

WORLD METEOROLOGICAL ORGANIZATION

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

EXPERT TEAM ON SATELLITE UTILIZATION AND PRODUCTS

ITEM: 2.0

SIXTH SESSION

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CHAIRMAN'S REPORT

(Submitted by Luiz Machado)

Summary and Purpose of Document

The present document contains a summary of the developments since the fifth ET-SUP meeting, and indicates the Chairman's views on the future steps to be accomplished by ET-SUP.

ACTION PROPOSED

The sixth session is invited to take note.

Appendices:

- A. ET-SUP Terms of Reference (as approved by CBS Ext. (10))
- B. Work Programme for ET-SUP (2009-2012)

Chairman's Report

I would like to thank ET-SUP and the Space Programme Secretariat for the work done during this year. At our last ET-SUP meeting, the Fifth ET-SUP, in March 2010, in Geneva, we have established a long list of actions and recommendations. It contained 27 actions and 16 recommendations and it is a pleasure to see that most of the actions were accomplished and recommendations have been addressed.

From the last ET-SUP up to now, our recommendations and actions were brought to the attention of several meetings (ICT-IOS, CBS, CGMS, Congress) that approved, validated and/or addressed the recommendations and actions. Moreover, these meeting also discussed the evolution of the Global Observing System and prepared the Implementation Plan for the future GOS.

The ICT-IOS drafted an update of the ET-SUP Terms of Reference (ToR) which was subsequently approved by CBS (see Appendix A), and the ET-SUP Work plan for 2009-2012 was finalized (see Appendix B). These two documents clearly frame the focus of ET-SUP activities, the ToR define the broad lines of our activities and the work plan describes the tasks, the deliverables and the status of our specifics actions.

Space based activities are at the crossroads: there is an ambitious plan for the Global Observing System (GOS) 2025 that the users need to prepare for, new generations of operational satellites are scheduled to be launched in the next 5-6 years and large changes from the user side will be necessary. Our work plan proposes "Review user implications of the evolution of the space-based GOS"; actions in this respect are to prepare a Vision, from the users side, for the GOS 2025, and to include the corresponding needs in the Implementation Plan for the Evolution of Global Observing Systems (EGOS-IP).

The change in perception of the use of research satellites much like operational ones, and the actual concept of satellite constellations, have great potential for bringing new data to the users. However, users need to prepare for these changes. For instance, the new operational and research ocean satellites and associated applications need to be announced and explained to the users in a way enabling them to take full advantage. The increased interest in space weather data and the future space weather satellites will open a new set of applications and data reception to the users.

The possibility of the users to discuss with data providers and prepare a regional data requirements set will add a new value of the data and products to the users. Also, a broad number of new users can be regularly accrued to the users community due to the low cost reception system of DVB-S.

As expressed in our ToR and Work Plan we have important challenges ahead of us in the next few years, and I would like to highlight some specific actions:

- Prepare the user community to the new operational satellite generation
- Include user needs in the EGOS-IP
- Integrate operations and research from the user perspectives
- Expand the concept of data requirements to all regions
- Improve the knowledge of satellite users needs.
- Integrate satellite training efforts in the use of DVB-S and the new satellite generation
- Support the development of freeware and open source algorithms to process satellite data, generate products and visualize and integrated data systems
- Expand the RARS concept to hyperspectral sounding
- Prepare users for the new satellite constellations.

I look forward to discussing all these topics and collect your input in order to jointly prepare a new set of actions and recommendations. These will help us bridging the gap between the potential use of satellite data and their current actual use. These are ambitious goals that will require efforts from ET-SUP members and the support of the WMO Space Programme office.

ET-SUP Terms of Reference

(as approved by CBS Ext. (10) on 23 November 2010)

In support of the strategy to improve satellite data utilization, ET-SUP shall:

- (a) Monitor the progress of satellite data availability and use by WMO Members, related issues and expectations, with the aim to publish findings and recommendations in a WMO Technical Document;
 - (b) Provide advice and support to the development and implementation of WIGOS, with a view to promote standardization of satellite measurements and product generation algorithms and validation procedures, from a user's perspective;
 - (c) Coordinate with ET-SAT and ET-EGOS on the evolution of the space-based component of Global Observing Systems;
 - (d) Initiate activities to improve the availability of operational and R&D satellite data according to user needs, monitor these activities in close coordination with the relevant CGMS working group(s) and with WIS activities;
 - (e) Review present and future R&D satellite data and products including their availability and potential applications, and provide advice with a view of increased utilization by WMO Members;
 - (f) Assess and further the concept of Sustained Co-ordinated Processing of Environmental Satellite Data (SCOPE);
 - (g) Review the needs of WMO Members for information regarding access to and utilization of satellite data, and related training opportunities;
 - (h) Keep under review the needs of WMO Members for training in satellite meteorology and engage with the Management Group of the Virtual Laboratory for Education and Training in Satellite Meteorology (VLab) to address these needs, towards full utilization of satellite data from operational and R&D satellites, in accordance with the 2009-2014 Virtual Laboratory Training Strategy;
 - (i) Prepare documents to assist Members, summarizing the results from the above activities.
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**WORK PROGRAMME FOR ET-SUP (2009-2012)
(With updated status as of November 2011)**

