SADIS COST RECOVERY & ADMINISTRATIVE GROUP (SCRAG)

NINETEENTH MEETING

(London, UK, 30th October 2018)

Agenda Item 6: Amendment to Annexes to the SADIS Agreement

<u>**AMENDMENT TO ANNEX II, SADIS INVENTORY TO THE SADIS AGREEMENT**</u>

(Presented by the Secretariat)

REFERENCES

SADIS Agreement
SCRAG/18-WP/3
METP-WG/MOG/6-SN/07
METP-WG/MOG/6-Report, Action 6/5

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1.   Introduction

1.1   This paper presents a draft amendment to Annex II, SADIS Inventory, to the SADIS Agreement as a result of recommendations of the METP-WG/MOG, at its Sixth Meeting (Offenbach, Germany, 10 to 11 April 2018).

2.   Discussion

2.1   The METP-WG/MOG reviewed the SADIS inventory and agreed upon some amendments to ensure that it would continue to meet the approved operational requirements. Attachment A shows what was agreed.

2.2   Two further small adjustments have been made to the SADIS inventory since the METP-WG/MOG; the amount of RAM was increased in early October 2018 to solve a technical issue, and the amount of resource allocated to the Administrator and International aviation management has been adjusted to be consistent with the finance tables.

2.3   The Attachment shows the revised text of Annex II, SADIS inventory, to the SADIS Agreement in the usual format: deletions are shown in ~~strikethrough~~, and additions are highlighted.

2.4   The proposed amendments have received the consent of the United Kingdom as the SADIS provider, in accordance with Article XVII, paragraph 5 of the SADIS Agreement.

3.   Action by the group

3.1   The Group is invited to review the proposed amendments to Annex II, SADIS inventory, to the SADIS Agreement.

ATTACHMENT A

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ANNEX II

SADIS INVENTORY

(2018-2019)

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The inventory items identified below cover the equipment and staffing required to provide, operate and maintain the Secure Aviation Data Information Service (SADIS). The inventory includes: communications circuits, communications back-up system, procured services, and staff. It should be noted that some equipment items form part of a wider infrastructure. Costs of some individual items cannot be separated from the required infrastructure that includes a significant part of the development of the software and technical configuration. The inventory is in accordance with the SADIS User Guide.

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1. EQUIPMENT

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A. Key components of SADIS FTP infrastructure and communications circuits

1. The SADIS FTP hub infrastructure connection to the Met Office message switch (MetSwitch) consists of a number of units installed at Exeter.

i) **Solely procured for SADIS (major components)**

      SADIS gateway function software (developed specifically for the gateway as part of the NATS CoreMet system; see items under "Not procured principally for SADIS").

      Dell Poweredge R900 servers to provide the SADIS FTP service (see Section 1 C).

ii) **Principally procured for SADIS**

    a)   At the Met Office;

         See Section 1 C for itemized components

iii) **Not procured principally for SADIS**

    a)   Met Office Message switch (MetSwitch): Total investment £328K[1] of which 1.23 per cent is attributable to the SADIS FTP service usage: switching data to operational FTP service;

    b)   Allocated bandwidth 42 Mbit/sec bursting to 60 Mbit/sec between server and Internet Service Provider (ISP) in support of the SADIS FTP service. Individual client connections have a maximum throughput of 4098 Kbit/sec.

    c)   NATS Message switch (CoreMet System);

         Note. ─ Some elements of the CoreMet System are exclusively for the support of the SADIS gateway function.

    d)   SADIS FTP equipment running costs;

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[1] budgeted cost for providing MetSwitch service during the fiscal year 2017/2018.

Note. ─ *This comprises support and maintenance of the servers underpinning the SADIS FTP services, a share of the cost for the underlying storage capacity on which the SADIS FTP services are reliant, and operational monitoring of the SADIS FTP services by Tivoli ensuring problems can be identified and resolved in a timely manner.*

e) Met Office Service Desk equipment; and

Note. ─ *Equates to 3.5 per cent of the total share of Met Office IT Operations equipment.*

B. SADIS data back-up system

The recognised back-up to failure if the SADIS FTP service is via the USA administered, WAFS Information File Service (WIFS). SADIS FTP users are encouraged to arrange back-up accounts with the WIFS provider via https://aviationweather.gov/wifs/ .

