

	COOMET Program	COOMET P6/2023
	COOMET Roadmap for Implementation of the Decisions Related to Redefinition of the Basic Units of the International System of Units (SI) for 2020–2025	
Approved at the 34th meeting of the COOMET Committee (May 23–24, 2023, Astana, Kazakhstan)		

Action	Indicator	Years (Participants)					
		2020	2021	2022	2023	2024	2025
A.1. Conducting comparisons	A.1.1					Supplementary comparisons in the field of mass measurements in the range from 1 mg to 1 kg	
	A.1.2					Supplementary comparison in the field of calibration of weights of E2 accuracy class in the range from 1 mg to 20 kg (nominal values: 10 mg, 500 mg, 5 g, 10 g, 100 g, and 5 kg)	
	A.1.3	COOMET: 802/UZ/20 "Pilot comparisons in the field of measuring DC and AC voltage and current, electrical resistance" (UzNIM, Uzbekistan – Pilot, INM, Moldova, NSC "Institute of Metrology", Ukraine, TÜBİTAK UME, Turkey)					
	A.1.4				Comparisons of voltage measuring standards based on the Josephson Effect		
	A.1.5				Comparisons of electrical resistance measuring standards based on the Hall Effect		
	A.1.6	CCQM-K167: Carbon isotope delta measurements of vanillin (VNIIM, Russia)					
	A.1.7	CCQM-P212: Coherence of carbon isotope delta reference materials ( <i>VNIIM, Russia</i> )					
	A.1.8	CCQM-P204, CO <sub>2</sub> Isotope Ratios (δ13C and δ18O) in pure CO <sub>2</sub> (VNIIM, Russia)					

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		2020	2021	2022	2023	2024	2025
A.2. Participation in joint scientific projects, EMPIR projects	A.2.1	EMPIR Project 19RPT02: RealMass: Improvement of the realization of the mass scale (NSC "Institute of Metrology", Ukraine) <a href="https://www.euramet.org/research-innovation/search-research-projects/details/project/improvement-of-the-realisation-of-the-mass-scale/">https://www.euramet.org/research-innovation/search-research-projects/details/project/improvement-of-the-realisation-of-the-mass-scale/</a>					
	A.2.2	EMPIR Project 18SIB04: QuantumPascal: Towards quantum-based realizations of the pascal (PTB, Germany) <a href="https://www.euramet.org/research-innovation/search-research-projects/details/project/towards-quantum-based-realisation-of-the-pascal/">https://www.euramet.org/research-innovation/search-research-projects/details/project/towards-quantum-based-realisation-of-the-pascal/</a>					
	A.2.3		EMPIR Project 19ENV05: Stable isotope metrology to enable climate action and regulation (PTB, Germany; VNIIM, Russia) <a href="https://www.euramet.org/research-innovation/search-research-projects/details/project/stable-isotope-metrology-to-enable-climate-action-and-regulation">https://www.euramet.org/research-innovation/search-research-projects/details/project/stable-isotope-metrology-to-enable-climate-action-and-regulation</a>				
	A.2.4.				Participation in development of the International Atomic Time Scale (TAI) and International Coordinated Time Scale (UTC) using optical frequency standards based on cold atoms.		
A.3. Participation in interregional organizations (CIPM CCs and WGs), cooperation with other RMOs	A.3.1.	Participation in CCs					
	A.3.2.	Participation in the WG on kibble balance					
	A.3.3.	Participation in the CC WG on comparisons and CMCs					
	A.3.4.	Participation in the GAWG (WG on gas analysis), IRWG (WG on isotope ratios)					
	A.3.5.	Mutual participation in meetings of COOMET and EURAMET Technical Committees					
A.4. Organization and holding of training events	A.4.1.	COOMET Webinar "Redefinition of Kilogram and its Impact on Metrology"					

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		2020	2021	2022	2023	2024	2025
		of Mass" (October 06, 2020)					
	A.4.2.					COOMET Seminar "Current Status of Redefinition of Kilogram and Progress of the Primary Realizations" (in parallel with the TC 1.6)	
	A.4.3				Webinar "Realization of the new definition of temperature unit – kelvin" (April 27, 2023, speakers: specialists from VNIIM and VNIIFTRI, Russia)		
	A.4.4		Educational webinar "Metrology of stable isotopes" (October 29, 2021, as part of TC 1.8 meeting)				
A.5. Participation in conferences, incl. online	A.5.1.	Participation in thematic conferences (for all COOMET TCs and NMIs of COOMET Member States)					
	A.5.2.	Participation in seminars and technical exchanges within the BIPM CBKT program framework					
	A.5.3.	Report “VNIIM pulse-driven AC Josephson voltage standard” at the online-conference CPEM-2020 (A.Katkov, G.Gubler, V.Shevtsov, A.Petrovskaya, R.Behr, and O.Kieler)					

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		2020	2021	2022	2023	2024	2025
	A.5.4.				Participation in the 10 <sup>th</sup> International Temperature Symposium (ITS10), USA		
	A.5.5.		<i>Participation in the General Assembly (2021) of the European Geosciences Union (EGU)</i>				
<b>A.6. Discussion of progress on implementation of the Roadmap at TCs meetings</b>	A.6.1.	Annual discussion of the results of works performed and updates of the Roadmap at TCs meetings					