



NEWS HL-LHC WP8

1. Changes in structure
2. Chamonix
3. Re-baselining
4. Budget estimate



NEWS HL-LHC WP8

Changes in structure

- Ilias Efthymiopoulos joins BE-ABP-HSI



WP8 mandate continues, now with Francisco Sanchez Galan & Sebastien Evrard

WP8 is all of us!!



NEWS HL-LHC WP8

Chamonix

<https://indico.cern.ch/event/448109/>

Thursday, 28 January 2016

08:30 - 12:00 Session 7: HL-LHC

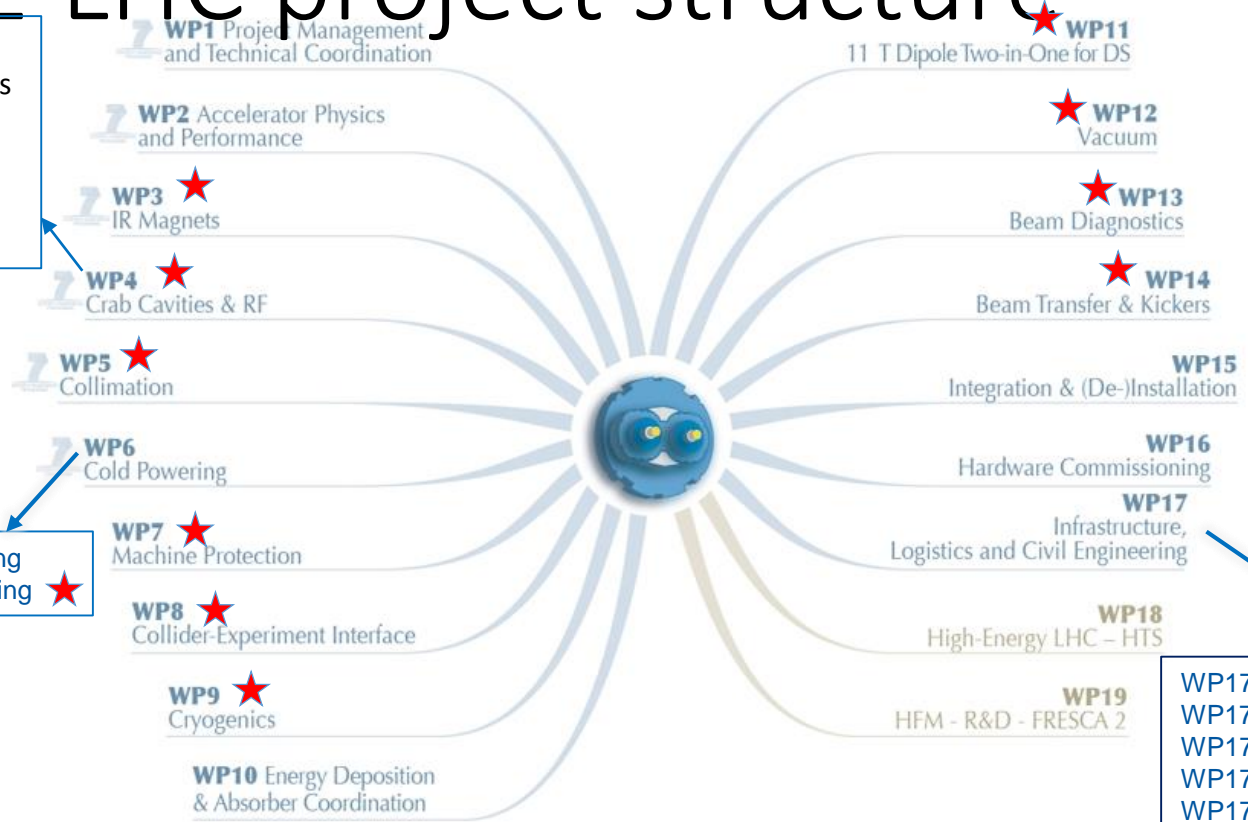
14:00 - 17:30 Session 8: (E)YETS and Long Shutdown 2 Strategy and Preparation

HL-LHC Activities during LS2, highlight of changes with respect to last year (L. Tavian)

HL-LHC project structure

WP4: Mainly SPS/BA6 activities (see Julie and Giovanna presentation)

