

	COOMET Recommendation	COOMET R/GM/7:2006
	PROCEDURE of inner inter-regional reviewing of measurement and calibration capabilities of COOMET national metrological institutes and interregional reviewing of the institutes of other regional metrological organizations	
<p><i>Approved at the COOMET Presidential Council (2 of October 2000). Revised in 2004.</i></p> <p><i>Approved at the 14 COOMET Committee Meeting (Albena, Bulgaria, May 27 - 28, 2004) updated and amended at the 16th COOMET Committee Meeting (Braunschweig, Germany, September 4 – 5, 2006)</i></p>		

1. Terms and definitions

The arrangement on mutual recognition of the national standards and calibration and measurement certificates issued by the national metrological institutes (MRA) is the technical agreement, which is signed by the directors of metrological institutes with the purpose of determination of the degree of the national measurement standards equivalence and assurance of the mutual recognition of calibration and measurement certificates. MRA is called upon to provide governments and other bodies with the reliable technical basis for planning and realization of agreements in the field of scientific & technical cooperation, international trade, commercial activity and the activity connected with the development of normative documentation.

The national metrological institute (NMI) is the metrological institute assigned by its government (or other body of the state power) to be responsible for the national standards and to be a member of the regional metrological organization (RMO) and to participate in MRA realization.

Calibration and measurement capabilities (CMC) are the highest level of calibration or measurement, which is usually proposed to clients expressed in the values of the confidence coefficient that is equal to 95%. CMC data are published in the database at JCRB Web-site (MRA Appendix C).

The Joint Committee of the Regional Metrology Organizations and BIPM (JCRB) is the international body that is responsible for analysis and calibration and measurement capabilities data, which are declared by NMI, entering the database. JCRB is created by CIPM, it includes the representatives of RMO; the sessions are conducted under the chairmanship of BIPM director.

COOMET Joint Committee on Standards (COOMET JCS) is COOMET working body, which realizes coordination and methodical assurance of NMI of COOMET countries members cooperation in the field of MRA realization as Appendix C formation.

CMC inner reviewing by COOMET is expertise of CMC of COOMET countries members, which is conducted by COOMET NMI. The inner expertise is completed by CMC publication at COOMET Web-site, and if NMI signed MRA, they are directed to the interregional expertise.

CMC interregional reviewing by COOMET is expertise of CMC of NMI of countries members of other regional metrological organizations, which is conducted by COOMET NMI.

2. The main provisions

CMC expertise is organized by the technical committees (TC) included into COOMET JCS involving official experts on quality management systems, which are admitted by COOMET Quality Forum. CMC reviewing is conducted at the subcommittees by the experts, which are affirmed by TC under control of TC Chairman. Realization of the special subcommittee on CMC expertise or assigning the responsible person for reviewing conducting is possible.

Reviewing is conducted according to JCRB general rules formulated in the following documents:

- Document JCRB-14/06(2a) “Criteria for acceptance of data for Appendix C”;
- Document JCRB-14/06(1) “JCRB Rules of Procedure for CMC entry into Appendix C “;
- Document JCRB-6/6 et.al. “BIPM Instructions for Drawing up CMC EXCEL Files” 8-9 March 2001.

The reviewing is realized by means of E-Mail. In case of essential difficulties in evaluation of the measurement capabilities of the concrete NMI or arising conflict situations TC Chairman presents this question for consideration at the next session of TC with notification of COOMET JCS Chairman and COOMET representative at JCRB.

The language of all official documents related to CMC is English. COOMET inner reviewing allows using Russian at the mutual agreement of NMI and experts.

All the information on the current state of CMC expertise at COOMET TC must be published at COOMET Web-site

3. The order of conducting expertise

The procedure establishes the stages of COOMET reviewing. The peculiarities, related to COOMET interregional reviewing, are italicized.

- a) NMI presenting their CMC in the concrete field of measurements sends the following documents to the expertise by means of TC member from its country to the Chairman of the corresponding TC and their copies to the Chairman of COOMET JCMS:

- the data on calibration and measurement capabilities in the format of MRA Appendix C;
- the information, which characterizes NMI quality management system according to the form of the questionnaire of Appendix 1 (it is allowed to add some information to the questionnaire at NMI discretion).

In case of interregional reviewing all the analogous information goes to the TC Chairperson by e-mail immediately after the CMC posting on the JCRB CMC

web-site¹ and all the further reviewing is conducted according to the stages of this document.

- b) TC Chairman must determine the date of expertise completing in his (her) TC and inform it and to NMI, which presented CMC.

In case of interregional reviewing the date is specified on the JCRB CMC web-site by the TC Chairperson.

The term of the reviewing must not exceed **three months** since the moment of getting CMC.

If by some causes TC considers reviewing of the arrived CMC as unsuitable, TC Chairman must inform COOMET JCS Chairman and vice-president who is in progress of JCS about it during two weeks. If during two weeks since the moment of getting CMC for reviewing JCMS Chairman does not get any information on the terms of the reviewing, three-month term is determined for these CMC.

In case of interregional reviewing if the TC Chairperson does not specify the deadline of the reviewing, COOMET will loose write of participation in the CMC inter-regional reviewing.

