

ANNUAL REPORT of TC 2 "Legal Metrology" for 2022

1. GENERAL CHARACTERISTICS OF COOPERATION IN THIS SUBJECT FIELD

TC 2 includes representatives of 17 COOMET member countries: Azerbaijan, Armenia, Belarus, Bulgaria, Bosnia and Herzegovina, China, Germany, Georgia, Kazakhstan, Kyrgyzstan, Cuba, Moldova, Russia, Slovakia, Tajikistan, Uzbekistan and Ukraine.

Since in October 2022 a notification was received from the Ministry of Economy of Ukraine of the suspension of participation in CSBs, the Acting TC 2 Chair (Yuriy Kuznmenko, Ukraine) was not able to further perform his duties. In view of the situation, the COOMET Presidential Council appointed the Head of COOMET Secretariat, Nadezhda Liakhova, the Acting Chair of TC 2 from 15.10.2022. Nadezhda Liakhova organized a TC 2 meeting (on 24 November 2022), where a new Chair was elected.

TC 2 members endorsed the appointment of Marat Yunusov (UzNIM, Uzbekistan) as the TC 2 Chair. His candidacy was supported by the COOMET Presidential Council and is submitted for approval to the COOMET Committee. The Presidential Council has appointed Marat Yunusov the Acting TC 2 Chair since January 2023.

TC 2 coordinates works in legal metrology among COOMET member countries, which are performed at the regional and international levels and are of common interest for cooperation participants.

TC 2 serves as a forum for scientific and technical cooperation in the subject field "Legal Metrology" and primarily provides for the implementation of such a COOMET task as to perform the function of a regional legal metrology organization (RLMO). This task, as well as other tasks, listed in document COOMET D1/2022, are implemented through the fields¹ of cooperation below:

13. *translation into Russian of documents on metrology of international metrology organizations;*

14. *exchange of information on international requirements and best practices in the field of legal metrology;*

15. *provision of guidance on the application of the requirements of international organizations' publications regarding measuring instruments and methods for their testing, as well as other objects of legal metrology at the national level.*

The following fields were defined in legal metrology within TC 2 and their coordinators appointed:

- 2.1 "Measuring devices and systems in legal metrology" (*coordinator is being specified*);
- 2.2 "Medical equipment with measuring functions" (coordinator – Nuriddin Raymjonov, UzNIM, Uzbekistan);
- 2.3 "Conformity assessment of measuring instruments" (coordinator – Marat Yunusov, UzNIM, Uzbekistan);
- 2.4 "Digitalization in legal metrology" (coordinator – Peter Ulbig, MEN, Germany);
- 2.5 "General principles of metrological control and supervision" (coordinator – Ruf Genkina, VNIIMS, Russia).

2. RESULTS OF TC 2 MEETINGS

The **23rd meeting of TC 2** was held online on 24 November 2023. Representatives of 9 COOMET member countries (Azerbaijan, Armenia, Belarus, Kazakhstan, Kyrgyzstan, China, Russia, Tajikistan, Uzbekistan) took part in the meeting.

¹ see section 4 of document COOMET D1/2022

The main resolutions of TC 2:

A. General issues

1) To request TC2 members to send information to the COOMET Secretariat about the experts from their countries, who are ready to take part in the discussion of the issues of cooperation in all fields of LM (deadline is 20.01.2023).

2) To request the elected TC 2 Chair in conjunction with the COOMET Secretariat to organize **online working meetings of countries' experts in fields 2.1 – 2.5** during the first six month of year 2023 in order to discuss possible subjects of cooperation within each field.

Comments: the appropriate survey was organized. The information on the experts was sent to the field coordinators. Online working meetings with experts are scheduled for the 2nd quarter of 2023. According to the meeting results, the coordinators will present their proposals on the development of work in the headed fields at TC 2 -2023.

3) To request the Elected TC 2 Chair in conjunction with the COOMET Secretariat to initiate in 2023 preparation of the **updated information about the legal metrology systems in COOMET member countries** published on the COOMET webportal:

<https://www.coomet.net/activities/legal-metrology/lm-in-coomet-countries/>

Comments: the appropriate enquiry was sent to counties. The information will be updated as soon as updated data from countries are received. The results will be presented at TC 2 -2023.

