ème} Conférence;
- 3 projets d'annexes (Formats de rapport d'essai), 3 nouveaux Documents Internationaux et le VIML ont été approuvés par le CIML (vote par correspondance); et
- le Système de Certificats OIML s'applique à 14 nouvelles catégories d'instruments de mesure.

M. Szilvássy poursuit en signalant que pendant la dernière période, plusieurs activités et actions - menées par le Conseil de la Présidence ou par le BIML - ont été conduites de façon à faciliter l'amélioration des activités techniques, y compris:

- La révision et la publication du *Guide pour les Membres du CIML*;
- Les actions concernant des sujets d'importance stratégique et les activités techniques abordées par le CIML et incluses dans le *Plan d'Action 1999-2002*;
- La mise à jour régulière et l'inclusion sur le site web de l'OIML d'une série de documents sur les Comités Techniques OIML y compris le document sur les liaisons externes;
- Le résumé des activités techniques des TC/SC OIML basé sur les Rapports Annuels publiés chaque année dans le numéro d'avril du Bulletin OIML;
- En plus de la surveillance des activités techniques, la mise à jour des documents et la distribution régulière des informations sur le travail technique de l'OIML, les contacts réguliers avec les Secrétariats des TC et



Robert Foster
a présidé la Conférence

SC par le personnel du BIML de façon à identifier les difficultés et à essayer de trouver des solutions appropriées aux problèmes qui se posent;

- La vérification croissante du contenu à la fois rédactionnel et technique des Recommandations et des Documents OIML par le personnel du BIML avant leur publication.

En 2000 un total de 67 organismes techniques de l'OIML (18 TC et 49 SC) sont responsables de 122 thèmes de travail. Deux Comités Techniques - TC 5 et TC 13 - sont restés vacants depuis l'année dernière et le TC 8/SC 2 est devenu vacant récemment.

Sur la question de la mise en application des Recommandations OIML par les États Membres, M. Szilvássy rappelle aux participants que le degré de mise en application doit être réexaminé tous les quatre ans. La dernière enquête ayant été conduite en 1996, une nouvelle a été engagée par le BIML en avril 2000. Mais afin que le BIML soit capable de rédiger et de publier les versions complètement mises à jour des deux documents en question et de tirer des conclusions plus précises et fondées, il est nécessaire que les États Membres de l'OIML qui n'ont pas encore répondu envoient leurs réponses au BIML dès que possible.

M. Szilvássy poursuit en expliquant qu'un certain nombre de différences existant (et/ou d'exigences supplémentaires) dans les réglementations nationales (particulièrement au sein des États Membres de l'OIML) comparées aux Recommandations OIML doivent être éliminées, dans la mesure où elles créent des barrières au commerce non souhaitables et - en même temps - entravent l'acceptation des résultats d'essais de modèles OIML/certificats OIML.

Bien que les mesures devant être prises ne sont pas explicitement incluses dans le *Plan d'Action 1999-2002*, elles sont formulées dans le document *Politique à long-terme de l'OIML - Évaluation des stratégies et des activités OIML* et approuvées par la Dixième Conférence dans ses décisions. Cette question doit être considérée comme une tâche permanente pour tous les États Membres de l'OIML.

L'obligation morale des États Membres de mettre en application les Recommandations OIML dans les réglementations nationales est également renforcée par l'Accord OMC TBT.

Par ailleurs, il existe une proposition de NU/CEE (diffusée par le Comité OMC TBT) en vue de développer un modèle global pour la mise en application d'une *Bonne pratique de contrôle pour la préparation, l'adoption et l'application des réglementations techniques par l'utilisation de normes internationales*. L'approbation de cette proposition et les dispositions de ce document vont très probablement accroître la nécessité de réglementations nationales harmonisées internationalement sur la base de normes internationales.

L'approbation probable de la MID dans un avenir proche et le développement de *Documents Normatifs* basés sur des Recommandations OIML grâce à l'effort conjoint des états membres de l'Union Européenne (qui sont également des États Membres de l'OIML) et du BIML aura un effet positif sur l'amélioration de la mise en application des Recommandations OIML.

Sous la supervision de M. Johansen (Danemark), la Conférence procède ensuite à la sanction formelle des 12 Recommandations nouvelles ou révisées déjà approuvées par le Comité en 1997, 1998 et 1999 (R 49-1, 60, 65, 81, 85, 93, 99, 125, 126, 127, 128 et 129). Toutes ces Recommandations sont approuvées.

La Conférence sanctionne ensuite directement trois projets de Recommandations (*Octave and one-third-octave band filters*, *Polymethylmethacrylate dosimetry systems* and *Alanine EPR dosimetry systems*).

6 Système de certificats OIML

Prof. Kochsiek distribue un rapport détaillé rédigé par le BIML, faisant la liste des principaux développements intervenus depuis la 10^{ème} Conférence; le plus important d'entre eux est le résultat des enquêtes effectuées en 1997, 1998 et 2000, et qui indiquent que:

- le Système et l'acceptation des certificats (résultats d'essais) évoluent d'eux-mêmes sur une base volontaire;
- les résultats obtenus et les développements qui en résultent sont encouragés à la fois par les constructeurs et par les Membres de l'OIML; et
- les actions envisagées dans le *Plan d'Action 1999-2002* sont en conformité avec les besoins et les propositions des constructeurs et des Membres de l'OIML.

En ce qui concerne les développements futurs du Système, il explique que deux séries d'activités sont réalisées en parallèle:

- la première série concerne directement la promotion et le développement du Système lui-même; et
- la deuxième série est liée à la promotion de l'acceptation des résultats d'essais de modèles OIML/certificats OIML et à la confiance établie entre les parties concernées (voir les actions formulées à B.1-B.3 du *Plan d'Action 1999-2002*).

D'autres faits et chiffres pertinents sont communiqués (arrêtés à la date de 2000.09.15):

- 671 certificats enregistrés;
- 30 Recommandations applicables au Système de Certificats OIML;
- 209 demandeurs et constructeurs de 31 pays ont bénéficié de certificats;

- 23 Autorités de Délivrance établies dans 20 États Membres.

Un problème a été soumis à l'examen de l'assemblée: des statistiques sur l'évolution du Système montrent clairement non seulement qu'un délai normal existe entre l'approbation et la publication d'une Recommandation, et la délivrance des premiers certificats OIML, mais également qu'il y a un fossé grandissant entre les catégories d'instruments de mesure applicables au Système (actuellement 30) et les catégories pour lesquelles les certificats OIML ont effectivement été délivrés (actuellement seulement 11).

La situation va probablement s'améliorer si l'on prend en compte le délai de production, l'applicabilité dans un avenir proche des Recommandations révisées sur les compteurs (R 49, R 75, etc.) et les futures implications de la Directive sur les Instruments de Mesure (MID) de l'Union Européenne.

Néanmoins, des Recommandations vont exister pour des catégories d'instruments de mesure pour lesquels l'application réelle au Système ne présente pratiquement pas d'intérêt.

En conclusion, il a été par conséquent proposé que soit considéré par toutes les parties intéressées (en particulier les TC/SC responsables de l'élaboration des Recommandations en question) si cela vaut vraiment la peine d'établir des Formats de Rapport d'Essai (dont l'élaboration demande un temps et une énergie considérables) pour des catégories d'instruments de mesure pour lesquelles il n'y a pratiquement pas d'intérêt à émettre (et à accepter) des certificats OIML.

Prof. Kochsiek conclut ce Point en mentionnant que la Table Ronde sur la *Reconnaissance Mutuelle* apportera sans aucun doute plus d'idées pour le développement futur du Système.

7 Pays en développement

Mme Annabi préside la réunion du Conseil de Développement avec Ian Dunmill; un rapport complet est publié séparément.

8 Questions administratives et financières

M. Birch anime la discussion sur ce sujet. Comme déjà annoncé au paragraphe 2 de ce rapport, la question de savoir si deux États Membres précis doivent être rayés de la liste pour n'avoir pas payé leurs cotisations pendant plus de trois ans a été débattue assez longtemps, ainsi que la question de savoir si les sommes payées en 2000 doivent être considérées comme le paiement d'une partie des arriérés ou comme un règlement de la cotisation de cette année; la dernière solution est choisie et la Conférence adopte une résolution décidant de ne pas radier ces pays, dans la

mesure où les cotisations des prochaines années seront payées à temps.

La Conférence examine la gestion du budget depuis la 10^{ème} Conférence, et considère que celui-ci a été géré de façon satisfaisante par le Président du CIML et le Directeur du BIML. Les rapports sur les années fiscales 1996-1999 sont distribués mais aucune observation n'est faite par les Délégués; le rapport inclut également des prévisions pour l'année 2000.

Le budget pour les quatre prochaines années établi par M. Athané est accepté avec quelques modifications, notamment une réduction des dépenses de voyage pour les Représentants de l'OIML ou le Personnel du BIML représentant l'Organisation dans des réunions à l'étranger.

La somme qui doit être mise de côté dans le Fonds de Réserve est réduite à zéro puisque le fonds de réserve est considéré comme assez élevé pour faire face à des dépenses imprévues et non incluses dans le budget.

Le budget des quatre années, explique M. Athané, a pris en compte les points figurant au *Plan d'Action 1999-2002* (ce qui affectera la charge de travail du BIML pour un certain nombre d'années), les besoins qui en résulteront au niveau du personnel du BIML, et les contraintes résultant de la situation économique mondiale actuelle. Le BIML fera de son mieux, assure M. Athané, pour faire face à une charge de travail croissant constamment en dépit du fait que le niveau du recrutement du BIML reste constant depuis un bon moment.

M. Athané suggère également que dans un avenir assez proche, les salaires du BIML devront être reconsidérés pour être alignés avec ceux d'autres Organisations similaires implantées hors de Paris; aucune résolution n'est proposée sur ce sujet.

Les parts contributives réelles et d'autres détails sont traités intégralement dans les *Décisions* de la Conférence, et dans le *Compte rendu* officiel.

9 Autres questions

Des distinctions honorifiques sont décernées par M. Faber à M. W. Klein (Tokheim) et à Prof. Dr. C. Volkmann (PTB) (reçue en son nom par Prof. Kochsiek) pour leur remarquable contribution au travail technique de l'OIML, et ce geste a été unanimement approuvé par l'assistance.

10 Clôture

Les décisions et résolutions sont adoptées et il est décidé d'attendre deux ans avant de décider du lieu de la Douzième Conférence; si aucune invitation n'est proposée, le BIML organisera la Conférence en France. ■

35^{ÈME} RÉUNION DU CIML

Discours d'ouverture - M. Gerard Faber

PRÉSIDENT, CIML

Mes Chers Collègues,

C'est avec plaisir que je vous accueille à la trente-cinquième Réunion du Comité International de Métrologie légale qui se tient à Londres conjointement avec la Onzième Conférence de notre Organisation.

Mon allocution d'ouverture sera très brève dans la mesure où je vais présenter cet après-midi un rapport assez détaillé sur les activités de l'OIML après l'ouverture de la Conférence.

Cependant, je ne peux pas commencer sans exprimer d'abord notre profonde gratitude à Seton Bennett et à ses collègues qui ont travaillé si dur pendant ces douze derniers mois pour permettre la réussite de ces réunions. Cher Seton, je suis sûr que, à la fin de la semaine, chacun d'entre nous sera totalement satisfait et que j'aurai le plaisir de vous adresser mes remerciements au nom de tous les participants.

Maintenant, selon la tradition, j'aimerais accueillir les Membres du CIML qui ont rejoint notre Comité à l'occasion de notre réunion de Tunis ou après celle-ci.

Ils sont les suivants:

- M. Boudissa, Algérie, qui a été nommé Membre du CIML au moment de notre réunion de Tunis mais que par conséquent je n'avais pas pu accueillir au début de cette réunion;
- M. Eggermont, Belgique;
- M. Botev, Bulgarie;
- M. Eisa, Égypte;
- M. Teklehaimanot, Éthiopie;
- M. Valkeapää, Finlande;
- M. Gunaryo, Indonésie;
- M. Imai, Japon, qui a déjà occupé le poste de Membre du CIML il y a quelque temps;
- M. Rysbekov, Kazakhstan;
- M. Cho, Chun Haeng, République de Corée;
- M. Iacobescu, Roumanie;
- M. Björkqvist, Suède; et
- M. Ehrlich, USA.

À tous ces nombreux nouveaux collègues, qu'ils soient présents ou non à cette réunion, j'ai le plaisir d'adresser mes sincères vœux de bienvenue et mes remerciements pour leur participation à nos travaux.

Je vais maintenant évoquer certains points sur lesquels nous aurons à prendre des décisions pendant les diverses sessions de cette Réunion du CIML.

Tout d'abord, ce matin, nous devons effectuer les derniers préparatifs de la Conférence. Cela ne devrait pas prendre trop de temps.

Nous aurons également à nous pencher sur des sujets qui relèvent typiquement de la responsabilité du Comité, tels que la situation de certains Comités Techniques et Sous-Comités.

Enfin, le Comité devra prendre des décisions qui seront vitales pour l'avenir de notre Organisation: l'élection du Président du CIML et du Deuxième Vice-Président du CIML, ainsi que la nomination du futur Directeur du BIML.

Les discussions sur ces sujets peuvent prendre un certain temps, y compris les votes secrets par lesquels vous exprimerez vos choix. Par conséquent, comme cela est déjà indiqué dans le programme que vous avez trouvé sur vos tables ce matin, le CIML devra se réunir à plusieurs reprises pendant cette semaine. Bien sûr, pendant chacune de ces réunions, le quorum des trois-quarts des Membres du CIML présents ou représentés devra être atteint. Puis-je vous demander par conséquent non seulement de vous assurer que vous serez dûment présents ou représentés à chacune de ces réunions du CIML, mais également de prêter attention à toutes les annonces qui concerneraient d'éventuels changements dans le programme.

Merci de votre attention, et que nos réunions rencontrent un plein succès. ■

35^{ÈME} RÉUNION DU CIML

Discours d'ouverture - Dr. Seton Bennett

CHIEF EXECUTIVE, NWML
ET MEMBRE DU CIML POUR LE ROYAUME-UNI

M. Faber,
Mesdames et Messieurs,

Au nom du National Weights and Measures Laboratory et du Département du Commerce et de l'Industrie, je vous souhaite la bienvenue à Londres et en particulier ce matin à la Trente-Cinquième Réunion du Comité International de Métrologie Légale. Je sais que nombre d'entre vous sont déjà venus à Londres, mais peut-être certains y viennent-ils pour la première fois. Le célèbre écrivain du dix-huitième siècle Dr. Samuel Johnson disait que l'homme qui est fatigué de Londres est fatigué de la

vie, et j'espère que pendant votre séjour, vous trouverez beaucoup de choses intéressantes et passionnantes à faire.

