SADIS COST RECOVERY ADMINISTRATIVE GROUP

SEVENTEENTH MEETING

(Toulouse, France, 10th November 2016)

Agenda Item 4:Review of estimated SADIS costs and cost shares for the period 1 January
to 31 December 2017 and estimated cost for the next 2-5 years

ESTIMATED SADIS COSTS : 2 to 5 YEARS (Presented by the United Kingdom)

REFERENCES

SADIS Agreement

SCRAG Reports 1-16

METP WG-MOG/1 and 3 METP WG-MOG/1 Reports

1. INTRODUCTION

1.1 The medium term (two to five years) forecast of the expected costs of operating the SADIS Services are provided in this Working Paper. Resource requirements will vary due to changing demand and these have been anticipated where possible and identified in the tables presented. Where the METP WG-MOG/3 has identified potential changes to the SADIS inventory, these will be reflected as appropriate.

2. DISCUSSION

- 2.1 The attached Table 1 identifies expected budgets for the years 2017 to 2020 based on expected trends for expenditure by the Met Office and NATS. 2015 actual costs and 2016 forecast costs are provided for comparison, as requested by the SCRAG/12 meeting.
- 2.2 With regard to Met Office staff costs, the rates remained static for several years prior to 2015. From 2015 it was necessary to apply increased day rates to some staff functions. However, it was feasible to reduce the overall time assigned to SADIS for some functions to offset the increase in day rates.
- 2.3 An additional increase in staff day-rates is expected in 2017. With a view to offset some of this increase, and recognising the cessation of SADIS 2G, it is feasible to reduce the Administrator function commitment to offset this increase.

2.4 The following notes should be read in conjunction with Table 1.

a. Communications costs between Whitehill and the Met Office.

These costs will cease when the SADIS 2G service is withdrawn on 31 July 2016.

b. NATS Links

Communications costs between the SADIS Gateway, operated by NATS, and the Met Office. This link provides data to SADIS FTP as well as that provided to SADIS 2G, and is expected to continue following withdrawal of SADIS 2G on 31 July 2016.

c. Message Switch

SADIS FTP costs will continue to be charged following the cessation of SADIS 2G. SADIS 2G costs will cease 31 July 2016.

d. Internet bandwidth.

It was agreed by the first meeting of the Meteorological Operations Group of the Meteorological Panel (METP WG-MOG/1, 8-11 September 2015, Gatwick, UK) that the bandwidth should be increased (from 16Mbit/sec bursting 24 Mbit/sec to 24Mbit/sec bursting 42Mbit/sec) in October 2015. This will result in annual bandwidth costs of GBP10,250 from 2016.

e. Service Desk equipment and Serial Communications

These charges cover equipment costs for the service desk functions and support of serial communications equipment.

f. Satellite lease

The SADIS 2G satellite bandwidth lease expired on 31 July 2016 with the cessation of the SADIS 2G service. The full annual charge is applied to 2015, with charges ceasing 31 July 2016 (Note, the 2016 costs were at a slightly reduced rate (pro rata) in comparison to 2015).

g. Annual Maintenance

With the cessation of SADIS 2G on 31 July 2016, there will no longer be a requirement for SADIS 2G support and maintenance contracts, nor the SADIS 2G facilities management at Whitehill.

IT Hall Space at the Met Office will continue to be required as part of the SADIS FTP service.

h. Ad-hoc maintenance

An annual allowance of $\pounds 5,000$ is being made for ad-hoc maintenance as requested by the SCRAG/6.

i. Help Desk and Other staff costs

The cost rates have been updated using the latest available figures. The percentage attribution rates can be found in the SADIS Inventory.

j. Additional Support costs

Please note detailed explanation regarding changes to day rates to be applied from 2017 in section 2.2 above.

k. Resource costs

This line includes the costs for decommissioning the SADIS 2G service, and will apply only to 2016.

