COOMET DIRECTORY 2009

(as of 1 May, 2009)

ЕВРО-АЗИАТСКОЕ СОТРУДНИЧЕСТВО ГОСУДАРСТВЕННЫХ МЕТРОЛОГИЧЕСКИХ УЧРЕЖДЕНИЙ

COOMET

EURO-ASIAN COOPERATION OF NATIONAL METROLOGICAL INSTITUTIONS

Kharkov, 2009

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in the COOMET Member Countries was updated and kindly provided
to the COOMET Secretariat by these countries.

Your questions or remarks concerning the material given in the Directory are welcome
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The electronic version of the COOMET Directory is available on the COOMET website
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COOMET
EURO-ASIAN COOPERATION
OF NATIONAL METROLOGICAL INSTITUTIONS

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 Metrological 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),
- Intra-African Metrology System (AFRIMETS), 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 (25–26 May, 2000, Almaty, Kazakhstan), at the 12th COOMET Committee Meeting (6–7 May, 2002, Havana, Cuba), at the 15th COOMET Committee Meeting (8–9 September, 2005, Vilnius, Lithuania), at the 16th COOMET Committee Meeting (4–5 September, 2006, Braunschweig, Germany) and at the 18th COOMET Committee Meeting (15–16 May, 2008, Kharkov, Ukraine).

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 available[1]:

- 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;

[1] Notes for the completion of the Forms are given in ***Annexes 1-3*** on pages 129-135.

- 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;
- Improvement of COOMET activities.

2.3. PROPOSED COOMET PROJECT

The Proposer of a project shall fill in the form (Annex 1, see page 129), 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 131), 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.

In case of realising projects concerning the carrying out of comparisons related with the implementation of the CIPM MRA, the information in Box 6 in the form of the Agreed Project shall contain the following data in addition: comparison type, supported CMC, piloting NMI of the comparison, registration in the KCDB (except for the pilot ones).

2.5. COOMET PROJECT PROGRESS/FINAL REPORT

This Form, Annex 3 (see page 133), 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.

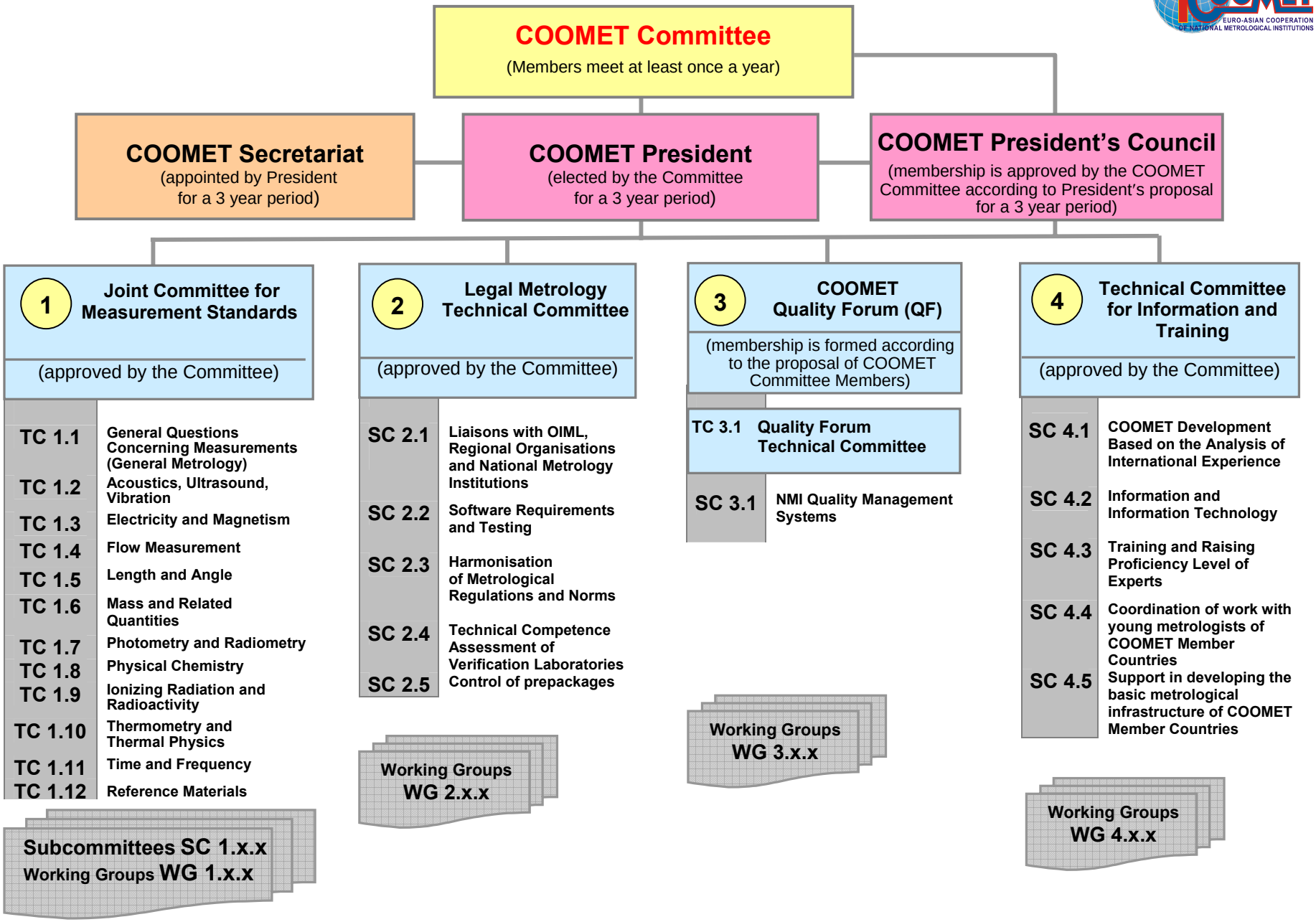
4.8. Between the meetings the Committee can discus any questions by correspondence involving all Committee Members as well as solve problems of cooperation at the President's Council, the meetings of which are convened by the President as required, but not less than once a year between the COOMET Committee 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