Il y a un an à Tunis notre réunion s'est merveilleusement bien passée dans une ville fascinante et certains d'entre nous ont eu le privilège de faire du tourisme dans ce si beau pays. Londres est très différente de Tunis et le Royaume-Uni également très différent de la Tunisie, mais j'espère que tout ce que vous aurez l'occasion de faire ici ne manquera pas d'intérêt.

Ce Centre de Conférence est, comme vous pouvez le voir, de construction relativement récente au milieu de nombreux bâtiments plus anciens, tous très proches du cœur de Londres et du cœur du Gouvernement. Nous sommes à quelques centaines de mètres de la Maison du Parlement, de Downing Street où vit le Premier Ministre, de l'Abbaye de Westminster et de la plupart des grands bureaux gouvernementaux. Depuis les fenêtres du Centre, vous avez je pense l'une des meilleures vues de Londres et vous pouvez voir non seulement quelques-unes des plus anciennes constructions de Londres mais également certaines des plus récentes. L'Abbaye de Westminster date de plus de neuf cents ans. Le London Eye, la grande roue, que vous ne pouvez pas manquer, a été ouvert au public il y a seulement huit mois, de telle sorte que se trouvent réunis l'ancien et le nouveau Londres.

La Maison du Parlement elle-même, que vous pouvez aussi apercevoir de la fenêtre, a un lien avec la métrologie légale puisque ce bâtiment a été construit au milieu du dix-neuvième siècle, suite à un incendie en 1834 qui détruisit non seulement l'ancienne Maison du Parlement, mais également les étalons britanniques (le yard et la livre), ce qui causa une profonde consternation; il fallut quelque vingt ou trente ans pour recréer effectivement le yard et la livre.

L'une des conséquences en fut l'établissement d'un département séparé s'occupant des poids et mesures et ce département devint finalement le National Weights and Measures Laboratory. On peut donc remercier cet incendie à la fois pour la splendide nouvelle Maison du Parlement et également pour mon laboratoire!

Mais vous n'êtes pas venus pour voir ces bâtiments; vous êtes venus ici pour vous réunir pendant une semaine, et cette semaine sera très active, puisque se tiendront la réunion du CIML, la Conférence de l'OIML, la réunion du Conseil de Développement, la réunion, hier, de la Coopération Euro-Méditerranéenne en Métrologie Légale, la réunion du Conseil de la Présidence et samedi la réunion des Organisations Régionales.

J'espère que cette semaine sera intéressante et fructueuse pour vous tous, et je formule trois vœux pour vous cette semaine: le premier, que votre réunion soit excellente et pleine de succès, que chacun des sujets dont nous discuterons aboutisse à de bonnes conclusions; mon second souhait est que vous appréciiez votre séjour à Londres et que vous trouviez l'occasion de voir la ville; et mon troisième souhait est que j'aie la possibilité de m'entretenir avec chacun d'entre vous au cours de cette semaine. Bienvenue à Londres. ■



Ordre du jour: 35^{ème} Réunion du CIML

Discours d'ouverture

Appel des Délégués - Quorum

Approbation de l'ordre du jour

- 0 Nomination d'un *Membre d'Honneur* du Comité
- 1 Adoption du compte rendu de la 34^{ème} Réunion du CIML
- 2 États Membres et Membres Correspondants
Situation de certains Membres
- 3 Questions financières
Adoption du rapport comptable pour 1999
- 4 Activités du Conseil de la Présidence
- 5 Activités du BIML
- 6 Activités techniques
Examen de la situation de certains TC/SC, si approprié
- 7 Onzième Conférence Internationale de Métrologie Légale
Ordre du jour et programme
- 8 Présidence du CIML
- 9 Directeur du BIML
- 10 Onzième Conférence Internationale de Métrologie Légale:
Examen des décisions de la Conférence
- 11 Futures réunions
 - 11.1 36^{ème} Réunion du CIML (2001)
 - 11.2 37^{ème} Réunion du CIML (2002)
- 12 Adoption des décisions

Clôture

35^{ÈME} RÉUNION DU CIML

Rapport

CHRIS PULHAM

TRADUCTION: LAURENCE LICHTIG

La Trente-cinquième réunion du Comité International de Métrologie Légale s'est tenue conjointement avec la Onzième Conférence Internationale du 9 au 13 octobre 2000.

Les discours d'ouverture ont été faits par Seton Bennett et Gerard Faber - ces textes sont reproduits dans leur intégralité aux pages 58-59. L'appel des Délégués a été fait: cinquante-deux Membres du CIML sont présents ou représentés sur un total de cinquante-sept et le quorum des 3/4 est atteint.

M. Faber accueille en particulier M. Birkeland, Président sortant du CIML et Membre d'Honneur du Comité. Après l'approbation de l'Ordre du Jour (voir encart), M. Faber explique que le but principal de la réunion de Londres - mis à part son activité normale - sera de nommer le nouveau Directeur du BIML pour succéder à M. Athané, et d'élire le Président du CIML.

0 Nomination d'un Membre d'Honneur du Comité

Le Comité approuve à l'unanimité la proposition de M. Faber de nommer Dr. Samuel Chappell, Premier Vice-Président sortant du CIML et Membre du CIML pour les États-Unis comme *Membre d'Honneur* du Comité (voir photo, page 37). M. Faber évoque la carrière de Dr. Chappell et le rôle qu'il a joué dans le développement de la participation des États-Unis aux activités de l'OIML et en contribuant à l'amélioration de nombreux aspects du travail de l'OIML.

2 États Membres et Membres Correspondants

Après l'approbation du compte rendu de la 34^{ème} Réunion du CIML (**Point 1**), une liste est distribuée aux Délégués les informant des derniers calculs de la population des États Membres; ces chiffres serviront de base pour déterminer la contribution annuelle de chaque pays. La liste indique également les États Membres qui bénéficient d'une classe de contribution inférieure à celle assignée par le nombre de leur population. En fait, cette nouvelle classification des États Membres est la

même que pour les années précédentes, malgré le fait que certaines populations ont pu changer et que certains États Membres en développement aient pu demander à rester dans la même classe de contribution.

3 Questions financières

Le Comité adopte le rapport comptable pour 1999; ce document sera soumis à la Onzième Conférence pendant la semaine.

4 Activités du Conseil de la Présidence

Le Conseil de la Présidence s'est réuni deux fois en 2000; ses principales responsabilités sont premièrement de conseiller le Président, et deuxièmement de préparer et de mettre en œuvre les décisions prises par le CIML ou par la Conférence concernant les décisions budgétaires et celles afférentes à la politique à long terme. La réunion de février 2000 qui s'est tenue au BIML a mis principalement l'accent sur la situation financière de l'OIML et la préparation du budget 2001-2004, et un examen complet du Plan d'Action. M. Faber ajoute que de plus, le Conseil a examiné les préparatifs de la Table Ronde sur la *Reconnaissance Mutuelle* et de la réunion BIPM/ILAC/OIML qui a suivi la réunion du Conseil.

5 Activités du BIML

Ce rapport est imprimé en entier dans ce numéro du Bulletin. M. Athané indique que le rapport montre une augmentation significative de certaines activités du BIML liées, par exemple, à la participation aux travaux techniques de l'OIML, à la représentation de l'OIML dans les réunions d'autres organismes internationaux et régionaux, au rôle qu'il joue en tant que secrétariat du Conseil de Développement, à la publication de documents et au développement de moyens de communication, etc. M. Athané déclare qu'il est convaincu que le futur Directeur du BIML, avec l'aide du Personnel actuel du BIML, sera en mesure de poursuivre cette progression et ce développement en termes de qualité et de quantité de travail du BIML.

6 Activités techniques

M. Szilvássy indique qu'un rapport plus complet sera présenté à la Conférence et que le CIML doit seulement examiner la situation d'un petit nombre de Comités Techniques ou de Sous-Comités. Veuillez également vous référer aux pages 55-56 de ce Bulletin pour de plus amples informations.

La situation des TC 5, TC 13, TC 8/SC 2 et TC 16/SC 1 est discutée, puis concernant le Plan d'Action 1999-2002 M. Szilvássy annonce qu'une liste de thèmes de travail hautement prioritaires a été préparée par le BIML sur la base d'une enquête menée récemment et que cette liste sera soumise à la Conférence. De plus, une liste de thèmes prioritaires est en cours d'élaboration; les deux listes seront ensuite distribuées à tous les Membres.

Un document additionnel sur les travaux des TC/SC est en cours de préparation et sera distribué à la fin de l'année; ce document donne la liste des thèmes en cours et des détails du processus de réexamen des publications existantes avec les propositions de leur reconfirmation, révision ou retrait.

7 Onzième Conférence Internationale de Métrologie Légale

Le CIML accepte le projet d'ordre du jour et le programme proposé pour la Onzième Conférence et approuve les propositions faites par le Royaume-Uni et par le Président du CIML de nommer Dr. Foster comme Président de la Conférence et Dr. Pákay et M. Beard comme Vice-Présidents de la Conférence.

8 Présidence du CIML

Les deux Candidats, Dr. Bennett du Royaume-Uni et M. Faber des Pays-Bas, se présentent et exposent leurs points de vue sur l'avenir de l'OIML. M. Faber indique qu'il sera disponible seulement pour trois ans.

Suite à deux votes secrets consécutifs, le CIML élit (avec la majorité requise) M. Faber comme Président pour les trois prochaines années.

Les trois Candidats à l'élection du Second Vice-Président du CIML, Dr. Imai (Japon), Dr. Issaev (Fédération de Russie) et M. Johnston (Canada) se présentent et exposent leurs points de vue sur l'avenir de l'OIML.

Après trois votes secrets successifs le CIML élit (avec la majorité requise) Dr. Issaev comme Second Vice-Président pour les six prochaines années.

Voir photos page 37.

9 Directeur du BIML

Le Candidat choisi par le Comité de Sélection, M. Magana (France), se présente et expose son point de vue sur le rôle du BIML au sein de l'OIML.

Suite à un vote secret, le Comité nomme (avec la majorité requise) M. Magana comme futur Directeur du BIML (photo page 37).

10 Onzième Conférence Internationale

M. Faber passe rapidement en revue les décisions prises par la Onzième Conférence et suggère que le Comité charge le Conseil de la Présidence de leur application, bien que certaines actions incombent peut-être au Président du CIML ou au Présidium. Le Comité exprime son accord avec cette procédure.

11 Futures réunions

M. Issaev confirme que le CIML est invité à tenir sa **36^{ème} Réunion** à Moscou entre le 22 et le 27 septembre 2001. Cette invitation est acceptée et le Comité demande à son Président et au BIML de commencer les préparatifs en temps voulu en étroite coopération avec le pays hôte.

M. Zarin confirme qu'Israël désire accueillir la **37^{ème} Réunion du CIML** en 2002. Le Comité prend note de cette invitation pour laquelle il remercie M. Zarin et décide que la décision finale sera prise lors de sa prochaine réunion.

12 Adoption des décisions

Il est procédé à la lecture du texte des décisions proposées et celles-ci sont adoptées par le Comité avec des corrections mineures.

Clôture

M. Faber exprime sa satisfaction pour le travail effectué lors de la 35^{ème} Réunion du CIML et déclare que les remerciements qu'il a adressés lors de la clôture de la Onzième Conférence sont bien entendu également applicables à cette réunion. Il note également que le Présidium du CIML inclut maintenant trois personnes originaires d'Europe et qu'il tiendra dûment compte de ce fait lors de l'établissement du nouveau Conseil de la Présidence afin que les diverses régions du monde soient représentées équitablement. ■

CONSEIL DE DÉVELOPPEMENT

Rapport

IAN DUNMILL & CHRIS PULHAM
 TRADUCTION: LAURENCE LICHTIG

La réunion du Conseil de Développement s'est tenue le 11 octobre 2000, présidée par Mme Ghaïet-El-Mouna Annabi. Sont aussi présents à la table de présidence MM. Faber, Kochsiek, Athané et Dunmill. 37 États Membres et neuf Membres Correspondants sont présents et les représentants de huit Organisations Régionales de Métrologie Légale (RLMO) ainsi que du CECIP, du CECOD et du BIML sont aussi présents.

0 Élection du Président

Mme Annabi a annoncé son intention de continuer à assumer la Présidence, et malgré une demande en faveur d'autres nominations, aucune autre candidature n'a été proposée. De nombreux commentaires ont été faites à M. Faber pour exprimer l'appréciation de la manière dont Mme Annabi a présidé le Conseil pendant les deux dernières années; elle est donc réélue à l'unanimité pour une nouvelle période de deux ans. Elle exprime l'espoir que les actions en cours continueront pendant les deux prochaines années.

Ordre du jour

- 0 Élection du Président
- 1 Rapport et discussions sur les activités depuis la réunion du Conseil de 1999 en Tunisie
- 2 Groupes de Travail
- 3 Rapports des représentants des Organisations Régionales de Métrologie Légale
- 4 Propositions pour le programme de travail 2001-2002
- 5 Information sur les propositions de projet
- 6 Information sur des activités spéciales des Membres
- 7 Autres questions
- 8 Prochaine réunion
- 9 Conclusion et clôture de la réunion

1 Rapport et discussions sur les activités depuis la réunion du Conseil de 1999 en Tunisie

Mme Annabi explique que trois-cinquièmes des Membres de l'OIML sont considérés par l'OCDE comme des pays en développement: ceci prouve l'importance du Conseil et de son travail, en particulier dans les domaines de la formation et de l'aide technique. L'intérêt de l'OIML pour les problèmes des pays en développement n'a cessé d'augmenter depuis des années et de nouvelles actions dans le domaine des publications, des séminaires / cours de formation et de l'information doivent être engagées. Mme Annabi effectue ensuite un bref rapport sur les activités des années passées.

Recomposition du Conseil de Développement

Depuis la création du Conseil, il n'était pas très clair de savoir exactement quels pays étaient inscrits. Lors de la réunion de Tunis, 37 pays étaient représentés. Une enquête a établi une liste des pays qui désiraient s'inscrire comme membres du Conseil, mais cette liste n'est absolument pas limitée, et en fait tout pays désirant participer à ses activités peut le faire.

Revitalisation des groupes de travail

Il y a maintenant trois groupes de travail (*Formation, Information et Équipement*), chacun d'entre eux ayant établi des attributions et des programmes de travail pendant l'année passée.

