

Master Schedule

& Planning in the coming weeks

Crab Cavities Technical Coordination
Meeting #XXIV

[INDICO: 629221](#)

[EDMS: 17474666](#)

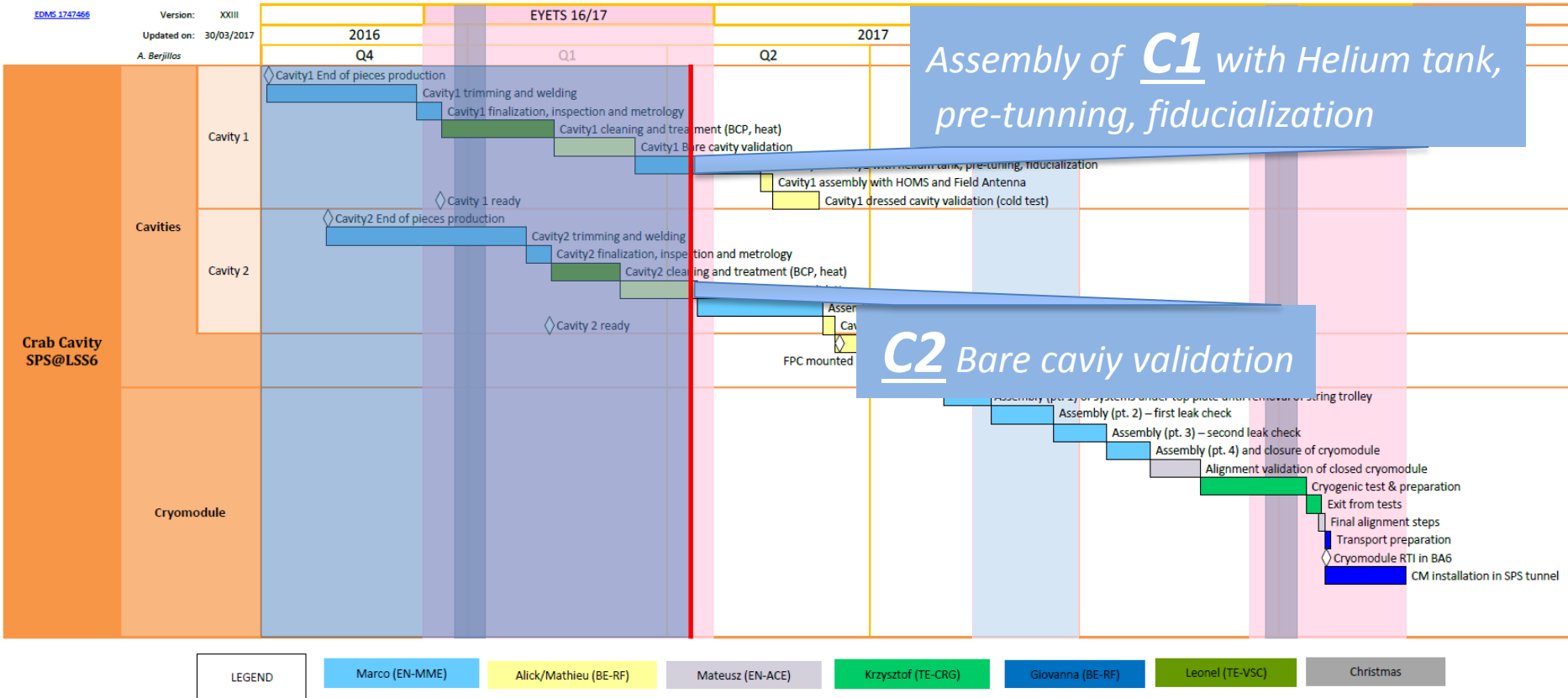
[WP4-SHAREPOINT](#)