I. Travel Costs

Travel and subsistence costs for Met Office staff to attend appropriate Meteorological Panel Working Groups (particularly the Meteorological Operations Group, WG-MOG, in relation to SADIS) and SCRAG meetings are included here.

m. Cost of depreciated capital

See WP/8. As of 2017, all Met Office capital projects will have been fully depreciated.

n. Cost of Capital

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

o. 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.

2.5 Notes on SADIS Gateway costs.

p. Staff Costs – Systems Engineers

The NATS SADIS Gateway Costs are as described in SCRAG10- WP/14. Staff costs and communications costs have been updated in line with the latest available data.

These are reflected in Table 1

q. Systems Maintenance

These are reflected in Table 1

r. SADIS Gateway Upgrade

A mid-life upgrade to the SADIS Gateway Infrastructure was undertaken during 2015, and becoming fully operational on 6 January 2016. Total project costs are $\pounds1,018,601$. The following component costs are attributable to SADIS: Capitalised staff costs of $\pounds77,520$ and hardware costs of $\pounds109,810$ will be depreciated over 5 years. Cost of capital has been calculated at a rate of 5.88% on the reducing balance in each year.

Depreciation schedule for SADIS Gateway mid-life upgrade.

	2015	2016	2017	2018	2019
Value at start of year	187,330	149,864	112,398	74,932	37,466
Depreciation	37,466	37,466	37,466	37,466	37,466
Value at end of year	149,864	112,398	74,932	37,466	0
Average value in year	168,597	131,131	93,665	56,199	18,733
Interest at 5.88%	10,983	8,786	6,590	4,393	2,197

3. CONCLUSIONS

3.1 The annual running costs are subject to change. Costs may change as a result of changes in internet bandwidth, maintenance and internal and external communication costs, new requirements and technological developments agreed by the PIRGS and by the working groups under the METP.

3.2 These figures should therefore be treated as an initial estimate of costs for the planning period and are subject to change.

4. ACTION

4.1 The SCRAG/17 is requested to note these provisional figures for the SADIS Costs.

			Actual 2015	FOO 2016	Est 2017	Est 2018	Est 2019	Est 2020
INVENTORY REF:	Note	DESCRIPTION						
UK MET OFFICE COSTS								
1. Equipment								
Principally procured for SADIS								
comms between Whitehill & Met Office	а	SADIS 2G	5,816	3,393	0	0	0	
comms link SADIS Gateway & Met Office	b	SADIS 2G/SADIS FTP	3,340	3,340	3,340	3,340	3,340	3,3
	5	ISDN Back-up	0,040	0	0,040	0,040	0,040	0,0
Not procured principally for SADIS								
message switch (FTP)	с	SADIS FTP	6,549	6,220	6,220	6,220	6,220	6,2
message switch (2G)		SADIS 2G	4,846	2,685	0	0	0	
internet bandwidth (FTP)	d	FTP	7,135	10,250	10,250	10,250	10,250	10,2
FTP equipment running costs		FTP	19,264	19,264	19,264	19,264	19,264	19,2
Service Desk Equipment Costs	е	Service Desk eqpt	12,520	12,750	12,750	12,750	12,750	12,7
Serial Comms Costs and maintenance	0	Serial Comms	10,614	10,601	10,600	10,600	10,600	10,6
		sub total	70,084	68,503	62,424	62,424	62,424	62,4
2. Procured Services	,		50 570	07.004	0			
space segment annual lease	f	Satellite Segment	56,570	27,981	0	0	0	
annual maintenance	g	2G Maintenance	35,128	23,662	0	0	0	
		2G Facilities Management	6,300	3,675	0	0	0	
		IT Hall Space	14,639	14,873	14,873	14,873	14,873	14,8
	h	ad hoc maintenance	0	5,000	5,000	5,000	5,000	5,0
		sub total	112,637	75,191	19,873	19,873	19,873	19,8
 Annual Staff Requirements Help Desk 	i	Help Desk 0.3%	5,916	6,000	6,000	6,000	6,000	6,0
		Technical Team Leader 3.5%	12,520	12,520	12,520	12,520	12,520	12,5
Additional Support		Network Systems Supervisor 7%	25,040	25,040	25,040	25,040	25,040	25,0
Systems Integration Team	j	Network Computer Engineer	5,292	5,292	5,460	5,460	5,460	5,4
	1	Message Switching Manager	5,670	5,670	5,850		5,850	5,8
Message Switching Manager						5,850		
Administrator		Executive Officer	62,850	62,850	64,235	64,235	64,235	64,2
International Aviation Management		Aviation Manager	7,290	7,290	7,665	7,665	7,665	7,6
Data Traffic		Communications Engineer	1,890	1,890	1,950	1,950	1,950	1,9
Contract Procurement and Management		Senior Procurement Officer	1,512	1,512	1,560	1,560	1,560	1,5
Message Switching Team		Technical Officer	5,670	5,670	5,850	5,850	5,850	5,8
Invoice Administration		Finance Officer & Business Acct	14,850	14,850	15,465	15,465	15,465	15,4
SADIS 2G decomissioning	k	Resource costs	0	2,000	0	0	0	
Travel Costs	I	SADISOPSG, METP meetings & SCF	1,479	1,000	1,000	1,000	1,000	1,0
		sub total	149,979	151,584	152,595	152,595	152,595	152,5
Cost of Depreciated Capital		TOTAL	332,700	295,278	234,892	234,892	234,892	234,8
		SADIS 2G	0	0	0	0	0	
	-	FTP enhancements	0	0	0	0	0	
	m	SADIS 2G CP6000 replacement (with	21,165	7,055	0	0	0	224 0
		sub total	353,865	302,333	234,892	234,892	234,892	234,8
Administrative costs	n o	Cost of Capital Admin charges	17,960 375	17,960 300	17,960 300	17,960 300	17,960 300	17,9 3

