



Science & Technology
Facilities Council

Finance

Alan Grant
STFC DL

Oversight Committee Meeting
21st March 2016

Finance

Current Status



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Current Status

MICE Phase IIa Construction and operations and analysis summary table		Approved	Actual FY 2012/13 (£k)	Actual FY 2013/14 (£k)	Actual FY 2014/15 (£k)	Approved FY 2015/16 (£k)		Total (£k)	Variance (£k)
		(excluding contingency)						(2+3+4+5+6)	(1-6)
		(1)	(2)	(3)	(4)	(5)	Variance	(7)	
Staff (including Academics, estates and indirects)									
Universities	CG	621.50	126.00	181.50	184.00	130.00		621.50	
	Project	543.50	126.00	150.50	137.00	130.00		543.50	
	CG	196.00	49.00	49.00	50.00	48.00		196.00	
	Project	196.00	49.00	49.00	50.00	48.00		196.00	
	CG	166.46	30.00	42.00	47.04	47.42		166.46	
	Project	166.46	30.00	42.00	47.04	47.42		166.46	
	CG	124.11	49.00	50.00	25.11			124.11	
	Project	124.11	49.00	50.00	25.11			124.11	
	CG	147.21	36.00	37.00	36.97	37.24		147.21	
	Project	147.21	36.00	37.00	36.97	37.24		147.21	
	CG	169.00	25.00	40.00	50.00	54.00		169.00	
	Project	169.00	25.00	40.00	50.00	54.00		169.00	
	CG	157.84	31.00	42.00	42.25	42.59		157.84	
	Project	157.84	31.00	42.00	42.25	42.59		157.84	
Consolidated Grant Total		1,582.12	346.00	441.50	435.37	359.25		1,582.12	
Project Staff Total		1,504.12	346.00	410.50	388.37	359.25		1,504.12	
STFC laboratories staff		3,627.53	637.00	2,232.27	1,050.15	1,545.00			
Spend to date							467.15	4,997.27	-1,352.01
Requirement to end financial year									
Staff (spend to date) Total		6,713.78	1,329.00	3,084.27	1,873.89	2,263.50	467.15	8,083.51	-1,352.01
Non-staff									
Capital		5,154.00	1,126.25	455.74	905.19	520.00	-126.37	3,113.87	772.16
Resource					443.79	210.00	-494.74	1,267.97	
Travel						15.00			
Common Fund / EuCARD-2 / Other			111.00	101.00	107.00		98.00	417.00	
Non-staff Total		5,154.00	1,237.25	556.74	1,455.98	745.00	-523.11	4,798.84	772.16
Total (excluding WA)		11,867.78	2,566.25	3,641.01	3,329.87	3,008.50	-55.96	12,882.36	-579.85
<i>Working allowance</i>									
Total (including WA)		11,867.78	2,566.25	3,641.01	3,329.87	3,008.50	-55.96	12,882.36	-579.85
Contingency (Held by STFC)									
Total Award		11,867.78	2,566.25	3,641.01	3,329.87	3,008.50	-55.96	12,882.36	-579.85

- All income, Encumbrance, Re-Charge accounts and adjustments included in the sheet.
- The HMRC cost of £104k is included in the Mechanical work package forecast. The cost is against baseline financial codes but in the event of the cost migrating to the project it has been accounted.
- PPD Baseline Staff specifically called out and removed from the totals – not included in the budget figures
- University spend is not monitored and a linear spend profile has been calculated.
- This Financial year is predicted to be overspent by ~£56k.
- Allocation figures do not include in year approved additional funding – this will reduce the total variance for the period
- *Further investigation of the historical actuals are required to ensure the variance against approved budget is correct*
 - *Some uncertainty is in mind particularly during the period of financial system change*

