COOMET DIRECTORY 2008

(as of 1 May, 2008)



This edition of the COOMET Directory was prepared by the acting COOMET Secretariat and published in two versions, Russian and English, the official languages of COOMET documents. The information about metrology infrastructures in the COOMET Member Countries was updated and kindly provided to the COOMET Secretariat by the these countries.

Your questions or remarks concerning the material given in the Directory are welcome to coomet@metrology.kharkov.ua.

The electronic version of the COOMET Directory is available on the COOMET website at www.coomet.org.

The COOMET Secretariat address

42 Mironositskaya Str. 61002 Kharkov UKRAINE

Telephone

+38057 704 98 31 +38057 700 34 23

Fax

+38057 700 34 47

E-mail:

coomet@metrology.kharkov.ua

Editor of the Russian version Lyudmyla Kamyshanova Editor of the English version

Page layout by *Inna Lyba*

Inna Lyba

Cover design by Maryana Natalchenko

CONTENTS

Introduction	107
COOMET MoU and RoP	
COOMET Memorandum of Understanding COOMET Rules of Procedure	109 113
COOMET Structure	
COOMET Structure (Scheme)	117
COOMET President	118
COOMET Secretariat	118
COOMET Vice-Presidents	119
COOMET Committee Members COOMET Structural Bodies and their Heads	120 124
National COOMET Secretariats	124
COOMET Projects (Notes for the completion of COOMET Project Forms)	
Proposed COOMET Project	127
Agreed COOMET Project	129
Progress/Final Reports	131
Organizational Scheme of COOMET Projects	133
Contact Persons of COOMET Member Countries	
Armenia	134
Azerbaijan	135
Belarus	136
Bulgaria	137
Cuba DPR of Korea	138 140
Georgia	140
Germany	142
Kazakhstan	144
Kyrgyzstan	146
Lithuania	147
Moldova	149
Romania	151
Russia	153
Slovakia	156
Ukraine	157
Uzbekistan	159
Metrology Infrastructures of COOMET Member Countries	161
Additional Information	
COOMET Publications	195
COOMET Committee Meetings	198
Acronyms	
Acronyms for the names of the NMIs of COOMET Member Countries	199
Acronyms for the names of international and regional metrology organisations	200



INTRODUCTION

COOMET is a regional organisation originally establishing cooperation of national metrology institutions of the countries of Central and Eastern Europe. It was founded in June, 1991 and renamed in *Euro-Asian Cooperation of National Metrology Institutions* in May, 2000. COOMET is open for any metrology institutions from other regions to join as associate members.

Now the members of COOMET are metrology institutions from Armenia, Azerbaijan, Belarus, Bulgaria, Georgia, Germany (Associate Member), Kazakhstan, Kyrgyzstan, DPR of Korea (Associate Member), Cuba (Associate Member), Lithuania, Moldova, Russia, Romania, Slovakia, Uzbekistan and Ukraine.

The basic activity of COOMET is cooperation in the following areas: measurement standards of physical quantities, legal metrology, accreditation and quality management systems, information and training.

The objectives of COOMET are as follows:

- assistance in effective addressing the problems relating to uniformity of measures, uniformity of measurements and the required accuracy of their results;
- assistance in promoting cooperation of national economies and eliminating technical barriers in international trade;
- harmonisation of activities of metrology services of Euro-Asian countries with similar activities in other regions.

COOMET strictly adheres to *the Memorandum of Understanding (MoU)* and *Rules of Procedure* in any of its activities.

COOMET countries cooperate in the following subject fields: acoustics, ultrasound, vibration; electricity and magnetism; flow measurement; ionising radiation and radioactivity; length and angle; mass and related quantities; photometry and radiometry; physical chemistry; thermometry and thermal physics; time and frequency; reference materials; general questions concerning measurements (general metrology); legal metrology; accreditation and quality systems; information and information technology; training and raising proficiency level of experts;

The supreme body of COOMET is *the COOMET Committee* consisting of heads of national metrology institutions from COOMET Member Countries. The Committee organises and promotes cooperation. The Committee meets at least once a year.

The COOMET President is elected by the Committee from among its Members for a three year period with an option of one more term of office. The President provides **the COOMET Secretariat** by using resources of his/her own institution.

The President proposes candidates of *COOMET Vice-Presidents* from among the Members of the Committee for further approval by the Committee. The President, Vice-Presidents and Head of the COOMET Secretariat constitute *the COOMET President's Council*, which decides upon the COOMET policy, interacts with international and regional metrology organisations, coordinates cooperation in the period between the Committee meetings and distinguishes problems to be discussed at these meetings.

Organisation of work in the basic fields and directions of cooperation is the major task of the Structural Bodies of COOMET (the Joint Committee, Technical Committees, and Quality Forum).

The Committee Members appoint their representatives to the Structural Bodies of COOMET (*Correspondents*) from among candidates in their countries. The Correspondents propose a candidate for the position of *the Chairperson of a Structural Body* for its further approval by the COOMET Committee.

The Structural Bodies can establish *Subcommittees* (*SCs*) for working on routine tasks of cooperation and *Working Groups* (*WGs*) within corresponding SCs/TCs for carrying out specific work on COOMET projects.

The official languages for the COOMET meetings and documents are Russian and English.

COOMET has no financial assets of its own.

By its scope of cooperation COOMET belongs to organisations of a multi-purpose type.

The activities of COOMET are carried out in line with *the Conception of Cooperation and Related Activities of COOMET* approved in 2005 and *COOMET Development Programmes* for a period of two or three years approved by the COOMET Committee.

An important prerequisite of COOMET effectiveness is the collaboration in all fields of activities. Jointly realised projects are the core elements of *the COOMET Working Programme*.

Nowadays the main attention is paid to the cooperation in the field of measurement standards, in particular to the implementation of the CIPM Arrangement on Mutual Recognition of National Measurement Standards and Calibration and Measurement Certificates Issued by National Metrology Institutes (CIPM MRA). Therefore, the majority of the COOMET projects are dedicated to the preparation of information on calibration and measurement capabilities, participation in key comparisons of national measurement standards organised by CIPM and organisation of regional comparisons of measurement standards, as well as creation and implementation of Quality Management Systems of the National Metrology Institutes of COOMET Member Countries.

The subjects of cooperation of COOMET Member Countries in the field of legal metrology encompasses a broad range of problems, starting with harmonisation of the national requirements in the area of legal metrology in the Member Countries and finishing with such applied problems as testing of software for measuring instruments, control of prepackages.

COOMET activities in the field of information support and training are also substantially related to the implementation of the CIPM MRA (e.g. in developing software for the CMC database and comparisons of measurement standards of the NMIs of COOMET Member Countries). It is also aimed at the exchange of training programmes for experts in the area of metrology, development of exchange programmes for experts in COOMET countries, determination of criteria for assessing scientific papers of young metrologists, etc.

Perspective task of COOMET is to find out possible ways of cooperation between interested COOMET Member Countries in regard with the activity relating to accreditation of metrology institutes, calibration and measurement laboratories.

COOMET is a member of the Joint Committee of the Regional Metrology Organisations and the BIPM (JCRB), as well as keeps close relations with OIML according to the Agreement with the International Bureau of Legal Metrology (BIML) signed in 1993.

Based on mutual interests, COOMET also cooperates with Regional Metrology Organisations such as

- European Association of National Metrology Institutes (EURAMET),
- European Cooperation in Legal Metrology (WELMEC),
- European Cooperation for Accreditation (EA),
- Asia-Pacific Metrology Programme (APMP),
- Asia-Pacific Legal Metrology Forum (APLMF),
- Asia Pacific Laboratory Accreditation Cooperation (APLAC),
- Scientific & Technical Commission on Metrology (STCMetr) of Euro Asian Council for Standardization, Metrology and Certification (EASC),
- Southern Africa Development Community Cooperation in Measurement Traceability (SADCMET),
- Inter-American Metrology System (SIM), etc.

COOMET is a joint forum of metrologists of Euro-Asian region, effectively working regional metrology organisation which successfully fulfils its tasks according to approved long term programmes. Cooperation within COOMET and its results allow its Member Countries to successfully solve metrological issues the national economies face under the conditions of market globalisation.

MEMORANDUM OF UNDERSTANDING

The National Metrology Institutions on behalf of which this Memorandum has been signed

considering

- the territorial proximity of the Countries and their mutual economic relations;
- the need to permanently improve metrological services for the benefit of economic and scientific relations;
- the similarity of their structures and the operational principles of their National Metrology Services;
- their combined experience and the results of their previous bilateral and multilateral cooperation;
- their willingness to more closely cooperate with international and regional metrology organisations

declare their intention to cooperate in the field of measurement standards of physical units, calibration, legal metrology, accreditation and quality management systems, information technology and training in the field of metrology within the COOMET organisation given below.

SECTION 1 – COOMET MEMBERS

COOMET is an organisation for the Euro-Asian cooperation of National Metrology Institutions (from the countries of Central and Eastern Europe, Asia and nearby countries) and is open to the National Metrology Institutions of countries from other regions to join it.

SECTION 2 – COOMET OBJECTIVES

The objectives of COOMET are as follows:

- 1. To contribute to effectively solving problems of the uniformity of measures, uniformity and required accuracy of measurements.
- 2. To contribute to establishing closer cooperation between the national economies and removing technical barriers to international trade.
- 3. To harmonise the activities of Metrology Services on the basis of international arrangements.

SECTION 3 – COOMET TASKS

The tasks of COOMET are to strengthen the links between the National Metrology Institutions interested in solving common problems and to create effective mechanisms in order to:

- achieve compatibility of measurement standards and harmonise the requirements imposed on measuring instruments and methods for their metrological control;
- recognise the equivalence of national certificates authenticating the results of metrological activities;
- exchange information on the current status of National Metrology Services and their development;
- collaborate in developing metrological projects:
- promote the exchange of metrological services.

SECTION 4 – PRINCIPAL FIELDS OF COOPERATION WITHIN COOMET

The principal fields of cooperation within COOMET include:

- realisation of the CIPM Arrangement on Mutual Recognition of National Measurement Standards and Calibration and Measurement Certificates Issued by National Metrology Institutes (CIPM MRA);
- establishment and maintenance of primary standards of units and scales of physical quantities;
- dissemination of units from primary standards to working measuring instruments;
- participation in the CIPM key comparisons of national measurement standards and carrying out of regional comparisons of measurement standards;
- development of new measurement methods and new types of high accuracy measuring instruments;
- solution of problems of general metrology, including problems of the theory of measurement and uncertainties, system of units, terminology;

- establishment of a system of gathering and dissemination of information on metrology and measurement techniques, information technology;
- definition, collection, evaluation and certification of reference data used in metrology;
- creation and use of reference materials of composition and properties of substances and materials;
- harmonisation of requirements for measuring instruments subject to metrological control, as well as methods for their testing taking into consideration international recommendations;
- preparation of conditions for mutual recognition of results of metrological control and metrological supervision;
- implementation of calibration and recognition of its results according to the rules and procedures set up by international organisations;
- assisting COOMET Member Countries in improving their activity in the field of the accreditation of metrology institutes, calibration and measurement laboratories. Finding out possible ways of cooperation in this field:
- creation and implementation of Quality Management Systems of National Metrology Institutes;
- training and raising proficiency level of experts;
- improvement of the activities of the Organisation and its structural bodies.

SECTION 5 – STRUCTURE OF COOMET AND WORKING PROCEDURES

- 1. The COOMET body initiating and supporting cooperation is the Committee. It consists of the Heads of National Metrology Institutions of the COOMET Member Countries or persons appointed by them, one representative from each institution. The Committee ensures that the activity of COOMET is pursued in accordance with its objectives and contributes to accomplishing its tasks.
- 2. The Committee elects the President from among its Members, for a period of three years, with the eligibility to be re-elected for one subsequent term of office.
- 3. Each Committee Member accompanied by experts may take part in its meetings. Only Committee Members may vote.
- 4. The Committee may invite observers from other international or regional organisations to take part in their meetings.
- 5. The Committee meets as often as required but at least once per year.
- 6. At the suggestion of the President, the Committee approves nominees for the positions of Vice-Presidents from among its Members. The President, Vice-Presidents and Head of the COOMET Secretariat form the President's Council, which develops the policy of cooperation within COOMET, interacts with international and regional metrology organisations, organises cooperation between the Committee meetings and prepares questions to be considered at these meetings.
- 7. A year before scheduled election of a new COOMET President the COOMET Committee nominates a candidate which after mutual approval becomes a Member of the President's Council having a status of President Elect. After the expiry of a three year period of presidency the COOMET President keeps the status of Former President for one more year. At the end of this year the President Elect becomes an active COOMET President.
- 8. The Committee decides on its own Rules of Procedure and on those of other COOMET bodies.
- 9. As a rule the COOMET Secretariat is provided by the National Metrology Institute of the COOMET President.
- 10. The Secretariat assists the President and the President's Council in the management of COOMET and ensures contacts between the Committee Members, as well as between the Committee, structural and working bodies of COOMET.
- 11. Following the decision of the COOMET Committee the following COOMET Structural Bodies are established for the purpose of initiating work in the major fields and directions of cooperation: Joint Committees (JC), Technical committees (TC), Councils, Forums, etc.
 - The scope of their objectives, tasks and working and collaboration procedures is specified in relevant Provisions approved by the COOMET Committee.
 - Each COOMET Structural Body is headed by a chairperson appointed by the COOMET Committee for a period of 4 years with the possibility to prolong this period.
- 12. Structural Bodies may establish:

- Subcommittees (SCs) in order to address the permanent tasks of collaboration;
- Working Groups (WGs) within relevant SCs/TCs in order to carry out routine work on COOMET projects.
- 13. Terms of reference, head and staff of a SC are defined by the corresponding Technical Committee and approved by the COOMET Committee for a period of 3 years with possible prolongation of this period.
- 14. Organizational and financial matters are managed by structural and working bodies individually taking into account the hierarchy of the COOMET bodies.
- 15. National Metrological Institutions that are Members of COOMET may invite other institutions in their countries to cooperation, at their own discretion, for working on a project.

SECTION 6 – LANGUAGES

- 1. The languages of the Committee meetings are English and/or Russian.
- 2. Documents of wide dissemination to be received and sent by the Secretariat must be edited both in English and Russian.
- 3. Final reports written after completion of projects may be in English, French, German or Russian. The authors of the report are given the choice of a language sufficiently understood by those to whom they wish to convey their information or considerations.
- 4. In other cases, any language the cooperating partners consider adequate for their communication may be used.

SECTION 7 – RIGHTS

In order to achieve the objectives of COOMET, each Member of the Organisation will have the following rights:

- to have access, upon agreement, to national standards of other Members of COOMET;
- to seek cooperation and assistance in solving metrological problems;
- to propose projects for joint work and participate in their implementation;
- to receive information on the results of activities of COOMET Bodies.

SECTION 8 – OBLIGATIONS

In order to achieve the objectives of COOMET, each Member of the Organisation will accept the following obligations:

- to provide the Committee, upon its request and within reasonable limits, with information on projects carried out and planned in accordance with the scope of the COOMET activities;
- to provide COOMET Members with assistance and services upon mutual agreement;
- to participate in joint COOMET projects depending on its financial and technical resources, as well as its interest and competence;
- to maintain the confidentiality of any information on the results of type tests, verifications and calibrations of measuring instruments submitted by cooperating partners;
- to take into consideration the COOMET recommendations in the activity of its National Metrology Institutions and to promote the implementation of the results of COOMET projects in its country.

SECTION 9 – COOPERATION WITH INTERNATIONAL AND REGIONAL ORGANISATIONS

- 1. COOMET will make best use of the results of work of international metrology organisations:
 - International Organisations within Metre Convention: General Conference on Weights and Measures (CGPM), International Committee for Weights and Measures (CIPM) and International Bureau of Weights and Measures (BIPM);
 - International Organisation of Legal Metrology (OIML), International Committee for Legal Metrology (CIML) and International Bureau of Legal Metrology (BIML);
 - International Laboratory Accreditation Cooperation (ILAC);
 - International Accreditation Forum (IAF);

- International Measurement Confederation (IMEKO), etc., as well as other organisations of interest to metrology such as ISO, IEC, CODATA, and will follow their recommendations in its activities.
- 2. COOMET intends to cooperate, as far as there is mutual interest, with regional metrology organisations:
 - European Association of National Metrology Institutes (EURAMET),
 - European Cooperation in Legal Metrology (WELMEC),
 - European Cooperation for Accreditation (EA),
 - Asia-Pacific Metrology Programme (APMP),
 - Asia-Pacific Legal Metrology Forum (APLMF),
 - Asia Pacific Laboratory Accreditation Cooperation (APLAC),
 - Scientific & Technical Commission on Metrology (STCMetr) of Euro Asian Council for Standardization, Metrology and Certification (EASC),
 - Southern Africa Development Community Cooperation in Measurement Traceability (SADCMET),
 - Inter-American Metrology System (SIM), etc.

SECTION 10 – VALIDITY OF MEMORANDUM

- 1. This Memorandum will come into operation on the date of its signing by at least four Signatories and remain open for further participants.
- 2. This Memorandum may be amended at any time by written agreement between at least three quarters of the Signatories.
- 3. If a Member on behalf of which this Memorandum has been signed, for any reason whatever, intends to terminate its participation in COOMET, it will notify the President of the COOMET Committee of this intention not later than six months in advance.
- 4. This Memorandum is concluded for a term of five years. Unless within this five year period revision or termination is proposed to the COOMET Committee by at least one third of the Signatories this Memorandum of Understanding will remain in effect for another five year period.

SECTION 11 – LIMITATIONS

- 1. Decisions of COOMET have an exclusively recommendatory nature.
- 2. The Secretariat's activities are financed at the expenses of the Party presiding in the COOMET Committee. On a voluntary basis, other COOMET Members can render financial support to the Secretariat, the President's Council and other COOMET bodies for the implementation of specific tasks.
- 3. This Memorandum does not limit the rights and obligations of the COOMET Members arising from other bilateral or multilateral cooperation agreements.

Done in Warsaw on 12 June 1991 in English and Russian,

updated and amended at the 10th COOMET Committee Meeting in Almaty, Kazakhstan, on 25-26 May, 2000;

at the 12th COOMET Committee Meeting in Havana, Cuba, on 6-7 May, 2002;

at the 15th COOMET Committee Meeting

in Vilnius, Lithuania, on 8-9 September, 2005, and

at the 16th COOMET Committee Meeting

in Braunschweig, Germany, on 4-5 September, 2006

RULES OF PROCEDURE

Rules of Procedure presented below were agreed at the first COOMET Committee Meeting held in Warsaw on 13-14 November, 1991 and updated and amended at the 10th COOMET Committee Meeting in Almaty (Kazakhstan) on 25-26 May, 2000, at the 12th COOMET Committee Meeting in Havana (Cuba) on 6-7 May, 2002, at the 15th COOMET Committee Meeting in Vilnius (Lithuania) on 8-9 September, 2005 and at the 16th COOMET Committee Meeting in Braunschweig (Germany) on 4-5 September, 2006.

They amend the description of the COOMET structure and activities which are part of the Memorandum of Understanding and were adopted in accordance with Article 8 Section 5 of the Memorandum and should promote the effective solution of cooperation problems in the shortest time possible according to established procedures using modern information technology and communication facilities.

1. MEMBERS OF COOMET AND MEMBERS OF COOMET COMMITTEE

- 1.1. From each State only one National Metrology Institution on behalf of which the Memorandum of Understanding has been signed, may be a Member of COOMET.
- 1.2. Each COOMET Member must inform the President about the name and address of its appointed Committee Member.
- 1.3. The Committee shall elect its President by open voting, by a simple majority of votes.
- 1.4. A COOMET Member not represented at two consecutive Committee meetings without giving the reasons for its absence shall be considered as having terminated its participation in COOMET.

Decision on the termination of participation of a COOMET Member in COOMET is to be made by open voting based on a simple majority of votes at the next COOMET Committee meeting.

2. COOMET PROJECTS

2.1. GENERAL

For each collaborative project a COOMET Project Form must be completed and sent to the Secretariat, which will arrange for its distribution to all Committee Members and to the head of the relevant SC/TC. This will enable all COOMET Members to keep themselves informed of areas of possible cooperation providing them with an opportunity to join cooperation.

Three separate forms are available¹:

- PROPOSED COOMET PROJECT FORM
- AGREED COOMET PROJECT FORM
- COOMET PROJECT PROGRESS/FINAL REPORT FORM

Proposals for COOMET collaboration projects may be presented at any time. The collection of Agreed COOMET Projects will represent the working programme of COOMET.

The Committee Members will monitor the COOMET projects to ensure they are in agreement with COOMET aims and tasks and are conducted in accordance with the adopted procedures. The COOMET cooperation can be extended to involve institutions from non-member countries in the projects provided the participants of the cooperation agree.

2.2. SUBJECT FIELDS

The project should belong to one of the following subject fields:

- Acoustics, ultrasound, vibration;
- Electricity and magnetism;
- Flow measurement;

¹ Notes for the completion of the Forms are given in *Annexes 1-3* on pages 127-132.

- Ionising radiation and radioactivity;
- Length and angle;
- Mass and related quantities;
- Photometry and radiometry;
- Physical chemistry;
- Thermometry and thermal physics;
- Time and frequency;
- Reference materials;
- General questions concerning measurements (General metrology);
- Legal metrology;
- Accreditation and quality systems;
- Information and information technology;
- Training and raising proficiency level of experts;
- Improvement of COOMET activities.

2.3. PROPOSED COOMET PROJECT

The Proposer of a project shall fill in the form (Annex 1, see page 127), and send it to the COOMET Secretariat through the COOMET Committee Member of his/her country. The COOMET Secretariat shall register the project and distribute the form to the head of the relevant SC/TC, as well as to all COOMET Committee Members who will inform the Proposer and the COOMET Secretariat of their interest within a period of three months.

In case if COOMET Members show no interest in the fulfilment of the proposed project, it can remain in the list of proposed projects for up to one year.

2.4. AGREED COOMET PROJECT

Agreed COOMET Project Forms, Annex 2 (see page 129), is used when agreement has already been reached between a certain number of partners to undertake a specific collaborative project. It is only through the completion of this Form that COOMET Members will be advised of the agreement in question.

The Working Group set up for accomplishing the project shall be composed of the persons stated in the Form. The Coordinator of the Working Group shall be responsible for keeping the relevant SC/TC informed of the progress of the project.

Once completed the Agreed COOMET Project Form should be sent by the Coordinator to the head of the relevant SC/TC and to the COOMET Secretariat for distribution among the Committee Members and also for inclusion of the project in the COOMET Working Programme and data base.

Should any modification, e.g. of the composition of the Working Group or the scope of the project, be decided later, a revised Agreed Project Form shall be circulated.

2.5. COOMET PROJECT PROGRESS/FINAL REPORT

This Form, Annex 3 (see page 131), is used by Coordinators for reporting the progress on Agreed COOMET Projects, once a year.

A Final Report must be prepared when a Project has been completed.

