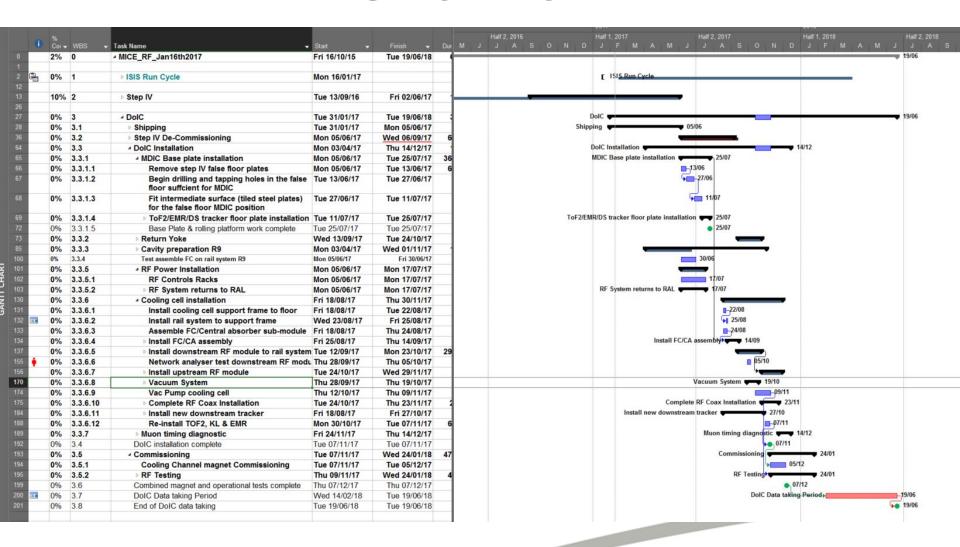


Upgrade to Demo Schedule

Overview







rimeline

Cavities arrive March 2017 - prep in R9 Step IV data - ISIS 2017/01 De-commission Step IV SSU stays in place and cold. South mezzanine extension/H2 removed Install RF power. Install base plate for EMR/Tracker/KL/ToF2 Trial build cooling cell in R9 Install cooling cell frame & lower PRY. Install Cooling cell & Upper PRY Install RF modules and co-axial lines Vacuum Muon Timing – November/December run. Commissioning January/February Data - ISIS 2017/04 2018/01