MICE Forecast for 15/16		Including Overheads	Excluding Overheads	UK Allocation 2015/16		Including Overheads	Excluding Overheads
MICE Phase 2 (Capital)	Reqs / M&O	626.69	626.69	MICE Phase 2 (Capital)	Reqs / M&O	520.00	520.00
	Travel				Travel		
	RAL TD / Other	642.32	642.32		RAL TD / Other	668.00	668.00
	Adj / Encum	19.68	19.68				
		1,288.69	1,288.69			1,188.00	1,188.00
MICE Phase 2 (Resource)	Reqs / M&O	411.42	411.42	MICE Phase 2 (Resource)	Reqs / M&O	100.00	100.00
	Travel				Travel		
	RAL TD / Other	281.49	161.77		RAL TD / Other	342.00	197.00
	Adj / Encum	-113.48	-113.48				
		579.42	459.71			442.00	297.00
MICE Phase 2 (Operations and Analysis)	Reqs / M&O	218.14	218.14	MICE Phase 2 (Operations and Analysis)	Reqs / M&O	110.00	110.00
	Travel	194.62	194.62		Travel	15.00	15.00
	RAL TD / Other	154.04	85.33		RAL TD / Other	535.00	307.00
	Adj / Encum	87.04	87.04				
		653.84	585.13			660.00	432.00
Income (Common Fund + EuCARD-2)		-176.00	-176.00				
	Totals	2,345.96	2,157.53		Totals	2,290.00	1,917.00
	Variance	-55.96	-240.53				
		-2%	-13%				
Against budgets	Allocation (ex Over)	Forecast	Variance				
MICE Phase 2 (Capital)	1188.00	1288.69	-100.69	£104k added to the forecast for the VAT			
MICE Phase 2 (Resource)	297.00	459.71	-162.71	The intension is for the office to re-coupe the amount from the HMRC			
MICE Phase 2 (Operations and Analysis) (inc included)	432.00	409.13	22.87				
Total	1917.00	2157.53	-240.53				

- The capital project, including the HRMC forecast charge, is predicting a £100k overspend
- The Resource projects with overheads added is predicting a £140k overspend (with income included £176k)
- The lower table is showing the capital and resource projects forecast without overheads
- £100k of cryogenics & gases charge used for commissioning the Spectrometer Solenoids will be transferred out of Phase 2 Resource to Operations.....and charged to the common fund. In discussion with executive board.

Finance

Cost to Complete

- Full Cost
- Flat Cash +10%
- Flat Cash



Cost to Complete DoIC – Full Cost

Work package		2016/17	2017/18	2018/19	2019/20	2020/21	
Id	Name	£k	£k	£k	£k	£k	£k
Total staff and non-staff by work package							
MICE-UK							
1	Project management and project office	505.62	572.58	285.43			1363.62
2	Mechanical integration	518.30	407.89	47.12			973.31
3	Electrical Integration	302.66	340.50	50.23			693.39
4	Focus-coil module	132.64	122.13	77.24	34.42		366.43
5	Hydrogn Delivery System	21.85					21.85
6	RF power	628.53	606.03	176.97	30.37		1441.90
7	Vacuum	117.66	72.71	36.71			227.07
8	Magnetic Mitigation	66.62	6.02				72.64
9	Software and computing	132.39	423.77	438.07	421.77		1416.01
10	Operations and analysis	893.27	1201.52	1191.79	673.68		3960.27
Grand totals		3319.55	3753.14	2303.57	1160.24		10536.49
MICE-UK	Cost of risk mitigation	130.00	180.00				480
	% above allocation	5%	17%	-30%	-66%	-100%	

Key Dates:-

- Step IV running till end Dec 16
- SSD delivery Jan 18
- DoIC installation complete mid Feb 18
- Commissioning Complete End July 18
- Data Taking from End July 18 to Jun 19
- Analysis ends end Mar 2020

- Includes University costs & resource charges
- Budget £3,050M

IN ALL CASES!!