In this Report the results obtained should be presented and possible applications stated. It is desirable to indicate the advantages of undertaking the work collaboratively through COOMET.

The Final Report is not deemed as a publication of the work.

Collaborators are encouraged to publish their work through usual channels, mentioning that it was undertaken within COOMET.

The Coordinator shall send the completed Final Report Form to the head of the relevant SC/TC and the COOMET Secretariat.

2.6. CANCELLATION OF COOMET PROJECTS

According to suggestions of the heads of SCs/TCs the COOMET Secretariat excludes the projects recognised as unpromising and obsolete from the Working Programme, however retaining the information about these projects.

3. ANNUAL REPORTS ON THE ACTIVITIES OF COOMET BODIES

- 3.1. A Coordinator of the WG dealing with the agreed COOMET projects sends annually the intermediate progress report on the project to the head of the relevant SC/TC by 31 January.

 The head of the SC/TC can address the Coordinator of the WG with a request to submit information on the
 - progress with the project in a month time before the meeting of the SC/TC.
- 3.2. The head of the SC/TC prepares Annual Progress Report of the SC/TC and forwards it to the Chairperson of the relevant COOMET Structural Body by the end of February.
- 3.3. Based on the reports of the SCs/TCs the Chairpersons of the COOMET Structural Bodies prepare reports on the activities of their COOMET bodies and forward them to the COOMET Secretariat and represent them at the COOMET Committee meeting.
- 3.4. Annual reports of the Chairpersons of the COOMET Structural Bodies established to fulfil specific tasks within COOMET, should have the following Sections,
 - general characteristic of the cooperation in the corresponding field including information on specific activities and projects being carried out and on the participants involved in cooperation;
 - results of the last meetings of the COOMET Structural Bodies and subordinated SCs/TCs;
 - review of the projects completed and information on the use of the results obtained;
 - problems of cooperation with international and regional organisations in the corresponding field of cooperation;
 - activities for the implementation of international agreements (e.g. the Arrangement on Mutual Recognition of National Measurement Standards and Calibration and Measurement Certificates Issued by National Metrology Institutes, etc.);
 - information on the prospective place and date for the following meetings of the COOMET Structural Bodies and subordinated SCs/TCs;
 - proposals for the resolutions of the COOMET Committee meeting.

The total volume of the report should not exceed three to five pages.

3.5. The COOMET Secretariat prepares Annual Report on COOMET activities based on the reports submitted by the Structural Bodies, and distributes it to the Committee Members before a Committee meeting.

4. COMMITTEE MEETINGS / CONVOCATION AND PROCEDURE

- 4.1. The President will decide on the place and date of the meeting, taking into consideration the proposals formulated by the Committee Members during their last meeting.
- 4.2. The President shall notify about the meeting at least ten weeks in advance and also send the preliminary draft agenda with the request to inform the President about their amendments and more precise definitions within a three week period.
- 4.3. The draft agenda is distributed among the delegates at least four weeks in advance of the meeting.
- 4.4. The agenda shall be approved by the Committee at the beginning of the meeting.
- 4.5. A quorum will be constituted by more than half of the Committee Members.
- 4.6. The Committee will attempt to reach conclusions by consensus, whenever possible. If a compromise cannot be reached, the different points of view shall be recorded in the minutes.
- 4.7. A draft report of the Committee meeting shall be circulated by the Secretariat to all Committee Members within 3 months of the meeting. In order to speed up the realisation of the resolutions adopted at the Committee meeting, it is recommended to the COOMET Secretariat to prepare and distribute to the Committee Members the list of drafts of such resolutions at the end of the meeting. The approval of the

- minutes of the corresponding Committee meeting is performed through e-mail during 1 month after they were received from the COOMET Secretariat.
- 4.8. Between the meetings the Committee can discus any questions by correspondence involving all Committee Members as well as solve problems of cooperation at the President's Council, the meetings of which are convened by the President as required, but not less than once a year between the COOMET Committee meetings.
- 4.9. Similar rules may be followed by all structural and working bodies of COOMET.

5. AMENDMENT OF RULES OF PROCEDURE

These Rules of Procedure can be amended only by the consent of at least half of the Committee Members.

COOMET STRUCTURE



COOMET Committee

(Members meet at least once a year)

COOMET Secretariat

(appointed by President for a 3 year period)

COOMET President

(elected by the Committee for a 3 year period)

COOMET President's Council

(membership is approved by the COOMET Committee according to President's proposal for a 3 year period)

Joint Committee for Measurement Standards

(approved by the Committee)

TC 1.1	General Questions Concerning Measurements (General Metrology)
TC 1.2	Acoustics, Ultrasound, Vibration
TC 1.3	Electricity and Magnetism
TC 1.4	Flow Measurement
TC 1.5	Length and Angle
TC 1.6	Mass and Related Quantities
TC 1.7	Photometry and Radiometry
TC 1.8	Physical Chemistry
TC 1.9	lonizing Radiation and Radioactivity
TC 1.10	Thermometry and Thermal Physics
TC 1.11	Time and Frequency

Legal Metrology
Technical Committee

(approved by the Committee)

SC 2.1	Liaisons with OIML, Regional Organisations and National Metrology Institutions
SC 2.2	Software Requirements and Testing
SC 2.3	Harmonisation of Metrological Regulations and Norms
SC 2.4	Technical Competence Assessment of Verification Laboratories
Workin	g Groups
	3

WG 2.x.x

COOMET
Quality Forum (QF)

(membership is formed according to the proposal of COOMET Committee Members)

TC 3.1 Quality Forum
Technical Committee

SC 3.1 NMI Quality Management Systems

General Issues of Accreditation of Calibration and Testing Laboratories

Working Groups WG 3.x.x

SC 3.2

Technical Committee for Information and Training

(approved by the Committee)

SC 4.1	COOMET Development Based on the Analysis of International Experience

SC 4.2 Information and Information Technology

SC 4.3 Training and Raising Proficiency Level of Experts

SC 4.4 Coordination of work with young metrologists of COOMET Member Countries

SC 4.5 Support in the improvement of national metrology services of COOMET Member Countries

Working Groups WG 4.x.x

Subcommittees SC 1.x.x
Working Groups WG 1.x.x

TC 1.12 Reference Materials

COOMET PRESIDENT



Dr. Goryslav SYDORENKO

General Director of the National Scientific Centre "Institute of Metrology"

Telephone: +38057 700 34 09 Fax: +38057 700 34 47

E-mail: info@metrology.kharkov.ua

COOMET SECRETARIAT

National Scientific Centre "Institute of Metrology"

42 Mironositskaya Str., Kharkov 61002, UKRAINE



HEAD OF SECRETARIAT

Dr. Pavlo NEYEZHMAKOV

Telephone: +38057 700 34 23 Fax: +38057 700 34 47

E-mail: pavel.neyezhmakov@metrology.kharkov.ua



ASSISTANTS

Yuliya BUNYAYEVA

Telephone: +38057 704 98 31 Fax: +38057 700 34 47

E-mail: coomet@metrology.kharkov.ua



Tetiana OMIELICHEVA

Telephone: +38057 704 98 31

Fax: +38057 700 34 47

E-mail: coomet@metrology.kharkov.ua

COOMET VICE-PRESIDENTS

Prof. Nikolai ZHAGORA

Vice-President, responsible for cooperation with international and regional legal metrology organisations

Telephone: +375 17 233 55 01 Fax: +375 17 288 09 38 E-mail: coomet@belgim.by



Dr. Vladimir KRUTIKOV

Vice-President, responsible for coordination of COOMET activity in the field of measurement standards and interrelations with CIPM and BIPM, COOMET representative to the JCRB

Telephone: +7 495 236 75 60 Fax: +7 495 230 75 07 E-mail: coomet@gost.ru



Dr. Stanislav MUSIL

Vice-President, responsible for coordination of COOMET activity in the field of Quality Management Systems and accreditation, Chairperson of COOMET Quality Forum

Telephone: + 421 2 602 94 211 Fax: + 421 2 654 29 592 E-mail: musil@smu.gov.sk



Prof., Dr. Klaus-Dieter SOMMER

Vice-President, responsible for coordination of COOMET activity for studying and practical application of international experience in the field of metrology

Telephone: +49 531 592 3010 Fax: +49 531 592 3015 E-mail: Klaus-Dieter.Sommer@ptb.de



COOMET COMMITTEE MEMBERS



Armenia AR

Mr. Vahan SAHAKYAN

General Director

National Institute of Metrology (NIM)

49/2 Komitasi Ave., 051 YEREVAN
+374 10 23 26 00 metrology@metrology.am
+374 10 23 54 78



Azerbaijan AZ

Mr. Ramiz HASANOV

General Director

State Agency on Standardization, Metrology and Patents
122 Br. Mardanovy Str., AZ 1147 BAKU
+99412 449 99 59 azs@azstand.gov.az
+99412 440 52 24



Belarus BY

Prof. Nikolai ZHAGORA

Director

Belarussian State Institute of Metrology (BelGIM)

93 Starovilensky Trakt, 220053 MINSK

+375 17 233 55 01 coomet@belgim.by

+375 17 288 09 38

Bulgaria BG

Dr. Katerin KATERINOV

Acting President

Bulgarian Institute of Metrology (BIM)

21 "6 Septemvri" Str., 1000 SOFIA

+359 2 980 89 20 k.katerinov@sasm.orbitel.bg
+359 2 986 17 07

Cuba CU

Dr. Nancy FERNÁNDEZ RODRÍGUEZ

General Director

Cuban National Bureau of Standards (NC)

Calle E No. 261 entre 11 y 13 Vedado, LA HABANA 10400
+537 830 08 79 / +537 30 00 22
+537 836 80 48 nc@ncnorma.cu

DPR of Korea KP

Mr. Myong Il JANG

Director

Central Institute of Metrology

Sonsin 1 Dong, Sadong District, PYONGYANG

pdk0301@163.com +850 2 381 44 10

+850 2 381 44 80

Georgia GE

Dr. Nodar KHATIASHVILI

Director General Georgian National Agency for Standards, Technical Regulations and Metrology (GeoStandMetrology)

67 Chargali Str., 0141 TBILISI

gnim metrology@yahoo.com +995 32 61 35 00

+995 32 61 35 00



Germany DE

Prof. Dr. Klaus-Dieter SOMMER

Head of Chemical Physics and Explosion Protection Physikalisch-Technische Bundesanstalt (PTB)

100 Bundesallee, 38116 BRAUNSCHWEIG

Klaus-Dieter.Sommer@ptb.de +49 531 592 3010

+49 531 592 3015



Kazakhstan KZ

Mr. Yerkin LEBAYEV

General Director Kazakhstan Institute of Metrology (KazInMetr)

Center of Measurement Standards, Left bank of the River Ishim,

Orynbor Str., 11, 010000, ASTANA

info@kazinmetr.org +7172 24-09-15

legal@kazinmetr.org +7172 79 32 99



Kyrgyzstan KG

Mr. Valery BALYKIN

Chief of Metrology and Testing Centre National Institute for Standards and Metrology of the Kyrgyz Republic "Kyrgyzstandard" (NISM)

197 Panfilov Str., 720040 BISHKEK

nism@nism.gov.kg +996 312 66 03 43 / 62 57 34 metrolog@nism.gov.kg +996 312 66 13 67





Lithuania LT

Mr. Osvaldas STAUGAITIS

Director
State Metrology Service (VMT)

31 Algirdo Str., 2006 VILNIUS
+370 5 213 33 49 info@lvmt.lt
+370 5 216 34 69



Moldova MD

Mr. Sergiu BABAN

General Director
Service of Standardization and Metrology of Republic of Moldova
("Moldova-Standard")

28 E. Coca Str., MD-2064 KISHINEV +3732 2 74 85 88 moldovastandard@standard.md +3732 2 75 04 60 / +3732 2 75 05 81

Romania RO

Dr. Dragos BOICIUC

Director

National Institute of Metrology

11 Vitan-Barzesti Rd., 75669 BUCHAREST
+40 21 334 55 20 office@inm.ro
+40 21 334 53 45



Russia RU

Dr. Vladimir KRUTIKOV

Deputy Head
Federal Agency on Technical Regulation and Metrology of Russian
Federation (Rostechregulirovanie)

9 Leninsky Prospect, 117049 MOSCOW
+7 495 236 75 60 coomet@gost.ru
+7 495 230 75 07



Slovakia SK

Dr. Stanislav ĎURIŠ

General Director
Slovak Institute of Metrology (SMU)

63 Karloveská Str., 84255 BRATISLAVA
+421 2 602 94 491 duris@smu.gov.sk
+421 2 654 29 592

Ukraine UA

Dr. Goryslav SYDORENKO

General Director

National Scientific Centre "Institute of Metrology" (NSC "IM")

42 Mironositskaya Str., 61002 KHARKOV

info@metrology.kharkov.ua +38 057 700 34 09

+38 057 700 34 47



Prof. Ortagoli HAKIMOV

Director
The State Enterprise "Centre of National Standards of Republic of Uzbekistan"

333 "A" Farobiy Str., 100049 TASHKENT
nscenter@standart.uz +998 71 149 35 08
+998 71 150 35 08



COOMET STRUCTURAL BODIES AND THEIR HEADS

Structural Body	Chairperson	Telephone, Fax, E-mail
Joint Committee for Measurement Standards (JCMS)	Dr. Sergey KOROSTIN All-Russian Scientific Research Institute of Physico-Technical Measurements (VNIIFTRI) 141570 MENDELEEVO, Moscow Region RUSSIA	+7 495 535 93 05 +7 495 744 81 75 ir@vniiftri.ru
TC 1.1 General Questions Concerning Measurements (General Metrology)	Dr. Anna CHUNOVKINA All-Russian Scientific Research Institute of Metrology named after D.I. Mendeleev (VNIIM) 19 Moscovsky Prospect 198005 SANKT-PETERSBURG RUSSIA	+7 812 251 83 07 +7 812 713 01 14 A.G.Chunovkina@vniim.ru
TC 1.2 Acoustics, Ultrasound, Vibration	Mrs. Valentina POZDEEVA Belarussian State Institute of Metrology (BelGIM) 93 Starovilensky Trakt 220053 MINSK BELARUS	+375 17 288 07 35 +375 17 288 09 38 pozdeeva@belgim.by coomet@belgim.by
TC 1.3 Electricity and Magnetism	Mrs. Tatyana KOLOMIETS Belarussian State Institute of Metrology (BelGIM) 93 Starovilensky Trakt 220053 MINSK BELARUS	+375 17 233 24 24 +375 17 288 09 38 kolomiets@belgim.by coomet@belgim.by
TC 1.4 Flow Measurement	Prof. Vladimir BOLSHAKOV National Scientific Centre "Institute of Metrology" (NSC "IM") 42 Mironositskaya Str. 61002 KHARKOV UKRAINE	+38 057 704 98 36 +38 057 700 34 47 bvb@metrology.kharkov.ua
TC 1.5 Length and Angle	Prof. Dr. Valentin SOLOVYOV National Scientific Centre "Institute of Metrology" (NSC "IM") 42 Mironositskaya Str. 61002 KHARKOV UKRAINE	+38 057 704 98 77 +38 057 700 34 47 solovyov@metrology.kharkov.ua
TC 1.6 Mass and Related Quantities	Dr. Natalya DOMOSTROEVA All-Russian Scientific Research Institute of Metrology named after D.I. Mendeleev (VNIIM) 19 Moscovsky Prospect 198005 SANKT-PETERSBURG RUSSIA	+7812 323 96 05 +7812 323 96 71 N.G.Domostroeva@vniim.ru
TC 1.7 Photometry and Radiometry	Mr. Valery KUZNETZOV All-Russian Scientific Research Institute of Optical and Physical Measurements (VNIIOFI) 46 Ozernaya Str. 119361 MOSCOW RUSSIA	+7 495 437 34 56 +7 495 437 31 47 vniiofi@vniiofi.ru

Structural Body	Chairperson	Telephone, Fax, E-mail
TC 1.8 Physical Chemistry	Prof. Dr. Leonid KONOPELKO All-Russian Scientific Research Institute of Metrology named after D.I. Mendeleev (VNIIM) 19 Moscovsky Prospect 198005 SANKT-PETERSBURG RUSSIA	+7 812 315 11 45 +7 812 327 97 76 lkonop@b10.vniim.ru
TC 1.9 Ionising Radiation and Radioactivity	Prof. Dr. Vladimir YARINA All-Russian Scientific Research Institute of Physico-Technical Measurements (VNIIFTRI) 141570 MENDELEEVO, Moscow Region RUSSIA	+7 495 535 93 05 +7 495 535 93 05 ir@vniiftri.ru
TC 1.10 Thermometry and Thermal Physics	Prof. Dr. Anatoly POKHODUN All-Russian Scientific Research Institute of Metrology named after D.I. Mendeleev (VNIIM) 19 Moscovsky Prospect 198005 SANKT-PETERSBURG RUSSIA	+7 812 315 52 07 +7 812 713 01 14 A.I.Pokhodun@vniim.ru
TC 1.11 Time and Frequency	Prof. Dr. Vitaliy PALCHIKOV All-Russian Scientific Research Institute of Physico-Technical Measurements (VNIIFTRI) 141570 MENDELEEVO, Moscow Region RUSSIA	+7 495 535-93-20 +7 495 535 93 34 vitpal@mail.ru
TC 1.12 Reference Materials	Prof. Dr. Vladislav LEONOV Urals Scientific Research Institute of Metrology (UNIIM) 4 Krasnoarmeiskaya Str. 620219 EKATERINBURG RUSSIA	+7 343 350 26 18 +7 343 350 20 39 uniim@uniim.ru
TC 2 Legal Metrology Technical Committee	Dr. Olaf KÜHN Thuringian State Bureau for Metrology and Verification (LMET) 2 Unterpörlitzer Straße 98693 ILMENAU GERMANY	+49 3677 850-300 +49 3677 850-400 olaf.kuehn@lmet.de
Quality Forum (QF)	Dr. Stanislav MUSIL Slovak Institute of Metrology (SMU) 63 Karloveská Str. 84255 BRATISLAVA SLOVAKIA	+421 2 602 94 211 +421 2 654 29 592 musil@smu.gov.sk
TC 3.1 Quality Forum Technical Committee	Dr. Stanislav MUSIL Slovak Institute of Metrology (SMU) 63 Karloveská Str. 84255 BRATISLAVA SLOVAKIA	+421 2 602 94 211 +421 2 654 29 592 musil@smu.gov.sk
TC 4 Technical Committee for Information and Training	Dr. Pavlo NEYEZHMAKOV National Scientific Centre "Institute of Metrology" (NSC "IM") 42 Mironositskaya Str. 61002 KHARKOV UKRAINE	+38 057 700 34 23 +38 057 700 34 47 pavel.neyezhmakov@metrology. kharkov.ua

NATIONAL COOMET SECRETARIATS

Country & Code		Name, NMI	Telephone, E-mail	
ARMENIA	AR	Mrs. Narine OGANYAN	+374 10 23 46 34	
AKWEMA	AN	National Institute of Metrology	ohanyan@metrology.am	
BELARUS	BY	Ms. Nadezda LYAKHOVA	+375 17 334 75 40	
DELAKUS	DI	Belarussian State Institute of Metrology (BelGIM)	coomet@belgim.by	
		Mrs. Zhana GENOVA	+359 2 873 51 69	
		Bulgarian Institute of Metrology (BIM)	euic.bim@sasm.orbitel.bg	
BULGARIA	BG	Mrs. Kristina PETKOVA	+359 2 986 26 66	
		State Agency for Metrological and Technical	ic@mail.orbitel.bg	
		Surveillance (SAMTS)	ic@mair.oroner.og	
		Mr. Li Man HO	+850 2 18111 (ext. 3818989)	
DPR of KOREA	KP	Mr. Jin Kyong MAN	+850 2 3814410	
DI K 01 KOKEA	IXI	State Administration for Quality Management	saqm@co.chesin.com	
		(SAQM)	pdk0301@163.com	
		Mrs. Annette KÖGLER	+49 531 592 8213	
GERMANY	DE	Physikalisch-Technische Bundesanstalt (PTB)	annette.koegler@ptb.de	
GERMANI	DE	Ms. Katrin SCHAAF	+49 531 592 8215	
		Physikalisch-Technische Bundesanstalt (PTB)	katrin.schaaf@ptb.de	
		Ms. Nino MIKANADZE	00707 (1070)	
GEORGIA	GE	Georgian National Agency for Standards, Technical	+995 32 61 35 00	
		Regulations and Metrology (GeoStandMetrology)	nino_mikanadze@yahoo.com	
		Mrs. Lubov GALITSYNA	+7172 79 32 77	
		Mrs. Aizhan KOPEYEVA	+7172 79 32 97	
KAZAKHSTAN I	KZ	Mrs. Zhanar ELEUSIZOVA	+7172 79 33 84	
		Kazakhstan Institute of Metrology (KazInMetr)	legal@kazinmetr.org	
		Mr. Salmoorbek ASANALIEV		
		Mrs. Liliya DIKAMBAEVA	+312 62 57 34	
KYRGYZSTAN	KG	National Institute for Standards and Metrology of	metrolog@nism.gov.kg	
		the Kyrgyz Republic	metr@nism.gov.kg	
		"Kyrgyzstandard" (NISM)		
I ITIIII ANII A	LT	Mr. Viktoras ZABOLOTNAS	+370 5 213 33 49	
LITHUANIA	LI	State Metrology Service (VMT)	info@lvmt.lt	
		Mrs. Elena HANGANU	-	
MOI DOWA	МЪ	Service of Standardization and Metrology	+373 22 71 92 39	
MOLDOVA	MD	of the Republic of Moldova	ehanganu@standard.md	
		("Moldova-Standard")		
		Mr. Sergey KOMISSAROV	+7 495 781 90 81	
RUSSIA	RU	Russian Scientific Research Institute of Metrological		
		Service (VNIIMS)	komissarov@vniims.ru	
CI OXATZI A	CIZ	Mrs. Ekaterina KROMKOVA	+421 2 602 94 503	
SLOVAKIA SK		Slovak Institute of Metrology (SMU)	kromkova@smu.gov.sk	
		Mrs. Yuliya BUNYAYEVA	129 057 704 09 21	
UKRAINE	UA	National Scientific Centre "Institute of Metrology"	+38 057 704 98 31	
		(NSC "IM")	coomet@metrology.kharkov.ua	
		Mr. Makhmud KAYUMOV	+998 71 150 35 08	
UZBEKISTAN	$\mathbf{U}\mathbf{Z}$	The State Enterprise "Centre of National Standards	mahmud_q@rambler.ru	
		of the Republic of Uzbekistan"	nscenter@standart.uz	

COOMET PROJECTS (Notes for the completion of COOMET Project Forms)

Annex 1

PROPOSED COOMET PROJECT

Box 1 Reference No.

It will be given by the COOMET Secretariat.

Box 2 Subject Field

Projects which cannot be assigned to one of the fields specified under item 2.2 of the Rules of Procedure should have the appropriate field entered in Box 2 in no more than two or three words.

