

# **SADIS COST RECOVERY ADMINISTRATIVE GROUP (SCRAG)**

## **ELEVENTH MEETING**

(Paris, 4 November 2010)

### **Agenda Item 7: Other Business**

#### **Impacts of non-satellite distribution of aeronautical information on the SADIS Cost recovery scheme.**

(Presented by the United Kingdom)

##### **REFERENCES**

Summary of discussions of the Meteorology Group of the EANPG –  
Twentieth Meeting.  
ICAO Annex 3 Amendment 75. Para. 11.1.9

### **1. Introduction**

1.1 The group will be aware that the provision of WAFS data over satellite in the early days of the service resulted in distinct areas of coverage (satellite footprints) which effectively defined from which service (SADIS or ISCS) user States were able to obtain their data. These practicalities were reflected in the regional Air Navigation Plans (RANPs).

1.2 Subsequent introduction of internet based delivery mechanisms (SADIS FTP, WIFS) initially for backup purposes has introduced the capability of a 'global'<sup>1</sup> footprint through internet based communications. With the enabling clause in Amendment 75 to Annex 3 – *Meteorological Service for International Aviation* allowing provision of non-time critical aeronautical data over the public internet (under which WAFS planning data is included); combined with the confirmed withdrawal by the United States of America of their satellite based service (ISCS G2) in June 2012 which will be replaced by the now operational internet based WIFS system; there is now a pressing need to agree and ratify ICAO policies on the provision and cost recovery of WAFS/OPMET data via means that are effectively 'global' in coverage.

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<sup>1</sup> It should be noted that some States have limited connection to the internet, and not all have the luxury of well developed, reliable, high speed internet data supply. So, the term 'global' in relation to the provision of data via the public internet should be used with care and qualification.

## 2. Discussion

2.1 The creation of two WAFCs (WAFC London and WAFC Washington) and two providers of WAFS/OPMET data delivery mechanisms (SADIS and ISCS) maintained by the SADIS and ISCS Provider States (United Kingdom and United States of America) provides for an effective global service with an efficient backup process without generating undue (and wasteful) replication of services. However, for both to co-exist and remain cost efficient, controls will need to be put in place to restrict access and allow the SADIS cost recovery process to remain effective.

2.2 The ISCS Provider State will provide its WAFS data solely via the public internet (using WIFS) after June 2012. This effectively provides a global coverage for which the data at least is provided 'free at the point of use'<sup>2</sup>. The SADIS Provider State will maintain its satellite broadcast until at least 2015, as well as SADIS FTP (and soon Secure SADIS FTP<sup>3</sup>); the SADIS Provider State cost recovers for the supply of data through the SADIS Cost Recovery Administrative Group (SCRAG).

2.3 In addition to the two global Internet services, requests have been received by the SADIS Provider from some states to receive WAFS data via non-AFS networks such as the WMO Global Telecommunications System (GTS). Historically, these requests have tended to be complied with in the interests of international collaboration, without any additional charge.

2.4 Both the introduction of global Internet services and the availability of aeronautical data via non-AFS networks pose a risk to the stability and future viability of the SADIS Cost recovery scheme.

2.5 With regard to access to SADIS FTP and WIFS, in order for the SADIS and ISCS Provider States to carefully plan and operate the most suitable infrastructure without needing to over-engineer a solution and incur unnecessary costs, the proposal is that users under the SADIS footprint will have access to SADIS FTP; those under the ISCS footprint will be given access to WIFS; and those that fall under both footprints will have the option of choosing one of the services as a primary source of data. In all cases, users of SADIS FTP would be expected to participate in the SADIS Cost Recovery (unless the state is an LDC or for emergency back-up use only)

2.6 With regard to the availability of WAFS data via GTS, there are currently at least 4 scenarios whereby states receive data in this way.

- (i) States that lie outside the SADIS footprint, where it has been agreed that delivery of WAFS data via GTS is acceptable on payment of the appropriate SADIS fee. (e.g. Iceland, Ireland)
- (ii) States that lie within the SADIS footprint, take delivery of WAFS data via both SADIS and GTS and pay the appropriate SADIS fee (e.g. Germany, Netherlands)
- (iii) States that lie within the SADIS Footprint, take delivery of WAFS data via GTS, and do not participate in the SADIS Cost recovery scheme. E.g. (France, Norway, Spain)
- (iv) States that lie partly or completely outside the SADIS footprint, take delivery of WAFS data via GTS, and do not participate in the SADIS Cost recovery scheme, e.g. Australia

2.7 At the ICAO EANPG METG/18 and METG/20 meetings it has been proposed that the UK hold a bilateral agreement with states that wish to receive WAFS/OPMET data via non-AFS

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<sup>2</sup> Users will need to purchase hardware/software independently, as well as maintenance/service/upgrade contracts as necessary.

<sup>3</sup> For SADIS FTP, also read 'Secure SADIS FTP' for the remainder of this document.

telecommunications networks. Clearly this solution by-passes the SADIS cost recovery scheme. Proliferation of the use of these non-AFS networks for WAFS data could eventually lead to the collapse of SADIS and the SADIS Cost Recovery system. In addition, the nature of such bilateral agreements has not been discussed and a policy on how a payment would be calculated or how the money would be used has not yet been determined.

