



INTERNATIONAL CIVIL AVIATION ORGANISATION
AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP (APIRG)
METEOROLOGICAL STUDY GROUP (METSG/10)
(Dakar, 29 June 2011 to 1ST July 2011)

Agenda Item 5: Provision of tropical cyclone and volcanic ash advisories for the AFI Region

FIRST RESULTS OF THE AFI SIGMET ADVISORY TRIAL
(Presented by France and South Africa)

SUMMARY

The paper presents the activities of the ongoing work by the Meteorological Warning Study Group (METWSG) to study the feasibility of assisting the Meteorological Watch Offices (MWOs) in the AFI Region issue SIGMETs by providing them with SIGMET advisory messages issued by selected Regional SIGMET Advisory Centre's (RSAC).

1. Introduction

1.1 ICAO, with the assistance of the Meteorological Warnings Study Group (METWSG), has undertaken a task to conduct a feasibility study into the use of SIGMET advisories in order to assist States in the issuance of SIGMET for thunderstorms, severe turbulence, severe icing and severe mountain waves.

1.2 The feasibility study is considered necessary by the Air Navigation Commission (ANC) following concerns expressed by the thirteenth Meeting of the Satellite Distribution System Operations Group (SADISOPSG), the ninth Meeting of the CARISAM Regional Planning and Implementation Group (GREPECAS), the twelfth Meeting of the ASARAC Air Navigation Planning and Implementation Regional Group (APANPIRG) and the fiftieth Meeting of the European Air Navigation Planning Group (EANPG).

1.3 These concerns reflect a general lack of compliance in most ICAO regions with SIGMET provisions contained in *ICAO Annex 3 - Meteorological Service for International Air Navigation, Chapter 7 and Appendix 6*.

2. Discussions

2.1 The feasibility study in the AFI Region commenced on the 4 April 2011 and will run through to the 30 June 2011. France and South Africa were selected as host of the RSAC during the trial. Their responsibility would be to assist by providing SIGMET advisory information to Meteorological Watch Offices (MWOs) in the AFI Region. Further to this, they are also expected store the SIGMETs issued by the MWOs in response to the advisories.

2.2 The SIGMET advisories information mentioned in 2.1 above is in the form of text (SMA) and graphics (SMG) and covers two areas (AFI-S and AFI-N), see **Appendix A** to the working paper. Toulouse RSAC is responsible for issuing advisories for AFI-N and AFI-S is covered by Johannesburg RSAC.

2.3 These advisories are disseminated in text format via AFTN to the MWOs of in the region. The text messages (SMA) are assigned the following headers obtained from WMO, FRAQii for AFI-S and FRQPii for AFI-N. Text and graphical advisories are available on dedicated websites:

<http://www.meteo.fr/sigadv/>

<http://aviation.weathersa.co.za/aviationold/SMA.htm>

2.4 The goal is to evaluate how SIGMET advisories produced by a regional center can be useful for the Meteorological Watch Offices and can therefore contribute to a better implementation of the SIGMET watch in the area.

2.5 During the trial, MWOs keep their usual production, using the SIGMET advisories as an additional source of information, in addition to what they already use (observations, satellite, radar, numerical models...etc). At the end of the trial, the MWOs will have to fill in an evaluation form which is also accessible through the links above.

2.6 In addition to the issuance of advisories, the RSAC have continuously encouraged the MWOs to participate in the trial and wherever possible assisted them to resolve whatever challenges they had i.e. communication etc. It became apparent that communication challenges and training were the major contributing factors for non participation in this trial. A summary of the status of participation thus far by the MWOs is included in **Appendix B** to the working paper.

2.7 The meeting may wish to note that most MWOs responded positively to the advisories and some participated after being assisted i.e. Botswana, Malawi, Zimbabwe and Namibia. Further to this, it must be noted that some MWOs have continually participated in the trial and have responded timely to the advisories.

3. Recommendation

As mentioned above, the challenges regarding the issuance of SIGMET by MWOs in the AFI Region still remains. The RSAC are continuing to commit resources to try and assist the MWOs issue SIGMETs.

Draft Conclusion 10/XX- MWOs to be encouraged to participate in the ongoing trial

That the RSAC and ICAO regional offices (WACAF and ESAF) continue encouraging the MWOs to fully participate in the ongoing trial in order to enhance the issuance of SIGMET information in the region thus contributing to the safety of air navigation.

