OIML CERTIFICATION SYSTEM

Update on the OIML Certification System (OIML-CS)

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Introduction

At its 51st meeting in Strasbourg the CIML took an important decision by approving the *Framework* for a new OIML Certification System (OIML-CS) that will replace the existing OIML Basic Certificate System and the OIML Mutual Acceptance Arrangement (MAA) on 1 January 2018. This article describes the reasons for that decision, the activities that have taken place since October 2013, and the objectives and major elements of the new OIML-CS.

An OIML Seminar *"OIML Mutual Acceptance Arrangement (MAA)"* was held prior to the 48th CIML Meeting in October 2013 to discuss the OIML MAA (see OIML Seminar Report S 7). The discussions at the Seminar and the subsequent 48th CIML Meeting resulted in the adoption of three CIML Resolutions (2013/15, 2013/16 and 2013/17) and the creation of an Ad-hoc Working Group (AHWG) to review the OIML MAA.

The AHWG was tasked with addressing concerns raised during the Seminar relating to

- there being two systems (Basic and MAA) in parallel,
- a management structure that it was felt could be improved,
- issues regarding the acceptance of certificates, and
- a lack of awareness of the MAA amongst potential users and beneficiaries.

However, during the course of its work it became apparent to members of the AHWG that a more fundamental overhaul of the OIML Certification Systems (Basic and MAA) was required.

Following an update on its activities at the 49th CIML Meeting (see Resolution 2014/18) the AHWG presented a proposal at the 50th CIML Meeting in October 2015 containing the structure and principles for a new OIML-CS. The CIML adopted Resolutions 2015/17 and 2015/18, approving the structure and principles of the new OIML-CS, disbanding the AHWG and creating an OIML Certification System Project Group (CSPG).

In accordance with Resolution 2015/18 the CSPG was tasked with preparing the relevant documents for the new OIML-CS:

- an OIML Basic Publication containing the *Framework* for the OIML-CS, and
- working drafts of the necessary operational and procedural documents,

with the intention that a Final Draft Basic Publication *Framework for the OIML Certification System (OIML-CS)* would be submitted for approval at the 51st CIML Meeting in October 2016 and that the new OIML-CS would become effective from 1 January 2017.

Development of the *Framework* for the OIML-CS

The CSPG, chaired by the CIML First Vice-President, Roman Schwartz, was formed in late 2015 with representatives from 15 countries (14 P-members and one O-member). An Intermediate Project Draft of the *Framework* document which is now OIML B 18 was developed and was circulated to the CSPG in February 2016.

Following a discussion on the work of the CSPG and the Intermediate Project Draft at the Presidential Council Meeting in March 2016, an updated Project Roadmap was developed along with a revised Draft. One of the key changes made to the Project Roadmap was to reflect the decision taken by the Presidential Council to delay the implementation of the new OIML-CS until 1 January 2018 to allow sufficient time for the development of the Operational and Procedural Documents that would underpin the *Framework*.

The revised Draft was circulated to the CSPG for vote and comment and, following approval of the Draft by the CSPG, a Draft Basic Publication was submitted for CIML Preliminary Online Ballot (POB) on 18 April 2016. Following a successful POB, a Final Draft Basic Publication was circulated to the CIML for approval along with a set of Working Drafts of the Operational and Procedural Documents that had been developed. The Working Drafts of the Operational and Procedural Documents were provided to give information on the detailed documentation that would underpin the *Framework*.

A meeting of the CSPG was held in August 2016 to discuss comments and concerns regarding the Final Draft Basic Publication that had been raised by some CSPG members and to review the Working Drafts of the Operational and Procedural Documents. The outcome

of the meeting was an amended Final Draft Basic Publication (Version 2) which was submitted for CIML approval. This was accompanied by an Additional Meeting Document which provided supplementary information to the CIML in support of the approval of the Final Draft Basic Publication (Version 2).

At the 51st CIML Meeting, Resolution 2016/16 was adopted approving the Final Draft Basic Publication (Version 2) which has since been published as OIML B 18:2016 *Framework for the OIML Certification System (OIML-CS)*.

Principles of the OIML-CS

The OIML-CS is a system for issuing, registering and using OIML Certificates and their associated OIML type evaluation/test reports for types of measuring instruments (including families of measuring instruments, modules, or families of modules), based on the requirements of OIML Recommendations.

It is a single Certification System comprising two Schemes: Scheme A and Scheme B which will replace the current OIML Basic Certificate System and the OIML MAA. The aim of the OIML-CS is to facilitate, accelerate and harmonize the work of national and regional bodies that are responsible for type evaluation and approval of measuring instruments subject to legal metrological control. In the same way, instrument manufacturers, who are required to obtain type approval in some countries in which they wish to sell their products, should benefit from the OIML-CS as it will provide evidence that their instrument type complies with the requirements of the relevant OIML Recommendation(s).

It is a voluntary system and OIML Member States and Corresponding Members are free to participate or not. Participating in the OIML-CS and signing the OIML-CS Declaration will commit, in principle, the signatories to abide by the rules of the OIML-CS. OIML B 18:2016 establishes these rules whereby signatories voluntarily accept and utilize OIML type evaluation/test reports, when associated with an OIML Certificate issued by an Issuing Authority, for type approval or recognition in their national or regional metrological controls.

