

A light blue world map with white outlines of continents and countries, serving as a background for the title text.

COOMET Report to the 13th EURAMET GA

Prof. Pavel NEYEZHMAKOV,
COOMET Vice-President

The COOMET member-countries cooperate in the following areas:



MEASUREMENT STANDARDS OF PHYSICAL UNITS



LEGAL METROLOGY



QUALITY MANAGEMENT SYSTEMS



INFORMATION AND TRAINING



JOINT RESEARCH in METROLOGY

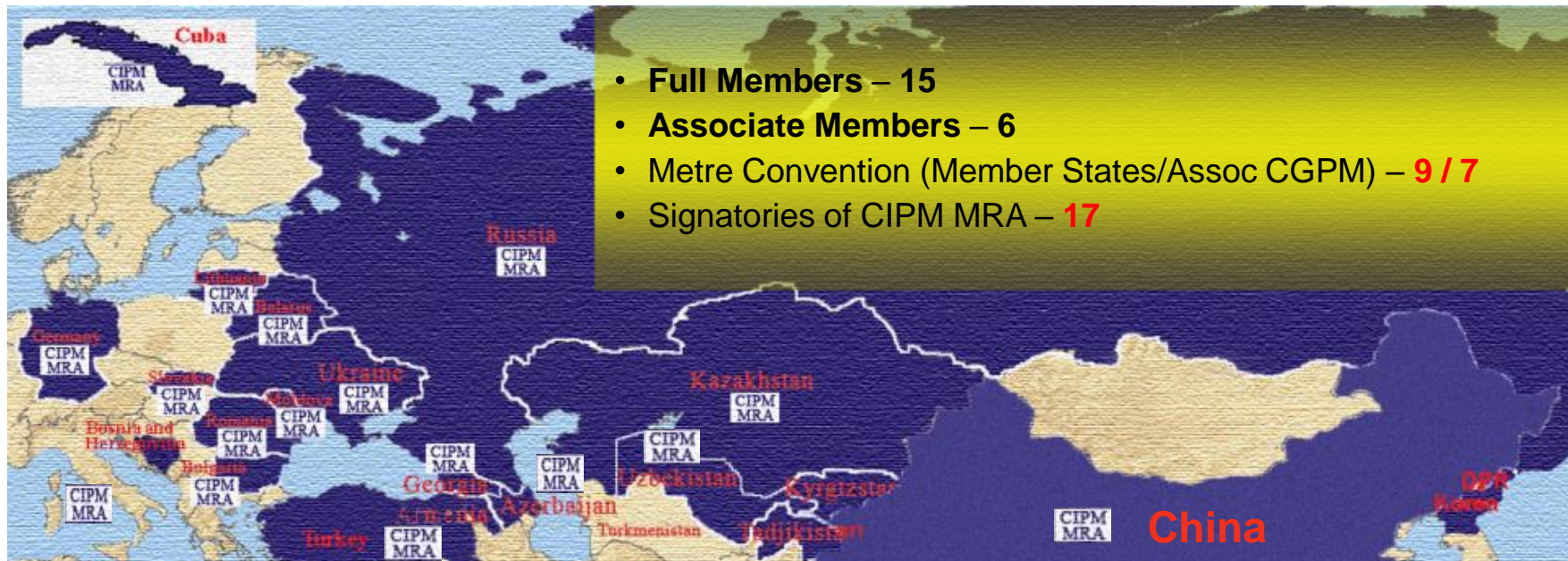
The main tasks of COOMET are the following:

Provide assistance in the uniformity of measures, uniformity of measurements and the required accuracy of their results;

Provide assistance in promoting cooperation between national economies and eliminating technical barriers for international trade;

Harmonize activities of metrology services of the Euro-Asian countries with similar activities in other regions.