- **Costs do not include US FTE's for commissioning for SS's**
- **Costs do not include US FTE's for commissioning for RF systems**



Cost to Complete DoIC – Full Cost – Critical Path

ID	%	WBS	Task Name	Start	Finish	Duration	Predecessors	Milestone watch	Gantt Chart											
									2016	2017			2018			2019				
0	37%	0	MICE_DoIC_Jan6th	01/09/08	31/03/20	2969.25 days?			[Gantt bar for MICE_DoIC_Jan6th]											
93	0%	3	DoIC	01/06/15	31/03/20	1239.25 days			[Gantt bar for DoIC]											
94	0%	3.1	Shipping	12/04/16	03/01/18	439 days			[Gantt bar for Shipping]											
109	0%	3.1.4	SSD	03/01/18	03/01/18	0 days			[Gantt bar for SSD]											
110	0%	3.1.4.1	SSD delivered to RAL	03/01/18	03/01/18	0 days		yes - Dash Boa	[Gantt bar for SSD delivered to RAL]											
153	0%	3.3	DoIC Installation	01/06/15	08/03/18	701.75 days			[Gantt bar for DoIC Installation]											
176	0%	3.3.2	Return Yoke	03/07/17	30/01/18	149.61 days			[Gantt bar for Return Yoke]											
186	0%	3.3.2.3	North PRY Frame Legs and Plates - Cavities and SSD	17/01/18	30/01/18	9.5 days			[Gantt bar for North PRY Frame Legs and Plates - Cavities and SSD]											
187	0%	3.3.2.3.1	Survey Floor & PRY Legs	17/01/18	18/01/18	1 day	204		[Gantt bar for Survey Floor & PRY Legs]											
188	0%	3.3.2.3.2	Cut shim	18/01/18	18/01/18	0.5 days	187		[Gantt bar for Cut shim]											
189	0%	3.3.2.3.3	Install frame legs (inc drilling plates)	18/01/18	22/01/18	2 days	188		[Gantt bar for Install frame legs (inc drilling plates)]											
190	0%	3.3.2.3.4	Survey PRY legs	22/01/18	23/01/18	1 day	189		[Gantt bar for Survey PRY legs]											
191	0%	3.3.2.3.5	Fit North side yoke plates	23/01/18	30/01/18	5 days	190,393,408,207		[Gantt bar for Fit North side yoke plates]											
192	0%	3.3.2.3.6	North side SS return yoke installation complete	30/01/18	30/01/18	0 days	191		[Gantt bar for North side SS return yoke installation complete]											
193	0%	3.3.2.4	North Side PRY Installation complete	30/01/18	30/01/18	0 days	192	yes - Dash Boa	[Gantt bar for North Side PRY Installation complete]											
204	0%	3.3.5	SSD installation	02/10/17	16/01/18	76 days			[Gantt bar for SSD installation]											
207	0%	3.3.5.3	Install Spectrometer Solenoid #2 and align	03/01/18	11/01/18	6.75 days	196,206,110		[Gantt bar for Install Spectrometer Solenoid #2 and align]											
417	0%	3.4	Re-install TOF2, KL & EMR	02/02/18	13/02/18	6.75 days	193,419		[Gantt bar for Re-install TOF2, KL & EMR]											
419	0%	3.6	Install tracker South Side wave guides	30/01/18	02/02/18	3 days	193,207		[Gantt bar for Install tracker South Side wave guides]											
420	0%	3.7	DoIC installation complete	13/02/18	13/02/18	0 days	193,417	yes - Dash Boa	[Gantt bar for DoIC installation complete]											
421	0%	3.8	Commissioning	13/02/18	31/07/18	120 days			[Gantt bar for Commissioning]											
422	0%	3.8.1	Cooling Channel magnet Commissioning	13/02/18	31/07/18	6 mons	420		[Gantt bar for Cooling Channel magnet Commissioning]											
423	0%	3.8.2	RF Testing	03/07/18	31/07/18	20 days			[Gantt bar for RF Testing]											
424	0%	3.8.2.1	Test and condition cavities, with B field, 1MW	03/07/18	31/07/18	4 wks	420,422FF		[Gantt bar for Test and condition cavities, with B field, 1MW]											
425	0%	3.8.2.2	RF cavity testing with B field complete	31/07/18	31/07/18	0 days	424		[Gantt bar for RF cavity testing with B field complete]											
426	0%	3.9	Combined magnet and operational tests complete	31/07/18	31/07/18	0 days	425	yes - Dash Boa	[Gantt bar for Combined magnet and operational tests complete]											
429	0%	3.12	Analysis	31/07/18	31/03/20	435 days	426		[Gantt bar for Analysis]											