Liaisons externes

Mme Annabi rapporte que ce sujet, qui est de la responsabilité de la Présidente (avec l'aide du BIML) consiste à établir des contacts avec les organisations internationales et régionales appropriées, étant donné que le financement constitue l'un des principaux problèmes rencontrés. Des contacts ont été pris avec ISO DEVCO, ONUDI et la Commission Économique des Nations Unies pour l'Afrique; d'autres contacts ont été pris lors de *Métrologie 2000* (mai 2000, La Havane, Cuba).

Réglementation

La révision de OIML D 1 *Loi de métrologie* a commencé cette année et une proposition préliminaire a été préparée en vue d'une action ultérieure par le TC/SC approprié.

Travail des TC et SC

Le Conseil essaiera de participer aux TC/SC qui représentent un intérêt direct pour les pays en développe-

ment. Cette année, il a été représenté aux réunions du TC 3/SC 5 *Évaluation de conformité* et du TC 6 *Produits préemballés*, bien que d'autres TC/SC présentent également un intérêt.

Le site web du Conseil de Développement et les listes d'experts / cours de formation

Le site du Conseil est maintenant opérationnel, accessible par le site principal de l'OIML. Il est prévu en trois langues, l'anglais, le français et l'espagnol. Une liste de quelque cinquante experts (classés par sujet, région et langue parlée) et de quarante cours de formation est maintenant établie et publiée, bien qu'elle soit toujours ouverte aux Membres du CIML pour d'autres propositions. Il est important que ces listes soient toujours mises à jour. La question de la "Validation" des cours de formation est encore à examiner.

M. Magana signale qu'il a aussi donné des informations sur des experts et des cours de formation en métrologie scientifique, et demande si des contacts ont été pris avec le BIPM afin d'examiner les intérêts communs dans ce domaine. M. Athané répond que les deux organisations devraient coopérer pour offrir des services communs aux pays qui développent leur infrastructure métrologique. Il est à souhaiter que le BIPM, qui n'a pas encore d'organisme spécialisé traitant de l'aide au développement, soit maintenant capable de consacrer plus de temps à la coopération avec l'OIML, en particulier dans le domaine de l'aide au développement. Ce sujet sera discuté lors de la prochaine réunion commune du 21 février 2001, et il semble que ce serait une très bonne solution de faire du Conseil un organisme commun au BIPM et à l'OIML.

M. Birch explique que l'évolution des relations entre le Conseil de Développement et les RLMO doit être considérée. L'une de ses principales préoccupations est le faible niveau d'engagement des pays en développement dans l'Organisation, comme cela apparaît dans la faible quantité de réponses aux enquêtes organisées cette année. Il explique qu'il est encourageant que le financement du Conseil de Développement par l'OIML ait augmenté. Souvent, cependant, la participation à des cours de formation a été financée, mais ceci est très spécifique à des individus particuliers. Une autre méthode peut-être plus efficace serait de financer la participation des pays en développement au fonctionnement du Conseil lui-même (et à ses groupes de travail) et aux TC et SC.

M. Imai rapporte qu'un groupe de travail pour les pays en développement a été constitué au sein du Programme de Métrologie de l'Asie-Pacifique (APMP) et que ses relations avec diverses organisations de métrologie internationales et régionales seront examinées.

M. Boudissa confirme la nécessité de bénéficier de l'expérience des pays développés et insiste sur le fait que les activités du Conseil devraient être évaluées en termes de coût et de déroulement.

M. Athané explique que l'une des raisons pour lesquelles l'OIML désire promouvoir la coopération régionale est de rendre possible aux pays non Membres de l'OIML mais qui sont en mesure de se joindre à la coopération régionale, de bénéficier indirectement du travail de l'OIML.

2 Groupes de travail

M. Dunmill rapporte qu'il a été décidé de rétablir la participation pour chacun des groupes de travail.

2.1 WG 1 - Formation

M. Wallerus fait un rapport sur la progression de ce groupe: depuis 1999 le nombre des participants à ce groupe a doublé et atteint environ vingt personnes. Un programme de travail a été proposé, dont le thème le plus important est la révision de OIML D 14 *Formation du personnel de métrologie légale*. Les cours doivent avoir un contenu défini, être d'une durée fixe, et être basés sur des Recommandations OIML ou des Normes ISO. Les institutions de formation doivent avoir des exigences pour l'équipement, le logement, et le personnel. Les enseignants doivent avoir un certain type de qualifications pédagogiques ainsi qu'une expérience professionnelle, et les examens doivent être reconnus par différents pays.

Il indique aussi que le DAM a aussi l'intention de proposer des ateliers pour formateurs, qui, en plus du contenu technique, offriront une formation sur les méthodes et la pratique d'enseignement.

M. Magana dit qu'il a identifié deux sujets principaux dans le travail de ce groupe: la définition du contenu requis des cours de formation, et la qualité de la formation dispensée.

M. Boudissa réalise qu'un financement est nécessaire pour permettre à n'importe quel pays en développement de mettre en place un programme de formation, et que cette question est la plus importante pour permettre au Conseil de Développement de poursuivre son programme de travail. Il signale également qu'il existe souvent un problème de langue au niveau des cours de formation et demande qu'il soit envisagé d'organiser des cours dans plusieurs langues.

M. Kochsieck rapporte que la Commission Européenne a été contactée à plusieurs occasions en vue d'un financement, mais ce sans succès.

2.2 WG 2 - Information

M. Mardin explique que les réponses à un questionnaire du BIML pour lancer le travail de ce groupe, ainsi que son programme de travail, ont été assez décevantes puisque seulement cinq réponses ont été reçues. Cependant, ces réponses seront une bonne base de travail initiale.

M. Birdseye rapporte qu'il a étudié avec M. Laamoumri la question de la reconnaissance d'approbation de modèles, de la certification, etc. au sein de EMLMF. Ils ont découvert que l'échange d'informations entre les autorités métrologiques est l'aspect le plus important dans l'amélioration du fonctionnement du Système de Certificats OIML du point de vue des pays en développement. Les informations sur la certification, la non-conformité, l'identification des équipements, la surveillance du marché, etc. pourraient être rendues disponibles par exemple sur des sites web, et la coordination de ces informations au niveau international pourrait être organisée grâce à ce groupe de travail.

2.3 WG 3 - Équipement

M. Mardin rapporte qu'il a été prévu de développer une classification des équipements et il espère que les pays en développement seront capables de fournir des informations sur leurs besoins à ce sujet. Toute aide permettant de fournir des équipements nécessitera de trouver une source de financement.

3 Rapports des représentants des RLMO

3.1 Forum de Métrologie Légale de l'Asie-Pacifique (APLMF)

M. Birch rapporte que l'APLMF comporte maintenant 25 membres (dont neuf sont des États Membres de l'OIML et neuf des Membres Correspondants), ce qui indique que ces organisations régionales sont complémentaires de l'OIML plus qu'elles ne rivalisent avec l'OIML. Depuis ces dernières années, l'APLMF a fait usage de rapports écrits soumis par des pays avant les réunions afin de repérer les thèmes clés et de surmonter la barrière des langues qui peut se poser lors des réunions; il recommande l'utilisation de ces rapports au Conseil de Développement. Lors de la dernière réunion, ces rapports illustraient l'importance de l'activité législative et le degré de modernisation de la législation en cours dans la région.

3.2 Coopération Européenne du Sud-Est

M. Grkov explique que cette organisation régionale est très récente. Il dit que tous les pays n'ont pas une infrastructure nationale de qualité, concernant la normalisation, la métrologie, l'accréditation et l'évaluation de conformité. Il donne aussi des détails sur un cours de formation sur l'expression des incertitudes, qui inclura à la fois les aspects théoriques et pratiques de ce sujet.

3.3 Coopération en Métrologie dans les pays d'Europe centrale et de l'Est (COOMET)

M. Zhagora indique que la Communauté des États Indépendants (CIS) a conclu plusieurs accords de reconnaissance mutuelle, qui sont très efficaces; chaque année des centaines d'approbations de modèles s'ajoutent aux précédents. Il explique également qu'au sujet de l'harmonisation de la législation en métrologie, il existe une loi type qui pourra être utilisée par les membres de COOMET. Il pense qu'il devrait exister une étroite coopération entre l'OIML et le BIPM afin de permettre l'équivalence des systèmes de mesure nationaux.

3.4 Forum Euro-Méditerranéen de Métrologie Légale (EMLMF)

M. Magana dit que cette coopération émergente n'a pas encore été formalisée par un memorandum d'entente. Deux réunions se sont tenues: la première à Tunis en 1999 et la deuxième à Londres. Il espère que d'autres pays s'y joindront, en particulier ceux de la région méditerranéenne. Il explique que quatre groupes de travail se sont constitués:

- *La Formation*, qui a étudié les besoins en formation de la région;
- *Les informations mutuelles*, qui espère mettre au point un répertoire régional de métrologie légale;
- *La reconnaissance mutuelle*, qui a tenté de résoudre les problèmes des accords existants et a réfléchi aux accords à venir; et
- *L'équipement et l'aide technique*, qui n'a pas encore commencé à travailler.

3.5 Forum de Métrologie Légale de l'Océan Indien (IOLMF)

M. Birch rapporte qu'un atelier qui s'est réuni en novembre 1998 au Sri Lanka a mis au point un certain

nombre de programmes d'importance régionale, et explique que deux programmes d'intérêt actuel sont concernés par la modernisation et l'harmonisation de la législation de la métrologie légale et par les produits préemballés. Il explique que ce sont des domaines dans lesquels l'établissement de groupes de travail supplémentaires du Conseil de Développement permettrait aux opinions des pays en développement d'être mises en avant sur ces sujets.

3.6 Coopération en Métrologie Légale de la Communauté Sud-Africaine de Développement (SADC MEL)

M. Beard explique que six des 14 membres du SADC MEL ne sont pas membres de l'OIML, mais que le but de l'organisation est que tous ses membres deviennent par la suite membres de l'OIML. La formation est considérée comme priorité régionale, mais il n'existe actuellement aucun cours lié spécifiquement aux Recommandations de l'OIML. Il indique qu'aucun des pays membres de SADC MEL n'est complètement développé et que c'est la raison pour laquelle ces pays ont l'intention de coopérer autant que possible avec le Conseil de Développement.

3.7 Système de Métrologie Inter-Américain (SIM) - Groupe de Travail de Métrologie Légale

M. da Silva rapporte que SIM compte actuellement 34 membres qui sont aussi membres de l'Organisation des États Américains (OAS). Fondée en 1979, SIM se consacre principalement au développement de la métrologie dans ses pays membres, en mettant l'accent sur les pays les moins développés. Elle travaille en coopération avec le BIPM et l'OIML, afin d'améliorer le libre échange et la qualité de la vie dans la région.

En 1997, SIM et l'OIML ont signé un accord de coopération visant à améliorer le développement de la métrologie légale dans les pays américains. Il existe deux groupes de travail de Métrologie Légale: *Lois et réglementations* et le *Contrôle Métrologique*. Lors de la dernière réunion du groupe de travail de métrologie légale en juillet 2000, un groupe de travail sur le contrôle métrologique des instruments de mesure a été constitué afin d'instaurer et d'améliorer la confiance dans les instruments de mesure soumis au contrôle légal utilisés dans le commerce, la santé et la protection de l'environnement, et de minimiser ainsi les barrières techniques au commerce.

3.8 Coopération Européenne en Métrologie Légale (WELMEC)

M. Magana fait état des importants développements intervenus au sein de WELMEC:

- La *Directive Européenne sur les Instruments de Mesure* qui a été proposée a été maintenant publiée par la Commission Européenne et devrait être adoptée d'ici deux à trois ans. Cette Directive s'aligne sur les Recommandations de l'OIML, de telle sorte que les instruments de mesure qui sont conformes à certaines Recommandations OIML pourront être vendus plus facilement sur le marché européen.
- WELMEC fait également un gros travail dans le domaine des préemballages. Un guide pour les conditionneurs qui explique la législation européenne pour le préemballage a été publié. Comme la législation européenne va probablement être modifiée, il est important que les membres de WELMEC soient également actifs dans le travail de l'OIML sur les préemballages, afin que les deux exigences soient harmonisées.
- La surveillance du marché est un sujet également important pour WELMEC, comme il l'est pour les pays en développement, afin que soit assurée la qualité des instruments proposés sur leurs marchés.

4 Propositions pour le programme de travail 2001-2002

M. Dunmill rappelle aux délégués le travail entrepris cette année, en particulier la remise en marche des groupes de travail et la création du site web du Conseil de Développement. Il pense que le programme actuel devrait être maintenu pour l'année à venir afin de permettre aux groupes de travail de poursuivre les programmes qu'ils ont mis au point cette année.

Travail technique

Le Conseil de Développement devrait continuer à participer activement à la révision du D 1 *Loi de métrologie* et à maintenir et augmenter l'intérêt qu'il porte à certains TC et SC importants afin de s'assurer que les intérêts des pays en développement soient pris en compte.

Site web

Celui-ci pourrait être amélioré cette année et on espère qu'une version espagnole sera également disponible. Les informations sur les experts et les cours de formation doivent être régulièrement mises à jour.

Cours de formation

Le Conseil de Développement doit examiner les possibilités d'une "validation" des cours de formation.

Liaisons externes et financement

M. Dunmill explique que des contacts utiles ont été pris l'année dernière, mais que d'autres points du programme de travail ont dû être mis en place avant que le financement d'un projet spécifique puisse être recherché. M. Athané ajoute que sur le sujet des liaisons externes, il serait utile de maintenir des liens étroits avec ISO DEVCO et avec le BIPM.

M. Birch suggère que la mise en place d'un groupe de travail du Conseil de Développement sur la *Législation* permettrait de mettre l'accent sur les points de vue des pays en développement dans le travail de révision du D 1. De même, un groupe de travail sur les *Produits préemballés* permettrait que les avis des pays en développement figurent dans le travail technique dans ce domaine. Il espère que les Présidents ou les co-Présidents de chaque groupe de travail seront choisis parmi des personnes originaires des pays en développement.

M. Yankine dit que le Burkina Faso est déjà largement impliqué dans les activités de l'OMC avec laquelle a été établi un comité consultatif; il pense qu'il est très important pour l'OIML de poursuivre une étroite collaboration avec l'OMC.