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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 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 Member: **Name:** **Signature:**		

Annex 2

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.

FOR PROJECTS RELATED WITH COMPARISONS

Box 6 Description

A short description of the comparison with compulsory indication of the type of comparison, calibration and measurement capabilities (CMC) supported by the comparisons, as well as the piloting NMI of the comparison and registration in the KCDB (except for the pilot ones) should be given in this box.

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 date:**	**11 Expected completion date:**
12 Coordinator's signature:		**13 Date:**

Annex 3

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

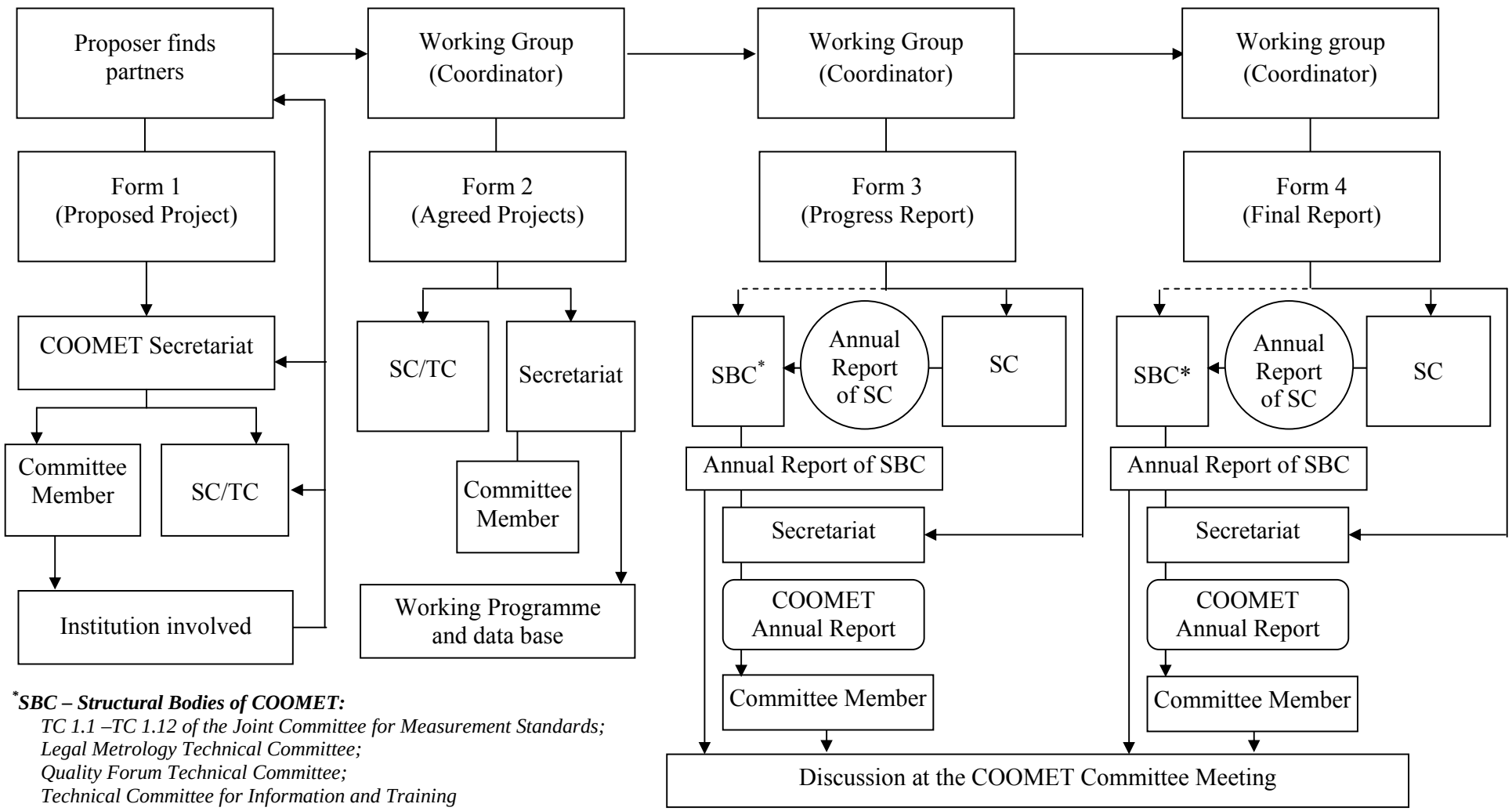
If the progress of the project is being reported then an estimated completion date should be given.
If the project has now been completed then the actual date of completion should be given.
For permanent agreements "ON-GOING" should be entered.

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



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Legal Metrology Technical Committee;
Quality Forum Technical Committee;
Technical Committee for Information and Training

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

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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
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TC 1.9 Ionising Radiation and Radioactivity	**RI**	**Mr. A. Druker**	+40 21 6344030 / 156 office@inm.ro	1
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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
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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

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SLOVAKIA

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4. State Enterprise "Ivano- Frankivsk Research-and-Production Center for Standardization, Metrology and Certification" (DP "Ivano-Frankivskstandartmetrologija")

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UZBEKISTAN

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ADDRESSES OF ORGANISATIONS

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

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METROLOGY INFRASTRUCTURES OF COOMET MEMBER COUNTRIES

ARMENIA

Area: *29.74 thousand km^2*
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 Economy of the Republic of Armenia**.

Management:	**Mr. Nerses Yeritsyan**
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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**
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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 Economy 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: *86 600 km²*
Population: *8.63 million*
Capital: *Baku*

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

The Commitee created on the basis of the Decree of the President of the Republic of Azerbaijan No. 53 of 19 November, 2008, 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.

Chairman:	**Hasanov Ramiz Ayvaz oqli**
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The legislative base for the functioning of the State metrological service is the Law of the Republic of Azerbaijan "On Provision of the Unanimity of Measurements", Regulations and Decisions of the Cabinet of Ministries of the Republic of Azerbaijan, Statute of the Committee.

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 Republic of Azerbaijan 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 Committee 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; carrying out of intergovernmental comparison of state measurement 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 the Statute about the Committee.