COOMET Members and their Relation to the Metre Convention and CIPM MRA



ARMENIA
AZERBAIJAN
BELARUS
BOSNIA AND HERZEGOVINA
BULGARIA
CHINA



CUBA
GERMANY
GEORGIA
DPR OF KOREA
KAZAKHSTAN

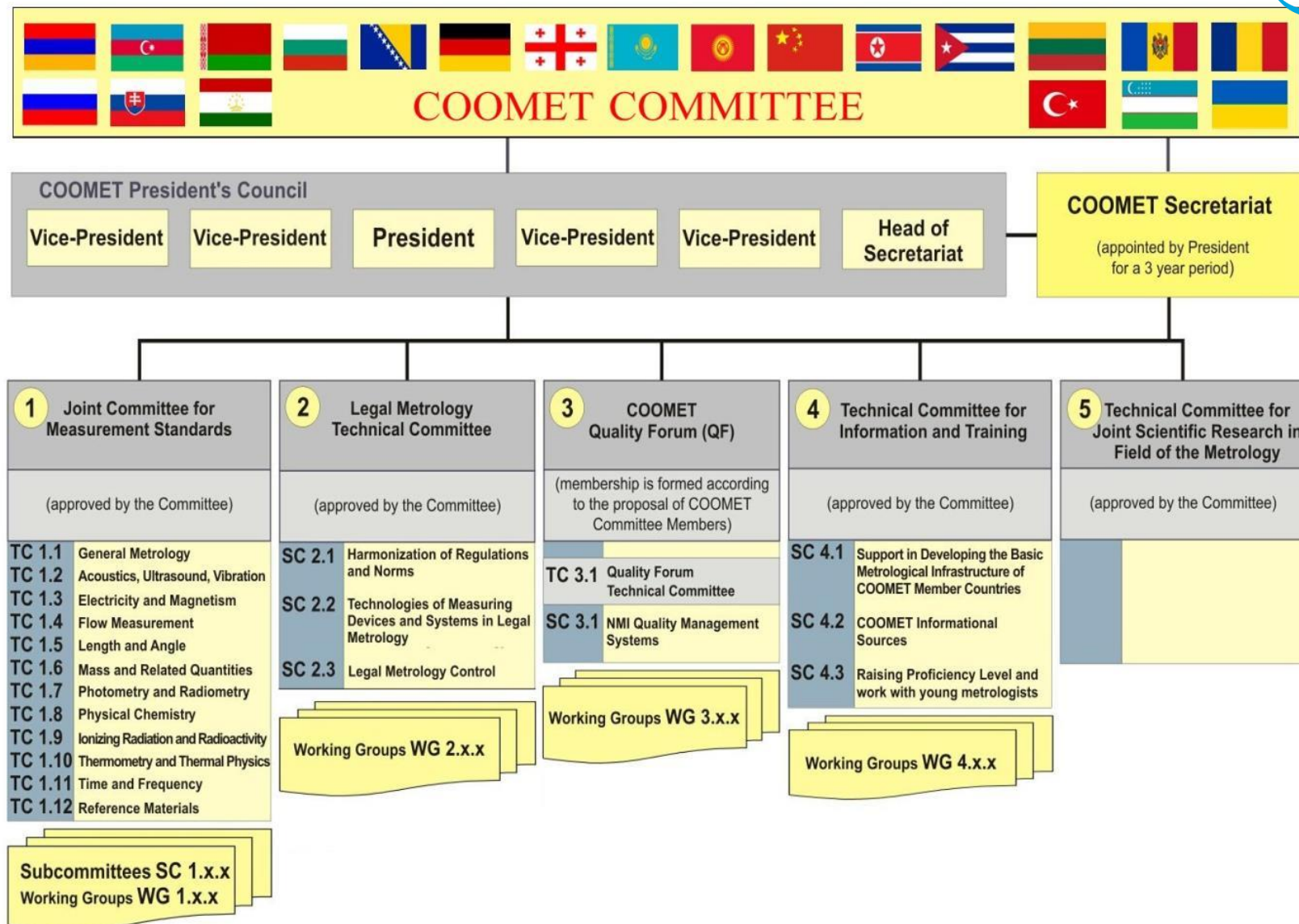


KYRGYZSTAN
LITHUANIA
MOLDOVA
ROMANIA
RUSSIA

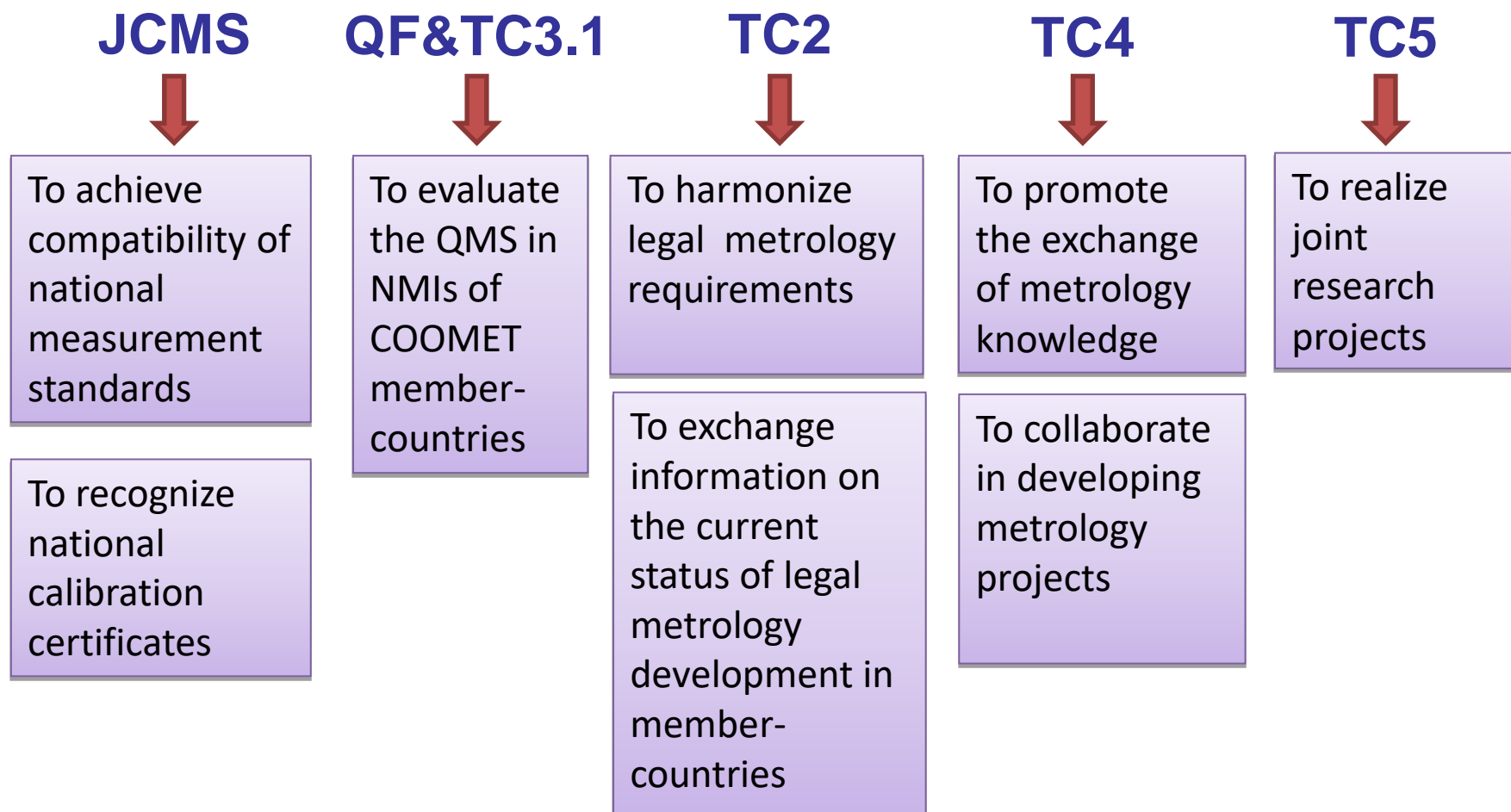


SLOVAKIA
TAJIKISTAN
TURKEY
UKRAINE
UZBEKISTAN

New participant of CIPM MRA – UzNIM, Uzbekistan



For the purpose of solving common problems **COOMET** created effective mechanisms to reach the following **objectives**:



From 12 of April 2018



COOMET President:
Dr. Valery HUREVICH



Director of Belarussian State Institute of Metrology (BelGIM)

Contacts:

E-mail: coomet@belgim.by, hurevich@belgim.by

COOMET President manages the general coordination of COOMET activity, as well as the coordination of cooperation between COOMET and international metrology organizations
JCRB Representative



COOMET Secretariat:

Belarussian State Institute of Metrology (BelGIM)

Address: 93, Starovilensky trakt, Minsk, 220053, Belarus

Head: Ms. Nadezhda LIAKHOVA

E-mail: coomet@belgim.by

The following members were elected as Vice-presidents:



Vice-President
Sergey GOLUBEV
(Rosstandart, Russia)

Coordination of cooperation in the field of measurement standards and joint scientific research



Vice-President
Peter ULBIG
(PTB, Germany)

Cooperation in the field of legal metrology



Vice-President
Nino MIKANADZE
(GeoSTM, Georgia)

Development of quality management systems and collaboration in the field of accreditation



Vice-President
Pavel NEYEZHMAKOV
(NSC “IM”, Ukraine)