Step IV decommissioning



% Cor •	→ WBS	→ Task Name	Start →	Finish 🔻	Duration → Predecess →	May '17 Jun '17 Jul '17 Aug '17 Sep '1 24 01 08 15 22 29 05 12 19 26 03 10 17 24 31 07 14 21 28 04
10%	6 2	⊳ Step IV	Tue 13/09/16	Fri 02/06/17	179 days	
0%	3	4 DolC	Tue 31/01/17	Tue 19/06/18	353 davs	
		▶ Shipping	Tue 31/01/17	Mon 05/06/17	90 days	05/06
0%	3.2	Step IV De-Commissioning	Mon 05/06/17	Wed 06/09/17	67.4 days	
0%	3.2.1	Vacuum System Vacuum System	Mon 05/06/17	Thu 08/06/17	4 days	Vacuum System 08/06
0%	3.2.2	Hydrogen System and Absorber	Fri 09/06/17	Wed 21/06/17	8.1 days	drogen System and Absorber 21/06
0%	3.2.2.1	Disconnect transfer line, cooling and instrumentation. Safety?	Fri 09/06/17	Mon 19/06/17	6.75 days 38	and instrumentation. Safety?
0%	3.2.2.2	Move Absorber and transfer line to R9	Mon 19/06/17	Wed 21/06/17	1.35 days 40	Move Absorber and transfer line to R9-1-21/06
0%	3.2.3	Downstream tracker Systems	Mon 05/06/17	Thu 27/07/17	38.15 days	wnstream tracker Systems 27/07
0%	3.2.3.1	Disconnect Northside Waveguides	Mon 05/06/17	Wed 07/06/17	2.7 days 5	nect Northside Waveguides
0%	3.2.3.2	Move North sideTracker Cryostat to R9	Wed 07/06/17	Mon 12/06/17	3 days 43	12/06
0%	3.2.3.3	Disconnect Southside Waveguides	Mon 05/06/17	Wed 07/06/17	2.7 days 43SS	nect Southside Waveguides→ 07/06
0%	3.2.3.4	Move South sideTracker Cryostat to R9	Wed 07/06/17	Fri 09/06/17	1.35 days 45	th sideTracker Cryostat to R9→1 09/06
0%	3.2.3.5	Tracker removal in R9	Thu 20/07/17	Thu 27/07/17	5 days 61	27/07
0%	3.2.4	△ TOF, KL & EMR	Fri 09/06/17	Wed 14/06/17	3 days 46	TOF, KL & EMR+ 14/06
0%	3.2.4.1	Remove TOF1 & KL & EMR	Fri 09/06/17	Wed 14/06/17	3 days	Remove TOF1 & KL & EMR14/06
0%	3.2.4.2	Move TOF, KL & EMR to R9	Wed 14/06/17	Thu 15/06/17	1.35 days 49	15/06
0%	3.2.5		Wed 21/06/17	Wed 19/07/17	20 days	
0%	3.2.5.1	RECONFIGURE for RF co-ax	Fri 30/06/17	Fri 14/07/17	10 days 49	RECONFIGURE for RF co ax 14/07
0%	3.2.6	△ Partial Return Yoke	Mon 12/06/17	Wed 13/09/17	67.15 days	Partial Return Yoke
0%	3.2.6.1	Remove North side PRY	Fri 14/07/17	Wed 19/07/17	3 days 39,49,52	Remove North side PRY
0%	3.2.6.2	North side PRY sent for mods	Wed 19/07/17	Wed 13/09/17	8 wks 54	
0%	3.2.6.3	Remove South side PRY	Mon 12/06/17	Wed 14/06/17	3 days 60	14/06
0%	3.2.6.4	South Side PRY sent for mods	Thu 15/06/17	Wed 09/08/17	8 wks 56	-09/08
0%	3.2.6.5	PRY Material returned.	Wed 13/09/17	Wed 13/09/17	0 days 55,57	
0%	3.2.7		Mon 05/06/17	Fri 21/07/17	34.15 days	Magnets 21/07
0%	3.2.7.1	Disconnect SSD magnet cooling lines, instrumentation and power		Fri 09/06/17	5 days 5	instrumentation and power
0%	3.2.7.2	Move Downstream Spectrometer Solenoid magnet to R9	Wed 19/07/17	Thu 20/07/17	1 day 45,60,54	Move Downstream Spectrometel Solenoid magnet to R\$→■ 20/07
0%	3.2.7.3	Move Focus Coil Magnet to R9	Thu 20/07/17	Fri 21/07/17	1 day 61,41	Move Focus Coil Magnet to R9→1 21/07
0%	3.2.8	Step IV De-Commissioning Complete	Fri 21/07/17	Fri 21/07/17	0 days 62	21/07



