



MINUTES

15th Meeting of COOMET Technical Committee 1.11

"Time and Frequency"

January 19, 2023, on-line

The 15th online meeting of COOMET TC 1.11 "Time and Frequency" was held on January 19, 2023, using the Zoom platform.

List of representatives of participating countries

| No | Participating country | Representative | Organization |
|----|-----------------------|--|---|
| 1 | Armenia | Khachatryan Armenui, TC 1.11 member info@metrology.am | CJSC "National Body for Standardization and Metrology" (CJSC "NBSM") |
| 2 | Azerbaijan | Abbasov Shamkhal, TC 1.11 member shamkhal.abbasov@metrology.gov.az | The Legal entity of public law "Azerbaijan Institute of Metrology" (AzMI) |
| 3 | | Zeynalov Maarif | |
| 4 | Belarus | Liakhova Nadezhda, Head of COOMET Secretariat | Belarusian State Institute of Metrology (BelGIM) |
| 5 | | Shershun Yuriy, TC 1.11 member yshershun@belgim.by | |
| 6 | | Takun Elena, scientist custodian of the time and frequency standard | |
| 7 | Kazakhstan | Smagulov Sultanbek, TC 1.11 member s.smagulov@ksm.kz | Kazakhstan Institute of Standardization and Metrology (KazStandard) |
| 8 | Kyrgyzstan | Abasbekova Elmira, TC 1.11 member metrolog@nism.gov.kg | Kyrgyzstandart |
| 9 | Moldova | Straistari Stella, representative of TC 1.11 member Marimi.electrice@inm.gov.md | National Metrology Institute INM-MD |
| 10 | Russia | Palchikov Vitaliy, TC 1.11 Chair vitpal@mail.ru | FSUE "All-Russian Research Institute of Physical Technical and Radio Technical Measurements" (VNIIFTRI) |
| 11 | | Zharikov Andrey, TC 1.11 Executive Secretary a.zharikov@mail.ru | |
| 12 | | Norets Igor, scientist custodian of the national time and frequency standard, TC 1.11 member norets_igor@vniiftri.ru | |
| 13 | | Karaush Artyom karaush_aa@vniiftri.ru | |
| 14 | Uzbekistan | Gazieva Lubov, TC 1.11 member apple-4@mail.ru | Uzbek National Institute of Metrology |

Given the quorum requirements for a COOMET structural body meeting according to document COOMET D5/2021, **the quorum at the meeting was reached.**

TC members from 17 COOMET member countries have been appointed, 12 countries participate in the quorum calculation, 3 countries (Bulgaria, Georgia and Tajikistan) have the status of an "observer". The quorum is reached with the participation of representatives of at least 6 countries.

The following agenda was adopted:

| № | Issue | Speaker |
|------|---|---|
| 1. | Report on the activities of TC 1.11 in 2021-2022, including the analysis of resolutions of the previous meeting and information about participation of TC representatives in meetings of the working bodies of international organizations and RMOs | <i>V. Palchikov, TC Chair</i> |
| 2. | Information on the resolutions of the COOMET Committee and the Presidential Council | <i>N. Liakhova, Head of the COOMET Secretariat</i> |
| 3. | Information on the resolutions of the 21 th and 22 nd meetings of the COOMET Joint Committee for Measurement Standards and discussion of the issues related to the resolutions adopted: | <i>A. Chunovkina, Chair of the Joint Committee for Measurement Standards</i> |
| 4. | About the state of COOMET projects in the field of "Time and Frequency" | <i>TC Chair Project Coordinators</i> |
| 4.1. | On the progress of work on the COOMET project 605/RU/13 "Comparison of time scales of NTP-servers via INTERNET", pilot - VNIIFTRI | <i>V. Palchikov</i> |
| 4.2. | On the progress of work on the COOMET project 398/RU/07 "Key comparisons of national standards of time and frequency with the Russian UTC (SU) scale", pilot - VNIIFTRI | <i>V. Palchikov</i> |
| 4.3. | Discussion of new projects | <i>TC Chair meeting participants</i> |
| 5. | On the implementation of the CIPM MRA | <i>V. Palchikov, TC Chair</i> |
| 5.1. | Consideration of issues of intra- and interregional CMC review on the KCDB 2.0 platform of the TC member countries and the participation of experts by the types of measurements in the CMC review of other RMOs | <i>V. Palchikov, TC Chair</i> |
| 5.2. | Updating the lists of technical experts on CMC review and QMS peer review in the field of measuring time and frequency | <i>A. Zharikov, Secretary of TC</i> |
| 6. | On the possibilities of the BIPM e-learning platform and on the creation of COOMET courses | <i>N. Liakhova meeting participants</i> |
| 7. | Discussion of CEEMS proposals in terms of organizing and conducting comparisons of standards and calibrations of standards, as well as conducting training events | <i>TC Chair meeting participants</i> |
| 8. | Election of the Chair of TC 1.11 | <i>TC Chair, TC members or their official representatives</i> |
| 9. | The seminar "National time scales, calibration of comparison instruments") | |
| 9.1 | Calculation of the national time scale UTC(SU) | <i>I. Norets, scientist custodian of the national time and frequency standard of the Russian Federation</i> |
| 9.2 | GNSS receiver calibration | <i>A. Karaush</i> |