Interaction with regional metrology organizations, information and knowledge transfer

23rd meeting of COOMET President's Council (27-29 November 2018, Minsk, Belarus)

Among other results the following should be noted:

- a decision is taken to establish a Working Group on Development of the COOMET Strategy;
- an amended draft of Protocol on cooperation and interaction in the field of metrology between COOMET and EASC was approved. The protocol will be signed by COOMET President and EASC chairperson after approval by COOMET Committee (presumably in June 2019);
- taking into consideration the Resolution 1 "On the revision of the International System of Units (SI)" drawn at 26th meeting of CGPM a discussion among Chairpersons of JCMS and TC 1.1 – TC 1.12 will be triggered and address the actions of COOMET required by this resolution; a workshop dedicated to the issue of SI units redefinition is planned to be held in 2019 and assumes attendance of Chairpersons of TCs of COOMET and other interested parties.



During the meeting the current activities of structural bodies of COOMET as regards realization of CIPM MRA (CMCs review, comparisons of Measurement Standards, assessment of QMS of NMIs of COOMET).

Program of Comparisons of Measurement Standards of COOMET NMIs (as of November 28, 2018) was approved and signed by COOMET President.

COOMET Presidential Council accepted the Policy and Plan of Technical Committee of COOMET Quality Forum transition to ISO 17034:2016 and ISO/IEC 17025:2017 in the assessment of QMS of NMIs and DIs. A Plan of work on updating the documents of the COOMET Quality Forum aiming at realization of the Policy was also accepted.