WP6A Cold powering
WP6B warm powering

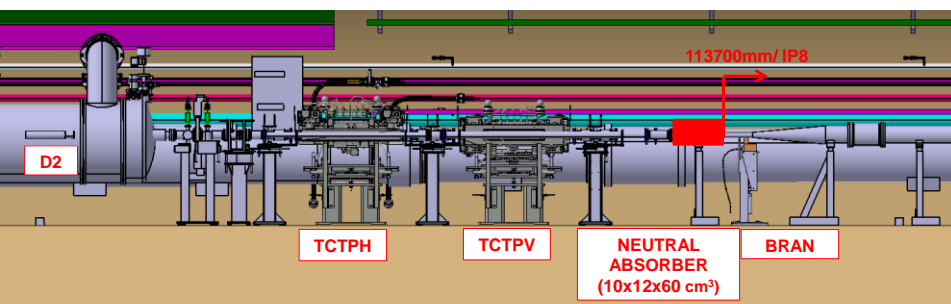


- WP17.1 Civil Engineering
- WP17.2 Electrical distribution
- WP17.3 Cooling and ventilation
- WP17.4 Access & Alarms
- WP17.5 Technical monitoring
- WP17.6 Survey & Alignment
- WP17.7 Transport
- WP17.8 Test/Assembly Facility Cons.
- WP17.9 Logistics & storage
- WP17.10 Operational Safety

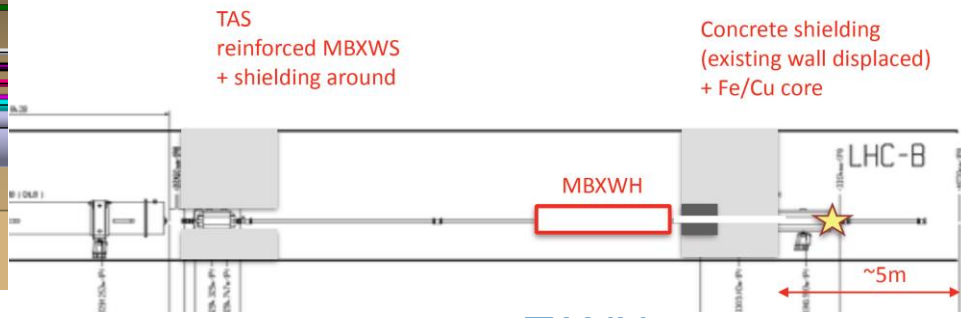
Avoid large upgrade and consolidation activities in test or assembly facilities in parallel with (E)YETS and LS

★ With potential installation activities during YETS, EYETS and LS2

Collider-Experiment interface



Neutral adsorber



TAXN

Chamonix 2014 : LS2 activity proposals

Installation of a neutral absorber in front of D2 in L8

Installation of 2 TAXN for LHCb in P8

Chamonix 2016: LS2 activity proposals

Maintained. (LHC-ECR to be done)

Maintained. (LHC-ECR to be done)

WP 3 4 5 6A.B 7 8 9 10 11 12 13 14 15 16 17.1.2.3.4.5.6.7.8.9.10



LHC Performance Workshop

Session 8: (E)YETS and Long Shutdown 2 Strategy and Preparation.

28th January 2016

<http://indico.cern.ch/event/448109/>

Conclusions

- HL-LHC activities will be present during the LS2 and must be coordinated and included in the LS2 master schedule.

WP	3	4	5	6A.B	7	8	9	10	11	12	13	14	15	16	17.1.2.3.4.5.6.7.8.9.10
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- Some alternatives to the HL-LHC baseline are still under study. Decisions and/or HL-LHC ECR must be done in the coming months to allow sufficient procurement/fabrication time.
- For all (E)YETS & LS2 HL-LHC activities impacting the LHC configuration, LHC ECRs must be issued.
- Civil engineering for underground areas is now integrated in the LS2 and will be on the critical path.
- Post-LS2 personnel safety in HL-LHC underground areas has to be addressed. Decision has to be taken in collaboration with HSE. Option 3 seems more attractive but the impacts on LHC, on additional works and on LS2 schedule must be studied more in detail.
- Remarks: If all the addressed HL-LHC LS2 activities are accepted, the warm-up of 7/8 LHC sectors will be required.

