

World Meteorological Organization

FIFTEENTH CONGRESS

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Secretary-General,  
President of CAeM

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## AERONAUTICAL METEOROLOGY PROGRAMME; THE REPORT OF THE PRESIDENT OF CAeM

### SUMMARY

#### **ACTION REQUIRED:**

Congress is invited to provide guidance regarding the future implementation of the Aeronautical Meteorology Programme.

#### **REFERENCES:**

1. *Abridged Final Report with Resolutions and Recommendations of the Thirteenth Session of the Commission for Aeronautical Meteorology* (WMO-No.1018)
2. *Abridged Final Report with Resolutions of the Fifty-eighth Session of the Executive Council* (WMO-No. 1007)

#### **CONTENT OF DOCUMENT:**

##### **Appendices for inclusion in the final report:**

- A. Draft text for inclusion in the general summary of Cg-XV
- B. Draft Resolution 3.4.3/1 (Cg-XV) – Aeronautical Meteorology Programme

##### **Appendix for information:**

**Cg-XV/Rep. 3.4.3:** Progress/Activity Report

## **DRAFT TEXT FOR INCLUSION IN THE GENERAL SUMMARY OF Cg-XV**

### **3.4.3 AERONAUTICAL METEOROLOGY PROGRAMME: THE REPORT OF THE PRESIDENT OF CAeM (agenda Item 3.4.3)**

**3.4.3.1** Congress was informed of the progress made in the implementation of the 6LTP, the new and streamlined structure of CAeM it had adopted at its recent thirteenth session and the Operating Plan of the Aeronautical Meteorology Programme (AeMP) for the period 2008-2011.

**3.4.3.2** Congress appreciated learning that extra funds provided at its request to compensate for the extremely limited regular budget of the AeMP were used to hold a series of training events covering Quality Management Systems, Cost Recovery, and modern methods in aeronautical meteorology and had led to a visible improvement demonstrated by the results of two consecutive Members' surveys.

**3.4.3.3** Congress further noted that the areas where significant progress had been achieved, such as the establishment of a Training Website ([www.caem.wmo.int](http://www.caem.wmo.int)) and holding of the Technical Conference were only possible due to the dedication of Experts who had been given the opportunity to meet as a team and continue their cooperation by correspondence. It noted that those teams without a funded meeting achieved extremely limited progress.

**3.4.3.4** On the issue of cost recovery for aeronautical meteorological service provision, Congress learned that lack of coordination and clear guidance from the relevant government departments involved with aviation prevented the implementation of cost recovery mechanisms for some Members. Congress thus agreed that targeted action by executive management of WMO may be required to overcome the deadlocks encountered in these countries where revenues from aviation were seen as a key to economic survival for NMHSs.

**3.4.3.5** The introduction of the new two-tier-system in the classification of meteorological personnel as described in WMO-No. 258 and its aeronautical supplement No.1 still requires a significant effort to ensure that aeronautical meteorological personnel fully comply with the new guidelines. This is an issue for many developing and also some developed countries for which Congress anticipated an increasing need for resources.

**3.4.3.6** On the subject of customer focus, Congress was informed that the rapid growth of air traffic in many regions had reinforced its critical dependence on forecasts and warnings of weather phenomena affecting the capacity of aerodromes and busy air routes. Congress thus encouraged CAeM to put strong emphasis on close cooperation with ICAO, air navigation service providers, airlines, pilots and airports in developing new and targeted forecast products for the wider Terminal Area of Aerodromes, entrusted to a new Expert Team.

**3.4.3.7** Congress also noted intensifying pressure from user groups, air traffic management authorities and ICAO to reorganize airspace and Flight Information Regions, and thus the Meteorological Watch Offices responsible for the issuance of SIGMETs and AIRMETs, into larger blocks both for the sake of harmonizing warnings and reducing costs. Congress requested regional associations together with CAeM to develop strategies for such cooperation amongst neighbouring NMHS's.

