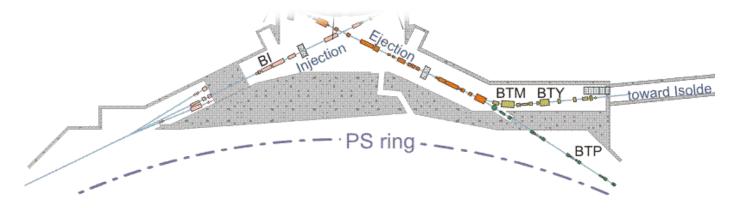




# **Bulding 245 schedule update**

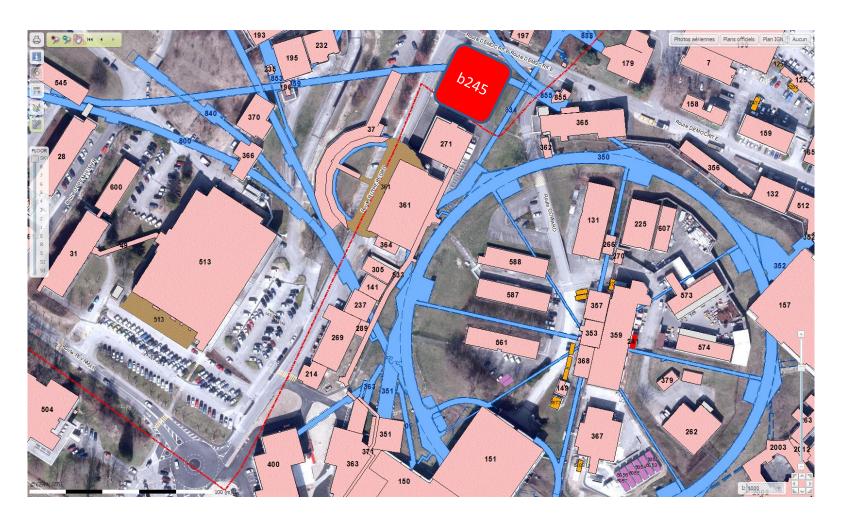


LIU Booster Meeting 30-01-2014
Fulvio Boattini
TE-EPC



#### **Building 245 position**

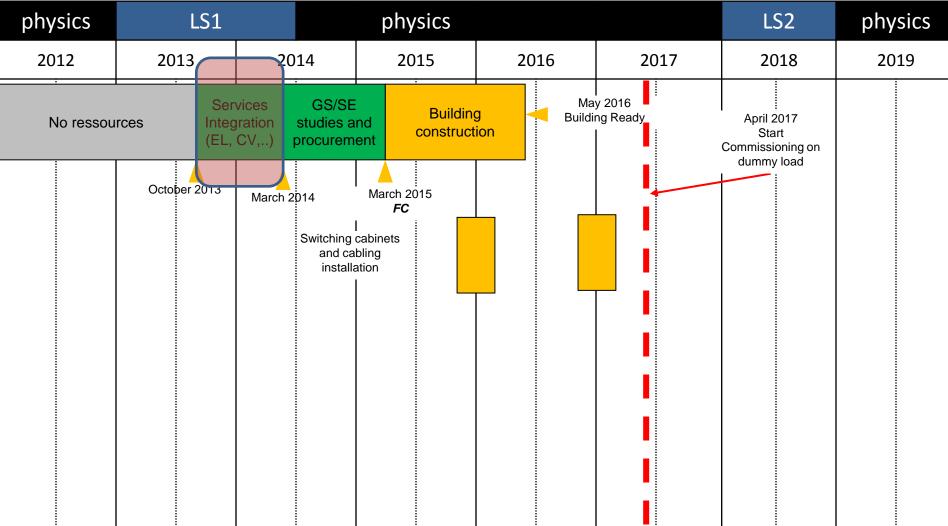






#### **MPSB Time Schedule**





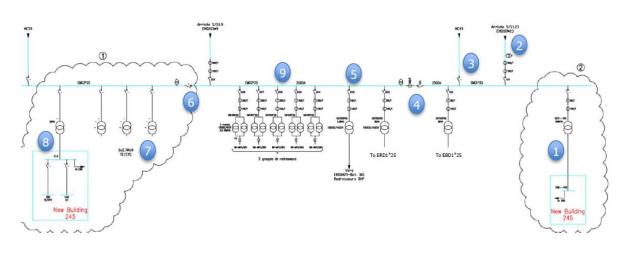


# Building 245: electrical power needs



TYPE OF NETWORK	USER	POWER [kW]	COMMENT	REFERECENCE
Machine	EN/CV	396	Water cooling and towers b.237 and 245	Annex 01
Machine	TE/EPC	392	Auxiliaries	F.Boattini 22/11/2013
Machine	TE/EPC	6750	N.3 transformer 2.7 MVA (2@100%, 1@50%)	F.Boattini 22/11/2013
General services	EN/EL	100	Lights, sockets, OH crane - b.245	F.Boattini 22/11/2013
General services	EN/CV	104	HVAC b.245	Annex 01
UPS	TE/EPC	15	Auxiliaries which need UPS	F.Boattini 22/11/2013
Safety network	EN/CV	10	Smoke extraction	F.Boattini 22/11/2013
Safety network	EN/EL	25	Emergency light, fire detection	F.Boattini 22/11/2013