Cavities



0	% Coi √	WBS ▼	Task Name	▼ Start ▼	Finish ▼	Duration → Predecess →		Apr 17 03 10 17 24	May '17 01 08 15 22	Jun '17 Jul '17 29 05 12 19 26 03 10
	2%	0	4 MICE_RF_Jan16th2017	Fri 16/10/15	Tue 19/06/18	669 days				
ren										
4	0%	1	▲ ISIS Run Cycle	Mon 16/01/17				0.1100		
	0%	1.1	Cycle 2016/05	Wed 15/02/17	Fri 31/03/17	33 days		31/03		
	0%	1.2	ISIS Off	Fri 31/03/17	Tue 02/05/17	24 days?			02/05	
-	0%	1.3	Cycle 2017/01	Tue 02/05/17	Fri 02/06/17	24 days?		Cycle 2017/01		02/06
-	0%	1.4	ISIS Off	Fri 02/06/17	Tue 19/09/17	78 days?				
=	0%	1.5	Cycle 2017/02	Tue 19/09/17	Fri 27/10/17	29 days?				
-	0%	1.6	ISIS Off	Fri 27/10/17	Tue 14/11/17	13 days?				
-	0%	1.7	Cycle 2017/03	Tue 14/11/17	Wed 20/12/17	27 days?				
	0%	1.8	ISIS Off	Wed 20/12/17	Tue 13/02/18	31 days?				
==	0%	1.9	Cycle 2017/04	Tue 13/02/18	Sun 01/04/18	34 days?				
	10%	2	⊳ Step IV	Tue 13/09/16	Fri 02/06/17	179 days				_
	1	_								
	0%	3	₄ DoIC	Tue 31/01/17	Tue 19/06/18	353 days				
	0%	3.1	▶ Shipping	Tue 31/01/17	Mon 05/06/17	90 days				05/06
	0%	3.2	▶ Step IV De-Commissioning	Mon 05/06/17	Wed 06/09/17	67.4 days				
	0%	3.3	△ DolC Installation	Mon 03/04/17	Thu 14/12/17	184 days 63	Installation	-		
	0%	3.3.1	▶ MDIC Base plate installation	Fri 21/07/17	Mon 11/09/17	36.75 days				MDIC Base plate installation
	0%	3.3.2	⊳ Return Yoke	Wed 13/09/17	Tue 24/10/17	30 days				
	0%	3.3.3	△ Cavity preparation R9	Mon 03/04/17	Wed 01/11/17	153 days		VII.		
	0%	3.3.3.1	△ Clean Room	Mon 03/04/17	Fri 23/06/17	60 days	Clean Room	_		23/06
= 4	0%	3.3.3.1.1	Install Clean Room R9	Mon 03/04/17	Fri 14/04/17	10 days		14/04		
٩ 🖣	0%	3.3.3.1.2	Run Clean Room	Mon 17/04/17	Fri 12/05/17	1 mon 87		F	12/05	
	0%	3.3.3.1.3	Move clean room to MICE hall and start	Mon 29/05/17	Fri 23/06/17	20 days 92,97				23/06
	0%	3.3.3.2		Mon 03/04/17	Mon 19/06/17	56 days				
<u> </u>	0%	3.3.3.2.1	Receive cavities and inspect to specifications	Mon 03/04/17	Mon 03/04/17	1 day 34		03/04		
	0%	3.3.3.2.2	Install couplers	Mon 15/05/17	Fri 19/05/17	5 days 88			19/05	
P 🛉	0%	3.3.3.2.3	Fit N type transistion to input ports, VNA tests	Mon 22/05/17	Mon 29/05/17	6 days 92			F	29/05
Q •	0%	3.3.3.2.4	Install vacuum pumps	Tue 04/04/17	Wed 12/04/17	7 days 91		12/04		
	0%	3.3.3.3		Mon 03/04/17	Mon 19/06/17	56 days				
<u> </u>	0%	3.3.3.3.1	Receive cavities and inspect to specifications	Mon 03/04/17	Mon 03/04/17	1 day 35		03/04		
	0%	3.3.3.3.2	Install couplers	Mon 22/05/17	Fri 26/05/17	5 days 92			4	6/05
Q 🍦	0%	3.3.3.3.3	Fit N type transistion to input ports, VNA tests	Mon 29/05/17	Mon 05/06/17	6 days 97			F	05/06
(2)	0%	3.3.3.3.4	Install vacuum pumps	Thu 13/04/17	Fri 21/04/17	7 days 94		21/0		
	00/	224	T4	C-1 24/07/47	F-! 40/00/47	20 4 07				

