



TC 1.5 COOMET "Length and Angle" ANNUAL REPORT 2020

**Chair TC 1.5
O. Kostrikov**



Online 27.10.2020

The TC 1.5 meeting was attended
representatives from 11 countries.



1 Main issues were considered

- report of TC 1.5 Chairman O. Kostrikov on the current status of COOMET project and on the activities held between TC meetings;
- report of the Chairman of TC 1.5 O. Kostrikov and the coordinators of comparisons on the current status of COOMET projects in comparisons;
- updating of comparison projects on previously planned works;
- conducting training seminars;
- organizational issues of TC.1.5 activity.



Comparison projects status:

<i>No</i>	<i>Project</i>	<i>Name of project</i>	<i>Status of project</i>	<i>Stage of completion</i>
1	820/KZ/20	Comparison of interference devices for measuring tapes up to 20 m	Proposed	
2	810/RU-a/20	Supplementary comparisons of measurement standards of involute gears using a complex standard	Project is completed	Measurements are completed.
3	800/BY/20	Calibration of lengths of reference linear geodetic base lines	Proposed	Agreement of technical protocol.
4	776/RU-a/19	Key comparison of standards in the field of measurement of 3D parameters of surface texture	Agreed	Measurements are in progress.



Comparison projects status (continuation):

<i>No</i>	<i>Project</i>	<i>Name of project</i>	<i>Status of project</i>	<i>Stage of completion</i>
5	746/BY-a/18	Calibration of gauge blocks by interference method	Agreed	Measurements are in progress.
6	742/UA-a/18	The comparison of length standards for measuring end measures in the range up from 0,5 mm to 100 mm	Agreed	Measurements are in progress.
7	714/UA/17	Comparison of standards for the measurement of end measures of length interference method in the range of 200 to 1000 mm.	Proposed	Agreement of technical protocol.
8	705/UA-a/16	Measurement of one-dimensional standard for coordinate measuring machines	Agreed	Measurements are in progress.



Comparison projects status (continuation):

<i>No</i>	<i>Project</i>	<i>Name of project</i>	<i>Status of project</i>	<i>Stage of completion</i>
9	690/RU/16	International comparisons of internal and external diameter gauges	Agreed	Measurements are completed. Report A is prepared.
10	674/UA-a/15	Comparison of standards nanometer range	Agreed	Measurements are completed. Report A is prepared.
11	657/UA/15	Comparison of the measurement standards of the line scales between 1 mm and 1000 mm.	Proposed	To consider the question of re-registration
12	612/By-a/13	Comparison of line scales up to 200 mm	Proposed	To consider the question of re-registration



Comparison projects status (continuation):

<i>No</i>	<i>Project</i>	<i>Name of project</i>	<i>Status of project</i>	<i>Stage of completion</i>
13	610/UA-a/13	Comparison of standards of flatness diameter up to 300 mm	Completed	Report B is being prepared
14	591/UA-a/12	Comparison of precise navigation systems GPS / GLONASS	Agreed	Preparation for measurements is in progress
15	590/UA-a/12	Comparison of precise rangefinder systems	Agreed	Preparation for measurements is in progress



Completed projects:

<i>No</i>	<i>Project</i>	<i>Name of project</i>
1	765/UA-a/18	The bilateral comparison of length standards for measuring end measures in the range up from 0,5 mm to 100 mm
2	673/UA-a/15	Comparison of initial measuring instruments of the parameters of involute gears
3	658/BY-a/15	Comparisons of national measurement standards for deviations from linearity and flatness; the measurement range for deviations from linearity is 0 to 50 μm , the surface length is 0.4 to 5 m
4	570/UA-a/12	Comparisons of standards of flatness
5	569/UA-a/12	Comparison of length standards in the range of 0.001 to 1 mm
6	563/RU/12	Supplementary comparison of the standards of the unit for roundness measurements
7	529/RU/11	Comparison of interference devices for measuring tapes up to 20 m
8	524/UA/11	Intercomparison of the national standards unit of the plane angle



To exclude the comparison projects:

<i>No</i>	<i>Project</i>	<i>Name of project</i>
1	657/UA/15	Comparison of the measurement standards of the line scales between 1 mm and 1000 mm
2	564/RU/12	Comparison of measurement standards of length unit in the field of sphere deviation measurements



№	Страны / Countries	Количество строк СМС/ Number of SMS lines
1	Азербайджан/ Azerbaijan	0
2	Армения/Armenia	0
3	Болгария/Bulgaria	18 (-1)
4	Беларусь/Belarus	16
5	Босния-Герцеговина/Bosnia-Herzegovina	0
6	Германия/Germany	99 (+2)
7	Грузия/Georgia	1 (+1)
8	Казахстан/Kazakhstan	7 (+1)
9	Киргизия/Kyrgyzstan	0
10	Корея/Korea	0
11	Куба/Cuba	0
12	Литва/Lithuania	9
13	Молдавия/Moldova	1
14	Россия/Russia	24 (+1)
15	Румыния/Romania	21 (+1)
16	Словакия/Slovakia	18
17	Таджикистан/Tajikistan	0
18	Турция/Turkey	76
19	Узбекистан/Uzbekistan	0
20	Украина/Ukraine	28 (+1)



Decisions of TC 1.5 2020

1. On the organization of TC 1.5 work

Cooperation within COOMET TC 1.5 "Length and Angle" to be recognized as satisfactory.

To approve the online seminar on the KCDB 2.0 platform held on October 8, 2020 together with TC1.6



Proposals following TC 1.5 meeting

- 1 Coordinators of comparisons update the forms of ongoing and completed comparisons, send them to the TC Chairman and to the COOMET Secretariat.
- 2 FSUE "VNIIMS" (Russia) to register bilateral comparisons of standards of flat angle with RSE "KazInMetr".
- 3 TC Chairman to complete work on comparisons on the old JCRB website.
- 4 By February 1, 2021, the Chairman of the TC shall send to the OKE a certificate of the status of work on comparisons lasting more than 5 years and the proposed corrective actions.



Proposals following TC 1.5 meeting

5 The TC Chairman should update the list of experts in the field of linear-angular measurements. By November 15, 2020 send the updated list of experts to the COOMET Secretariat. To ask TC members to nominate young specialists for training as COOMET technical experts (TE) on CMC examination.

6 Abolish the following subcommittees:

- PC 1.5.1 Measurements of long distances in the open air;
- PC 1.5.2 Measurements of length in the nanometer range;
- PC 1.5.3 Measurement of deformations.

TC Chairperson to send this issue to the COOMET Committee.



Proposals following TC 1.5 meeting

7 By December 31, 2020, hold a discussion about the feasibility of developing standard techniques in the field of linear-angular measurements.



The next meeting of COOMET TC 1.5
"Length and Angle" will be held in
September 2021.
The date and venue are being specified.



Thank you for attention!