

**INFORMATION
ON COOMET ACTIVITIES in 2017–2018
for 12th EURAMET GA**

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GENERAL INFORMATION

The COOMET activities were performed in all main fields of cooperation:

- MEASUREMENT STANDARDS OF PHYSICAL UNITS
- LEGAL METROLOGY
- QUALITY MANAGEMENT SYSTEMS
- INFORMATION AND TRAINING
- JOINT RESEARCH IN METROLOGY.

COOMET MEMBERS

Now 21 countries cooperate within COOMET: Azerbaijan, Armenia, Belarus, Bosnia and Herzegovina, Bulgaria, China, Cuba, DPR of Korea, Georgia, Germany, Kazakhstan, Kyrgyzstan, Lithuania, Moldova, Romania, Russia, Slovakia, Tajikistan, Turkey, Ukraine and Uzbekistan.

COOMET EVENTS

Meetings of the Structural Bodies of COOMET

The following meetings were held in 2017–2018:

- 28th meeting of **COOMET Committee** (11–12 April 2018, Sarajevo, Bosnia and Herzegovina);
- 22nd meeting of **COOMET President’s Council** (29–30 November 2017, Braunschweig, Germany);
- 16th meeting of **Joint Committee for Measurement Standards** (10 April 2018, Sarajevo, Bosnia and Herzegovina).

Meetings of the **Technical Committees** of COOMET in 2017–2018:

- **TC 1.1** “General Metrology” meeting (13 June 2017, Saint-Petersburg, Russia);
- **TC 1.2** “Acoustics, Ultrasound, Vibration” meeting (5–6 September 2017, Vilnius, Lithuania);
- **TC 1.3** “Electricity and Magnetism” meeting (2–6 October 2017, Minsk, Belarus);
- **TC 1.4** “Flow Measurement” meeting (7 September 2017, Kazan, Russia);
- **TC 1.5** “Length and Angle” meeting (16–18 May 2017, Sarajevo, Bosnia and Herzegovina);
- **TC 1.6** “Mass and related quantities” meeting (10–11 October 2017, Minsk, Belarus);
- **TC 1.7** “Photometry and Radiometry” meeting (14–15 August, Saint-Petersburg, Russia);
- **TC 1.8** “Physical Chemistry” meeting (23–24 May 2017, Saint-Petersburg, Russia);
- **TC 1.9** “Ionizing Radiation and Radioactivity” meeting (2–4 May 2017, Havana, Cuba);

- **TC 1.10** “Thermometry and Thermal Physics” meeting (7–8 November 2017, Sarajevo, Bosnia and Herzegovina);
- **TC 1.11** “Time and frequency” (22–23 March 2018, Moscow, Russia);
- **TC 1.12** “Reference Materials” meeting (12–13 September 2017, Kazan, Russia);
- **TC 2** “Legal Metrology” meeting (15–17 May 2018, Moscow, Russia);
- **TC 3.1** “Technical committee of Quality Forum” and **Quality Forum** meetings (29–30 January, Braunschweig, Germany);
- **TC 4** “Information and Training” meeting (31 October – 1 November 2017, Chisinau, Moldova).

In 2017–2018 COOMET representatives participated in the meetings of the following metrology organizations promoting COOMET activities:

- NSCLI Board of Directors Meeting (12–17 August 2017, Maryland, USA);
- 38th and 39th meetings of JCRB (13–14 September 2017, Bern, Switzerland; 14–15 March 2018, Paris, France);
- 52nd meeting of CIML and meeting of the Round table of the Regional Metrological Organizations for Legal metrology (9–13 October 2017, Cartagena de Indias, Colombia);
- 33rd APMP General Assembly (30 November – 1 December 2017, New Delhi, India).

28th COOMET Committee Meeting

On 11–12 April 2017, according to the schedule of meetings of COOMET structural bodies, 28th meeting of COOMET Committee, 16th meeting of COOMET Joint Committee for Measurement Standards and the Workshop within the BIPM Programme on Capacity Building and Knowledge Transfer (CB&KT) for the Heads of NMIs of COOMET member countries were held.

The objectives of the activities were to discuss issues on COOMET development, implementation of the “Arrangement on Mutual Recognition of National Measurement Standards and Calibration and Measurement Certificates Issued by National Metrology Institutes” (CIPM MRA), performance results in “Legal Metrology”, “Information and Training”, “Quality Management” and cooperation with the International Bureau of Weights and Measures (BIPM) and the International Bureau of Legal Metrology (BIML).

