

	COOMET Program	COOMET P2/2023
	COOMET PROGRAM OF COMPARISONS	
<i>Approved at the 34th COOMET Presidential Council meeting</i>		

APPROVED



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COOMET President
14 March 2023*

Total 75 projects

AUV - Acoustics, Ultrasound and Vibrations

4 projects

actualisation	project number	state	subject	type of comparison
13.05.2021	846/RU/21	Proposed	Regional key comparisons in the field of ultrasound power measurement in water	key
13.12.2021	790/TR-a/19	Agreed	Supplementary comparison on calibration of sound calibrators	supplementary COOMET.AUV.A-S4
27.12.2019	786/RU-a/19	Agreed	Comparisons of the results of amplitude-phase calibrations of hydrophones in the frequency range from 10 kHz to 500 kHz	pilot
02.07.2019	757/RU-a/18	Agreed	Supplementary comparison of national standards of the sound pressure unit in air through determines the pressure sensitivity level of WS2 type working standard microphones in the low frequency range	supplementary COOMET.AUV.A-S3

EM - Electricity And Magnetism

11 projects

actualisation	project number	state	subject	type of comparison
25.10.2022	862/RU/22	Proposed	Pilot comparisons of reference instruments measuring AC high voltage of power frequency	pilot
21.04.2022	859/TR/22	Proposed	Supplementary comparison of high current transformer measuring systems	supplementary
04.04.2022	855/RU/22	Proposed	Pilot comparisons in the field of high DC current measurements	pilot
13.01.2020	799/UA/20	Proposed	Supplementary comparisons of electric field strength measurements	supplementary
21.05.2021	821/RU-a/20	Agreed	Pilot comparisons of DC high voltage reference measuring systems in the voltage range of $\pm (1 \dots 100)$ kV	pilot
07.02.2022	813/RU-a/20	Agreed	Supplementary comparison of measuring current transformers (CTs)	supplementary COOMET.EM-S25
03.12.2020	802/UZ-a/20	Agreed	Pilot comparisons in the field of measuring DC and AC voltage and current, electrical resistance	pilot
17.12.2021	798/BY-a/19	Agreed	Pilot comparisons of the volumes of digital information transmitted via the Internet and telephony channels	pilot
09.12.2020	770/RU-a/18	Agreed	Supplementary comparisons of NMI measurement standards in the field of measurements of magnetic flux density of a permanent magnetic field and magnetic flux using sensing coils	supplementary COOMET.EM-S26
07.06.2016	681/RU-a/16	Agreed	Supplementary comparison of the measurement of current transformers (CTs)	supplementary COOMET.EM-S22
12.05.2015	624/GE-a/13	Agreed	Comparison of electrical resistance standards at 100 Ω and 100 k Ω	supplementary COOMET.EM-S19

L - Length
13 projects

actualisation	project number	state	subject	type of comparison
23.09.2020	820/KZ/20	Proposed	Comparison of interference devices for measuring tapes up to 20 m	supplementary
18.08.2020	810/RU-a/20	Agreed	Supplementary comparisons of measurement standards of involute gears using a complex standard	supplementary COOMET.L-S30
01.03.2023	800/BY-a/20	Agreed	Calibration of lengths of reference linear geodetic base lines	supplementary COOMET.L-S32
16.07.2020	776/RU-a/19	Agreed	Supplementary comparisons of measurement standards in the field of measurement of 3D parameters of surface texture	supplementary COOMET.L-S28
25.08.2020	746/BY-a/18	Agreed	Calibration of gauge blocks by interference method	supplementary COOMET.L-S29
11.08.2020	742/UA-a/18	Agreed	The comparison of length standards for measuring end measures in the range up from 0,5 mm to 100 mm	supplementary COOMET.L-S27
11.08.2020	705/UA-a/16	Agreed	Measurement of one-dimensional standard for coordinate measuring machines.	supplementary COOMET.L-S26
01.12.2020	690/RU-a/16	Agreed	Comparisons of internal and external diameter gauges	key COOMET.L-K4.2021
12.03.2019	674/UA-a/15	Agreed	Comparison of standards nanometer range	supplementary COOMET.L-S25
22.10.2020	612/BY-a/13	Agreed	Calibration of a 200 mm linear glass scale	supplementary COOMET.L-S31
11.08.2020	591/UA-a/12	Agreed	Comparisons of precise navigation systems GPS/GLONASS	supplementary COOMET.L-S24
27.08.2020	590/UA-a/12	Agreed	Comparison of precision rangefinders	supplementary COOMET.L-S23
19.11.2021	524/UA-a/11	Agreed	Key comparison of the national standards unit of the plane angle	key COOMET.L-K3