- ϵ) TC Chairman (or the person who is responsible for the reviewing) sends the arrived Excel-files to his (her) experts.

- d) The experts added the column “COOMET comments” to CMC table according to the form of Appendix 2 and fill it in by the following:

- if they do not have remarks to the reviewed line, they put “OK” in this line;
- if they have remarks to the reviewed line, they write this remark in this line.

If the remark demands an extended ground, it is written in the separate file. At this the reference to this file is put in the corresponding line of the column “COOMET comments”. In case of the remark the line is filled with red colour. The column size is regulated by the expert.

It is possible to give remarks in the form table (see Appendix 3).

- e) The files with remarks are sent to TC Chairman (or to the person who is responsible for the expertise conducting). TC Chairman writes the report on the results of the expertise where he must indicate the number (in per cents) of the reviewed CMC, and also the experts’ names and places of their work. The appendices to the report are CMC files with the remarks that are renamed as “Name of NMI comments.xls” (for example, “VNIIM comments.xls”, “BelGIM comments.xls”, etc.).

- f) TC Chairman sends the report with the appendices (experts’ remarks) to NMI that presented CMC data.

In case of interregional reviewing the report and remarks are posted on the CMC JCRB web-site by the TC Chairperson.

- h) If CMC authors have any objections or questions caused by the experts’ remarks, they send them to TC Chairman who organizes the process of discussion and agreement of CMC data and preparation of the report on the expertise. On agreement with TC Chairman the direct correspondence is possible between experts and CMC authors with the obligatory copies for the Chairman (or the person who is responsible for CMC expertise).

¹ Information placed on the JCRB CMC web-site available for the TC Chairs anytime.

The discussion must not exceed **four months**.

In case of interregional expertise COOMET TC Chairman must agree the process of discussion with the Chairman of the corresponding TC of RMO from where CMC went to the expertise.

- i) As a result of the discussion the authors correct the presented CMC. If the experts agree with the introduced changes, they inform TC Chairman about it.
- j) NMI that presents its CMC in the particular field of measurements to reviewing sends the following documents by E-Mail by TC member from its country to the Chairman of the corresponding TC and the copies of them to TC member from their country:
 - the final version of CMC;
 - the final version of questionnaire on the quality system management ;
 - the explanatory note, which contains the introduced CMC on the results of the change expertise.
- k) COOMET TC Chairperson posts CMCs, QSM questionnaire, report about the COOMET reviewing on the JCRB CMC web-site

Appendix 1

QUESTIONNAIRE FOR THE REVIEW OF COOMET CALIBRATION AND MEASUREMENT CAPABILITIES

This questionnaire is to be filled in by the COOMET Contact Person (Co-ordinator – for Russian Federation).

Subject-Field **NMI**

Sub-Field(s)

CMC entry or entries

Code	CMC review process	Yes	No	Comments
1	Comparison results relevant to the claimed CMCs			
1.1	CIPM key comparisons			
1.2	Supplementary comparisons			
1.3	COOMET comparisons			
1.4	Bilateral comparisons			Please, specify and provide source of publication
2	Knowledge of the NMI's work and activities			
2.1	Activities of this NMI:			
2.1.1	Reproducibility of units of physical quantities			
2.1.2	Verification and (or) calibration of measuring instruments			
2.1.3	Elaboration of documentary standards			
2.1.4	Certification and testing of measuring instruments			
2.2	Participation of this NMI in the work of international metrological organizations:			
2.2.1	In CIPM and (or) its Committees			
2.2.2	In IEC			
2.2.3	In OIML			
2.2.4	In ISO			
2.3	Availability of documentary standards regulating a measurement process (GOST, Guiding Documents, Measurement Procedures)			
3	Quality system			
3.1	Has the NMI an international accreditation?			Please, provide name of accreditation body and accreditation number
3.2	Has the NMI a national accreditation system?			Please, provide name of accreditation body and accreditation number
3.3	Has the NMI its own quality?			

Code	CMC review process	Yes	No	Comments
4	Additional information			
4.1	Have the NMI been visited by representatives of international metrological organisations?			Please, specify by whom
4.2	Have the NMI been visited by representatives of other RMOs?			Please, specify by whom
4.3	Availability of scientific publications on the results of the NMI activities in the given field of measurements since 1991.			Please, specify the quantity

To obtain a positive answer on the CMCs of NMI, an expert should adopt positive decisions on Group 1, 2, 3 questions

- Group 1 questions: One positive answer is sufficient, provided it is based on comparisons relevant for the claimed CMCs of the subject-field or sub-fields indicated or for single CMC entries.
- Group 2 questions: At least two positive answers are needed. If the only positive answer in Group 1 questions is 1.4, then all questions in Group 2 should have a positive answers (2.1; 2.2; 2.3)
- Group 3 questions: One positive answer is need if only for one question (3.1 or 3.2). In case that 3.3 is answered positively, the expert should consider the own NMI quality system according to Section 3 of this document.
- Group 4 questions: Information is used by the expert individually.

Appendix 3

Form of reviewing

Name of NMI making reviewing (it is possible to use official logotype of NMI)

Names and positions of the experts.

e-mails of head of expert group

Reviewed NMI CMC Service Identification	Remarks and questions