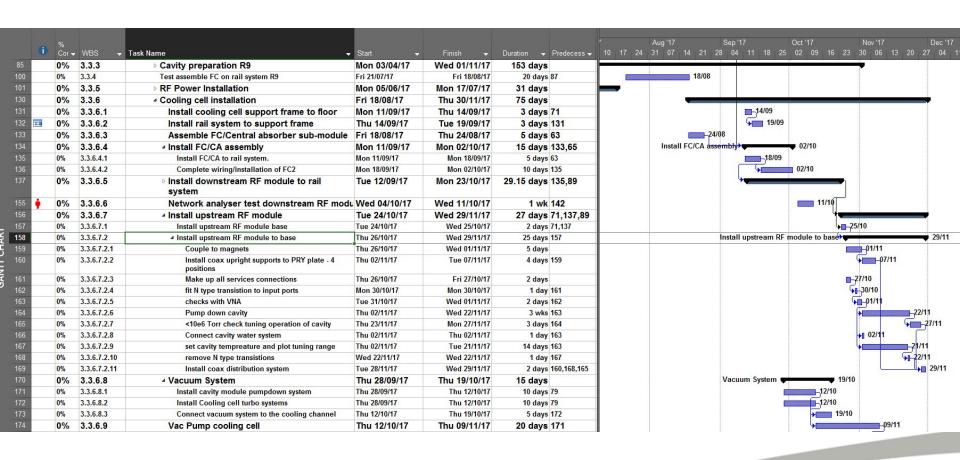


Base Plates

D	% Cor √	WBS ▼	Task Name ▼	Start ▼	Finish ▼	Duration ▼	Predecess ▼	12 19		il '17 03 10	17 24	Aug 31		21 2	Sep '1 28 04		18 25	Oct '11 5 02		Nov 23 30
	10%	2	⊳ Step IV	Tue 13/09/16	Fri 02/06/17	179 days														
	0%	3	₄ DolC	Tue 31/01/17	Tue 19/06/18	353 days														
(0%	3.1	Shipping	Tue 31/01/17	Mon 05/06/17	90 days		06												
- (0%	3.2	▶ Step IV De-Commissioning	Mon 05/06/17	Wed 06/09/17	67.4 days									_					
(0%	3.3	DolC Installation	Mon 03/04/17	Thu 14/12/17	184 days	63	_									F(1)			
	0%	3.3.1	[▲] MDIC Base plate installation	Fri 21/07/17	Mon 11/09/17	36.75 days		C Base p	late in	stallatio	n 🔻				٠.	11/	09			
(0%	3.3.1.1	Remove step IV false floor plates	Fri 21/07/17	Mon 31/07/17	6.75 days	63					31/0	7							
9	0%	3.3.1.2	Begin drilling and tapping holes in the false floor suffcient for MDIC	Mon 31/07/17	Mon 14/08/17	10 days	66					F		80'						
(0%	3.3.1.3	Fit intermediate surface (tiled steel plates) for the false floor MDIC position	Mon 14/08/17	Mon 28/08/17	10 days	67						¥		28/08					
(0%	3.3.1.4	ToF2/EMR/DS tracker floor plate installation	Mon 28/08/17	Mon 11/09/17	10 days		To	F2/EM	R/DS tra	cker floo	or plate	installa	tion 🔻		11/	09			
(0%	3.3.1.4.1	Install ToF2/EMR/Dtracker base plate	Mon 28/08/17	Mon 11/09/17	10 days	68							4		11/0	9			
(0%	3.3.1.4.2	ToF2/EMR/Dtracker base plate installation complete	Mon 11/09/17	Mon 11/09/17	0 days	70								4	11/	09			
(0%	3.3.1.5	Base Plate & rolling platform work complete	Mon 11/09/17	Mon 11/09/17	0 days	71								4	11/	09			
(0%	3.3.2	△ Return Yoke	Wed 13/09/17	Tue 24/10/17	30 days														•
(0%	3.3.2.1	△ Downstream lower PRY Plates	Wed 13/09/17	Thu 28/09/17	11.75 days	57				E	Downstr	eam low	ver PRY	Plates	-	_	28/09		
(0%	3.3.2.1.1	Installation of PRY starts	Wed 13/09/17	Wed 13/09/17	0 days	72,58									13	3/09			
-	0%	3.3.2.1.2	Fit downstream lower side yoke plates	Wed 13/09/17	Thu 21/09/17	6.75 days	75									H	21/0	19		
	0%	3.3.2.1.3	Install lower PRY end plate to Base plate	Thu 21/09/17	Thu 28/09/17	5 days	76										F	28/09		
(0%	3.3.2.1.4	Downstream lower return yoke installation complete	Thu 28/09/17	Thu 28/09/17	0 days	77											28/09		
(0%	3.3.2.2	Lower PRY Installation complete	Thu 28/09/17	Thu 28/09/17	0 days	78										+	28/09		
	0%	3.3.2.3	Downstream upper PRY Plates	Mon 18/09/17	Tue 24/10/17	26.1 days?						Dow	nstream	upper	PRY PI	ates 🛡	110			24/10
(3.3.2.3.1	Fit downstream upper side yoke plates	Mon 18/09/17	Mon 25/09/17	5 days	135											5/09		
(0%	3.3.2.3.2	Install upper PRY end plate.	Tue 24/10/17	Tue 24/10/17	1 day?	81,134,137													24/10
(3.3.2.3.3	Downstream upper return yoke installation complete	Tue 24/10/17	Tue 24/10/17	0 days	82												100	24/10
(0%	3.3.2.4	Upper PRY Installation complete	Tue 24/10/17	Tue 24/10/17	0 days	83												9	24/10