By Aurelio Berjillos

10/04/2017

Master Schedule rev.XXIII

EDMS 1747466



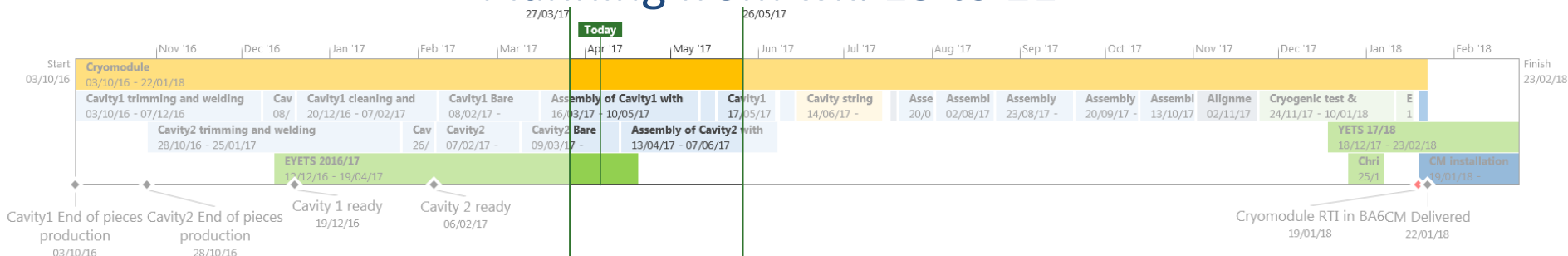
CM delivered in BA6 on **22nd Jan'18**

Changes from the previous version:

- Deleted “Pressure” on the task: Leak test (UI: 261,321,372)
- Added “Pressure” on the task UI: 298

293	↵ Cryogenic test & preparation	24 days	24/11/17	10/01/18	Kzystof (TE-CRG)
292	Welding of internal lines with CM and SM	2 days	24/11/17	27/11/17	Kzystof
294	Leak test of new conections	1 day	28/11/17	28/11/17	Kzystof
296	Insulation and welding of interconnections external envelope	2 days	29/11/17	30/11/17	Kzystof
297	Vacuum pumping	2 days	01/12/17	04/12/17	Kzystof
298	Leak & Pressure test under vacuum	1 day	05/12/17	05/12/17	Kzystof
295	Cooldown and commissioning	14 days	06/12/17	08/01/18	Kzystof

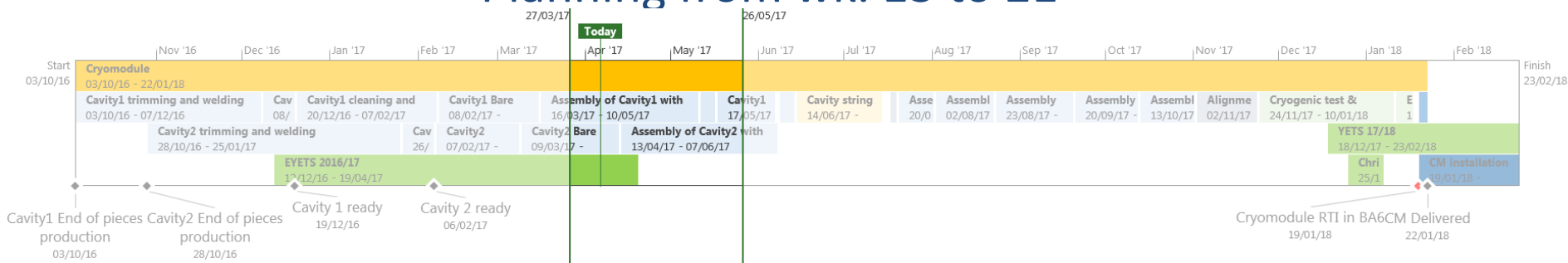
Planning from wk. 13 to 21



Unique ID	Task Name	Duration	Start	Finish	Resource Names
274	▲ Cavity 1	167 days	03/10/16	06/06/17	
41	▲ Assembly of Cavity1 with helium tank, pre-tuning, fiducialization	38 days	16/03/17	10/05/17	Marco (EN-MME)
200	Preparation and machining adaptation parts	7 days	20/03/17	28/03/17	Marco
201	Assembly of cavity with tank and magnetic shield	4 days	29/03/17	03/04/17	Marco
202	RF frequency	0 days	03/04/17	03/04/17	Rama
203	Welding of helium tank	20 days	04/04/17	03/05/17	Marco
196	Coarse tuning, RF frequency	1 day	04/05/17	04/05/17	Rama
197	Metrology and tank fiducialisation	1 day	05/05/17	05/05/17	Marco, Mateusz
393	Leak test	2 days	08/05/17	09/05/17	Marco
134	Transport activity	1 day	10/05/17	10/05/17	
48	▲ Cavity1 assembly with HOMS and Field Antenna	4 days	11/05/17	16/05/17	Alick (BE-RF)
205	Assembly of cavities with HOMS and Field Antenna	3 days	11/05/17	15/05/17	Eric
135	Transport activity	1 day	16/05/17	16/05/17	
51	▲ Cavity1 dressed cavity validation (cold test)	15 days	17/05/17	06/06/17	Alick (BE-RF)
321	Leak tests	2 days	17/05/17	18/05/17	Alick
371	Evacuation & Bakeout	2 days	19/05/17	22/05/17	Alick
322	RF cold test	8 days	23/05/17	01/06/17	Alick