Note 1: - Usage restrictions apply. Further information is provided in the SADIS User Guide Part 1 (Administrative)

Note 2: - It is the responsibility of the SADIS FTP user to arrange and test back-up accounts with WIFS.

C. Hub equipment and services located at Exeter and Whitehill

Item	*Description*	*Quantity*

1.   SADIS FTP service

1.1	Dell Poweredge R900 servers with ~~1~~ 4 Gb RAM	2
1.2	Dell Poweredge R900 (4 core) servers with 32 Gb RAM *	2
1.3	Shared Storage Arrays (analogous to hard disk storage, but with dynamic upper limit)	2
1.4	VMWave Virtual Platform with Red Hat Linux 5.3 OS	2
1.5	Intel Xeon X7350, 2.93 GHz Processors	2
1.6	Licenses, misc. support and maintenance costs	1

Note 1. — Item 1.2 relates to Digital Signing servers.
Note 2. – Items listed under Section 1 are located at Exeter.

2. PROCURED SERVICES

A.   Annual maintenance of Met Office Exeter on-site equipment (SADIS FTP server); and

C.   Gateway function:

i)   Communication circuits between Met Office and NATS infrastructure site; and

ii)   System maintenance.

3. ANNUAL STAFF REQUIREMENTS

A. United Kingdom Met Office

i) Service Desk

Note.— The Service Desk acts as a first point of contact for all inquiries, including those concerning the OPMET Gateway function. Complex inquiries will be passed to a relevant expert. Experts are available either on a 24-hour rota basis, or as a daytime support with limited on-call capability.

Help Desk	*Skill*
1. Service desk (first point of contact)	Incident Management
2. Additional Service Desk operator	Customer Enquiries

Note. — Total support for SADIS provided by the Met Office Service Desk team equates to 0.3 per cent of the total Weather Desk budget.

24-hour IT Operations support	*Skill*
1. Shift Leader (ITCS)	Technical Supervisor
2. Networks Incident Manager (NIM)	Service Continuity

Note. — Total support for SADIS provided by the Met Office IT Operations team equates to 3.5 per cent of the total IT Operations budget.

Normal working hours support	*Skill*
1. Change and problem manager (CPM)	Process Specialist

ii) Additional support

Day support	*Resource*
1. Systems integration team	14 staff-days of network computer engineer
2. Message Switching Manager	15 staff-days of MSS manager
3. Administrator	~~140~~ 144 staff-days of executive officer
4. International aviation management	~~15~~ 14 staff-days of manager
5. Data traffic	5 staff-days of communications engineer
6. Contract procurement and management	4 staff-days of senior procurement officer
7. Message switching Team	15 staff-days of technical officer
8. Invoice Administration	20 staff-days of invoicing officer and 15 staff-days of business accountant

B. NATS infrastructure site – CACC (OPMET Gateway function)

Note 1. — The CACC provides the OPMET Gateway function, which is provided from a single operational site, but with a full capability at an alternative site. Staff are available either on a 24-hour basis, or as a daytime support with on-call capability.

Note 2. — The resource demand of 604 days required to provide the SADIS Gateway service comprises 6 watches of 1 ATSA4 and 1 ATSA3 each (Operations), 1 ATCE4 (Engineering Watchkeeping) and 3 ATCE4 (Engineering Day Support) and 2 Gateway day support administrative staff.

24-hour support	*Resource*
1. Air Traffic Services Assistant	521 staff-days per annum

Note. — Total support for SADIS provided by the 24 hour support for the OPMET Gateway function equates to 36 per cent of the Data services CACC Met Service H24 support and 18 per cent of the total CACC Helpdesk budget.

2. H24 Maintenance Engineering	10 staff-days per annum

Day Support	*Resource*
3. Administration-	54 staff-days per annum
4. Meeting Attendance	6 staff days per annum
5. Staff Training and Documentation	3 staff days per annum
6. Day Support Engineering	10 staff days per annum

Note. — Total support for SADIS provided by the day support for the OPMET Gateway function equates to 5 per cent of the total day support budget.

C. Bought-in services

Additional support and maintenance agreements with third parties are in place to provide third line support of the SADIS FTP services.

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