COOMET Document



Memorandum

of understanding on the development and use of certified reference materials of composition and properties of substances and materials within COOMET **COOMET D3:2008**

Memorandum of understanding was signed at the 1st meeting of experts on certified reference materials of COOMET member-countries (St. Petersburg, Russia, September, 1994),), updated and supplemented at the 12th meeting of COOMET TK 1.12 "CRMs" (Astana, Kazakhstan, 18-20 September, 2007)

Approved at the 18th COOMET Committee Meeting (Kharkov, Ukraine, 15th–16th May 2008)

The representatives of the National Metrological Institutions of the states that have signed COOMET Memorandum of Understanding (hereinafter referred to as Parties),

guided by the principles of cooperation set forth in COOMET Memorandum of understanding;

taking into consideration the great importance of the development and use of certified reference materials of composition and properties of substances and materials for scientific research, production and use of substances and materials, quality control and certification of products, their safety for human life and health and for the environment;

being aware of the critical role of certified reference materials of composition and properties of substances and materials in the elimination of technical barriers to trade, economical, scientific, technical and other fields of cooperation,

declare their intention to cooperate in the field of the development and use of certified reference materials on the terms of equal partnership and agree as follows:

- 1. The subject of cooperation within COOMET is, in the first place, certified reference materials intended for use in the fields subject to the state metrological control (annex 1).
 - 2. The objectives of cooperation are:
- to keep and build up scientific and methodical potential accumulated previously on the problem of the development and use of certified reference materials, to bring COOMET activities closer to those of international and regional organizations in this field;
- to unify regulations and rules of the national metrology institutes defining the requirements for certified reference materials, their validation procedure and use in the works on ensuring the uniformity of measurements;
- to participate in the implementation of the Mutual Recognition Arrangement (MRA) for the mutual recognition of national measurement standards and of calibration and measurement certificates issued by national metrology institutes by demonstrating calibration and measurement capabilities based on metrological characteristics of certified reference materials:
- to eliminate technical barriers in the production of substances and materials and in the international trade by establishing the mechanism for mutual recognition of the national certified reference materials produced by the Parties;
- to eliminate customs barriers when transferring certified reference materials from one country to another with the purpose of conducting interlaboratory comparisons, interlaboratory certification and other metrological works;

- to establish liaison with other metrology and regional organizations directly concerned with certified reference materials, including ISO/REMCO, OILM, ILAC, etc.
- to provide liaison with other international and regional organizations dealing with certified reference materials, including ISO/REMCO, OIML, ILAC, etc.
 - 3. To accomplish the above stated objectives, the Parties undertake:
- to provide conditions for the use of certified reference materials, developed within COOMET in the course of economic, scientific and research cooperation by making references to them in standards, agreements and contracts;
- to participate in joint projects to the extent of their financial and technical means and depending on their interest;
- to keep as confidential the information on the results of CRM tests/certification and development practice, submitted by any Party;
- to promote the implementation of the results of COOMET projects on the CRM problem in their respective countries.
- 4. The Parties agreed that their cooperation should contribute to the accomplishment of the following tasks:
- to achieve methodological and methodical uniformity of requirements imposed on the development and use of certified reference materials for:

control of accuracy (trueness and precision) measures in routine laboratory practice; validation of measurement procedures;

evaluation of uncertainty and traceability of measurement results;

verification and calibration and metrological certification of measurement instruments;

carrying out tests;

accreditation of testing and calibration laboratories and centres;

metrological assurance of quality evaluation and control of substances and materials, including marketing;

demonstration of calibration and measurements capabilities;

- providing for participation in the works on comparison of certified reference materials accepted in Appendix C of the MRA;
- providing for conditions for the recognition of certification results of certified reference materials developed within COOMET;
- providing the interested parties with information on available and in-production (including planned) certified reference materials.
 - 5. The Parties agreed that the main fields of cooperation will include:
 - identification and prioritization of problem areas to be developed in concert;
- unification of administrative and legal regulations and methodical aspects of the development and use of certified reference materials, taking into consideration the requirements of the relevant international and national regulatory documents, pertaining to the subject of cooperation;
 - development of certified reference materials of mutual interest within COOMET;
- preparation of the data on NMIs' calibration and measurement capabilities based on CRM metrological characteristics;
 - exchange of information.
- 6. The Parties established the following liaison structure for cooperation on CRM problem:

