



HIE-ISOLDE Project: Phase 2 Planning

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for the HIE-ISOLDE Project Team

ISOLDE Collaboration Committee Meeting

CERN, 28 June 2016



Planning overview

August – December 2015:

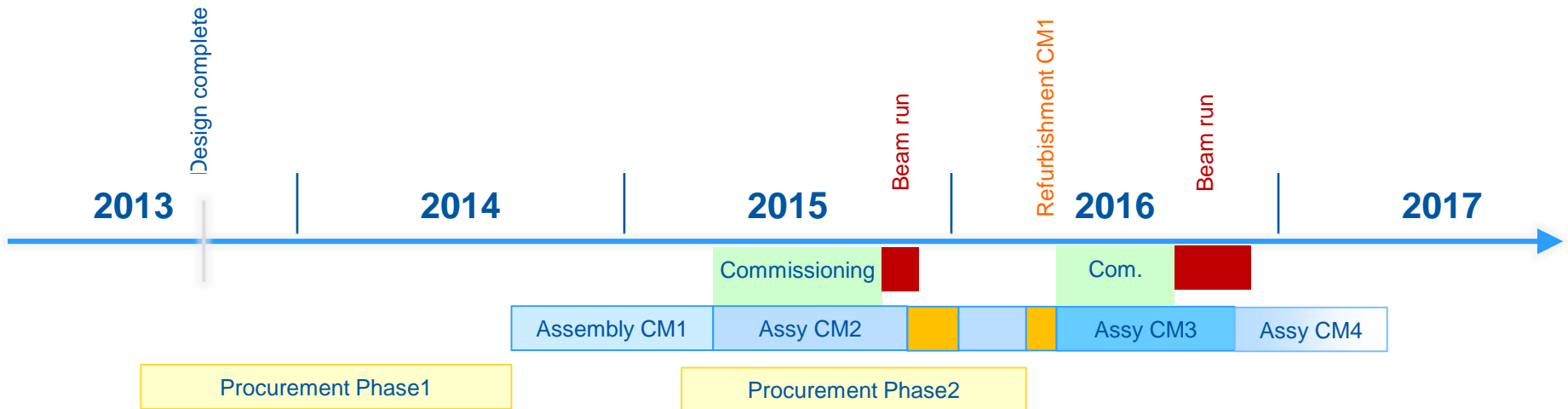
- Design and manufacturing of coupler thermalisations
- CM2 assembly pursued until cavities assembly

2016:

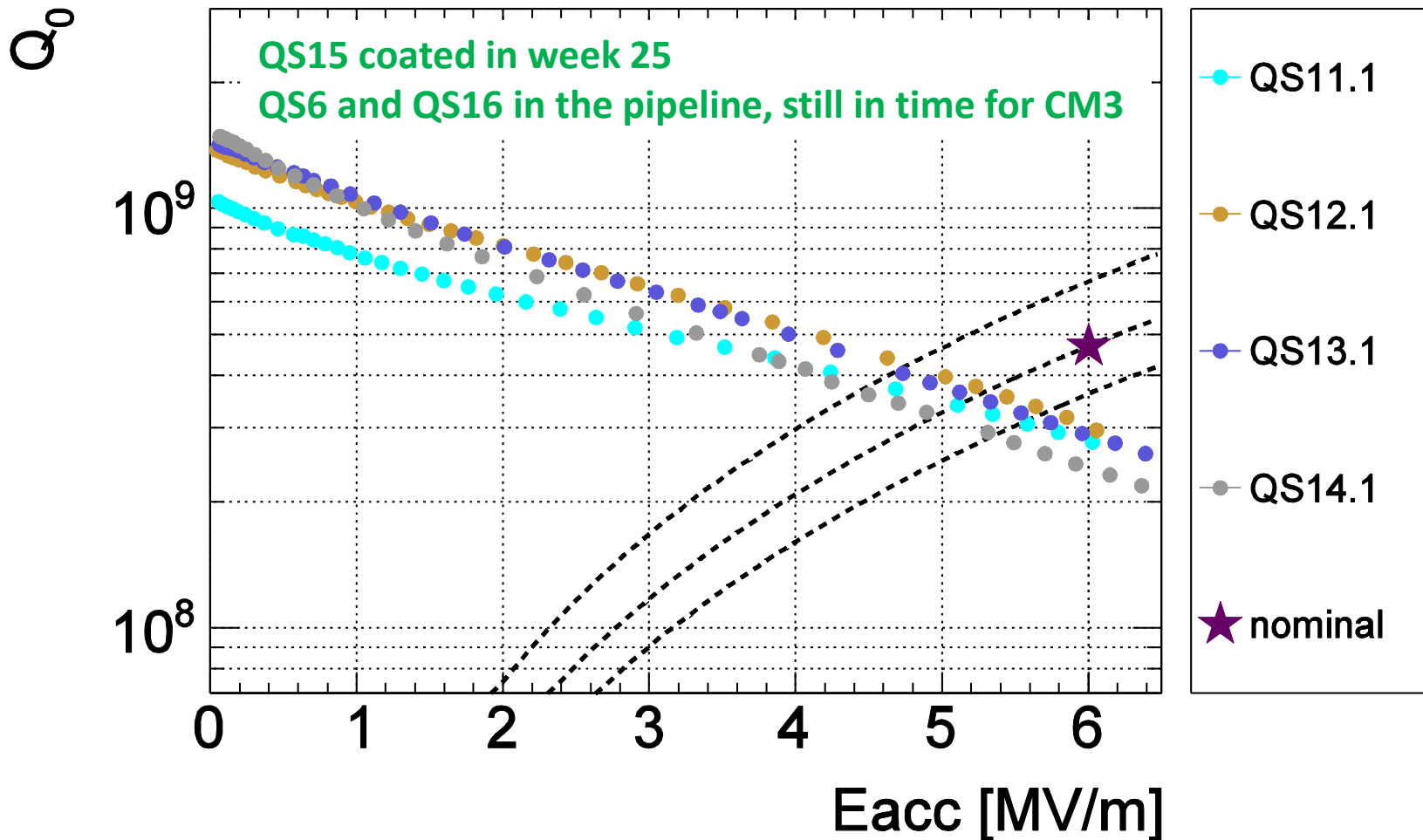
- January: restart CM2 assembly with upgraded design
- February: start refurbishment CM1 in parallel
- End April:
 - CM1 & CM2 installed in the Linac
 - Start CM3 assembly



