SADIS COST RECOVERY & ADMINISTRATIVE GROUP (SCRAG)

TWENTY-SECOND MEETING

(Virtual Meeting, 8 December 2021)

2020 ACTUAL SADIS COSTS

(Presented by the United Kingdom)

REFERENCES

SADIS Agreement

SCRAG Reports 1-21

METP WG-MOG/3 Report

METP WG-MOG/4 Report

METP WG-MOG/6 Report

METP WG-MOG/10 Report

METP WG-MOG/13 Report

METP WG-MOG/15 Report

1. INTRODUCTION

- 1.1 Article IX of the SADIS Agreement identifies that the United Kingdom shall furnish on or before 30 June of each year, a statement of the actual costs of the SADIS, expressed in pounds sterling, for the previous calendar year. These costs are identified in table 1 and 2 at the end of this document.
- 1.2 The format of the table is similar to that provided for previous years and is consistent with information provided in the SADIS Inventory.

2 **DISCUSSION**

2.1 Notes relate to the actual costs for 2020 and forecast costs for 2021

a. Met Office to NATS Link

Communications costs between the SADIS Gateway, operated by NATS, and the Met Office are provided here. NATS own the links and are billed for the circuits., then NATS invoice the Met Office for the Met Office share of the costs. The cost increased in 2020 due to a change of lines being used.

b. Message Switch

These charges relate to the routing of data through into SADIS FTP.

c. AWS server running costs

The cost of operating SADIS FTP using Amazon Web Services (AWS) Cloud computing reflects all the individual elements that make up SADIS and has been optimised to minimise costs. At SCRAG20 the different operating cost elements were estimated and separated out, however it was only possible to report a single AWS running cost.

d. Service Desk equipment

This charges originally covered equipment costs for the service desk functions. In early 2020 the support cost structure was revised, and this cost was removed.

e. Development costs

In November 2020 IWXXM OPMET data, and higher resolution gridded WAFS hazard data was added to SADIS. These costs relate to setting up the data feed and some of the modifications made to SADIS to publish the data.

f. First Line Support costs

This includes 24x7 incident handling functions (call and e-mail) provided by the Met Office Service Desk. For each year the estimate is as follows:

Description	Value 4,800 GBP
Incident Handling (initial call, follow up etc),	950
62 incidents per year	
Incident Handling training – 2 hours per FTE	1,850
year	
Service Management – 8 hours per year	2,000

g. Second Line Support

This includes 24x7 system monitoring and incident handling functions to ensure the timely resolution of any SADIS operating problems. For each year the estimate is as follows:

Description	Value GBP 20,500
Incident Handling (investigation,	5,800
communication, resolution, documentation),	
100 incidents per year	
Monitoring costs, 9205 alerts	8,800
Incident Handling training – 4 hours per year	2,500
per FTE	
Service Management – 15 hours per year	3,400

h. Third and Fourth Line Support

This includes incident investigation and resolution provide by the Message Switching department, as well as the administration of SADIS user accounts and data routing. Fourth line support includes using the expertise of the developers who built current incarnation of SADIS in the AWS environment. For each year the estimate is as shown in the table below, but the actual costs will depend greatly on how well SADIS operates:

Description	Value 15,000 GBP
Message Switching Staff	5,000
SADIS Development Squad staff	5,000
AWS technical support	5,000

i. Additional support

Administrative and professional support is provided by the specified staff functions to the SADIS service.

j. Travel Costs

Actual travel and subsistence costs for Met Office staff to attend appropriate Met Panel Working Groups (Meteorological Operations Group, WG-MOG, in relation to SADIS) and SCRAG meetings are included here. It should be noted that in 2020 and 2021 both the MOG and SCRAG meetings were held virtually due to the COVID-19 pandemic. Note: The cost shown in the 2020 actuals relates to the SCRAG19 meeting, held in December 2019 which didn't get billed until January 2020.

k. Cost of Capital

Cost of capital for 2020 has been calculated using the revised methodology applied in 2008 and described in SCRAG/10 WP/13.

1. Administrative costs (bank charges, couriered invoices etc)

Following SCRAG Conclusion 14/7, this item includes costs relating to the processing of invoices (usually when administration charges reduce the amount actually received by the SADIS Provider by a small amount), or the cost of couriered invoices where normal surface mail is unreliable.

