INTERNATIONAL CIVIL AVIATION ORGANIZATION

AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP
TWENTIETH MEETING (APIRG/20)
(Yamoussoukro, Cote d'Ivoire, 30 November to 2 December 2015)

Agenda Item 2: **Performance Framework for Regional Air Navigation Planning and Implementation**

2.6 Aeronautical Meteorology (MET)

AREAS OF RESPONSIBILITIES OF WMO IN THE ISSUANCE AND DISSEMINATION OF SIGMET

(Presented by ASECNA or BENIN AND TOGO)

SUMMARY

This working paper points out the issue of rules for the application of section 3.4.1 of Annex 3, and the need to clarify the concept of MWO area of responsibility in the FIRs containing several ATS units.

REFERENCES:

- Annexe 3
- FASID - Table MET 2B.
- METWSG
- MET14 WP 11
- CAeM-15 Doc.11

1. INTRODUCTION

1.1   Common use associates a MWO with the FIR, even if in fact the documentation nuances that definition. This is why in our region, each FIR is associated with a MWO responsible for the establishment and dissemination of SIGMET information related to weather events that may affect the safety of air navigation within the FIR.

1.2   The current evolution of the organization of airspace where sectorization help to improve ATS operations, leads to different en-route control center managing the airspace of the same FIR. Thus, the location of a Main Watch Office falls into it's true definition where the MWO is associated with a RIC or a RCC. This is why a new organization of MET services delivery is needed to ensure effective service and efficient information in en-route assistance.

2.   DISCUSSION

Current situation

2.1   A sectorization create within a single FIR, areas or portions of areas where en-route control is provided from different ATS centers.

2.2   So that the Areas of Responsibility (AOR) of MWO associated with FIR sectorized contain several ATS centers. These units receive the same SIGMET messages that are routed to them either directly or through CMA, lengthening deliveries times.
In addition, the SIGMET sent to them is developed for the whole FIR and the rules for renewal and cancellation are unchanged regardless of the movement of the phenomena responsible of this information in a given sector of the FIR or subairspace.

2.3   Thus contamination of a subairspace by a phenomenon having already been the subject of a SIGMET in the FIR will not be reported until this SIGMET remain in force or the phenomenon responsible of its issuance has not change in intensity.

2.4   Similarly, all ATS units will receive all SIGMET issued; and that, whatever the position of the phenomenon or its expected evolution over the area under their responsibility.

2.5   Hence, the ATS center does not always have the relevant information to be transmitted to the pilot, but in addition, it may be recipient of irrelevant information for the airspace under his responsibility. All these information will be sent to the crews who will strip them to assess their interest for the course of their flight.

2.6   If we take into account the prospective time to relay by a CMA, one immediately understand that the process is a potential source of risk.

2.7   This is the meaning to be given to the proposed amendment 77 being adopted.

2.8   The notion of responsibility specified space is associated with the flight information region or control area to take into account this need for clarification. Thus, it becomes clear that for MWO whose area of responsibility encompasses more than one FIR and / or CTA it will be established separate SIGMET messages for each FIR and / or CTA of that FIR.

2.9   It is the application of this principle that led to establish the Lome MWO, after the segmentation of the Accra FIR, and for which Table MET2B will be amended soon.

2.10   The generalization of this principle to ASECNA may lead to review the current organization of providing en-route MET assistance.

2.11   In those of our MWO whose area of responsibility includes several FIR and / or UTA such as Dakar, Niamey, Brazzaville and Ndjamena, a safety study will allow us to decide whether to modify the responsibilities of the office to take into account the need for specific SIGMET for each en-route assistance body, or the erection of certain CMAs to MWO.

2.12   The benefits of such an arrangement are multiple:•
- The controller is fed only   by the SIGMET concerning its area of responsibility;
- The ARS collected are those related to the area evolving flight and their operation may be immediate; and
- The delivering times of provision of products are reduced.

Development

2.13   The ability of a MWO for the generation of SIGMET for the benefit of several NA organisms, many thanks to the improvement of communication systems and working tools, could evolve to Regional Hazard Advisory Center issuing SIGMET Advisory for other centers.

2.14   ASECNA, in an ambitious program of modernization and improvement of its working tools, is planning to equip its MWO in the very near future, with modern monitoring systems and alert for meteorological phenomena that may jeopardize the safety of the air Navigation.

2.15   These systems rely on a modern and comprehensive observation network (real-time analysis of satellite images, radar, database and systematic profiling wind from the soil and on board soundings, lightning data, turbulence and icing, NWP outputs on a fine mesh grid centered on West Africa) in addition to all traditional observation systems.

2.16   These customizable systems will interoperate or interface with all other the prediction tools (NWP products, or WAFS from the analysis), and will allow monitoring of specified areas of responsibility, and therefore to issue SIGMET advisory for one or more MWO.

3.   ACTION BY THE MEETING

3.1   The meeting is invited to Examine the content of that note and formulate the following recommendation:

Recommendation 20/XX: ………………

The meeting recommended that it be applied to all States hosting MWO associated with the FIR containing several of en-route ATS assistance; kindly amend the FASID Table MET 2B in order to:

> **• indicate SIGMET products delivered; and**
> **• specify airspace for which the SIGMET is issued.**