TABLE 2: NATS and other SADIS Cost Projections until 2020 (at 2016 prices)

				Actual 2015	FOO 2016	Est 2017	Est 2018	Est 2019	Est 2020
	INVENTORY REF:	Note	DESCRIPTION	2013	2010	2017	2010	2013	2020
2	NATS Gateway Costs Staff Costs	р							
	Operational Staff		Air Traffic Services Asst.	250,860	266,738	270,690	275,445	276,484	276,499
	Engineering Staff		Maintenance Engineer	4,048	9,660	8,302	8,449	8,540	8,561
	Administration Staff		Administration Officer	93	1,122	N/A	N/A	N/A	N/A
	Engineering Staff		Asset Management	N/A	N/A	N/A	N/A	N/A	N/A
			sub total	255,001	277,520	278,992	283,894	285,024	285,060
	Systems Maintenance	q	IP Comms link to UKMO	N/A	N/A	N/A	N/A	N/A	N/A
			X.25 Comms link to UKMO	N/A	N/A	N/A	N/A	N/A	N/A
			Systems Maintenance	N/A	N/A	N/A	N/A	N/A	N/A
			Communications	1,720	1,567	1,025	1,043	1,061	1,079
			Maintenance	9,599	9,169	9,347	9,509	9,674	9,841
			T&RE	721	3,200	3,263	3,319	3,377	3,435
	Sadis Gateway Upgrade (Capital Project)	r							
	Cost of Depreciated Capital		Capital Investments	37,466	37,466	37,466	37,466	37,466	N/A
			Interest at 5.88%	10,983	8,786	6,590	4,393	2,197	N/A
	Sadis Backup enhancement		procurement & Installation	0	0	0	0	0	0
			annual support costs	0	0	0	0	0	0
	Total NATS Gateway Costs			315,490	337,708	336,683	339,624	338,799	299,415
	CAA Administration Costs ICAO Administration Costs			3,813 36,711	4,000 36,711	4,000 45,176	4,000 45,176	4,000 45,176	4,000 45,176
	TOTAL SADIS COSTS			728,214	699,012	639,011	641,952	641,127	601,743