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**COOPERATION WITH OTHER WMO BODIES**

**AND INTERNATIONAL ORGANIZATIONS**

Inputs to PTC-2017 and EC-WG-2017 and coordination with other Technical Commissions

*(Submitted by the WMO Secretariat)*

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| **Summary and Purpose of Document**This document provides information about the on-going governance review of WMO constituent bodies and required inputs from the technical commissions in this regard. Coordination activities with relevant EC working groups and with other Technical Commissions are also discussed. |

**ACTION PROPOSED**

The Management Group (MG) is invited to:

1. formulate views to be presented to the upcoming PTC/PRA meeting in January 2017 and Executive Council Working Groups meetings in the 1Q of 2017;
2. review the coordination with other relevant TCs and adjust the ETs’ work programmes accordingly

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1. **EXECUTIVE SUMMARY**

***PTC-2017***

* 1. The MG noted that the 2017 meetings of the Presidents of the WMO Technical Commissions[[1]](#footnote-1) and Presidents of the WMO Regional Associations[[2]](#footnote-2) would convene in parallel during week commencing 9 January 2017 at WMO headquarters.
	2. The MG was informed about the on-going governance review of the WMO led by the EC Working Group on Strategic and Operational Planning (EC WG-SOP) which covered the structure of the WMO constituent bodies. Decision 84 (EC-68) endorsed the recommendations of the EC WG-SOP including, inter alia, governance advice to the technical commissions (INF. 3 refers).
	3. The PTC-2017 will be an important step in consolidating the views of the presidents regarding the future of the technical commissions. The MG considered how the case of the CAeM should be presented at the meeting in order to ensure continuation of its activities in an optimal way. In this regard, the MG <text based on the discussion and decisions of the meeting>.

***EC-WG-2017***

* 1. The MG recalled that Resolution 1 (EC-67) had re-established, with amended terms of reference, an Executive Council Working Group on WMO Strategic and Operational Planning (EG-WG-SOP) to conduct activities on strategic planning and budget, roles and operations of NMHSs, improvement of WMO processes and practices, governance and the quality management framework.
	2. MG recalled that Aviation Meteorology was a WMO strategic priority for the current financial period (2016 to 2019) and discussed developing a position for the next WMO Strategic Plan (2020 to 2023). In this regard, the MG <text based on the discussion and decisions of the meeting>.
	3. The MG further recalled that Resolution 5 (EC-67) had established an Executive Council Working Group on Disaster Risk Reduction (EC-WG-DRR) to provide guidance on the implementation of the DRR Programme, to provide advice, guidance and recommendations for more effective engagement of WMO Programmes involving DRR and service delivery activities with GFCS (Global Framework for Climate Services), and to monitor progress made in these respects and to report back to the Executive Council accordingly.
	4. In this connection, the MG discussed the role of aviation meteorology in the DRR context and determined that <text based on the discussion and decisions of the meeting>.

***Technical Commissions***

* 1. The MG reviewed the coordination with other Technical Commissions, in particular CBS and CAS.
	2. In respect of CBS, the MG appreciated the recent and ongoing efforts of the OPAG-ISS Task Team on Aviation XML (TT-AvXML) to, inter alia, identify the meteorological information that WMO must represent in XML in response to the ICAO requirements and the development of the supporting IWXXM schema. In this connection, the MG noted ICAO’s intentions to:
1. upgrade existing provisions concerning the issuance of METAR and SPECI, TAF and SIGMET as well as for AIRMET, volcanic ash advisories (VAA) and tropical cyclone advisories (TCA)[[3]](#footnote-3) in XML/GML from recommended practices to standards as part of Amendment 78 or 79[[4]](#footnote-4);
2. introduce new provisions concerning the issuance by designated centres of information on space weather as part of Amendments 78 and/or 79[[5]](#footnote-5); and
3. introduce new provisions (standards and/or recommended practices) that would modify the current practice of the issuance of SIGMET information, potentially as early as Amendment 79.

Of the foregoing proposals, the MG noted that a) would necessitate little, if any, change to the extant IWXXM (version 2.0) since this was purely a change in status (recommended practice to Standard), while b) and c) would lead to some, potentially significant, further development of IWXXM necessitating CBS support going forwards. The MG agreed that continued collaboration and coordination between ET-ISA and TT-AvXML in this context would remain essential going forwards.