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
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SSD delivery Jan 2018 is on the critical path

- Assumes full working SSD ready to be installed
- All magnet testing to be carried out at contractors

Cost to Complete DoIC – Flat Cash + 10%

Work package							
Id	Name	£k	£k	£k	£k	£k	£k
Total staff and non-staff by work package							
MICE-UK							
1	Project management and project office	505.62	572.58	285.43			1363.62
2	Mechanical integration	518.30	407.89	47.12			973.31
3	Electrical Integration	302.66	340.50	50.23			693.39
4	Focus-coil module	132.64	122.13	77.24	34.42		366.43
5	Hydrogn Delivery System	21.85					21.85
6	RF power	628.53	428.07	359.61	38.35		1454.55
7	Vacuum	117.66	72.71	36.71			227.07
8	Magnetic Mitigation	66.62	6.02				72.64
9	Software and computing	132.39	423.77	438.07	421.77	109.13	1525.14
10	Operations and analysis	893.27	1201.52	1191.79	737.45	174.31	4198.35
Grand totals		3319.55	3575.17	2486.21	1231.98	283.45	10896.36
MICE-UK	Cost of risk mitigation	130.00	180.00				480
	% above allocation	5%	11%	-24%	-63%	-91%	

Assumptions:-

- Complete RF system#2 build and test at DL and deliver to RAL mid July 17.
- Push back installation of RF system#2 until April 18 – effort saving!!
- Only test RF system #2 into dummy loads.
- Do not carry out HPRF tests on the cooling channel for cavity#1 using RF system#2. This set of tasks which takes approx. 1mth but may not be necessary. Small risk to project.

Key Dates:-

- Step IV running till end Dec 16
- SSD delivery Jan 18
- DoIC installation complete mid Jun 18 – 4 mth slippage
- Commissioning Complete early Dec 18
- Data Taking from early Dec 18 to mid Oct 19
- Analysis ends early August 2020
- Length of duration time for Commissioning & Data taking remains the same