TODAY

Planning from wk. 13 to 21



Unique ID	Task Name	Duration	Start	Finish	Resource Names
275	▲ Cavity 2	152 days	28/10/16	13/06/17	
119	▲ Cavity2 Bare cavity validation	25 days	09/03/17	12/04/17	Alick (BE-RF)
242	Cold RF test	10 days	22/03/17	04/04/17	Alick
243	Warmup	4 days	05/04/17	10/04/17	Alick
244	Removal of test antenna and preparation for transport	1 day	11/04/17	11/04/17	Alick
246	Transport activity	1 day	12/04/17	12/04/17	
120	▲ Assembly of Cavity2 with helium tank, pre-tuning, fiducialization	38 days	13/04/17	07/06/17	Marco (EN-MME)
347	Alternative tuning, RF frequency	1 day	13/04/17	13/04/17	Rama
247	Metrology of cavity	1 day	18/04/17	18/04/17	Marco
248	Preparation and machining adaptation parts	7 days	19/04/17	27/04/17	Marco
249	Assembly of cavity with tank and magnetic shield	4 days	28/04/17	03/05/17	Marco
250	RF frequency	0 days	03/05/17	03/05/17	Rama
251	Welding of helium tank	20 days	04/05/17	31/05/17	Marco

TODAY



ID	Task Mod	Unique ID	Task Name	Duration	Start	Finish	Resource Names
1		273	Cryomodule	320 days	03/10/16	22/01/18	
2		274	Cavity 1	167 days	03/10/16	06/06/17	
3		1	Cavity1 End of pieces production	0 days	03/10/16	03/10/16	Marco (EN-MME)
6		3	Cavity1 trimming and welding	48 days	03/10/16	07/12/16	Marco (EN-MME)
19		18	Cavity1 finalization, inspection and metrology	8 days	08/12/16	19/12/16	Marco (EN-MME)
26		24	Cavity1 cleaning and treatment (BCP, heat)	28 days	20/12/16	07/02/17	Leonel (TE-VSC)
37		33	Cavity1 Bare cavity validation	26 days	08/02/17	15/03/17	Alick (BE-RF)
47		41	Assembly of Cavity1 with helium tank, pre-tuning, fiducialization	38 days	16/03/17	10/05/17	Marco (EN-MME)
58		48	Cavity1 assembly with HOMS and Field Antenna	4 days	11/05/17	16/05/17	Alick (BE-RF)
61		51	Cavity1 dressed cavity validation (cold test)	15 days	17/05/17	06/06/17	Alick (BE-RF)
68		286	Cavity 1 ready	0 days	19/12/16	19/12/16	
69		275	Cavity 2	152 days	28/10/16	13/06/17	
70		115	Cavity2 End of pieces production	0 days	28/10/16	28/10/16	Marco (EN-MME)
73		116	Cavity2 trimming and welding	55 days	28/10/16	25/01/17	Marco (EN-MME)
87		117	Cavity2 finalization, inspection and metrology	8 days	26/01/17	06/02/17	Marco (EN-MME)
94		118	Cavity2 cleaning and treatment (BCP, heat)	22 days	07/02/17	08/03/17	Marco (EN-MME)
105		119	Cavity2 Bare cavity validation	25 days	09/03/17	12/04/17	Alick (BE-RF)
115		120	Assembly of Cavity2 with helium tank, pre-tuning, fiducialization	38 days	13/04/17	07/06/17	Marco (EN-MME)
126		121	Cavity2 assembly with HOMS and Field Antenna	4 days	08/06/17	13/06/17	Alick (BE-RF)
129		284	Cavity 2 ready	0 days	06/02/17	06/02/17	
130		52	Cavity string assembly	23 days	14/06/17	14/07/17	Mathieu (BE-RF)
139		392	FPC mounted	0 days	15/06/17	15/06/17	
140		62	Alignment check, RF frequency check	3 days	17/07/17	19/07/17	Mateusz (EN-ACE)
144		362	Cryostating	74 days	20/07/17	01/11/17	
145		64	Assembly (pt.0) with tuners and cryolines	9 days	20/07/17	01/08/17	Marco (EN-MME)
151		68	Assembly (pt. 1) of systems under top plate until removal of string trolley	15 days	02/08/17	22/08/17	Marco (EN-MME)
157		78	Assembly (pt. 2) – first leak check	19 days	23/08/17	19/09/17	Marco (EN-MME)
162		84	Assembly (pt. 3) – second leak check	17 days	20/09/17	12/10/17	Marco (EN-MME)
167		92	Assembly (pt. 4) and closure of cryomodule	14 days	13/10/17	01/11/17	Marco (EN-MME)
173		101	Alignment validation of closed cryomodule	16 days	02/11/17	23/11/17	Mateusz (EN-ACE)
179		293	Cryogenic test & preparation	24 days	24/11/17	10/01/18	Kzysstof (TE-CRG)
187		309	Exit from tests	5 days	11/01/18	17/01/18	Kzysstof (TE-CRG)
190		355	Final alignment steps	1 day	17/01/18	18/01/18	Mateusz (EN-ACE)
194		111	Transport preparation	2 days	19/01/18	22/01/18	Giovanna (BE-RF)
195		361	CM Delivered	0 days	22/01/18	22/01/18	
196		316	Cryomodule RTI in BA6	0 days	19/01/18	19/01/18	must be ready in
197		291	CM installation in SPS tunnel	26 days	19/01/18	23/02/18	Giovanna (BE-RF)

