

Considerations and Concepts in the Development of the “Framework for a Mutual Acceptance Arrangement on OIML Type Evaluations” (OIML MAA)

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The International Committee of Legal Metrology (CIML) of the International Organization of Legal Metrology (OIML) has recently adopted a Mutual Acceptance Arrangement (MAA) that will facilitate better global acceptance of type evaluation test data, test reports and OIML certificates among bodies responsible for providing and accepting such reports and certificates (Issuing Authorities). This short discussion is to highlight some of the motivations, considerations and concepts associated with the development of the MAA.

The OIML Certificate System has been operating somewhat successfully now for over twelve years. However, there are still some reported difficulties in obtaining acceptance of OIML Certificates by Issuing Authorities in some countries or regions. One source of difficulty is a lack of confidence in some cases, by the Issuing Authorities, in the testing capability of the country from which the Certificate was obtained. In order to address this difficulty several countries have entered into regional or bilateral arrangements to recognize each other's testing capabilities, and where possible they have accepted OIML Certificates from each other. While bilateral arrangements can be very useful, at the same time they can also be very inefficient if every interested country needs to engage in a bilateral arrangement with every other interested country.

Plans for developing the MAA were thus started with the idea of developing an efficient, low-cost multilateral arrangement among OIML Member States that have testing capability for a particular category of measuring instrument covered under the Certificate System. It was soon recognized that there would be Member States that do not have such testing capability (or may choose not to use it for purposes of the MAA) that nonetheless would like to participate in the MAA by agreeing to accept test data for purposes of issuing a national type approval certificate. The MAA has been structured to accommodate this. Even Member States that do not issue national certificates for that type of instrument, but do have a national body in their country that is responsible for granting authority to market and sell that type of instrument (National Responsible Body), are allowed to

participate. It was also recognized that some OIML Corresponding Members would also like to take part in the MAA by agreeing to accept test data, and this has also been accommodated, with some limitations as described below.

The MAA is structured as an “Arrangement” and not an “Agreement” to recognize that it exists among Issuing Authorities and not among Governments. As its title states, the MAA is a framework document and is not signed. It establishes Declarations of Mutual Confidence (DoMC) for each category of measuring instrument for which interest has been shown by at least two Member States with testing capability. The DoMCs are to be signed by representatives from the Issuing Authorities in each participating country once they are satisfied that the testing capabilities are adequate in the other countries that provide testing under the DoMC.

Figure 1 illustrates schematically the overall MAA process. A manufacturer of a type of measuring instrument covered under a DoMC can submit its instrument for testing to the Issuing Authority in Country A. The manufacturer may be from any country, although presumably manufacturers will prefer to submit their instruments for testing in their own country, if available. Under the MAA, the manufacturer can request that its instrument be tested not only according to the OIML requirements, but also to any additional test requirements that exist in Country A, or in Countries B and C where the manufacturer also wishes to market its instrument, if these additional requirements are agreed to by all of the Participants during the development of the DoMC. This will provide manufacturers with the ‘one-stop-shopping’ that they desire.

Upon successful completion of the testing, the Issuing Authority in Country A will issue to the manufacturer a Test Report for the complete set of tests (OIML and additional), a letter authenticating the test report/data, and a ‘new’ type of OIML Certificate that indicates that it was issued under the DoMC/MAA. The manufacturer can then take that certificate to the Issuing Authority in Country B to obtain that country's national certificate. If a country does not issue certificates, such as in Country C, but there is still a requirement that a manufacturer obtain permission to market and sell their instrument in that country, then the manufacturer can submit the ‘new’ OIML certificate to the National Responsible Body in Country C that grants such permission.