Cost to Complete DoIC – Flat Cash + 10% – Critical Path

ID	% Complete	WBS	Task Name	Start	Finish	Duration	Predecessors	2016		2017		2018		2019	
								H1	H2	H1	H2	H1	H2	H1	H2
0	37%	0	MICE_DoIC_Jan6th	01/09/08	06/08/20	3054 days?									
93	0%	3	DoIC	01/06/15	06/08/20	1324 days									
153	0%	3.3	DoIC Installation	01/06/15	21/06/18	769 days									
212	0%	3.3.7	RF Installation	20/05/16	21/06/18	524 days									
213	0%	3.3.7.1	RF Controls Racks	20/05/16	01/05/18	487 days									
221	0%	3.3.7.1.2	RF Controls Rack #2	06/07/17	01/05/18	205 days									
224	0%	3.3.7.1.2.3	Install rack in MICE Hall	23/04/18	24/04/18	2 days	223,268								
225	0%	3.3.7.1.2.4	Terminate control cables at control rack	25/04/18	01/05/18	5 days	224								
253	0%	3.3.7.3	RF System #2 - Installation	04/05/17	21/06/18	287 days									
254	0%	3.3.7.3.1	4616 Amplifier system #2	04/05/17	11/05/18	258 days									
263	0%	3.3.7.3.1.9	Install 4616 Amplifier	02/04/18	06/04/18	5 days	262								
264	0%	3.3.7.3.1.10	Install 20kV HV Rack	09/04/18	09/04/18	1 day	263								
265	0%	3.3.7.3.1.11	Install Auxiliary Rack	10/04/18	10/04/18	1 day	264								
266	0%	3.3.7.3.1.12	Terminate 4616 Amplifier cables	11/04/18	12/04/18	2 days	265								
267	0%	3.3.7.3.1.13	Terminate HV Rack cables	13/04/18	17/04/18	3 days	266								
268	0%	3.3.7.3.1.14	Terminate Auxiliary Rack cables	18/04/18	20/04/18	3 days	267								
273	0%	3.3.7.3.2	TH116 Amplifier system #2	16/05/17	21/06/18	279 days									
280	0%	3.3.7.3.2.7	Install HV Rack	02/05/18	02/05/18	1 day	225								
281	0%	3.3.7.3.2.8	Install Auxiliary Rack	03/05/18	03/05/18	1 day	280								
282	0%	3.3.7.3.2.9	Install / Terminate HV Rack cables	04/05/18	10/05/18	5 days	281								
283	0%	3.3.7.3.2.10	Install / Terminate Auxiliary Rack cables	11/05/18	21/05/18	7 days	282								
284	0%	3.3.7.3.2.11	Install / Terminate TH116 Amplifier cables	22/05/18	28/05/18	5 days	283								
285	0%	3.3.7.3.2.12	Prepare TH116 Dummy Load	22/05/18	28/05/18	5 days	284SS								
286	0%	3.3.7.3.2.13	Commission Electrical system	29/05/18	07/06/18	8 days	271,285								
287	0%	3.3.7.3.2.14	Commission RF with Dummy Load	08/06/18	21/06/18	10 days	279,286								
288	0%	3.3.7.3.2.15	RF System#2 - Amplifier 4616 & TH116 available for operation	21/06/18	21/06/18	0 days	287								
420	0%	3.7	DoIC installation complete	21/06/18	21/06/18	0 days	193,417,288								
421	0%	3.8	Commissioning	22/06/18	06/12/18	120 days									
422	0%	3.8.1	Cooling Channel magnet Commissioning	22/06/18	06/12/18	6 mons	420								
423	0%	3.8.2	RF Testing	09/11/18	06/12/18	20 days									
424	0%	3.8.2.1	Test and condition cavities, with B field, 1MW	09/11/18	06/12/18	4 wks	420,422FF								
425	0%	3.8.2.2	RF cavity testing with B field complete	06/12/18	06/12/18	0 days	424								
426	0%	3.9	Combined magnet and operational tests complete	06/12/18	06/12/18	0 days	425								
429	0%	3.12	Analysis	07/12/18	06/08/20	435 days	426								

RF system#2 on the critical path

- Installation in MICE Hall begins 2/4/18

Cost to Complete DoIC – Flat Cash

Work package							
Id	Name	£k	£k	£k	£k	£k	£k
Total staff and non-staff by work package							
MICE-UK							
1	Project management and project office	505.62	522.58	540.46			1568.66
2	Mechanical integration	392.19	284.04	270.02			946.24
3	Electrical Integration	296.19	332.09	212.94			841.22
4	Focus-coil module	132.64	122.13	121.23	57.18		433.18
5	Hydrogn Delivery System	21.85					21.85
6	RF power	628.53	329.71	413.96	131.63		1503.83
7	Vacuum	117.66	72.71	51.49	32.22		274.08
8	Magnetic Mitigation	66.62	6.02				72.64
9	Software and computing	132.39	423.77	438.07	437.88	226.60	1658.72
10	Operations and analysis	893.27	1160.38	1192.30	973.85	348.63	4568.43
Grand totals		3186.97	3253.41	3240.47	1632.75	575.23	11888.84
MICE-UK	Cost of risk mitigation	110.00	130.00	70.00			480
	% above allocation	0%	1%	1%	-50%	-82%	

Assumptions:-

- Continue running step IV until end Dec 17 (12mth delay) – allows to redistribute effort and capital spending into latter yrs across work packages.
- Only test RF stem #2 into dummy loads.
- Do not carry out HPRF tests on the cooling channel for cavity#1 using RF system#2. This set of tasks which takes approx. 1mth but not really necessary.

