



COOMET TC 1.10 «Temperature and thermophysical quantities» activity 2024 – 2026



ВНИИМ

ФГУП "Всероссийский научно-исследовательский институт метрологии им. Д.И.Менделеева"

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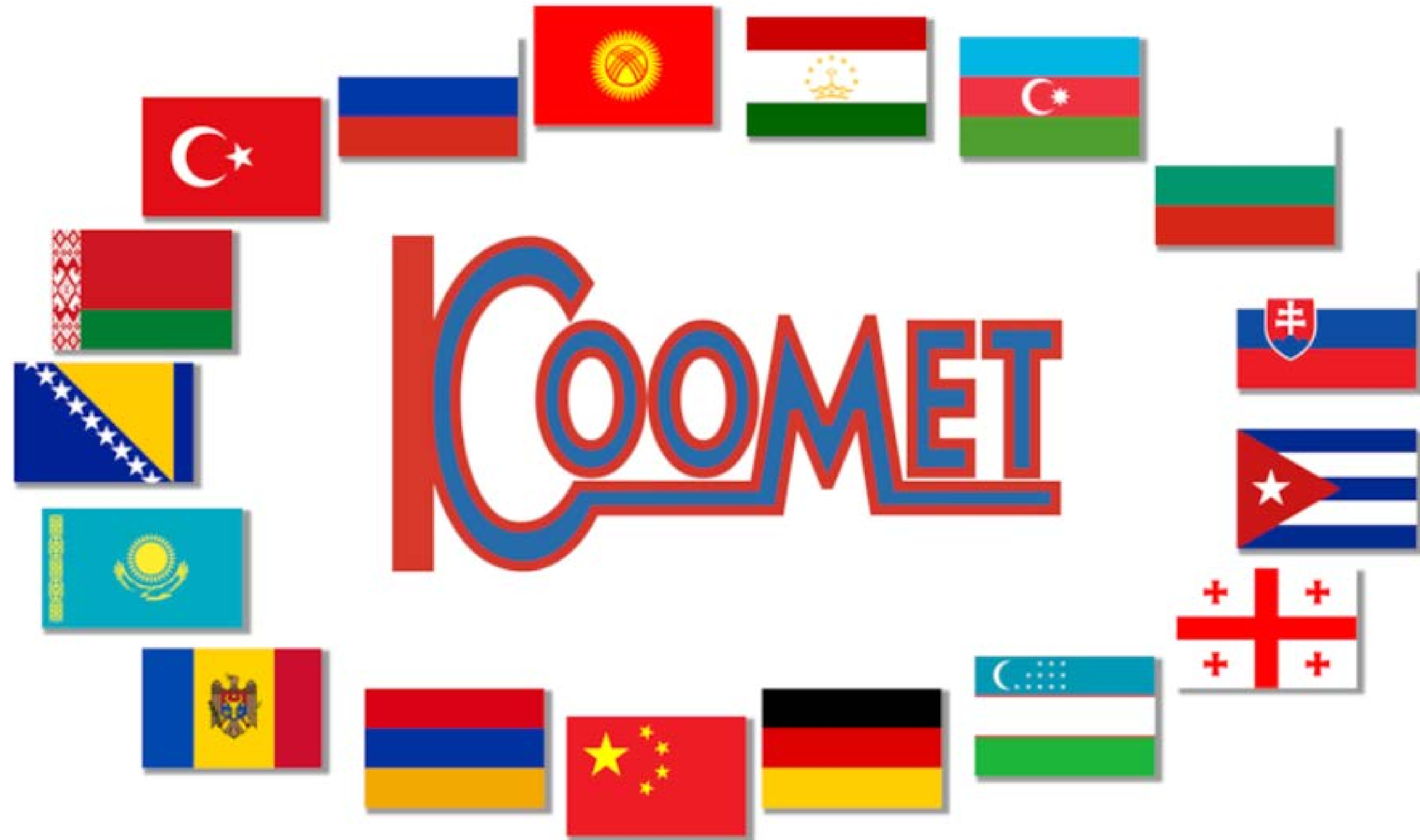
Chairman of COOMET TC 1.10

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PCT



1. Practical implementation of the CIPM MRA:
 - organizing and conducting regional key and supplementary comparisons;
 - achieving international recognition of the measuring capabilities of the NMIs of the COOMET member countries.
2. Research aimed at creating new national standards for units of thermo-physical quantities and improving existing standards.
3. Research aimed at introducing a new definition of kelvin into measurement practice in COOMET countries.

22th meeting of COOMET TC 1.10 «Thermometry and thermophysical quantities» was held in BelGIM, Minsk, Belarus.

11 members of COOMET countries:

- on site: Belarus, Kazakhstan, Russia, Tajikistan, Uzbekistan;
- online: Azerbaijan, Bosnia and Herzegovina, China, Kyrgyzstan, Moldova, Slovakia.