In the field of metrology the Committee 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:

- division of the calibration and attestation of measuring instruments;
- division of the calibration of physical-chemical of measuring instruments;
- division of the calibration of heat engineering and thermo physic of measuring instruments;
- division of the calibration of measuring instruments in the area of radio engineering, dosimetry, electricity, acoustics and optics;
- division of the calibration of mechanical and geometrical measuring instruments;
- division of legal metrology;
- division of development and planning of state measurement standards base.

In 2008 the employees of the State Committee on Standardization, Metrology and Patents of the Republic of Azerbaijan carried out about 650 000 verifications of measuring instruments.

BELARUS

Area: *207.6 thousand km^2*
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**
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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 30 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).**

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

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**
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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:	**Mr. Borislav Georgiev**
Address:	21 "6 Septemvri" Str., 1000 Sofia, Bulgaria
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	+359 2 93 96 763/829
Fax:	+359 2 986 17 07
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The major objectives of SAMTS are focused on promoting the state policy in the field of legal metrology – metrological supervision; market surveillance of technical products (including measuring instruments) placed on the market and/or put into use subject to essential requirements; technical inspection 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**
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Telephone:	+359 2 986 22 66
	+359 2 93 96 801
Fax:	+359 2 988 42 85
E-mail:	Pavlina.Danailova@damtn.government.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;
- performing market surveillance of measuring instruments;
- registration of repairers of fiscal devices;
- registration and control of installers and repairers of tachographs;
- licensing repairers of electronic taximeters with fiscal memory.

The General Directorate "Metrological Supervision" of SAMTS also includes **the Control and Methodology Department** and 9 **regional departments.**

CUBA

Area: *109.89 thousand km^2*
Population: *11.1 million*
Capital*: Havana*

The National Research Institute on Metrology (INIMET) of Cuban National Bureau of Standards as NMI, 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.

See note 1 for quality system.

Director: **Mr. Antonio Lopez Maidique**
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La Habana, CP 10200, Republic of Cuba
Telephone: +537 862 05 36
+537 862 3041
Fax: +537 867 69 66
E-mail: maidique@inimet.cu

The **Centro de Isótopos** (CENTIS) is the designated laboratory in the field of Radioactivity. CENTIS belongs to the Agency of Nuclear Energy and Advanced Technologies of the Ministry for Science, Technology and Environment (CITMA). The main objective of this center is the production and R&D of radiopharmaceuticals, RIA kits and radioactive labeled compounds for the Cuban Health System as well as to perform specialized technical services and application of Nuclear Techniques to solve economical national problems, including those related to metrology of ionizing radiation. The Department of Radionuclides Metrology of the Centro de Isótopos, the CENTIS-DMR, is responsible for the establishment, developing, conservation, custody and diffusion of National Standards of Radionuclide Activity units (Becquerel). CENTIS-DMR is the scientific and methodological warrantor for achieving the traceability to these standards of the radioactivity measurements performed at national level.

See note 1 for quality system.

Director: MSc. Saúl Pérez Pijuán
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Guanabacoa, CP 11100, Ciudad Habana, Cuba
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Fax: +537 866 98 21
E-mail: saul@centis.edu.cu

The Centro de Protección e Higiene de las Radiaciones (CPHR) is a designated laboratory mainly responsible for the dosimetry standards in the field of ionizing radiation. The Dosimetry Laboratory of the CPHR performs the following obligations:

- to maintain traceability in Cuba to the international measurement system through implementing and improving national standards and calibrating measuring instruments.
- to participate in comparison exercises of the standards at international level.

- to carry out research and scientific-technical development in the field of ionizing radiation metrology;
- to provide education to specialists and users in the field of radiation measurements.

See note 1 for quality system.

Director:	**Mr. José Fidel Santana Nuñez**
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	La Habana, CP 11300, Republic of Cuba
Telephone:	+537 6829681
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E-mail:	santana@cphr.edu.cu

Note 1:

INIMET, **CENTIS** and **CPHR** have established a quality system in correspondence with the ISO/IEC 17025 and the Mutual Recognition Arrangement for national measurement standards and for calibration and measurement certificates issued by National Metrology Institutes. In 2008, this system was accredited by the National Accreditation Body (ONARC) of the Republic of Cuba and recognized by the Regional Metrology Organization COOMET, in accordance with the above-mentioned international standard.