B. Digitalization in legal metrology

4) To take note of the information from the Chair of TG-DigTr Andrey Pankov about the proposals² in terms of preparation of COOMET recommendations in conjunction with TC 2:

- "Structure of and requirements for digital certificates, data sheets and type descriptions for measuring instruments in COOMET member countries"
- "Structure of and requirements for digital verification certificates for measuring instruments in COOMET member countries"

5) To request the Chair of TG-DigTr to inform about the completion of work under the project "Preparation of a COOMET recommendation "Structure of and requirements for digital MI group card descriptions in COOMET member countries" as the basis for further work on the projects under item 4.

Comments: the issue will be considered at the next TC 2 meetings (when the information is received from the TG-DigTr Chair). Other importance issues of digitalization in legal metrology within COOMET will also be discussed at TC 2 meetings (digital data exchange; repository of documents based on the results of metrological work (certificates, acts etc.); methods for remote metrological work (verifications, calibrations, conformity assessment etc.); digital data banks, work with big data etc.).

C. Regulation regarding smart meters

6) To take note of the results of the survey among TC 2 members on the **challenges related to the regulation of smart meters** in COOMET member countries, conducted as part of preparation to the RLMO Round Table (27.09.2022), and **to note the relevance of this problem for COOMET**.

7) To request the COOMET President to send an official letter to the BIML with a proposal to formulate a term "smart meters" (as measuring instruments, with the indication of their metrological features in view of the "smart" technology) in an OIML publication so that this term has the same meaning in all countries and regions.

8) To consider it appropriate to hold a **seminar "Issues of the metrological ensuring of measurements using smart meters"** (possibly involving representatives of the producers of such measuring instruments), ahead of the TC 2 meeting in 2023 to exchange experiences on that issue.

² proposals from the Roadmap for Implementation of the COOMET Concept for the Issues of Digital Transformation in Metrology

9) To make a decision on the appropriateness of launching a COOMET project or taking other steps in terms of discussing this problem within COOMET at the next TC meeting in 2023.

Comments: A request was sent to the BIML from the President. Preparation of the seminar program has begun. Discussion of the problem will continue at TC 2 -2023.

D. Participation in the OIML Certification System

10) To take note of the information about the preparation of a draft **translation of the UNIDO-OIML Brochure "Certification of measuring instruments"** and its preliminary review by the members of the WG for project 827/RU/21 (coordinator – Aleksandr Kuzin, VNIIMS, Russia).

11) To request the project coordinator to inform the Acting Chair of TC 2 on obtaining permission from UNIDO (OIML) for publication of the Brochure translation, inter alia on the COOMET information resources and to make a design of the Russian translation of the Brochure as close to the original as possible.

Comments: A draft translation has been prepared. Work is currently underway to obtain permission from UNIDO for publication of the translation in the form that is to the maximum extent close to the original, in hard copies and on the COOMET web resources. When the work is completed, the Brochure will be sent to COOMET member countries.

12) To endorse holding of a **COOMET webinar on the OIML Certification System for interested specialists of COOMET member countries** in 2023; the dates of the webinar should be negotiated in due course when work under on the Brochure translation is completed.

13) To request the COOMET representative to OIML-CS Aleksandr Kuzin (Russia) to start preparing proposals on the webinar program and possible speakers – to discuss them during an online meeting, involving the Elected TC 2 Chair, coordinator of field 2.3 "Conformity assessment of measuring instruments" and COOMET Secretariat on a convenient date.

14) To request the COOMET Secretariat to inform stakeholders about the scheduled webinar at least two month before its date.

Comments: the work continues.

E. About translation of OIML publications and preparation of COOMET recommendations based on OIML publications

15) To consider it appropriate to initiate a COOMET project on the translation of the International Vocabulary of Terms in Legal Metrology VIML (version 2022) in 2023. To request the interested members of TC 2 to inform the Elected TC 2 Chair (with a copy to the COOMET Secretariat) about their willingness to act as the project coordinator by 20.01.2023.

Comments: It has been preliminarily agreed that VNIIMS, Russia, will act as the work coordinator. The form of the proposed project is expected for registration.

16) To request the Elected TC 2 Chair in conjunction with the COOMET Secretariat to conduct a survey among TC2 members from Azerbaijan, Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan and Uzbekistan as to translations of what OIML publications (TOP10) are currently the most relevant for their countries. To present the consolidated proposals from countries to the COOMET Plan for translation of OIML publications at the next TC 2 meeting in 2023 for discussion and taking into account in preparing a Work Program of TC 2 for 2024-2026.