| № | Issue | Speaker |
|------|--|--|
| 10. | Organizational issues | <i>A. Zharikov, Secretary of TC</i> |
| 10.1 | Information about changes in the staff composition of the TC | <i>A. Zharikov, TC Secretary</i> |
| 10.2 | On the cancellation of COOMET recommendations (COOMET R/TF/2:1995 "Interstate Hierarchical Chain for time and frequency measuring instruments" and COOMET R/TF/3:1995 "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") | <i>A. Zharikov, TC Secretary</i> |
| 11. | Short reports on the current state of metrological activities in the field of time and frequency measurement in COOMET countries | <i>TC members</i> |
| 12. | Other issues | <i>TC Chair TC Secretary, TC members, Meeting participants</i> |
| 13. | Time and venue of the next meeting | <i>A. Zharikov, Secretary of TC</i> |
| 14. | Discussion of the results of the TC meeting | <i>Chair of the TC, TC Secretary, TC members, meeting participants</i> |

RESOLUTIONS OF THE MEETING

Under item 1:

Adopted resolution:

- 1) To take note of the information about the activities of TC 1.11 in 2021-2022.

Under item 2:

Adopted resolutions:

- 1) To take note of the information about the resolutions of the COOMET Committee and Presidential Council;
- 2) Members of TC 1.11 should study the changes in the COOMET Memorandum of Understanding (COOMET D1/2022).

Under item 3:

Adopted resolutions:

- 1) To take note of the information on the resolutions of the 21st and 22nd meetings of the COOMET Joint Committee for Measurement Standards and to be guided by them in performing work within TC 1.11;
- 2) The TC Chair should submit proposals on updating the COOMET Roadmap on the issue of redefining the second to the Joint Committee for Measurement Standards until 01.02.2023.

Under item 4:

The current status of COOMET projects, as well as the issues of updating the subjects of cooperation and new promising projects were considered.

4.1 Project 605/RU/13 "Comparison of time scales of NTP-servers via INTERNET" (coordinator - Kagan S.N.)

The project Coordinator presented the results of the comparisons of the countries participating in the project.

Adopted resolutions:

- 1) To consider it appropriate to complete the project owing to the sufficient scientific results obtained and lack of the need for publishing CMC entries.
- 2) The comparison Coordinator should prepare a report on comparisons and send it to the participants, as well as to draw up a form of the final report on the COOMET project and submit it to the COOMET Secretariat by 05.03.2023.

4.2 Project 398/RU-a/07 "Key comparisons of national standards of time and frequency with the Russian UTC (SU) scale" - (CCTF-K001.UTC) (coordinator - Palchikov V.G.)

Adopted resolution:

- 1) To take note of the information on the results of the comparisons of the countries participating in the project.

4.3 Suggested new projects

The meeting participants exchanged views on new promising projects within the framework of TC 1.11.