2.2 Notes on SADIS Gateway Costs

m. NATS gateway costs

The NATS SADIS Gateway Costs are as described in SCRAG19- WP/16 and were simplified for future NATS gateways costs.

n. Other costs

Communication costs have been removed. System maintenance relates to the systems used to manage the OPMET data flow to SADIS.

o. T&RE

This covers travel costs that relate to the 2020 and 2021 WG-MOG SADIS and SCRAG meetings.

2.3 Notes on CAA and ICAO Administration Costs

p. CAA Administration Costs

This encompasses Met Authority Regulatory oversight and, if appropriate travel costs that relate to the 2020 and 2021 SCRAG meetings.

q. ICAO Administration costs are detailed in WP/4.

3 ACTION

3.1 The SCRAG/22 is requested to note the cost information provided by the United Kingdom and approve for these costs to be recovered from States within the Cost Recovery Scheme.

SCRAG/22 WP/5 Annex 1.							
TABLE 1: 2020 and 2021 Met Office SAD	S						
INVENTORY REF:	Note	DESCRIPTION	2020 Actual (Jan-Dec)	2020 FOO (SCRAG21)	2020 Estimate (SCRAG20)	2021 FOO (SCRAG22)	2021 Estimate (SCRAG21)
UK MET OFFICE COSTS							
1. Equipment							
Principally procured for SADIS							
comms link SADIS Gateway & Met Office	а		8,405	7,000	3,500	9,700	6,000
Not procured principally for SADIS							
message switch	b		4,000	4,000	5,500	4,000	5,000
AWS Server running costs	С		46,541	36,000	9,000	44,000	45,000
AWS data egress	С		-	-	2,400	-	-
AWS Contingency	С		-	-	1,710	-	-
AWS Cloud Operations Expertise	С		-	-	5,000	-	-
Service Desk Equipment Costs	d		-	-	11,000	-	-
		Equipment sub total	58,946	47,000	38,110	57,700	56,000
2. Next Generation SADIS service provi	ion						
WAFS 0.25 degree and IWXXM data set up		Data feed set up costs	12,256	7,000		_	_
WAFS 0.25 degree and IWAWI data set up	. 6	Data leed set up costs	12,230	7,000	-	_	-
		Development sub total	12,256	7,000	0	0	0
3. Annual Staff Requirements							
Operating Support							
	f	First Line Support	4,488	4,500	4,800	4,500	4,800
	g	Second Line Support	20,352	20,000	20,500	20,000	20,500
	h	Third and Fourth Line Support	3,366	3,500	15,000	4,000	15,000
Additional Support							
Administrator	i	Executive Officer	64,235	64,235	65,000	65,930	65,000
International Aviation Management	i	Aviation Manager	7,665	7,665	8,400	8,112	8,000
Contract Procurement and Management	i	Senior Procurement Officer	1,560	1,560	1,600	1,642	1,600
Invoice Administration	i	Finance Officer & Business Acct	14,465	14,465	14,500	12,754	14,500
Travel Costs	j	METP-WG/MOG meetings & SCRA	75	75	400	0	400
		Staff Requirement and travel sub	116,206	116,000	130,200	116,938	129,800
Administrative costs	k I	Cost of Capital Admin charges	18,571 247	20,000 250	21,000 650	18,500 200	21,000 650
	1	Admin charges	241	230	030	200	030
		Total UKMO Costs	206,226	190,250	189,960	193,338	207,450

TABLE 2: 2020 and 2021 NATS, ICA	AO and CAA (Costs					
INVENTORY REF:	Note DESCRIPTION		2020 Actual (Jan-Dec)	2020 FOO (SCRAG21)	2020 Estimate (SCRAG20)	2021 FOO (SCRAG22)	2021 Estimate (SCRAG21)
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NATS Gateway Costs							
Staff Costs							
Operational Staff	m	Air Traffic Services Asst.	225,000	225,000	225,000	225,000	229,000
Engineering Staff	m	Maintenance Engineer	7,000	7,000	7,000	7,000	7,200
Administration Staff	m	Administration Officer	27,800	27,800	27,800	27,800	28,500
		Staff Costs sub total	259,800	259,800	259,800	259,800	264,700
Other Costs							
Communications	n		0	0	345	0	(
System Maintenance	n		9,700	9,700	9,700	9,700	9,700
T&RE	0		0	0	750	0	1,500
		Total NATS Gateway Costs	269,500	269,500	270,595	269,500	275,900
CAA Administration Costs	р		980	1,000	4,500	980	4,500
	P			.,500	.,,500	1	.,00
ICAO Administration Costs	q		33,514	41,000	41,500	34,000	38,600
		TOTAL SADIS COSTS	510,220	501,750	506,555	497,818	526,450