5 Informations sur des propositions de projets

5.1 ONUDI - OIML - PTB

M. Kochsiek annonce que le Conseil de la Présidence a décidé de lancer ce projet commun lors de sa réunion en février 2000. Un plan de travail a été élaboré pour les 18 mois à venir et l'ONUDI a récemment indiqué que les fonds étaient maintenant disponibles. Certains pays moins développés d'Afrique ont été contactés et il est prévu que des experts vont commencer à travailler dans ces pays en décembre. Le but du projet est de démontrer que la métrologie légale contribue au revenu de l'État grâce aux taxes et aux redevances prélevées sur le mesurage correct, le maintien de la loyauté commerciale et la protection du consommateur. Les pays choisis ont été sélectionnés en fonction de leur manque d'infrastructure en métrologie légale. L'ONUDI a indiqué également que si ce projet réussit, un financement plus important serait fourni en 2001-2002 pour des projets similaires dans d'autres régions.

6 Informations sur des activités spéciales des Membres

6.1 PTB

M. Kochsiek explique que le PTB travaille pour les pays en développement dans les domaines des services de restructuration, de la formation de base et/ou avancée, la fourniture de matériels et d'équipement, l'accréditation ou la certification. Des informations détaillées sont données dans la Section *Informations*.

7 Autres questions

M. Magana suggère de promouvoir l'utilisation d'Internet parmi les Membres, ce qui économiserait beaucoup d'argent et permettrait ainsi à d'autres pays en développement de participer activement au travail. Le problème est que certains d'entre eux n'ont pas encore l'accès facile à l'Internet. Il pense que le CIML devrait attirer l'attention des gouvernements de ces pays sur ce besoin.

8 Prochaine réunion

La prochaine réunion pourra se tenir en liaison avec la 36^{ème} Réunion du CIML, et durera peut-être une demi-journée, plus au moins une autre demi-journée consacrée à un groupe de travail, ou à plusieurs groupes de travail qui se réuniraient en sessions parallèles. Le programme spécifique dépendrait de l'état de progression des activités des groupes de travail et de la création possible des groupes de travail supplémentaires mentionnés plus haut.

9 Conclusion et clôture de la réunion

En conclusion, M. Faber explique que l'importance du travail du Conseil va en s'accroissant et qu'il espère que l'on trouvera les moyens de récolter des fonds. Il évoque également l'étendue des débats qui ont eu lieu, en particulier sur le sujet de la formation en métrologie légale. Il pense que le Conseil de Développement progresse dans la bonne direction et remercie d'une part Mme Annabi d'avoir présidé la réunion et d'autre part les délégués pour leurs contributions. ■

TABLE RONDE

Reconnaissance mutuelle

ATTILA SZILVÁSSY

TRADUCTION: EDOUARD WEBER

Dans son discours d'ouverture, Monsieur Faber rappelle aux participants que la Table Ronde ne fait pas réellement partie de la Conférence et leur demande d'exprimer leurs vues, non pas en tant que représentants nationaux mais plutôt qu'en tant qu'experts.

Dr. M. Kochsiek, Président de la Table Ronde, indique que les objectifs consistent à informer les participants sur les activités d'autres organisations dans le domaine de la reconnaissance mutuelle et d'obtenir des données pour le développement de l'accord d'acceptation mutuelle de l'OIML (MAA) et le marquage OIML IQ proposé pour les préemballages.

Présentations de la situation actuelle

Monsieur Vaucher (Suisse) fournit des informations supplémentaires à propos des accords de reconnaissance mutuelle (MRA) de la Convention du Mètre qui est un préalable à d'autres MRA dans le domaine de la métrologie. Comme pour l'accord OIML, il indique que les organismes de réglementation doivent se mettre d'accord pour accepter les résultats d'essais; le MAA doit être aussi simple que possible et il doit revenir aux participants de décider d'utiliser l'accréditation ou l'auto-évaluation.

M. Hayward (UKAS) donne un aperçu de la situation actuelle de l'accréditation de laboratoire ainsi que des informations sur les objectifs du MRA de ILAC, qui ont été préparées sur la base des MRA de deux groupements régionaux (AE et APLAC).

M. Engler (Pays-Bas) donne des informations sur l'expérience des Pays-Bas au niveau des accords bilatéraux sur la reconnaissance des rapports d'essais. Il indique que le NMI encourage la reconnaissance et qu'il n'y a aucun conflit entre les accords bilatéraux du NMI et le MAA de l'OIML. Il ajoute ensuite que le MAA devrait être concentré sur l'acceptation des rapports d'essais et que priorité devrait être donnée à l'accréditation pour preuve de compétence.

Dr. Chappell (USA) fait une présentation détaillée par transparence sur les activités en cours du TC 3/SC 5 pour l'élaboration des documents nécessaires pour le MAA. Dans sa seconde présentation il donne un aperçu sur le Système de Marquage OIML de Quantité Internationale (IQ) d'application volontaire proposé qui est inclus dans le projet de révision de R 87 *Contenu net des préemballages*.

Discussions

M. Magana (France) fait une remarque générale portant sur la nécessité pour les exigences sur l'évaluation de la compétence des laboratoires d'essai de modèles d'être équivalentes à celles appliquées par ILAC (AE et APLAC).

M. Lagauterie (France) attire l'attention sur les ambiguïtés du projet de document MAA de l'OIML: le thème de l'acceptation devrait être "les rapports d'essais associés aux certificats OIML", et non "les évaluations de modèle".

M. Johansen (Danemark) indique que plusieurs points méritent d'être clarifiés dans le récent projet MAA. Il fait part de ses inquiétudes concernant la réelle nécessité de ce document. Il explique que le système de certificats OIML fonctionne bien et qu'il y a déjà un certain nombre de cas d'acceptations volontaires. Pour construire la confiance, il insiste sur le fait que l'accréditation est indispensable.

M. Stoichitou (Roumanie) rappelle aux délégués les conclusions de la Table Ronde sur l'accréditation, tenue à Vancouver en 1996 et indique que seule l'accréditation peut servir de base à la confiance mutuelle et aux accords sur la reconnaissance mutuelle.

M. Birch (Australie) rappelle aux participants la nécessité d'un Système global de mesures. Malheureusement, pour l'instant, il n'y a pas de système international de métrologie légale qui puisse fournir de support au système global. M. Birch indique que l'auto-évaluation telle que proposée par le MAA ne pourrait fournir la transparence et la cohérence nécessaires pour une acceptation internationale.

Dr. Issaev (Russie) rappelle aux participants que l'*auto-déclaration* a déjà été discutée plusieurs fois et acceptée comme une option nécessaire. De plus, il insiste sur la nécessité du MAA de l'OIML ainsi que sur celle de permettre aux pays en développement de participer à l'Accord.

Dr. Bennett (UK) explique qu'un accord doit passer quatre caps: (i) confiance; (ii) transparence; (iii) accessibilité à toutes les parties intéressées; et (iv) bénéfice pour toutes les parties concernées. Le MAA de l'OIML dans sa forme actuelle ne remplit pas ces critères et il y a encore beaucoup à faire pour améliorer sa transparence et son accessibilité.

Concernant la marque IQ/OIML proposée, Dr. Bennett exprime des doutes quant à la possibilité de son acceptation ainsi que son inquiétude pour la charge additionnelle qu'une telle marque peut causer pour des petites entreprises d'emballage.

M. Andersson (USA) indique que les USA sont intéressés par le MAA et appliqueront le système de certificats OIML. Il fait part de l'expérience des USA pour obtenir la confiance mutuelle au niveau national sans accréditation obligatoire. Il attire l'attention sur l'importance de la surveillance du marché et du contrôle régulier de conformité des instruments de mesure en fabrication.

M. Faber (Pays-Bas) précise qu'il croit à la création d'un Système global de mesures. Il pense que le MAA de l'OIML est très important et urgent; il doit être également très précis, complet et transparent, et doit être élaboré étape par étape.

M. Kildal (Norvège) dit que le MRA de la Convention du Mètre se dirige en droite ligne vers le Système global de mesures. Puisque le système de certificats OIML lui-même fonctionne bien, afin d'améliorer le MAA/OIML (si cela s'avère nécessaire), il propose de prendre en considération d'autres documents internationaux et systèmes existants.

Pour résumer les discussions, Dr. Chappell indique qu'il se sent encouragé par toutes les contributions et demande aux participants de lui envoyer leurs commentaires à la fois sur le projet MAA et la marque IQ proposée.

Conclusion des discussions

M. Athané (BIML) formule les conclusions suivantes de la Table Ronde:

Après avoir écouté les rapports au sujet de ce qui se passe dans le domaine des accords de reconnaissance mutuelle au sein du CIPM, ILAC, OMC et aussi au niveau bilatéral, les informations ont circulé lors de la Table Ronde concernant l'état d'avancement du travail des TC 3/SC 5 et du TC 6 de l'OIML. Les points de vue sur ces activités en particulier concernant le TC 3/SC 5 comme exprimé par certains participants diffèrent considérablement et des opinions opposées ont été exprimées en particulier à propos de la nécessité du travail du TC 3/SC 5 et de l'accréditation et de la suffisance de l'autodéclaration. Cependant, il y a un consensus concernant le fait que la reconnaissance mutuelle des résultats d'essais associés aux certificats OIML de conformité ait un objectif indispensable, mais les façons d'y parvenir sont encore à identifier. ■

LONDRES 2000

Réunion des Représentants des RLMO

14 octobre 2000

SETON BENNETT, Chief Executive, NWML et
Membre du CIML pour le Royaume-Uni

TRADUCTION: LAURENCE LICHTIG

La croissance de la régionalisation et l'importance grandissante des groupes économiques régionaux influencent de plus en plus le développement de la métrologie légale. La plupart, sinon la totalité, des membres de l'OIML sont aussi participants des organisations régionales de métrologie légale (RLMO), qui sont reconnues comme des organisations efficaces pour la discussion et la résolution des problèmes régionaux. Les neuf ou dix RLMO existantes ont différents ordres du jour, reflétant les priorités politiques, commerciales et techniques de leurs régions respectives. Ces questions régionales (certaines communes - d'autres spécifiques) intéressent également le reste de l'OIML.

Les représentants de huit RLMO se sont réunis à Londres samedi 14 octobre, après la Conférence de l'OIML et la Réunion du CIML, pour échanger des informations sur leurs activités, pour identifier les thèmes d'intérêt commun, et pour explorer les moyens de travailler ensemble. Les RLMO représentées vont des organisations rodées (WELMEC, COOMET, APLMF) à des organisations nouvelles, voire naissantes (Forum Euro-Méditerranéen et

Coopération Balkanique). En quelques heures de discussion, des similarités et des différences ont été mises en valeur à mesure que chaque représentant faisait un rapport des priorités actuelles.

Une discussion s'est tenue sur l'ampleur du chevauchement de la participation à ces organisations. Bien que dans certains cas le chevauchement soit considérable (par exemple WELMEC et le Forum Euro-Méditerranéen) il est tout à fait clair qu'il y a peu de sujets communs sur les divers ordres du jour, et la réunion conclut qu'il ne serait ni réalisable ni souhaitable de tenter de limiter la participation de chaque pays à une seule RLMO. Un sujet d'intérêt pratiquement universel, cependant, est celui de la reconnaissance mutuelle, qui aurait pu progresser plus facilement dans l'OIML si des accords régionaux avaient été mis en œuvre. La discussion révèle que les espoirs de parvenir à un accord varient, mais le besoin se fait sentir d'une transparence et d'un accès général à un accord quel qu'il soit, avec une plus grande flexibilité pour permettre plus d'un seul accord pour chaque catégorie d'instruments. Les besoins des pays en développement et la possibilité d'inclure des États non membres de l'OIML doit également être considérée.

La relation entre les RLMO et l'OIML est nécessairement informelle, mais le BIML doit jouer le rôle de centre d'information. La discussion sur les projets de Recommandations dans les RLMO susciterait une participation plus large dans la préparation des textes, aidée par la publication prévue de tous les projets sur Internet. M. Athané explique que le BIML prendra la responsabilité d'organiser des réunions futures des représentants des RLMO et ajoutera les réunions régionales dans l'agenda du site web de l'OIML.

Tout le monde est d'accord pour affirmer que la réunion a été précieuse et il est convenu de tenir la prochaine à Moscou en septembre 2001. ■

DEVELOPING COUNTRIES

PTB's contribution to legal metrology in developing countries

DR. EBERHARD SEILER, Head of the Technical Cooperation Department, PTB, Germany

1 Introductory remarks

Since 1956, the Government of the Federal Republic of Germany has supported the economic development of many countries. Part of the fight against hunger and poverty is the establishment of an efficient economic system and its integration into the world economy. This will, however, only be successful if the technical infrastructure for a metrology, standardization, testing and quality assurance (MSTQ) system as well as an accreditation and certification system are built up at the same time. Metrology (and legal metrology in particular) are vital for economic and social development.

The responsible Federal Ministry for Economic Cooperation and Development (BMZ) therefore entrusts the PTB with the implementation of development projects in the field of MSTQ.

Further information is available in the brochure "PTB and Development Cooperation" which can be obtained from the PTB or from the author. Projects currently being implemented are given in the list at the end of this article.

Following some general remarks about Technical Cooperation, a summary of the activities undertaken since 1966 is given in section 3. Projects and activities implemented before 1966 are described in the paper "Strengthening of legal metrology in developing countries" presented at the OIML Symposium *Metrological Activities in Developing Countries* held in Beijing, China, in 1995; selected lectures have been published by the BIML.

2 General remarks on the PTB's Technical Cooperation

The PTB is the national institute of science and technology of the Federal Republic of Germany and is

the highest authority for metrology and certain sectors of safety engineering. The PTB makes use of the specialist technical knowledge of its staff to implement MSTQ projects all over the world. The PTB's contributions cover advisory services in the following areas:

- establishment and organization of structures and institutions;
- legal bases, technical rules and standards;
- planning and construction of laboratories with their technical equipment;
- equipping with measuring instruments and test devices;
- staff development and qualification;
- making political decision-making bodies and representatives of industry and economy aware of the significance of MSTQ matters;
- solution of special problems; and
- accreditation of laboratories.

Basic and advanced training

In addition to technical training ranging from several weeks up to one year, seminars and practical training courses are organized, sometimes in cooperation with international organizations, in which participants from countries with which no project agreements have been concluded can participate.

Supply of materials and equipment

Part of the project funds are used to equip the measurement and test laboratories with the necessary facilities. If necessary, the instruments are first tested or calibrated and then put into operation in the partner institutes' laboratories with support from experts. The instruments are selected so that they are appropriate for the tasks to be accomplished and do not cause follow-on costs that the partner is unable to bear in the long term. The supplies also comprise technical rules and standards.

Accreditation and certification

Project measures support the establishment of accreditation and certification systems in partner countries and thus facilitate access to international markets. By the accreditation of laboratories of the partner institutes in accordance with international guidelines, the competence of the partners is documented and the acceptance of their services and certificates also furthered at international level.