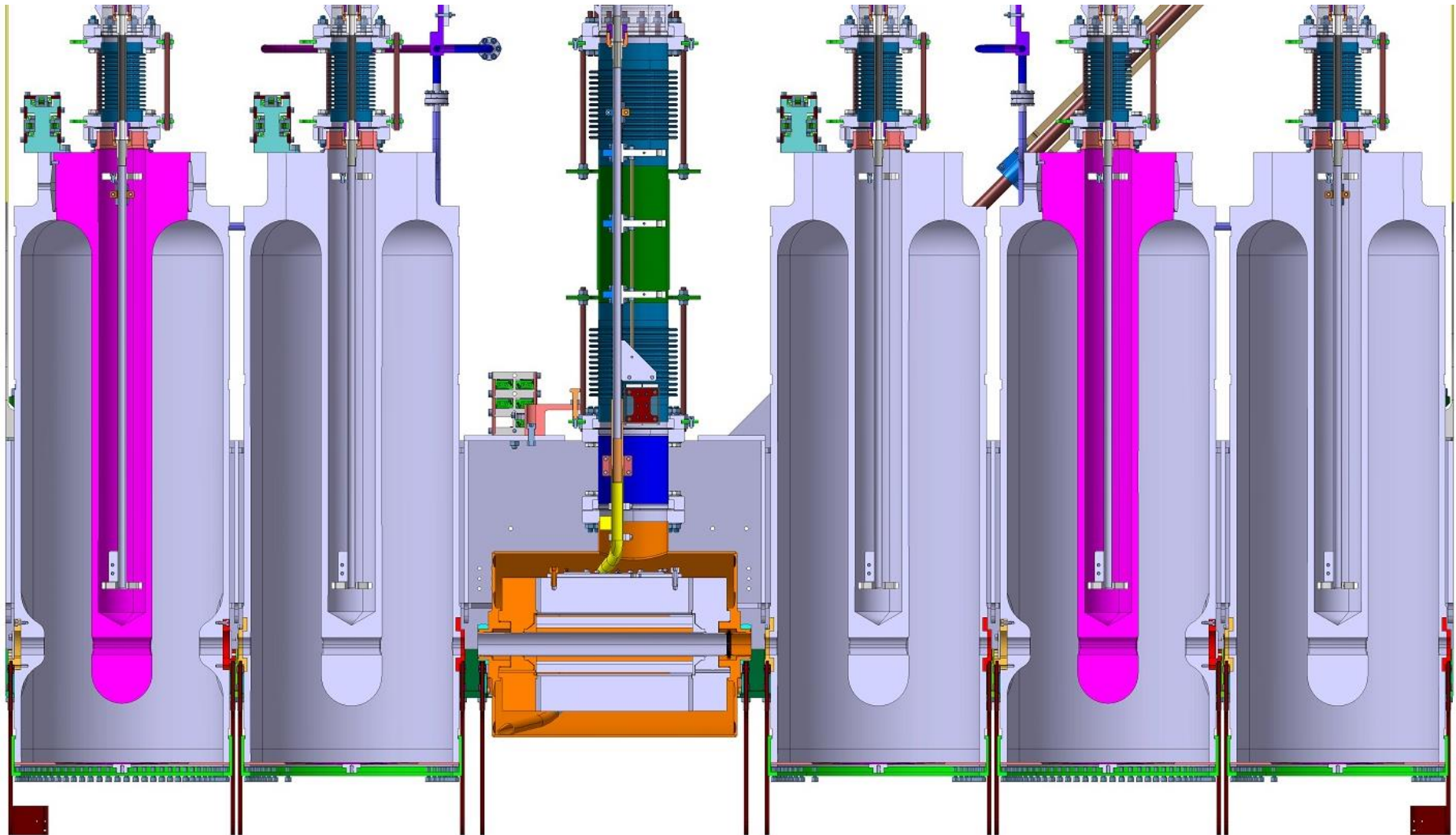
Co-activity CM1 refurbishment / CM2 final testing at SM18



4 out of 5 cavities available (tested) for CM3



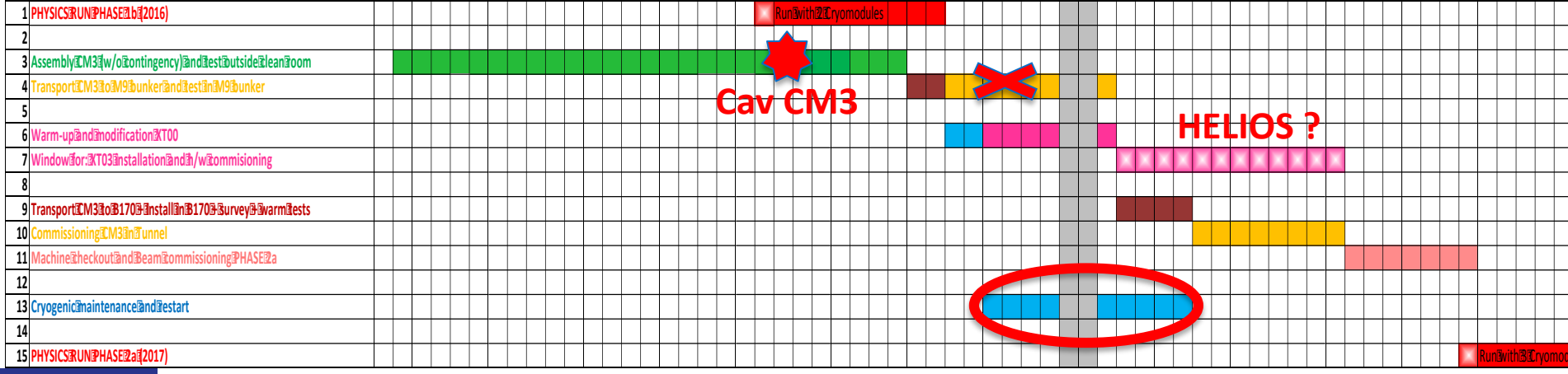
CM4 configuration



Forecast for HIE-ISOLDE Phase 2 (2016-2017)