**3.4.3.8** Concerning aircraft observations, Congress noted that the addition of humidity data would turn AMDAR data into a data source with the potential for substantial savings in conventional upper-air observations, providing comparable quality, precision and vertical resolution to these for the troposphere. Congress supported the notion that the necessary investment for the general introduction of these sensors could be overcompensated by large savings in the context of a Global Observing System. In this respect, the migration of the AMDAR programme, once

operational, from the AeMP to the World Weather Watch of WMO is seen as a natural and necessary development.

**3.4.3.9** After some discussion, Congress adopted Resolution 3.4.3/1 (Cg-XV).

## DRAFT RESOLUTION

### Res. 3.4.3/1 (Cg-XV) – AERONAUTICAL METEOROLOGY PROGRAMME

#### THE CONGRESS,

#### Noting:

- (1) Resolution 15 (Cg-XIV) — Aeronautical Meteorology Programme,
- (2) The *Abridged Final Report with Resolutions and Recommendations of the Thirteenth Session of the Commission for Aeronautical Meteorology* (WMO-No. 1018),
- (3) Recommendation 1 (CAeM-XII) — Training Activities of the Aeronautical Meteorology Programme,
- (4) The request by EC-LVIII (*Abridged Final Report with Resolutions of the Fifty-eighth Session of the Executive Council* (WMO-No. 1007) general summary paragraph 3.4.3.1) to the Secretary-General to endeavour to provide increased funding to the programme,

#### Considering:

- (1) That aeronautical meteorological service provision as a fundamental source of income particularly for developing countries needs to increase efficiency while maintaining safety,
- (2) That NMHSs are coming under increasing pressure to provide timely and accurate services to aviation, applying recognized Quality Management Systems,
- (3) That these targets can only be achieved by applying a vigorous training and capacity building programme in close cooperation with aviation stakeholders and WMO's sister organization ICAO,
- (4) That such programmes require a stable funding basis founded on recognized principles of cost recovery for aviation meteorological services,
- (5) That progress in aeronautical meteorology is to be achieved by making best use of adequate technology and opportunities such as aircraft meteorological data including humidity observations, and emerging remote sensing platforms,
- (6) That aeronautical meteorology has to play an important role in cross-cutting activities such as Disaster Prevention and Mitigation, support for Least Developed Countries for whom aviation is a key development factor and in questions of the impact of aviation on the local and global environment,

#### Decides:

- (1) That the WMO Aeronautical Meteorology Programme should be intensified and enabled to address new and urgent questions put before it;
- (2) That the Aeronautical Meteorology Programme form an integral part of the new WMO Strategic Plan 2008-2011, and assist Members to plan for enhanced service provision including new terminal forecasts and warnings to be developed jointly with ICAO;

- (3) That additional funding be provided for high priority activities in the field of training, capacity building and support for Least Developed Countries and Small Island Developing States;

**Urges** all Members to collaborate actively, by making time and expertise of their staff available, in the implementation of the Aeronautical Meteorology Programme;

**Requests Congress**, with the assistance of CAeM and other relevant technical commissions, to guide and support the implementation of the AeMP;

**Requests the Secretary General,**

- (1) To assist in the implementation of the programme and in particular give high priority to training and capacity building requirements;
  - (2) To foster the overall integration of the programme, in a cross-cutting way, in accordance with the Strategic Plan for WMO;
  - (3) To include discussions with senior Government officials on cost recovery issues as part of his agenda whenever on missions to concerned Member countries;
  - (4) To discuss with ICAO their policy of charging Members upfront the cost of sending an expert on dedicated missions to support the implementation of cost recovery;
  - (5) To collaborate in the implementation of the programme with ICAO, ASECNA, IATA, IFALPA, IFATCA, regional and national Aviation Meteorology Regulators and Service Providers as well as user representatives;
  - (6) To bring this resolution to the attention of all concerned.
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**AERONAUTICAL METEOROLOGY PROGRAMME;  
REPORT OF THE PRESIDENT OF CAeM**

**PROGRESS/ACTIVITY REPORT**

**SUMMARY**

Reference: Cg-XV/Doc. 3.4.3

**CONTENT OF DOCUMENT:**

**Appendix:**

- Report by the president of CAeM

## **REPORT BY THE PRESIDENT OF CAeM**

### **1. INTRODUCTION**

This report covers the overall activities and organization of the Commission since the Fourteenth Congress in 2003. The Management Group of CAeM has met formally twice: in Hall, Austria, in April 2004, and in Boulder, Colorado, USA, in April 2006, and CAeM-XIII was held in Geneva in November 2006.