Comments: The survey is underway. The results will be presented at TC 2-2023.

17) To request the coordinators of fields 2.1 – 2.5 to preliminarily consider the appropriateness of preparing COOMET recommendations on the issues, related to OIML publications, at online working meetings with experts of fields 2.1 – 2.5. To continue discussion of the issue at the next TC 2 meeting in 2023.

Comments: The appropriateness of preparing COOMET recommendations on the issues of application of the following OIML publications was highlighted: G19, D10, D23, D30. Discussion of this issue will continue at online meetings.

F. Cooperation with RLMOs

18) To take note of the information about posting of a list of translations into Russian of documents of regional organizations with summaries on the COOMET web portal (prepared under project 844/UA/21).

Cm. <https://www.coomet.net/ru/publikacii/translations-into-russian-of-documents-of-regional-organizations/>

19) To request the Elected Chair of TC 2 in conjunction with the COOMET Secretariat to complete the survey among TC2 members for the assessment of the current situation with regard to the application of Guides of WELMEC and other RLMOs in COOMET member countries and appropriateness of their application in the future by 30.06.2023. To present the results of the survey at the TC2 meeting in 2023.

20) To consider the issue of drawing up a Plan for translation of Guides of WELMEC and documents of other RLMOs into Russian (taking into account the results of the survey among TC 2 members) at the TC 2 meeting in 2023.

21) To take note of the information about obtaining permission from WELMEC for the publication of translations of its Guides, provided that the requirements of the document "Conditions for the Use and Translation of WELMEC e.V. Guides" of 13.08.2021 (kept in the COOMET Secretariat) are met.

22) To consider it appropriate to translate documents of other RLMOs and post the translations on the COOMET information resources, provided that permissions are obtained from the corresponding organizations.

Comments: The survey will be completed in the 2nd quarter of 2023. Discussion will continue at TC 2-2023.

E. Discussion of possible topics of training events on the issues of legal metrology of interest to specialists of COOMET member countries

23) To request the Elected TC 2 Chair in conjunction with the COOMET Secretariat to complete the survey among TC 2 members to define possible topics and format of training events on the issues of LM of interest to specialists of COOMET member countries by 30.06.2023. To present the survey results at the TC 2 meeting in 2023 and to formulate exact topics of training seminars to be included in the Plan of COOMET training events for 2023-2024 and beyond.

Comments: There is currently no technical possibility to hold online trainings using the COOMET web resources. Hence, all efforts on conducting trainings in LM are focused on holding training seminars/webinars. A COOMET webinar on the OIML Certification System (dates are being specified) and seminar "Issues of the metrological ensuring of measurements using smart meters" (jointly with a TC 2 meeting) are provided for in the plan for 2023.

OIML e-learning platform is being upgraded (the link to the platform is available on the COOMET web portal).

3. STATUS OF COOMET PROJECTS

In 2022 COOMET project **797/BY/19** "Review of approaches to the metrological support of medical measuring instruments" (coordinator – BelGIM, Belarus) was completed.

Working group: TC 2 members or other specialists of COOMET member countries (Azerbaijan, Belarus, Bosnia and Herzegovina, Germany, Kazakhstan, China, Kyrgyzstan, Russia, Ukraine). Under the project, a survey was conducted among the representatives of the interested countries (from members of the WG for the project), based on which a brief review of approaches to the metrological control of medical measuring instruments with numerical readings expressed in the units of measurements was prepared. The results were handed over to the coordinator of field 2.2 "Medical Equipment with Measuring Functions" and presented at the TC 2 meeting (24.11.2022).

The following COOMET projects are currently **in progress**:

Project, coordinator	Participants	Implementation
716/BY-a/17 "Development of rules for setting up reverification and recalibration intervals for measuring instruments used in the field of legal metrology" (coordinator – Belarus)	Belarus, Armenia, Germany, Kyrgyzstan, Cuba, Moldova, Russia, Ukraine, other interested TC 2 members	A draft recommendation was preliminary discussed. The discussion will continue at an online meeting with experts of field 2.1 (2 nd quarter of 2023), information about the progress of work will be presented at the TC 2 meeting in 2023.