S12	S23	S34	S45	S56	S67	S78	S81
11 T or alt.	11 T or alt.	Cryo	Cryo	Q5	11 T Q5	11 T	





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Rebaselining exercise

Targets: (25 Feb 2016)

- Trace the changes that have been endorsed since the C&S review 2015 which have an impact on the Baseline
- Prepare the EVM for the project.



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Rebaselining exercise

What to include

- Rescheduling/cost re-profiling due to LS2-LS3 shift
- Any rescheduling, internal to your WP, in particular delays in the acquisition process and changes of scope.



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Rebaselining exercise

Outcome

List of changes will serve as basis to issue the HL-LHC ECRs

Impact on costs will serve as basis to modify the APT data and will be further used for the next C&S review

Impact on the Schedule - will serve as basis for the change of the master Schedule

List of deliverables for the next 3 years based on your purchasing strategy



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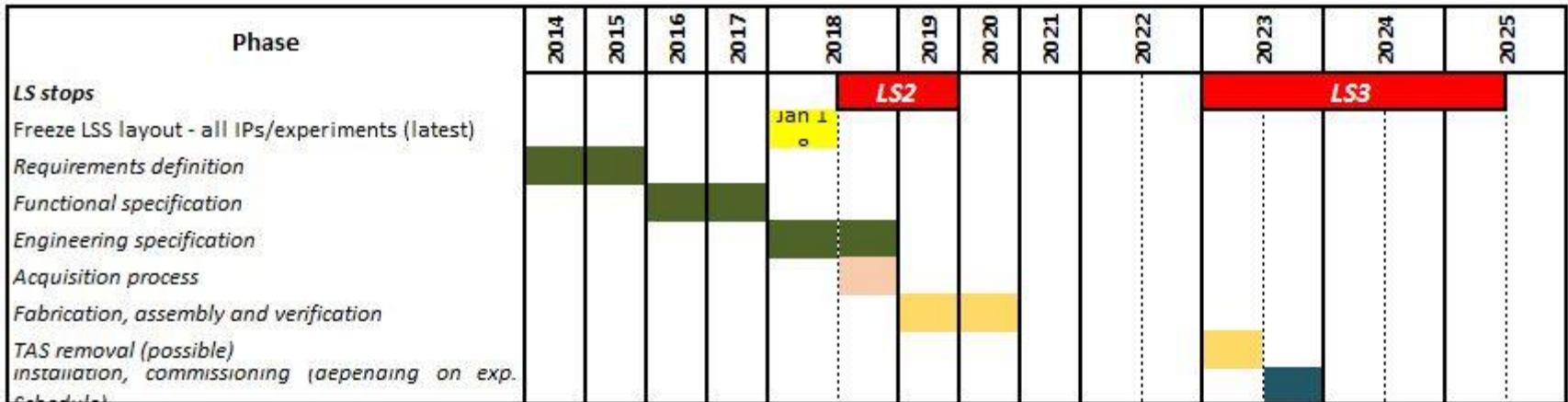
Budget estimate

PBS	Type	LOC	WP8 Activities summary	Project budget
0	M4P	LHC	Designer work	324,000.00
1		IP1	Removal of existing TAS-IP1 (2pc)	324,000.00
2		IP1	Construction of new TAXS-IP1 (2pcs)	477,000.00
3		IP1	Installation of new TAXS-IP1 (2pcs)	195,000.00
4		IP5	Removal of existing TAS-IP5 (2pc)	300,000.00
5		IP5	Construction of new TAXS-IP5 (2pcs)	462,000.00
6		IP5	Installation of new TAXS-IP5 (2pcs)	195,000.00
7		IP1/IP5	Removal of existing TAN (4pcs)	346,000.00
8		IP1/IP5	Construction of new TAXN (4pcs)	2,767,000.00
9		IP1/IP5	Installation of TAXN (4pcs)	279,000.00
10		IP8	Dismantling works for TAXN installation	
11		IP8	Construction of new TAXN (2pcs)	691,000.00
12		IP8	Installation of TAXN (2pcs)	139,000.00
13		IP8	Construction of new TCDDM (2pcs)	158,000.00
14		IP8	Installation of new TCDDM (2pcs)	8,000.00
15		IP1	Experimental side modifications	419,000.00
16		IP5	Experimental side modifications	174,000.00
total				7,258,000.00

To be discussed with experiments and responsible of main equipment.



Timeline for the TAXS baseline scenario - exchange from TAS to TAXS during LS3.



Last update: February 12, 2015