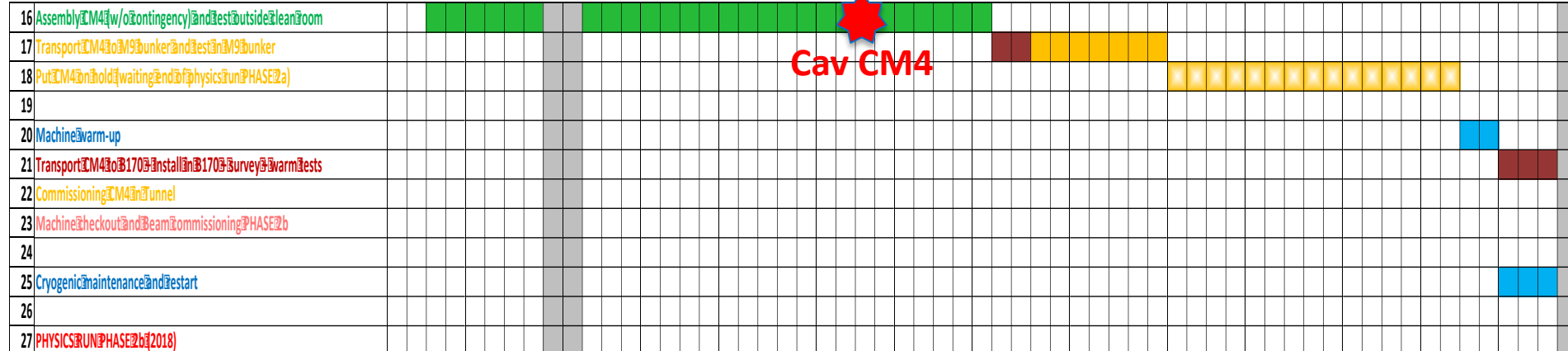
WEEKS	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17																																																
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26