COOMET Committee members and their official representatives, Chairpersons of COOMET Technical Committees and representatives of COOMET National Secretariats from 17 COOMET member countries (Azerbaijan, Armenia, Belarus, Bosnia and Herzegovina, Germany, Georgia, Kazakhstan, China, Kyrgyzstan, Cuba, Lithuania, Moldova, Russia, Slovakia, Turkey, Uzbekistan and Ukraine), representatives of international metrological organizations: M. Milton, Director of the BIRM; B. Jeckelmann, Chairperson of EURAMET; W. Schmid, EURAMET Secretariat; Ian Dunmill, Assistant Director of the BIML; N. Zviagin, Executive Secretary of the JCRB took part in the 28th COOMET Committee meeting.

20 agenda issues were considered at the meeting, including:

- main results of COOMET activities in 2017;
- signing of the Memorandum of Understanding between COOMET and EURAMET;
- set of issues related to the implementation of CIPM MRA;
- results of the 36th and 37th meeting of JCRB and the 51st meeting of the International Committee of Legal Metrology (CIML) and COOMET tasks arising from its decisions;
- COOMET Quality Forum activities;
- COOMET activity in Legal Metrology;
- COOMET activity in Information and Training;

- establishment of COOMET structural bodies and appointment of Chairpersons of Technical Committees and Subcommittees;
- official delegation of authority to the new COOMET President;
- formation of the COOMET President's Council.

During the 28th meeting of the COOMET Committee, an official delegation of authority to the new COOMET President V. Hurevich (BelGIM, Belarus) from the previous President V. Krutikov (VNIIOFI, Russia) took place.

During the meeting the **Memorandum of Understanding between COOMET and EURAMET** was signed by new COOMET President V. Hurevich and Chairperson of EURAMET B. Jeckelmann.

This MoU was agreed at the meeting of EURAMET–COOMET delegations, which was held on 12 September 2017 in METAS, Bern-Wabern, Switzerland.

Forms of cooperation within MoU include, but are not limited to areas of mutual interest as:

- research in metrology,
- traceability of measurements to the SI units,
- inter-laboratory comparisons,
- knowledge exchange,
- joint publications.

Cooperative Activities are as follows:

- (1) Joint activities under this Memorandum of Understanding are subject to the applicable rules of each Party, as well as the funds and personnel available to the Parties or their members respectively.
- (2) Delegations of EURAMET and COOMET will meet on an annual basis. e. g. aside the JCRB meeting, to discuss actual matters and strategic orientation of the cooperation.
- (3) EURAMET and COOMET will mutually invite their TC-Chairs to the annual meetings of the TC in their organisation, this applies to the meetings of the Technical Committees for Quality, Information and Training and Interdisciplinary Metrology particularly.
- (4) EURAMET and COOMET will cooperate in the field of Capacity Building, e. g. by
 - mutual invitation to, or joint organisation of Capacity Building events, where appropriate,
 - exploring opportunities to hold joint workshops within the BIPM Capacity Building and Knowledge Transfer Programme (CBKT).
- (5) EURAMET and COOMET may arrange joint promotional, educational, technical, or scientific initiatives, such as conferences, seminars, workshops, training courses, joint publications and other pertinent activities.
- (6) The Parties will each appoint a person responsible for the coordination of the activities.

A new membership of COOMET President's Council was formed. The following members were elected as Vice-presidents: P. Neyezhmakov (NSC "Institute of Metrology", Ukraine) – responsible for cooperation with regional metrology organizations as well as for training and knowledge transfer; P. Ulbig (PTB, Germany) – responsible for legal metrology, N. Mikanadze (GEOSTM, Georgia) – responsible for the quality management system and accreditation, S. Golubev (Rosstandart, Russia) – responsible for cooperation in the field of measurement standards and general scientific research.

Conferences and workshops under the aegis of COOMET

- International Scientific-Technical Conference "Metrology 2017" (4–5 April 2017, Minsk, Belarus);

- VII International Competition of COOMET “The Best Young Metrologist” (17–18 May 2017, Astana, Kazakhstan);
- International Scientific and Practical Conference “175 years of D.I. Mendeleyev Institute for Metrology and National Measurement System” (14–15 June 2017, Saint- Petersburg, Russia);
- Seminar for the Directors of NMIs of COOMET Member Countries and the Chairpersons of COOMET TCs on the procedure and conditions of participation in the European Metrology Program for Innovation and Research (EMPIR) (4 December 2017, Braunschweig, Germany);
- Workshop on calibration of small volumes (6–8 March 2018, Wolfen, Germany);
- Workshop within the BIPM Programme on Capacity Building and Knowledge Transfer (CB&KT) for the Heads of NMIs of COOMET member countries (10 April 2018, Sarajevo, Bosnia and Herzegovina).

INFORMATION ON COOMET ACTIVITIES

Implementation of COOMET projects

The general amount of projects registered by COOMET Secretariat since 1991 is **745 projects** as of 31 April 2018.

