

**WORLD METEOROLOGICAL ORGANIZATION**

**COMMISSION FOR INSTRUMENT AND  
METHODS OF OBSERVATION  
*OPAG-SURFACE***

**EXPERT TEAM ON SURFACE TECHNOLOGY AND  
MEASUREMENT TECHNIQUES  
*First Session***

Geneva, Switzerland, 13-16 October 2004

CIMO/OPAG-SURFACE/  
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ITEM: 1.2

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**EXPLANATORY MEMORANDUM**

**1. ORGANIZATION OF THE SESSION**

**1.1 Opening of the session**

The first session of the CIMO Expert Team on Surface Technology and Measurement Techniques will be opened on Wednesday, 13 October 2004, at 10:00 a.m. at the WMO Headquarters, Geneva.

**1.2 Adoption of the agenda**

The meeting will be invited to consider the provisional agenda with a view of its adoption.

**1.3 Working arrangements for the session**

The meeting will agree on details concerning the organization of its work including working hours. The documentation will be available in English only, and the meeting will be held in English.

**2. REPORT OF THE CHAIRMAN**

The chairman of the ET will brief the participants on the purpose and scope of the ET based on the Terms of Reference of ET approved by CIMO-XIII and CIMO Management Group. He will also submit a report on the activities carried out by the ET since its establishment.

**3. STANDARDS FOR AUTOMATED VISUAL AND SUBJECTIVE OBSERVATIONS**

The meeting will address the issue of the development of standards for systems measuring present weather, including clouds, icing, state of the ground, lightning and thunderstorms and standards for automation of manual, visual and subjective observations. The meeting will also discuss standardization of algorithms for AWSs, including algorithms for the automatic assessment of cloud base height and cloud amount. The meeting will be invited to study the possible alternative methods for replacing some traditional observations that may not be possible to automate in the foreseeable future.

**4. THE STATE-OF-THE-ART OF INSTRUMENTS AND AUTOMATED SURFACE OBSERVING SYSTEMS**

The meeting will be invited to agree on the Questionnaire of the 8th Instrument Development Inquiry and to agree on the steps in providing guidance to Members on implementation of instruments in harsh climatological conditions. Development of siting criteria and metadata standards for observations will be addressed. The meeting is expected to identify possible means to minimize the impact on the cost of the continuous modernization of instruments.

**5. PROGRESS OF URBAN AND ROAD METEOROLOGICAL MEASUREMENTS**

The meeting will be informed on the progress in monitoring the emerging requirements for urban and for road meteorological measurements with a view of developing recommendations for standards and practices.

**6. QUALITY MANAGEMENT SYSTEMS PROCEDURES FOR INSTRUMENTS AND METHODS OF OBSERVATION**

The meeting will be invited to suggest steps to be taken in developing performance measures to demonstrate continuous improvement in the quality of observations and in this regard basic procedures for quality management of observations, instrument maintenance, calibration and operational practices. Although the *OPAG on Capacity Building* is responsible for this activity in general, this QMS task, endorsed by Congress can only be fulfilled with input from all ETs.

**7. TRAINING ACTIVITIES AND TRAINING MATERIAL**

The meeting will be informed on training activities under the IMOP Programme since CIMO-XIII and will be asked to provide guidance on future training needs and the need for development of new training material.

**8. WORK PLAN**

The ET meeting is invited to review the proposed Work Plan for 2003 – 2006 with a view of its adoption.

**9. ANY OTHER BUSINESS**

**10. DRAFT REPORT OF THE SESSION**

The meeting will agree on the draft Report of the Session. Members of ET are expected to provide their written inputs for the Final Report to the ET chair.

**11. CLOSURE OF THE SESSION**

It is expected to close the meeting on Saturday, 16 October 2004, late afternoon.

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