Framework for Mutual Acceptance Arrangement (MAA) on OIML Type Evaluations

Schematic of Overall Objective

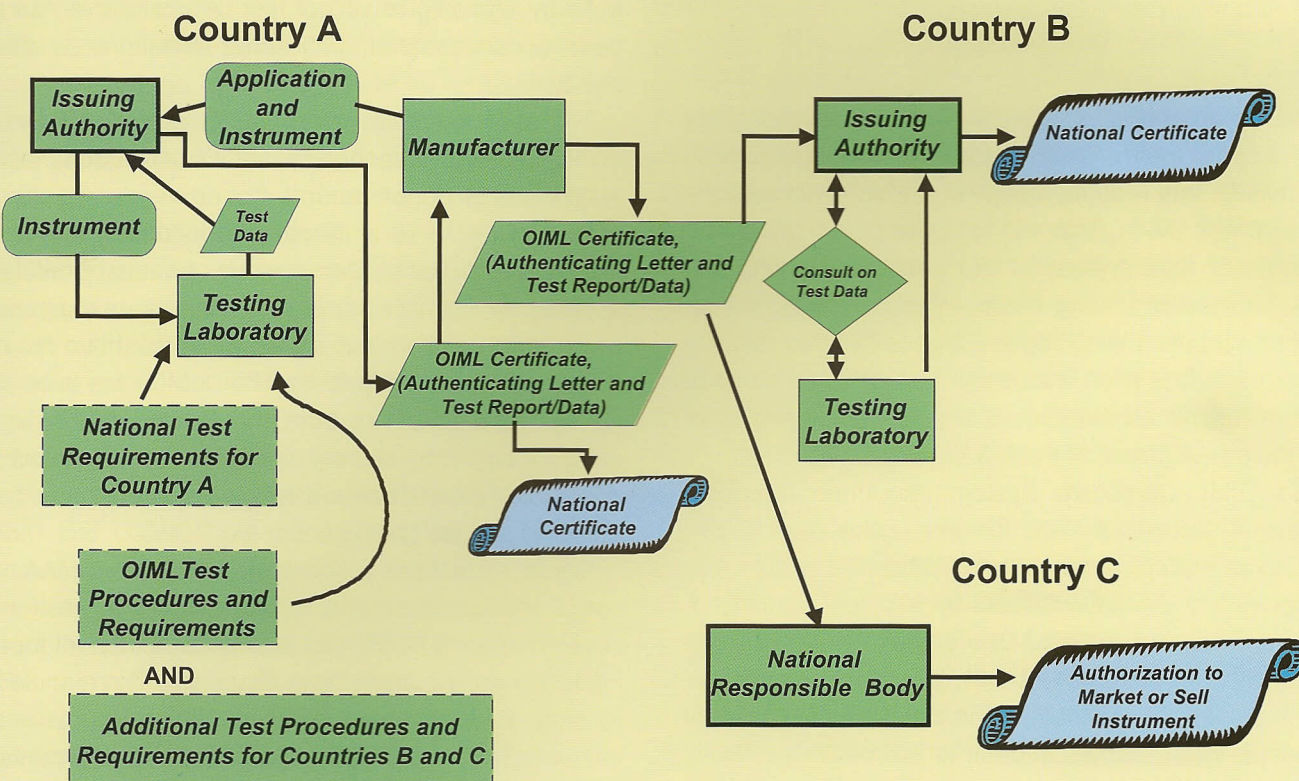


Figure 1 Schematic diagram indicating how a manufacturer can obtain 'one-stop shopping' under the OIML MAA.

Under the MAA, neither the Issuing Authority in Country B nor the National Responsible Body in Country C are legally required to accept the test report from the manufacturer, for instance, if they question the report for some reason, but they are morally obligated to accept the report or obtain clarification or additional information so that they can subsequently accept the report. However, once an Issuing Authority has accepted a test report, they are legally responsible for the use of that report in the same way that they are legally responsible for the use of a similar type of report that they obtain from their own testing laboratory for a domestic type approval.

In order to obtain the mutual confidence in testing capabilities of participating testing laboratories, three dif-

ferent mechanisms were considered: 1) laboratory accreditation, 2) peer evaluation, and 3) laboratory round-robin/intercomparison evaluation. The original goal was to make the MAA as inexpensive as possible so as not to require the need for on-site auditing, if sufficient information was provided by the testing laboratory about their capabilities using a checklist and any round-robin/intercomparison data. However, a majority of countries objected to this approach, and instead wanted to require either a laboratory accreditation (where the scope of accreditation includes the relevant legal metrology tests for that DoMC), or an on-site peer evaluation.

Establishing a Declaration of Mutual Confidence (DoMC)