Main Activities Blocks

CM should RTI in BA6 on 19th Jan'18

Please check the key-date in the pdf file, as double check of your software (Merlin, whatever), to be sure it works properly compared with the official MS project file

Thank You for listening.

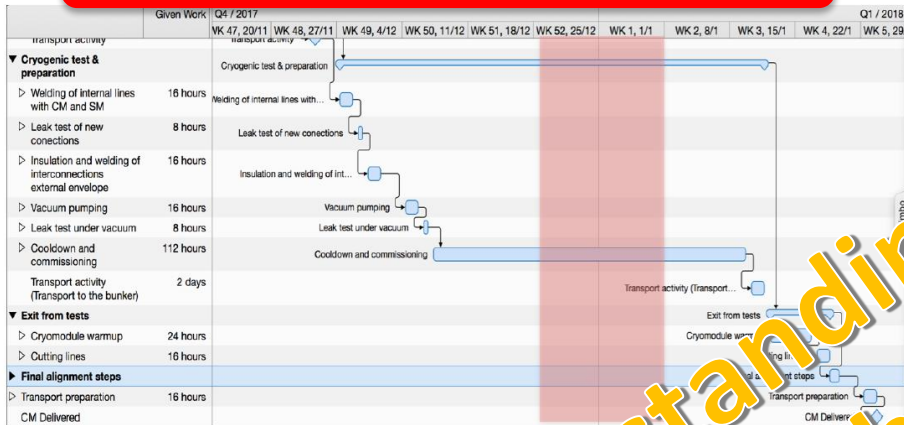


Q's ?

Cryomodule Validation Schedule

Schedule (Version 22)

- CM available for M7 installation: 4th December
- CM ready for SPS Installation: 30th January



Alick's presentation in the review
4 April '17



Misunderstanding / mistake
Mitigation: Double check with the pdf file
uploaded on EDMS, Sharepoint

Cryomodule schedule: Version 22

- Before Christmas break: Installation, connections, leak tests, and synchro tests
- After Christmas: Cool down & leak tests, warm up and disconnection
- Current schedule: No time for RF tests in M7
 - Still, plan for limited RF tests at low power in 2017