No	Task	Deliverable/Activity	Due	Responsible	Status	Comments
1	Monitor the use of satellite data & products across WMO Members, with focus on the needs of less well developed Members through a biennial questionnaire.	Biennial questionnaire Analysis of responses Comparison with input from VL COEs. Findings and recommendations. Advice to Regional Associations on follow-up actions. Technical Document for publication.	2010 3 Q 2010 3 Q 2010 4 Q 2010 4 Q 2010 4 Q 2010	ET-SUP	See ET-SUP-6 item 12.	The questionnaire for 2008-2009 was issued in January 2010 and its outcome published in January 2011. Scope and format of future questionnaires are being reviewed.
2	Contribute to the development and implementation of WIGOS concept and provide relevant advice and support to the chairperson of OPAG-IO5.	Evaluation of the WIGOS SAT Pilot Project (GSICS). Advice on integrated products using space/surface observations.	4 Q 2010	ET-SUP	(See ET-SUP-6 items 6, 9, 10, 11) ET-SUP highlighted many aspects of integration relevant to space-based observation including: Data access, calibration, coordinated operation of HEO missions, product generation through a "SCOPE" mechanism, use of AWS as ground-truth.	
3	Review user implications of the evolution of the space-based GOS.	Review user implications of the evolution of the space-based GOS.	2 Q 2010 (continuing yearly)	ET-SUP	See ET-SUP-6 items 10, 11 ET-SUP highlighted the upcoming transition to new GEO generations and potential user readiness issues and took action to develop a strategy, through the VLab..	

No	Task	Deliverable/Activity	Due	Responsible	Status	Comments
4	Improve data availability from operational and R&D satellites through monitoring and guidance to the RARS and IGDDS projects.	Feedback on the progress of RARS and IGDDS. Guidance to the RARS and IGDDS Implementation Groups for their future activities.	2 Q 2010 (continuing yearly)	ET-SUP	See ET-SUP-6 item 9.	
5	Improve data availability from operational and R&D satellites in response to user needs at the regional level.	Regional reports on requirements for data access, in coordination with regional rapporteurs. Recommendations for enhancing user-provider interaction on the data content of dissemination means.	2010/4	ET-SUP	See ET-SUP-6 item 7 Regional initiatives taken in RA III / RA IV (Brazil workshop), RA I (with EUMETSAT) and RA II (Pilot Project). Procedure proposed to standardize data requirements collection.	
6	Promote the wide use of established and standard satellite data formats, processing techniques and tools.	Guidance to the Task Force on Satellite Data Codes. List of useful software tools for satellite data analysis (maintained).	2 Q 2011	ET-SUP	See ET-SUP-6 item 9 A preliminary list of software tools was developed.	
7	Promote utilization of R&D satellite data & products by WMO Members.	Review of relevance and availability of R&D data for operational use, indication of priorities and recommendations for improved availability, information and training, especially for developing countries.	2010 (continued in 2011)	ET-SUP	See ET-SUP-6 items 10, 13 In order to prepare recommendations for improved availability, ET-SUP members were first asked to report on availability issues encountered. No issue has been reported.	
8	Expand the use of satellite data & products through extending the concept of SCOPE-CM to other application areas.	Recommendations for extension to other thematic areas, based on lessons learnt from SCOPE-CM.	3 Q 2010	ET-SUP	See ET-SUP-6 item 10. A proposal on SCOPE-NWC is being prepared.	

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No	Task	Deliverable/Activity	Due	Responsible	Status	Comments
9	Support the provision of up-to-date and comprehensive on line information describing satellite plans, systems, products, and means of access.	Material for inclusion in WMO web pages and training actions. Recommendations on links with relevant on line resources.	4 Q 2010	ET-SUP	See ET-SUP-6 item 14. Information to be provided also by ET-SUP-6 under item 9.	
10	Support implementation of the Virtual Laboratory (VL) Training Strategy, relying on the VL Management Group, to meet the training needs of WMO Members.	Regular reviews of the VL status, activities and plans (training resources, courses, meetings, newsletters). Guidance to meet users' needs, especially from less developed Members. Contribution to training resource development.	4 Q 2010 (continued yearly)	ET-SUP	See ET-SUP-6 item 13.	