Cooling Cell





Commissioning

0	% Cor →	WBS →	Task Name	✓ Start →	Finish →	Duration → Predecess →	Aug Sep	Qtr 4, 2017 Oct	Nov D	Q Dec	tr 1, 2018 Jan	Feb	Qtr Mar
	10%	2	⊳ Step IV	Tue 13/09/16	Fri 02/06/17	179 days							
			-										
	0%	3	△ DolC	Tue 31/01/17	Tue 19/06/18	353 days							
	0%	3.1	▶ Shipping	Tue 31/01/17	Mon 05/06/17	90 days							
	0%	3.2	▶ Step IV De-Commissioning	Mon 05/06/17	Wed 06/09/17	67.4 days							
	0%	3.3	△ DolC Installation	Mon 03/04/17	Thu 14/12/17	184 days 63				14/12			
	0%	3.3.1	▶ MDIC Base plate installation	Fri 21/07/17	Mon 11/09/17	36.75 days	11/09						\$
	0%	3.3.2	▶ Return Yoke	Wed 13/09/17	Tue 24/10/17	30 days	_						
	0%	3.3.3	▶ Cavity preparation R9	Mon 03/04/17	Wed 01/11/17	153 days							
	0%	3.3.4	Test assemble FC on rail system R9	Fri 21/07/17	Fri 18/08/17	20 days 87	18/08						
	0%	3.3.5	▶ RF Power Installation	Mon 05/06/17	Mon 17/07/17	31 days							
	0%	3.3.6	▶ Cooling cell installation	Fri 18/08/17	Thu 30/11/17	75 days	—						
	0%	3.3.7	△ Muon timing diagnostic	Fri 24/11/17	Thu 14/12/17	15 days	Muor	timing diagnos	stic	14/12			-
	0%	3.3.7.1	Install Muon timing diagnostic	Fri 24/11/17	Thu 30/11/17	5 days 175			30/1	1			-
	0%	3.3.7.2	Test Muon timing diagnostic no RF	Fri 01/12/17	Thu 14/12/17	10 days 190,8			4	14/12			
	0%	3.4	DoIC installation complete	Tue 07/11/17	Tue 07/11/17	0 days 84,188		•	07/11				
	0%	3.5	△ Commissioning	Tue 07/11/17	Wed 24/01/18	47.25 days	Co	mmissioning 🔽	_		24/	01	
	0%	3.5.1	Cooling Channel magnet Commissioning	Tue 07/11/17	Tue 05/12/17	1 mon 192		4	05/	/12			Š.
	0%	3.5.2	₄ RF Testing	Thu 09/11/17	Wed 24/01/18	45.1 days 174		RF Testing			24/	01	
	0%	3.5.2.1	Test and condition cavities, with B field, 1MW	Thu 09/11/17	Thu 07/12/17	4 wks 192		H	b	7/12			
	0%	3.5.2.2	RF cavity testing with B field complete	Thu 07/12/17	Thu 07/12/17	0 days 196			90 0	07/12			
	0%	3.5.2.3	Test Muon Timing	Fri 15/12/17	Wed 24/01/18	20 days 189			—	-	24/0)1	
	0%	3.6	Combined magnet and operational tests complete	Thu 07/12/17	Thu 07/12/17	0 days 197			40 0	07/12			
	0%	3.7	DoIC Data taking Period	Wed 14/02/18	Tue 19/06/18	90 days 199,10			De	olC Data 1	taking Perio	od)	
	0%	3.8	End of DoIC data taking	Tue 19/06/18	Tue 19/06/18	0 days 200							