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
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Fax:	+537 682 78 50
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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 km^2*
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 Il**
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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
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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 km^2*
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**
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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 **GEOSTM**.

Acting Director:	**Dr. Jason Mujiri**
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The major activities of **GEOSTM** are as follows:

- development of scientific-methodological and procedural basis of SEUM;
- coordination and performance of fundamental and practical researches with the purpose to assure uniformity of measurements;
- development, maintenance and comparison of national measurement standards;
- reproduction of units of measurements 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 measurement;
- development of normative and methodological documents in the field of metrology;
- carrying out of type approval, verification, calibration of measuring instruments, as well as official measurements and other metrology related work;
- maintenance of the state register of approved measuring instruments and reference materials and the register of national and reference measurement standards.
- participation in accreditation of verification, calibration and test laboratories;
- participation in the cooperation projects in the field of metrology at regional and international levels as the National Metrology Institute (NMI);
- participation in the training and improving of professional skill of personnel engaged in metrology and accreditation activities.

The State Metrology Service includes **7 district metrology bodies of GEOSTM.**

GERMANY

Area: *357.021 thousand km^2*
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:	**Dr. Jörn Stenger**
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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.

Office of Consortium on Metrology and Verification
At German Academy of Metrology (DAM)

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Fax: +49 89 17 901 - 386
E-mail: dam@lmg.bayern.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: **Dr. Michael Wolf**
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KAZAKHSTAN

Area: *2 717.3 thousand km^2*
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**
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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" (RSE "KazInMetr") is a state scientific metrological centre.

General Director:	**Mr. Vasily Mikhalchenko**
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E-mail:	info@kazinmetr.org, legal@kazinmetr.org

RSE “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 RSE “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 km^2*
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.

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

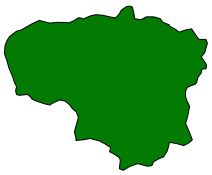
The basic activities include:

- 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;
- 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 km^2*
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 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. Ignas Stankovicius**
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E-mail: info@lvmt.lt

According to the Resolution of the Government of Lithuania No. 518 of 1997 (new revision No. 730, 9 June 2003) 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 km^2*
Population: *3.567million*
Capital: *Chisinau*

In conformity with the law on metrology No. 647-XIII currently in force adopted on the 17th of November 1995 in the Republic of Moldova with the following amendments and addenda implemented by law of the Republic of Moldova No. 222-XVI from the 25th of October 2007 state governance providing the policy adoption in the domain of metrology is performed by the **Ministry of Economy and Trade** (Direction of metrology) that is the **Central Metrology Authority.**

In the domain of metrology the ministry is governed by law "On metrology", enactments of the President of the Republic, dispositions, orders, ordinances of the Government of the Republic of Moldova, international agreements and conventions signed by the Republic of Moldova.

The national system infrastructure of metrology includes:

Central Metrology Authority (CMA) – central public administration branch body under Government, responsible for the quality infrastructure, - the Ministry of Economy and Trade

- National Institute of Metrology,
- National Standard System;
- National Technical Council on Metrology;
- territorial metrology centers;
- metrological departments of juridical persons;
- metrological inspection.

In conformity with the entrusted authorities in the domain of metrology the Ministry of Economy and Trade performs the following functions:

- elaboration and coordination in realization of state policy in the domain of metrology;
- elaboration of legislative basis and taking part in elaboration and agreement of normative acts projects for the purpose of assurance of measurement results traceability to International System of Units (SI system);
- affirmation of regulations in legislative metrology within the competence;
- coordination of metrological activity of the central public administration branch bodies, both juridical and natural persons that accomplish activities in the domain of metrology;
- presentation of the Republic of Moldova to regional and international organizations of metrology together with the national metrology body;
- designation of the juridical persons for verification of a legal measuring instruments and for the carrying out of official measurements on the basis of National Metrology Body conclusions.