4. Actions by the meeting

3.1 The meeting is invited to:

- a) note the information presented in this and;
- b) decide on the draft recommendation

APPENDIX A
(Area of responsibility and examples of advisories)

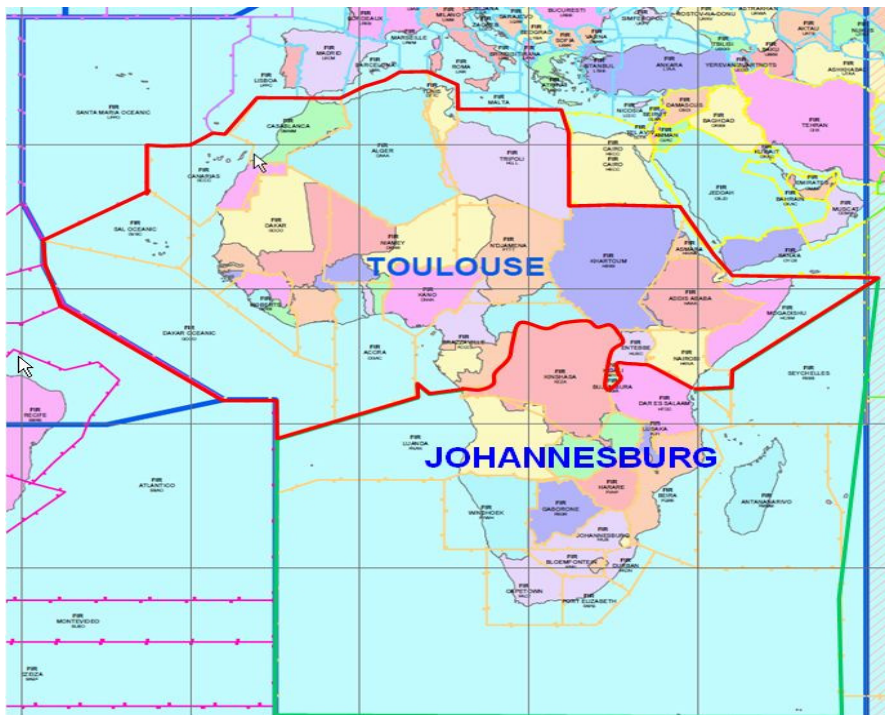


Fig 1: (Area of responsibility for Toulouse and Johannesburg RSAC)

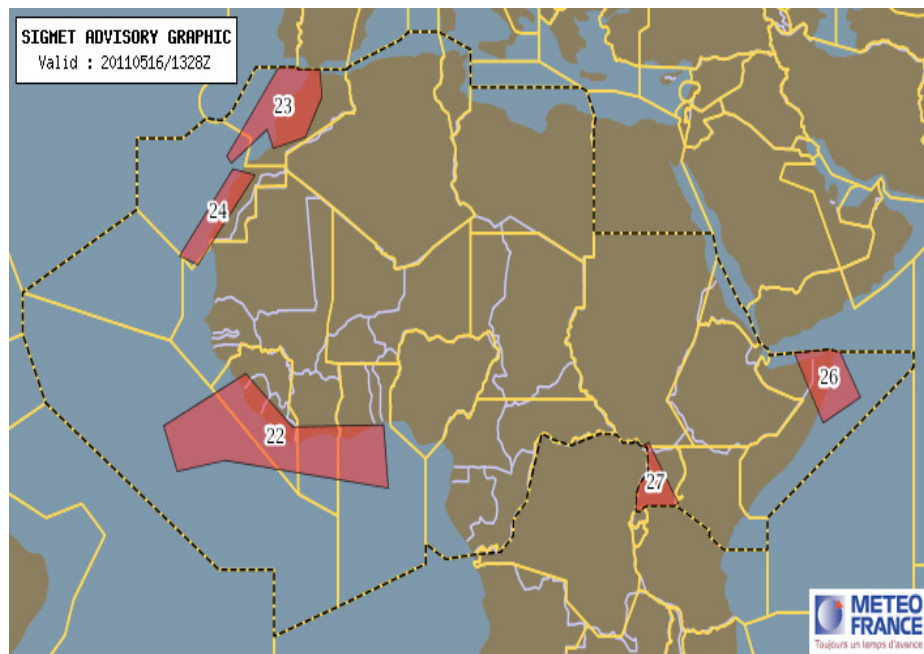


Fig 2: (Example of Graphical SIGMET advisory issued by Toulouse RSAC)

