

COMMISSION FOR BASIC SYSTEMS  
OPEN PROGRAMME AREA GROUP ON INTEGRATED OBSERVING SYSTEMS

EXPERT TEAM ON SATELLITE SYSTEMS  
EIGHTH SESSION  
GENEVA, SWITZERLAND, 28-30 MAY 2013

Original: ENGLISH

## EXPLANATORY MEMORANDUM

### 1. OPENING OF THE MEETING

1.1 The session will open at 9h00 on Tuesday, 28 May 2013, in Room "7 Lake", at the seventh floor of the WMO Headquarters in Geneva, Switzerland. Registration will take place as of 8h30.

The main objectives of the session are:

- To initiate actions regarding the architecture for climate monitoring from space, from a physical viewpoint;
- To provide updates on the satellite programmes and plans of the participating agencies and interact with the Expert Team on satellite Utilization and Products (ET-SUP) on satellite utilization matters related to these programmes;
- To provide guidance on the development of the Observing System Capability Analysis and Review Tool (OSCAR) space-based capability component;
- To analyze potential gaps in the space-based observing system as an input to forthcoming discussions of the Coordination Group for Meteorological Satellites (CGMS);
- To review and propose updates, if relevant, to space-based aspects of the Vision of WIGOS in 2025.

In addition, the session will follow-up actions initiated at previous sessions of the Expert Team, and address the various other aspects of its work plan.

1.2 The provisional agenda, as contained in ET-SAT-8/Doc. 1.2(1), will be submitted to the session for adoption. The order of agenda items may be modified and additional items be introduced if necessary.

The session will work in plenary and in small working groups as required. The discussions and the documentation of the session will be in English only. The working documents, and any related background material will be distributed in electronic form only through the following web page: <http://www.wmo.int/pages/prog/sat/meetings/ET-SAT-8.php>. The session will decide on its other arrangements such as the working hours.

1.3 The session will be chaired by Dr Jack A. Kaye, USA. The ET-SAT Chairman will indicate his views on future steps to be accomplished by ET-SAT.

1.4 The Secretariat will brief the participants on the role of ET-SAT within WMO and with respect to other satellite coordination groups such as the Coordination group for Meteorological Satellites (CGMS) and the Committee on Earth Observation satellites (CEOS). It will introduce the Terms of Reference and the preliminary work plan assigned to the team by the Commission for Basic Systems (CBS) and its Management Group. This work plan will be taken as a starting point and updated as appropriate after the meeting.

1.5 The chair of the CBS Open Programme Area Group on Integrated Observing Systems (OPAG-IOS) will give introductory remarks and guidance.

## **2. OUTCOME OF WMO AND OTHER MEETINGS OF RELEVANCE TO ET-SAT**

The Secretariat will present a summary of the outcome of major meetings of direct relevance to ET-SAT held over the past year:

- The seventh session of ET-SAT and the actions initiated by that session,
- The fifteenth session of CBS (CBS-15),
- The 40<sup>th</sup> meeting of CGMS,
- The WMO Integrated Global Observing System (WIGOS) Inter-Commission Coordination Group(ICG) and task teams, including the Task Team on Regulatory Material and the development of the WIGOS manual using the outcome of ET-SAT-7.

## **3. VISION OF SPACE-BASED OBSERVATION IN 2025**

Recalling the Vision for WIGOS in 2025, adopted by the CBS in 2009, the session will review the currently proposed updates to its space-based observation part, and provide guidance for further updates if relevant.

## **4. OBSERVING SYSTEM CAPABILITY ANALYSIS AND REVIEW TOOL (OSCAR)**

The session will be introduced to OSCAR ([www.wmo.int/oscar](http://www.wmo.int/oscar)) and in particular its “Space-based capability” component, that was made openly available online following a recommendation of ET-SAT-7. The Secretariat will inform ET-SAT on the planned developments and on the quality management procedure being considered to control the OSCAR updating process. ET-SAT will be invited to provide guidance in this respect.

