



**WORKING PAPER**

**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**

**PROPOSAL TO INCREASE SECURE SADIS FTP BANDWIDTH**

(Presented by the SADIS Provider State)

**SUMMARY**

In light of increased downloads of WAFS GRIB2 data, and the expected significant increase of Secure SADIS FTP users ahead of the withdrawal of the SADIS 2G service (31 July 2016), this paper proposes an increase to the overall bandwidth allocated to the Secure SADIS FTP service from October 2015.

Action by the METP-WG/MOG is in paragraph 4.

**1. INTRODUCTION**

1.1 This paper considers the need to increase the Secure SADIS FTP bandwidth. This is due to recent increased downloads of WAFS GRIB2 data, and of an expected significant increase in Secure SADIS FTP users ahead of the withdrawal of the SADIS 2G service on 31 July 2016.

**2. DISCUSSION**

2.1 The group will recall that at the last meeting of the SADISOPSG<sup>1</sup> meeting the SADIS Provider offered to increase the Secure SADIS FTP bandwidth<sup>2</sup>. At the time, the group considered that no increase to the bandwidth was necessary.

<sup>1</sup> SADISOPSG/19, 27 to 29 May 2014, London, United Kingdom

<sup>2</sup> This is the overall allocated bandwidth between the SADIS Provider and the SADIS Provider's Internet Service Provider

2.2 The group will be aware of the decision to cease the SADIS 2G service on 31 July 2016. As a consequence the expectation is that the number of users of Secure SADIS FTP will increase, and this will require greater bandwidth to be available.

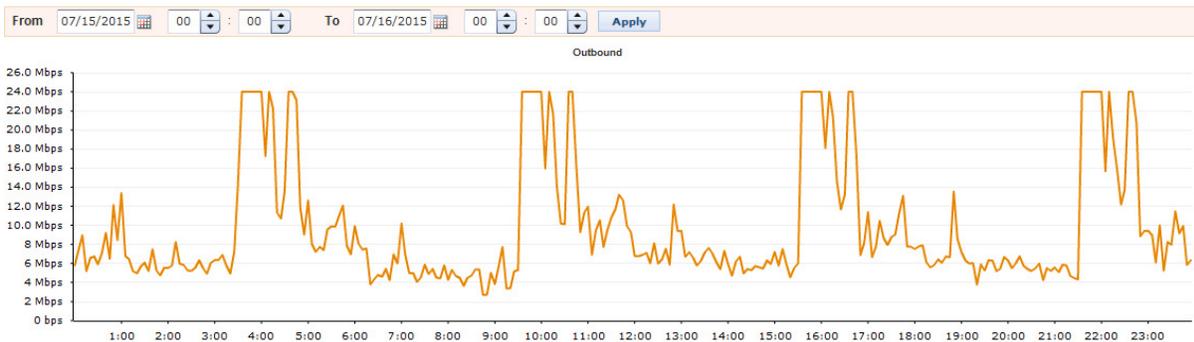
2.3 As at 30 June 2015 there were approximately 109 regular users of the Secure SADIS FTP, and this results in approximately 45GB of data being downloaded on a daily basis.

2.4 With the withdrawal of SADIS 2G it is anticipated that approximately 80 new users will transition to the Secure SADIS FTP service. Pro rata that would result in a download rate of 80GB daily. Perhaps a more relevant aspect to consider is the download requirements at 'peak' usage. Reference to Figure 1 illustrates that peak download activity in July 2014 was 23Mbit/sec when WAFS GRIB2 data is made available.



**Figure 1:** Secure SADIS FTP download activity against capacity (16Mbit/sec bursting to 24Mbit/sec) with individual client limit rate was set to 1024Kbit/sec, 9 July 2014.

2.5 More recent analysis on 7 July 2015, Figure 2, shows that peak demand is now exceeding capacity (24Mbit/sec) during GRIB2 data downloads.



**Figure 2:** Secure SADIS FTP download activity against capacity (16Mbit/sec bursting to 24Mbit/sec) with individual client limit rate was set to 1024Kbit/sec, 7 July 2015.

2.6 In order to improve download rates for all users and to meet anticipated data download volumes it is recommended that the overall bandwidth made available to Secure SADIS FTP should be increased to 24Mbit/sec bursting to 42Mbit/sec (currently 16Mbit/sec bursting 24 Mbit/sec) on 27 October 2015.

2.7 In addition, it is proposed to raise the individual client limit from 1024Kbit/sec to 2048Kbit/sec.

2.8 The costs of providing the increased bandwidth as suggested would be GBP10,250 per annum (currently GBP6,500 per annum).

### 3. CONCLUSION

3.1 The preceding paragraphs have considered impacts of increasing GRIB2 data downloads in the last year, and the likely implications regarding download volumes ahead of the withdrawal of the SADIS 2G service on 31 July 2016.

3.2 It is considered that there will be an approximate increase in download volumes of approximately 75%, and that the greatest impact of this increase will be in relation to downloading of the large volumes of WAFS GRIB2 data.

3.2.1 It is therefore proposed that the overall bandwidth available to Secure SADIS FTP be increased to 24Mbit/sec bursting to 42Mbit/sec. At the same time it is proposed to raise the current client limit of 1024Kbit/sec to 2048 Kbit/sec. The group is therefore invited to consider the content of this paper and formulate the following draft Conclusion;

#### **Conclusion 1/xx Increase of Secure SADIS FTP Bandwidth**

That,

- a) the SADIS Provider be invited to increase the overall bandwidth available to Secure SADIS FTP to 24 Mbit/sec bursting to 42 Mbit/sec, and;
- b) the SADIS Provider be invited to increase the individual client limit from 1024Kbit/sec to 2048 Kbit/sec.

*Note 1: - The overall bandwidth refers to the bandwidth available between the SADIS Provider and its Internet Service Provider (an annual cost of GBP10,250 at 2015 rates).*

*Note 2: - The increase in bandwidth to be implemented at 1200 UTC on 27 October 2015.*

### 4. ACTION BY THE METP-WG/MOG

4.1 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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