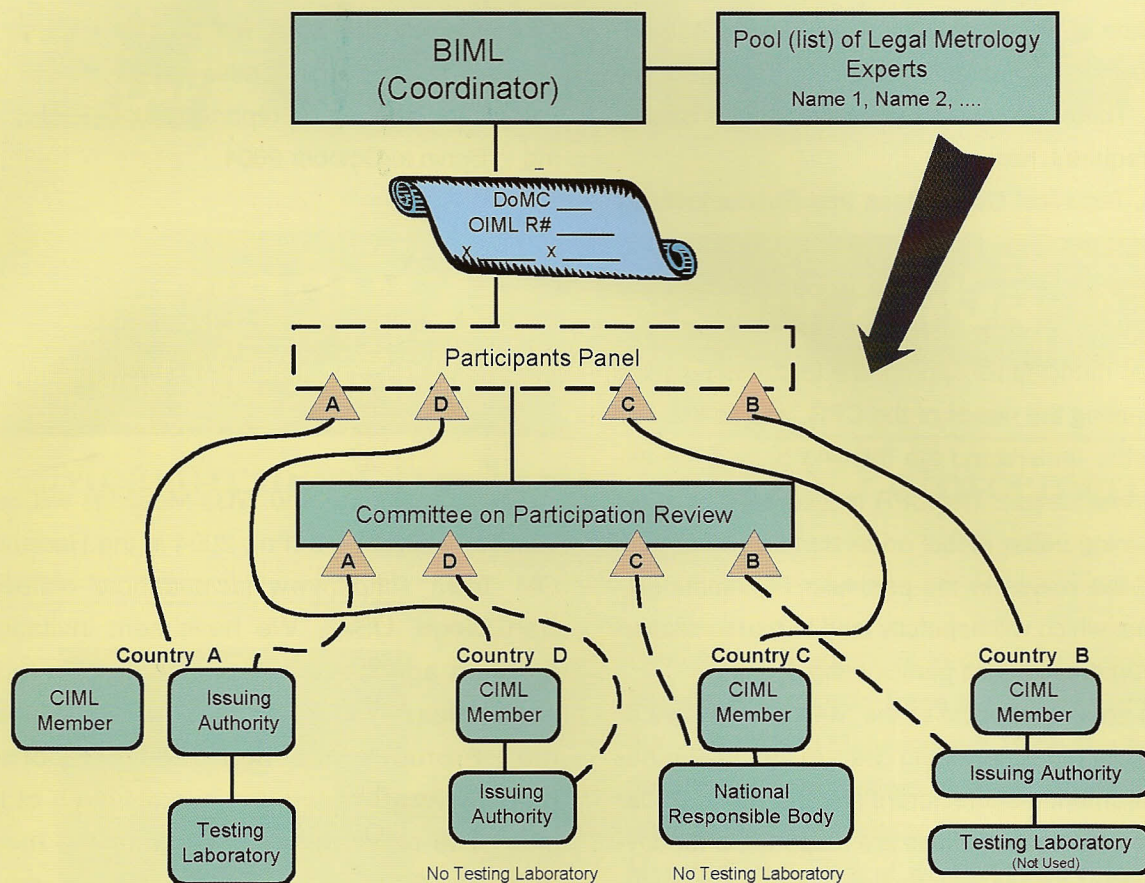


Figure 2 Schematic diagram indicating development of a Declaration of Mutual Confidence (DoMC) under the OIML MAA.

The basic mechanism for establishing a DoMC under the MAA is shown schematically in Figure 2. The International Bureau of Legal Metrology (BIML) will coordinate each DoMC. A Committee on Participation Review (CPR) will be established for each DoMC, comprised of one expert from the Issuing Authority or National Responsible Body of each participating Member State. The CPR will review the information on testing capability submitted by each participating testing laboratory (through use of a checklist, which can be customized for each DoMC, and other information provided). Based on the information provided, the CPR will establish the extent of the on-site auditing required for each testing laboratory. The BIML will maintain a list of identified Legal Metrology Experts for that purpose, and will facilitate the on-site auditing, to be paid for by the testing laboratory being audited. Each auditor will perform the specified audits and provide a written report to the CPR. The CPR will then analyze all of the information it has received and prepare a report, making a recommendation for

whether or not to include each applicant testing laboratory in the DoMC. The report will be reviewed by a representative from each Member State (shown as a member of a 'Participant's Panel' in Figure 2, although this is not formally recognized in the MAA), who individually will identify those testing laboratories from which they are not comfortable accepting test reports/data. Efforts will then be made by the BIML coordinator to resolve such issues, including the use of a formal appeals process specified in the MAA. All Member States wishing to participate in a DoMC are allowed to review the CPR's report and raise their objection to the claimed capabilities of one or more testing laboratories. Corresponding Members will have access to the final report, but will not be allowed to raise such objections because their role is limited by their membership status. The Testing Laboratories will be required to have their competence reassessed and reviewed by the CPR at least once every four years.

Since test reports must first be reviewed by Issuing Authorities before they can be issued to manufacturers, it was decided that the CPR should also perform a cursory evaluation of the capabilities of the Issuing Authorities to verify their competence in serving to review the test reports. There are no on-site evaluations of Issuing Authorities required, however.

The OIML Technical Committees and Subcommittees responsible for the OIML Recommendation for which the DoMC applies will also be invited to participate in the work of the corresponding CPR, so that the Recommendation can be modified as appropriate to contain explicit language meeting the needs of the CPR, and so that the CPR can better understand the thinking behind the existing Recommendation. The CPR is also seen as a forum for obtaining better global understanding among its members of the issues in the particular Recommendations involved, which will hopefully lead to harmonization of the requirements in each participating country.

There are several aspects of the MAA that involve financial considerations, including costs to the Issuing Authorities, instrument manufacturers and the BIML. Under the MAA, the Issuing Authorities are responsible for covering the costs of having their testing laboratories evaluated. At least some of these additional costs will likely be passed on to manufacturers. The BIML will also need to hire someone to coordinate the work of the CPRs and provide overall administrative support for the MAA. As

several Member States expressed their unwillingness to see general OIML member dues used to support the MAA, it has been decided to develop an MAA fee structure whereby the MAA will be self-supporting under steady-state operation. These details are still under development, and will be reported at the 39th CIML meeting in Berlin in October 2004.

Dates and Location for the Meetings in 2004

The 11th APLMF and WGs Meetings will be held on October 6 (Wed) – 8 (Fri), 2004 in the Hacienda Hotel-Old Town (<http://www.haciendahotel-oldtown.com/>), San Diego, USA. We have sent invitation letter, program agenda, and registration form to member economies. You could also download them from the Forum Meetings and Reports page (<http://www.aplmf.org/forum/index.html>) of the website. The registration deadline for the meetings is **July 31, 2004**. If you should have any inquiry about the meetings, please make a contact to aplmf-forum11@m.aist.go.jp.

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