The National Institute of Standardization and Metrology is designated as **National Metrology Body** (NMB) by law on metrology. It is a legal entity and accomplishes its activity on the basis of regulations affirmed by Central Metrology Authority and by regulations of law. The National Metrology Body performs the following functions:

Functions on legal metrology:

- elaboration of regulations on legal metrology;
- execution of technical works in the domain of legal metrology (type approval, primary, periodical and expert verifications of measuring instruments, official measurements, metrological examinations of the normative documents projects);
- conduct of state measuring instruments registries, legal methodology of metering, regulations in legal metrology and parties registered in National Metrology System;

- participation in work of international and regional forums in the domain of metrology together with CMA;
- realization of agreements on mutual recognition of type approval and verification, technical competence of verificating, testing laboratories and laboratories for calibration of measuring instruments and standard samples;
- state registration of juridical persons and natural persons fulfilling activities on repair, sale, rent and assembly of measuring instruments, and juridical and natural persons who manufacture, import or package the products.

Functions on general metrology:

- realization of national policy in the domain of metrology;
- creation, development and maintenance of national and reference standards, storage and transmission of legal units;
- assurance of measuring results traceability through comparison of national database of standards on regional and international levels, maintenance of national and reference standards, storage and transmission of legal units;
- training and professional development of experts in legal metrology, technical experts in metrology and verification officers;
- elaboration and examination of the normative documents projects on assurance of measurements traceability, approved in metrological requirements with international and national documents of other countries.

Territorial centers of metrology are legal entities within the jurisdiction of Central Metrology Authority, authorized to perform the following functions:

- realization of state policy in the domain of metrology in area;
- transmission of legal units through verification and calibration of measuring instruments;
- metrological examinations of normative documents projects and measuring instruments.

Metrological inspection is the body of legal metrological control in the name of state and within the jurisdiction of Central Metrology Authority. Metrological inspection is a component of the Central state inspection on surveillance of market, metrology and protection of consumers and is a legal entity. Metrological inspection exercises legal metrological control for compliance with provisions in normative acts in the domain of legal metrology by juridical entities and natural persons.

The Ministry of Economy and Trade of the Republic of Moldova – Central Metrology Authority

Vice Prime-Minister, Minister: Igor DODON

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Chisinau, Republic of Moldova MD-2033
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Fax: +3732 2 23-40-64
E-mail: mineconcom@mec.gov.md

Deputy Minister: Iurie MUNTEAN (supervises activity in the domain of quality infrastructure)

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Direction of Metrology

Manager of Direction: Elena HANGANU

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National Institute of Standardization and Metrology (INSM)

General Director: Igor CALDARE

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Telephone: +373 2 75-04-60
+373 2 21-84-33
Fax: +373 2 74-85-42
E-mail: igori@standard.md

Technical Director: Iurie FRIPTULEAC. (supervises the activity in the domain of metrology)

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Telephone: +373 22 21 84 17
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ROMANIA

Area: *237.5 thousand km^2*
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 km^2*
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
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+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**
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Fax: +7 3433 50 20 39
E-mail: 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
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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: **Mr. Alexandr Kogogin**
Address: 7a, 2 Azinskaya Str., 420029, Kazan, Russia
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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**
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	+7 495 535 24 01
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	+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, coulometry), 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
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Fax:	+7 4212 32 55 04
	+7 4212 32 92 68
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 km^2*
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**
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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 km^2*
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
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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
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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" (DP NDI "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

DP NDI "Systema" 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 (DP "Ukrmetrteststandard")

Director: **Dr. Mikhail Mukharovsky**
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

DP "Ukrmetrteststandard" is designated as:

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

DP "Ukrmetrteststandard" performs the following:

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

State enterprise "Ivano-Frankivsk Research-and-Production Center for Standardization, Metrology and Certification" (DP "Ivano-Frankivskstandartmetrologija")

Director: **Igor Petryshyn**
Address: 127, Vovchynetska Str., Ivano-Frankivsk, 76006, Ukraine
Telephone: +38 03422 6-68-84
Fax: +38 03422 3-02-00
E-mail: dcsms@if.ukrtel.net

DP "Ivano-Frankivskstandartmetrologija" is main organization in gas meters and flow meters volume and volume flow measurement.

DP “Ivano-Frankivskstandartmetrologija” implements fundamental and applied research in field of volume and volume flow measurement, coupled with creation, improvement, storing and application of national and secondary standard, creating systems for transmitting size of measurement unit, normative document development in field of gas meters and flow meters volume and volume flow measurement metrology.