### **2. PLANNING**

The activities of the Commission have been fundamentally driven by the Aeronautical Meteorology Component of the Sixth Long-term Plan (6LTP).

In line with the development of the WMO Strategic Plan 2008-2011, the Management Group has formulated an AeMP Operating Plan for 2008-2011. The Plan focuses on:

- (a) Providing access to training;
- (b) Facilitating good relationships and collaboration between Members and their customers and partners including civil aviation authorities and air navigation service providers;
- (c) Assisting Members in planning for future aeronautical meteorological service provision;
- (d) Collaborating with ICAO on the design and assessment of a new terminal weather forecast;
- (e) Ensuring aeronautical meteorology interests are taken into account and capabilities made available in cross-cutting activities and other constituent bodies of WMO;
- (f) Ensuring that WMO Members' interests are represented in ICAO regional planning, study and operations groups;
- (g) Surveying Members' capabilities for aeronautical meteorological service provision with a view to identify and quantify benefits from the AeMP.

The AeMP Operating Plan will directly contribute to WMO's Top Level Objectives 1 and 2, and Expected Results 1, 6, 7, 8 and 9 as contained in the WMO Strategic Plan.

### **3. STRUCTURE AND EXPERTISE**

The former structure of the Commission with 2 OPAGS and 4 Expert Teams achieved important results, but in light of limited resources both in financial terms and available time of Experts, a more streamlined structure was adopted by CAeM-XIII, with 3 Expert Teams and 1 Expert Network supporting the Management Group together with a Rapporteur on Aviation and Environment.

### **4. BUDGET**

The Executive Council, at its fifty-eighth session in Geneva in 2006, did recognize the difficulties of maintaining the required momentum of the programme with the extremely limited funds available under the zero-growth policy in its report, where paragraph 3.4.3.1 stated that:

“Concerning the importance of the Aeronautical Meteorology Programme, the Council:

- (a) Requested the Secretary-General to endeavour to provide increased resources to the Aeronautical Meteorology Programme, which currently represented about 1 percent of the WMO budget, while aeronautical meteorology brought in as much as 30% of the budgets of many NMHSs;
- (b) Requested the Secretary-General to highlight and promote the role of NMHSs to ensure they were properly recognized for their operation of the basic system on which aeronautical meteorological services throughout the globe depended. “

## **5. TRAINING AND PUBLICATIONS**

Support for Members to assist them in training is an important component of our work. Despite the lack of adequate funding, we have managed to continue to conduct training events, thanks to the cooperation and support of Members and other Organizations, and to the availability of funds from the “cash surplus” from the previous financial period. These events have had a beneficial impact on Members activities as can be seen from our Members surveys.

There was significant progress made by the Expert Team on Education and Training, including the establishment of a dedicated Web site with online training materials at <http://www.caem.wmo.int>.

## **6. AMDAR**

Excellent progress on AMDAR continues to be made. Data counts show that we now have something like 230,000 automated aircraft reports per day. Comparable numbers were around 10,000 in 1990, 50,000 in 1998, and 100,000 in 2001.

In accordance with directions of Congress and the Executive Council, a migration of responsibility for the AMDAR Programme from the AeMP to the World Weather Watch is underway. For that reason, the Operating Plan for 2008-2011 does not refer to AMDAR activities.

## **7. ACKNOWLEDGEMENTS**

I want to thank the many people who have contributed to the work of the Commission over the last four years. The former president of the Commission, Dr Neil Gordon, has done a wonderful job ably assisted by the Management Group. The Expert Teams, and their chairs in particular, have valiantly grappled with the tasks allotted them. The Secretariat team have been a great support and gave guidance in difficult questions. Many Members have supported the programme by hosting seminars, workshops and meetings, for which they deserve our appreciation.

There are also many countries and organizations who have supported the activities of the Commission, and there has been excellent cooperation with organizations including ICAO, IATA and ASECNA.

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