Box 3 Field of cooperation

The field of cooperation should be defined by referring to the specification of "Principal Fields of Cooperation within COOMET" (Section 4 of the Memorandum of Understanding).

Cooperation, which cannot be referred to this specification, should have its field clearly defined in the space available in Box 3.

Box 4 Partners

Members of COOMET, who have already expressed their willingness to participate in the proposed cooperation, should be indicated by their initials. If specific institutions are involved, they should be indicated by full names together with the letters signifying their country (see ISO 3166-1981, code Alpha-2), i.e. BG, CS, DE, HU, PL, RO, SU, etc.

Box 5 Subject

The specific subject of the proposed cooperation should be defined in not more than 60 characters (including spaces).

Box 6 Description

Within the space provided a brief description of the proposed project should be given. Sufficient details should be provided for experts from other institutions so that they can assess their capabilities to join cooperation.

Box 7 Additional remarks

This box provides an opportunity for adding any additional remarks relevant to the proposed collaborative project, e.g. previous cooperation, advantages of implementation, etc.

Box 8 Proposer's name

The name, full postal address, fax numbers and e-mail of the person proposing the cooperation should be given.

Box 10 Date

The Form should be dated the day of signature.

Box 11 Proposed starting date

A proposed starting date should be given.

PROPOSED PROJECT COOMET				
1 Reference No.:	2.5	Subject Field:		
3 Field of cooperation:				
4 Partners:				
5 Subject:				
6 Description:				
7 Additional remarks:				
8 Proposer's Name: Address:				
Telephone:	Fax:	E-mail:		
9 Proposer's signature:	10 Date:	11 Proposed starting date:		
12 Signature of the COOMET	Committee Membe	er:		
Name:		Signature:		

AGREED COOMET PROJECT

Guidance on completion of **boxes 1, 2, 3 and 5, 6, 7** of the Agreed COOMET Project Form is the same as that on completion of the corresponding Boxes in the Proposed COOMET Project Form.

Box 4 Working Group

Names of experts forming the Working Group and names (or initials) of their institutions, as well as letters signifying their countries should be given.

Box 8 Coordinator's name, address, etc.

The person nominated by the Working Group as its Coordinator should be indicated.

Box 9 Date project agreed Ref. No. of proposal

Date on which an agreement was reached and the Reference No. of the Proposed COOMET Project should be given.

Box 10 Starting date

The date it has been agreed to start the project.

Box 11 Expected completion date

An expected completion date must be given. For permanent agreement (e.g. time service) "ON-GOING" should be entered.

Box 13 Date

The Form should be dated the day of signature.

AGREED PROJECT COOMET					
1 Reference No.:		2 Subject Field:			
3 Field of cooperation:					
4 Working Group:					
5 Subject:					
6 Description:					
7 Additional remarks:					
8 Coordinator's name:					
Address:	_				
Telephone:	Fax:	E-mail:			
9 Date project agreed:	10 Starting da	ate: 11 Expected completion date:			
12 Coordinator's signature:		13 Date:			

COOMET PROJECT PROGRESS/FINAL REPORT

Boxes 1-5

The content of the corresponding Boxes in the Agreed COOMET Project Form should be reproduced.

Box 6 Progress

A brief description of the progress up to date should be entered in the space provided.

Box 7 Coordinator's name, address, etc.

As in the Agreed COOMET Project Form.

Box 8 Completion date

If the progress of the project is being reported then an estimated completion date should be given. If the project has now been completed then the actual date of completion should be given. For permanent agreements "ON-GOING" should be entered.

Box 10 Date

The Form should be dated the day of signature.

COOMET PROJECT PROGRESS/FINAL REPORT 1 Reference No.: 2 Subject Field: 3 Field of cooperation: 4 Working Group: 5 Subject: 6 Progress: 7 Coordinator's name: **Address: Telephone:** Fax: E-mail: 8 Completion date: 9 Coordinator's signature: 10 Date:

ORGANIZATIONAL SCHEME OF COOMET PROJECTS



PROPOSED PROJECT AGREED PROJECT PROGRESS REPORT FINAL REPORT Working Group Working Group Proposer finds Working group partners (Coordinator) (Coordinator) (Coordinator) Form 1 Form 2 Form 3 Form 4 (Proposed Project) (Agreed Projects) (Progress Report) (Final Report) Annual **COOMET Secretariat** Annual SC SC/TC Report SBC* SC Secretariat SBC* Report of SC of SC Annual Report of SBC Annual Report of SBC Committee Committee SC/TC Member Member Secretariat Secretariat **COOMET COOMET** Working Programme Institution involved Annual Report Annual Report and data base Committee Member Committee Member *SBC - Structural Bodies of COOMET: TC 1.1 –TC 1.12 of the Joint Committee for Measurement Standards; Legal Metrology Technical Committee; Quality Forum Technical Committee; Discussion at the COOMET Committee Meeting

The connection depicted by dotted line is followed when there is no SC in a TC.

Technical Committee for Information and Training

CONTACT PERSONS OF COOMET MEMBER COUNTRIES

ARMENIA

Structural Body & Subject Field		Contact Person	Telephone, E-mail	Address
TC 1.1 General Metrology	GM	Mr. Vahan Sahakyan	+374 10 23 26 00 metrology@metrology.am	1
TC 1.2 Acoustics, Ultrasound, Vibration	AUV	Mr. Ararat Bagdasaryan	+374 10 23 84 41 iinfo@metrology.am	1
TC 1.3 Electricity and Magnetism	EM	Mr. Viktor Shakhmuradyan	+374 10 23 84 41 info@metrology.am	1
TC 1.4 Flow Measurement	F	Mr. Karapet Sargisyan	+374 10 23 54 52 info@metrology.am	1
TC 1.5 Length and Angle	L	Mr. Eduard Rustamyan	+374 10 23 97 90 info@metrology.am	1
TC 1.6 Mass and Related Quantities	M	Mr. Eduard Rustamyan	+374 10 23 97 90 info@metrology.am	1
TC 1.7 Photometry and Radiometry	PR	Mr. Kamo Movsisyan	+374 10 24 45 54 movsisyan@metrology.am	1
TC 1.8 Physical Chemistry	QM	Mr. Kamo Movsisyan	+374 10 24 45 54 movsisyan@metrology.am	1
TC 1.9 Ionising Radiation and Radioactivity	RI	Mr. Ovik Vardanyan	+374 10 23 46 34 info@metrology.am	1
TC 1.10 Thermometry and Thermal Physics	T	Mr. Kamo Movsisyan	+374 10 24 45 54 movsisyan@metrology.am	1
TC 1.11 Time and Frequency	TF	Mr. Viktor Shakhmuradyan	+374 10 23 84 41 info@metrology.am	1
TC 1.12 Reference Materials	RM	Ms. Narine Oganyan	+374 10 23 67 22 movsisyan@metrology.am	1
TC 2 Legal Metrology	LM	Ms. Rima Danielyan	+374 10 23 58 29 info@metrology.am	1
TC 3.1 Quality Forum Technical Committee	AQ	Mr. Grant Yeritsyan	+374 10 23 46 34 info@metrology.am	1
TC 4 Information and Training	IT TR	Mr. Sarkis Gevorgyan	+374 10 23 84 41 info@metrology.am	1

ADDRESS OF ORGANISATION

1. Ministry of Trade and Economic Development of the Republic of Armenia National Institute of Metrology

49/2 Komitasi Ave. 0051 Yerevan Republic of Armenia

Telephone: +374 10 23 26 00 Fax: +374 10 23 54 78 +375 17 288 09 38

E-mail: metrology@metrology.am

Website: http://metrology.am

AZERBAIJAN

Structural Body & Subject Field		Contact Person	Telephone, E-mail	Address
TC 1.1 General Metrology	GM	Mr. Sayad Humbatov	+99412 449-43-82/131	1
TC 1.2 Acoustics, Ultrasound, Vibration	AUV	Mr. Ebuzer Araslanbekov	+99412 490-02-33	1
TC 1.3 Electricity and Magnetism	EM	Mr. Maarif Zeynalov	+99412 449-43-81/133	1
TC 1.4 Flow Measurement	F	Mr. Azer Hurbanov	+99412 449-99-59/194	1
TC 1.5 Length and Angle	L	Mr. Yusif Hasanov	+99412 449-99-59/190	1
TC 1.6 Mass and Related Quantities	M	Mr. Yusif Hasanov	+99412 449-99-59/190	1
TC 1.7 Photometry and Radiometry	PR	Mr. Sardar Aslanov	+99412 440-63-16	1
TC 1.8 Physical Chemistry	QM	Ms. Raisa Musayeva	+99412 449-84-91/189	1
TC 1.9 Ionising Radiation and Radioactivity	RI	Mr. Tahir Shafiyev	+99412 449-43-82/131	1
TC 1.10 Thermometry and Thermal Physics	Т	Mr. Movlud Garalov	+99412 449-43-82/185	1
TC 1.11 Time and Frequency	TF	Mr. Sardar Aslanov	+99412 440-63-16	1
TC 1.12 Reference Materials	RM	Mr. Agarza Aliyev	+99412 449-99-59/175	1
TC 2 Legal Metrology	LM	Mr. Sardar Aslanov	+99412 440-63-16	1
TC 3.1 Quality Forum Technical Committee	AQ	Mr. Dayanat Gurbanov	+99412 449-43-82/146	1
TC 4 Information and Training	IT TR	Ms. Aliya Kerimova	+99412 449-84-89/160	1

ADDRESS OF ORGANISATION

1. The State Agency on Standardization, Metrology and Patents of the Azerbaijan Republic

124 Mardanovs Brothers Str.

AZ 1147 Baku

Azerbaijan Republic

Telephone: +99412 449-87-61
Fax: +99412 449-36-81
E-mail: azs@azstand.gov.az
Website: www.azstand.gov.az

BELARUS

Structural Body & Subject Field		Contact Person	Telephone, E-mail	Address
TC 1.1 General Metrology	GM	Ms. Nadezda Lyakhova	+375 17 334 75 40 coomet@belgim.by	1
TC 1.2 Acoustics, Ultrasound, Vibration	AUV	Mrs. Valentina Pozdeeva	+375 17 288 07 35 pozdeeva@belgim.by	1
TC 1.3 Electricity and Magnetism	EM	Mrs. Tatiyana Kolomiets	+375 17 233 24 24 kolomiets@belgim.by	1
TC 1.4 Flow Measurement	F	Mr. Nikolay Martynov	+375 17 233 03 92 dikun@belgim.by	1
TC 1.5 Length and Angle	L	Mrs. Anna Demodova	+375 17 233 35 82 demodova@belgim.by	1
TC 1.6 Mass and Related Quantities	M	Mrs. Ludmila Evsievich	+375 17 288 08 77 galat@belgim.by	1
TC 1.7 Photometry and Radiometry	PR	Mrs. Olga Tarasova	+375 17 334 98 20 khairova@belgim.by	1
TC 1.8 Physical Chemistry	QM	Mrs. Nina Khairova	+375 17 334 98 20 khairova@belgim.by	1
TC 1.9 Ionising Radiation and Radioactivity	RI	Mr. Valery Milevsky	+375 17 233 65 04 milevski@belgim.by	1
TC 1.10 Thermometry and Thermal Physics	Т	Mr. Nikolay Martynov	+375 17 233 03 92 dikun@belgim.by	1
TC 1.11 Time and Frequency	TF	Mr. Alexander Galygo	+375 17 233 62 73 galygo@belgim.by	1
TC 1.12 Reference Materials	RM	Mr. Valery Makarevich	+375 17 233 62 70 mac@belgim.by	1
TC 2 Legal Metrology	LM	Prof. Nikolai Zhagora	+375 17 233 55 01 coomet@belgim.by	1
TC 3.1 Quality Forum Technical Committee	AQ	Mrs. Irina Voitek	+375 17 233 57 99 voitek@belgim.by	1
TC 4 Information and Training	IT TR	Mrs. Lidia Astafijeva	+375 17 239 23 37 coomet@belgim.by	1

ADDRESS OF ORGANISATION

1. Belarussian State Institute of Metrology (BelGIM)

info@belgim.by

93 Starovilensky Trakt 220053 Minsk Republic of Belarus

Telephone: +375 17 233 55 01
Fax: +375 17 288 09 38
E-mail: coomet@belgim.by

Website: www.belgim.by

BULGARIA

Structural Body & Subject Field		Contact Person	Telephone, E-mail	Address
TC 1.1 General Metrology	GM	Mrs. Stefka Hristova	+359 2 873 52 88 ncmdiv@sasm.orbitel.bg	1
TC 1.2 Acoustics, Ultrasound, Vibration	AUV	Mr. Marin Chushkov	+359 2 876 11 56 ncm@sasm.orbitel.bg	1
TC 1.3 Electricity and Magnetism	EM	Mrs. Petya Aladzhem	+359 2 871 02 37 ncm@sasm.orbitel.bg	1
TC 1.4 Flow Measurement	F	Mr. Ivalin Yosifov	+359 2 870 71 91 metrolog1@abv.bg	1
TC 1.5 Length and Angle	L	Mr. Vesselin Gavaliugov	+359 2 873 52 68 ncm@sasm.orbitel.bg	1
TC 1.6 Mass and Related Quantities	M	Mrs. Nadia Vladimirova	+359 2 873 51 69 ncm@sasm.orbitel.bg	1
TC 1.7 Photometry and Radiometry	PR	Mr. Nikolay Aleksandrov	+359 2 876 11 56 ncm@sasm.orbitel.bg	1
TC 1.8 Physical Chemistry	QM	Mrs. Dimka Ivanova	+359 2 873 52 50 ncm@sasm.orbitel.bg	1
TC 1.9 Ionising Radiation and Radioactivity	RI	Mrs. Juliana Mincheva	+359 2 873 52 72 ncm@sasm.orbitel.bg	1
TC 1.10 Thermometry and Thermal Physics	T	Mr. Sasho Nedialkov	+359 2 876 29 46 ncm@sasm.orbitel.bg	1
TC 1.11 Time and Frequency	TF	Mrs. Tzvetanka Aleksandrova	+359 2 870 51 38 ncm@sasm.orbitel.bg	1
TC 1.12 Reference Materials	RM	Mrs. Ljudmila Dimitrova	+359 2 873 52 50 ncm@sasm.orbitel.bg	1
TC 2 Legal Metrology	LM	Mr. Ivan Machulekov	+359 2 873 52 98 metrolog1@abv.bg	1
TC 3.1 Quality Forum Technical Committee	AQ	Mrs. Plamena Yordanova- Kapraliakova	+359 2 871 01 79 ncm@sasm.orbitel.bg	1
TC 4 Information and Training	IT TR	Mrs. Plamena Yordanova- Kapraliakova	+359 2 871 01 79 ncm@sasm.orbitel.bg	1

ADDRESS OF ORGANISATION

1. Bulgarian Institute of Metrology (BIM)
General Directorate "National Centre of Metrology" (DG NCM)
General Directorate "Measures and Measuring Instruments" (DG MMI)

52-b, G. M. Dimitrov Blvd. 1125 Sofia

Bulgaria

Telephone: +359 2 873 52 88

+359 2 873 52 98

Fax: +359 2 873 52 85

+359 2 873 52 98

E-mail: ncm@sasm.orbitel.bg

metrolog1@abv.bg

Website: http://damtn.government.bg

CUBA

Structural Body & Subject Field		Contact Person	Telephone, E-mail	Address
TC 1.1 General Metrology	GM	Mr. Eduardo Perez	+537 862 05 36 eduardo@inimet.cu	1
TC 1.2 Acoustics, Ultrasound, Vibration	AUV	Mr. Evelio Palomino	+537 862 05 36 epalomino@inimet.cu	3
TC 1.3 Electricity and Magnetism	EM	Mr. Mirta Navarro	+537 862 30 41 mirta@inimet.cu	1
TC 1.4 Flow Measurement	F	Mr. Jose I. Franco	+537 862 30 41 volumen@inimet.cu	1
TC 1.5 Length and Angle	L	Mr. Miguel A. Dinza	+537 862 30 41 dinza@inimet.cu	1
TC 1.6 Mass and Related Quantities	M	Mr. Augusto Maury	+537 862 30 41 maury@inimet.cu	1
TC 1.7 Photometry and Radiometry	PR	Mrs. Sandra Pedro	+537 862 30 41 sandra@inimet.cu	1
TC 1.8 Physical Chemistry	QM	Mrs. Sandra Pedro	+537 862 30 41 sandra@inimet.cu	1
TC 1.9 Ionising Radiation and Radioactivity	RI	Mrs. Pilar Oropeza	+537 579-563 porepeza@centis.edu.cu	2
TC 1.10 Thermometry and Thermal Physics	Т	Mr. Hermes Rozsa	+537 863 90 62 hermes@inimet.cu	1
TC 1.11 Time and Frequency	TF	Mr. Oscar Torras	+537 22 75 66 torras@inimet.cu	1
TC 1.12 Reference Materials	RM	Mrs. Sandra Pedro	+537 862 30 41 sandra@inimet.cu	1
TC 2 Legal Metrology	LM	Dr. Martín Antunez	+537 830 00 22 metro@ncnorma.cu	4
TC 3.1 Quality Forum Technical Committee	AQ	Mr. Oscar Torras	+537 22 75 66 torras@inimet.cu	1
TC 4 Information and Training	IT TR	Mr. Luis González	+537 862 30 41 luisg.denis@inimet.cu	1

ADDRESSES OF ORGANISATIONS

1. National Research Institute on Metrology (INIMET)

Consulado No.206 e/ Animas y Trocadero Centro Habana CP 10200 La Habana Republic of Cuba

Telephone: +537 862 05 36

+537 833 90 62

Fax: +537 867 69 66

E-mail: laboratorio@inimet.cu

Website: http://www.inimet.cubaindustria.cu

2. Center of Isotopes (CENTIS)

Ave. Monumental y Carretera La Rada, Km 3 CP 3415 Samn Jose de las Lajas Republic of Cuba

Telephone:

Fax: +537 866 98 21

E-mail: poropesa@centis.edu.cu

Website:

3. Centro de Estudios Innovación y Mantenimiento

Calle 127 s/n esq. 114 CP 19300 Marianao Republic of Cuba

Telephone:

Fax: +537 267 18 72

E-mail: angels@ceim.cujae.edu.cu

Website:

4. Cuban National Bureau of Standards (NC)

Calle E No 261 entre 11 y 13- Vedado 10400 La Habana Republic of Cuba

Telephone: +537 862 05 36

+537 833 90 62

Fax: +537 836 80 48 E-mail: nc@ncnorma.cu

Website:

DPR OF KOREA

Structural Body & Subject Field		Contact Person	Telephone, E-mail	Address
TC 1.1 General Metrology	GM	Dr. Kim Gwan Ho	+850 2 381 44 10 pdk0301@163.com	1
TC 1.2 Acoustics, Ultrasound, Vibration	AUV	Dr. Chang Myong Ir	+850 2 381 44 10 pdk0301@163.com	1
TC 1.3 Electricity and Magnetism	EM	Dr. Kim So Jun	+850 2 381 44 10 pdk0301@163.com	1
TC 1.4 Flow Measurement	F	Dr. Choe Yong Chol	+850 2 381 44 10 pdk0301@163.com	1
TC 1.5 Length and Angle	L	Dr. Kim Jin Ju	+850 2 381 44 10 pdk0301@163.com	1
TC 1.6 Mass and Related Quantities	M	Dr. Pak Jin	+850 2 381 44 10 pdk0301@163.com	1
TC 1.7 Photometry and Radiometry	PR	Dr. Kwak Eui Yong	+850 2 381 44 10 pdk0301@163.com	1
TC 1.8 Physical Chemistry	QM	Prof. Li Dong II	+850 2 381 44 10 pdk0301@163.com	1
TC 1.9 Ionising Radiation and Radioactivity	RI	Dr. Kim Gwan Ho	+850 2 381 44 10 pdk0301@163.com	1
TC 1.10 Thermometry and Thermal Physics	Т	Prof. Byon Guk On	+850 2 381 44 10 pdk0301@163.com	1
TC 1.11 Time and Frequency	TF	Dr. Hong Chol Ho	+850 2 381 44 10 pdk0301@163.com	1
TC 1.12 Reference Materials	RM	Prof. Li Dong II	+850 2 381 44 10 pdk0301@163.com	1
TC 2 Legal Metrology	LM	Mrs. Jo Sun Bok	+850 2 381 44 10 pdk0301@163.com	1
TC 3.1 Quality Forum Technical Committee	AQ	Dr. Chang Myong Ir	+850 2 381 44 10 pdk0301@163.com	1
TC 4 Information and Training	IT TR	Mr. Jin Gyong Man	+850 2 381 44 10 pdk0301@163.com	1

ADDRESS OF ORGANISATION

1. Central Institute of Metrology (CIM)

Sonsin 1 Dong, Songyo District Pyongyang DPR of Korea

Telephone: +850 2 381 86 49
Fax: +850 2 381 44 80
E-mail: pdk0301@163.com

Website:

GEORGIA

Structural Body & Subject Field		Contact Person	Telephone, E-mail	Address
TC 1.1 General Metrology	GM	Mr. Revaz Jvania	+995 32 61 30 90 gnim_metrology@yahoo.com	1
TC 1.2 Acoustics, Ultrasound, Vibration	AUV	Mr. Guram Tsiklauri	+995 32 61 77 57 gnim_metrology@yahoo.com	1
TC 1.3 Electricity and Magnetism	EM	Mr. Nikolay Lobjanidze	+995 32 61 30 90 gnim_metrology@yahoo.com	1
TC 1.4 Flow Measurement	F	Mrs. Irma Rurua	+995 32 61 35 00 irmarurua@yahoo.com	1
TC 1.5 Length and Angle	L	Mr. Vaja Sikharulidze	+995 32 61 30 21 gnim_metrology@yahoo.com	1
TC 1.6 Mass and Related Quantities	M	Mr. Soso Rogava	+995 32 61 30 21 gnim_metrology@yahoo.com	1
TC 1.7 Photometry and Radiometry	PR	Mr. Raul Kankia	+995 32 61 30 21 gnim_metrology@yahoo.com	1
TC 1.8 Physical Chemistry	QM	Ms. Izolda Garsevanishvili	+995 32 61 77 57 gnim_metrology@yahoo.com	1
TC 1.9 Ionising Radiation and Radioactivity	RI	Mr. Simon Sukhishvili	+995 32 61 73 22 gnim_metrology@yahoo.com	1
TC 1.10 Thermometry and Thermal Physics	Т	Mr. Omar Dalakishvili	+995 32 61 77 57 gnim_metrology@yahoo.com	1
TC 1.11 Time and Frequency	TF	Mr. Guram Tatishvili	+995 32 61 30 90 gnim_metrology@yahoo.com	1
TC 1.12 Reference Materials	RM	Mr. Temur Philishvili	+995 32 61 30 90 gnim_metrology@yahoo.com	1
TC 2 Legal Metrology	LM	Mr. Alexander Borokhovich	+995 32 61 25 30 gnim_metrology@yahoo.com	1
TC 3.1 Quality Forum Technical Committee	AQ	Ms. Nino Mikanadze	+995 32 61 35 00 gnim_metrology@yahoo.com	1
TC 4 Information and Training	IT TR	Mr. Shota Gloveli	+995 32 61 30 90 gnim_metrology@yahoo.com	1