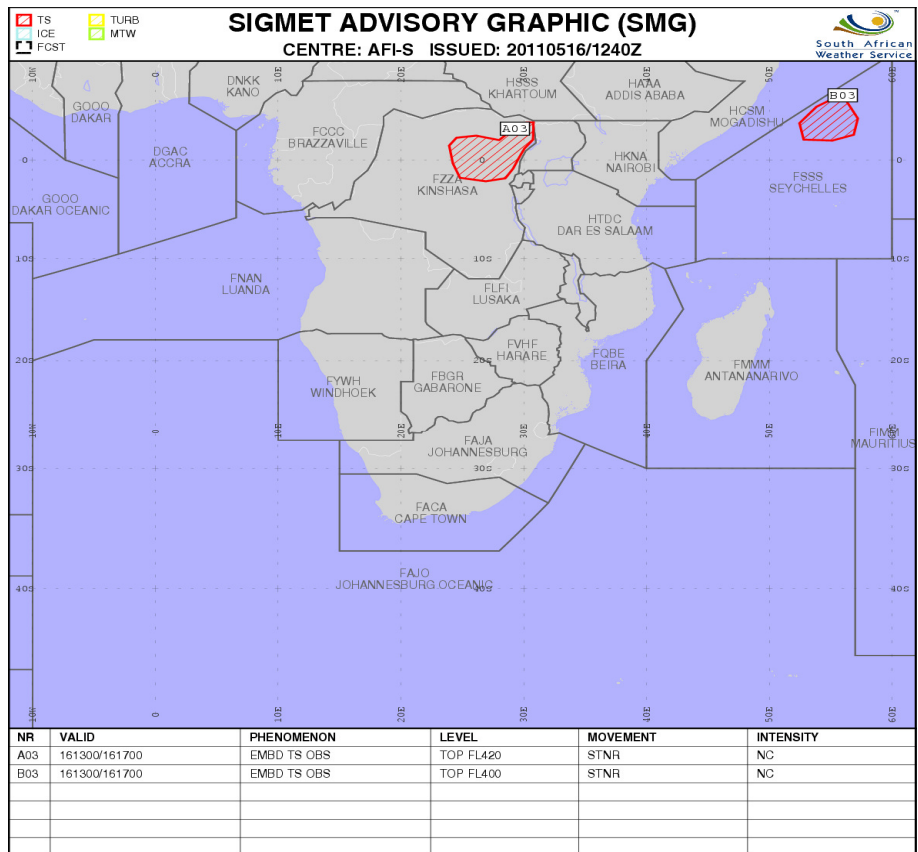


Fig 3: (Example of Graphical SIGMET advisory issued by Johannesburg RSAC)

Appendix B
(Status of participation by MWOs)

AFI-S		
MWO Location	Participation? (Y/N)	Comments
Luanda	N	Challenges with AFTN connections. The MWO promised to participate at a later stage.
Gaborone	Y	Participating after been assisted with the routing of their SIGMETs. However, they are not responding to every advisory.
Bujumbura	N	Not participating
Kinshasa	N	They were contacted several times. The issue of training was raised as well as AFTN connection problems.
Antananarivo	Y	One of the few who always respond to the advisories.
Lilongwe	Y	Participating after been assisted with format issues.
Mauritius	Y	Always participating
Beira	N	Never participated. The MWO has been contacted several times.
Windhoek	Y	Participating but not always.
Kigali	N	Never participated
Seychelles	Y	Always participation
Dar es Salaam	Y	AFTN challenges at first but are now participating though there are still few technical issues about the formatting.
Lusaka	N	Not participating
Harare	Y	Participating
AFI-N		
Dakar Oceanic	Y	Regularly
Dakar	Y	Regularly
Sal Oceanic	Y	Regularly
Canarias	Y	Regularly
Casablanca	Y	Regularly
Roberts	N	Not participating
Alger	Y	Sometimes
Niamey	Y	Sometimes
Kano	Y	Sometimes
Accra	Y	Only a few SIGMETs have been issued
Tunis	Y	Regularly
N'djamena	Y	Regularly
Brazzaville	Y	Regularly
Khartoum	N	Not participating
Asmara	N	Not participating
Addis Ababa	N	Not participating

Entebbe	N	Not participating
Kigali		FIR OUT OF DOMAIN
Bujumbura		FIR OUT OF DOMAIN
Nairobi	Y	Participating
Mogadishu	N	Not participating