SATELLITE DISTRIBUTION SYSTEM OPERATIONS GROUP (SADISOPSG)

THIRTEENTH MEETING

Dakar, Senegal, 27 to 29 May 2008

Agenda Item 9 Any other business

USE OF THE AERONAUTICAL FIXED SERVICE FOR THE DISTRIBUTION OF OPMET AND WAFS PRODUCTS

(Presented by the SADIS Provider State)

SUMMARY

ICAO Standards and Recommended Practices (SARPs), as well as the Regional Air Navigation Plans, stipulate that the Aeronautical Fixed Service (AFS) should be used to exchange OPMET and to distribute WAFS products. Following a review of UK compliance against ICAO SARPs, it has been found that aeronautical meteorological information is distributed to some States exclusively on other telecommunications networks. Additionally, it is noted that SADIS cost recovery arrangements are being flouted by some States using such networks. The UK is considering changing its policy on aeronautical meteorological information distribution and will consult the respective Met Groups of the affected ICAO regions.

1. INTRODUCTION

1.1 ICAO Annex 3 Chapter 11 paragraph 11.1.3 requires that a State provides suitable telecommunication facilities to permit the world area forecast centres (WAFC) to supply the world area forecast system (WAFS) products to meteorological offices, meteorological authorities and other users. Additionally, a note accompanying paragraph 11.1.1 identifies that circuits of the aeronautical fixed service (AFS) are used for the collection and exchange of OPMET, whilst three AFS satellite distribution systems providing for global coverage are used to support the exchange of OPMET.

1.2 ICAO Annex 3 Appendix 10 paragraph 2.2.1 states that the telecommunications facilities used for the supply of world area forecast system products should be the AFS.

1.3 ICAO Annex 10, Volume III, Part 1, Chapter 10 lays down explicit requirements relating to the service via satellite for the dissemination of aeronautical information. It requires that the system be a point-to-multipoint telecommunication service via satellite to be based on full-time, non pre-emptible,

protected services as defined in the relevant Telegraph and Telephone Consultative Committee (CCITT) Recommendations. Additionally for WAFS products, the system is required, inter alia, to have bit error rates of better than 1 in 10^7, forward error correction; and an availability of 99.95 per cent.

2. DISCUSSION

2.1 Following a recent review of UK compliance against the relevant ICAO Annexes by the UK Met Authority, one observation on the dissemination of aeronautical meteorological information was that such information is distributed to some States exclusively on other telecommunications networks. This does not comply with the requirements of ICAO Annex 3, nor the ICAO Regional Air Navigation Plans.

2.2 At the same time, the UK Met Authority notes that there have been several cases where States, authorised to access the SADIS service but who have had services suspended due to non-payment of outstanding debts, have simply reverted to taking the service over alternative telecommunications networks. This jeopardises the viability of the SADIS cost recovery scheme and, ultimately, increases the burden of costs on the majority of States that pay for the SADIS service in full and on time.

2.3 The UK is therefore considering the introduction of a policy that will permit the dissemination of aeronautical meteorological information on ICAO-compliant telecommunications networks only. Clearly such a policy must take account of the SADIS FTP service. However, as noted in the SADIS FTP Service guide (available on the ICAO SADIS Operations Group website), the SADIS FTP Service is an ICAO approved distribution system and an integral part of the SADIS service. It further notes that a guaranteed bandwidth is allocated to the FTP service between the server and the Met Office Internet Service Providers but that delivery of products and transmission times beyond this point over the public internet cannot be guaranteed.

2.4 For some States, it is simply not practicable to use the SADIS broadcast, typically where the State lies close to the edge of the satellite footprint and do not wish to rely solely on the SADIS FTP service. Therefore it is prudent to consider alternative networks that may offer opportunities for the dissemination of aeronautical meteorological information. However, this would need to be carried out on a bilateral basis with the SADIS Provider State and would be required to explicitly acknowledge, inter alia, that the data dissemination method cannot be guaranteed to be fully ICAO-compliant. Additionally, to avoid the potential loophole highlighted in paragraph 2.2, the Met Authority proposes that a State would also need to participate in the SADIS cost recovery scheme.

2.5 It is anticipated that the introduction of this policy would affect four States. Further consultation with the respective Met Groups of the affected ICAO regions is required over the next few months and, if such a policy were to be implemented, there would be an appropriate period of notice to allow the affected States to budget accordingly.

3. ACTION BY THE SADISOPSG

3.1 The meeting is invited to note the information contained in this paper.

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