## **5. ARCHITECTURE FOR CLIMATE MONITORING FROM SPACE**

In May 2011, the WMO Congress adopted Resolution 19 (Cg-16) on the Architecture for Climate Monitoring from Space. The “[Strategy Towards an Architecture for Climate Monitoring from Space](#)” drafted in 2012 by an ad-hoc team of CEOS, CGMS and WMO Secretariat representatives has now been published. The possible organization of future efforts in this area were discussed at CGMS-40 (Nov 2012), at CEOS/SIT-28 (March 2013) and within WMO ICG-WIGOS (March 2013). ET-SAT meeting will be briefed on the outcome of discussions held during the Space and Climate Week (Geneva, 18-22 Feb 2013) within the Architecture ad-hoc team and the CEOS Working Group on Climate.

In particular, ET-SAT shall discuss how the “Future satellite missions to be performed on operational/sustained basis”, as identified in the CGMS Baseline, will contribute to the Architecture for Climate Monitoring from Space.

## **6. SATELLITE PROGRAMME UPDATES FROM PARTICIPATING AGENCIES**

In a joint session with ET-SUP, the members of ET-SAT will present an update (10-12 minutes per agency) on the status and plans of the agency they are representing. The presentations shall focus on highlights and milestones of recent programme development, new upcoming capabilities, and data access details. A template will be provided for these presentations.

## **7. ATMOSPHERIC COMPOSITION REQUIREMENTS AND SPACE CAPABILITIES**

In a joint session with ET-SUP, a presentation will be given by a representative of the CEOS Atmospheric Composition Constellation on atmospheric composition requirements and related space-based observing capabilities. The joint meeting will discuss further interactions of ET-SAT and ET-SUP with the CEOS ACC and the Global Atmospheric Watch programme, in the framework of WIGOS.

## **8. SATELLITE UTILIZATION MATTERS**

In a joint session with ET-SUP, the meeting will address satellite utilization matters on the basis of a report from ET-SUP. In particular, the discussion may address the outcome of the 2012 WMO Survey on the Use of Satellite Data, specific data access issues and related information needs, or the draft concept of a Product Access Guide.

The Secretariat will report on the draft CIMO Guide Section dedicated to satellite observation, and will request guidance on remaining open issues.

## **9. SHORT- AND LONG-TERM GAP ANALYSIS**

A major task of ET-SAT is to advise the CBS on the status of space-based subsystem of WIGOS and on the adequacy of implementation plans to fulfil the requirements of WMO programmes. Previous ET-SAT reviews have led to CBS [Recommendation 4 \(CBS-15\)](#) and to a draft resolution submitted to the forthcoming Executive Council (See EC-65 Doc. 4.4(4)). The outcome of ET-SAT has also informed the CGMS Working Group on Operational Continuity and Contingency Planning.

ET-SAT shall in particular:

- Check the continuity of core operational missions,
- Review the continuity of other essential missions for weather and climate, and
- Highlight possible gaps or risks of gap, in the short- or long-term, and mitigation actions.

## **10. GLOBAL SPACE-BASED INTER-CALIBRATION SYSTEM (GSICS)**

A brief update shall be given on the Global Space-based Inter-Calibration System (GSICS), based on the outcome of its last Joint Working Group meeting held in March 2013. ET-SAT will be invited to provide guidance on how GSICS can best contribute to WIGOS.

## **11. REPORT ON SPACE WEATHER ACTIVITIES**

ET-SAT will be informed on the activities of the Inter-Programme Coordination Team on Space Weather (ICTSW).

## **12. RADIO-FREQUENCY SPECTRUM MANAGEMENT ISSUES**

ET-SAT will be informed on the on-going activities of the WMO Steering Group on Radio-Frequency Coordination (SG-RFC) and the main issues of relevance to Earth Observation Satellites in the preparation for the next World Radio Conference (WRC-15).

## **13. ANY OTHER BUSINESS**

Any question requiring attention of the session but not covered above may be considered here.

## **14. DATE , PLACE AND AGENDA OF NEXT MEETING**

The session will define tentative dates of its next meetings (including virtual meetings), and will agree on modalities of work for completion of its actions until the CBS extraordinary session in 2014.

## **15. SUMMARY OF ACTIONS AND CONCLUSIONS**

The outline of the report, including the agreed list of actions and other major conclusions, will be reviewed and adopted, subject to finalization after the meeting. The main outcome of the meeting will be forwarded to the CBS via the OPAG IOS Chair.

It is planned to close the meeting at 16h00 on Thursday 30 May 2013.

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