Table 1 Support for legal metrology through bilateral projects	Mongolia	Thailand	Turkey
<i>Project Partner</i>	National Institute for Standardization and Metrology	Dept. of Commercial Registration	General Directorate for Metrology and Standardization
<i>Duration</i>	1996–2001	1993–2003	1993–2002
<i>Germany's contribution in million DM</i>	1.0	4.2	6.2
<i>Long-term training in Germany (> 12 months)</i>	-	6 persons	10 persons
<i>Short-term training in Germany (< 3 months) and study tours</i>	3 persons	17 persons	16 persons
<i>Short-term experts</i>	3 persons, 3 months	11 persons, 13 months	15 persons, 8 months
<i>Workshops</i>	* Mass determination * Verification of fuel dispensers	* Non-automatic weighing instr. * Harmonization of technical regulations in Europe * Control of prepackages	* Weighing instruments * Flowmeters for water * Harmonization of technical regulations
<i>Equipment for verification of</i>	* weights (up to 500 kg) * prepackages * fuel dispensers	* weights (up to 500 kg) * prepackages * fuel dispensers	* Control of prepackages * weights * prepackages * fuel dispensers

Since projects are implemented in a spirit of partnership, the recipient countries must make contributions. The partner country makes available the funds for the necessary buildings, the personnel and the operating costs and provides the legal and administrative framework conditions for the project to be successfully implemented. In addition to sufficient political stability and appropriate legal framework conditions, the partner countries' commitment to making their own contributions as required is therefore also a prerequisite for the implementation of projects.

3 PTB's contributions

Bilateral projects exclusively intended to support relevant legal metrology are being implemented in Mongolia, Thailand and Turkey. Relevant information is given in Table 1.

Besides such bilateral projects, further activities are carried out for training (summarized in Table 2) and for other activities (Table 3). Since regional cooperation and the formation of regional markets is gaining in importance, the PTB has also started Technical Cooperation with regions. A cooperation with SADC MEL, the regional organization for legal metrology of the ten Southern African Development Community countries, has been established. Besides consultancy on regulations for prepacked goods, the newly established SADC Resource Center for Metrology Education has been supported by training trainers in the fields of mass, temperature and prepacked goods.

In cooperation with the PTB's project partner in Thailand, a regional seminar on "*The Importance of Legal Metrology and Opportunities of Regional Cooperation*" was held in Chiang Mai, Thailand, on November 8–9, 1999. The seminar was attended by 46 participants from Cambodia, Lao PDR, Malaysia, Philippines, Thailand and Vietnam. Speakers from the BIML, the Asia Pacific Legal Metrology Forum (APLMF) and the PTB gave key information on:

- the global challenges to legal metrology;
- the necessity for a verification system and its benefit to society, commerce and industry; and
- actions that could be recommended for the development of a metrological infrastructure for consumer protection based on national and international requirements.

Table 2 Training Seminars and Workshops in legal metrology supported by the PTB, 1996-2000

Subject	Year	Organized by	Practical Training	Country	Support for participants
Legal metrology	1996	DAM	-	Germany	Chinese participants only
Prepackages	1996	DAM	DAM, Factories	Germany	22
Mass scale	1996	PTB / ARSO	KEBS	Kenya	14
Volume flow	1997	PTB / ARSO	KEBS	Kenya	11
Prepackages	1997	SABS / PTB	SABS, Factories	South Africa	13
Mass	1997	NML / PTB	NML	South Africa	12
Legal metrology	1998	PTB	-	China	Chinese participants only
Volume standards	1998	DAM	DAM	Germany	10
Weighing instruments	1999	DAM	DAM	Germany	6
Volume	1999	DAM	DAM	Germany	5
Temperature	1999	SADC MET	MBS	Mauritius	15
Prepackages (Regulations)	1999	SADC MEL	-	South Africa	12
Prepackages (Checking)	1999	DAM	DAM	Germany	8
Legal metrology	1999	PTB / GDWM	-	Thailand	40
Volume	2000	DAM	DAM	Germany	2
Flow meters	2000	DAM	DAM	Germany	10
Weighing instruments	2000	CBWM	CBWM	Thailand	6
Measuring instruments in road traffic	2000	DAM	DAM	Germany	9
ARSO: African Regional Organization for Standardization		MBS:	Mauritius Bureau of Standards		
CBWM: Central Bureau for Weights and Measures (Thailand)		NML:	National Metrology Laboratory (South Africa)		
DAM: Deutsche Akademie für Metrologie		SABS:	South Africa Bureau of Standards		
KEBS: Kenya Bureau of Standards					

List of projects currently being implemented (as of July 2000)				
Country	Project partner	Project title	Period	Germany's contribution (million DM)
AR	Instituto Nacional de Tecnología Industrial, INTI	Promotion of Legal Metrology and Calibration Services	1985–2001	4,8
AR	Centro de Investigaciones Acústicas y Luminotécnicas, CIAL	Support for Audiometry and Noise Level Measurements	1995–2000	0,2
AR	Instituto Nacional de Tecnología Industrial, INTI	Advice on the Establishment of a National Quality System	1999–2002	2,7
AM	Instituto Centroamericano de Investigación y Tecnología Industrial, Guatemala	Promotion of standardization, testing and metrology at ICAITI		
BO	Viceministerio Nacional de Industria y Comercio Interno, VICI	Build-up of the Bolivian System of Standardization, Metrology, Accreditation and Certification	1998–2001	2,2
BR	Centros de Referencia em Tecnologias Inovadoras, CERTI	Establishment of a Calibration Laboratory	1993–2002	3,5
BR	Instituto Nacional de Metrologia Normalização e Qualidade Industrial, INMETRO	Amelioration of Preconditions for Certification	1995–2000	0,8
BG	State Committee for Standardization and Metrology	Support of Metrology in Bulgaria II	1996–2001	0,8
CL	Instituto Nacional de Normalización, INN	Establishment of a Metrology Net	1997–2001	1,8
CO	Superintendencia de Industria y Comercio, SIC	National Accred. and Certif. System	1999–2001	1,1
EC	Instituto Ecuatoriano de Normalización, INEN	Technology Transfer in Metrology	1999	0,1
GR	Hellenic Institute of Metrology, EIM	Establish National Metrology System	1994– ---	
HR	State Bureau for Metrology and Standardization	Amelioration of Croatia's Metrological Infrastructure	1998–2001	1,0
JM	Jamaica Bureau of Standards, JBS	Bureau of Standards	1994–2001	1,6
MN	National Institute for Standardization and Metrology	Support for Legal Metrology	1996–2001	1,0
MX	Centro Nacional de Metrología, CENAM	Cooperation in Metrology	1989–2000	3,6
NI	Dirección de Ciencias y Tecnología en el Ministerio de Economía y Desarrollo	Advice on Metrology	1993–2003	0,1
RO	R & D Institute ICMET	Support of ICMET Craiova	1995–2001	0,9
RO	National Metrology Institute, INM	Amelioration of Metrology	1996–2001	1,2
SL	Standards and Metrology Institute of Slovenia	Improve Slovenia's Metrological Infrastructure	1995–2000	1,2
TH	Department of Commercial Registration	Amelioration of Legal Metrology	1993–2003	4,2
TH	National Institute of Metrology (Thailand), NIMT	Support Metrology & Nat'l Calib. Service	1999–2003	2,6
TR	General Directorate for Metrology and Standardization	Support of Legal Metrology	1993–2002	6,2
TR	National Metrology Institute	Establishment of a Metrology Institute and a Calibration Service	1991–2000	6,5
TR	Türk Standardları Enstitüsü, TSE	Support for Turkey's National Standards Institute	1987–2000	9,2
TR	Undersecretariat for Foreign Trade	Support for the Establishment of a Turkish Accreditation System	1999–2003	2,0
UY	Laboratorio Tecnológico del Uruguay, LATU	Support of the National MSTQ System	1992–2000	2,3
UY	Organismo Uruguayo de Acreditación	Advisory Support for Accred. Body of Uruguay	1999–2000	0,2
VE	Servicio Autónomo Nacional de Metrología, SANAMET; Comisión Venezolana de Normas Industriales, COVENIN	Support of the National MSTQ-Services	1989–2003	4,1
	Regional Project	Support for MSTQ	1998–2001	1,4
	Regional Project	Support of MSTQ in African and Arabian Countries	1998–2002	2,0
	Regional Project	Support of Metrology in Middle and East European and CIS Countries	2000	0,3
	Regional Project	Improvement of relations between MSTQ projects and projects promoting economic development and employment	2000–2003	1,0

Table 3 Support for legal metrology in developing countries as part of PTB's project activities 1996–2000

Country	
Argentina	Consultancy, seminar, evaluation of the national legal metrology system
Chile	Consultancy on national measurement standards
Bolivia	Supply of mass standards, training
Costa Rica	Training in mass, pressure, length, volume, density, viscosity
Ecuador	Consultancy
India	Supply of a test rig for volume flow
Jamaica	Training in volume measurement
Panama	Supply of measuring equipment, training, calibration of standards
Peru	Training in mass, calibration of mass standards
Uruguay	Consultancy, calibration of measurement standards, training
Vietnam (EU-project)	Consultancy

After hearing reports on legal metrology in the countries represented at the seminar, the participants identified needs for and evoked possibilities of cooperation in legal metrology among the countries of this region. It was agreed to hold a follow-up seminar in October 2000 in conjunction with the meeting of the APLMF.

An assessment of the legal metrology system in Malta is under preparation and the PTB will send two experts to Malta for discussions on the system and on the formulation of the terms of reference for this assessment.

With the aim of strengthening legal metrology services in developing countries, the United Nations Industrial Development Organization (UNIDO), the OIML and the PTB signed a Letter of Intent in 1999. Provided financial resources are available and in accordance with its approved program of work these organizations will contribute to achieving this objective. The activities will be focused on least developed countries in Africa. The beneficiaries will be selected taking into account their commitment to making contributions and their ability to ensure success of the project and to achieve sustainable effects.

Other institutes and donor organizations are invited to join this initiative. Preparatory work has been started by the PTB to gather relevant data of African countries. A first mission to West African countries is scheduled for November 2000 and the OIML is expected to provide model laws and regulations. Projects will be funded from UNIDO and PTB resources but cooperation with and contributions from other organizations are welcome. ■

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REPORT

ILAC 2000 Technical Conference and Fourth General Assembly

30 October–4 November 2000,
Washington D.C.

ATTILA SZILVÁSSY

The four-day *ILAC 2000 Technical Conference for Testing and Laboratory Professionals* was held in conjunction with the Fourth ILAC General Assembly.

1 Technical Conference

Six technical sessions were organized as follows:

Session 1: Application of ISO/IEC 17025

A presentation addressed the content and progression of the draft ILAC document *Guidance on the Application of ISO/IEC 17025 for the Purposes of Accreditation* and two panels discussed the major concerns of accreditation bodies and of laboratories.

Session 2: Stakeholder Reliance on Accredited Laboratories

Benefits of accreditation (confidence, efficiency, international acceptance, etc.) were explored at some length by representatives of US and EU regulators and US and non-US manufacturers.

Session 3: Proficiency Testing and Interlaboratory Comparisons

A wide variety of topics related to proficiency testing was explored, including the results of a recent ILAC survey, cross-border confidence building, proficiency testing programs that accredited laboratories use to meet accreditation requirements and the long-term benefits of participating in these programs.

Session 4: Uncertainty and Traceability

Four presentations addressed requirements for uncertainty statements and their relationship to trace-

ability and provided guidance for different user groups, such as industry and chemical laboratories. A special tutorial on uncertainty analysis according to the GUM was also organized with some 30 participants.

Session 5: Effect of Accreditation on International Trade

Six presentations addressed this topic from the point of view of different key actors and all concluded in emphasizing the necessity for greater international and regional mutual recognition of conformity assessment results.

Session 6: Developing New Accreditation Systems

This session provided examples and experiences in developing new accreditation programs from the Latin American, Asia-Pacific and African Regions and a panel discussion explored future opportunities to facilitate the development of such programs.

2 ILAC Fourth General Assembly

In her report to the General Assembly, Mrs. Belinda Collins (Chair) gave a summary of activities since the last GA and focused on key issues such as the incorporation of ILAC (likely in The Netherlands), the creation of a permanent secretariat, further strengthening of the cooperation with IAF, the ILAC MRA and admission of new Full and Associate Members.

The event of major importance on the agenda was the ceremonial signing of the ILAC Multilateral Recognition Arrangement by the representatives of 35 calibration and/or testing laboratory accreditation bodies from 28 countries.

2.1 Reports from ILAC Committees

The *Accreditation Policy Committee* (among others) has finalized the supporting documents to the MRA and has drafted a document on the ILAC logo and accreditation mark to promote MRA membership.

The *Technical Accreditation Issues Committee* has finalized an application document *Guidance for accreditation to ISO/IEC 17025* and advanced well with two policy documents on traceability of measurement results and on introduction of the concept of measurement uncertainty in testing. This Committee has also undertaken the revision of OIML D 10 and a second draft will be circulated soon.

The *Laboratory Liaison Committee* reported advances in most items of the 1998–2000 Work Program. High priority has been given to the production of a guide for laboratory management converting from ISO Guide 25 to ISO/IEC 17025, to aspects of traceability and measurement uncertainty and to the use of logos.

The *Public Affairs Committee* reported on the revision of guidelines for development of ILAC documents, further developments of the ILAC web site and activities for the promotion of accreditation.

2.2 Reports and contributions from other international organizations in liaison with ILAC

Mr. Ohtsubo (Chair) gave an outline of recent IAF activities including the development of strategic policies, continuing to encourage accreditation bodies to join the IAF Multilateral Recognition Arrangement for QMS and intensification of cooperation with ILAC.

On behalf of the CIPM Mr. Kaarls gave a short report on the recent CGPM session and the measures being taken for the implementation of the agreement on *Mutual recognition of national measurement standards and calibration certificates issued by national metrology institutes* signed in 1999.

The OIML representative gave information on recent OIML events and activities of TC 3/SC 5 *Conformity Assessment* that are of interest to ILAC. It was emphasized that the OIML is interested in closer cooperation with ILAC on conformity assessment and accreditation related issues and in a (trilateral) cooperation between BIPM-ILAC-OIML on metrology related issues, such as terminology and uncertainty of measurements.

3 Miscellaneous

The General Assembly agreed that representatives of ILAC would participate at the annual tripartite meeting of the *Convention du Mètre*, of ILAC and of the OIML to be held at the BIML in February 2001.

Representatives of regional bodies - APLAC, EA, IAAC and SADCA - also reported on their respective activities, recent developments and future plans.