A development of a unified new information resource of COOMET was discussed: further work will concern the preparation of a technical task for development of a new information resource of COOMET.

It was agreed to hold a VIII International competition "COOMET Best young metrologist – 2019" on 5-6 Juny 2019 in Kazan. Russia.



29th meeting of COOMET Committee and 17th meeting of the JCMS 3-4 April 2019, Dresden, Germany

Specialists from 16 countries (Armenia, Belarus, Bosnia and Herzegovina, Germany, Georgia, Kazakhstan, China, Cuba, Kyrgyzstan, Lithuania, Moldova, Russia, Slovakia, Tajikistan, Uzbekistan, Ukraine) took part in the event, as well as representatives of international metrology organizations (**BIPM, OIML**) and representatives of regional metrology organizations (**EURAMET, WELMEC and APMP**). Representatives of the State Measurement Standard Centre of the Main State Service "**Turkmenstandartlary**" attended the meeting as guests.

Taking into account the 26th CGPM meeting, the Resolution 1 of CGPM was discussed regarding redefinition of the SI units and tasks of COOMET structural bodies and NMIs of COOMET member countries, related to these resolutions. It was agreed to hold a workshop "Redefinition of the International System of Units (SI)" in October 2019 at the premises VNIIM named after D.I. Mendeleev, Saint Petersburg, Russia

JCMS	Anna CHUNOVKINA, VNIIM, RUSSIA, new term
TC1.1 GM	Anna CHUNOVKINA, VNIIM, RUSSIA, new term
TC1.2 AUV	Valentina POZDEEVA, BelGIM, BELARUS
TC1.3 EM	Tatyana KOLOMIETS, BelGIM, BELARUS
TC1.4 FF	Viktor FAFURIN, VNIIR, RUSSIA, new term
TC1.5 L	Aleksandr KOSTRIKOV, NSC “IM”, UKRAINE
TC1.6 M	Iryna KOLOZINSKAYA, NSC “IM”, UKRAINE
TC1.7 PR	Anatolii BESCUPSCHII, INM, MOLDOVA
TC1.8 QM	Leonid KONOPELKO, VNIIM, RUSSIA
TC1.9 RI	Nikolay MOISEEV, VNIIM, RUSSIA, new term
TC1.10 T	Anatoly POKHODUN, VNIIM, RUSSIA
TC1.11 TF	Vitaliy PALCHIKOV, VNIIFTRI, RUSSIA
TC1.12 RM	Sergey MEDVEDEVSKI KH, UNIIM, RUSSIA
TC2 LM	Peter ULBIG, PTB, GERMANY
QF	Andreas ODIN, PTB, GERMANY
TC3.1 QF	Natalya MURAVSKAYA, VNIIOFI, RUSSIA
TC4 I&TR	Pavel NEYEZHMAKOV, NSC “IM”, UKRAINE, new term
TC5	-

- ❖ **TC 1.2** "Acoustics, ultrasound, vibration" (17–18 September 2018, Gebze, Turkey);
- ❖ **TC 1.3** "Electricity and magnetism" (16–18 October 2018, Baku, Azerbaijan);
- ❖ **TC 1.4** "Flow measurement" (5 September, 2018, Kazan, Russia);
- ❖ **TC 1.5** "Length and angle" (11–12 December 2018, Kharkiv, Ukraine);
- ❖ **TC 1.6** "Mass and related quantities" (28–30 August 2018, Sarajevo, Bosnia and Herzegovina);
- ❖ **TC 1.7** "Photometry and radiometry" (3–7 September 2018, Havana, Cuba);
- ❖ **TC 1.8** "Physical chemistry" (23–24 May 2018, Saint-Petersburg, Russia);
- ❖ **TC 1.9** "Ionizing radiation and radioactivity" (18–20 September 2018, Saint-Petersburg, Russia);
- ❖ **TC 1.10** "Thermometry and thermal physics" (11–14 September 2018, Tbilisi, Georgia);
- ❖ **TC 1.11** "Time and frequency" (21–23 March 2018, Moscow, Russia);
- ❖ **TC 1.12** "Reference materials" (14–15 September 2018, Ekaterinburg, Russia);
- ❖ **TC 2** "Legal metrology" (17 May 2018, Moscow, Russia);
- ❖ **TC 3.1** "Quality Forum Technical Committee" (3–4 October 2018, Tbilisi, Georgia, and 26–27 March 2019, Kishinev, Moldova);
- ❖ **TC 4** "Information and training" (24–25 October 2018, Gebze, Turkey).

Implementation of COOMET projects

The general amount of projects, which have been registered by the COOMET Secretariat since 1991, is **781 projects** (as of 10 May 2019).