M - Mass And Related Quantities

14 projects

actualisation	project number	state	subject	type of comparison
27.12.2020	822/GE/20	Proposed	Pilot comparisons in the small volumes	pilot
14.04.2022	789/KZ-a/19	Agreed	Pilot comparisons of fluid density in the range of from 600 to 1000 kg/m ³	pilot
14.04.2022	788/KZ-a/19	Agreed	Pilot comparisons of the unit kinematic viscosity of a liquid at temperatures: 20 °C (250-400 mm ² /s), 25 °C (50-100 mm ² /s), 40 °C (20-70 mm ² /s)	pilot
10.11.2020	766/GE-a/18	Agreed	Supplementary comparisons in the small volumes	supplementary COOMET.M.FF-S7
07.06.2022	764/UA/18	Agreed	Supplementary comparisons in the field of mass measurements	supplementary COOMET.M.M-S6
04.11.2020	717/DE-a/17	Agreed	Supplementary comparisons of national standards of the pressure unit in the range from 250 MPa to 1500 MPa	supplementary COOMET.M.P-S3
16.05.2019	711/TR-a/16	Agreed	Comparison of absolute pressure in the range 0,3 mPa to 0,9 Pa	key COOMET.M.P-K15
03.06.2019	694/MD-a/16	Agreed	Supplementary comparison of mass standards with nominal values of 100 mg, 20 g, 1 kg and 10 kg	supplementary COOMET.M.M-S3
14.06.2019	665/UA-a/15	Agreed	Supplementary bilateral comparison in the field of mass measurements	supplementary COOMET.M.M-S2
21.06.2019	651/RU-a/14	Agreed	Supplementary bilateral comparison of national reference instruments for nanoindentation	supplementary COOMET.M.H-S2
04.09.2015	638/UA-a/14	Agreed	The comparison of the national hardness standards of Super-Rockwell scales	supplementary COOMET.M.H-S3
28.01.2014	589/UA-a/12	Agreed	Supplementary comparison of national measurement standards of gauge pressure in the range from 1 MPa to 10 MPa	supplementary COOMET.M.P-S1
14.06.2019	546/UA-a/11	Agreed	Supplementary comparisons in the field of mass measurements	supplementary COOMET.M.M-S5
17.10.2013	259/RU/02	Agreed	COOMET comparisons in the field of force measurements	supplementary COOMET.M.F-S1

F - Fluid Flow

3 projects

actualisation	project number	state	subject	type of comparison
25.11.2021	852/RU/21	Proposed	Supplementary comparisons of national standards in the field of gas flow and volume at gas flow rate from 0.4 to 100 m ³ /h	supplementary
05.11.2020	760/RU-a/18	Agreed	Supplementary comparisons of national standards in the field of liquid flow and mass in the flow range from 0.1 to 45 t/h	supplementary COOMET.M.FF-S10
16.11.2018	545/UA-a/11	Agreed	Comparisons of complex of static volume measuring devices	supplementary COOMET.M.FF-S6