The General Assembly appointed Mr. Mike Pete (SANAS) as Chair and Mr. Daniel Pierre (COFRAC and EA) as Vice Chair of ILAC for 2000–2002.

The next ILAC General Assembly will be held in Kyoto from 29 October to 2 November 2001. ■



SUMMARY PROCEEDINGS

Legal Metrology Seminar for the Americas

16–20 July 2000

S.E. CHAPPELL Consultant to NIST

C.D. EHRLICH Chief, Technical Standards Activities
Program, Office of Standards
Services, NIST

K.S. BUTCHER Senior Standards Specialist,
Technical Standards Activities
Program, Office of Standards
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Introduction

The Legal Metrology Seminar for the Americas was held in conjunction with the 85th Annual Meeting of the National Conference on Weights and Measures (NCWM) in Richmond, Virginia (USA) from July 16–20, 2000. It served as a follow up on some of the subjects considered at the *Workshop on Legal Metrology for the Americas* (WLMA), held at NIST in June 1998. NIST cosponsored the Seminar with the Members and Associate Members of the NCWM.

The objective was to discuss legal metrology practices and capabilities for type evaluation and approval of measuring instruments and devices and the legal requirements for prepackaged products. The discussions were to take into consideration developments internationally as well as in other regions of the world. Relevant issues would be raised and addressed through both formal presentations and an open dialogue among participants, and, as a consequence, specific opportunities for mutually beneficial actions within the Americas could be identified for future consideration.

Because of the limited scope of the Seminar, a selected number of nations within the Americas were invited to explore further regional cooperation in legal metrology for the benefit of all. Invitations to the Seminar were sent to the following countries: Argentina, Brazil, Canada, Colombia, Costa Rica, Ecuador, El Salvador, Jamaica, Mexico, Peru, Uruguay and Venezuela. All of the countries invited participated except Mexico. Seventeen persons participated in the Seminar representing twelve countries. Another fourteen persons representing US manufacturers and

industry and four from NIST provided specific presentations (see Annex A). In addition to those listed, several other representatives of manufacturers and members of the NCWM participated as observers.

The Seminar participants from countries in the Americas also observed the proceedings of the Annual Meeting of the NCWM, and simultaneous interpretation of the NCWM proceedings was provided in Spanish. At the end of each day's sessions, Mr. Ken Butcher (NIST) discussed the highlights of the NCWM program with the participants. Dr. Richard Kayser, Director of Technology Services at NIST, presented the President's address to the NCWM on Tuesday, July 18, and also gave a brief talk to the Seminar participants during their session on that day's NCWM highlights.

The Seminar began on the morning of Sunday, July 16. A welcoming presentation was given by Mr. Wes Diggs, Chairman of the NCWM.

Dr. Ehrlich facilitated the introduction of participants and then provided an "Overview of the Activities for the Week." He also served as the facilitator of the Seminar in all its sessions.

Overview of the NCWM

Mr. Henry Oppermann, Chief, Weights and Measures Program, NIST, gave an "Overview of the NCWM." He included a brief history of the NCWM and its relationship with NIST and also provided an explanation of the objectives, organization and structure, activities including meetings, membership, and leadership of the NCWM.

OIML activities

Dr. Chappell gave a presentation on "OIML activities". In particular, he provided information about the development within the OIML of a project on a "mutual acceptance arrangement (MAA) on OIML type evaluation" and on another project that would establish an International Quantity (IQ) mark for prepackaged products.

The MAA project is within OIML TC 3/SC 5 *Conformity assessment* for which the United States is the Secretariat, and OIML approval is expected within the next year. It will establish a voluntary framework whereby the responsible bodies in OIML Member States could accept and utilize in their relevant national or regional type approval programs those OIML type evaluation test reports and reports for any supple-

mentary or different tests accompanied by certificates of conformance. It covers the means by which an agreement can be established, implemented and amended and the period of its duration. The MAA procedures also provide for appealing and resolving issues and for terminating agreements. The MAA has three main objectives:

- (a) to establish rules and procedures for fostering mutual confidence in the test results of measuring instruments indicating conformity to OIML requirements;
- (b) to promote the global harmonization, uniform interpretation and implementation of legal requirements for measuring instruments; and
- (c) to promote efficiency in time and cost of official type evaluations and approvals of measuring instruments.

The IQ mark project for prepackaged products is being developed as a part of the revision of OIML R 87 *Net content in prepackages*. Its ultimate objective is to establish an OIML program for facilitating the international trade of prepackaged products. Under the proposed program, packers could apply an IQ mark to their packaged products provided they have in place a quality system and testing laboratory to determine the net content (quantity) in the packaged product. Such packers would have to be authorized and subjected to audits by or on behalf of the national responsible bodies of OIML Member States participating in the OIML program.

Type evaluation

A general session was conducted on "National type evaluation". Presentations were given on the specific practices in the United States, Canada and Brazil by respectively Ms. Tina Butcher of the NIST Weights and Measures Program, Mr. Alan Johnston, President, Measurement Canada, Industry Canada, and Mr. Cezar Luis Leal Moreira da Silva, General Manager, Department of Legal Metrology, INMETRO, Brazil. A general discussion followed in which the other participants provided information about type evaluation in their countries. Most indicated that type evaluations were not carried out in their countries, and some pointed out that instruments were not manufactured locally.

Round table discussions by representatives of manufacturers were presented on type evaluation of the following measuring instruments and devices:

• *Type evaluation of weighing devices in the Americas*

Moderator: Mr. Daryl Tonini, Technical Director, Scale Manufacturers Association, Inc. (SMA) and

- Mr. Darrell Flocken, Manager, International Weights and Measures, Mettler-Toledo, Inc.
- Mr. Quenton Olson, Teda Huntleigh
- Mr. Gary Lameris, Design Engineer, Hobart Corporation

Summary: The panel identified the membership and objectives of the Scale Manufacturers' Association. Members of the panel discussed the requirements for marketing their products in North America, Central and South America, Europe and the Asia-Pacific. The US-Canada mutual recognition on type approvals and the status of accepting the NCWM's National Type Evaluation Program (NTEP) within the various states of the United States were discussed. The presenters highlighted the benefits of developing and maintaining regional forums for weights and measures organizations and establishing cooperation among them to reduce barriers to trade.

• *Type evaluation of metering devices in the Americas*

Moderator: Mr. Jeff Kelly, International Sales Manager, Hoffer Flow Controls Inc.

- Mr. John Skuce, Manager, FMC Management Solutions
- Mr. Robert M. Traettino, Liquid Controls, Inc.
- Mr. Michael Keilty, Micro Motion, Inc.

Summary: The panel provided an explanation of the goals of the Meter Manufacturers' Association that included education, technology issues and uniformity. It was emphasized that the Association is dedicated to the promotion of uniform international metrology regulation.

• *Type evaluation of gasoline dispensers in the Americas*

Moderator: Mr. Richard Tucker, Manager Approvals, Tokheim Corporation

- Mr. Gordon Johnson, Manager Regulatory Affairs, Marconi Commerce Systems, Inc.
- Mr. Mike Gallo, Wayne Division - Dresser Industries

Summary: The panel identified the objectives of the Gas Pump Manufacturers' Association and identified their strategy to achieve global approval of their products. A result of a survey of the current

approval requirements in certain countries in the Americas was presented and discussed. The wish was expressed that NCWM-NTEP certification should be accepted within the region.

Packaging and labeling

On Wednesday, July 19, a general session was conducted on "Net content and labeling requirements for prepackaged products." Presentations were given on the specific practices in the United States and Canada by respectively Mr. Ken Butcher, Technical Standards Activities Program, NIST, and Mr. Gilles Vinet, Vice President, Program Development, Measurement Canada.

A round table discussion by representatives of the packaging industry was presented on packaging and labeling of products:

• *Package requirements in the Americas*

Moderator: Mr. Christopher B. Guay, Principal, Proctor and Gamble Co.

- Mr. John A. Baker, Senior Manager Merchandise Compliance/Regulations, Pier 1 Imports
- Mr. Richard Davis, Manager, Product Safety and Compliance, Fort James Corporation

Summary: The panel described the variety and global nature of their industry and highlighted the significant disparities that exist in legal labeling requirements among trading partners and that are complicated by differences in quantity units, language, formats and environmental issues. The panel presented three recommendations for the benefit of the industry and consumers for consideration by the Seminar participants: (1) allow metric only net content statements on product labels in the United States, (2) work towards establishing an agreement or guideline to permit the use of a standard label, and (3) seek to establish clear rules that change less frequently and that can be easily adaptable and understood.

Hemispheric issues

The last sessions of the Seminar were held on Thursday, July 20. Prior to these, each participant was requested to submit proposals for a discussion of "Hemispheric issues." The proposals were to be based on the issues raised during the Seminar in the formal presentations and discussions.

C. Ehrlich and S. Chappell led the discussions and the hemispheric issues identified as being important with regard to establishing effective cooperation were:

- providing basic information about legal metrology in each country including:
 - the responsible person and body concerning the regulation of measuring instruments;
 - requirements for manufacturers to sell instruments for legal-for-trade applications; and
 - a database of legal requirements;
- establishing mutual arrangements for developing confidence in weighing and measuring instrumentation sold in various countries;
- conducting periodic forums and training;
- harmonizing regulations for legal metrology including:
 - procedures for testing and verifying instruments (when appropriate); and
 - labeling and net content requirements for pre-packages;
- providing information on the status of the legal metrology infrastructure:
 - laws and regulations;
 - administrative procedures;
 - type evaluation (inspection and tests); and
 - verification;
- using and applying uniform terms and definitions;
- considering cultural and political factors;
- providing materials to convey the importance of legal metrology to political leaders and to the public;
- funding; and
- coordinating work with regional development authorities.

Regional legal metrology activities

S. Chappell gave a presentation on "Regional legal metrology activities". He pointed out the benefits derived from regional cooperation including:

- (a) strengthening trading partners;
- (b) assisting developing countries;
- (c) increasing competence and confidence among participants;
- (d) enhancing market opportunities for competent instrument manufacturers and producers of pre-packaged products; and
- (e) facilitating continued partnership and global influence.

The regional activities covered were:

- (1) the Asia-Pacific Legal Metrology Forum (APLMF);
- (2) European Cooperation in Legal Metrology (WELMEC);
- (3) Southern Africa Development Community Cooperation in Legal Metrology (SADCMECL); and
- (4) the Working Group on Legal Metrology within the Inter-American Metrology System (SIM).

The membership, functions and objectives of these organizations were briefly discussed.

Seminar resolutions

Draft resolutions were presented based on consideration of the presentations and the hemispheric issues discussed, and then C. Ehrlich reviewed them with participants. After editing during the discussions, the following resolutions were unanimously adopted:

- 1) An inquiry should be distributed to develop a listing of the national responsible body for legal measuring instruments in each member state of the Organization of American States (OAS).

Note: the instruments listed initially and addressed in the other resolutions should be non-automatic weighing instruments, meters for measuring liquids, and vehicular fuel dispensers.

- 2) An inquiry should be distributed to OAS member states to determine the metrological and technical requirements that measuring instruments must meet in order for a manufacturer or importer to market those instruments for legal-for-trade applications.
- 3) A Mutual Acceptance Arrangement (MAA) for type evaluation of measuring instruments should be developed for voluntary consideration in the Americas based on the ongoing OIML work on this subject. This MAA is intended to develop confidence among participants that includes those that accept and issue test reports and certificates of conformity and those that only accept test reports and certificates.
- 4) A draft procedure of general requirements for initial verification should be prepared for con-

sideration in harmonizing such procedures within the Americas.

- 5) Training courses should be developed and implemented for the testing of measuring instruments during initial and subsequent verification.
- 6) An inquiry should be distributed to OAS member states requesting copies of (or references to Internet sites containing) their laws on legal metrology.
- 7) The OIML should be requested to give priority to the revision of D 1 *Law on Metrology*.
- 8) An inquiry should be distributed to OAS member states requesting: (a) copies of their packaging and labeling laws and regulations (or references to Internet sites containing this information) and (b) an identification of the responsible bodies.
- 9) Training courses should be developed for implementing packaging and labeling based on the requirements of OIML R 79 *Labeling requirements for prepackaged products* and R 87 *Net content in prepackages*.
- 10) Information should be exchanged among the member states to educate consumers and others in the area of legal metrology.
- 11) These resolutions shall be submitted to the SIM Working Group on "legal metrology" for consideration in implementing them within their scope of their work by December 31, 2000. Consideration shall be given to pursue those items not to be covered by the SIM working group.

SIM Working Group on Legal Metrology

A meeting of the SIM Working Group on Legal Metrology was held after the Seminar, chaired by Mr. Cezar da Silva (Brazil). The other official representatives participating in the Working Group meeting were Mr. Edgar Sanchez (Costa Rica), Mr. Edwin Pineiros (Ecuador), Ms. Ernestine Horsham (Jamaica), Mr. Luis A. Garcia y Santos (Uruguay), and Dr. Charles Ehrlich (USA). All other participants in the Seminar were observers at the meeting. ■

REPORT

ISO DEVCO/CASCO * workshop

Milan, Italy, 26 September 2000

IAN DUNMILL

In opening this workshop on the theme *Facilitating recognition of conformity assessment activities in the 21st century*, Fabio Tobón (Executive Director, ICONTEC, Colombia) said that the issues of accreditation, certification, testing, inspection and calibration, all covered by the term “conformity assessment activities”, were becoming increasingly urgent in a world where trade was of primary importance for world peace and prosperity.

World commerce is now underpinned by the two pillars of standardization and conformity assessment. It is frequently the repetition of testing caused by different systems of conformity assessment in different countries which leads to serious non-tariff barriers to trade. Building confidence in conformity assessment activities is therefore of high priority. It is essential that the needs of developing countries are taken into account in elaborating conformity assessment procedures if solutions to the problems are going to be found which are applicable at a global level.

Session 1: Keynote speeches

These issues were expanded upon in presentations by representatives from the European Commission, the WTO and ISO CASCO.

Session 2: Mutual recognition agreements (MRAs)

Presentations in this session covered MRAs between certification bodies and between accreditation bodies as well as bilateral, regional and international agreements, including the OIML Certificate System for Measuring Instruments.

Session 3: Facilitating access of developing countries to MRAs

The need to facilitate developing countries' access to MRAs was considered, in particular concentrating on their need for guidance documents, pre-peer evaluation programmes in order to avoid waste of resources. Other forms of assistance such as training courses and seminars were also considered.