In 2018–2019 **41 new projects** were proposed during the reporting period:

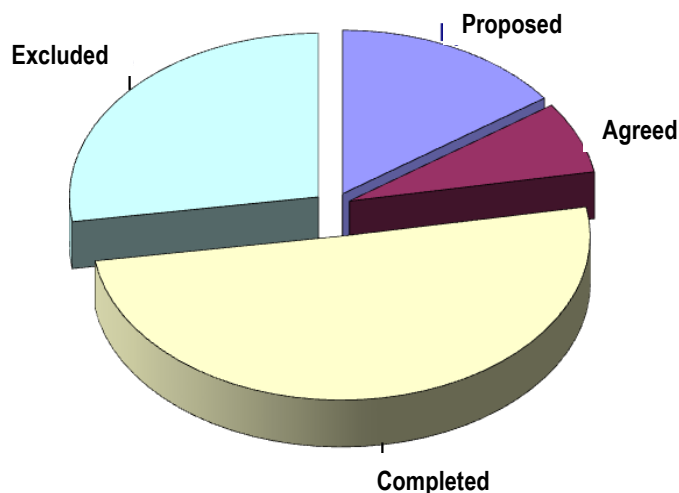
8 projects – for each of the fields "Mass and Related Quantities" and "Legal Metrology",

5 projects – for each of the fields "Thermometry and thermal physics" and "Physical chemistry",

4 projects – for each of the fields "Photometry and radiometry" and "Length and Angle",

2 projects – for each of the fields of "Electricity and magnetism" and "Ionizing radiation and radioactivity",

1 project – for each of the fields "Reference Materials", "Flow measurement", "Acoustics, ultrasound, vibration".



Project status	Number
Proposed	119
Agreed	55
Completed	392
Excluded	213
Deferred	2
Total	781

Course "Train the trainer": transitioning to ISO/IEC 17025:2017 in the CIPM MRA

23–24 May 2018, BIPM, France

23 participants from 17 countries, representing **6 Regional Metrology Organizations (RMOs)** – AFRIMETS, APMP, COOMET, EURAMET, GULFMET and SIM, took part in the course.

Representatives of **Georgia, Russia and Ukraine** participated in the course **from COOMET**.



The aim of the “Train the trainer” course was to assist RMOs in the implementation of ISO/IEC 17025:2017 and its application to the CIPM MRA. The Program of Course included the following issues:

- Common understanding of the new edition of ISO/IEC 17025;
- Training the trainers, including development of materials that can be used at the RMO level for further knowledge transfer;
- Transparent RMO processes on QS.



Workshop “Redefinition of the SI units”

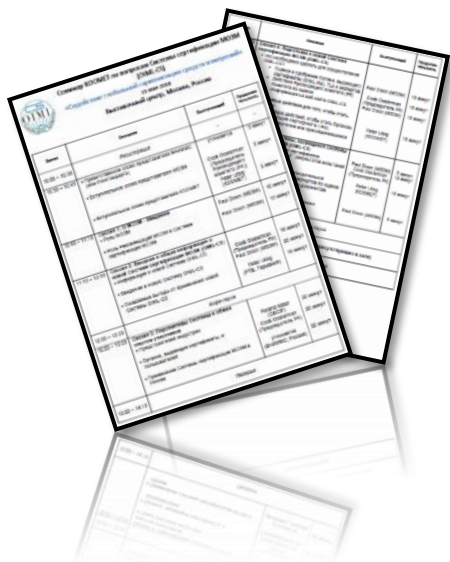
4 September 2018, Varadero, Cuba

The workshop was attended by **18 specialists-metrologists from 13 COOMET member-countries** (Azerbaijan, Belarus, Bosnia and Herzegovina, Cuba, China, Germany, Georgia, Kazakhstan, Moldova, Russia, Slovakia, Ukraine and Uzbekistan), as well as lecturer of **Peter Blattner**, Head of photometry and radiometry laboratory of METAS, **Elected president of CIE**.

The goal of the workshop –
how redefinition of SI units
will influence fundamental
unit Cd and its impact on the
measurements techniques.



COOMET seminar on the OIML Certification System (OIML-CS) "Promoting Global Harmonization for Measuring Instruments"



Speakers:

Cock Oosterman (MC Chair)
Peter Ulbig (COOMET)
Roland Nater (CECIP)

15 May 2018, Moscow, Russia

The Program included the following issues:

- Introduction and general information on the OIML-CS;
- OIML Recommendations and their role in OIML -CS;
- Expected benefits of the new OIML-CS;
- Implementation and operation of the OIML-CS;
- Important topics concerning the OIML-CS.

Representatives from 14 COOMET member-countries (Azerbaijan, Armenia, Belarus, BOSNIA and Herzegovina, Germany, Kazakhstan, Kyrgyzstan, Moldova, Russia, Slovakia, Tajikistan, Turkey, the Ukraine and Uzbekistan) participated in the seminar.