Objectives of the OIML-CS

The objectives of the OIML-CS are

- to promote the global harmonization, uniform interpretation and implementation of legal metro-

logical requirements for measuring instruments and/or modules,

- to avoid unnecessary re-testing when obtaining national type evaluations and approvals, or recognition of measuring instruments and/or modules under legal metrological control, while achieving and maintaining confidence in the results in support of facilitating the global trade of individual instruments, and

- to establish rules and procedures for fostering mutual confidence among participating OIML Member States and Corresponding Members in the results of type evaluations that indicate conformity of measuring instruments and/or modules, under legal metrological control, to the metrological and technical requirements established in the applicable OIML Recommendation(s).

OIML-CS scope and participation

As mentioned above, the OIML-CS is a single Certification System with two Schemes:

- Scheme A, and
- Scheme B.

Those categories of measuring instruments (including families of instruments, modules, or families of modules) for which the relevant OIML Recommendation specifies the metrological and technical requirements, the test procedures, and the OIML test report format will *automatically* be included in the OIML-CS. A category of measuring instrument will initially be placed in Scheme B, with the intention that all categories of measuring instruments in the OIML-CS will transition to Scheme A two years after first being included in the OIML-CS.

The requirements for the participation of Issuing Authorities and their associated Test Laboratories in Scheme A or Scheme B are the same, but the method of demonstrating compliance is different. Issuing Authorities are required to demonstrate compliance with accepted international standards, e.g. ISO/IEC 17065, and Test Laboratories are required to demonstrate compliance with ISO/IEC 17025. For participation in Scheme B, it is sufficient to demonstrate compliance on the basis of "self-declaration" with additional supporting evidence. However, for participation in Scheme A, compliance shall be demonstrated by peer evaluation on the basis of *accreditation* or *peer assessment*.
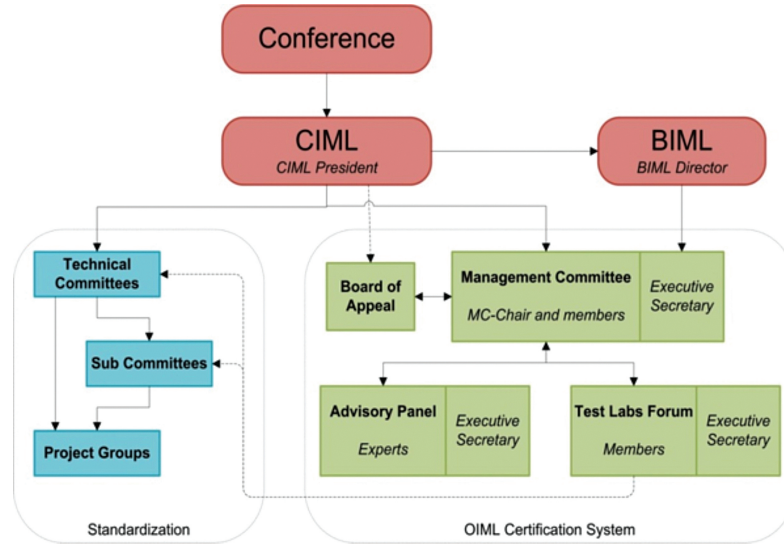
Figure 1: OIML-CS Structure

OIML-CS Structure

Figure 1 shows the structure of the OIML-CS which comprises:

- CIML;
- BIML;
- Management Committee;
- Advisory Panel;
- Test Laboratories Forum;
- Board of Appeal.

The Management Committee is responsible for the operation of the OIML-CS under the authority of the CIML, with an Executive Secretary from the BIML who is responsible for undertaking the day-to-day activities of the OIML-CS under the direction of the MC. An Advisory Panel is to be used to provide advice to the Management Committee, in the form of recommendations, on issues such as the acceptance of new Issuing Authorities and the approval of technical and metrology experts. The TLF is intended to provide a platform for handling practical and/or technical questions pertaining to test specifications, test methods and test equipment, and to propose amendments/improvements to OIML Recommendations. A Board of Appeal is provided to address appeals against decisions of the MC and to recommend solutions to any other dispute referred to it with regard to the application of the rules of the OIML-CS.

OIML-CS Document Structure

Figure 2 shows the OIML-CS Document Structure. OIML B 18:2016 specifies the *Framework* for the OIML-CS and this is supported by three Operational Documents which specify the operational rules of the Management Committee, Advisory Panel and the Test Laboratories Forum.

These are underpinned by a set of Procedural Documents which provide the detailed procedures relating to the operation of the OIML-CS, such as accepting new Issuing Authorities, approving technical and metrological experts, issuing certificates, etc.

A series of templates, forms and guidance will also be developed which will be used by users of the OIML-CS. They will provide a consistent means of providing information, e.g. in support of new applications, and the consistent reporting of information within the OIML-CS.

