

WMO EXECUTIVE COUNCIL CONSULTATIVE MEETINGS

(Submitted by WMO)

Summary and purpose of document

This document presents information related to the evolution of WMO Executive Council Consultative Meetings on High-Level Policy on Satellite Matters. It covers activities since CGMS-XXVI in 1998.

ACTION PROPOSED:

CGMS may wish to comment on the future activities of the WMO Executive Council Consultative Meetings on High-Level Policy on Satellite Matters and the involvement of CGMS.

Appendix: Consultative Meetings on High-Level Policy on Satellite Matters

DISCUSSION

Background

1. The Thirteenth WMO Congress, held in Geneva in May 1999, noted that the Commission for Basic Systems (CBS) at its Extraordinary Session held in Karlsruhe, Germany in 1998 established an Open Programme Area Group (OPAG) for Integrated Observing Systems (IOS) to address a redesign of the Global Observing System including technical issues related to environmental observation satellite systems. CBS, in recognizing there would be a continued increase in environmental satellite systems and their applications throughout WMO programmes, noted that the OPAG IOS would address specific implementation and technical satellite-related issues. Further, it was recognized that many environmental satellite missions (e.g., ERS, TOPEX-POSEIDON, TRMM, SPOT, etc.) did not exclusively or directly support the space-based subsystem of the WMO's Global Observing System, but did provide significant support to many other WMO Programmes. As a result, there was a potential need for WMO to hold discussions with operators of environmental satellites to address policy, operational and important funding issues. In addition, Congress was informed that the satellite operator members of the Coordination Group for Meteorological Satellites (CGMS) requested the President of WMO to consider, within the structure of WMO, a suitable mechanism to address policy level issues regarding present and future environmental satellite programmes.

2. The WMO Congress agreed that, because of the long-term nature of most issues and the expected large investments required, a dialogue would be mutually beneficial between WMO and operators of environmental satellites. Therefore, Congress requested the Executive Council to consider arranging for a dialogue early in the next WMO financial period starting on 1 January 2000 by a grouping of appropriate agencies that operate environmental satellites.

3. The fifty-first session of the WMO Executive Council, held in May 1999 directly following the WMO Congress, considered decisions of the Thirteenth Congress requiring urgent action. The Executive Council considered a WMO mechanism for policy level interaction with operators of environmental satellites.

4. The Executive Council noted the need to build a new and closer partnership under the auspices of WMO between the Meteorological and Hydrological Services and environmental satellite communities. In particular, the Executive Council was of the belief that it should receive advice from those entities that were providing satellite systems that require major investment in order to meet WMO Member needs including those missions of a research nature not normally included in the space-based subsystem of the Global Observing System. The Executive Council also felt it appropriate to have discussions with those satellite operators who had the capability or would have the capability to provide data, products and services in support of WMO Programmes and international projects and activities sponsored by WMO. The Council also recognized that the satellite operators need to receive requirements approved at WMO policy levels to help justify the needed financial investments.

5. As a result, the Executive Council requested the Secretary-General to arrange, in consultation with the President and the Permanent Representatives of satellite operating countries, a meeting between representatives of the Executive Council and directors of agencies providing environmental observation satellites. The representatives of the Executive Council should adequately reflect the broad interest of Members including regional balance, user representation, and those members with satellite operating agencies. The intent of the meeting would be to provide guidance on the best way to deal with the policy level decisions of the organization in satellite matters. The results of the meeting should be provided to EC-LII for consideration.

EC Meeting on a Mechanism for Policy Level Interaction with Operators of Environmental Satellites

6. The WMO Executive Council Meeting on a Mechanism for Policy Level Interaction with Operators of Environmental Satellites was held at the World Meteorological Organization (WMO) Headquarters in Geneva, Switzerland from 24 to 25 January 2000 under the chairmanship of the President of WMO, Dr J.W. Zillman. The meeting was opened by the Secretary-General of WMO, Prof. G.O.P. Obasi. The Secretary-General noted that WMO Members were highly dependent on the data, product and services provided by environmental satellites, and that this dependency was evident even in the early years of meteorological satellites. He recalled that the primary catalyst for the World Weather Watch (WWW) had been a United Nations General Assembly Resolution in 1961 on international cooperation in the peaceful uses of outer space which requested WMO to develop a global plan for meteorology. The result was the formation of the World Weather Watch in 1963. Thus, environmental satellites had been very important to WMO throughout the years. The Thirteenth World Meteorological Congress held in May 1999 recognized that many environmental satellite missions (e.g., ERS, TOPEX-POSEIDON, TRMM, SPOT, etc.) did not exclusively or directly support the space-based Global Observing System (GOS), but did provide significant support to many WMO Programmes. As a result, it was felt that there was a potential need for WMO to hold discussions with environmental satellite operators to address policy and important funding issues. In closing, the Secretary-General noted that the meeting was historic as it was the first time when the both the meteorological and environmental space agencies, that contribute to the needs of WMO's various programmes had met with WMO in one of its meetings, not as observers, but rather as participants.