International Conference OIML-COOMET "Worldwide uniform requirements on prepackages - Basis for fair trade and consumer protection"

The Program included the following issues:

- ❖ Introduction into the topic of the Conference and overview of regulation in COOMET countries;
- ❖ International harmonization in the area of prepackages and measuring instruments – The role of the OIML;
- ❖ Worldwide uniform requirements on prepackages: Important OIML recommendations and guides;
- ❖ Labelling and accuracy requirements for prepackages
- ❖ Misleading packaging practices, how they affect consumers and fair competition
- ❖ Example of countries

16 May 2018, Moscow, Russia



Training Workshop on Food Safety Measurement Standards and Technologies

21 October – 9 November 2018, Beijing, China

19 representatives from national metrological institutes or related government agencies from **12 countries** including Armenia, Belarus, Bosnia and Herzegovina, Lithuania, Russia, Singapore, South Africa, Tajikistan, Thailand, Ukraine, Uzbekistan, Vietnam were participated in the Workshop.

The contents of the workshop included the lectures on introduction of technical and administrative system both international and within China on chemical metrology and food safety measurement, introduction of general international guidelines and related laws and regulations in China, and the introduction on the development and common use of reference materials, as well as on food safety measurement and testing methods and demonstration experiments.



Workshop "Implementing the updated requirements of the new version ISO/IEC 17025 in the Quality Management System of NMIs/DIs"

05–07 February 2019, Braunschweig, Germany

The workshop was attended by **28 metrologists** from **10 COOMET member-countries** (Azerbaijan, Belarus, Bosnia and Herzegovina, Georgia, Germany, Kyrgyzstan, Moldova, Russia, Ukraine and Uzbekistan), as well as lecturers from PTB – Martin Czaske, Andreas Odin, Kai Stoll-Malke, Magda Kemper, Beate Kulesa.

The workshop was focused on effective implementation of the revision and its application in the Quality Management System at NMIs/DIs.

The agenda of the workshop included the following topics:

- Detailed review of ISO/IEC 17025:2017
- Management system requirements
- Process approach
- Decision rules
- Information technologies
- Risk-based thinking
- Metrological traceability
- Competence of Personnel



COOMET–BIPM Workshop "CIPM MRA review outcomes: comparisons and CMCs"

2 April 2019, Dresden, Germany



The workshop was attended by **50 specialists-metrologists** – Heads of COOMET Technical Committees and invited guests from **14 COOMET member-countries** (Armenia, Belarus, Bosnia and Herzegovina, China, Cuba, Germany, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Ukraine and Uzbekistan), as well as representatives of international and regional metrology organizations – **Andy Henson**, Head of International Liaison and Communication Department of BIPM; **Chingis Kuanbayev**, specialist of International Liaison and Communication Department of BIPM; **Ian Dunmill**, Assistant Director of the BIML; **Wolfgang Schmid**, EURAMET Member Service Manager.

The goal of the workshop – development of recommendations for coordinating the actions of the TCs Chairpersons when introducing new approaches aimed at improving the efficiency and effectiveness of the CIPM MRA processes.

The agenda of the workshop included 4 sections:

1. Representative CMCs (broad scope)
2. Reducing workload
3. Interpretation of comparisons
4. Sharing workload

2nd annual meeting of EURAMET – COOMET delegations was held on 14 March 2019 in BIPM, Sevres, France. Objective – discuss actual matters and strategic orientation of the cooperation between EURAMET and COOMET.

Agenda included the following items:

- 1) Opening remarks
- 2) Review of action list of first meeting
- 3) Evaluation of achievements so far
- 4) Plans for future cooperation



The following decisions were made:

Act 2/1 COOMET and EURAMET TCs shall make an enquiry on joint CB activities which would benefit both organisations.

Act 2/2 Analyse the TC proposals for joint CB activities. They shall be further discussed at the meeting of the EURAMET BoD Working Group for Capacity Building (BOD-WGCB) in October 2019; a few appropriate activities shall be identified and implemented.

Act 2/3 EURAMET to search for a representative in the Scientific Committee in the VIII International Competition "The Best Young Metrologist of COOMET" from 5 to 6 June in Kazan, Russia.

Act 2/4 EURAMET to promote the Scientific Committee in the VIII International Competition "The Best Young Metrologist of COOMET" via the EURAMET TCs.

**2nd annual meeting of
EURAMET – COOMET delegations**

MINUTES

Final version: 2019-03-21

BIPM, Sevres, France
 Thursday, 14 March 2019, 14h30 – 15h15

Objective
 Discuss actual matters and strategic orientation of the cooperation
 between EURAMET and COOMET

Participants

EURAMET	COOMET
Hans Arne Freyenstein, Chairperson Wolfgang Schmid, Member Service Manager Miruna Dobrea, TC-IM Chair	Valery Hurevich, President Pavel Neyezhmakov, Vice President

AGENDA

- 1) Opening remarks
- 2) Review of action list of first meeting
- 3) Evaluation of achievements so far
- 4) Plans for future cooperation

