

**DECISION**  
**of the meeting of COOMET TC 1.5 "Length and angle"**  
18-20 June, 2014  
VNIIMS, Moscow, Russia

At the meeting of TC 1.5 there were discussed the following main issues:

- the report of the Chairperson of TC 1.5 about the state of projects of COOMET for the current moment;
- the report of the Chairperson of TC 1.5 about the events carries out between the meetings of TC;
- actualization of comparisons projects, in accordance with the planned works carried out earlier;
- reports of the TC members and representatives of Metrology Institutes of the COOMET member-countries:

***Several examples from metrological practice in PTB (Laboratory 5.13)***  
T. Abbe, Research Associate of the department 5.1 "Metrology of surfaces", PTB, Germany;

***Improvement of the State Primary Special Standard of the length unit in the field of measurements of deviations from straightness and flatness GET 130-80***  
Yu. R. Shimolin, Head of the Laboratory of measurements of mass, power and linear-angular values, FGUP "UNIIM", Russia;

***Standards of the length unit RGP "KazInMetr"***  
I. Z. Suvorova, Head of the laboratory of mechanical and geometric measurements of "KazInMetr", Astana, the Republic of Kazakhstan;

***Republic Unitary enterprise "Belarus State Metrology Institute"***  
V. B. Makarevich, Head of the Department of measurements of geometric values, "BelGIM", the Republic of Belarus;

***Metrology Provision of measurements of geometric parameters***  
V. G. Lysenko, Head of the Department of measurements of geometric values, FGUP "VNIIMS", the Russian Federation;

***About possibility of achievement of subnanometric values of uncertainty at measurements of linear dimensions with scanning probe microscope connected with three-dimensional heterodyne laser interferometer***  
V. L. Lyasovskiy, Head of the laboratory of biophysical and special information-measurement systems, FGUP "VNIIOFI", the Russian Federation;

- organizational issues of the activity of TC.1.5.

In the result of discussion of the issues set up in the Program of the meeting of TC 1.5 "Length and angle" there were made the following decisions:

### **1. As per organization of work of TC 1.5**

1.1 To recognize the cooperation within COOMET TC 1.5 "Length and angle" as satisfactory.

1.2 To create within TC 1.5 the subcommittee SC 1.5.3 "Deformation measurement". To appoint Yu.R. Shimolin, Head of the laboratory of measurements of mass, power and linear-angular values, FGUP "UNIIM", Russia, the Chairperson of SC 1.5.3.

1.3 To appoint the Chairperson of SC 1.5.1, senior research associate A.L. Kostrikov, Head of the laboratory NIL-20 of NSC "Institute of Metrology", Ukraine, the Deputy of TC 1.5.

### **2. As per approved and offered projects**

2.1 The coordinators are offered to monitor more actively the state of the comparisons being carried out.

2.2 To confirm the actuality of carrying out of the following comparisons projects:

#### **Offered projects:**

<b>No.</b>	<b>Project</b>	<b>Project designation</b>
1	612/UA/13	Comparison of line scales up to 100 mm
2		Coordinate-measuring machines. Uncertainty of the dimension determination
3		Comparison of standards of nanometric range
4		Comparison of standards of evolvent surfaces
5		Pilot comparisons of national standards in the field of measurements of surface density at values $0.10 \text{ g/m}^2$ and $0.45 \text{ g/m}^2$ and thicknesses of coverings at values 10 nm and 50 nm
6		Additional comparisons of national standards in the field of measurements of surface density of coverings in the range $(0.007-0.21) \text{ kg/m}^2$ and thickness of coverings in the range $(1-30) \mu\text{m}$

#### **Approved projects:**

<b>No.</b>	<b>Project</b>	<b>Project designation</b>
1	524/UA-RU/11	Intercomparison of the national standards unit of the plane angle
2	529/RU/11	Comparison of interferometers for measurement of tapes up to 20 m
3	564/RU/12	Comparisons of measurement standards of length unit in the field of sphere deviation measurements
4	570/UA/12	Comparisons of flatness standards
5	590/UA/12	Comparison of precise rangefinder systems
6	591/UA/12	Comparisons of precise navigation systems GPS/GLONASS
7	610/UA/13	Comparisons of standards of flatness diameter up to 300 mm

### **3. Offers as per results of the meeting of TC 1.5**

3.1 To provide in the practice of carrying out of TC meetings the reports of pilot laboratories of completed projects.

3.2 To ask the management of FGUP "VNIIMS" to organize carrying out of testing of multi-mode interferometers produced by LLC "Nano-Atto Metria".

The testing results can be used for realization of:

- precision systems of positioning in measuring installations;
- highly-sensitive non-contact sensors of movements and vibrations in nano- and picometric ranges;
- highly-sensitive systems, indentometry, non-destructive testing and ultrasonic diagnostics (USD).

### **4. Place and date of carrying out of the following meeting of TC 1.5**

The next meeting of COOMET TC 1.5 "Length and angle" shall be carried out in TUBITAK UME, Gebze, Turkey.

Chairperson of COOMET TC 1.5  
"Length and angle"



V. S. Kupko