* 1. Concerning space weather, the MG recalled that an Inter-Programme Coordination Team on Space Weather (ICTSW), established in May 2010, had greatly assisted the CBS, CAeM and ICAO in advancing the understanding of, inter alia, the methods of observing and forecasting space weather events with impacts on international air navigation, and the roles, responsibilities, capabilities and overall number of global and regional forecasting centres as well as their designation process, governance and cost recovery principles, competency standards and duration of mandate. Moreover, Resolution 38 (Cg-17) had agreed that WMO would facilitate international commitments and enable the establishment of operational space weather services, in particular in the context of support to ICAO, and that a four-year plan for WMO coordination of space weather activities had been established together with draft terms of reference of an Inter-Programme Team on Space Weather Information, Systems and Services (IPT-SWISS) as a successor to ICTSW. The MG noted that IPT-SWISS would be established jointly under CBS and CAeM, contributing to relevant expert teams of these commissions as well as other groups of technical commissions including those of CIMO and CAS. As a pursuit jointly led by CBS and CAeM, the MG acknowledged that co-chairs (one representing CBS, one representing CAeM) were required for IPET-SWISS. In this connection, the MG was informed that the upcoming CBS-16 session intended to elect its co-chair representative while CAeM was required to do likewise during the (CAeM) intersession period. The MG <text based on discussion and decisions>.
	2. The MG accepted that WMO, through the IPET-SWISS, would have an important advisory role to play in the designation, by ICAO, of space weather information providers (Doc. 5 refers). More precisely, experts from within IPET-SWISS would be involved in the conducting of impartial site assessments and audits of prospective space weather information providers for aviation in accordance with timelines and assessment/auditing criteria set by ICAO.
	3. In the context of the WMO Information System (WIS), the MG was apprised that the CAeM had had representation, through an ET-ISA co-chair, at an inaugural Inter-Commission Task Team on the WMO Information System (ICTT-WIS) meeting (12-13 September 2016, Geneva), which had been established as a result of EC-68 (Decision 38). EC-68 had noted the need for CBS to ensure a continued user focus, working with other technical commissions, to resolve present governance issues impacting on the operation of the WIS and to establish how WIS should evolve over coming decades together with the approach to achieving this. The ICTT-WIS was tasked to develop a governance structure for the operation management of WIS and to facilitate stakeholder input into the WIS strategy and the development of Part C of WIS. EC-68 requested CBS to present a proposal for the governance structure and strategy for the evolution of WIS to EC-69 (2017).
	4. In the context of the Global Data-Processing and Forecasting System (GDPFS), the MG was apprised that the CAeM had had representation, through the Vice-President of CAeM, at an inaugural Future Seamless-GDPFS meeting (1 to 4 November 2016, Geneva), which had been requested at EC-68 (Decision 55). The meeting was intended to provide guidance and to monitor the development of a process for the gradual establishment of a future enhanced integrated and seamless WMO DPFS, to manage the integration of new components in the GDPFS, including addressing synergies with and requirements of all WMO Programmes and Regions, to develop a description of the set of products the system should produce, and to complete an implementation plan for the process for consideration at EC-69 (2017).
	5. As part of a WMO Rolling Review of Requirements (RRR) – a process defined by the Manual on the Global Observing System (WMO-No. 544) whereby user requirements for observations are compared with the capabilities of present and planned observing systems – the MG was apprised that a [Statement of Guidance](https://www.wmo.int/pages/prog/www/OSY/SOG/SoG-Aero.pdf) (SOG) had been developed for the aeronautical meteorology application area and duly reviewed and approved by the CBS Inter-Programme Expert Team on Observing System Design and Evolution (IPET-OSDE) in April and June 2016 respectively. The SOG provided an assessment of the adequacy of observations to fulfil requirements and suggested areas of progress towards improved use of space-based and surface-based observing systems. The MG agreed that there was a need to ensure that the RRR in the aeronautical meteorology domain respected the evolving strategic direction of aeronautical users’ requirements as represented by ICAO’s Global Air Navigation Plan (GANP) and its aviation system block upgrades (ASBU) methodology.
	6. In respect of CAS, and also in connection with the developments envisioned by ICAO’s GANP/ASBU, the MG recalled that the WMO World Weather Research Programme (WWRP) was leading an Aviation Research Demonstration Project (AvRDP), as a joint venture between the CAS, CAeM and CBS, in order to develop, demonstrate and quantify the benefits of end-to-end nowcasting (0 to 6 hour timeframe) of aeronautical meteorological services for the terminal area focused on high-impact weather. The MG was apprised that Resolution 44 (Cg-17) had requested, inter alia, the presidents of CAS, CAeM and CBS to:
1. establish effective coordination in implementing the AvRDP activities; and
2. to stimulate and coordinate research and development activities and studies of nowcasting methods, numerical predication tools and assimilation methods to increase the potential benefits of AvRDP implementation for Members
	1. Furthermore, Resolution 44 (Cg-17) had requested the Secretary-General to, inter alia, support, within available budgetary resources, the implementation of AvRDP and to organize appropriate events for the dissemination of project results for the maximum benefit of Members, within available budgetary resources. In this regard, a special session on AvRDP was held in Hong Kong, China in July 2016 during the WMO/WWRP 4th International Symposium on Nowcasting and Very-short-range Forecast (WNS16). Moreover, EC-68 gave necessary consideration to AvRDP as an inter-commission aviation research project, where Decision 44 (EC-68) endorsed, inter alia, a proposal for organizing in 2017 a WMO scientific event (conference, symposium or workshop) with broad participation of research, operations and user communities, with the objective to identify needs and plan the research activities during ASBU Block 1 and Block 2 timeframes. (Doc. 7.3 refers)

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1. Commission for Aeronautical Meteorology (CAeM), Commission for Agricultural Meteorology (CAgM), Commission for Atmospheric Sciences (CAS), Commission for Basic Systems (CBS), Commission for Climatology (CCl), Commission for Hydrology (CHy), Commission for Instruments and Methods of Observation (CIMO) and Joint WMO/IOC Technical Commission for Oceanography and Marine Meteorology (JCOMM). [↑](#footnote-ref-1)
2. Regional Association I (Africa), Regional Association II (Asia), Regional Association III (South America), Regional Association IV (North America, Central America and the Caribbean), Regional Association V (South-West Pacific) and Regional Association VI (Europe). [↑](#footnote-ref-2)
3. The issuance of AIRMET, VAA and TCA in XML/GML is a recommended practice with effect 10 November 2016. [↑](#footnote-ref-3)
4. XML/GML data representation will, for the foreseeable future, be in addition to their representation in TAC code form (for METAR, SPECI and TAF), abbreviated plain language (for SIGMET, AIRMET, VAA and TCA) and graphical format (for SIGMET, volcanic ash and tropical cyclone information). [↑](#footnote-ref-4)
5. The provisions for space weather information may entail XML/GML data representation, TAC code form and/or graphical format. [↑](#footnote-ref-5)