Session 4: Panel discussion

A lively panel discussion followed the presentations. Many concerns were expressed about the proliferation and cost of certification schemes, some of which it was felt added little value for the consumer. There is also the problem of confusion amongst consumers due to products carrying a large number of certification marks.

In developed countries, use could be made of manufacturers' declarations of conformity, but developing countries still felt that the independence of a third party assessment was valuable.

Thus, a clear message which emerged from the workshop was that it is necessary to merge and harmonize conformity assessment procedures in order to reduce duplication and costs and to achieve a worldwide conformity assessment system.

Conclusion

Participants gained a broad perspective of the impact of conformity assessment activities in the global economy, the usefulness in trade promotion of the recognition of conformity assessment activities, the existence of ways to achieve it and the need to facilitate its implementation. Mr. Fabio Tobón, in summing up, said that conformity assessment had to go hand in hand with transparency, non-discrimination and the use of international standards. He thought that the workshop had drawn attention to the problems and assured participants that progress in solving them would be monitored. ■

* CASCO: ISO Committee for Conformity Assessment Matters
DEVCO: ISO Committee for Developing Country Matters

REPORT

34th ISO DEVCO meeting**Milan, Italy, 27 September 2000**

IAN DUNMILL

*Summary of the most significant points on the agenda:***Development manuals:**

The need for a Development Manual concerning the WTO TBT Agreement was discussed, but may not be necessary since the technical assistance needs of developing countries would be highlighted in a joint publication which is currently under preparation by the International Trade Center and the Commonwealth Secretariat. Development Manual 3 *Training of technical staff* will be reviewed this year.

Regional training seminars:

A new series of training seminars had been conducted in Columbia and Peru. There has also been an increase in train-the-trainer activities.

Documentation and information systems:

ISO's increasing application of information and communications technology to the standardization process was welcomed. The *MED 2000* project, which aimed to assist in establishing and/or upgrading the information technology and telecommunications infrastructure in the Mediterranean basin and the Horn of Africa, had produced some useful guides and tools which could be applied in other countries. Some of the contributions to ISO's Funds in Trust had also been reserved for information technology development.

Funding:

It was reported that 2000 had been a bad year for contributions to the Funds in Trust. Representatives from Australia, UK and USA indicated their intention to make significant contributions in the coming years.

Activities of CASCO:

ISO/IEC Guide 68 *Agreements for the recognition and acceptance of conformity assessment results* is currently under consideration as a Committee draft by CASCO members. The increased involvement of developing countries in CASCO working groups, especially since participation by correspondence had begun, was also welcomed.

Activities of COPOLCO:

A survey examining ways in which consumer issues are addressed in developing countries had been conducted amongst DEVCO members during the year and a report will be circulated soon. Priorities for the coming year were identified as financial services, e-commerce, ergonomics and services.

Cooperation between DEVCO and REMCO:

During the last year, a further project to upgrade analytical laboratories had been undertaken in Botswana, Mauritius and Mozambique.

Revision of ISO 9000:

It was reported that by the end of 2000, around 400 000 ISO 9000 certificates are likely to have been issued by 150 countries. The revisions of the three core documents (ISO 9000, 9001, 9004) were expected to be available by the end of 2000. Certificates based on the previous versions of the documents could be maintained for up to three years after the issue of the new ones.

SGM Forum - first meeting:

This round table will discuss programs, projects and studies in standards and related matters. Some project ideas were put forward at the first meeting which will be considered at the next one, to which development banks will also be invited. A web site is being established which will contain a database of technical assistance projects.

Collaboration with WTO TBT:

Mrs. Vivien Liu reported on this year's Workshop on Technical Assistance and Special and Differential Treatment which she said had been very practical and solutions-orientated. There had also been excellent cooperation between the WTO and ISO DEVPRO in holding training seminars.

Technical assistance:

It was suggested that a committee be formed to discuss the financing of technical assistance projects, especially in the light of the WTO's emphasis on international standardization. The possibility of cooperation between ISO and the OIML was also mentioned since the OIML has just established a list of experts available for projects in the field of metrology.

The next ISO DEVCO meeting will be held on 14 and 15 September 2001 in Sydney, Australia. ■

OIML MEETING REPORT

TC 8/SC 5

Paris, 9–10 November 2000

JIM WILLIAMSON, NEL, UK (TC 8/SC 5 Secretary)

The meeting, which was chaired by Dr. Michael Reader-Harris (NEL, UK), was held at the offices of AFNOR, Paris La Défense. 22 delegates attended representing 12 Member States.

It was reported that since the previous meeting in November 1999, International Recommendation R 49-1 *Water meters intended for the metering of cold potable water, Part 1: Metrological and technical requirements*, has been published and drafts of R 49-2 (Method of test) and R 49-3 (Test report format) had been sent to SC 5 for comment.

The comments on these two drafts were considered by the Sub-committee and, as a result of the changes agreed, new committee drafts are being prepared by the secretariat. Full details of the agreed changes can be seen from the minutes (Doc. 178) which were sent to members on 29 November 2000.

It was noted that some of the requirements in R 49-1 concerning the testing of electronic water meters have been superseded because of revisions to IEC standards (to which OIML D 11 refers). In order to remedy this, an amendment to R 49-1 will to be sent out to Member States and, in addition, a working group has been set up to look at the revisions required to R 49-1. The working group has one year to complete its task and report back to SC 5.

It had been the intention to send drafts of R 49-2 and R 49-3 to the members of OIML TC 8/SC 5 for voting and subsequently to seek CIML approval at its 36th Meeting in September 2001. However, the changes required to R 49-1 have consequences for R 49 parts 2 and 3. It was therefore agreed to ballot SC 5 members to ask if R 49-2 should be submitted to the CIML in 2001 as planned, or to delay doing so for one year until the documents can be updated with the new requirements for testing electronic water meters.

The following agreed time scale is intended to allow R 49-2 to be submitted to the CIML in 2001 for approval if that is the wish of SC 5:

- By mid-December 2000 the Secretary should revise R 49-2 and send it with the ballot paper to SC 5 for voting and comment.
- SC 5 should return the ballot paper and their vote on R 49-2 by the beginning of February 2001.
- If the ballot requires that R 49-2 should be presented to the CIML in time for its 36th Meeting in September 2001, then the results of the vote and the draft R 49-2 (taking into account comments received) should be sent to the BIML by the end of February 2001.
- The BIML would send the draft to CIML Members for voting and comment, voting being completed by the end of June 2001.
- The BIML would send CIML Members' comments to the Secretary of SC 5 to be collated.
- The BIML would send the final draft to the CIML by the end of August 2001 for approval at its September 2001 Meeting.
- R 49-3, which can be approved by postal vote, would follow closely behind.

At the invitation of Mr. R. Eggermont, the next meeting of OIML TC 8/SC 5 is to be held on 9–10 October 2001 in Brussels at the Ministère des Affaires Économiques, Boulevard Albert II, 116, B-1000 Brussels, Belgium. ■

OIML Certificate System: Certificates registered 2000.08–2000.10

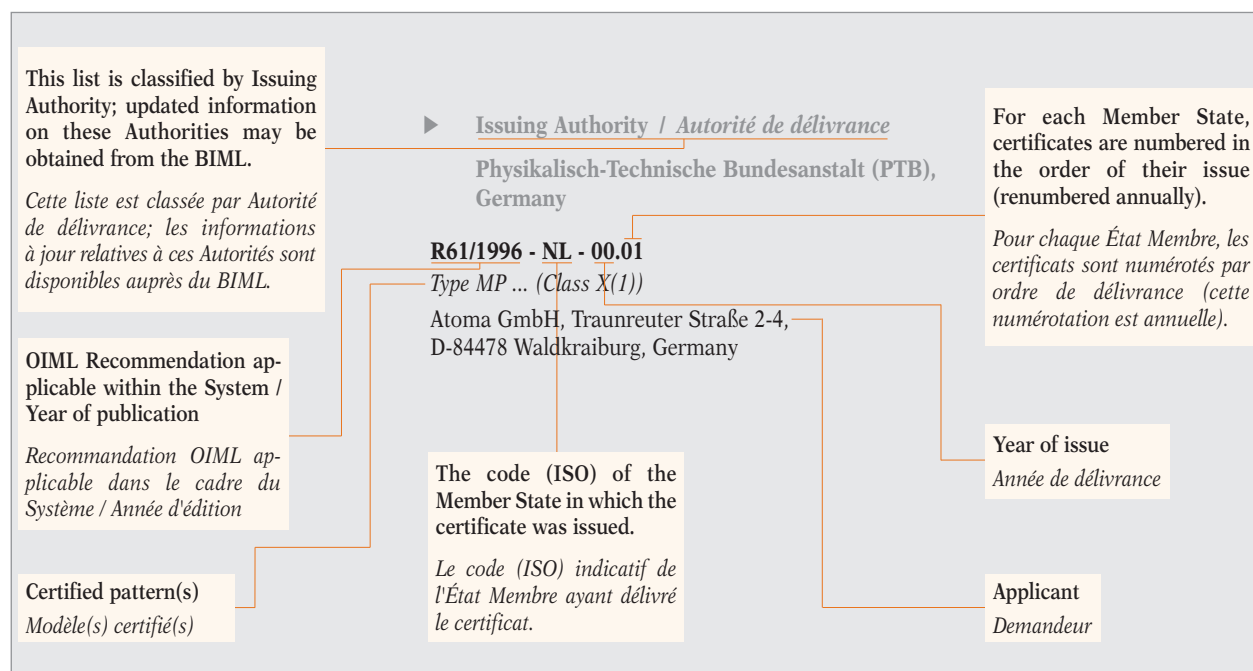
For up to date information: www.oiml.org

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.

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 2000.08–2000.10

Pour des informations à jour: 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 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

Continuous totalizing automatic weighing instruments (belt weighers)
Instruments de pesage totalisateurs continus à fonctionnement automatique (peseuses sur bande)

R 50 (1997)

- Issuing Authority / *Autorité de délivrance*
 Swedish National Testing and Research Institute AB,
 Sweden

R50/1997-SE-99.01

Belt Weigher Z-H22 (Class 1)

SEG Instrument AB, Box 11143, SE-161 11 Bromma, Sweden

R50/1997-SE-99.02

Weighfeeder FK-3, FK-5 or FK-7 (Class 1)

SEG Instrument AB, Box 11143, SE-161 11 Bromma, Sweden

INSTRUMENT CATEGORY
CATÉGORIE D'INSTRUMENT

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

R 51 (1996)

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

R51/1996-GB1-00.02

Type 8060 (Classes X(1) and Y(a))

Pelcombe Ltd, Main Road, Dovercourt, Harwich,
 Essex CO12 4LP, United Kingdom

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

R51/1996-NL1-00.05

FDP-3000S series*

Ishida Co., Ltd., 44, Sanno-cho, Shogoin, Sakayo-ku,
 Kyoto-city 606-8392, Japan

INSTRUMENT CATEGORY
CATÉGORIE D'INSTRUMENT

Load cells
Cellules de pesée

R 60 (1991), Annex A (1993)

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

R60/1991-DE-00.01

RLC .. (Classes C1 to C6)

Revere Transducers Europe BV, Ramshoorn 7,
 P.O. Box 6909, 4802 HX Breda, The Netherlands

- Issuing Authority / *Autorité de délivrance*
 Danish Agency for Development of Trade
 and Industry, Division of Metrology, Denmark

R60/1991-DK-00.02

Shear beam, strain gauge load cell, type LFB-xxxxxy (Class C)

Cardinal Scale Manufacturing Co., 203 East Daugherty St.,
 Webb City, Missouri 64870, USA

INSTRUMENT CATEGORY
CATÉGORIE D'INSTRUMENT

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

R 60 (2000)

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

R60/2000-GB1-00.01

*Single Ended Shear Beam (bending) strain gauge load cell,
 model SEB (Class C3)*

Celtron Technologies Inc., 15f, No. 86, Sec. 1 Hsin Tai Wu Road,
 Hsi Tzu, Taipei Hsien, R.O.C., Taiwan

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

R60/2000-NL1-00.10

Types 1042 and 1042 Symmetric (Class C)

Tedea Huntleigh International Ltd., 2 Hazoran street,
Netanya 42506, Israël

R60/2000-NL1-00.11

LSH and MSH (Class C)

Sun Scale Inc., 12-3, 31 Road, Industrial Park,
Tai-Chung, Taiwan

R60/2000-NL1-00.12

FFX (Class C)

MASTER-K, 38, avenue des Frères Montgolfier, B.P. 186,
69686 Chassieu Cedex, France

- Issuing Authority / *Autorité de délivrance*
Gosstandart of Russian Federation,
Russian Federation

R60/2000-RU-00.01

Type Digicell 100 (Class C)

OOO "Petro VES", 18, Gorohovaja str., P.O. Box 246,
191186 Sankt-Petersburg, Russian Federation

R60/2000-RU-00.02

Type Digicell 200 (Class C)

OOO "Petro VES", 18, Gorohovaja str., P.O. Box 246,
191186 Sankt-Petersburg, Russian Federation

R60/2000-RU-00.03

Type Digicell 300 (Class C)

OOO "Petro VES", 18, Gorohovaja str., P.O. Box 246,
191186 Sankt-Petersburg, Russian Federation

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

R61/1996-NL1-00.05

Auger Filling instrument (Class Ref (1))

G. Webb Automation Ltd., Link Industrial Estate, Howsell Road,
Malvern Link, Worcestershire WR14 1TF, United Kingdom

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*
Physikalisch-Technische Bundesanstalt (PTB),
Germany

R76/1992-DE-00.02

Nonautomatic electromechanical weighing instrument with or without leverwork, type WDS30-277x (Classes III or IIII)

Soehnle-Waagen GmbH + Co., Fornsbacher Straße 27 - 35,
D-71540 Murrhardt, Germany

R76/1992-DE-00.03

Nonautomatic electromechanical weighing instrument with or without lever system, type ST.. (Classes III and IIII)

Bizerba GmbH & Co. KG, Wilhelm-Kraut-Straße 65,
D-72336 Balingen, Germany

R76/1992-DE-00.04

Disomat B plus (Classes III and IIII)

Schenk Process GmbH, Landwehrstraße 55, 64293 Darmstadt,
Germany

R76/1992-DE-00.05

Types EL 7 500, EL 16 500 (Classes II and III)

Bizerba GmbH & Co. KG, Wilhelm-Kraut-Straße 65,
D-72336 Balingen, Germany

R76/1992-DE-00.07

*Nonautomatic electromechanical weighing instrument,
type DX BM 500 (Classes II, III and IIII)*

