



International Civil Aviation Organization

**SIXTEENTH MEETING OF THE
COMMUNICATIONS/NAVIGATION/SURVEILLANCE AND
METEOROLOGY SUB-GROUP (CNS/MET SG/16) OF APANPIRG**

Bangkok, Thailand, 23 – 27 July 2012

Agenda Item 8: Regional Implementation of the World Area Forecast System

3) Other WAFS (ISCS/WIFS & SADIS/Secure SADIS FTP)

**SUMMARY OF RECENT AND FORTHCOMING
DEVELOPMENTS TO THE WAFS**

(Presented by WAFS Provider States)

SUMMARY

This paper describes WAFS developments since July 2011. Some of these developments have had a direct impact on end users. A number of important developments are planned to the WAFS in future years and these are highlighted in this paper for the consideration of the group.

This paper relates to –

Strategic Objectives:

A: Safety – Enhance global civil aviation safety

Global Plan Initiatives:

GPI-19 Meteorological Systems

1. INTRODUCTION

1.1 This paper presents developments to the WAFS since the last meeting of the CNS/MET SG/15 in July 2011. Although there has not been a WAFSOPSG¹ meeting since the last CNS/MET meeting, the group will be pleased to note that a number of actions have successfully been implemented in the intervening year. For more details of the activities of the World Area Forecast System (WAFS), users may wish to review information available on the ICAO WAFS Operations Group website at URL: <http://www.icao.int/safety/meteorology/WAFSOPSG/Pages/default.aspx>.

¹ World Area Forecast System Operations Group

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2. RECENT DEVELOPMENTS**2.1 Implementation of a new SIGWX Production Platform at WAFC London**

On the 11th October 2011, World Area Forecast Centre (WAFC) London commenced production of SIGWX forecasts using its new SIGWX production platform. The transition had been preceded by several months of testing with a number of stakeholders, and whilst it is considered that the transition was generally successful a number of teething problems were identified. These were generally addressed quickly with work-around solutions, and with the support of the supplier of the new production platform permanent fixes were established as quickly as possible. The feedback from users of WAFC London SIGWX products was very welcome and useful during this period.

A beneficial consequence of this change is that the WAFCs worked together to ensure that differences in SIGWX PNG chart sizes, orientation, and precise areas of coverage were addressed.

Suggested action: Note this information. Note also that the definitions in Annex 3 (App 8, Figures A8-1, A8-2 and A8-3) pertaining to SIGWX chart areas will be modified accordingly with applicability of Amendment 76 (though most changes are minor).

2.2 Availability of harmonized WAFS CB cloud, icing and turbulence Forecasts in GRIB2 format

On the 29th November 2011, both WAFCs made available harmonized forecasts of CB cloud, icing and turbulence. Currently, the data is made available via SADIS FTP/Secure SADIS FTP and WIFS. The WAFCs will be presenting verification data relating to these forecasts to the WAFSOPSG/7 meeting in September of this year. Noting the user requests to begin the operational evaluation and use of the forecasts, WAFSOPSG Conclusion 6/18 determined that Note 1 at Paragraph 1.2.2 of Appendix 2 to ICAO Annex 3 regarding the experimental label “trial forecasts”, be removed as part of Amendment 76.

Suggested action: Note this information.

2.3 Cessation of ISCS G2

The meeting is invited to note that ISCS-G2 ceased operations on 01 July 2012 at 0400 UTC. This particular subject will be addressed in more detail by separate papers presented to the meeting.

Suggested action: Note this information.

2.3 Prioritization of GRIB2 WAFS Aviation Forecasts above the GRIB1 WAFS Aviation Forecasts

On 5th July 2012, with effect from data issued with data time 1200 UTC, both WAFCs re-prioritized WAFS Upper Air forecasts in GRIB2 format above those in GRIB1 format. This is in compliance with WAFSOPSG Conclusion 6/10, and for practical purposes means that GRIB2 formatted WAFS Upper Air forecasts are produced and distributed before those in GRIB1 format. This is in advance of the expected cessation of WAFS Upper Air forecasts in the GRIB1 format in November 2013.

Suggested action: Note this information.

2.4 WAFC backup tests

The WAFC Provider States have continued to test their SIGWX backup procedures in the event that one WAFC is unable to produce SIGWX forecasts in the BUFR-code and PNG-chart format. Routine backup tests are conducted quarterly, with the results posted on the WAFSOPSG website in the document 'Recent and Forthcoming Chronology of WAFC Backup Tests' available from URL: <http://www.icao.int/safety/meteorology/WAFSOPSG/Reference%20Documents/Forms/AllItems.aspx>. Tests over the last 12 months have been largely successful and transparent for the overwhelming majority of WAFS users.

Forthcoming backup tests are outlined in the same document: Notification of WAFC backup tests is promulgated on the SADIS broadcasts in advance, by way of administrative messages. In addition, WAFC backup procedures are outlined in the 'WAFC Backup Procedures' available from the same URL.

***Suggested action:** Note this information and regularly visit the WAFSOPSG website to obtain information pertaining to WAFC backup tests and procedures.*

2.5 Access to Internet based services (SADIS FTP/Secure SADIS FTP/WIFS).

The policies regarding the development of clear guidelines with regard to the accessing of data from SADIS FTP/Secure SADIS FTP and from WIFS have been endorsed by WAFSOPSG, SADISOPSG² and SCRAG³. This particular subject will be addressed in more detail by a separate paper presented to the meeting.

***Suggested action:** Note this information.*

3. FORTHCOMING DEVELOPMENTS

3.1 Additional geopotential flight level data to be provided by the WAFCs

The WAFC Provider States will make available data for an additional geopotential flight level - FL410, 175 hPa - as part of the GRIB2 WAFS upper-air forecast dataset with the implementation of the next amendment to Annex 3 - *Meteorological Service for International Air Navigation* (November 2013).

***Suggested action:** Note this information.*

3.2 Withdrawal of WAFS upper-air forecasts in GRIB1 code form

The long term plan of the WAFSOPSG continues to indicate the intention to withdraw WAFS upper-air forecasts in the GRIB1 code form in November 2013.

***Suggested action:** Users should confirm that their visualisation systems have been (or will be) updated to display GRIB2 data; and that they are using GRIB2 data before the withdrawal of GRIB1 data.*

² Satellite Distribution System Operations Group

³ SADIS Cost Recovery Administrative Group

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3.3 Guidance and Training for States on the use and visualization of new gridded WAFS forecasts

The WAFSOPSG/5⁴ meeting noted that the need for training related to the “roll-out” of the new gridded forecasts had been recognized by most planning and implementation regional groups (PIRGs) which had formulated conclusions calling for the WAFS Provider States to organize training seminars on the use of the new gridded WAFS forecasts for CB clouds, icing and turbulence.

WAFSOPSG/6⁵ reviewed the status concerning guidance and training for States and WAFS users on the intended use of new gridded WAFS forecasts for CB clouds, icing and turbulence. The group concurred that the development of such training should be deferred until visualization standards for these elements had been finalized.

These issues will be discussed at the forthcoming WAFSOPSG/7 meeting.

Suggested action: Note this information.

4. ACTION BY THE MEETING

4.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) discuss any relevant matters as appropriate.

⁴ 16th-18th September 2009, Paris, France

⁵ 21st-24th March 2011, Dakar, Senegal