28 new projects were proposed during this period: **7** – for “Mass and Related Quantities”, **5** – “Photometry and Radiometry”, **4** – “Reference Materials” and “Information and training”, **2** – for “Legal metrology”, “General questions concerning measurements (General metrology)” and “Thermometry and Thermal Physics”, **1** – “Length and Angle” and “Ionising Radiation and Radioactivity”.

14 of the new projects are related with regional comparisons of measurement standards of physical units, **3** projects are aimed at the development of COOMET Recommendations and Documents, **3** – for organization and holding of meetings of the Structural Bodies as well as events within COOMET, **4** – to carry out training of metrologists.

During the reporting period **9** projects were agreed, **12** – completed, **3** – excluded. In general, COOMET Program of Comparisons for 2018 includes **129** projects.

VII International Competition of COOMET “The Best Young Metrologists 2017”

VII International Competition of COOMET “The Best Young Metrologist” was held 17–18 May 2017 in Astana, Kazakhstan. It was the second time that the International Competition of COOMET “The Best Young Metrologist” was held with the participation of young metrologists from other RMOs and only in English.

36 works of young metrologists from 10 countries (Belarus, Columbia, Germany, Kazakhstan, Moldova, Peru, Russia, Slovakia, Spain and Ukraine) of 3 regional metrology organisations (COOMET, EURAMET and SIM) were submitted for the Competition.

The Scientific Committee of the Competition includes leading metrologists of Belarus, France, Germany, Kazakhstan, Russia, South Africa, Ukraine and USA from international (BIPM, BIML) and regional (AFRIMETS, COOMET, EURAMET, SIM) metrology organisations.

1st place – Edyta Beyer (PTB, Germany) – graduate student of PTB from Poland;

2nd place – Mikhail Aleynikov (VNIIFTRI, Russia);

3rd place – Anna Villevalde (VNIIM, Russia).

It was the first time when the Proceedings of VII International Competition of COOMET “The Best Young Metrologist – 2017” were prepared and published in electronic and paper variants. The DOI index – digital object identifier was assigned to all papers. This was done by the specialists of NSC “Institute of Metrology” (Kharkov, Ukraine).

Seminar for the Directors of NMIs of COOMET Member Countries and the Chairpersons of COOMET TCs on the procedure and conditions of participation in EMPiR

The seminar for the Directors of NMIs of COOMET Member Countries and the Chairpersons of COOMET Technical Committees on the procedure and conditions of participation in the European Metrology Program for Innovation and Research (EMPIR) was held on 4 December 2017 in Braunschweig, Germany.

The Seminar was attended by Heads of National Metrology Institutes and Chairpersons of COOMET TCs from 7 COOMET member-countries (Belarus, Georgia, Germany, Russia, Tajikistan, Ukraine and Uzbekistan) and also representatives of EURAMET and EMPiR Secretariats.

The agenda included a number of issues: introduction course for participants; introduction to EMPiR; concept of EMPiR; rules for participants; contribution and impact of EMPiR Projects; participation in EMPiR topics; structure of Projects; examples of external partnership; projects of potential research topics.

Workshop within the BIPM CB&KT Programme for the Heads of NMIs of COOMET member countries

On April 10, one-day COOMET-BIPM workshop “Sound beginning in the CIPM MRA” was held for the Heads of NMIs of COOMET member countries with the developing metrological infrastructure in the framework of the BIPM Programme on Capacity Building and Knowledge Transfer (CB&KT).

The workshop was attended by Heads of NMIs from 14 COOMET member countries of both countries-signatories and non-signatories of the CIPM MRA (Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Germany, Georgia, Kazakhstan, Cuba, Kyrgyzstan, Moldova, Russia, Turkey, Uzbekistan and Ukraine), as well as Ch. Kuanbayev, specialist of the BIPM department on international liaison, N. Zviagin, Executive Secretary of the JCRB, and Ian Dunmill, Assistant Director of the BIML.

The goal of the workshop was the effective involvement of COOMET member countries in the CIPM MRA implementation, exchange of experience in peer review of Quality Management Systems, comparisons, signing of the CIPM MRA.

The agenda of the workshop included 5 sections with the following topics:

1. Global quality infrastructure.
2. General information on Metre Convention.
3. Quality Management System.
4. Comparisons and calibration and measurement capabilities.
5. Key comparisons database of the BIPM.

COOMET WEB RESOURCES

The COOMET web-portal (www.coomet.net) is maintained by the respective COOMET Secretariat and national on-line editors for the pages of COOMET member countries and Technical Committees of COOMET.

COOMET Data Bases are available at COOMET website (www.coomet.org).

NEXT COOMET MEETINGS AND EVENTS

The 23rd meeting of COOMET President’s Council will be held in November–December 2018 in Minsk, Belarus.

The 29th COOMET Committee Meeting will be held in April 2019 in Germany.