Key Dates:-

- Step IV running till end Dec 17
- SSD delivery Jan 18
- DoIC installation complete mid Aug 18
- Commissioning Complete early Feb 19
- Data Taking from early Feb 19 to mid Dec 19
- Analysis ends early Oct 2020
- Length of duration time for Commissioning & Data taking remains the same



Cost to Complete DoIC – Flat Cash – Critical Path

ID	% Complete	WBS	Task Name	Start	Finish	Duration	Predecessors	Milestone watch	2016		2017		2018		2019	
									H1	H2	H1	H2	H1	H2	H1	H2
0	37%	0	MICE_DoIC_Jan6th	01/09/08	02/10/20	3094.31 days?										
17	23%	2	Step IV Commissioning	27/04/15	04/01/18	668.6 days?								04/01		
91	0%	2.12	End of STEP IV Operations	04/01/18	04/01/18	0 days	90,14	yes - Dash Boa						04/01		
93	0%	3	DoIC	01/06/15	02/10/20	1364.31 days										
112	0%	3.2	Step IV De-Commissioning	02/11/15	27/04/18	619.55 days										27/04
115	0%	3.2.2	Tracker Systems	04/01/18	11/01/18	5.7 days										11/01
116	0%	3.2.2.1	Disconnect Northside Waveguides	04/01/18	08/01/18	2.7 days	91									08/01
118	0%	3.2.2.3	Disconnect Southside Waveguides	04/01/18	08/01/18	2.7 days	116SS									08/01
119	0%	3.2.2.4	Move South side Tracker Cryostat to R9	08/01/18	10/01/18	1.35 days	118									10/01
120	0%	3.2.3	TOF, KL & EMR	10/01/18	17/01/18	5.4 days	119									17/01
121	0%	3.2.3.1	Remove TOF1 & KL & EMR	10/01/18	16/01/18	4.05 days	119									16/01
122	0%	3.2.3.2	Move TOF, KL & EMR to R9	16/01/18	17/01/18	1.35 days	121									17/01
123	0%	3.2.4	Partial Return Yoke	17/01/18	12/02/18	18.15 days										12/02
124	0%	3.2.4.1	Remove North side PRY	17/01/18	22/01/18	3 days	122									22/01
126	0%	3.2.4.3	Remove South side PRY	02/02/18	07/02/18	3 days	134									07/02
128	0%	3.2.4.5	Remove Downstream underfloor supports	07/02/18	12/02/18	2.7 days	126									12/02
129	0%	3.2.4.6	PRY Material removed from the Hall	12/02/18	12/02/18	0 days	128									12/02
130	0%	3.2.5	Magnets	22/01/18	02/02/18	9.45 days										02/02
131	0%	3.2.5.1	Disconnect all magnet cooling lines, instrumentation and power	22/01/18	31/01/18	6.75 days	124									31/01
132	0%	3.2.5.2	Move Downstream Spectrometer Solenoid magnet to R9	31/01/18	01/02/18	1.35 days	118,131									01/02
133	0%	3.2.5.3	Move Focus Coil Magnet to R9	01/02/18	02/02/18	1.35 days	132,137									02/02
134	0%	3.2.5.4	All Channel Magnets moved out of the Hall	02/02/18	02/02/18	0 days	133									02/02
135	0%	3.2.6	Hydrogen System and Absorber	22/01/18	01/02/18	8.1 days										01/02
136	0%	3.2.6.1	Disconnect transfer line, cooling and instrumentation	22/01/18	31/01/18	6.75 days	124									31/01
137	0%	3.2.6.2	Move Absorber and transfer line to R9	31/01/18	01/02/18	1.35 days	136									01/02
152	0%	3.2.8	Step IV De-Commissioning Complete	12/02/18	12/02/18	0 days	129	yes - Dash Boa								12/02
153	0%	3.3	DoIC Installation	01/06/15	17/09/18	830.05 days										17/09
154	0%	3.3.1	MDIC Base plate installation	01/06/15	04/07/18	777.9 days										04/07
155	0%	3.3.1.1	Remove step IV false floor plates	12/02/18	21/02/18	6.75 days	152									21/02
156	0%	3.3.1.2	Begin drilling and tapping holes in the false floor sufficient for MDIC	21/02/18	08/03/18	10.8 days	155									08/03
157	0%	3.3.1.3	Fit intermediate surface (tiled steel plates) for the false floor MDIC	08/03/18	16/03/18	6.75 days	156									16/03
158	0%	3.3.1.4	RF Cavity Rolling Platform Installation (2 off)	01/06/15	27/04/18	729.9 days										27/04
161	0%	3.3.1.4.3	Install RF Cavities base plates	16/03/18	06/04/18	15 days	157,160									06/04
162	0%	3.3.1.4.4	Install RF Cavities rolling platforms	08/04/18	27/04/18	15 days	161									27/04
163	0%	3.3.1.4.5	RF cavity rolling platforms installation complete	27/04/18	27/04/18	0 days	162									27/04
164	0%	3.3.1.5	AFC#1 Rolling Platform Installation	27/04/18	25/05/18	20 days										25/05
165	0%	3.3.1.5.1	Install AFC #1 base plate	27/04/18	11/05/18	10 days	163									11/05
166	0%	3.3.1.5.2	Install AFC #1 rolling platform	11/05/18	25/05/18	10 days	165									25/05
167	0%	3.3.1.5.3	AFC #1 rolling platform installation complete	25/05/18	25/05/18	0 days	166									25/05
168	0%	3.3.1.6	AFC#2 Rolling Platform Installation	25/05/18	22/06/18	20 days										22/06
169	0%	3.3.1.6.1	Install AFC #2 base plate	25/05/18	08/06/18	10 days	167									08/06
170	0%	3.3.1.6.2	Install AFC #2 rolling platform	08/06/18	22/06/18	10 days	169									22/06
171	0%	3.3.1.6.3	AFC #2 rolling platform installation complete	22/06/18	22/06/18	0 days	170									22/06
172	0%	3.3.1.7	Spectrometer Solenoid floor plate installation	22/06/18	04/07/18	8 days										04/07