Adopted resolution:

- 1) To approve holding of additional comparisons of the time scales of the laboratories in Uzbekistan and Turkey, pilot - TUBITAK UME. To request the Coordinator to send the form of the proposed project to the COOMET Secretariat by 31.01.2023.

Under item 5:

The issues of intra- and interregional reviews of CMCs on the KCDB 2.0 platform were discussed.

Adopted resolutions:

- 1) To take note of the information from the TC 1.11 Chair on the state of intra- and interregional reviews of CMCs of the TC member countries on the KCDB 2.0 platform and the participation of experts by the types of measurements in CMC reviews of other RMOs.
- 2) To update until 01.03.2023, the lists of technical experts and candidates for technical experts on CMC review and peer review of QMS in the field of time and frequency measurement.
- 2) The Chair of TC 1.11 should send to the COOMET Secretariat the above lists for the update of the information on the TC 1.11 page on the COOMET web portal by 01.03.2023.

Under item 6:

Adopted resolution:

- 1) To take note of the information from the Head of the COOMET Secretariat about the capabilities of the BIPM e-learning platform.
- 2) To request the TC Chair to arrange creation of a training course on the issues of time and frequency measurements. To present the results at the next TC meeting.

Under item 7:

CEEMS requests were discussed in terms of organizing and conducting comparisons of standards and calibrations of standards, as well as conducting training events.

Adopted resolutions:

- 1) To note the inappropriateness of conducting COOMET comparisons on electronic stopwatches owing to the lack of interested participants.
- 2) To request FSUE "VNIIFTRI" to assist the laboratory of the CSMC of Kyrgyzstan in organizing the calibration of electronic stopwatches.

Under item 8:

According to the initiative of the current TC 1.11 Chair V.Palchikov to resign, **a new TC 1.11 Chair was elected.**

The TC 1.11 Secretariat received a formal letter nominating the TC 1.11 member from Russia I.Norets (Head of Department, scientific custodian of the national time and frequency standard of the Russian Federation, VNIIFTRI) for the position of the TC 1.11 Chair.

According to paragraph 5.2.3.2 of document D5/2021 "Model Regulations for COOMET Structural Bodies" (taking into account para. 4.2 of COOMET D5.11/2022 "Regulation on the COOMET Technical Committee "Time and Frequency" (TC 1.11)":

Elections of the CSB Chair shall be held in the form of a secret ballot among CSB members at the CSB meeting.

The decision is considered to be adopted if 2/3 of votes are given FOR the candidature of the Chair (in case of one candidate) and by the simple majority of votes (in case of two and more candidates) from the number of CSB members, who took part in the voting.

Voting was held among TC 1.11 members.

8 members of TC 1.11 took part in the voting.

One candidature, **Igor Norets (VNIIFTRI, Russia)**, was submitted for vote.

Voting results:

Votes cast – 8

FOR – 8

AGAINST – 0

ABSTAIN – 0

The election shall be considered valid.

The voting results will be further submitted to the COOMET Presidential Council for endorsement and to the COOMET Committee for approval.

The meeting participants wished every success to the elected TC 1.11 Chair in fulfilling his duties (after the approval of his candidature by the COOMET Committee) and expressed gratitude to the current Chair (Vitaliy Palchikov) for his contribution to the organization of COOMET activities in the "Time and Frequency" field.

Under item 9:

The reports of the scientist custodian of the national standard of time and frequency of the Russian Federation I. Norets, and Head of laboratory at VNIIFTRI A. Karaush were heard out and discussed.

Under item 10:

Adopted resolution:

1) To take note of the information about the changes in the composition of TC 1.11.

2) To cancel the following COOMET publications in the field "Time and Frequency":

– Recommendation COOMET R/TF/2:1995 "Interstate Hierarchical Chain for Time and Frequency Measuring Instruments";

– Recommendation COOMET R/TF/3:1995 "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".

Under item 11:

Reports of members of TC 1.11 on the current state of metrological activities in the field of measuring time and frequency in their laboratories were heard.

Under item 13:

Adopted resolution:

1) The 16th meeting should be held in October 2023 (the place and format of the meeting will be agreed upon in working order).

Chair of TC 1.11



V. Palchikov

Executive Secretary of TC 1.11



A. Zharikov