ADDRESS OF ORGANISATION

1. Georgian National Agency for Standards, Technical Regulations and Metrology (GeoStandMetrology)

67 Chargali Str. 0141 Tbilisi Georgia

Telephone: +995 32 61 35 00 Fax: +995 32 61 35 00

E-mail: gnim_metrology@yahoo.com Website: www.gnims.caiucasus.net

GERMANY

Structural Body & Subject Field		Contact Person	Telephone, E-mail	Address
TC 1.1 General Metrology	GM	Prof. Dr. Manfred Kochsiek	+49 531 592 2005 +49 531 592 2002 Manfred.Kochsiek@ptb.de	1
TC 1.2 Acoustics, Ultrasound, Vibration	AUV	Dr. Thomas Fedtke	+49 531 592 1511 +49 531 592 69 1511 Thomas.Fedtke@ptb.de	1
TC 1.3 Electricity and Magnetism	EM	Dr. Hans Bachmair	+49 531 592 2010 +49 531 592 2015 Hans.Bachmair@ptb.de	1
TC 1.4 Flow Measurement	F	Dr. Gudrun Wendt	+49 531 592 1500 +49 531 592 1505 Gudrun.Wendt@ptb.de	1
TC 1.5 Length and Angle	L	Dr. Günter Wilkening	+49 531 592 5010 +49 531 592 5015 Guenter.Wilkening@ptb.de	1
TC 1.6 Mass and Related Quantities	M	Dr. Wladimir Sabuga	+49 531 592 3230 +49 531 592 69 3230 Wladimir.Sabuga@ptb.de	1
TC 1.7 Photometry and Radiometry	PR	Dr. Klaus Stock	+49 531 592 4100 +49 531 592 4105 klaus.stock@ptb.de	1
TC 1.8 Physical Chemistry	QM	Dr. Bernd Güttler	+49 531 592 3100 +49 531 592 3015 Bernd.Guettler@ptb.de	1
TC 1.9 Ionising Radiation and Radioactivity	RI	Dr. Ludwig Büermann	+49 531 592 6620 +49 531 592 6015 Ludwig.Bueermann@ptb.de	1
TC 1.10 Thermometry and Thermal Physics	T	Dr. Steffen Rudtsch	+49 30 34 81 7650 +49 30 34 81 7504 Steffen.Rudtsch @ptb.de	2
TC 1.11 Time and Frequency	TF	Dr. Andreas Bauch	+49 531 592 4420 +49 531 592 4479 Andreas.Bauch@ptb.de	1
TC 1.12 Reference Materials	RM	Dr. Wolfram Bremser	+49 30 8104 58 02 +49 30 8104 5577 Wolfram.Bremser@bam.de	3
TC 2 Legal Metrology	LM	Dr. Olaf Kühn	+49 3677 850-300 +49 3677 850-400 olaf.kuehn@lmet.de	4
TC 3.1 Quality Forum Technical Committee	AQ	Dr. Andreas Odin	+49 531 592 8330 +49 531 592 698330 Andreas.Odin@ptb.de	1
TC 4 Information and Training	IT TR	Annette Kögler	+49 531 592 8213 +49 531 592 8225 Annette.Koegler@ptb.de	1

ADDRESSES OF ORGANISATIONS

1. Physikalisch-Technische Bundesanstalt (PTB)

100 Bundesallee

38116 Braunschweig

Germany

Fax: +49 531 592 9292

Website: www.ptb.de

2. Physikalisch-Technische Bundesanstalt (PTB) Berlin - Charlottenburg

2-12 Abbestrasse 10587 Berlin 10 Germany

- - .. ,

Fax: +49 30 348 7490

Website: www.ptb.de

3. Federal Institute for Material Research and Testing (BAM), Department 1

11 Richard-Willstätter-Straße

12489 Berlin

Germany

Fax: +49 30 6392 5577

Website: www.bam.de

4. Thuringian State Bureau for Metrology and Verification (LMET)

2 Unterpörlitzer Str. 98693 Ilmenau

Germany

Fax: +49 3677 850 400

Website: www.lmet.de

KAZAKHSTAN

Structural Body & Subject Field		Contact Person	Telephone, E-mail	Address
TC 1.1 General Metrology	GM	Mr. Almas Batanov	+7172 79 32 68 kazinmetr@land.ru	1
TC 1.2 Acoustics, Ultrasound, Vibration	AUV	-	-	-
TC 1.3 Electricity and Magnetism	EM	Mr. Zhanat Begaidarov	+7172 79 32 87 metrology@nursat.kz	1
TC 1.4 Flow Measurement	F	Mr. Reshat Sabirgaliev	+7112 21 56 35 zkfinmetr@mail.ru	3
TC 1.5 Length and Angle	L	Mrs. Olga Issakova	+7272 21 65 59 metrology@nursat.kz	2
TC 1.6 Mass and Related Quantities	M	Mr. Chingis Kuanbaev	+7172 79 33 70 metrology@nursat.kz	1
TC 1.7 Photometry and Radiometry	PR	-	-	-
TC 1.8 Physical Chemistry	QM	Mrs. Gulmira Bekturganova	+7172 79 32 59 kazinmetr@land.ru	1
TC 1.9 Ionising Radiation and Radioactivity	RI	-	-	-
TC 1.10 Thermometry and Thermal Physics	Т	Mrs. Kuralay Duyssebaeva	+7272 21 36-16 metrology@nursat.kz	2
TC 1.11 Time and Frequency	TF	Mr. Berikbergen Elubaev	+7272 55 62 71 time_service@nursat.kz	2
TC 1.12 Reference Materials	RM	Mrs. Vera Donbaeva	+7172 79 32 91 kazinmetr@land.ru	1
TC 2 Legal Metrology	LM	Mrs. Lubov Galitsyna	+7172 79 32 77 legal@kazinmetr.org	1
TC 3.1 Quality Forum Technical Committee	AQ	Mr. Dauren Sharipov	+7172 79 32 80 legal@kazinmetr.org	1
TC 4 Information and Training	IT TR	Mrs. Saulet Kussainova	+7172 79 32 83 legal@kazinmetr.org	1

ADDRESSES OF ORGANISATIONS

1. Republic State Enterprise "Kazakhstan Institute of Metrology" (KazInMetr)

Center of Measurement Standards Left bank of the river Ishim Orynbor Str., 11 010000 Astana Republic of Kazakhstan

Telephone: +7172 79 32 52
Fax: +7172 79 32 99
E-mail: info@kazinmetr.org
Website: http://www.kazinmetr.org

2. South-Kazakhstan Subsidiary of Republic State Enterprise "Kazakhstan Institute of Metrology" (SKS KazInMetr)

83 Altynsarina Str. 480035 Almaty Republic of Kazakhstan

Telephone: +7272 21 65 59 Fax: +7272 21 65 59

E-mail: metrology@nursat.kz
Website: http://www.kazinmetr.org

3. Western-Kazakhstan Subsidiary of Republic State Enterprise "Kazakhstan Institute of Metrology" (WKS KazInMetr)

59 3rd Zavokzalny Tupik Str. 090003 Uralsk

Republic of Kazakhstan

Telephone: +7112 21 56 35
Fax: +7112 21 56 35
E-mail: zkfinmetr@mail.ru

Website: http://www.kazinmetr.org

KYRGYZSTAN

Structural Body & Subject Field		Contact Person	Telephone, E-mail	Address
TC 1.1 General Metrology	GM	Mr. Ulan Turdukulov	+996 312 62 57 34 metrolog@nism.gov.kg	1
TC 1.2 Acoustics, Ultrasound, Vibration	AUV	-	-	-
TC 1.3 Electricity and Magnetism	EM	Mr. Mukan Moldobaev	+996 312 62 58 09 metrolog@nism.gov.kg	1
TC 1.4 Flow Measurement	F	Mrs. Marina Denisova	+996 312 66 22 80 metrolog@nism.gov.kg	1
TC 1.5 Length and Angle	L	Mrs. Galina Devyatova	+996 312 662620 metrolog@nism.gov.kg	1
TC 1.6 Mass and Related Quantities	M	Mrs. Natalia Truleva	+996 312 662620 metrolog@nism.gov.kg	1
TC 1.7 Photometry and Radiometry	PR	-	-	-
TC 1.8 Physical Chemistry	QM	Mrs. Ekaterina Kotova	+996 312 66 22 80 metrolog@nism.gov.kg	1
TC 1.9 Ionising Radiation and Radioactivity	RI	Mr. Igor Ershov	+996 3133 2 11 78 metrolog@nism.gov.kg	1
TC 1.10 Thermometry and Thermal Physics	Т	Mrs. Marina Denisova	+996 312 66 22 80 metrolog@nism.gov.kg	1
TC 1.11 Time and Frequency	TF	Mr. Mukan Moldobaev	+996 312 62 58 09 metrolog@nism.gov.kg	1
TC 1.12 Reference Materials	RM	Mrs. Nataliya Shelepina	+996 312 62 57 34 metrolog@nism.gov.kg	1
TC 2 Legal Metrology	LM	Mr. Ulan Turdukulov	+996 312 62 57 34 metrolog@nism.gov.kg	1
TC 3.1 Quality Forum Technical Committee	AQ	Mrs. Liliya Dikambaeva	+996 312 62 57 34 metrolog@nism.gov.kg	1
TC 4 Information and Training	IT TR	Mrs. Liliya Dikambaeva	+996 312 62 57 34 metrolog@nism.gov.kg	1

ADDRESS OF ORGANISATION

1. National Institute for Standards and Metrology of the Kyrgyz Republic "Kyrgyzstandard" (NISM)

197 Panfilov Str. 720040 Bishkek Kyrgyz Republic

Telephone: +996 312 62 68 70

+996 312 62 57 34

Fax: +996 312 66 13 67

E-mail: metrolog@nism.gov.kg

nism@nism.gov.kg

Website: www.nism.gov.kg

LITHUANIA

Structural Body & Subject Field		Contact Person	Telephone, E-mail	Address
TC 1.1 General Metrology	GM	Mr. Viktoras Zabolotnas	+370 5 213 33 49 +370 5 216 34 69 info@lvmt.lt	1
TC 1.2 Acoustics, Ultrasound, Vibration	AUV	Dr. Algirdas Krukonis	+370 37 351 252 +370 37 351 252 algirdas.krukonis@micros	5
TC 1.3 Electricity and Magnetism	EM	Dr. Gintautas Ambrazevicius	+370 5 2 61 80 65 +370 5 2 62 71 23 ambra@pfi.lt	4
TC 1.4 Flow Measurement	F	Dr. Antanas Pedišius	+370 37 40 18 63 +370 37 35 12 71 testlab@isag.lei.lt	3
TC 1.5 Length and Angle	L	Dr. Lilijana Gaidamovičiūtė	+370 5 230 62 76 +370 5 216 43 09 post@vmc.lt	2
TC 1.6 Mass and Related Quantities	M	Mrs. Ilona Milkamanavičienė	+370 5 230 62 76 +370 5 216 43 09 post@vmc.lt	2
TC 1.7 Photometry and Radiometry	PR	Mr. Viktoras Zabolotnas	+370 5 213 33 49 +370 5 216 34 69 info@lvmt.lt	1
TC 1.8 Physical Chemistry	QM	Dr. Petras Serapinas	+370 5 261 60 18 +370 5 262 71 23 pserapin@itpa.lt	4
TC 1.9 Ionising Radiation and Radioactivity	RI	Dr. Lidija Safonova	+370 5 230 62 76 +370 5 216 43 09 post@vmc.lt	2
TC 1.10 Thermometry and Thermal Physics	T	Dr. Antanas Pauža	+370 5 26 20 194 +370 5 26 27 123 pauzha@uj.pfi.lt	4
TC 1.11 Time and Frequency	TF	Dr. Rimantas Miškinis	+370 5 26 20 194 +370 5 26 27 123 miskinis@uj.pfi.lt	4
TC 1.12 Reference Materials	RM	Dr. Petras Serapinas	+370 5 261 60 18 +370 5 262 71 23 pserapin@itpa.lt	4
TC 2 Legal Metrology	LM	Mr. Viktoras Zabolotnas	+370 5 213 33 49 +370 5 216 34 69 info@lvmt.lt	1
TC 3.1 Quality Forum Technical Committee	AQ	Mrs. Irena Lazdauskaitė	+370 5 213 33 49 +370 5 216 34 69 info@lvmt.lt	1
TC 4 Information and Training	IT TR	Mr. Viktoras Zabolotnas	+370 5 213 33 49 +370 5 216 34 69 info@lvmt.lt	1

ADDRESSES OF ORGANISATIONS

1. State Metrology Service (VMT)

31 Algirdo LT - 2006 Vilnius

Lithuania

Telephone: +370 5 213 33 49
Fax: +370 5 216 34 69
E-mail: info@lvmt.lt

Website: http://www.lvmt.lt

2. Vilnius Metrology Centre (VMC)

23 S. Dariaus ir S. Girėno LT – 2038 Vilnius

Lithuania

Telephone: +370 5 230 62 76
Fax: +370 5 216 43 09
E-mail: post@vmc.lt
Website: http://www.vmc.lt

3. Lithuanian Energy Institute (LEI)

3 Breslaujos Str. LT- 3035 Kaunas

Lithuania

Telephone: +8 37 (7) 401 863
Fax: +8 37 (7) 351 271
E-mail: testlab@isag.lei.lt
Website: http://www.lei.lt

4. Institute of Semiconductor Physics (PFI)

11 A. Goštauto LT - 2600 Vilnius Lithuania

Telephone: +370 5 261 27 58
Fax: +370 5 262 71 23
E-mail: galdikas@uj.pfi.lt
Website: http://www.pfi.lt

5. Metrology Institute at Kaunas Technology University (KTU MI)

50 Studentu LT-3031 Kaunas Lithuania

Telephone: +370 37 351 252 Fax: +370 37 740 585

E-mail: algirdas.krukonis@microsys.ktu.lt

Website: http://www.ktu.lt

MOLDOVA

Structural Body & Subject Field		Contact Person	Telephone, E-mail	Address
TC 1.1 General Metrology	GM	Mr. Yuri Friptuleak	+3732 2 75 04 72 friptuleac@standard.md	2
TC 1.2 Acoustics, Ultrasound, Vibration	AUV	-	-	-
TC 1.3 Electricity and Magnetism	EM	Mr. Alexandru Chirinciuc	+3732 2 21 85 15 insm@standard.md	2
TC 1.4 Flow Measurement	F	Mr. Alexander Ciorba	+3732 2 75 09 83 insm@standard.md	2
TC 1.5 Length and Angle	L	Mr. Tudor Birsa	+3732 2 75 05 63 birsa@standard.md	2
TC 1.6 Mass and Related Quantities	M	Mr. Tudor Birsa	+3732 2 75 05 63 birsa@standard.md	2
TC 1.7 Photometry and Radiometry	PR	-	-	-
TC 1.8 Physical Chemistry	QM	Mr. Sergey Chapa	+3732 2 75 05 63 ceapa@standard.md	2
TC 1.9 Ionising Radiation and Radioactivity	RI	Mr. Yuri Friptuleak	+3732 2 75 04 72 friptuleac@standard.md	2
TC 1.10 Thermometry and Thermal Physics	Т	Mr. Konstantin Bordianu	+3732 2 75 05 63 insm@standard.md	2
TC 1.11 Time and Frequency	TF	-	-	-
TC 1.12 Reference Materials	RM	Mrs. Adelaida Andriesh	+3732 2 71 92 39 ehanganu@standard.md	1
TC 2 Legal Metrology	LM	Mrs. Elena Hanganu	+3732 2 71 92 39 ehanganu@standard.md	1
TC 3.1 Quality Forum Technical Committee	AQ	Mr. Sergey Chapa	+3732 2 75 05 63 ceapa@standard.md	2
TC 4 Information and Training	IT TR	Mrs. Elena Hanganu	+3732 2 71 92 39 ehanganu@standard.md	1

ADDRESSES OF ORGANISATIONS

1. Service of Standardization and Metrology of Republic of Moldova ("Moldova-Standard")

28 E. Coca Str. 2064 Kishenev Republic of Moldova

Telephone: +3732 2 74 85 88

+3732 2 75 04 60

Fax: +3732 2 750581

E-mail: moldovastandard@standard.md

Website: www.ssm.gov.md

2. National Institute of Standardization and Metrology (INSM)

28 E. Coca Str.

2064 Kishenev Republic of Moldova

+3732 2 75 04 65 +3732 2 74 85 42 Telephone:

Fax: +3732 2 750581

E-mail: insm@standard.md

Website: www.standard.md

ROMANIA

Structural Body & Subject Field		Contact Person	Telephone, E-mail	Address
TC 1.1 General Metrology	GM	Dr. A. Millea	+40 21 6343520 office@inm.ro	1
TC 1.2 Acoustics, Ultrasound, Vibration	AUV	Mr. A. Popescu	+40 21 6344030 / 146 office@inm.ro	1
TC 1.3 Electricity and Magnetism	EM	Mr. R. Soviany	+40 21 6344030 / 177 office@inm.ro	1
TC 1.4 Flow Measurement	F	Mr. A. Oncescu	+40 21 6344030 / 173 office@inm.ro	1
TC 1.5 Length and Angle	L	Mr. Dragos Boiciuc	+40 21 6343520 office@inm.ro	1
TC 1.6 Mass and Related Quantities	M	Mr. V. Petrescu	+40 21 6344030 / 146 office@inm.ro	1
TC 1.7 Photometry and Radiometry	PR	Mr. M. Simionescu	+40 21 6344030 / 141 office@inm.ro	1
TC 1.8 Physical Chemistry	QM	Mr. P. König-Georgescu	+40 21 6344030 / 187 office@inm.ro	1
TC 1.9 Ionising Radiation and Radioactivity	RI	Mr. A. Druker	+40 21 6344030 / 156 office@inm.ro	1
TC 1.10 Thermometry and Thermal Physics	Т	Dr. I. Asavinei	+40 21 6344030 / 123 office@inm.ro	1
TC 1.11 Time and Frequency	TF	Dr. F. Cretu	+40 21 6344030 / 120 office@inm.ro	1
TC 1.12 Reference Materials	RM	Mr. C. Botgros	+40 21 6344030 / 116 office@inm.ro	1
TC 2 Legal Metrology	LM	Mr. D. Dinu	+40 21 6134563 office@brml.ro	2
TC 3.1 Quality Forum Technical Committee	AQ	Mr. Dragos Boiciuc	+40 21 6343520 office@inm.ro	1
TC 4 Information and Training	IT TR	-	-	-

ADDRESSES OF ORGANISATIONS

1. National Institute of Metrology (INM)

11 Sos. Vitan Bârzesti 75669 Bucharest Romania

Telephone: +40 21 634 35 20

+40 21 634 33 45

Fax: +40 21 334 15 33 E-mail: office@inm.ro

Website:

2. Romanian Bureau of Legal Metrology (BRML)

11 Sos. Vitan Bârzesti

75669 Bucharest

Romania

Telephone: +40 21 613 16 05

+40 21 613 45 63

Fax: +40 21 332 06 15

E-mail: office@brml.ro

Website:

RUSSIA

Structural Body & Subject Field		Contact Person	Telephone, E-mail	Address
TC 1.1 General Metrology	GM	Dr. Anna Chunovkina	+7 812 251 83 07 +7 812 713 01 14 A.G.Chunovkina@vniim.ru	1
TC 1.2 Acoustics, Ultrasound, Vibration	AUV	Dr. Alexander Enyakov	+7 495 535 93 97 +7 495 535 93 34 enyakov@vniiftri.ru	3
TC 1.3 Electricity and Magnetism	EM	Dr. Sergey Kolotygin	+7 495 744 81 30 +7 495 744 81 30 lab202@vniiftri.ru	3
TC 1.4 Flow Measurement	F	Dr. Gennady Khomyakov	+7 843 2 76 70 62 +7 8432 76 00 32 vniir@mi.ru	6
TC 1.5 Length and Angle	L	Dr. Konstantin Chekirda	+7 812 323-96-64 +7 812 323-96-64 k.v.chekirda@vniim.ru	1
TC 1.6 Mass and Related Quantities	M	Dr. Natalya Domostroeva	+7 812 323 96 05 +7 812 323 96 71 N.G.Domostroeva@vniim.ru	1
TC 1.7 Photometry and Radiometry	PR	Mr. Valery Kuznetzov	+7 495 437 34 56 +7 495 437 31 47, 437 37 00 vniiofi@vniiofi.ru	4
TC 1.8 Physical Chemistry	QM	Prof. Dr. Leonid Konopelko	+7 812 315 11 45 +7 812 713 01 14 lkonop@b10.vniim.ru	1
TC 1.9 Ionising Radiation and Radioactivity	RI	Prof. Dr. Vladimir Yarina	+7 495 535 93 05 +7 495 535 93 05 ir@vniiftri.ru	3
TC 1.10 Thermometry and Thermal Physics	T	Prof. Anatoly Pokhodun	+7 812 315 52 07 +7 812 713 01 14 A.I.Pokhodun@vniim.ru	1
TC 1.11 Time and Frequency	TF	Prof. Vitally Palchikov	+7 495 535-93-20 +7 495 535 93 34 admin@imvp.ru.	3
TC 1.12 Reference Materials	RM	Prof. Dr. Vladislav Leonov	+7 343 3 50 26 18 +7 343 3 50 20 39 uniim@uniim.ru	5
TC 2 Legal Metrology	LM	Dr. Valery Skovorodnikov	+7 495 437 33 10 +7 495 437 56 66 sva@vniims.ru	2
TC 3.1 Quality Forum Technical Committee	AQ	Dr. Nataly Muravskaya	+7 495 437 33 56 +7 495 437 31 47 muravskaya-d4@vniiofi.ru	4
TC 4 Information and Training	IT TR	Mr. Viktor Ivanov	+7 495 437 40 61 +7 495 437 56 66 vivanov@vniims.ru	2