HIE-ISOLDE PHASE 2a

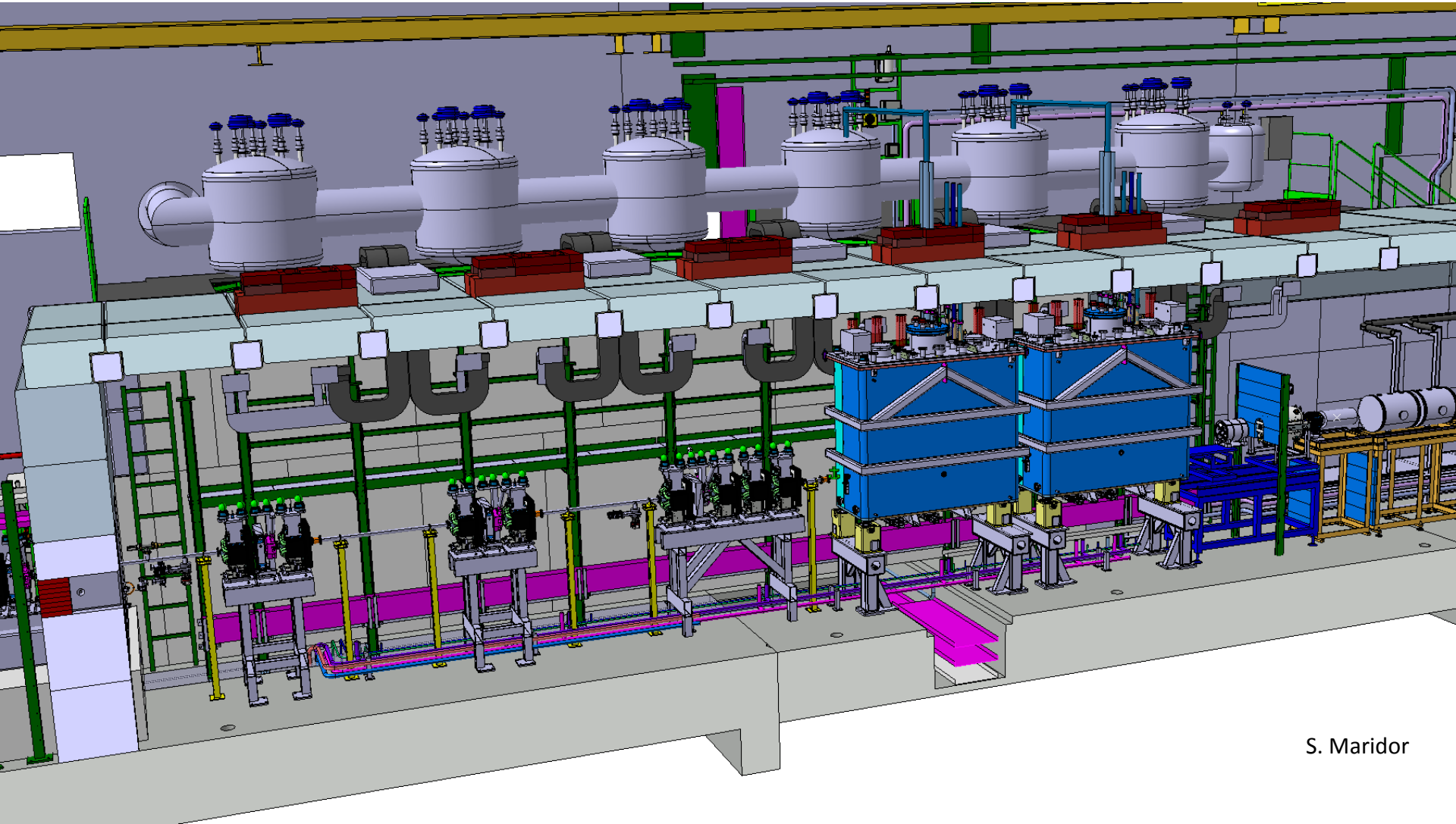


WEEKS	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17																																															
	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52