An important aspect of the OIML-CS is that the Management Committee will be responsible for the development, maintenance and approval of the Operational and Procedural Documents. However, the Management Committee will consult with the CIML where a change to any of these documents could be considered contentious or where a change would deviate significantly from OIML strategy or policy.

OIML-CS provisional Management Committee (prMC)

With the *Framework* approved, and subsequently published as B 18:2016, the CIML agreed to disband the CSPG and to create a provisional Management Committee (prMC) under CIML Resolution 2016/17. The prMC, chaired by the CIML First Vice-President, has been tasked with finalizing and approving the
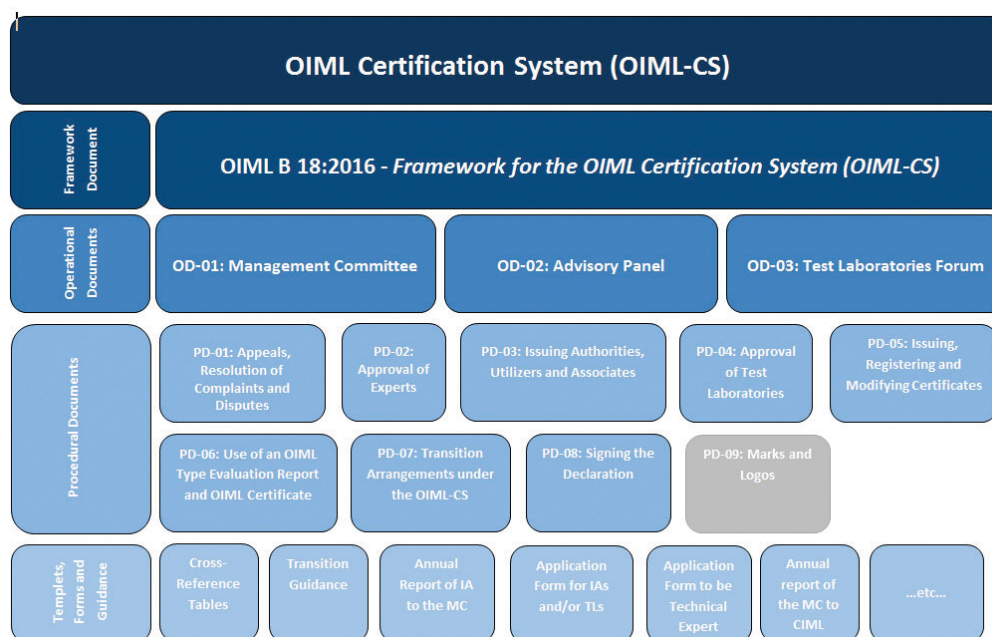
Figure 2: OIML-CS Document Structure

Operational and Procedural Documents and to ensure that all appropriate actions are taken so that the new OIML-CS may become effective from 1 January 2018. In addition, the prMC will review OIML B 18:2016 to identify potential amendments and improvements for consideration at the 52nd CIML Meeting.

Resolution 2016/17 specifies that the prMC has the authority to act as the Management Committee for the purposes of approving OIML-CS Operational Documents, Procedural Documents, Guidance Documents, Template and Forms.

A call for nominations for interested parties to participate in the prMC was circulated to CIML Members, representatives of Corresponding Member Countries and representatives of Organizations in Liaison. Nominations have been received from 18 OIML Member States and two Organizations in Liaison and the prMC is scheduled to hold its first meeting on the 14–16 February 2017 at the PTB, Berlin, Germany.

At the meeting, it is proposed that discussions will focus on the development and approval of the Working Drafts of the Operational and Procedural Documents, new versions of which have been produced and circulated to the prMC, along with issues such as the development of the OIML-CS website and Workspace, membership of the Advisory Panel and Test Laboratories Forum, and the approval of technical and metrological experts.

A second prMC meeting has been tentatively scheduled to take place in June 2017. The prMC will provide a report on its activities at the 52nd CIML Meeting in 2017, with a view to the OIML-CS becoming effective on 1 January 2018.

An OIML Certification System for the future

The approval of the structure and principles of a new OIML Certification System at the 50th CIML Meeting in 2015, along with the subsequent approval of OIML B 18:2016 at the 51st CIML Meeting have provided a platform to develop an OIML Certification System that will provide benefits to the users of the system and will address the concerns raised during the MAA Seminar held in 2013.

The clearly defined structure of the OIML-CS (see above), including a Management Committee that has responsibility for the operation of the OIML-CS under the authority of the CIML and a dedicated Executive Secretary will address the concerns raised about the management structure of the current MAA. Having a dedicated group of people that have responsibility for the running of the OIML-CS, including the promotion and raising awareness of the OIML-CS, will ensure that the concerns raised regarding the lack of awareness of the current systems will be addressed. The intention to automatically transition all measuring instrument categories from Scheme B to Scheme A after two years will result in there being, in the future, a single system with qualified certificates being issued for all relevant measuring instrument categories. This will mean that in the future all new OIML Certificates will be issued by Issuing Authorities that have undergone an evaluation of their competence on the basis of accreditation or peer assessment. The benefits of that will be increased confidence in the certificates that are issued, resulting in an increase in their acceptance and added value for users of the system. ∎