MEETING OF THE METEOROLOGY PANEL (METP) WORKING GROUP MOG

FIRST MEETING

Gatwick, London, United Kingdom, 8 to 11 September 2015

Agenda Item 3.: **Matters relating to SADIS**
  3.4.4 **Proposals from the SADIS Provider and SADIS Gateway Provider for consideration by appropriate WG under METP/1**

IMPLEMENTATION OF A DEVELOPMENT SECURE SADIS WEB SERVICE

(Presented by the SADIS Provider State)

SUMMARY
This working paper seeks endorsement to provide a development Secure SADIS Web Service. Action by the METP-WG/MOG is in paragraph 5.

1.   **INTRODUCTION**

1.1   This working paper seeks endorsement to implement a development Secure SADIS Web Service.

2.   **DISCUSSION**

2.1   The Secure SADIS FTP service has been in operation since 18 November 2010.

2.2   In light of the outcomes of the Meteorological Divisional Meeting, and the establishment of Working Groups under the Meteorological and Information Management Panels (METP and IMP respectively), it is considered that further development of Secure SADIS internet based services is appropriate.   METP Job Card References #5[i] and #9[ii] refer as overseen by WG-Meteorological Information Exchange (WG-MIE) and WG-Meteorological Operations Group (WG-MOG) respectively, with the active participation of the SADIS Provider State (see end-notes to this WP for relevant extracts from the Job Cards).

2.3   A proposed enhancement of the SADIS internet based services would be the development of a Secure SADIS Web Service. In this context such a service would be "*a software system designed to support interoperable machine-to-machine interaction over a network using web protocols and*

technologies." A Web Feature Service exposing TAFs and METARs encoded in iWXXM would be an example of a web(-based) service. Implementation of a development Secure SADIS Web Service would permit:

a) Provision of Digital Form (XML/GML) OPMET that is compliant with iWXXM principles

b) Dissemination of enhanced WAFS Products (including higher resolution datasets), expected to be developed by the WAFCs

c) Distribution of data via web services

d) Evolution of services towards a System Wide Information Management (SWIM) infrastructure.

2.4   **Access controls:**

2.5   Under the terms of the current arrangements for provision of SADIS, only those users who had existing approval to access SADIS would be permitted to use the development Secure SADIS Web service.

2.6   As a development service, there would be no 24/7 operational support. The service may also be taken offline as necessary to permit further internal development/testing.

2.7   **Costs**

2.8   The costs of providing a development service for Secure SADIS Web services would require negligible capital investment initially, and this is expected to be within the agreed current maintenance provision under SADIS Cost Recovery.   However, there will be annual costs of approximately GBP8,000 for additional system servers and their support and maintenance at the Secure SADIS FTP site.

3.   **TRANSITION TO OPERATIONAL STATUS.**

3.1   It would be expected that an operational version of SADIS Web services would subsequently be developed. The costs of transitioning to operational status would be further investigated following experience with the development system.

3.2   The meeting will be aware of the existing access controls, governance and cost recovery processes in place for SADIS. As such, the development and enhancement of SADIS as described above is largely a technical matter – the administrative functions are already in place.

4.   **CONCLUSION**

4.1   **Implementation of a development Secure SADIS Web service.**

4.2   In light of the foregoing information it is proposed that the group endorse the implementation of a development Secure SADIS Web service. The intended functions of such a service would be:

a) To develop and demonstrate capability to provide aviation meteorological data in Digital Form (i.e. iWXXM compliant METAR, SPECI, TAF, SIGMET, AIRMET, VAA, TCA) on a web based version of SADIS.

b) To develop and demonstrate capability to provide existing and enhanced WAFS data (higher resolution gridded data, SIGWX in iWXXM compliant format) on a web based version of SADIS.

c) Evolution towards SWIM based infrastructure.

4.2.1   Accordingly, the meeting is invited to formulate the following draft Conclusion;

Conclusion 1/xx   Implementation of development Secure SADIS Web service

That, the SADIS Provider implement a development Secure SADIS Web service for the purposes of developing and demonstrating web based services and distribution of iWXXM compliant data, enhanced WAFS datasets (including higher resolution gridded forecasts), and to evolve towards a System Wide Information Management infrastructure.

Note 1: - The development Secure SADIS Web service to be implemented by 31 August 2016.

Note 2:- As a development system, there will be no 24/7 operational support. The service may be temporarily withdrawn to implement changes. As much notice as possible will be given, but it may be necessary to make changes without notice.

Note 3: - SADIS Provider annual costs are expected to be GBP8,000 (at 2015 prices) for implementation of a development system. Cost estimates to implement an operationally resilient system would be provided at the next meeting of the METP-WG/MOG.

5.   **ACTION BY THE METP-WG/MOG**

5.1   The METP-WG/MOG is invited to:

a)   note the information contained in this paper; and

b)   decide on the draft conclusion proposed for the group's consideration.

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[i] "The transition from the Internet-based SADIS/WIFS system is an integral part of these considerations as are the intermediate steps towards full SWIM by making the Annex 3 products IWXXM-compliant."

[ii] "It was recommended by the MET Divisional Meeting (Recommendation 2/2) that an appropriate ICAO expert group be tasked to ensure that the SADIS and the WIFS continue to meet user expectations and further develop in a manner consistent with the Global Air Navigation Plan (Doc 9750). Furthermore Recommendation 2/3 a) and b) call for ICAO to undertake a transition from the satellite-based service to the Internet-based services available. This is to include consideration of the role of SADIS and WIFS within the future system-wide information management (SWIM) environment underpinning the globally interoperable air traffic management system; and alignment with future activities to be undertaken by ICAO in the information management domain."