



MET/SG/7-WP/13

INTERNATIONAL CIVIL AVIATION ORGANIZATION

**AFI PLANNING AND IMPLEMENTATION
REGIONAL GROUP (APIRG)**

METEOROLOGICAL SUB GROUP SEVENTH MEETING

(Dakar, 11 - 13 April 2005)

Agenda Item 3: WAFS in the AFI Region

Provision of WAFS SIGWX Charts in PNG Format

(Presented by WAFC London)

Summary

WAFC London will commence production of its WAFS SIGWX charts (SWH and SWM) in the PNG format and place these on the internet based WAFS FTP Service. This will provide users with convenient access to standard area charts that requires minimal investment in end user software.

1. Introduction

1.1 The cessation of T4 formatted WAFS charts (SIGWX and wind & temperature) and their replacement by BUFR and GRIB encoded equivalent data is proving challenging for a number of users. These problems manifest as a result of the change in responsibility for chart production when the binary coded data is issued; responsibility shifts from the WAFC to the user. The problems are primarily associated with cost, as a result of the requirement to procure a visualisation system and perhaps a number of software upgrades so that the user remains current with changes to the BUFR and GRIB encoded data. This financial issue has been compounded by the late availability of quality and compliant visualisation software and the perceived lack of benefit for the new formats by some users. However we have now reached a stage where five workstation packages can be considered compliant. These problems are mainly associated with the BUFR formatted data. The GRIB encoded data is a mature product accepted and utilised by many users.

1.2 At the recent WAFSOPSG/2 meeting it was agreed (Conclusion 2/12) that the WAFS SIGWX forecasts in T4 format should continue to be produced until 30 November 2006. This extra time may assist users in the migration to the BUFR

encoded equivalent data. However it was agreed that the T4 wind and temperature charts would cease on the 1 July 2005.

2. Discussion

2.1 Even though the BUFR format does realise some potential benefits to users WAFC London is aware that these benefits may not be utilised or even needed by everyone and the high cost of procuring BUFR visualisation software may seriously undermine these benefits. There is a serious risk that users will not stay up to date with ICAO compliant visualisation software and may consequently be unable to produce valid WAFS charts for their customers. This clearly has a safety implication.

2.2 To assist in addressing this important issue WAFC London has proposed that the standard ICAO chart areas should be retained and WAFS SIGWX charts should be produced for these areas using the industry portable network graphics (PNG) format. This proposal was debated at the WAFSOPSG/2 meeting which resulted in the formulation of WAFSOPSG Conclusion 2/13.

Conclusion 2/13 - Availability of WAFS SIGWX forecasts in chart form using the PNG format or an equivalent industry standard

That, the WAFC Provider States be invited to

- a) provide, on a trial basis, WAFS SIGWX forecasts in chart form for the fixed areas of coverage using the industry standard Portable Network Graphics (PNG) graphical format of an equivalent industry standard;**
- b) place these charts on the WAFS FTP server by 1 July 2005; and**
- c) report back to the WAFSOPSG/3 Meeting to facilitate the group to assess the desirability of continuing the provision of WAFS SIGWX forecasts in chart form using the PNG format or an equivalent industry standard.**

2.3 WAFC London anticipates producing its WAFS SIGWX charts in the PNG format from mid-April 2005. These will become available from a new sub-directory available on the WAFS FTP server. Discussions are taking place with WAFC Washington to arrange for the provision of the Washington WAFS SIGWX products in PNG or an equivalent industry standard format.

2.4 Users wishing to access and display these products will need a very limited amount of hardware and software. This includes a PC running a web browser or other standard visualisation package, access to the internet, and an account on the WAFS FTP server. Access to the WAFS FTP server is provided free of charge to all SADIS and ISCS recipients. The simplicity of this approach mitigates the disadvantages of the BUFR format and provides users with an extremely cost effective way of receiving pre-formatted WAFS SIGWX charts.

2.5 WAFSOPSG formulated Conclusion 2/12 that invited (amongst other issues) the ICAO regional offices to carry out a survey in May 2006 to verify the implementation of the reception and effective utilisation of BUFR-coded SIGWX

forecasts by States, and for the WAFSOPSG Secretariat to present the results of this consultation for consideration and future action by the WAFSOPSG/3 meeting. States are encouraged to respond to the survey and inform ICAO about the usefulness of the PNG products.

3. Action

The AFI MET SG meeting is invited to note the information contained in this paper, and to provide feedback to WAFC London and to ICAO through the forthcoming survey in 2006, about the usefulness of these products.