Project, coordinator	Participants	Implementation
778/UA-a/19 "Development of a COOMET Recommendation "Metrological control of measuring systems. The main provisions" (<i>coordinator is being specified</i>)	Belarus, Bosnia and Herzegovina, Cuba, Russia, Slovakia, Uzbekistan, other interested TC2 members	<p>A draft recommendation was discussed in 2021-2022.</p> <p>In view of the death of the project coordinator, it was decided at TC 2-2022:</p> <p>1) to discuss the appropriateness of continuing work on the project at an online working meeting with experts of field 2.1 (2nd quarter of 2023);</p> <p>2) in case of a positive decision, to define a new coordinator and request him to draw up the form of the agreed COOMET project with the refined country code and members of the WG for the project.</p>
Update of publications		
823/BY/21 Update of COOMET Recommendation R/LM/25:2015 "Procedure for recognizing technical devices as measuring instruments" (coordinator – Belarus)	Belarus, Uzbekistan, other interested TC 2 members	Work is underway. Information about the progress of work will be presented at the TC 2 meeting in 2023
831/UZ-a/21 Update of COOMET Recommendation R/LM/8:2002 "Layout, presentation, drawing up and contents of Measuring instrument type specification for national register of measuring instruments" (coordinator – Nuriddin Raimjonov, Uzbekistan)	Uzbekistan, Belarus, Kazakhstan, Moldova	Work is underway. Information about the progress of work will be presented at the TC 2 meeting in 2023
Translations		
844/UA/21³ Drawing up a List of adopted rules, guides, recommendations in the field of legal metrology of other RLMOs, which are of interest to COOMET member countries, and agreement on the possibility of their application in COOMET member countries (coordinator – Yuriy Kuzmenko, Ukraine)	Ukraine, Belarus, Kazakhstan, other interested TC 2 members	<p>The list of RLMO publication with brief summary is available on the TC 2 page on the COOMET webportal for reference purposes.</p> <p>A survey will further be conducted to assess the current situation on the application of RLMO documents in COOMET member countries and appropriateness of their application in the future.</p> <p>Information about the progress of work will be presented by the Acting TC 2 Chair at the TC 2 meeting in 2023</p>
827/RU/21 Translation of the UNIDO-OIML Brochure "Certification of measuring instruments" (coordinator – Aleksandr Kuzin, Russia)	Russia, Belarus, Kazakhstan, Ukraine, other interested TC 2 members	<p>A draft translation has been prepared. Work is currently underway to obtain permission from UNIDO for publication of the translation in the form that is to the maximum extent close to the original, in hard copies and on the COOMET web resources.</p> <p>When the work is completed, the Brochure will be sent to COOMET member countries. The project will be completed after the publication of the Brochure on the COOMET web resources.</p>

³ Note: the form of the agreed project will be prepared on behalf of UzNIM (Uzbekistan)

Project, coordinator	Participants	Implementation
834/RU/21 Translation of OIML D1:2020 "National metrology systems - Developing the institutional and legislative framework" (coordinator – Yuriy Androshchuk, Russia)	Russia, Belarus, Uzbekistan, other interested TC 2 members	The translation has been prepared. The project will be completed in May 2023.
845/KG/21 Translation of Document ILAC-G24/OIML D 10:2007 "Guidelines for the determination of calibration intervals of measuring instruments" (coordinator- Marina Denisova, Kyrgyzstan)	Kyrgyzstan, Kazakhstan, Russia, other interested TC 2 members	The translation has been prepared. The project will be completed in May 2023
835/RU/21 Translation of OIML D11:2013 "General requirements for measuring instruments - Environmental conditions" (coordinator – Yuriy Androshchuk, Russia)	Russia, Belarus, other interested TC 2 members	Preparation of the translation is at the final stage - it will be sent to members of TC 2 and WG for the project in the 2 nd quarter of 2023.
838/BY/21 Translation of Document OIML D 30:2020 "Guide for the application of ISO/IEC 17025 to the assessment of Testing Laboratories involved in legal metrology" (coordinator – Belarus)	Belarus, Russia, Uzbekistan	The translation has been prepared. The project will be completed in April 2023
836/RU/21 Translation of OIML D31:2019 "General requirements for software controlled measuring instruments" (coordinator – Yuriy Androshchuk, Russia)	Russia, other interested TC 2 members	The translation has been prepared. The project will be completed in May 2023
839/BY/21 Translation of Document OIML D 32:2018 "Guide for the application of ISO/IEC 17065 to assessment of certification bodies in legal metrology" (coordinator – Belarus)	Belarus, Russia, Uzbekistan	The translation has been prepared. The project will be completed in April 2023
847/AZ/21 Translation of Document OIML D 33:2019 "Reference standard liquids (Newtonian viscosity standard for the calibration and verification of viscometers)" (coordinator – Azer Gurbanov, Azerbaijan)	Azerbaijan, Belarus, other interested TC 2 members	Preparation of the translation is at the final stage - it will be sent to members of TC 2 and WG for the project in the 2 nd quarter of 2023.
832/UZ/21 Translation of Recommendation OIML R 75-3:2006 "Heat meters. Part 3: Test Report Format" (coordinator – Nuriddin Raimjonov, Uzbekistan)	Uzbekistan, Kazakhstan other interested TC 2 members	The translation has been prepared. The project will be completed in May 2023
837/RU/21 Translation of OIML R125:1998 "Measuring systems for the mass of liquids in tanks" (coordinator – Y.Androshchuk, Russia)	Russia, other interested TC 2 members	Preparation of the translation is at the final stage - it will be sent to members of TC 2 and WG for the project in the 2 nd quarter of 2023.
840/BY/21 Translation of Guide OIML G 14:2011 "Density measurement" (coordinator – Nadezhda Liakhova, Belarus)	Belarus, Uzbekistan	The translation has been prepared. The project will be completed in April 2023