2.8 Clearly, a policy on the use of non-AFS networks for the distribution of WAFS data is desirable. In scenario (i) and (ii) in 2.6, there is no particular issue, since currently the number of States utilising this methodology are low and the States concerned are contributing to the SADIS Cost recovery scheme. The additional cost of providing the data via GTS is effectively borne by the SADIS Provider State. In scenarios (iii) and (iv) the SADIS Provider State is effectively providing a subsidy to these states and it could be argued that indirectly the SADIS cost recovery scheme is subsidising those States who choose to obtain OPMET via non-AFS telecommunications networks rather than SADIS. Whilst these States are not obliged to use any of the SADIS services (it is a recommended practice within ICAO Annex 3), there should be a charge for the costs of receiving the data via non-AFS networks.

### 3. Suggested actions

3.1 There are several processes that can be implemented in order to mitigate or prevent against the potential consequences of not having some control over States access to the WAFS internet based delivery mechanisms.

3.1.1 Confirm and clarify the official source of ‘primary’<sup>4</sup> WAFS data from the WAFCs in the RANPs. For most RANPs this should be straightforward in that all but one identifies only one or other of ‘SADIS’ or ‘ISCS’. The ASIAPAC RANP however cites both as potential sources since SADIS covers western parts of Asia, and ISCS covers eastern parts of Asia – with an overlap of footprints over eastern China, Indonesia, Malaysia and western Australia areas. For ASIAPAC, the RANP would need to be modified to direct users outside the ISCS satellite footprint to source *primary* data from SADIS internet based services; and for those users outside the SADIS satellite footprint to source *primary* data from the WIFS internet based service. Those under both footprints would be free to choose a *primary* source. *As an aside, it would seem that RANPs would need to be updated soon regardless to recognize the accepted use of the public internet for non-time critical aeronautical data, and the forthcoming withdrawal of ISCS 2G.*

3.1.2 Determine a data volume threshold above which users who have nominated SADIS FTP for *backup* purposes will have to contribute to the SADIS cost recovery mechanism. A certain level of ‘cost free’ usage will be permitted in order that users can confirm and test connections for contingency purposes. However, charges should be raised for connections that are effectively logged in and downloading data for continuous operational purposes. Should a State, for whatever reason, wish to receive data operationally from both providers (effectively joint primary providers) then that State would of course contribute anyway to the SADIS costs.

### 4. Conclusion

4.1 The provision of WAFS/OPMET data by the SADIS/ISCS Provider states has had a long and very reliable history in regard to satellite distribution and more recently with regard to internet based distribution, with, in the future an increasing reliance on internet based mechanisms.

4.2 In order for both Internet services to remain viable and coexist in the medium to long term future, and for the SADIS cost recovery scheme to remain effective, consideration will need to

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<sup>4</sup> The term ‘primary’ is used here to identify where the WAFS data should be sourced for normal, ongoing, operational usage. ‘Backup’ is used to identify the source of data that would be implemented and used in the event of the failure of the primary source.

be given by ICAO as to policy for accessing WAFS/OPMET data from the provider states internet services.

4.3 Separately, the SCRAG needs to consider the introduction of charging for access to SADIS FTP for operational purposes from non-SADIS participating states.

4.4 Additionally, the SCRAG is invited to discuss the provision of WAFS/OPMET data via GTS and decide on a suitable conclusion.

4.5 From the preceding discussion, the group is invited to formulate the following draft conclusions;

#### **Draft Conclusion 11/xxx**

That,

The SCRAG endorses and recommends the position that RANPs should be reviewed and clarified in light of the global coverage of internet based distribution to the effect that it be confirmed that:

- a) States in the AFI, EUR, and MID regions source their *primary* WAFS data from the SADIS Provider State (i.e. via SADIS 2G, and SADIS FTP)
- b) States in the CARSAM, region source their *primary* WAFS data from the ISCS Provider State (i.e. via ISCS G2 or, WIFS)
- c) ASIAPAC States identified as being outside the ISCS footprint source their *primary* WAFS data from the SADIS Provider State (i.e. via SADIS 2G, SADIS FTP)
- d) ASIAPAC States identified as being outside the SADIS footprint source their *primary* WAFS data from the ISCS Provider State (i.e. via ISCS G2, WIFS)
- e) ASIAPAC States under both satellite footprints would be free to choose a *primary* source from either provider.

Note – the ASIAPAC States identified under c), d) and e) above are listed in Appendix A to this Working Paper.

#### **Draft Conclusion 11/xxx**

That,

The Chairman of the SCRAG forward the above, endorsed Conclusion to the Chairmen of the SADISOPSG and the WAFSOPSG for follow up action.

## **Draft Conclusion 11/xxx**

That,

The SCRAG endorses the introduction of cost recovery from those States using SADIS FTP as an operational service and not currently participating in the SADIS Cost recovery scheme.

The SCRAG invites the SADIS Provider State to:-

- a) consider a mechanism for recovery of costs from states that receive their WAFS data via GTS that feeds back the monies received into the SADIS cost recovery scheme and,
- b) report back to the SCRAG/12 meeting.

### **5. Actions by the group**

5.1 The group is invited to;

- a) note the information in this paper, and
- b) decide on the draft Conclusions proposed for the group's consideration.

- END -

## **APPENDIX A**

ASIAPAC States with territory falling under both the SADIS 2G and ISCS G2 Satellite footprints:

Mongolia  
China – Beijing  
China – Hong Kong  
China - Macau  
Japan  
Democratic People's Republic of Korea  
Republic of Korea  
Thailand  
Myanmar  
Vietnam  
Malaysia  
Indonesia  
Australia  
Philippines  
Papua New Guinea (just)