HIE-ISOLDE PHASE 2b

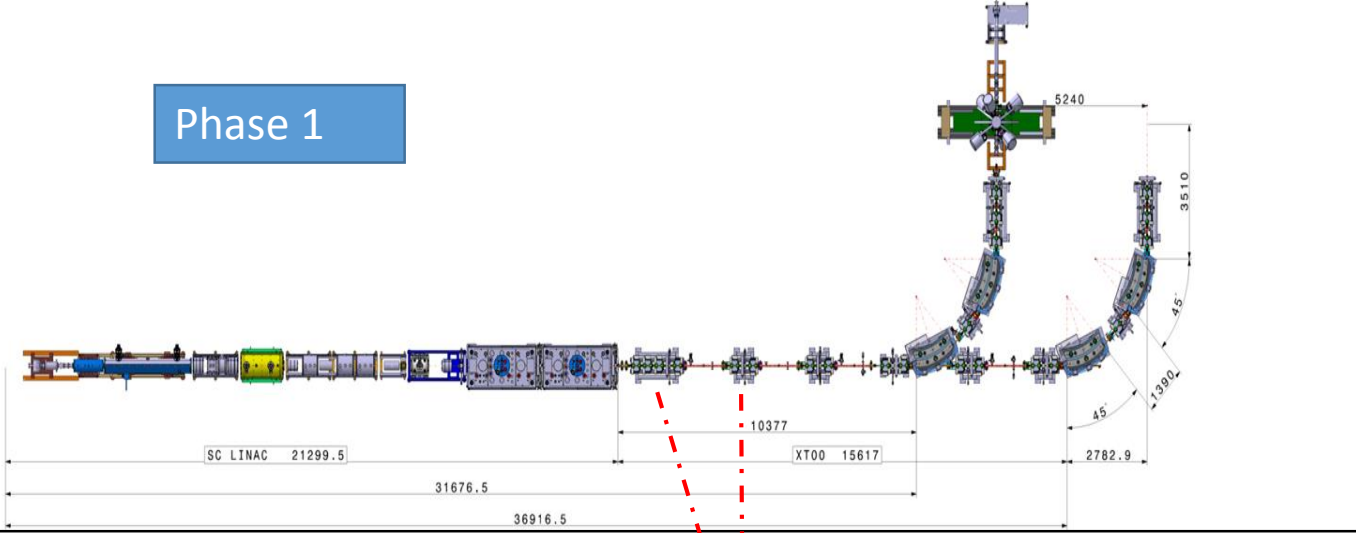


HIE-ISOLDE SC LINAC: Phase 1

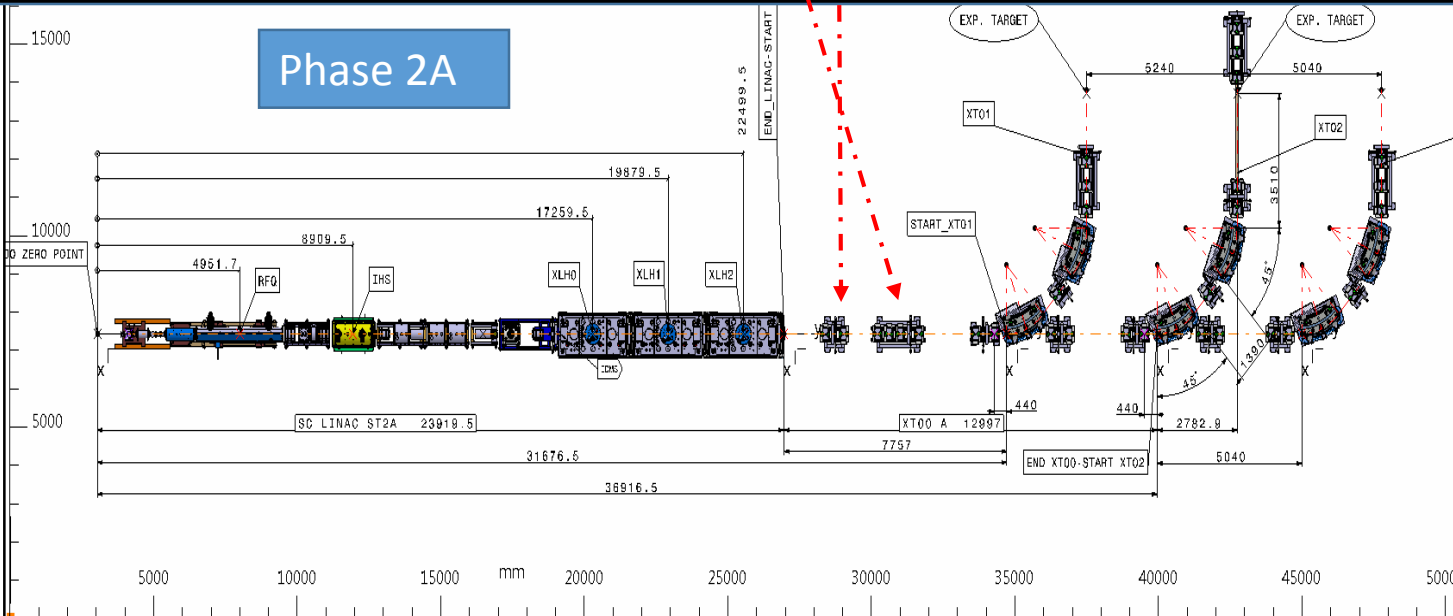


S. Maridor

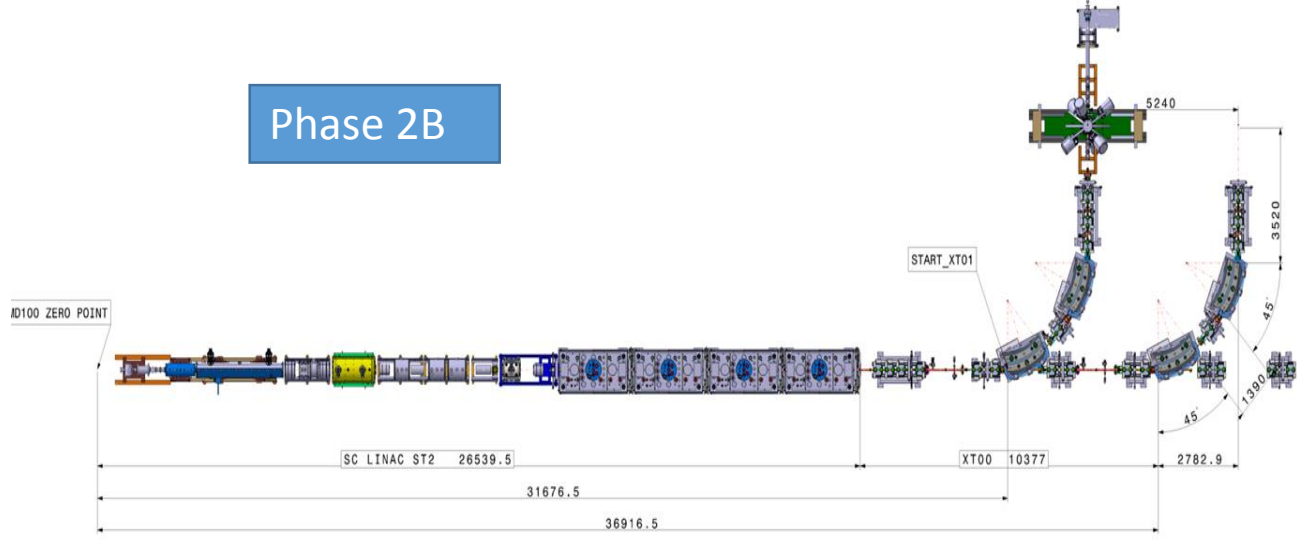
Phase 1



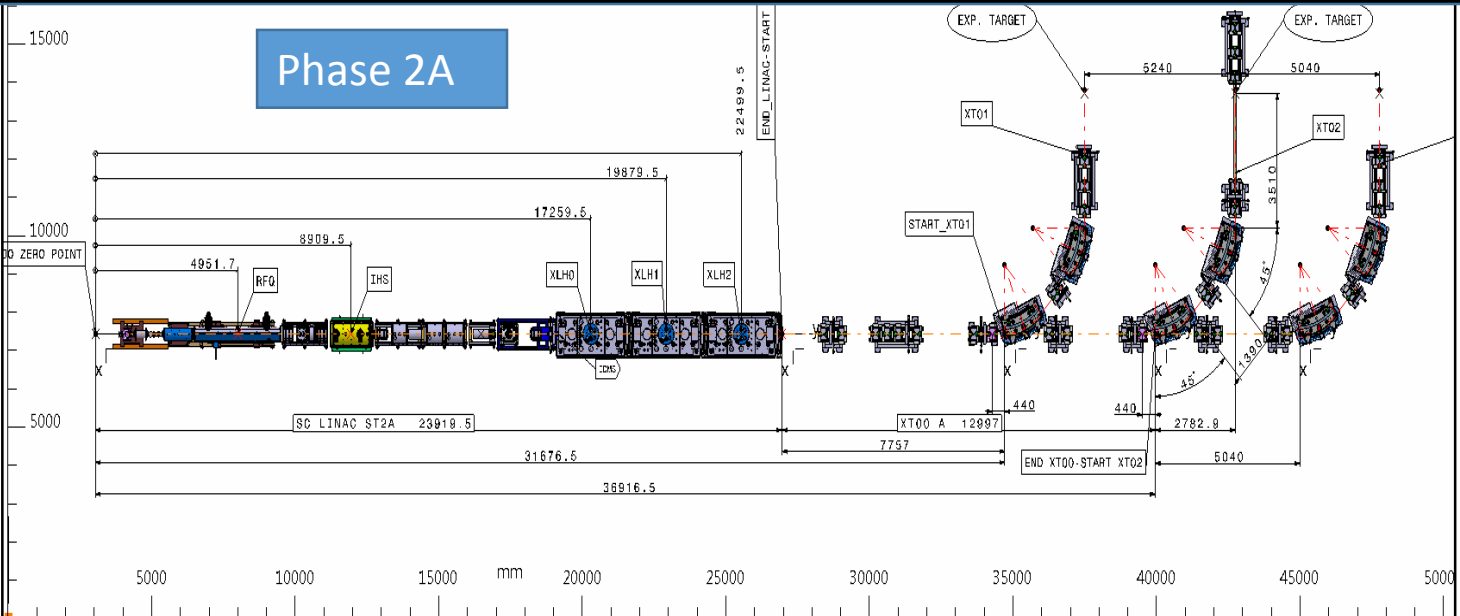
Phase 2A



Phase 2B



Phase 2A



Overall Summary

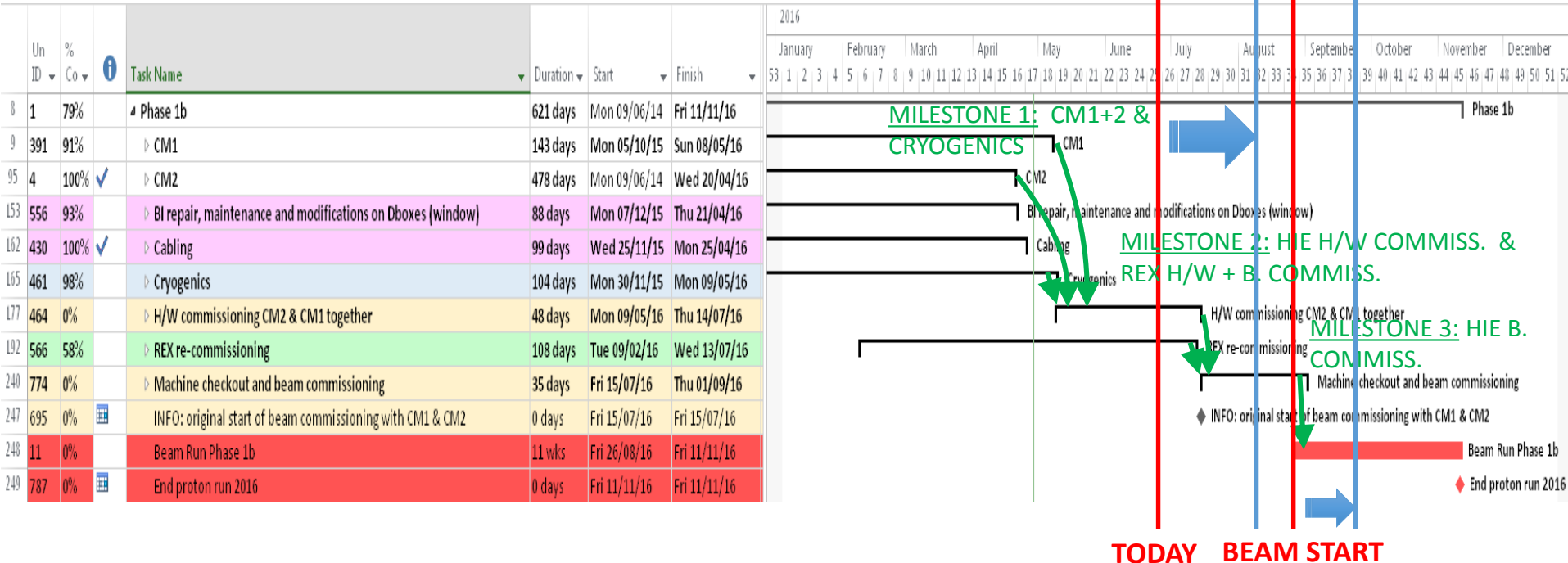
- Planning for Physics with 3 and then with 4 cryomodules chosen such as to maximise beam time in 2017 and 2018 respectively (> 25 wks)
- Main limitation in installing CMs during YETS = restart of cryo plant on time
 - Limit cryo plant shutdown works => early maintenance (incl. cooling plant)
 - Keep SC Linac cold during EYETS => availability of cooling plant
 - Cooldown with 2 CMS this year: 3 wks -> 6 wks
 - Cooldown with 3 or 4 CMs: ?? => rely on experience gained this year !
- Install XT03 during EYETS 2016-2017
- Keep XT02 as is until ISS is installed



Thank you!



PLANNING FOR PHASE 1



- ❖ Extended overhaul of cryo-plant, pollution, fixing leaks, automatization of the process, training of cryo operators => **main cause of delay**
- ❖ HW commissioning on stand by since 3 weeks waiting for cavities to be cold
- ❖ On time achievement of last two milestones is not still possible unless we consider limiting the HW & B commissioning activities
- ❖ First (stable) beam for machine and experiment setup initially planned for end wk35 => **now end wk38**