Critical Path runs from end of stepIV operations, beginning with de-comissioning

- May need SSD before end of Dec 2017 to carry out repair work if this is the chosen path.

Figures submitted in report

Cost to Completion Summary						
	2016/17	2017/18	2018/19	2019/20	2020/21	Total
Full Cost	3,320	3,753	2,304	1,160		10,536
% above allocation	5%	17%	-30%	-66%	-100%	
Flat Cost + 10%	3,320	3,575	2,486	1,232	283	10,896
% above allocation	5%	11%	-24%	-63%	-91%	
Flat Cost	3,187	3,253	3,240	1,633	575	11,889
% above allocation	0%	1%	1%	-50%	-82%	

- Figures do not include any bridging loans for 2016/17 for University Staff
- Further work being carried out to refine these figures.

Capital Project Only - STAK00058						
	2016/17	2017/18	2018/19	2019/20	2020/21	Total
Full Cost	1,921	1,979	826	487		5,213
Flat Cash + 10%	1,921	1,801	1,009	495	109	5,334
Flat Cash	1,788	1,570	1,508	659	227	5,752

UK Cost to completion

Allocation Period Phase 1 Construction						
Spend	Spend	Spend	Spend	Spend		Phase 1
to 2008	2008/9	2009/10	2010/11	2011/12		
10,100	2,953	3,064	3,003	3,129		22,249

Allocation Period Phase 2 Construction						
Spend	Spend	Spend	Allocation			Phase 2
2012/13	2013/14	2014/15	2015/16			
2,613	3,509	3,100	3,278			12,500

Allocation Period Phase 3						
Requirement	Requirement	Requirement	Requirement			Phase 3
2016/17	2017/18	2018/19	2019/20	2020/21		
3,187	3,253	3,240	1,633	575		11,888

Total Spend across all three phases of the project						46,637
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- Allocation and required figures include risk mitigation costs for equipment and staff
- The 2018/19 FY request is for data analysis, paper writing And does include a fraction of Technical and Engineering support in the event of further operations and data taking.
- Phase 3 costs based on Flat Cash figures submitted in report.
- Required allocation for Phase 3 - £11,888k
- Total UK spend for MICE £46,637k