PR - Photometry And Radiometry

9 projects

actualisation	project number	state	subject	type of comparison
11.03.2020	805/UA/20	Proposed	Supplementary comparison on spectrally-selective transmitting material	supplementary
05.03.2020	804/UZ/20	Proposed	Pilot comparisons of measurement standards of attenuation and average power of a signal in optical fiber	pilot
16.01.2020	801/BY/20	Proposed	Supplementary comparisons of measurement standards for polarization mode dispersion in optical fiber	supplementary
09.03.2022	785/RU-a/19	Agreed	Supplementary comparisons of laser power responsivity at wavelengths of 0,532; 1,064 and 10,6 μm	supplementary COOMET.PR-S12
11.07.2019	781/UZ-a/19	Agreed	Pilot comparison of spectral regular transmittance from 400 to 1000 nm	pilot
04.02.2020	741/RU-a/18	Agreed	Spectral Irradiance, from 250 nm to 2500 nm	key COOMET. PR-K1.a.2018
18.11.2021	735/RU-a/17	Agreed	Relative reflection density of samples	pilot
14.09.2015	640/BY-a/14	Agreed	Comparison of colour, transmitted	supplementary COOMET.PR-S10
10.08.2011	429/CU-a/08	Agreed	Comparisons of measurement standards of the units of spectral regular transmittance in the (250 to 900) nm wavelength range	supplementary COOMET.PR-S5

QM - Amount Of Substance

9 projects

actualisation	project number	state	subject	type of comparison
22.12.2021	865/RU/22	Proposed	Pilot comparisons in the field of sulfur and carbon mass fractions measurements in steel	pilot
22.12.2021	864/RU/22	Proposed	Key comparisons "Automotive exhaust gases"	key
23.09.2021	849/RU/21	Proposed	Content of metals in blood serum	pilot
15.02.2021	824/RU/21	Proposed	Pilot comparisons "Determination of sulfur in isooctane"	pilot
25.10.2021	809/RU-a/20	Agreed	Pilot comparison in the field of measuring the mass fraction of titanium in pure titanium	pilot
25.10.2021	808/RU-a/20	Agreed	Pilot comparison in the field of measuring the mass fraction of nickel in pure nickel	pilot
25.10.2021	807/RU-a/20	Agreed	Pilot comparison in the field of measuring the mass fraction of magnesium in pure magnesium	pilot
25.10.2021	806/RU-a/20	Agreed	Pilot comparison in the field of measuring the mass fraction of aluminum in pure aluminium	pilot
05.11.2021	775/RU-a/19	Agreed	Pilot comparison on determination of KCl solution electrolytic conductivity at the level of 10 μ Sm/sm and 25 Sm/m	pilot

RI - Ionizing Radiation

3 projects

actualisation	project number	state	subject	type of comparison
30.03.2007	389/RU/07	Proposed	Comparison of the well-type ionization chamber (IC) calibrations factors for the medical radionuclides ("Dosecalibrators")	supplementary
30.04.2021	833/RU-a/21	Agreed	Supplementary comparisons of the national standards of radioactivity	supplementary COOMET.RI(II)-S3
14.09.2015	641/BY-a/14	Agreed	Comparison of the national standards of air kerma for x-radiation qualities used in radiation protection and diagnostic radiology	supplementary COOMET.RI(I)-S3

T - Termometry

8 projects

actualisation	project number	state	subject	type of comparison
14.02.2023	873/RU/23	Proposed	Comparisons in the field of measuring the combustion energy of pure organic substances	pilot
25.11.2021	851/RU/21	Proposed	Supplementary comparisons of measurement standards of dew point temperature	supplementary
15.11.2021	826/MD-a/21	Agreed	Supplementary comparisons of standards for relative humidity unit	supplementary COOMET.T-S5
07.10.2021	787/UZ-a/19	Agreed	Pilot comparisons in the area of platinum resistance thermometers calibration	pilot
20.08.2021	780/RU-a/19	Agreed	Pilot comparisons of national reference gas calorimeters using samples of gas mixtures	pilot
15.11.2021	771/MD-a/18	Agreed	Pilot comparisons in the area of platinum resistance thermometers calibration in fixed points from triple point of mercury (-38.8344 °C) to melting point of gallium (29.7646 °C)	pilot
20.03.2020	744/RU-a/18	Agreed	Comparisons in the field of measurements of combustion energy of coals with different sulphur content	supplementary COOMET.T-S4
20.12.2019	704/RU-a/16	Agreed	Comparisons of temperature national standards at the triple point of mercury	key COOMET.T-K9.1

TF - Time and Frequency

1 project

actualisation	project number	state	subject	type of comparison
16.11.2021	398/RU-a/07	Agreed	Key comparisons of national standards of time and frequency with the Russian UTC (SU) scale	key CCTF-K001.UTC