Sartorius A.G., Weender Landstraße 94-108, D-37075 Göttingen,
Germany

► Issuing Authority / *Autorité de délivrance*
Centro Español de Metrología, Spain

R76/1992-ES-98.01 Rev. 1

*Nonautomatic, graduated, self-indicating, electronic
counter-top/hanging weighing instrument, type "BASIC"
intended for direct sale to the public (Class III)*

Campesa S.A., Avinguda Cova Solera, 25-29,
E-08191 Rubi-Barcelona, Spain

R76/1992-ES-99.03 Rev. 1

*Nonautomatic, graduated, self-indicating, electronic
counter-top/hanging weighing instrument, type "BASIC PRINT"
intended for direct sale to the public (Class III)*

Campesa S.A., Avinguda Cova Solera, 25-29,
E-08191 Rubi-Barcelona, Spain

R76/1992-ES-00.03

Type "SMALLY-Print" (Class III)

OMEGA BILANCE S.p.A., Cs. Sempione 111 Gallarate (Va),
Italy

R76/1992-ES-00.04

AP (Class III)

GEC Avery Limited, Foundry Lane, Smethwick, Warley,
West Midlands B66 2LP, United Kingdom

R76/1992-ES-00.05

AN (Class III)

GEC Avery Limited, Foundry Lane, Smethwick, Warley,
West Midlands B66 2LP, United Kingdom

R76/1992-ES-00.06

AB (Class III)

GEC Avery Limited, Foundry Lane, Smethwick, Warley,
West Midlands B66 2LP, United Kingdom

R76/1992-ES-00.07

MVL (Class III)

Fabrica de balancas medines, Lda., Trav. Da Falagueira,
11, 2700 AMADORA, Portugal

R76/1992-ES-00.08

MPL (Class III)

Fabrica de balancas medines, Lda., Trav. Da Falagueira,
11, 2700 AMADORA, Portugal

► Issuing Authority / *Autorité de délivrance*
Laboratoire National d'Essais
Service Certification et Conformité Technique
Certification Instruments de Mesure, France

R76/1992-FR2-00.01

Type EL 27 (Class III)

Société NS Testut SAS, 957 rue de l'Horlogerie, B.P. 11,
62401 Béthune, France

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

R76/1992-GB1-00.04

NCR 7872 (Class III)

NCR Corporation, 2651 Satellite Blvd, Duluth,
Georgia 30096, USA

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

R76/1992-NL1-98.32 Rev. 1

Types SR and SG (Classes II and III)

Mettler-Toledo A.G., Im Langacher, 8606 Greifensee, Switzerland

R76/1992-NL1-00.16

SC 900 (Class III)

Shekel Electronics Scales, Kibbutz Beit Keshet,
M.P. Lower Galilee 15247, Israël

R76/1992-NL1-00.17*Types AW, AX, AY (Class I)*

Shimadzu Corporation, 1, Nishinokyo-Kuwabaracho,
Nakagyo-ku, Kyoto 604, Japan

R76/1992-NL1-00.18*AC-3000 and BC-3000 series (Class III)*

Ishida Co., Ltd., 44, Sanno-cho, Shogoin, Sakayo-ku,
Kyoto-city 606-8392, Japan

R76/1992-NL1-00.19 Rev. 1*DC-190 ... (Class III)*

Teraoka Seiko Co., Ltd., 13-12 Kugahara, 5-Chome, Ohta-ku,
Tokyo 146-8580, Japan

R76/1992-NL1-00.20*BM-1 (Class III)*

Digital Scales S.A., Avda. Santa Ana n° 7 Dpto. 10,
Grupo Empreserial Santa Ana, 48940 Leioa Vizcaya, Spain

R76/1992-NL1-00.21*Ranger... (Class III)*

Ohaus Corporation, 29, Hanover Road, Florham Park,
New Jersey 07932-0900, USA

R76/1992-NL1-00.22

*Types with $n \leq 35100$ divisions (Class II) or with $n \leq 10000$
divisions (Class III)*

Mettler-Toledo A.G., Im Langacher, 8606 Greifensee, Switzerland

R76/1992-NL1-00.23*Types AX..., MX..., UMX... (Class I)*

Mettler-Toledo A.G., Im Langacher, 8606 Greifensee, Switzerland

R76/1992-NL1-00.24*Type BM-1 (Class III)*

Digital Scales S.A., Avda. Santa Ana n° 7 Dpto. 10,
Grupo Empreserial Santa Ana, 48940 Leioa Vizcaya, Spain

- **Issuing Authority / Autorité de délivrance**
National Institute of Standards and Technology,
United States of America

R76/1992-US-99.01*SP 600 (Class III)*

Hobart Corporation, World Headquarters, 701 Ridge Avenue,
Troy, Ohio 45374-0001, USA

INSTRUMENT CATEGORY
CATÉGORIE D'INSTRUMENT
**Automatic level gauges for measuring the level
of liquid in fixed storage tanks**

*Jaugeurs automatiques pour le mesurage des niveaux
de liquide dans les réservoirs de stockage fixes*

R 85 (1998)

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

R85/1998-NL1-00.01*Model ATG 854 (Class 2)*

Enraf B.V., Röntgenweg 1, 2624 BD Delft, The Netherlands

R85/1998-NL1-00.02*Model Micropilot S FMR 530 (Class 2)*

Endress + Hauser GmbH + Co., Hauptstrasse 1,
D-79689 Maulburg, Germany

- **Issuing Authority / Autorité de délivrance**
Swedish National Testing and Research Institute AB,
Sweden

R85/1998-SE-00.01 Rev. 1*Saab TankRadar REX, RTG 3900 (accuracy class 2)*

Saab Marine Electronics AB, Box 13045, 402 51 Göteborg,
Sweden

BIML**Report on Activities**

1999.10 – 2000.09

**Subject****Activities**
**Preparations for the 11th
Conference and
35th CIML Meeting**

- Finalization of preparations in close cooperation with the NWML
- Information to invited countries and international/regional organizations; preparation of financial and technical papers to be discussed; design and printing of the Conference information brochure

**Follow-up to the
35th CIML Meeting**

- Editing and distribution of the Decisions
- Editing and distribution of the Minutes
- Implementation of the Decisions

Presidential Council

- Organization of a meeting in Paris (February 2000); preparation of reports on the various aspects of OIML activities of interest to the Council; publication of the Council meeting report in the OIML Bulletin
- Multiple contacts with the CIML President and Vice-Presidents

**Selection of candidates for the
position of BIML Director**

- Call for candidacies through letters to CIML Members and national metrology and accreditation bodies; OIML web site; advert in *The Economist*
- Organization of the pre-selection committee meeting
- Organization of the selection committee meeting and interviews of pre-selected candidates

Development Council

- Editing and distribution of the minutes of the Tunis meeting
- Working meetings with the Chairperson of the Development Council; numerous contacts with the secretariats of the Council working groups
- Development of the Council's (and working groups') work programs
- Preparations for the London meeting
- Liaisons with ISO/DEVCO/CASCO, UNIDO, WTO, etc.
- Contacts with national bodies offering assistance to developing countries (DAM-Germany, SDM-France, NSC-Australia, ESM-France, Resource-UK, VNIIMS-Russia, etc.)

OIML Policy

- Assessment of activities for 1999
- Finalization of the *1999–2002 Action Plan* for submission to the Conference

**Technical Committees and
Subcommittees**

- Inquiries for annual reports; work priorities; implementation of OIML Recommendations
- Examination of the situation of and contact with numerous TC's/SC's
- Participation in the work of certain TC's/SC's
- Liaison between certain TC's/SC's and international and regional bodies
- Postal inquiries concerning a number of draft Recommendations/Documents/ test report formats; distribution of three drafts for approval by the Conference
- Permanent updating of papers (*State of progress*, etc.) related to TC's/SC's that are posted on the OIML web site

Participation in OIML technical meetings

- TC 8/SC 5/WG 2 organized by the BIML in Paris February 2000
- TC 8/SC 3 & 4 " February 2000
- TC 6 " February 2000
- TC 3/SC 5 " June 2000
- TC 3/SC 5 working group on uncertainty, Paris June 2000
- Seminar on weights, Böras October 1999
- TC 8/SC 7, Paris March 2000
- TC 9/SC 2, Teddington June 2000

Certification

- Registration of OIML certificates; information concerning OIML Members (letters, OIML Bulletin and web site)
- Revision of the document on the *OIML Certificate System* (TC 3/SC 5)
- Questionnaires to OIML Members, Issuing Authorities and manufacturers
- Reports for the Conference
- Follow-up on conformity assessment, quality management, certification and accreditation and other activities within IAF, ILAC, ISO/IEC, WTO, UN/ECE, EA, etc.

Technical publications

- Editing, posting on the web site, printing and distribution of R 60, R 128, R 122/Annex C (French versions being prepared)
- Editing and posting on the web site of R 49-1 (printed version available soon - French version being prepared)
- Editing R 65, R 129 and R 81/Annex D
- Cooperation with ISO and OIML experts on ISO 3930 / OIML R 99, now available
- Cooperation with TC 1 (Poland) on the VIML

OIML Bulletin

- Production of four issues
- Proof-reading and author approval of all articles before publication
- Preparation of reports and information for publication in the Bulletin

Communication

- Regular update of information annexed to the Blue Brochure, the Bulletin, the web site, the OIML transparency presentation and OIML posters
- Main information on the web site now available in Spanish
- Specific web site developed for the OIML Development Council

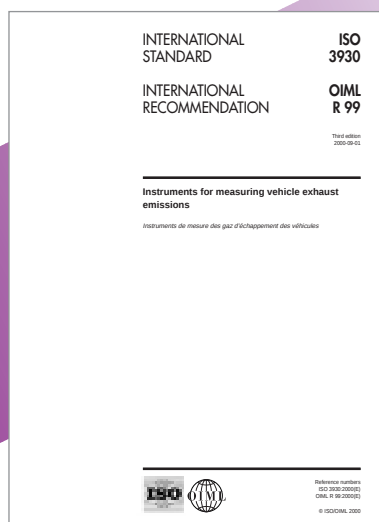
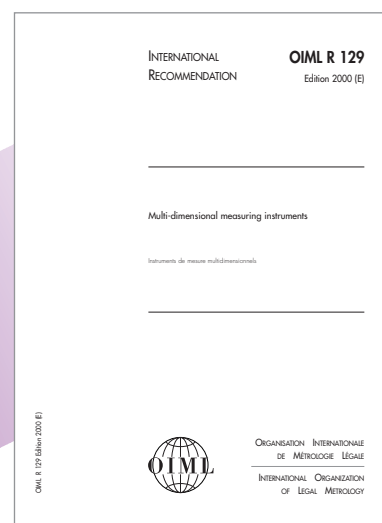
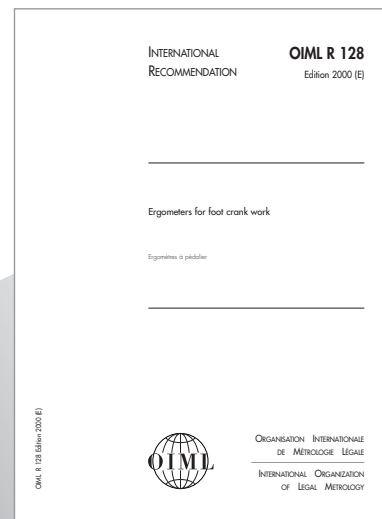
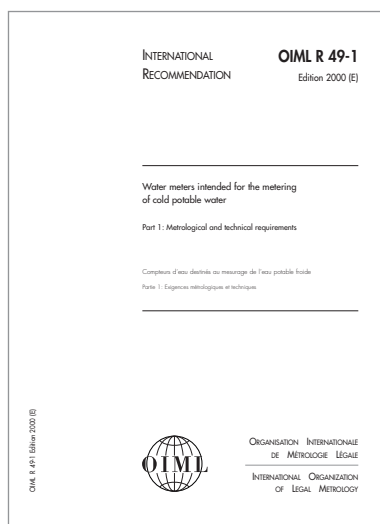
Participation in meetings organized by OIML Members

Liaisons with other institutions (including participation in meetings)

- CGPM (Paris, October 1999)
- Euro-Mediterranean Cooperation (Tunis, October 1999)
- ISO DEVCO and Open Session (Beijing, October 2000)
- ILAC General Assembly (Rio de Janeiro, October 1999)
- PTB/APLMF workshop (Chiangmai, November 1999)
- Joint BIPM/ILAC/OIML meeting (BIPM, February 2000)
- JCGM WG 1 & 2 (Paris, March 2000)
- Metrology 2000 (Habana, March 2000)
- Balkan Cooperation (Struga, Macedonia, April 2000)
- Metrology 2000 (Jerusalem, May 2000)
- WELMEC Committee Meeting (Moss, June 2000)
- European Commission, CEN, CENELEC
- COOMET Legal Metrology meeting (Braunschweig, March 2000)
- 125 years of the Meter Convention (Budapest and Saint Petersburg, May 2000)
- WTO TBT Committee and Symposium (Geneva, July 2000)
- National Measurement Conference (Wellington, July 2000)
- Conference on metrology of the PHARE Program (Paris, October 2000)

Note: Miscellaneous information and visits from/to OIML Members are no longer systematically mentioned in order to maintain this report as short as possible.

New OIML Publications



The OIML is pleased to welcome the following new

■ CIML Members

Australia	Judith Bennett
Bulgaria	Tsonyo Botev
Ethiopia	Mesfin Teklehaimanot
Finland	Tuomo Valkeapää
France	Gérard Lagauterie
Indonesia	Gunaryo
Rep. of Korea	Chun Haeng Cho

■ OIML Meetings

January 2001

16–17	TC 11 Instruments for measuring temperature and associated quantities	BERLIN (PTB)
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March 2001

5–8	TC 8/SC 7 Gas metering	BRUSSELS
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September 2001

22–27	36 th CIML and Development Council Meetings	MOSCOW
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October 2001

9–10	TC 8/SC 5 Water meters <i>(Date to be confirmed)</i>	BRUSSELS
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The OIML is pleased to welcome the following new

■ Corresponding Member: Cambodia

■ Committee Drafts

received by the BIML, 2000.08.01 – 2000.10.31

Revision of R 84:	Platinum, copper and nickel resistance thermometers (for industrial and commercial use)	English	2 CD	TC 11/SC 1	Russia
R 49-2:	Methods of testing water meters intended for the metering of cold potable water	English	1 CD	TC 8/SC 5	UK
OIML Document:	Mutual acceptance arrangement on OIML type evaluations	English	7 CD	TC 3/SC 5	USA
Revision of R 74:	Electronic weighing instruments	English	1 CD	TC 9	USA