7. The January 2000 meeting discussed the need to provide the WMO Executive Council with guidance on the best way to deal with the policy-level decisions of the organization on satellite matters. The meeting was of the opinion that a need did exist for high-level policy discussions between the satellite operators and senior representatives of the WMO user community and that such discussions would be mutually beneficial. Furthermore, it agreed that a mechanism for such discussions could be provided through the convening of "Consultative Meetings on High-Level Policy on Satellite Matters" at one-to-two-year intervals. The meeting provided suggested guidelines for the Consultative Meetings on High-Level Policy on Satellite Matters.

EC's consideration of the outcome of the EC Meeting

8. The fifty second session of the WMO Executive Council noted the recommendations provided by the Meeting on a Mechanism for Policy Level Interaction with Operators of Environmental Satellites held from 24 to 28 January 2000 in Geneva. The Executive Council agreed that a mechanism for such interactions should be provided through the convening of "Consultative Meetings on High-Level Policy on Satellite Matters" at one-to-two-year intervals and endorsed the guidelines for these meetings as given in the Appendix, in connection with paragraphs 9-14 below.

9. The Executive Council was of the view that the Consultative Meetings should give early consideration to:

- ◆ Evaluating satellite missions to ensure, *inter alia*, the better use of existing and planned R&D missions in support of WMO Programmes and provide an assessment on their operational utility;
- ◆ Reviewing and revising the space-based component of the Global Observing System to take into account both operational and R&D opportunities and the need to maximize cost efficiency and effectiveness of satellite observing programmes.

10. The Executive Council agreed that the first of the Consultative Meetings on High-Level Policy on Satellite Matters will be held in 2001.

11. The Executive Council noted with satisfaction the early preparatory activities undertaken by the Commission for Basic Systems for the first Consultative Meeting on High-Level Policy on Satellite Matters that will occur in early 2001. It agreed that WMO should develop, in partnership with the space agencies providing environmental observation satellites, guidelines for minimum requirements that would be agreed upon in order to provide operational users a measure of confidence in the availability

of R & D observational data. Furthermore, the Consultative Meetings would provide the necessary high-level forum for a review of the present configuration of the space-based Global Observing System.

12. The Council also noted that the topics for the Consultative Meetings were germane to the needs of all WMO Programmes. In this regard, the Council suggested that the Joint WMO/IOC Technical Commission for Oceanography and Marine Meteorology (JCOMM), the Global Climate Observing System (GCOS) and the World Climate Research Programme (WCRP) be invited to participate in the Consultative Meeting thus ensuring the direct consideration of the oceanographic and climate observational needs, including research aspects.

13. While stressing the need for and potential contributions from Consultative Meetings, the Council also noted the need to maintain the present close and ongoing coordination between WMO and the Coordination Group for Meteorological Satellites (CGMS), the Committee on Earth Observations Satellites (CEOS) and the Integrated Global Observing Strategy Partnership (IGOS-P). Such coordination would assist in the implementation of recommendations and decisions derived from Consultative Meetings.

14. The Council stressed that the Consultative Meetings should take into account the needs of developing countries to ensure that they keep up with advances in satellite products and services. The Council also stressed the need for access to satellite data, products and services and appropriate education and training programmes to be able to realize the potential from this most valuable data.

Preparation of the first session of the Consultative Meetings

15. The first session of the Consultative Meetings on High-Level Policy on Satellite Matters is planned for early 2001. A draft agenda and explanatory memorandum have been prepared and distributed. The first session will review:

- An evaluation on the utility of some current and planned R&D missions for some WMO applications areas. The evaluation will be prepared using the methodology in the process developed and approved by the Commission for Basic Systems (CBS), i.e., the Rolling Review of Requirements process. Preliminary draft guidelines as described in paragraph 11 above have been distributed to first session participants seeking input to allow the development of guidelines for consideration at the first session;
- The draft guidelines for minimum requirements that could be agreed upon by WMO and the satellite operators in order to provide operational users a measure of confidence in the availability of Operational and R&D observational data and data providers with an indication of its operational utility. The guidelines, once finalized, would be submitted to both the WMO Executive Council and space agencies for formal approval;
- An initial draft of a possible configuration for the space-based component of the GOS which will include R&D missions, as well as the existing constellations of environmental polar-orbiting and geostationary satellites. The new configuration will be based on the assumption that the draft guidelines as described above could be realized;
- The needs of developing countries with regard to their utilization of satellite systems in order to ensure that they can keep up with advances in satellite data, products and services. Matters for special attention include the need for access to satellite data, product and services and appropriate education and training;
- A draft WMO Technical Document on "The Role of Satellites in WMO Programmes in the 2010s" which will update the last comparable technical document entitled "The Role of Satellites in WMO Programmes in the 1980s" by D.S. Johnson and I.P. Vetlov published in 1977.

Consultative Meetings on High-Level Policy on Satellite Matters

(i) Background

In the opening decade of the new millennium, a major opportunity to support and enhance WMO Programmes could be obtained through existing and planned satellite programmes. At the same time, there was a need to demonstrate the value of those satellite programmes to all concerned and to ensure that future plans took into account WMO needs. Within the above context, the satellite operators and WMO propose that regular consultative meetings to discuss high-level policy matters would be beneficial to all parties concerned. Such meetings would build on the good relationships that existed today between satellite operators and WMO and would enhance the working relations already in place through existing mechanisms. Those meetings would promote the achievement of further efficiencies in the satellite observing system and would ensure a common understanding of objectives and lead to better harmonization of programmes, requirements, usage of satellite data products and services, and high-level policy matters.

High-level policy matters could have a substantial impact on satellite operators, and on most, if not all, WMO Members as well as on the allocation of resources. For WMO, the relevant decision-making authority was the Executive Council; for the satellite operators, the equivalent decision-making organ would be their relevant governing bodies.

(ii) Purpose

The purpose of the Consultative Meetings on High-Level Policy on Satellite Matters would be to discuss matters of mutual interest between the satellite operators and WMO. One outcome of the meetings would be to ensure a better understanding of issues. A second, and more important objective, would be to agree on recommendations to be forwarded to the WMO Executive Council and/or satellite operators.

(iii) Organization and resource implications

It was anticipated that the meetings would be attended by the Directors of satellite operating agencies, members of the WMO Bureau, the president of the WMO Commission for Basic Systems, and sufficient members of the Executive Council to adequately reflect the broad interests of WMO Members (including consideration of regional balance, user representation and the role of the Permanent Representatives of those Members with satellite operating agencies). The satellite operators would attend those meetings at their own expense and the timing would be harmonized with WMO Bureau sessions. Preparation for the meetings would be assured by existing secretariat staff of all parties as part of their normal duties, and the meetings would normally be called by WMO.

(iv) Possible meeting topics

The meetings could focus on an initial list of topics including:

- ◆ Discussion with satellite operators on WMO Programmes and WMO-sponsored Programmes, on meteorology (including climatology), oceanography and hydrology. That would provide WMO with a forum to present its requirements for meteorological and environmental satellites (operational, research, and technology programmes) in a coordinated fashion;
- ◆ Consideration of the evolutionary design of the space component of the Global Observing System to take account of future technological developments and the evolution of the present day *in situ* networks. WMO would become more proactive in providing a vision on future state-of-the-art systems;
- ◆ Preparation for the implementation of the transition between research and operational

programmes through: (a) development of a WMO position for better convergence and transition of appropriate R&D instruments, missions and their corresponding new products and services into operational use; (b) demonstration of the use of new capabilities by WMO Members and work with satellite operators to evaluate the contributions towards meeting societal needs; and (c) WMO assessments of new satellite systems from a user perspective to provide formal evaluation results to the satellite operators;

- ◆ Consideration of the ways and means to reduce costs, including standardization of equipment, taking into account the efficiency and effectiveness of the total observing system (including ground systems), as well as consideration of the needs for the compatibility among satellite systems, particularly ground stations and product requirements;
- ◆ Maximizing the benefits to be derived from existing and planned satellite products and services in order to improve utilization of existing satellite data, products and services, and to provide for better coordination of these benefits for all WMO Members.

(v) *Interests of developing countries*

In all deliberations, the meetings should take into account the needs of developing countries to ensure that they keep up with advances in satellite products and services. In particular, attention should be given to the access to satellite data, products and services and appropriate education and training programmes, especially those at the WMO Regional Meteorological Training Centres (RMTCs).
