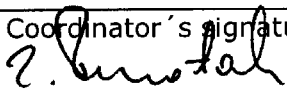


**EUROMET PROJECT
PROGRESS/FINAL REPORT**

1. Ref. No.:	2. Subject Field: Length	
3. Type of collaboration: Consultation on facilities		
4A. Partners: DZHM, GUM	4B. CEC funded? No	
5. Participating countries: HR, PL		
6. Title: Interferometric measurements of gauge blocks		
<p>7. Progress:</p> <p>Consultation were performed during the visit of three representatives of DZHM in Length Laboratory of Length and Angle Department of GUM. There were following topics discussed:</p> <ul style="list-style-type: none"> - modification and automatisisation of the Kösters interferometer, - calibration of gauge blocks measured with GBI 300 and Kösters interferometer by optical interferometry with the phase-stepping method of exact fractions, - software used for interferometric measurements of gauge blocks, - calibration of gauge blocks using the reference plates made of various materials, - theory of transmission of light beam with optical fibres, - uncertainty evaluation for the measurement of gauge blocks by optical interferometry (also taking into account the Monte Carlo method), - calibration of gauge blocks measured with mechanical comparator and 1-D measuring machine. <p>There were also presented:</p> <ul style="list-style-type: none"> - GPI XP/D (ZYGO) interferometer for flatness measurement, - gauge block interferometer with white light up to 0,5 m, - 1-D comparator for calibration of precision line scales, - 50 m bench for calibration of tapes, - national standards for length unit (optical frequency synthesizer), plane angle unit (new system with precision KUGLER indexing table and ELCOMAT HR autocollimator) and refractive index unit, - SIP CMM5 measuring machine, - surface roughness and hardness measuring instruments. 		
<p>8. Coordinator's name: Zbigniew Ramotowski</p> <p>Address: Central Office of Measures (GUM), Length and Angle Department Elektoralna St. 2, 00-139 Warsaw, Poland</p> <p>Telephone: :+48 22 581 95 43 Fax: +48 22 620 83 78 E-mail: length@gum.gov.pl</p>		
9. Completion date: 20 March 2008	10. Coordinator's signature: 	11. Date: 11.04.2008