The following COOMET projects were **excluded** from the TC 2 Work Program in 2022:

Project number	Project title	Project coordinator	Notes
842/UA/21	Translation of the OIML publication: OIML R 137-1/2:2012 "Gas meters. Part 1: Metrological and technical requirements. Part 2: Metrological controls and performance tests" and Amendment to OIML R 137-1/2 (2014)	Yuriy Kuzmenko (Ukrmetrteststandart, Ukraine)	Excluded at the coordinator's initiative
843/UA/21	Translation of the OIML publication: OIML R 137-3:2014 "Gas meters. Part 3: Test report format"	Yuriy Kuzmenko (Ukrmetrteststandart, Ukraine)	Excluded at the coordinator's initiative
830/BY/21	Update of the COOMET Recommendation R/LM/28:2016 "Template procedure for testing of software of measuring instruments"	Maksim Shabanov (BelGIM, Belarus)	Excluded at the decision made at TC 2-2022
841/BY/21	Update of the COOMET Recommendation R/LM/26:2015 "General requirements for the competence of verification laboratories"	Maksim Shabanov (BelGIM, Belarus)	Excluded at the decision made at TC 2-2022
848/UA/21	Development of a COOMET recommendation "Procedure for establishing reverification intervals for measuring systems used in the field of legal metrology"	Aleksandr Krichevets (DP NDI "Systema", Ukraine)	Excluded at the initiative of the TC 2 Chair (Yuriy Kuzmenko)

4. ISSUES, RELATING TO INTERACTION WITH INTERNATIONAL AND REGIONAL ORGANIZATIONS IN THE FIELD OF LEGAL METROLOGY

Valery Hurevich, COOMET President, and Andrey Pankov, TG-DigTR Chair, represented COOMET at the Round table of regional legal metrology organizations (27 September 2022, online); at the meeting they gave a presentation on the COOMET activities in legal metrology. The results of the survey among TC 2 members regarding national regulation of smart meter were reflected in the presentation.

5. INFORMATION ABOUT THE PROPOSED VENUE AND DATE OF THE NEXT MEETINGS

The 24th TC 2 meeting is scheduled for **September-October 2023 jointly with the seminar "Issues of the metrological ensuring of measurements using smart meters"**. An enquiry was sent to TC 2 members about the possibility of organization of the physical meeting of TC 2 (1 day) and seminar (1 day) in their countries.

It was agreed that in the absence of an invitation, both events will be held online (the exact dates will be negotiated with TC 2 members in due course by 01.05.2023 at the latest).

6. PROPOSALS FOR RESOLUTIONS OF THE COOMET COMMITTEE

➤ To approve Marat Yunusov (Uzbekistan) as the new Chair of TC 2 "Legal Metrology" for 4 years, from 2023 to 2027 (first term of office).



Marat Yunusov
Acting TC 2 Chair