ADDRESSES OF ORGANISATIONS

1. All-Russian Scientific Research Institute of Metrology named after D.I. Mendeleev (VNIIM)

19 Moscovsky Prospect 198005 Sankt-Petersburg

Russia

Telephone: +7 812 251 76 01

Fax: +7 812 713 01 14

E-mail: info@vniim.ru

Website: www.vniim.ru

2. All-Russian Scientific Research Institute of Metrological Service (VNIIMS)

46 Ozernaya Str. 119361 Moscow

Russia

Telephone: +7 495 437 55 77

Fax: +7 495 437 56 66

E-mail: office@vniims.ru

Website: www.vniims.ru

3. All-Russian Scientific Research Institute of Physico-Technical Measurements (VNIIFTRI)

141570 Mendeleevo

Solnechnogorsky District, Moscow Region

Russia

Telephone: +7 495 535 92 10

+7 495 535 24 01

Fax: +7 495 535 93 34

+7 495 535 73 86

E-mail: director@vniiftri.ru

Website: www.vniiftri.ru

4. All-Russian Scientific Research Institute of Optical and Physical Measurements (VNIIOFI)

46 Ozernaya Str. 119361 Moscow

Russia

Telephone: +7 495 437 56 33

Fax: +7 495 437 31 47

E-mail: vniiofi@vniiofi.ru

Website: www.vniiofi.ru

5. Urals Scientific Research Institute of Metrology (UNIIM)

4 Krasnoarmeiskaya 620219 Ekaterinburg

Russia

Telephone: +7 3433 50 26 18 Fax: +7 3433 50 20 39 E-mail: uniim@uniim.ru Website: www.uniim.ru

All-Russian Scientific Research Institute of Flowrate Measurement (VNIIR)

7a, 2 Azinskaya Str. 420029 Kazan Russia

Telephone: +7 8432 76 70 62 +7 8432 76 00 32 Fax:

E-mail: vniir@mi.ru

Website:

SLOVAKIA

Structural Body & Subject Field		Contact Person	Telephone, E-mail	Address
TC 1.1 General Metrology	GM	Dr. Robert Spurný	+421 2 602 94 350 spurny@smu.gov.sk	1
TC 1.2 Acoustics, Ultrasound, Vibration	AUV	Mr. Ján Šebok	+421 2 602 94 720 sebok@smu.gov.sk	1
TC 1.3 Electricity and Magnetism	EM	Dr. Peter Vrabček	+421 2 602 94 360 vrabcek@smu.gov.sk	1
TC 1.4 Flow Measurement	F	Mrs. Miroslava Benková	+421 2 602 94 202 benkova@smu.gov.sk	1
TC 1.5 Length and Angle	L	Mr. Roman Fíra	+421 2 602 94 284 fira@smu.gov.sk	1
TC 1.6 Mass and Related Quantities	M	Dr. Robert Spurný	+421 2 602 94 350 spurny@smu.gov.sk	1
TC 1.7 Photometry and Radiometry	PR	Dr. Peter Nemeček	+421 2 602 94 278 nemecek@smu.gov.sk	1
TC 1.8 Physical Chemistry	QM	Dr. Viliam Pätoprstý	+421 2 602 94 285 patoprsty@smu.gov.sk	1
TC 1.9 Ionising Radiation and Radioactivity	RI	Mr. Jozef Dobrovodský	+421 2 602 94 671 dobrovodsky@smu.gov.sk	1
TC 1.10 Thermometry and Thermal Physics	Т	Dr. Juraj Ranostaj	+421 2 602 94 220 ranostaj@smu.gov.sk	1
TC 1.11 Time and Frequency	TF	Mr. Pavol Doršic	+421 2 602 94 359 dorsic@smu.gov.sk	1
TC 1.12 Reference Materials	RM	Mrs. Anna Mathiasová	+421 2 602 94 226 mathiasova@smu.gov.sk	1
TC 2 Legal Metrology	LM	Mrs. Anna Nemečková	+421 2 602 94 380 nemeckova@smu.gov.sk	1
TC 3.1 Quality Forum Technical Committee	AQ	Dr. Stanislav Musil	+421 2 602 94 211 musil@smu.gov.sk	1
TC 4 Information and Training	IT TR	Dr. Stanislav Ďuriš	+421 2 602 94 277 duris@smu.gov.sk	1

ADDRESS OF ORGANISATION

1. Slovak Institute of Metrology (SMU)

63 Karloveská 842 55 Bratislava Slovak Republic

Telephone: +421 2 602 945 03 Fax: +421 2 654 295 92 E-mail: kromkova@smu.gov.sk

Website: www.smu.gov.sk

UKRAINE

Structural Body & Subject Field		Contact Person	Telephone, E-mail	Address
TC 1.1 General Metrology	GM	Dr. Goryslav Sydorenko	+38 057 700 34 09 +38 057 700 34 47 info@metrology.kharkov.ua	1
TC 1.2 Acoustics, Ultrasound, Vibration	AUV	Dr. Vladimir Chaly	+38 0322 79 72 67 +38 0322 74 21 49 v-chalyy@dndi-systema.lviv.ua	3
TC 1.3 Electricity and Magnetism	EM	Prof. Dr. Yuri Pavlenko	+38 057 704 97 07 +38 057 700 34 47 pavlenko@metrology.kharkov.ua	1
TC 1.4 Flow Measurement	F	Prof. Vladimir Bolshakov	+38 057 704 98 36 +38 057 700 34 47 bvb@metrology.kharkov.ua	1
TC 1.5 Length and Angle	L	Dr. Vladimir Kupko	+38 057 704 98 54 +38 057 700 34 47 kupko@metrology.kharkov.ua	1
TC 1.6 Mass and Related Quantities	M	Mrs. Liliya Teplitskaya	+38 057 704-97-22 +38 057 700 34 47 metrology_mass@ukr.net	1
TC 1.7 Photometry and Radiometry	PR	Mr. Leonid Grishchenko	+38 057 704 97 43 +38 057 700 34 47 optolas@metrology.kharkov.ua	1
TC 1.8 Physical Chemistry	QM	Dr. Mikhail Rozhnov	+38 044 526 52 98 +38 044 526 64 60 molar@ukrcsm.kiev.ua	2
TC 1.9 Ionising Radiation and Radioactivity	RI	Dr. Nikolay Kravchenko	+38 057 700 34 52 +38 057 700 34 47 kravchenko@metrology.kharkov. ua	1
TC 1.10 Thermometry and Thermal Physics	T	Dr. Rimma Sergiyenko	+38 057 704 98 00 +38 057 700 34 47 rps@metrology.kharkov.ua	1
TC 1.11 Time and Frequency	TF	Dr. Alexander Tkachuk	+38 057 704 97 96 +38 057 700 34 47 taa@metrology.kharkov.ua	1
TC 1.12 Reference Materials	RM	Mr. Andrey Ivkov	+38 057 704 97 45 +38 057 700 34 47 standard@metrology.kharkov.ua	1
TC 2 Legal Metrology	LM	Dr. Boris Markov	+38 057 704 97 73 +38 057 700 34 47 markov@metrology.kharkov.ua	1
TC 3.1 Quality Forum Technical Committee	AQ	Mrs. Olga Maletskaya	+38 057 704 97 79 +38 057 700 34 47 moe@metrology.kharkov.ua	1
TC 4 Information and Training	IT TR	Dr. Pavlo Neyezhmakov	+38 057 700 34 23 +38 057 700 34 47 pavel.neyezhmakov@metrology. kharkov.ua	1

ADDRESSES OF ORGANISATIONS

1. National Scientific Centre "Institute of Metrology" (NSC "IM")

42 Mironositskaya Str.

61002 Kharkov-2

Ukraine

Telephone: +38 057 700 34 09 Fax: +38 057 700 34 47

E-mail: info@metrology.kharkov.ua Website: www.metrology.kharkov.ua

2. All-Ukrainian State Scientific and Research Center of Standardization, Metrology, Certification and Consumer Protection (Ukrmetrteststandard)

4 Metrologichna Str.

03143 Kyiv Ukraine

Telephone: +38 044 526 52 29 Fax: +38 044 526 64 60

E-mail: ukrcsm@ukrcsm.kiev.ua Website: www.ukrcsm.kiev.ua

3. State Enterprise "Scientific-Research Institute for Metrology of Measurement and Control Systems" (DP "NDI "Systema")

6 Kryvonis Str. 79008 Lviv Ukraine

Telephone: +38 0322 72 89 39 Fax: +38 0322 72 21 49

E-mail: office@dndi-systema.lviv.ua Website: www.dndi-systema.lviv.ua

UZBEKISTAN

Structural Body & Subject Field		Contact Person	Telephone, E-mail	Address
TC 1.1 General Metrology	GM	Mr. Ravshan Rahmanov	+998-71 150 26 01 uzst@standart.uz	2
TC 1.2 Acoustics, Ultrasound, Vibration	AUV	Dr. Ortagoli Hakimov	+998-71 149 35 08 nscenter@standart.uz	2
TC 1.3 Electricity and Magnetism	EM	Mr. Andrey Sadikov	+998-71 253 80 83 nscenter@standart.uz	2
TC 1.4 Flow Measurement	F	Mr. Stanistlav Jebrovskiy	+998-71 150 26 00 nscenter@standart.uz	2
TC 1.5 Length and Angle	L	Mr. Gayrat Tajiev	+998-71 150 26 06 nscenter@standart.uz	2
TC 1.6 Mass and Related Quantities	M	Mr. Makhmud Kayumov	+998-71 150 35 08 nscenter@standart.uz	2
TC 1.7 Photometry and Radiometry	PR	Mr. Abdubori Mavlan-Kariev	+998-71 150 26 09 nscenter@standart.uz	2
TC 1.8 Physical Chemistry	QM	Mr. Abdubori Mavlan-Kariev	+998-71 150 26 09 nscenter@standart.uz	2
TC 1.9 Ionising Radiation and Radioactivity	RI	Mr. Petr Gluhov	+998-71 150 26 05 nscenter@standart.uz	2
TC 1.10 Thermometry and Thermal Physics	Т	Mrs. Assiyam Nadjmitdinova	+998-71 150 26 08 nscenter@standart.uz	2
TC 1.11 Time and Frequency	TF	Mr. Hikmat Mahmudov	+998-71 150 26 05 nscenter@standart.uz	2
TC 1.12 Reference Materials	RM	Mrs. Larisa Kim	+998-71 253 80 83 nscenter@standart.uz	2
TC 2 Legal Metrology	LM	Mr. Andrey Sadikov	+998-712 253 80 83 nscenter@standart.uz	2
TC 3.1 Quality Forum Technical Committee	AQ	Mr. Zayniddin Akhmedov	+998-71 396 85 07 smq@standart.uz	1
TC 4 Information and Training	IT TR	Mr. Vafo Latipov	+998-71 253 85 67 nscenter@standart.uz	2

ADDRESSES OF ORGANISATIONS

1. Uzbek Agency for Standardisation, Metrology and Certification ("UZSTANDARD" Agency)

333"A" Farobiy Str. 100049 Tashkent Republic of Uzbekistan

Telephone: 998-71 144 96 01
Fax: 998-71 144 96 03
E-mail: uzst@standart.uz
Website: http://www.standart.uz/

2. The State Enterprise "Centre of National Standards of Republic of Uzbekistan (SE "CNS Uz")

333"A" Farobiy Str. 700049 Tashkent

Republic of Uzbekistan

Telephone: 998-71 149 35 08 Fax: 998-71 150 35 08

E-mail: nscenter@standart.uz Website: http://www.standart.uz/

METROLOGY INFRASTRUCTURES OF COOMET MEMBER COUNTRIES

ARMENIA



Area: 29.74 thousand km² **Population:** 3.2 million **Capital:** Yerevan

The legal basis of the system for assuring the uniformity of measurements of the Republic of Armenia was laid down in 2004 in the Law on Assuring the Uniformity of Measurements and in the Regulation of the Government of the Republic of Armenia.

Organizational structure of the national metrological system includes a national metrology body and a National Metrology Institute.

The national metrology body is the Ministry of Trade and Economic Development of the Republic of Armenia.

Management: Mr. Nerses Yeritsyan

Address: 5 Mkrtchyan Str., 0010 Yerevan, Republic of Armenia

Telephone: +374 10 52 61 34 **Fax:** +374 10 52 65 77 **E-mail:** minister@minted.am

Major activities are as follows:

- development of public policy in the field of uniformity of measurements;
- coordination of activities of the National Metrology Institute;
- development of legal and other acts regarding uniformity of measurements;
- organisation of development and approval of national standards;
- type approval of measuring instruments imported into Armenia and domestically produced;
- accreditation of laboratories that calibrate measuring instruments;
- organisation and carrying out of state metrological inspection of measuring instruments and control over compliance with metrological rules and regulations;
- licensing of organisations and individuals who produce and repair measuring instruments;
- maintenance of the register of approved measuring instruments and reference materials.

56 units of reference measuring instruments represent the technical basis of the system for assuring uniformity of measurements of the Republic of Armenia.

The duties of the Armenian National Metrology Institute are performed by the Closed Joint-Stock Company "National Institute of Metrology"

Management: Dr. Vahan Sahakyan

Address: 49/2 Komitasi Ave., 0051 Yerevan, Republic of Armenia

Telephone: +374 10 23 26 00 **Fax:** +374 10 23 54 78

E-mail: metrology@metrology.am

Major activities:

According to the Law on Assuring the Uniformity of Measurements of the Republic of Armenia of 26 May, 2004, the National Institute of Metrology under authority of the Ministry of Trade and Economic Development of the Republic of Armenia was established on the basis of the Closed Joint-Stock Company "Metrologist".

The National Institute of Metrology within its lawful competence is responsible for implementing state policy in the field of metrology. The Institute fulfils its responsibilities through the following constituent laboratories, departments and services:

- service of reference materials and scientific research of the use and maintenance of measurement standards, which includes optical-physical, physical-chemical, thermotechnical, radiation and reference material laboratories:
- department of development of normative documents in metrology;
- department of state type approval testing of measuring instruments;
- department of technical maintenance of measuring instruments;
- territorially organised verification laboratories;
- laboratory of mechanical and dimensional measurements;
- laboratory of time and frequency, as well as radio-electronic measurements;
- laboratory of gas and liquid flow measurements;
- laboratory of force, strength and pressure measurements.

Major activities of the Institute are:

- development of normative and methodical documents in metrology;
- provision of reproducibility of units of measurements and their dissemination to the working measuring instruments used by metrological services of organisations, as well as by testing and measuring laboratories accredited by it;
- carrying out of research with the purpose of assuring the uniformity of measurements;
- performance of state tests, verification and metrological attestation of measuring instruments and testing equipment;
- provision of comparisons of national standards with intergovernmental and international standards;
- carrying out metrological attestation of measurement techniques, metrological examination of normative documents in metrology;
- performance of other functions stipulated by the legislation and the Statute of the Institute.

AZERBAIJAN



Area: 86 000 km²
Population: 8.3 million

Capital: Baku

The State Agency on Standardization, Metrology and Patents of the Republic of Azerbaijan is the national body on metrology in this country.

The agency created on the basis of the Decree of the President of the Republic of Azerbaijan No. 623 of 27 December, 2001, is the state body which carries out the state policy in the fields of standardization, metrology, certification, accreditation and protection of the industrial and intellectual proprietary rights.

Director General: Hasanov Ramiz

Address: 124 Mardanov Br. Str., AZ 1147 Baku, Azerbaijan Republic

 Telephone:
 +994124499959

 Fax:
 +994124405224

 E-mail:
 azs@azstand.gov.az

 Website:
 www.azstand.gov.az

The legislative base for the functioning of the State metrological service is the Law of the Republic of Azerbaijan On Assuring the Uniformity of Measurements, Regulations and Decisions of the Cabinet of Ministries of the Republic of Azerbaijan, Statute of the Agency.

The goals of the state metrological service in Azerbaijan are as follows:

- protection of the rights and legitimate interests of the citizens, the established law, order and economy of the Azerbaijan Republic from negative consequences of doubtful measurement results;
- assistance to scientific and technical and economic progress on the basis of application of the state standards of units and use of measurement results of high and guaranteed accuracy expressed in the units admitted for application in the country;
- creation of favourable conditions for international and inter-regional relations;
- regulation of relations of the state bodies of the Republic of Azerbaijan with legal and physical persons in the field of development, manufacture, checking, test, operation, repair, sale, import and export of measuring instruments;
- creation of conditions for mutual recognition of results of tests, verifications and calibrations with a view of elimination of technical barriers in bilateral and multilateral external economic relations.

In the field of metrology, according to the legislation, the State Agency on Standardization, Metrology and Patents of the Republic of Azerbaijan is assigned the following functions:

- definition of the general metrological requirements to measuring instruments, measurement methods and results;
- development and carrying out of the state policy in the field of maintaining the uniformity of measurements;
- state metrological control and supervision;
- establishment of the rules of creation, approval, storage and application of measurement standards;
- approval of the state standards;
- establishment of the rules of certifications of measurement procedures;
- organisation of the elaboration and approval of national standards in the field of metrology;
- accreditation of testing centres;
- approval the list of measuring instruments subject to calibration and checking;
- organisation and coordination of activities of the state inspectors on maintenance of the uniformity of measurements;
- approval of the type of measuring instruments;

- maintenance of the state register of measuring instruments;
- organisation of the activity and accreditation of metrological services of legal and physical entities for the right of carrying out calibration work;
- approval of normative documents on measurement assurance;
- realisation of other functions stipulated by the legislation of the country and Statute about Agency.

In the field of metrology the Agency carries out its authorities through the department of metrology that is part of its structure and corresponding divisions in the regions of the country. The structural divisions of the metrological service include:

- sector of the state tests and certifications of measuring instruments;
- sector of the state control over measuring instruments;
- sector of metrological assurance;
- sector of the state checking of physical and chemical measuring instruments;
- sector of the state checking of measuring instruments in the area of heat engineering and thermal physic;
- sector of the state checking of measuring instruments in the area of radio engineering, dosimetry, electricity, acoustics and optics;
- sector of the state checking of mechanical and geometrical measuring instruments.

In 2006 the employees of the State Agency on Standardization, Metrology and Patents of the Republic of Azerbaijan carried out about 800 000 verifications of measuring instruments.

BELARUS



Area: 207.6 thousand km² **Population:** 10.018 million

Capital: Minsk

The legal basis of the system for assuring the uniformity of measurements of the Republic of Belarus (SAUM) is the Law on Assuring the Uniformity of Measurements and the Directives of the Government of the Republic of Belarus and the State Committee for Standardization of the Republic of Belarus.

The sate metrology service is headed by a national metrology body – State Committee for Standardization of the Republic of Belarus (Gosstandart of Belarus).

Chairperson: Dr. Valery Koreshkov

Address: 93 Starovilensky Trakt, 220053 Minsk, Republic of Belarus

Telephone: +375 17 233 52 13 **Fax:** +375 17 233 25 88 **E-mail:** belst@anitex.by

metrol belst@anitex.by

The major branches of activities are as follows:

- maintenance of the common policy on the matters regarding measurement assurance, as well as coordination of the implementation and development of the SAUM and Accreditation System of the Republic of Belarus;
- development of legal and other directives aiming at assuring the uniformity of measurements; determination of priorities in metrology development;
- organisation of the development and approval of national standards and other normative documents regulating the implementation of the SAUM;
- organisation of the publication and dissemination of technical standards and scientific-technical information in the field of metrology including reference data;
- setting requirements for national measurement standards and measurement standard, as well as rules of their development, approval, maintenance and use;
- type approval of imported and domestically produced measuring instruments;
- organisation and performance of metrological surveillance;
- coordination of the cooperation in the field of metrology and laboratory accreditation at the international level; representation of the Republic of Belarus in the international metrology organisations and collaboration with national metrology and accreditation organisations of other countries.

Gosstandart coordinates the activity of the following:

- Interindustry Commission of time and frequency and determination of the Earth rotation parameters,
- Interindustry Commission of reference substances and materials of composition and properties;
- Interindustry Commission of reference data of physical constants and properties of substances and materials.

Technical basis of the SAUM is represented by 25 national and primary measurement standards of the Republic of Belarus and about 3 500 reference measuring instruments.

The leading organisation in the field of developing and maintaining measurement standards is the National Metrology Institute – **Belarussian State Institute of Metrology (BelGIM).**

Director: Prof. Nikolai Zhagora

Address: 93 Starovilensky Trakt, 220053 Minsk, Republic of Belarus

Telephone: +375 17 233 55 01 **Fax:** +375 17 288 09 38

E-mail: info@belgim.by

coomet@belgim.by

The major activities of BelGIM are as follows:

- development of scientific-methodological and procedural basis of the SAUM;
- coordination and performance of fundamental and practical research;
- development, maintenance and comparison of national measurement standards with the international measurement standards or national measurement standards of other countries;
- recognition of national measurement standards by other countries;
- reproduction of measurement units and their dissemination to the measurement standards at the level of metrology services of enterprises and accredited laboratories;
- development of a uniform scientific-technical policy in the field of metrology and assurance of the uniformity of measurements and laboratory accreditation;
- development of normative methodological document, measurement procedures and methodological documents in the field of metrology;
- development of the criteria for classification of devices as measuring instruments;
- carrying out of state type approval tests, verification, calibration and metrological evaluation of measuring instruments and other metrology related work;
- maintenance of the state register of national measurement standards of the Republic of Belarus and the state register of approved measuring instruments.
- carrying out of metrological evaluation of measurement procedures and calibration of test equipment; accreditation of verification, calibration and testing laboratories;
- participation in the cooperation projects in the field of metrology at regional and international levels as a National Metrology Institute (NMI);
- participation in training and improving the professional skills of personnel engaged in metrology and accreditation activities.

The State Metrology Service includes 15 regional metrology bodies of Gosstandart.

Besides collaboration within COOMET there are good relations in the field of metrology with the following organisations:

- International Organisation of Legal Metrology (OIML);
- International Bureau of Weights and Measures (BIPM);
- International Laboratory Accreditation Cooperation (ILAC);
- Interstate Council on Standardisation, Metrology and Certification (EASC).

BULGARIA



Area: 111 thousand km² Population: 8.34 million

Capital: Sofia

The first Law on Measures and Weights was adopted by the Bulgarian Parliament in 1888 and thus the Bulgarian metrological service was established.

At present the Bulgarian Institute of Metrology (BIM) and the State Agency for Metrological and Technical Surveillance (SAMTS) are the institutions responsible for the implementation of the governmental policy in the field of metrology. These two institutions carry out the activities in the field of metrology for providing traceability, accuracy and reliability of measurements in Bulgaria. Their responsibilities are laid down in the new Law on Measurements in 2002 and its amendment of 2005.

1) Bulgarian Institute of Metrology (BIM)

Acting President: Dr. Katerin Katerinov

Address: 21 "6 Septemvri" Str., 1000 Sofia, Bulgaria

Telephone: +359 2 980 89 20 **Fax:** +359 2 986 17 07

E-mail: k.katerinov@sasm.orbitel.bg

The major objectives of BIM are focused on promoting the governmental policy in the field of metrology and on providing traceability, accuracy and reliability of measurements in Bulgaria. The main BIM activities are performed by the General Directorate "National Centre of Metrology" and General Directorate "Measures and Measuring Instruments".