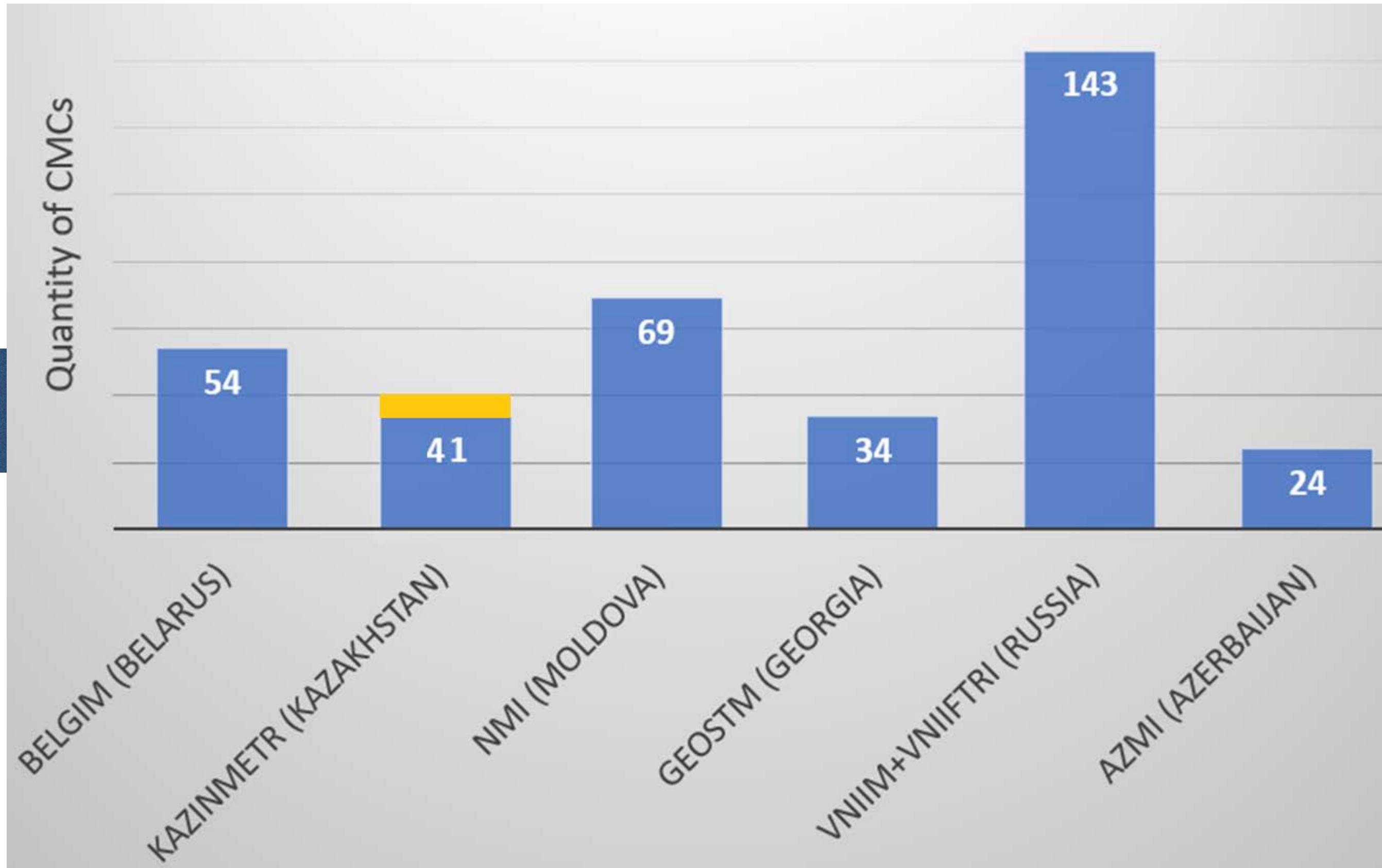


- COOMET Project 899/KZ/24 (COOMET.T-K6.1) **COMPLETED in 2025**
«Bilateral key comparison of dew point temperature standards of national metrological institutes»
(pilot – KazStandard, Kazakhstan)
- COOMET Project 826/MD/21 (COOMET.T-S5) **COMPLETED in 2026**
«Supplementary comparison on calibration of relative humidity sensor»
(pilot – NMI, Moldova).
- COOMET Project 873/RU/23 (COOMET.T-S6) **COMPLETED in 2026**
«Supplementary comparison in the field of combustion energy of pure organic substances»
(pilot – VNIIM, Russia)

- COOMET Project 897/RU/24 (COOMET.T-S7) **Draft A in progress**
«Supplementary comparison in the field of combustion energy of high-purity benzoic acid»
(pilot – VNIIM, Russia)
- COOMET Project 901/RU/24 (COOMET.T-K6.2) **Draft B in progress**
«Bilateral key comparisons of dew point temperature standards of national metrological institutes»
(pilot – VNIIM, Russia)

- COOMET Project 898/KZ/24 (COOMET.T-S8) **Measurements in progress**
«Supplementary comparison of platinum resistance thermometers in thermostats»
(pilot – KazStandard, Kazakhstan)
- COOMET Project 938/KZ/24 (COOMET.T-S9) **Measurements in progress**
«Supplementary comparisons of digital thermometers»
(pilot – KazStandard, Kazakhstan)
- ❑ **COOMET Project 943/UZ/25**
Joint research project on the development and creation of a primary humidity standard in UzNIM (TC 5 “Prospective research areas”)

Current number of CMCs (May, 2026)



6 new CMCs from Kazakhstan (2025-2026) after finishing first KC as a pilot

Topics of the reports:

- Reports on the current state of the art in thermometry and thermophysical quantities at BelGIM (Belarus), NIM (China), SMU (Slovakia)
- Current state of metrological assurance for humidity measuring instruments in Russian Federation (VNIIFTRI)
- Working standards of precision radiation thermometry instruments in the temperature range from 32 °C to 43 °C (VNIIM)
- Development of the primary state standard of thermometry in the range from 0,3 to 5,0 K - Noise-thermometer (VNIIFTRI)
- Measurements of the density of radiative heat fluxes in the range from 1 to 2500 kW/m² (VNIIFTRI)
- Development prospects of primary radiation thermometry (VNIIM)
- Resource tests of temperature measuring instruments to determine the inter-calibration interval (VNIIM)



Thank you for your
attention!

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