Annex: Summary of actions

Ref.	Actions of 2nd COOMET – EURAMET meeting 03/2019 (and pending actions from 1 st meeting)	Status of implementation
A1/1	Both delegations to inform their TC-Chairs, that EURAMET and COOMET shall mutually invite the TC-Chairs to the annual meetings of their organisation (in line with Article II.3 of the MoU).	Action was implemented, but follow-up shall be given to ensure continuation of cooperation among TCs
A1/2	COOMET to inform EURAMET on their plan of future conferences in COOMET member countries.	Remained open from 1 st action plan
A2/1	COOMET and EURAMET TCs shall make an enquiry on joint CB activities which would benefit both organisations	
A2/2	Analyse the TC proposals for joint CB activities. They shall be further discussed at the meeting of the EURAMET BoD Working Group for Capacity Building (BOD-WGCB) in October 2019; a few appropriate activities shall be identified and implemented	
A2/3	EURAMET to search for a representative in the Scientific Committee in the VIII International Competition "The Best Young Metrologist of COOMET" from 5 to 6 June in Kazan, Russia.	
A2/4	EURAMET to promote the Scientific Committee in the VIII International Competition "The Best Young Metrologist of COOMET" via the EURAMET TCs.	

Also the **Action Plan on Cooperation for 2019 between EURAMET and COOMET** was agreed.

According to Plan the **main actions** are:

- participation of EURAMET/COOMET TC Chairpersons/Representatives in COOMET/EURAMET TC meetings accordingly;
- joint participation in capacity building and knowledge transfer projects within the BIPM CB&KT Programme;
- participation of COOMET Representative as an observer in the meetings of EURAMET Board of Directors' Working Group for Capacity Building (BOD-WGCB);
- participation of NMIs of COOMET and EURAMET member-countries in comparisons;
- participation of NMIs of COOMET member-countries in realized EMPIR projects.

Action Plan on Cooperation for 2019

No.	Action	Participants	Time	Note
1	Annual meeting of EURAMET and COOMET Heads	COOMET President, COOMET Vice-Presidents, EURAMET Chairperson, EURAMET Representatives	March 2019	Jointly with the 40 th meeting of JCRB Th 14/3, 13h – 14h30
2	Participation of EURAMET Representative in the 29 th meeting of COOMET Committee	EURAMET Representative	3–4 April 2019	Wolfgang Schmid
3	Participation of EURAMET Representative in the workshop for COOMET TC Chairpersons within the BIPM CB&KT Programme	EURAMET Representative	2 April 2019	Wolfgang Schmid
4	Participation of COOMET Representative in the 13 th EURAMET General Assembly	COOMET Vice-President responsible for cooperation with EURAMET	20–24 May 2019	Pavel Neyezhmakov
5	Participation of EURAMET TC Chairpersons/Representatives in COOMET TC meetings	EURAMET TC Representatives	2019	Ongoing
6	Participation of COOMET TC Chairpersons/Representatives in EURAMET TC meetings	COOMET TC 1.1–1.12, TC 3.1, TC 4 Representatives	2019	Ongoing
7	Participation of EURAMET Representatives in the VIII International Competition "The Best Young Metrologist of COOMET" as competitors and a member of the Scientific Committee	EURAMET Representatives	5–6 June 2019	Kazan, Russia <i>Representative of EURAMET to be identified</i>
8	Informing of EURAMET about international metrology events within COOMET	COOMET Secretariat	2019	Ongoing
9	Joint participation in capacity building and knowledge transfer projects within the BIPM CB&KT Programme	COOMET and EURAMET Representatives	2019	It was discussed on 14 March in BIPM
10	Participation of COOMET Representative as an observer in the meetings of EURAMET Board of Directors' Working Group for Capacity Building (BOD-WGCB)	COOMET Vice-President responsible for cooperation with EURAMET	2019	Pavel Neyezhmakov
11	Informing of EURAMET about planned key and supplementary comparisons within COOMET	JCMS Secretary, COOMET TC 1.2–1.12 Chairpersons	2019	Ongoing via TCs <i>Активация Windows</i>
12	Informing of COOMET about planned key and supplementary comparisons within EURAMET	EURAMET TC Chairpersons	2019	Ongoing via TCs
13	Analysis of the opportunities for participation of NMIs of COOMET member-countries in EURAMET comparisons	COOMET TC 1.2–1.12 Chairpersons	2019	Ongoing via TCs
14	Analysis of the opportunities for participation of NMIs of EURAMET member-countries in COOMET comparisons	EURAMET TC Chairpersons	2019	Ongoing via TCs
15	Participation of NMIs of COOMET and EURAMET member-countries in comparisons		2019	See below
16	Participation of NMIs of COOMET member-countries in realized EMPIR projects		2019	See below

The Chairpersons of COOMET TCs or their representatives participated in the meetings of following EURAMET TCs:

- ❖ **TC-AUV** "Acoustics, Ultrasound and Vibration";
- ❖ **TC-F** "Flow";
- ❖ **TC-IM** "Interdisciplinary Metrology";
- ❖ **TC-M** "Mass and Related Quantities";
- ❖ **TC-MC** "Metrology in Chemistry";
- ❖ **TC-PR** "Photometry and Radiometry";
- ❖ **TC-Q** "Quality";
- ❖ **TC-T** "Thermometry"