The General Directorate "National Centre of Metrology" (DG NCM) realises the BIM policy in the field of fundamental metrology

General Director: Mrs. Stefka Hristova

Address: 52-b G.M. Dimitrov Blvd., 1125 Sofia, Bulgaria

Telephone: +359 2 873 52 88 **Fax:** +359 2 873 52 85 **E-mail:** ncmdiv@sasm.orbitel.bg

 \sim

The major activities of DG NCM include:

- developing long-term programme on elaboration and improvement of the national measurement standards;
- development, maintenance and improvement of national measurement standards;
- providing traceability of national measurement standards to international standards or to the standards of the Signatories of the Metre Convention;
- taking measures on assuring traceability of measurements in case if there is no approved national measurement standard or this standard is out of service;
- organisation and participation in international comparisons in order to determine the level of equivalence of national standards;
- dissemination of units from the national measurement standards to the standards of lower level through calibration;
- coordinating the activities of measurement standards' keepers;
- keeping the register of approved national measurement standards;
- carrying out approval of software for processing measurement data;
- certification of reference materials and coordination of implementation of the long-term policy on developing and maintaining certified reference materials;
- keeping the register of certified reference materials and publishing this register in a special edition;

- carrying out the activities on creating the conditions for mutual recognition of measurement standards in the framework of the Agreement (MRA) initiated by the CIPM;
- participation in the work of CIPM, EUROMET and COOMET technical committees.

The General Directorate "Measures and Measuring Instruments" (DG MMI) realises the BIM policy in the filed of legal metrology

General Director: Mr. Ivan Machulekov

Address: 52-b G.M. Dimitrov Blvd., 1125 Sofia, Bulgaria

Telephone: +359 2 873 52 98 **Fax:** +359 2 873 52 98 **E-mail:** metrolog1@abv.bg

The major activities of DG MMI include:

- carrying out type approval of legally controlled measuring instruments;
- keeping the register of approved types of measuring instruments;
- carrying out initial and subsequent verification of measuring instruments;
- carrying out metrological review of measuring instruments;
- participation in the work of OIML, WELMEC and COOMET technical committees;
- carrying out calibration of measuring instruments;
- carrying out type approval and initial and subsequent verification of gambling machines;
- carrying out type approval and review of fiscal devices;
- keeping the register of approved types of fiscal devices.

The General Directorate "Measures and Measuring Instruments" includes the Control and Methodology Department and 6 regional departments.

2) State Agency for Metrological and Technical Surveillance (SAMTS)

Acting President: Dr. Olga Manafova

Address: 21 "6 Septemvri" Str., 1000 Sofia, Bulgaria

Telephone: +359 2 988 32 31

93 96 748

Fax: +359 2 986 17 07 mail@sasm.orbitel.bg

The major objectives of SAMTS are focused on promoting the state policy in the field of legal metrology, surveillance of products placed on the market and/or put into use subject to essential requirements, technical surveillance of high risk equipment, quality control of liquid fuels, and designation of conformity assessment bodies.

The General Directorate "Metrological Supervision" (DG MS) realises the SAMTS policy on metrological supervision in the field of legal metrology:

General Director: Mrs. Pavlina Danailova

Address: 21 "6 Septemvri" Str., 1000 Sofia, Bulgaria

Telephone: +359 2 986 22 66

93 96 801

Fax: +359 2 988 42 85

E-mail: mesdevdiv@sasm.orbitel.bg

mn.dir@sasm.orbitel.bg

The major activities of the General Directorate "Metrological Supervision" include:

- observing the utilisation of the measurement units under the Law on Measurements;
- supervision of manufacturers, importers, repairers and users of measuring instruments subject to legal control under the Law on Measurements;
- authorisation and supervision of persons that verify measuring instruments;

- restricting actions on putting measuring instruments not complying with the requirements of the Law on Measurements and respective directives on the market and/or into service;
- control of persons producing or importing prepackages or measuring container bottles;
- restricting action on putting prepackages or measuring container bottles not complying with the requirements of the Law on Measurements and respective directives on the market and/or into service;
- registration of manufacturers, importers or repairers of fiscal devices;
- registration of installers and repairers of tachographs;
- licensing repairers of electronic taximeters with fiscal memory.

The General Directorate "Metrological Supervision" also includes the Control and Methodology Department and 12 regional departments.

CUBA



Area: 110.86 thousand km² Population: 11.1 million Capital: Havana

The National Research Institute on Metrology (INIMET) of Cuban National Bureau of Standards as primary laboratory is the institution responsible for measurement standards and scientific metrology. It is in charge of the following main activities:

- to implement, improve, maintain and compare, at the international level, the Cuban national measurement standards and transfer their values to secondary standards;
- to carry out research and scientific-technical development in the field of metrology;
- to calibrate working standards and instruments of secondary laboratories;
- to carry out pattern evaluation of measurement instruments;
- to certificate the Cuban reference materials;
- to participate in the elaboration of standards and technical regulations for verification and calibration of measuring instruments;
- to educate and train specialists for legal metrology and industrial calibration laboratories.

INIMET laboratories were accredited by the National Accreditation Body (ONARC) of the Republic of Cuba according to ISO/IEC 17025 standard.

Director: Mr. Antonio Lopez Maidique

Address: Consulado No.206, e/ Animas y Trocadero, Centro Habana

La Habana, CP 10200, Republic of Cuba

Telephone: +537 862 08 79

+537 863 08 91 +537 830 00 22

Fax: +537 867 69 66 **E-mail:** maidique@inimet.cu

The institutions responsible for Legal Metrology are:

a) Cuban National Bureau of Standards (NC) that is responsible for the development of metrology and legal metrology and performs the functions of the central steering body of state administration in the field of metrology.

The main tasks and activities of the NC in the field of metrology are:

- elaboration and realisation of state policy in metrology;
- preparation of laws and decrees referring to metrology;
- steering of metrology in the state in the scope given by the Law on Metrology, including subordinate metrological institutions and Legal Metrology Service;
- methodical activity and supervision of activities in metrology;
- representation of the Republic of Cuba in the international metrological associations.

General Director: Dr. Nancy Fernández Rodríguez
Director of Metrology: Dr. Martín Antunez Ramírez

Address: Calle E No 261 entre 11 y 13- Vedado

La Habana 10400, Republic of Cuba

Telephone: +537 830 08 79

+537 830 08 91

+537 830 00 22

Fax: +537 836 80 48

E-mail: nc@ncnorma.cu, metro@ncnorma.cu

- **b) Territorial Centres of Metrology (TCM)** which are subordinate institutions of NC. These institutions are charged with the following main activities:
- to verify the legal measurement instruments;
- to calibrate the working standards of measurement units (for industry);
- to calibrate the ordinary measuring instruments for customers;
- to carry out the pattern evaluation of measuring instruments.

TCM laboratories were accredited by ONARC according to ISO IEC 17025 standard.

c) The other institutions in the field of legal metrology are **Metrological Laboratories** (Industry). These institutions (established in factories or other organisation) are calibration laboratories. NC authorises some of them for verification of the specified kinds of legal measuring instruments, if necessary.

The calibration of ordinary measuring instruments is performed by more than 170 calibration laboratories, established in the framework of industry or other organisations.

DPR OF KOREA



Area: 121.2 thousand km² **Population:** 22.6 million **Capital:** Pyongyang

The institution responsible for standards, scientific metrology and calibration service in the DPR of Korea is **the Central Institute of Metrology (CIM).** Its main tasks are:

- maintenance and management of national standards for the measurement units of physical quantities;
- fundamental research in the field of metrology;
- development of national standards and reference measuring instruments;
- calibration and international comparison of various kinds of reference measuring instruments;
- pattern approval of measuring instruments;
- research for the establishment of law and regulations on metrology;
- train of experts and dissemination of scientific and technical knowledge on metrology;
- international exchange in the field of metrology.

Director: Mr. Jang Myong II

Address: Sonsin 1 Dong, Sadong District, Pyongyang, DPR of Korea

Telephone: +850 2 381 86 49 **Fax:** +850 2 381 44 80 **E-mail:** pdk0301@163.com

The institution responsible for legal metrology is **the State Administration for Quality Management (SAQM)** responsible for the metrological activity in the country. It is charged with the following main activities:

- to elaborate and realise the state policy in metrology;
- to define and register the measurement standards for the unification of measurement units and maintenance of their accuracy;
- to approve the measuring instruments;
- to accredit the self-calibration institutions;
- to organise and carry out inspection and supervision in the field of metrology;
- to elaborate law, regulations and rules on metrology;
- to approve guidelines to calibration and pattern evaluation.

President: Prof. Dr. Choe Hui Jong

Director: Dr. Jon In Chol (Department of Metrology)

Address: Songyo 1 Dong, Songyo District, Pyongyang, DPR of Korea

Telephone: +850 2 381 **Fax:** +850 2 381 44 10

Territorial Institutions of Calibration are subordinated to SAQM. These institutions are charged with the following main activities:

- to maintain working standards and reference instruments;
- to calibrate ordinary measuring instruments belonging to the category of state calibration within the territory;
- to carry out supervision and control on metrology;
- to give technical and administrative guidance to self-calibration institutions within the territory.

GEORGIA



Area: 69.9 thousand km² **Population:** 4.5 million

Capital: Tbilisi

The legal basis of the system for ensuring the uniformity of measurements of Georgia (SEUM) was laid down in 1996 in the Law on Assuring the Uniformity of Measurements (amended in 2005) and the Resolutions of the Georgian Government.

The organizational structure of the SEUM is represented by:

- State Metrology Service;
- Service of Time and Frequencies (STF);
- Service of Reference Materials (SRM);
- Service of Reference Data (SRD);
- accredited verification, calibration and test laboratories.
- metrological services of state governing bodies and agents of management.

The State Metrology Service is headed by a national metrology body – Georgian National Agency for Standards, Technical Regulations and Metrology (GeoStandMetrology).

Management: Dr. Nodar Khatiashvili

Address: 67 Chargali Str, 0141 Tbilisi, Georgia

Telephone: +995 32 61 35 00 **Fax:** +995 32 61 35 00

E-mail: gnim_metrology@yahoo.com

Major branches of activities are the follows:

- maintenance of common policy on the matters regarding the assurance of the uniformity of measurements, as well as coordination of the implementation and development of the SEUM;
- development of legal and other directives aiming at the assurance of the uniformity of measurements; determination of priorities in improving metrology;
- organisation of the development and approval of national standards, technical regulations and other normative documents regulating the implementation of the SEUM;
- organisation of the publication and dissemination of normative documents and scientific-technical information in the field of metrology;
- type approval of imported and domestically produced measuring instruments;
- organisation and performance of the verification, calibration and metrological certification according to metrological directives pertaining to measurements of radioactive pollution of the environment and raw materials and products;
- coordination of the cooperation in the field of metrology at the international level; representation of Georgia
 in the international metrology organisations and collaboration with national metrology organisations of
 other countries.

The technical basis of the SEUM is represented by 29 national and primary measurement standards of Georgia and about 2 500 reference measuring instruments.

The leading organisation in the field of developing and maintaining measurement standards is **the Institute of Metrology** under GeoStandMetrology.

Acting Director: Dr. Jason Mujiri

Address: 67 Chargali str, 0141 Tbilisi, Georgia

Telephone: +995 32 61 35 00 **Fax:** +995 32 61 35 00

E-mail: gnim_metrology@yahoo.com

The major activities of GeoStandMetrology are as follows:

- development of scientific-methodological and procedural basis of the SEUM;
- coordination and performance of fundamental and practical research with the purpose of assuring the uniformity of measurements;
- development, maintenance and comparison of national measurement standards;
- reproduction of measurement units and their dissemination to measurement standards at the level of metrology services of enterprises and accredited laboratories;
- carrying out of methodical administration in developing programmes of metrological assurance and metrological control over the use and implementation of measuring instruments;
- development of the uniform scientific-technical policy in the field of metrology and assurance of the uniformity of measurements;
- development of normative and methodological documents in the field of metrology;
- carrying out of state type approval tests, state verification, calibration and metrological evaluation of measuring instruments and other metrology related work;
- maintenance of the state register of approved measuring instruments and reference materials and the register of national and primary measurement standards;
- carrying out of metrological evaluation of measurement procedures and test equipment; participation in accreditation of verification, calibration and testing laboratories;
- participation in cooperation projects in the field of metrology at regional and international levels as a National Metrology Institute (NMI);
- participation in training and improving professional skills of personnel engaged in metrology and accreditation activities.

The State Metrology Service includes 9 district metrology bodies of GeoStandMetrology.

GERMANY



Area: 357.021 thousand km² **Population:** 82.1 million

Capital: Berlin

1. The institution responsible for measurement standards and scientific metrology in Germany is Physikalisch-Technische Bundesanstalt (PTB).

It is the National Metrology Institute providing scientific and technical services.

PTB's responsibilities are to achieve progress and ensure reliability in the field of metrology for the benefit of society, economy and science with research, measurement and consulting being its main activities.

Areas of PTB's work are:

- realisation, reproduction and dissemination of the SI units,
- development of national measurement standards,
- determination of fundamental constants and exploitation of quantum effects for realising the units,
- provision of traceable reference materials and determination of material properties,
- development of accurate and reliable measurement procedures,
- contribution to standardization and technology transfer by consulting and seminars,
- pattern evaluations, approval and consulting,
- metrology in commercial transactions, environmental, labour and radiation protection, medicine and safety engineering,
- cooperation in European and international metrology organisations as well as with other metrology institutes.
- technical cooperation with developing and newly industrialised countries

President of the PTB: Prof. Dr. Ernst-O. Göbel Vice-President: Prof. Dr. Manfred Peters Member of Presidential Board: Prof. Dr. Michael Kühne

Address: 100 Bundesallee, D-38116 Braunschweig, Germany

 Telephone:
 +49 531 592 0

 Fax:
 +49 531 592 9292

 E-mail:
 Ernst.O.Goebel@ptb.de

 Manfred Peters@ptb.de
 Manfred Peters@ptb.de

Manfred.Peters@ptb.de Michael.Kuehne@ptb.de

2. Institutions responsible for legal metrology

The basic principles of legal metrology are stipulated by the Units Act and the Verification Act, including the relevant implementing ordinances and additional regulations.

The physical and technical basis of the units to be applied in official and commercial transactions is today's International System of Units (SI).

The tasks of legal metrology are distributed between the federal and the state authorities. PTB is responsible for type examination and type approval of measuring instruments and traceability to national standards used by the verification authorities.

The verification authorities of the sixteen states and the officially approved test centres for measuring instruments in the field of electricity, gas, water and heat are responsible for the individual testing of measuring instruments subject to mandatory verification.

Ständiges Sekretariat der AG ME Hessische Eichdirektion

Address: 3 Holzhofallee, 64283 Darmstadt, Germany

Telephone: +49 6151 125553 **Fax:** +49 6151 125923

E-mail: Hessische-Eichdirektion@t-online.de

3. Institutions responsible for calibration service

Calibrations are performed by the laboratories of **the "Deutscher Kalibrierdienst (DKD)"** founded and operated by the German Government - represented by the Accreditation Body of DKD - and industry. The basis of the DKD accredited calibration laboratories is the traceability of their measurands to the national standards provided by the National Metrology Institute, the PTB. Industrial laboratories and other institutes which, due to their trained personnel and equipment, are able to perform measurements with the required uncertainty and whose standards are traceable to the national standards of the PTB, are accredited as calibration laboratories.

Accreditation is granted by the Accreditation Body of DKD after assessment of the laboratories in accordance with the standard DIN EN ISO/IEC 17025. Membership of DKD in the European Cooperation for Accreditation (EA) and the International Laboratory Accreditation Cooperation (ILAC) ensures the recognition of the calibration certificates in all member countries worldwide. At present there are about 400 accredited calibration laboratories for electrical, magnetic, dimensional, mechanical, acoustical, fluid and optical quantities, as well as for chemical analysis, reference materials, time and frequency, ionising radiation and radioactivity, temperature and humidity.

Head of DKD Accreditation Body: Dipl-Ing. Michael Schaller

Address: Post Box 3345, 38023 Braunschweig, Germany

Telephone: +49 531 592 1900 **Fax:** +49 531 592 1905

E-mail: Michael.Schaller@dkd.eu

KAZAKHSTAN



Area: 2 717.3 thousand km² **Population:** 15.4 million

Capital: Astana

The activity in the field of metrology in the Republic of Kazakhstan is regulated by the Law on Assuring the Uniformity of Measurements establishing legal, economic and organizational bases of the uniformity of measurements. This Law is directed towards the protection of the rights and legitimate interests of the citizens and economy of the Republic of Kazakhstan from the consequences of invalid measurement results.

The Committee on Technical Regulation and Metrology of the Ministry of Industry and Trade of the Republic of Kazakhstan (MEMST of the Republic of Kazakhstan) is a national body state administration in charge of activities aimed at ensuring the uniformity of measurements.

Chairperson: Mr. Gabit Mukhambetov

Address: Center of Measurement Standards, Left bank of the river Ishim, Orynbor Str., 11,

010000, Astana, Republic of Kazakhstan

Telephone: +7172 79 33 01 **Fax:** +7172 24 02 48 **E-mail:** sdandart@memst.kz

In accordance with the Law of the Republic of Kazakhstan on Assuring the Uniformity of Measurements the main objectives of MEMST are:

- formation and realisation of the state policy on assuring the measurement uniformity;
- coordination of activity of the metrology services of the Republic of Kazakhstan;
- establishment of measurement units admitted for application;
- organisation of the conducting of research activities in the field of metrology;
- establishment of the rules of creation, approval, storage, use and comparisons of state measurement standards, improvement of measurement standard base of measurement units of the Republic of Kazakhstan;
- organisation of comparisons of the results of verifying and calibrating measuring instruments;
- establishment of a classification of national standards of units used on the territory of the Republic of Kazakhstan;
- determination of the order of developing and approving normative documents on the assurance of measurement uniformity;
- determination of the common metrological requirements to instruments, measurement methods and results, procedures for verifying measuring instruments;
- determination of the order of using, producing and repairing measuring instruments;
- organisation of the maintenance of the register of the state system of assuring measurement uniformity;
- organisation and carrying out of the state metrological supervision;
- representation of the Republic of Kazakhstan in international and regional metrological organisations;
- organisation of the proficiency development of specialists in the field of metrology.

Republic State Enterprise "Kazakhstan Institute of Metrology" (KazInMetr) is a state scientific metrological centre.

General Director: Mr. Yerkin Lebayev

Address: Center of Measurement Standards, Left bank of the river Ishim, Orynbor Str., 11,

010000, Astana, Republic of Kazakhstan

Telephone: +7172 24 09 15 **Fax:** +7172 79 32 99

E-mail: <u>info@kazinmetr.org</u>, legal@kazinmetr.org

KazInMetr carries out:

- activity directed towards the development of metrology in the republic;
- scientific-technical, practical, organizational-methodical activities with the purpose of improving the bases of the state system of assuring measurement uniformity of the Republic of Kazakhstan;
- creation and improvement of the measurement standards base of measurement units of the Republic of Kazakhstan;
- participation in improving the legal and normative bases of the state system of assuring measurement uniformity; harmonisation of normative documents on metrology with international requirements;
- pattern approval of measuring instruments produced in the Republic of Kazakhstan and imported measuring instruments on type approval;
- information and normative support of organisations in the field of metrology;
- raising of the level of skills and further training of specialists in the field of metrology.

The international cooperation of MEMST in the field of metrology is realised within:

- International Organisation of Legal Metrology (OIML);
- General Conference on Weights and Measures (CGPM);
- Euro-Asian Cooperation of National Metrological Institutions (COOMET);
- Euro-Asian Council for Standardization, Metrology and Certification (EASC);
- Interregional Standardization Association (IRSA);
- Central-Asian Cooperation on Metrology, Accreditation, Standardization and Quality (CAC-MAS-Q).

In 2007 KazInMetr became the full member of the International Measurement Confederation (IMEKO) and an associate member of the Asia Pacific Metrology Programme (APMP).

The state service of reference substances and materials of composition and properties hosted by KazInMetr have been performing since 2002; the state service of time and frequency and the state service of reference data of physical constants and properties of substances and materials have been performing since 2005.

Besides the State Metrology Service the national metrology infrastructure includes a number of organisations, accredited for calibration of measuring instruments, evaluation of measurement methods, as well as a number of organisations having licenses for manufacturing and repairing measuring instruments.

KYRGYZSTAN



Area: 198.5 thousand km² **Population:** 5.141 million

Capital: Bishkek

The National Institute of Standards and Metrology of the Republic of Kyrgyzstan "Kyrgyzstandard" (NISM) acts as a National Metrology Institute.

Director: Mr. Patidin Atakhanov

Address: 197 Panfilov Str., 720040 Bishkek, Kyrgyz Republic

Telephone: +996 312 62 68 70

+996 312 62 57 34

Fax: +996 312 66 13 67 **E-mail:** nism@nism.gov.kg

metrolog@nism.gov.kg

The basic activities include:

• realisation and dissemination of base and derived units of the International System of Units (SI); development, maintenance and improvement of the national standards of physical quantities;

- rendering of verification (calibration) and measurement services to manufacturers and organisations having different ownership on voluntary basis;
- establishment and development of a national legal metrology system. The purposes of this system are to maintain traceability of measurement results, secure public interests and encourage fair competitiveness between vendors;
- type approval and metrological evaluation of measuring instrument; maintenance of the state register of approved measurement instruments and reference materials;
- participation in comparisons of measurement standards at international, regional and national levels for the purpose of their technical maintenance and worldwide recognition of the resulting calibration and measurements certificates;
- development and evaluation of measurement procedures;
- research in the field of metrology;
- participation in the activities of regional and international metrology organisations;
- participation in training and raising the level of skills of experts in metrology.

At the international level NISM cooperates with:

- International Organisation of Legal Metrology;
- Interstate Council for Standardization, Metrology and Certification;
- Interregional Association for Standardization;
- International Conference of Measurement Laboratories.

LITHUANIA



Area: 65.2 thousand km² Population: 3.4 million Capital: Vilnius

The Law on Metrology was adopted on 9 July, 1996 (amended on 30 October, 2006). **The State Metrology Service** is a governmental institution responsible for the formation of and organizational measures to implement the metrology policy in Lithuania, coordination of uniformity of measurements, carrying out of legal metrological regulation, as well as exchange of information on verification of measuring instruments and notification of bodies with other EU member states.

State Metrology Service (VMT)

Director: Mr. Osvaldas Staugaitis

Address: 31 Algirdo, 03219 Vilnius, Lithuania

Telephone: +370 5 213 33 49 **Fax:** +370 5 216 34 69 **E-mail:** info@lvmt.lt

According to the Resolution of the Government of Lithuania No. 518 of 1997 on the approval, maintenance and use of national measurement standards, and approval of the list of national measurement standards and national standard laboratories, authorised to develop and keep national standards, the development of national measurement standards is being performed in line with the above mentioned Resolution, as well as the needs and economical capabilities of Lithuania.

A decentralised system exists in Lithuania. Thus, the State Metrology Service performs the functions of a National Metrology Institute together with state laboratories, which are authorised to develop and maintain national measurement standards.

Verification and calibration of measuring instruments and standards is performed by the state companies – Vilnius, Kaunas, Klaipeda, Siauliai and Panevezys Metrology Centres (MCs), as well as other accredited laboratories for calibration of certain measuring instruments. They are also authorised to perform verification of measuring instruments by the State Metrology Service.