UZBEKISTAN

Area: *447.4 thousand km^2*
Population: *26.5 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. Abdukahhar Abduvaliev**
Address:	333"A" Farobiy Str., 100049, Republic of Uzbekistan
Telephone:	998-71 244 96 01
Fax:	998-71 244 80 28
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".**

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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 D2/2008**	
3.	**Memorandum** on cooperation in development and application of reference materials of composition and properties of substances and materials within COOMET	**COOMET D3/2008**	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 D9/2008**	

COOMET Recommendations

No.	Name of Recommendation	Registration Number	Remarks
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/4:2008**	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/13:2008**	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
18.	**Recommendation** Procedure of the International Competition "The Best Young Metrologist of COOMET"	**COOMET R/GM/18:2008**	
19.	**Recommendation** Guideline on COOMET supplementary comparison evaluation	**COOMET R/GM/19:2008**	

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 (Braunschweig)	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 (Braunschweig)	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
18.	15–16 May, 2008	UKRAINE (Kharkov)	AR, AZ, BY, CU, DE, KZ, MD, RU, SK, UA, UZ; BIML, EURAMET

COUNTRY CODES

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

ACRONYMS

Acronyms for the names of the NMIs of COOMET Member Countries

Agency “UZSTANDARD”	Uzbekistan	Uzbek Agency for Standardisation, Metrology and Certification
“AZSTANDARD” Committee	Azerbaijan	State Committee 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 MSv	Bulgaria	General Directorate “Metrological Supervision”
DG NCM	Bulgaria	General Directorate “National Centre of Metrology”
DKD	Germany	Deutscher Kalibrierdienst
DP “Ivano-Frankivskstandart-metrologija”	Ukraine	State enterprise “Ivano-Frankivsk Research-and-Production Center for Standardization, Metrology and Certification”
DP NDI “Systema”	Ukraine	State Enterprise “Scientific Research Institute for Metrology of Measurement and Control Systems”
DP “Ukrmetrteststandard”	Ukraine	All-Ukrainian State Scientific and Research Centre of Standardization, Metrology, Certification and Consumer Protection
GEOSTM	Georgia	Georgian National Agency for Standards, Technical Regulations and Metrology
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
KTU MI	Lithuania	Metrology Institute at Kaunas Technology University
LEI	Lithuania	Lithuanian Energy Institute
LMET	Germany	Thuringian State Bureau for Metrology and Verification
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
RSE “KazInMetr”	Kazakhstan	Republic State Enterprise “Kazakhstan Institute of Metrology”
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 RSE “KazInMetr”	Kazakhstan	South-Kazakhstan Subsidiary of Republic State Enterprise “Kazakhstan Institute of Metrology”
SLM	Slovakia	Slovak Legal Metrology
SMI	Slovakia	Slovak Metrology Inspectorate
SMU	Slovakia	Slovak Institute of Metrology
SNIIM	Russia	Siberian Scientific Research Institute of Metrology
UNIIM	Russia	Urals Scientific Research Institute of Metrology
UNMS	Slovakia	Slovak Office of Standards, Metrology and Testing
VMC	Lithuania	Vilnius Metrology Centre
VMT	Lithuania	State Metrology Service
VNIIFTI “DALSTANDART”	Russia	All-Russian Scientific Research Institute of Physico-Technical 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	Russia	All-Russian Scientific Research Institute of Optical and Physical Measurements
VNIIR	Russia	All-Russian Scientific Research Institute of Flowrate Measurement
VS NIIFTRI	Russia	Eastern-Siberian Scientific Research Institute of Physico-Technical and Radiotechnical Measurements
WKS RSE “KazInMetr”	Kazakhstan	Western-Kazakhstan Subsidiary of Republic State Enterprise “Kazakhstan Institute of Metrology”

Acronyms for the names of international and regional metrology organisations

AFRIMETS	Intra-African Metrology System
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
SIM	Inter-American Metrology System
STCMetr	Scientific &Technical Commission on Metrology of Euro-Asian Council for Standardization, Metrology and Certification
WELMEC	Western Europe Legal Metrology Cooperation