The Chairpersons of EURAMET TCs or their representatives participated in the meetings of following COOMET TCs:

- ❖ **TC 1.2** "Acoustics, ultrasound, vibration";
- ❖ **TC 1.3** "Electricity and magnetism";
- ❖ **TC 1.4** "Flow measurement";
- ❖ **TC 1.6** "Mass and related quantities";
- ❖ **TC 1.7** "Photometry and radiometry";
- ❖ **TC 4** "Information and training"

Participation of **NMIs of COOMET member countries** in **EMPIR** projects, including:

- ❖ **Project 15SIB04** “Waveform metrology based on spectrally pure Josephson voltages” (**QuADC**)
- ❖ **Project 15RPT04** “Traceability routes for electrical power quality measurements” (**TracePQM**)
- ❖ **Project SRT-s13** “Realising the redefined kelvin” (**InK**)
- ❖ **Project SRT-s14** “Implementing the new kelvin 2” (**InK2**)
- ❖ **Project SRT-s11** “Maintaining and disseminating the new SI unit kilogram via spheres of natural silicon” (**SISi**)
- ❖ **Project SRT-r07** “Research capabilities for radiation protection dosimeters” (**DOSEtrace**)
- ❖ **Project SRT-s09** “Large-Scale Dimensional Measurements for Geodesy” (**GeoMetre**)
- ❖ **Project 17RPT02** “Establishing traceability for liquid density measurements” (**Rholiq**)

VIII International Competition of COOMET

**“The Best Young Metrologist –
2019”**

**5 - 6 June 2019, VNIIR, Kazan,
Russia.**

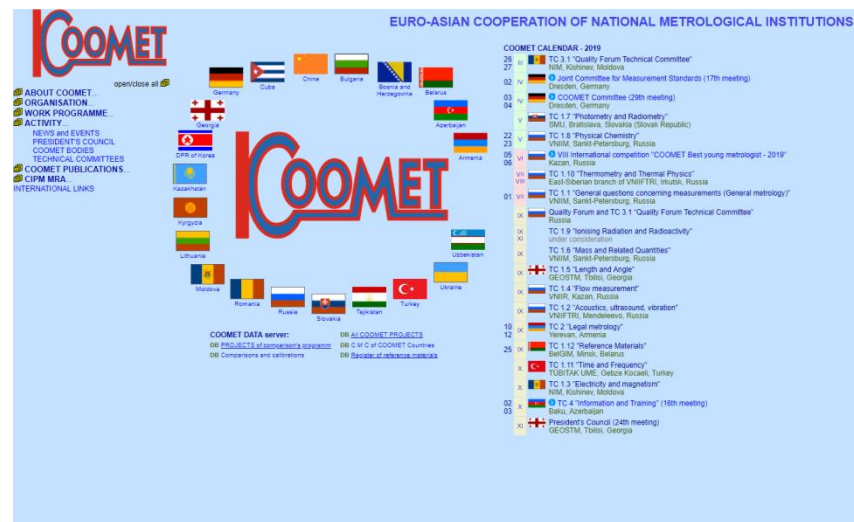
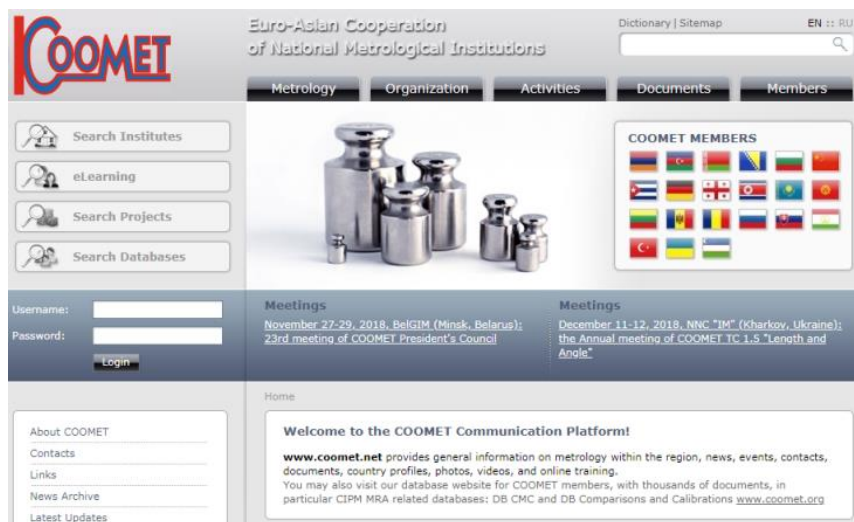


- **The 24th meeting of COOMET President's Council** will be held in November 2019 in Tbilisi, Georgia.
- **The 30th COOMET Committee Meeting** will be held in April 2020 in Kazakhstan.

Thank you for your attention!

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

The COOMET website (www.coomet.org) is maintained by Administrator (A.Ivanov, VNIIFTRI, Russia).



COOMET Web-resources

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