The Lithuanian Metrology Inspectorate was established according to the Law on Metrology.

There exists **the Technical Committee "Metrology"** within the Lithuanian Standards Board. Its main responsibility is to draft written standards in the metrology field.

The Institute of Metrology is a research and educational unit at the Kaunas Technology University.

MOLDOVA



Area: 33.7 thousand km² **Population:** 4.59 million **Capital:** Kishenev

According to the Law on Metrology adopted in the Republic of Moldova in 17 November, 1995 the state administration in the field of metrology is entrusted to **the Service of Standardization and Metrology of Republic of Moldova ("Moldova-Standard")** being a National Metrology Body.

The activity of the Service in the field of metrology is regulated by the Law on Metrology, decrees of the President, government directives, international agreements and conventions of which Moldova is a signatory.

According to the authorities delegated the Service performs the following:

- ensures the uniformity and accuracy of measurements in the republic; sets out rules of the development, maintenance and implementation of measurement standards;
- determines general technical requirements to measuring equipment, measurement procedures and processing of measurement data;
- performs metrological surveillance and control over compliance with technical regulations, standards, metrological norms and other relevant documents;
- performs type approval of measuring instruments liable to state surveillance;
- represents the Republic of Moldova in international and regional metrology organisations.

The technical Committee of Standardisation in the field of metrology (TC-6) was established at the "Moldova-Standard" for the purpose of developing normative documents.

Organizational structure of the national metrology system consists of the National Metrology Body and manufacturers.

The National Metrology Body ("Moldova-Standard") includes the Metrology Department, National Institute of Standardization and Metrology, a number of regional centres of metrology and standardization and the Metrology Inspection of Petroleum Products and Services under the Central State Inspection of Market Surveillance, Metrology and Protection of Consumers.

As a result of the reorganisation of the National Centre of Standards, Metrology and Certification in March, 2002 the National Institute of Standardization and Metrology (INSM) was established and charged with scientific research and practical metrology activities.

In the field of scientific metrology:

- creation, development, storage and maintenance of national measurement standards of units;
- traceability of national measurement standards to SI units through their calibration in the countries having primary standards that obtained the universal recognition;
- confirmation of equivalence of national measurement standards to standards of the same units from other countries on the ground of the results of bi- and multilateral interlaboratory comparisons;
- transfer of the sizes of units from national measurement standards to reference standards of legal entities in accordance with the approved calibration hierarchies;
- elaboration and metrological review of the drafts of normative technical documents on the assurance of measurement uniformity, harmonised in regard to the metrological requirements with international and national documents of other countries;
- training of local specialists in the field of metrology;
- participation in regional metrological organisations and collaboration with related metrological institutions of different countries in specific areas of activity;

INSM and Regional Centres for Standardisation and Metrology carry out activity in the field of applied metrology:

- linking of reference standards and, if necessary, measuring instruments used by testing and calibration laboratories of scientific institutions, industrial enterprises and other entities of national economy with national measurement standards;
- accreditation of the metrological services of legal entities for the right to carry out calibration and assign the status to reference measuring instruments; type approval tests;
- verification of measuring instruments in the legal area according to the Law on Metrology.

According to the delegated authorities the Metrology Department performs the following in the field of legal metrology:

- elaboration of basic conceptions and long-term development programmes for national metrology system;
- drafting and submission to the Government of legislative and other normative acts in the field of metrology harmonised with the similar current acts of the European countries;
- coordination of activity and methodical guidance of metrological service of economic agent;
- elaboration of general metrological rules, requirements and norms, as well as procedural instructions and recommendations;
- licensing of activities and registration of legal and natural bodies for the right to perform manufacture, repairing, calibration, verification, installation, sale and rent of measuring instruments;
- certification of engineering personnel as state verification officers;
- collaboration with national bodies of legal metrology from other countries within international and regional organisation.

State metrology surveillance over measurements in the republic (i.e. manufacture and importing of measuring instruments and their use; compliance with metrological norms and directives; activities of authorised laboratories) is carried out by the Metrology Inspection of Petroleum Products under the Central State Inspection of Market Surveillance, Metrology and Protection of Consumers under the "Moldova-Standard".

Service of Standardization and Metrology of Republic of Moldova ("Moldova-Standard")

General Director: Mr. Sergiu BABAN

Address: 28 E. Coca Str., 2064 Kisheney, Republic of Moldova

Telephone: +3732 2 75 04 60

+3732 2 74 85 88

Fax: +3732 2 75 05 81

E-mail: moldovastandard@standard.md

Metrology Department of "Moldova-Standard"

Head of the Department:Mrs. Elena HANGANU

Telephone: +3732 2 71 92 39 **Fax:** +3732 2 75 05 81 **E-mail:** ehanganu@standard.md

National Institute of Standardization and Metrology (INSM)

General Director: Dr. Alexandru TARLAJANU

Address: 28 E. Coca Str., 2064 Kishenev, Republic of Moldova

Telephone: +3732 2 75 04 65

+3732 2 74 85 42

Fax: +3732 2 24 54 14 insm@standard.md

ROMANIA



Area: 237.5 thousand km² Population: 2.5 million Capital: Bucharest

The basic act establishing the national policy in the field of metrology is the Ordinance No. 20/1992 approved by the Law No. 11/1994. This document concerns the use of the units of measurement, the national system of measurement standards and the regime of the measuring instruments subject to the state metrological control.

The official body responsible for metrology in Romania is **the Romanian Bureau of Legal Metrology (BRML)**, a public institution, with non-budgetary financing, subordinated to the Ministry of Industry and Trade. BRML coordinates the metrology activities at the national level and supervises the compliance with the legal metrology regulations throughout the country.

FUNDAMENTAL METROLOGY

The National Institute of Metrology (INM), with laboratories in Bucharest and Timisoara, provides the maintenance and development of the national measurement standards, their comparison with international measurement standards and measurement standards of other countries, dissemination of the measurement units to secondary standards, higher echelon calibration services, scientific research in metrology and other related fields. INM is a research institute, part of the BRML structure, which is financed mainly through services paid by customers, but also through contracts financed by the Ministry of Research and Technology.

National Institute of Metrology (INM)

Director: Dr. Dragos Boiciuc

Address: 11 Sos. Vitan Bârzesti, 75669 Bucharest, Romania

Telephone: +40 1 334 55 20 **Fax:** +40 1 334 53 45 **E-mail:** office@inm.ro

The activity of INM covers the major part of physical quantities (dimensional, mechanical, electromagnetic, thermal, optical, physical-chemical, ionising radiation, etc.). The primary standards realised at INM are assessed by BRML and declared as national standards through governmental decisions.

INM also performs calibrations, metrological verifications, pattern and conformity tests, high accuracy measurements, certification of reference materials, international cooperation; offers consultations, education and training in metrology; prepares calibration/verification procedures and publishes the technical quarterly journal METROLOGIE.

APPLIED METROLOGY

The set of activities aimed at assuring traceability of all measurements in industry and other areas – also known as industrial or technical metrology – is carried out mainly in the regional metrology laboratories belonging to BRML and in the laboratories of enterprises and factories.

LEGAL METROLOGY

According to the legislation in force in the field of metrology, the measuring instruments used in areas of public interest, such as trade, health, environment protection, etc. are submitted to the metrological control of the state. This control is exerted mainly through the authorisation of metrology laboratories and their personnel, through pattern approval of measuring instruments manufactured in Romania or imported, through initial and subsequent metrological verifications and through metrological surveillance.

BRML issues orders and regulations in the field of legal metrology, performs inspections and applies sanctions, represents Romania in the international organisations of legal metrology.

RUSSIA



Area: 17.075 million km² **Population:** 145.2 million

Capital: Moscow

All activity on assuring the uniformity of measurements in Russia is based on the Law of the Russian Federation On Assuring the Uniformity of Measurements issued in 1993.

Realisation of this Law, fulfilment of metrological functions and terms of reference are approved by Decrees of the President of the Russian Federation No. 314 of 9 March, 2004 and No. 649 of 20 May, 2004 and Government Directive No. 294 of 17 June, 2004 and are implemented by **the Federal Agency on Technical Regulation and Metrology (Rostechregulirovanie)** under the Federal Ministry of Industry and Energy (Minpromenergo of Russia).

Deputy Chairperson of Rostechregulirovanie: Dr. Vladimir Krutikov

Head of the Metrology Department: Dr. Vladimir Lakhov Address: 9 Leninsky Prospect, 117049 Moscow, Russia

Telephone: +7 495 236 75 60

+7 495 236 30 42

Fax: +7 495 236 62 31

E-mail: info@gost.ru, metrol@gost.ru

The State Metrology Service is a subsidiary of Rostechregulirovanie, which incorporates state scientific centres (research metrology institutes) and local metrology departments of different regions of Russia.

Rostechregulirovanie coordinates the work of the following:

- State Service of Time and Frequency and Determination of the Earth Rotation Parameters (GSVCH),
- State Service of Reference Substances and Materials of Composition and Properties (GSSO);
- State Service of Reference Data of Physical Constants and Properties of Substances and Materials (GSSSD).

Rostechregulirovanie carries out state metrological surveillance and control over measuring instruments.

State metrology control covers the following:

- type approval of measuring instruments;
- verification of measuring instruments;
- licensing of the activities pertaining to manufacture and maintenance of measuring instruments by legal and natural persons.

State metrology surveillance is carried out over the following:

- manufacture, maintenance and application of measuring instruments; certified measuring procedures; measurement standards; compliance with metrological norms and directives;
- amount of goods excepted from commercial transactions:
- amount of goods in any type of packages in manufacture and trade.

International cooperation in the field of metrology is performed with the following organisations:

- International Organisation of Legal Metrology (OIML);
- International Bureau of Weights and Measures (BIPM);
- Euro-Asian Cooperation of National Metrological Institutions (COOMET);
- Asia-Pacific Legal Metrology Forum (APLMF);
- Interstate Council for Standardisation, Metrology and Certification;

• other international and regional organisations.

Metrology institutes of Russian Federation actively collaborate with national metrology centres of Germany, the USA, the United Kingdom, Slovakia, Japan, France, Korea, China, India, Belarus, Ukraine, Lithuania, etc.

A good deal of activity regarding the development, improvement, maintenance and use of national measurement standards, as well as research in the field of metrology including elaboration of normative documents of GSI is carried out by Metrology Institutes of Rostechregulirovanie. The majority of these institutes is specialised in specific fields of measurements and accredited as state test centres of measuring instruments and verification centres, as bodies on voluntary certification of measuring instruments and at the same time authorised to perform accreditation in the Russian System of Calibration (RSC).

All-Russian Scientific Research Institute of Metrology named after D.I. Mendeleev (VNIIM)

General Director: Dr. Nikolay Khanov

Address: 19 Moscovsky Prospect, 198005 Sankt-Petersburg, Russia

Telephone: +7 812 251 76 01 **Fax:** +7 812 713 01 14 **E-mail:** info@vniim.ru

The institute is a successor of the Central Chamber of Measures and Weights, which was the first and one of the oldest world metrology institutions. It is also the biggest world research centre of metrology and leading Russian research organisation in the field of metrology that maintains national measurement standards and has an official status of the State Research Centre of the Russian Federation.

All-Russian Scientific Research Institute of Metrological Service (VNIIMS)

Director: Dr. Sergey Kononogov

Address: 46 Ozernaya Str., 119361 Moscow, Russia

Telephone: +7 495 437 55 77 **Fax:** +7 495 437 56 66 **E-mail:** office@vniims.ru

VNIIMS is the main centre of the State Metrology Service and a centre of measurement standards in the filed of measurements of middle pressures, geometric parameters of machined surfaces and form deviations of rotating objects, high and ultrahigh voltages, etc.

It carries out research and engineering in the filed of scientific, applied and legal metrology.

VNIIMS is a scientific-methodological centre of the Russian System of Calibration (RSC) and certification of measuring instruments. It also acts as a head organisation of Gosstandart of Russia in international cooperation and training and information resource in the field of metrology.

All-Russian Scientific Research Institute of Optical and Physical Measurements (VNIIOFI)

General Director: Dr. Vyacheslav Ivanov

Address: 46 Ozernaya Str., 119361 Moscow, Russia

Telephone: +7 495 437 56 33 **Fax:** +7 495 437 31 47 **E-mail:** vniiofi@vniiofi.ru

VNIIOFI is a leading organisation on assuring the uniformity of measurements in the fields of photometry; radiometry (including laser ranges); spectrum radiometry and spectrum photometry; calorimetry; radiation pyrometry; sensitometry and densitometry; refractometry and polarimetry; measurements of the parameters of fibre cable networks; measurements of optical parameters of transient processes; measurements of pulse parameters of electric and magnetic fields.

VNIIOFI is designated as:

• a head organisation in the field of measurements of optic-physical parameters and parameters of transient

processes;

- a head organisation for assuring the uniformity of measurements in medical treatment and in manufacture of medical equipment;
- a head organisation for assuring the uniformity of measurements in the field of non-destructive testing.

VNIIOFI accommodates Russian technical committee on ultra-quick photography and photonics, which includes leading scientists of Russian academy of sciences, experts of higher education system and industry.

Ural Scientific Research Institute of Metrology (UNIIM)

General Director: Prof. Dr. Vladislav Leonov

Address: 4 Krasnoarmeiskaya Str., 620219 Ekaterinburg, Russia

Telephone: +7 3433 50 26 18 **Fax:** +7 3433 50 20 39 **uniim@uniim.ru**

UNIIM is a head organisation of the State Service of Reference Materials.

It maintains measurement standards of temperature and thermo-physics parameters, surface density and thickness of coatings, magnetic and electrical parameters, linear and angular parameters, deformation and force, mass, vibration, torque and mechanical capacity, humidity of solid substances, physical-chemistry composition of substances and materials, pressure, etc.

UNIIM is also designated as:

- a scientific-methodological metrology centre in the field of certification and testing of foods;
- a scientific-methodological centre for initiation of inter-laboratory proficiency tests;
- a scientific-methodological centre of the Accreditation System for Analytical Laboratories;
- a scientific-methodological centre for metrological evaluation of measurement procedures for determination of chemical composition.

UNIIM is accredited as:

- a certification body for voluntary certification of products made of ferrous and non-ferrous metals;
- an accreditation body in the Accreditation System for Analytical Laboratories.

Siberian Scientific Research Institute of Metrology (SNIIM)

Director: Mr. Vladimir Matveychuk

Address: 4 Dimitrov Prospect, 630004, Novosibirsk, Russia

Telephone: +7 3832 10 08 14 **Fax:** +7 3832 10 13 60 **E-mail:** info@sniim.siberia.net

SNIIM is a centre of measurement standards of the parameters of electro-radio circuits at high and ultra high frequencies; electro-magnetic features of materials at high and ultra high frequencies; heavy loads; thermal torrents; weak magnetic fields; minor lengths; parameters of laser spectrum.

SNIIM maintains reference astro-optical installation, which is a part of the equipment of the State Service of Time and Frequencies (GSVCH) and the determination of the Earth rotation parameters.

SNIIM is a secondary organisation of measurement standards in Russia.

All-Russian Scientific Research Institute of Flowrate Measurement (VNIIR)

Director: Dr. Valery Ivanov

Address: 7a, 2 Azinskaya Str., 420029, Kazan, Russia

Telephone: +7 8432 76 70 62 **Fax:** +7 8432 76 00 32 **E-mail:** vniir@mi.ru

It is a central organisation in the field of flow measurements of liquids and gases; capacity of vessels and level measurements; physical-chemistry measurements of composition and properties of oil and mineral oils.

VNIIR has modern test facilities based on 7 national measurement standards and 40 reference measuring instruments.

All-Russian Scientific Research Institute of Physico-Technical Measurements (VNIIFTRI)

General Director: Dr. Petr Krasovsky

Address: Mendeleevo, Solnechnogorsky District, 141570, Moscow Region, Russia

Telephone: +7 495 535 92 10

+7 495 535 24 01

Fax: +7 495 535 93 34

+7 495 535 73 86

E-mail: director@vniiftri.ru

VNIIFTRI is a leading organisation in the field of measurements of time and frequency, big and ultra-big lengths, time-coordinates measurements, radio-technical and radio-electronic measurements at high and ultra-high frequencies in closed channels and open media (electromagnetic filed), electromagnetic compatibility, density of electromagnetic flux power, electromagnetic and magnetic measurements, thermo-physical and temperature measurements, measurements of hardness of metals and high pressure measurements, acoustic and hydro-acoustic measurements, electro-chemical measurements (pH, ionometry, conductometry), measurements of physical-chemical composition of substances and materials, acoustic-optical measurements, measurements of dispersion parameters of aerosols, dredges and powders, measurements of parameters of ionising radiation and constants.

VNIIFTRI establishes the Institute of Time and Space Metrology serving reliable ground for the State Service of Time and Frequencies and Monitoring of the Earth Rotation.

VNIIFTRI is an advisory company of UNIDO and supports projects on scientific-technical development of metrology institutes of different countries through supplying reference equipment and training of personal.

VNIIFTRI has an official status of the State Research centre of the Russian Federation.

Eastern-Siberian Scientific Research Institute of Physico-Technical and Radiotechnical Measurements (VS NIIFTRI)

Acting as Director: Mr. Viktor Egorov

Address: 57 Borodina Str., 664056, Irkutsk, Russia

Telephone: +7 3952 46 83 03 **Fax:** +7 3952 39 38 48 **E-mail:** egorov@niiftri.irk.ru

VS NIIFTRI is a basic centre of metrology in astro-optical and satellite monitoring of the Earth rotation parameters. It also performs measurements of time and frequency in the region of Eastern Siberia and maintains national standards of dielectric parameters of materials and substances and humidity of gases.

All-Russian Scientific Research Institute of Physico-Technical Measurements "DALSTANDART" (VNIIFTI "DALSTANDART")

Director: Dr. Yuri Lykov

Address: 65 K. Marks Str., 680000, Khabarovsk, Russia

Telephone: +7 4212 32 92 68 **Fax:** +7 4212 32 55 04 +7 4212 32 92 68

D 1 + 1 + 0 1:11

E-mail: Dalstandart@poli.khv.ru

DALSTANDARD performs functions of a centre of standards in the field of time and frequency measurements for the Far East region.

In 2007 VS NIIFTRI and VNIIFTI "DALSTANDART" were transformed to the branches of VNIIFTRI in accordance with the Decree of the Government of the Russian Federation.

The Main Scientific Centre of Metrology under the State Service of Standard Reference Data (GNMC "GSSSD") is a structural unit of Russian Scientific and Technical Centre of Information on Standardization, Metrology and Conformity Assessment (STANDARTINFORM).

Head of GNMC "GSSSD", First Deputy Director of STANDARTINFORM:

Prof. Dr. Alexander Kozlov

Address: 4 Granitny Lane, 103001, Moscow, Russia

Telephone: +7 495 290 43 09 **Fax:** +7 495 290 68 28 **E-mail:** fond@vniiki.ru

Center for Surface and Vacuum Research (NICPV)

Director: Prof. Dr. Pavel Todua

Address: 40/1 Novatorov Str., 119421, Moscow, Russia

Telephone: +7 495 935 97 77 **Fax:** +7 495 935 9690 **E-mail:** fgupnicpv@mail.ru

The major activities of NICPV are as follows:

- complex study of structure, physicochemical and mechanical surface properties of a solid body and thin films, characteristics of processes at the phase thresholds with the purpose to develop high-accuracy measurement instruments and methods for controlling technological processes aiming at assuring the uniformity of measurements in future technologies including micro- and nanotechnologies;
- research in the field of fundamental metrology directed at the creation and improvement of methods and high-accuracy measuring instruments, development of physical principles and creation of reference base of a new generation;
- development of methods and instruments for disseminating physical units from current measurement standards to working instruments, development of special standards for assuring uniformity of measurement in micro-, opto-, nanoelectronics, nanotechnology, precise machine-building, instrument making, biotechnology and microbiology, genetic engineering, chemistry and chemical technology;
- development of high-accuracy measurement instruments in the field of geometrical, vibro-acoustic and physicochemical measurements.

NICPV carries out tests and quality surveillance of production in science intensive technologies and industries with the purpose of conformity assessment.

The research facilities of NICPV include standards and high-accuracy apparatuses for length measurement in micro- and nano-meter ranges.

SLOVAKIA



Area: 49.035 thousand km² **Population:** 5.34 million **Capital:** Bratislava

1. The institution responsible for national and other measurement standards and the scientific metrology in Slovakia is the Slovak Institute of Metrology (SMU) functioning according to the Law of Metrology as a state administrative body for this field.

It is charged with the following main activities:

- implementation, improvement, maintenance and comparison of Slovak national standards of physical and technical quantities and their measurement units at the international level, as well as transfer of their values to secondary standards;
- representation of the Slovak Republic in international metrology organisations;
- carrying out of research and scientific-technical development in the field of metrology;
- calibration of working standards and working instruments;
- carrying out of pattern approval of measuring instruments;
- supervision over the realisation of Slovak Certified Reference Materials;
- elaboration of technical regulations, decrees to the Law on Metrology which determine technical requirements, methods of verification of measuring instruments subject to verification and pattern approval;
- education and training of specialists for legal metrology and industrial calibration laboratories;
- certification of personnel for metrology;
- performance of specialised and technical activities in the field of accreditation and certification bodies and other specialists dealing with technical measurements.

General Director: Dr. Stanislav Ďuriš

Address: 63 Karloveská, 842 55 Bratislava, Slovak Republic

Telephone: +421 2 602 94 491 **Fax:** +421 2 654 29 592 **E-mail:** duris@smu.gov.sk

2. The institutions responsible for legal metrology are:

Slovak Office of Standards, Metrology and Testing (UNMS) as the central steering body of the state administration in the field of metrology.

The main tasks and activities of the UNMS in the field of metrology are:

- elaboration and realisation of the state policy in metrology;
- preparation of legislative and legal rules (laws and decrees) referring to metrology, standardisation and testing;
- steering of metrology in the state in the scope given by the Law on Metrology, including subordinate metrology institutions (Slovak Institute of Metrology, Slovak Legal Metrology, Slovak Metrology Inspectorate);
- methodical activity and supervision of activities in metrology.

President of UNMS: Mr. Peter Lukáč

Address: Štefanovičova 3, P.O.Box 76, 810 05 Bratislava, Slovak Republic

Telephone: +421 2 524 91 085 **Fax:** +421 2 524 91 050

E-mail: predseda@normoff.gov.sk

Slovak Legal Metrology (SLM) - a subordinate institution of the UNMS. This institution is charged with the following main activities:

• verification of legal measuring instruments;

- calibration of reference and working standards of measurement units (for industry);
- calibration of ordinary measuring instruments for customers;

• carrying out of pattern evaluation of measuring instruments.

Director General: Mr. Jaromír Markovič

Address: 31 Hviezdoslavova, 975 90 Banská Bystrica, Slovak Republic

Telephone: +421 48 4719122

+421 48 4719125

Fax: +421 48 4719158 **E-mail:** markovic@slm.sk

Slovak Metrology Inspectorate (SMI) – a subordinate institution of the UNMS.