- 6.1 COOMET body initiating and supporting cooperation in the "Certified Reference Materials" subject- field is COOMET Technical Committee TC 1.12 "Certified Reference Materials".
- 6.2 The Chairman of TC 1.12 "CRMs" provides the Secretariat by the national metrology institution which he represents, the functions of Secretariat being defined in the Regulations on the Secretariat of TC 1.12 "CRMs".
- 6.3 Development of COOMET CRMs can be undertaken in all subject COOMET Technical Committees (COOMET TCs).
- 6.4 The decision concerning the recognition of certified reference materials as COOMET certified reference materials and their registration in the Register of COOMET CRMs is taken by COOMET Committee.
- 6.5 Materials for the development of CRMs and documentation on CRMs are considered and agreed upon at the meetings of COMMET TCs within which these materials and documentation were developed, the information on the outcome of work is submitted to the Chairman of TC 1.12 "CRMs".
- 6.6 The Secretariat of TC 1.12 "CRMs" assists the Chairman in the establishing liaisons between COOMET TCs and the members of TC 1.12 "CRMs", pools the results of works, submits the information to the COOMET Committee to take a decision on the recognition of the developed CRMs as COOMET CRMs and runs the Register and Data Base of COOMET CRMs.
- 6.7 COOMET member-countries, which joined the recognition of COOMET certified reference materials, register these certified reference materials in their national registers as and when needed.

Priority Fields of Cooperation in the "Certified Reference Materials" Subject-Field

Taking into consideration OIML documents, ID N 1 ("Law on Metrology") in particular, and national legislative acts, the terms of reference of the national metrology institutions is to ensure the uniformity of measurements and to exercise metrological control in a well-defined sphere of the national economy and in public activities, including:

public health, environmental protection, safety of labor, trade operations, stock-taking operations, product tests for compliance with mandatory requirements, etc.

So, within COOMET it is feasible to limit the range of CRM-related problems to the same spheres that are covered by the state metrological service.

Thus, priority fields of cooperation may be considered as follows:

- CRMs for the system of public health and veterinary;
- CRMs for the system of environmental control;
- CRMs for the system of control of foodstuffs and other goods;
- CRMs for the system of labor safety control;
- CRMs, accepted in Appendix C of the MRA;
- CRMs of composition and properties of new innovative materials for new technologies

(nanochemistry, nanotechnology, biotechnology, etc.)

- other fields.

At the same time COOMET may be used to promote the works on the development of any type and any range of CRMs in case of interest expressed by several partners.

Principal stages of work:

- development of an agreed list of CRMs taking into account the requirements of both national and international regulatory documents;
- exchange of information on the availability of the national CRMs included in the respective list, their price and delivery terms;
 - planning joint development of new CRMs in case of mutual interest;
- development of criteria for mutual recognition of CRM certification; mutual exchange of national regulatory documents.

Such an approach allows to avoid the duplication of ISO/REMCO activity, where different priorities with more general tasks are known to be adopted.

However, development of specific projects should be guided by documents of general character developed in ISO/REMCO (in particular, ISO Guides 30-35) and other international organizations.

INFORMATION DATA

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- 1. Coordinating organization: Belorussian State Institute for Metrology (BelGIM)
- 2. COOMET Project: 381/BY/07
- 3. The Document is agreed at the 18th COOMET Committee Meeting
- 4. Information on the use of this document by COOMET member-countries: Since this COOMET Recommendation is of an organizational and methodical nature and reflects legal and procedural questions to be followed by all COOMET structural bodies when carrying out the works on CRM production, then this document is to be used by all COOMET member-countries.