Its main task is to perform the state metrology supervision over the compliance with the Law on Metrology and Decrees and supervision over measuring instruments and measurements in the Slovak Republic.

Director: Mr. Alfonz Cocher

Address: 1 Geologická, 822 11 Bratislava, Slovak Republic

Telephone: +421 2 45525529 **Fax:** +421 2 455 25 473 **E-mail:** cocher@smi.sk

Other institutions in the field of legal metrology are **State Centres of Metrology.** These institutions (established in factories or other organisations) are authorised by the UNMS for verification of specified kinds of legal measuring instruments.

3. Institutions responsible for calibration service.

Services in calibration of ordinary measuring instruments are performed by **Centres of Calibration Services** (calibration laboratories) established in the framework of factories or other organisations. A part of them was accredited by SNAS according to the European standard ISO/IEC 17025.

UKRAINE



Area: 603.7 thousand km² **Population:** 44.8 million

Capital: Kyiv

The legal basis of the state metrology system of Ukraine is laid down by the Ukrainian Law on Introduction of Changes to the Law of Ukraine on Metrology and Metrological Activities which came into force on 1 January, 2005.

The state metrological system consists of the State Metrology Service and metrology services of state departments, manufacturers and organisations.

The state metrological system includes:

- Derzhspozhyvstandart of Ukraine and its divisions;
- National Scientific Metrology Centre;
- state scientific metrology centres;
- regional metrology bodies;
- State Service of Time and Reference Frequencies;
- State Service of Reference Materials;
- State Service of Reference Data on Physical Constants and Properties of Substances and Materials.

All the activities on assuring the uniformity of measurements and improvement of the state metrology system are regulated by the authorised central executive organisation in the filed of metrology – the State Committee of Ukraine for Technical Regulation and Consumer Policy (Gospotrebstandart of Ukraine).

Chairperson: Mrs. Larisa Losyuk

Address: 174 Gorky Str., Kyiv, 03680, Ukraine

Telephone: +38 044 226 29 71 **Fax:** +38 044 226 29 70 **E-mail:** dssu@dssu.gov.ua

The major objectives of Gospotrebstandart are focused on the implementation of common scientific and technical policy in the filed of measurements including:

- organisation and carrying out of fundamental research in the field of metrology;
- organisation and development of national measurement standards;
- determination of procedures for development, approval, registration and maintenance of measurement standards, as well as their comparisons with domestic and international measurement standards;
- determination of general metrological requirements to measuring instruments, equipment and measurement procedures;
- type approval of measuring instruments;
- determination of general requirements for calibration and metrological evaluation of measuring instruments;
- participation in cooperation projects with international organisations.

NATIONAL SCIENTIFIC METROLOGY CENTRE

National Scientific Centre "Institute of Metrology" (NSC "IM")

General Director: Dr. Goryslav Sydorenko

Address: 42 Mironositskaya Str., Kharkiv-2, 61002, Ukraine

Telephone: +38 057 700 34 19 **Fax:** +38 057 700 34 47

E-mail: info@metrology.kharkov.ua

The NSC "IM" is

- a leading centre for assuring the uniformity of measurements in Ukraine;
- a leading centre of the State Service of Reference Materials;
- a leading centre of the State Service of Time and Reference Frequencies.

The NSC "IM" carries out fundamental and applied research in the filed of legal metrology and organises development, maintenance and improvement of national and secondary measurement standards used in traceability schemes. The NSC "IM" also develops normative documents and works out state development programmes in the filed of metrology.

It also exerts metrological surveillance and control, as well as provides scientific and methodological basis of state metrology departments.

STATE SCIENTIFIC METROLOGY CENTRES

State scientific metrology centres develop and maintain secondary measurement standards, work out traceability schemes and normative documents in the filed of metrology, as well as exert metrological control.

State Enterprise "Scientific-Research Institute for Metrology of Measurement and Control Systems" (GP "NII "Systema")

Director: Dr. Vasily Parakuda

Address: 6 Kryvonis Str., Lviv, 79008, Ukraine

Telephone: +38 0322 72-89-39 **Fax:** +38 0322 74-21-49

E-mail: office@dndi-systema.lviv.ua

GP NII "System" is a head organisation in the filed of measurements of acoustic and hydro-acoustic parameters that provides metrological support of measurement and control systems.

All-Ukrainian State Scientific and Research Centre of Standardization, Metrology, Certification and Consumer Protection (Ukrmetrteststandard)

Director: Dr. Mikhail Mucharovsky

Address: 4 Metrologichna Str., Kyiv, 03143, Ukraine

Telephone: +38 044 526 52 29 **Fax:** +38 044 526 42 60 **E-mail:** ukrcsm@ukrcsm.kiev.ua

Ukrmetrteststandard is designated as:

- a leading centre of the State Metrology System of Ukraine;
- a leading centre of the State Service of Reference Data.

Ukrmetrteststandard performs the following:

- development, maintenance and improvement of measurement standards;
- maintenance of the National Register of approved types of measuring instruments.

UZBEKISTAN



Area: 4474 thousand km² Population: 25.7 million Capital: Tashkent

The legal basis of the system for assuring the uniformity of measurements of the Republic of Uzbekistan (SAUM) was laid down in 1993 in the Law on Metrology and in the Directive of the Government of the Republic of Uzbekistan.

The organizational structure of the SAUM is represented by:

• the State Metrology Service;

• metrological service of legal persons.

The Sate Metrology Service is headed by Uzbek Agency for Standardisation, Metrology and Certification ("UZSTANDARD" Agency).

General Director: Mr. Rahimberdi Buriev

Address: 333"A" Farobiy Str., 100049, Republic of Uzbekistan

Telephone: 998-71 144 96 01

144 37 78

Fax: 998-71 144 96 03 **E-mail:** uzst@standart.uz

The state metrological service headed by "Uzstandard" Agency includes:

- the State Enterprise "Centre of National Standards of Republic of Uzbekistan";
- the State Enterprise "Centre of Metrological Services";
- Scientific Research Institute of Standardisation, Metrology and Certification;
- the Main Centre of Metrological Service;
- the Main Centre of Reference Materials;
- the Main Centre for Nondistructive Control;
- territorial (Karakalpak, regional and city) administrations of standardisation and metrology.

Major branches of activities are as follows:

- maintenance of the common policy on the matters regarding the assurance of the uniformity of measurements, as well as coordination of the implementation and development of the SAUM;
- development of legal and other directives aiming at assuring the uniformity of measurements; definition of priorities in improving metrology;
- organisation of the development and approval of national standards and other normative documents regulating the implementation of the SAUM;
- organisation of the publication and dissemination of normative documents and scientific-technical information in the field of metrology;
- type approval of imported and domestically produced measuring instruments;
- organisation and performance of metrological surveillance over measuring instruments and implementation of metrological directives pertaining to measurements in the field of distribution of the state metrological supervision and control;
- coordination of cooperation in the field of metrology and laboratory accreditation at the international level; representation of the Republic of Uzbekistan in the international metrology organisations and collaboration with national metrology of other countries.

The leading organisation in the field of developing and maintaining measurement standards is the State Enterprise "Centre of National Standards of Republic Uzbekistan".

Director: Prof. Ortagoli Hakimov

Address: 333"A" Farobiy Str., 100049, Republic of Uzbekistan

Telephone: 998-71 149 35 08 **Fax:** 998-71 150 35 08 **E-mail:** nscenter@standart.uz

The major activities are as follows:

- coordination and performance of fundamental and practical research with the purpose of assuring the uniformity of measurements;
- development, maintenance and comparison of national measurement standards;
- reproduction of measurement units and their dissemination to measurement standards at the level of metrology services;
- development of a uniform scientific-technical policy in the field of metrology and assurance of the uniformity of measurements;
- development of normative and methodological documents in the field of metrology;
- carrying out of state type approval tests, state verification, calibration and metrological evaluation of measuring instruments and other metrology related work;
- maintenance of the state register of national and primary measurement standards;
- carrying out of metrological evaluation of measurement procedures;
- participation in the cooperation projects in the field of metrology at regional and international levels as a National Metrology Institute;
- participation in training and improving of professional skills of personnel engaged in metrology activities.

The structure of the State Metrology Service includes also metrological departments of 14 territorial administrations of standardisation and metrology and the Republican Centre of Tests and Certification.

ADDITIONAL INFORMATION

COOMET PUBLICATIONS

All COOMET publications are available on the COOMET website www.coomet.org.

COOMET Documents

No.	Name of Document	Registration Number	Remarks
1.	COOMET Memorandum of Understanding	COOMET D1/2006	
2.	COOMET Rules of Procedure	COOMET D2/2006	
3.	Memorandum on cooperation in development and application of reference materials of composition and properties of substances and materials within COOMET	COOMET D3/1998	Project 28/RU-a/92
4.	Document COOMET Publications. Classification, Development, Approval and Registration. General Provisions	COOMET D4/2003	Project 264/BY-a/02
5.	Document Model Regulations for COOMET Structural Bodies	COOMET D5/2003	Project 248/BY-a/02
6.	Document Procedure for Maintaining COOMET Website. General Provisions	COOMET D6/2003	Project 251/BY-a/02
7.	Document Regulation on Awarding the Distinguished Title "Honorary Metrologist of COOMET"	COOMET D7/2005	
8.	Document Criteria and Procedure of Admission for New COOMET Members	COOMET D8/2006	
9.	Document COOMET Programme of Comparisons	COOMET D9/2007	

COOMET Recommendations

No.	Name of Recommendation	Registration Number	
1.	Recommendation Typical Procedure for Testing Vibration-Measuring Transducers (Vibration Pick-Ups)	COOMET R/AUV/1:1995	Project 49/RU-a/92
2.	Recommendation Interstate Hierarchical Chain for Time and Frequency Measuring Instruments	COOMET R/TF/2:1995	Project 16/RU-a/92
3.	Recommendation Requirements to Time and Frequency Measuring Equipment Produced by the COOMET Member Countries Required for Mutual Recognition of the Results of National Metrological Verifications and Certifications	COOMET R/TF/3:1995	Project 16/RU-a/92
4.	Recommendation Order of Joint Development, Recognition and Registration of Reference Materials within COOMET	COOMET R/RM/4:1998	Project 132/RU-a/95

No.	Name of Recommendation	Registration Number	Remarks
5.	Recommendation Contents and Rules of Drawing Up Documents for RM Developed within COOMET	COOMET R/RM/5:2002	Project 151/RU-a/96
6.	Recommendation Register of Reference Materials of Composition and Properties of Substances and Materials Developed within COOMET. Fundamentals	COOMET R/RM/6:1998	
7.	Recommendation Procedure of Inner Inter-Regional Review of Calibration and Measurement Capabilities of COOMET National Metrology Institutes and Inter-Regional Review of Institutes of Other Regional Metrology Organisations	COOMET R/GM/7:2006	
8.	Recommendation Layout, Presentation, Drawing Up and Contents of Measuring Instrument Type Specifications for National Register of Measuring Instruments	COOMET R/LM/8:2002	Project 207/BY/00
9.	Recommendation Evaluation of Quality Management Systems of National Metrology Institutes Annex 1. COOMET Approval Criteria for QMS of NMIs Annex 2. Rules for Scientist-Custodians of Primary Measurement Standard Annex 3. Recommended Questionnaire for an expert Performing Evaluation of Quality Management Systems of NMIs Annex 4. Recommended Questionnaire for an Expert Performing Evaluation of Quality Management Systems of NMIs according to ISO 17025 Requirements Annex 5. Recommendations Concerning Oral Presentations of a Quality Management System of an NMI at the COOMET Quality Forum Annex 6. Recommendations Concerning Preparation for Presentation of Documents of a Quality Management System of an NMI at the COOMET Quality Forum	COOMET R/AQ/9:2002 Annex 1 Annex 2 Annex 3 Annex 4 Annex 5 Annex 6	Project 230/SK/01
10.	Recommendation Software for Measuring Instruments. General Technical Specifications	COOMET R/LM/10:2004	Project 213/BY/00
11.	Recommendation Regulations for Comparison of Measurement Standards from the National Metrology Institutes of COOMET	COOMET R/GM/11:2007	
12.	Recommendation Rules of Maintaining of Foregoing COOMET Programme of Comparisons	COOMET R/GM/12:2007	
13.	Recommendation Rules and Procedure of Assessment of Quality Management Systems of National Metrology Institutes	COOMET R/AQ/13:2006	Project 230/SK/01
14.	Recommendation Guidelines for Data Evaluation of COOMET Key Comparisons	COOMET R/GM/14:2006	Project 336/RU/05
15.	Recommendation Rules of Completing the Form of Calibration Certificates Issued by National Metrology Institutes within the CIPM MRA	COOMET R/GM/15:2007	Project 301/UA-a/03

No.	Name of Recommendation	Registration Number	Remarks
16.	Recommendation Recommendation for Acceptance of Certified Reference Materials into Appendix C of the CIPM MRA	COOMET R/RM/16:2007	Project 290/RU-a/03
17.	Recommendation Guidelines for Issuing Certificate of Participant of COOMET CRM Interlaboratory Certification	COOMET R/RM/17:2007	Project 349/BY-a/05

COOMET Informational Materials

No.	Name of Informational Material	Registration Number	Remarks
1.	Normative Documents Regulating the Questions of RM Production and Use, Analytical Overview (based on information provided by COOMET contact persons for RM)	COOMET I/RM/1:2001	Project 185/RU/99
2.	Register of Certified Reference Materials of Composition and Properties of Substances and Materials Developed within COOMET	COOMET I/RM/2:2008	TC 1.12 Secretariat is maintaining and updating the Register
3.	Survey of Technical Requirements in the Field of Legal Metrology in COOMET Member Countries	COOMET I/LM/3:2003	Project 204/DE-a/00
4.	Analysis of the Problem of Introduction of the Guide to the Expression of Uncertainty in Measurement in COOMET Member Countries	COOMET I/GM/4:2005	Project 279/RU-a/03
5.	Analysis of Cooperation Projects within APLMF and Preparation of Proposals for Cooperation of COOMET with this RMO in the Field of Legal Metrology	COOMET I/LM/5:2005	Project 307/RU-a/04
6.	Review National Educational Systems in the Field of Metrology in COOMET Member Countries	COOMET I/TR/6:2005	Project 270/BY-a/03

COOMET COMMITTEE MEETINGS

No.	Date	Country and City	Participants (representatives of national, international and regional organisations)
1.	13–14 November, 1991	POLAND (Warsaw)	BG, CS, CU, DE, HU, PL, RO, SU
2.	2–3 June, 1992	POLAND (Warsaw)	BG, CS, CU, DE, HU, PL, RO, RU, UA
3.	17–19 March, 1993	GERMANY (Berlin)	BG, BY, DE, PL, RO, RU, SK, UA, LT, BIML, EURAMET
4.	19–20 April, 1994	SLOVAKIA (Bratislava)	BG, BY, DE, PL RO, RU, SK, UA, LT, BIML
5.	4–5 April, 1995	SLOVAKIA (Bratislava)	BG, BY, DE, PL, RO, RU, SK, UA, HU, CZ, BIPM, EURAMET, BIML
6.	10–12 April, 1996	BULGARIA (Sofia)	BG, BY, DE, LT, PL, RO, RU, SK, UA, BIPM, BIML, EURAMET, WELMEC
7.	23–25 April, 1997	GERMANY (Braunshweig)	BY, BG, DE, LT, PL, RO, RU, SK, UA, MD, EE, BIML, EURAMET, WELMEC
8.	12–13 May, 1998	BELARUS (Minsk)	BY, BG, DE, LT, MD, PL, RU, SK, UA BIPM, STC
9.	12–13 May, 1999	RUSSIA (Moscow)	BY, BG, DE, KZ, LT, MD, PL, RU, SK, UA
10.	25–26 May, 2000	KAZAKHSTAN (Almaty)	BY, DE, KZ, KG, CU, MD, PL, RU, SK, UA, YU, UZ
11.	25–26 April, 2001	MOLDOVA (Kishenev)	BY, DE, KZ, KG, LT, CU, MD, RU, RO, SK, UA
12.	6–7 May, 2002	CUBA (Havana)	BY, DE, LT, CU, RU, RO, SK, UA, BIML
13.	29–30 April, 2003	UKRAINE (Yalta)	BY, BG, DE, KP, LT, CU, MD, RU, SK, UA
14.	27–28 May, 2004	BULGARIA (Albena)	BY, BG, DE, KZ, KP, LT, CU, MD, RU, UZ, UA BIML
15.	8–9 September, 2005	LITHUANIA (Vilnius)	BY, BG, DE, LT, MD, RU, SK, UZ, UA
16.	4–5 September, 2006	GERMANY (Braunshweig)	BY, BG, CZ, DE, GE, KG, KZ, LT, MD, RU, SK, UA, UZ, CIPM, OIML, BIML, APMP, EURAMET
17.	24–25 April, 2007	BELARUS (Minsk)	AR, AZ, BY, BG, DE, GE, KG, KZ, LT, RU, SK, UA, UZ BIPM, BIML, EURAMET, WELMEC, APMP, EASC

COUNTRY CODES			
AR – Armenia	EE – Estonia	PL – Poland	
AZ – Azerbaijan	GE – Georgia	RO – Romania	
BG – Bulgaria	HU – Hungary	RU – Russia	
BY – Belarus	KG – Kyrgyzstan	SK – Slovakia	
CU – Cuba	KP – DPR of Korea	UA – Ukraine	
CS – Czechoslovakia	KZ – Kazakhstan	UZ – Uzbekistan	
CZ – Czech Republic	LT – Lithuania	YU – Yugoslavia	
DE – Germany	MD – Moldova	•	

ACRONYMS

SLM

Acronyms for the names of the NMIs of COOMET Member Countries

Actonyms for the names	of the Milis of	COOMET Member Countries
"AZSTANDARD" Agency	Azerbaijan	State Agency on Standardization, Metrology and Patents of the Republic of Azerbaijan
BAM	Germany	Bundesanstalt für Materialforschung und -prüfung
BelGIM	Belarus	Belarussian State Institute of Metrology
BIM	Bulgaria	Bulgarian Institute of Metrology
BRML	Romania	Romanian Bureau of Legal Metrology
CENTIS	Cuba	Center of Isotopes
CIM	DPR of Korea	Central Institute of Metrology
CJSC "NIM"	Armenia	Closed Joint Stock Company "National Institute of Metrology"
DG MMI	Bulgaria	General Directorate "Measures and Measuring Instruments"
DG MS	Bulgaria	General Directorate "Metrological Supervision"
DG NCM	Bulgaria	General Directorate "National Centre of Metrology"
DKD	Germany	Deutscher Kalibrierdienst
DP "NII "Systema"	Ukraine	State Enterprise "Scientific Research Institute for Metrology of Measurement and Control Systems"
GNMC "GSSSD"	Russia	Main Scientific Center of Metrology under the State Service of Standard Reference Data
Gosstandart of Belarus	Belarus	State Committee for Standardization of the Republic of Belarus
Gosstandart of the Republic of Kazakhstan	Kazakhstan	Committee on Technical Regulation and Metrology of the Ministry of Industry and Trade of the Republic of Kazakhstan
Gospotrebstandart of Ukraine	Ukraine	State Committee of Ukraine for Technical Regulation and Consumer Policy
INIMET	Cuba	National Research Institute on Metrology
INM	Romania	National Institute of Metrology
INSM	Moldova	National Institute of Standardization and Metrology
KazInMetr	Kazakhstan	Republic State Enterprise "Kazakhstan Institute of Metrology"
KTU MI	Lithuania	Metrology Institute at Kaunas Technology University
LEI	Lithuania	Lithuanian Energy Institute
"Moldova-Standard"	Moldova	Service of Standardization and Metrology of the Republic of Moldova
NC	Cuba	Cuban National Bureau of Standards
NICPV	Russia	Center for Surface and Vacuum Research
NISM	Kyrgyzstan	National Institute for Standards and Metrology of the Kyrgyz Republic "Kyrgyzstandard"
NSC "IM"	Ukraine	National Scientific Centre "Institute of Metrology"
PFI	Lithuania	Institute of Semiconductor Physics
PTB	Germany	Physikalisch-Technische Bundesanstalt
Rostechregulirovanie	Russia	Federal Agency on Technical Regulation and Metrology of the Russian Federation
SAMTS	Bulgaria	State Agency for Metrological and Technical Surveillance
SAQM	DPR of Korea	State Administration for Quality Management
SE "CNS Uz"	Uzbekistan	State Enterprise "Centre of National Standards of Republic of Uzbekistan"
SKS KazInMetr	Kazakhstan	South-Kazakhstan Subsidiary of Republic State Enterprise "Kazakhstan Institute of Metrology"
CT 3.6	Q1 1:	

Slovak Legal Metrology

Slovakia

SMI Slovakia Slovak Metrology Inspectorate
SMU Slovakia Slovak Institute of Metrology

SNIIM Russia Siberian Scientific Research Institute of Metrology
Ukrmetrteststandard Ukraine All-Ukrainian State Scientific and Research Centre of

Standardization, Metrology, Certification

and Consumer Protection

UNIIM Russia Urals Scientific Research Institute of Metrology
UNMS Slovakia Slovak Office of Standards, Metrology and Testing
"UZSTANDARD" Agency Uzbekistan Uzbek Agency for Standardisation, Metrology and

Certification

VMC Lithuania Vilnius Metrology Centre VMT Lithuania State Metrology Service

VNIIFTI Russia All-Russian Scientific Research Institute of Physico-Technical

"DALSTANDART" Measurements "DALSTANDART"

VNIIFTRI Russia All-Russian Scientific Research Institute of Physico-Technical

Measurements

VNIIM Russia All-Russian Scientific Research Institute of Metrology

named after D.I. Mendeleev

VNIIMS Russia All-Russian Scientific Research Institute of Metrological

Service

VNIIOFI Russian Scientific Research Institute of Optical and

Physical Measurements

VNIIR Russian Scientific Research Institute of Flowrate

Measurement

VS NIIFTRI Russia Eastern-Siberian Scientific Research Institute of Physico-

Technical and Radiotechnical Measurements

Acronyms for the names of international and regional metrology organisations

APLMF Asia Pacific Legal Metrology Forum

APMP Asia Pacific Metrology Programme

BIML International Bureau of Legal Metrology

BIPM International Bureau of Weights and Measures

CODATA Committee on Data for Science and Technology

EA European Cooperation for Accreditation

EASC Euro-Asian Council for Standardization, Metrology and Certification

EURAMET European Association of National Metrology Institutions

IEC International Electrotechnical Commission

ILAC International Laboratory Accreditation Cooperation ISO International Organisation for Standardization

JCRB Joint Committee of Regional Metrology Organisations and BIPM

OIML International Organisation of Legal Metrology

STCMetr Scientific & Technical Commission on Metrology of Euro-Asian Council for Standardization,

Metrology and Certification

WELMEC Western Europe Legal Metrology Cooperation