#### Power needs have been collected and EN/EL worked out a power network layout



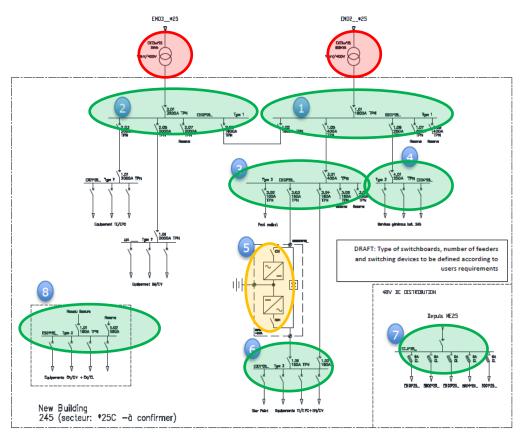
EN/EL needs detailed power departures from TE/EPC and EN/CV



### Building 245: electrical power needs



**EN/EL** prepared the first schematic of the LV network is now available.



Transformers: 18k/0.4kV 2MVA; 800kVA

**Switching cabinets** 

**An UPS** 

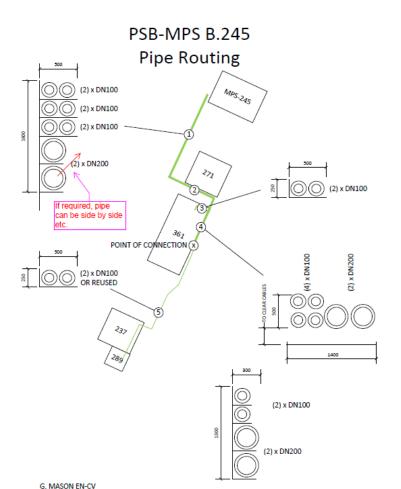


5/12/13

#### **Building 245: cooling pipes**







**EN/CV** proposed a path for the pipeworks

- 2 DN200 + 2DN100 pipes for PSB magnets cooling (from b245 to b361)
- 2 DN100 pipes for chilled water (from b361 to b245)
- 2 DN100 pipes for TT2 cooling (from b245 to b289)



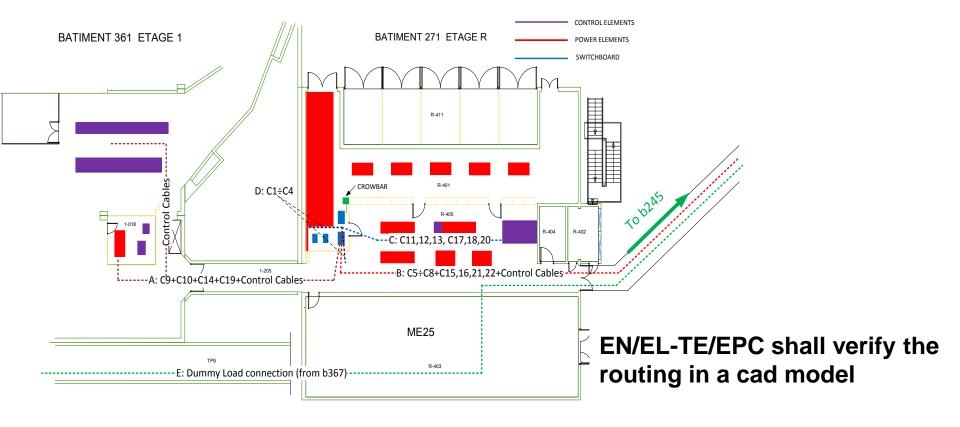
## **Building 245: power cables**



**TE/EPC** presented power cables paths

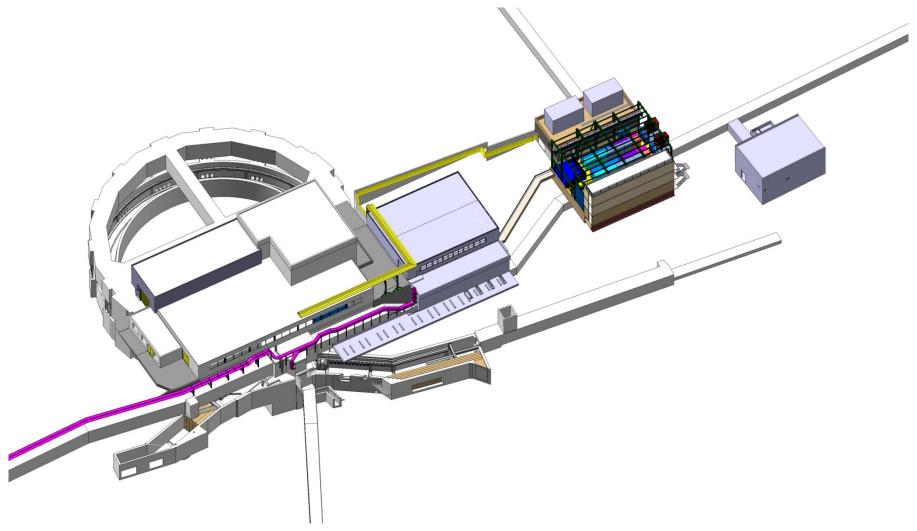
No spare magnets are needed anymore inside b245 as POPS spare magnets will be used for commissioning

18kV cables still to be added



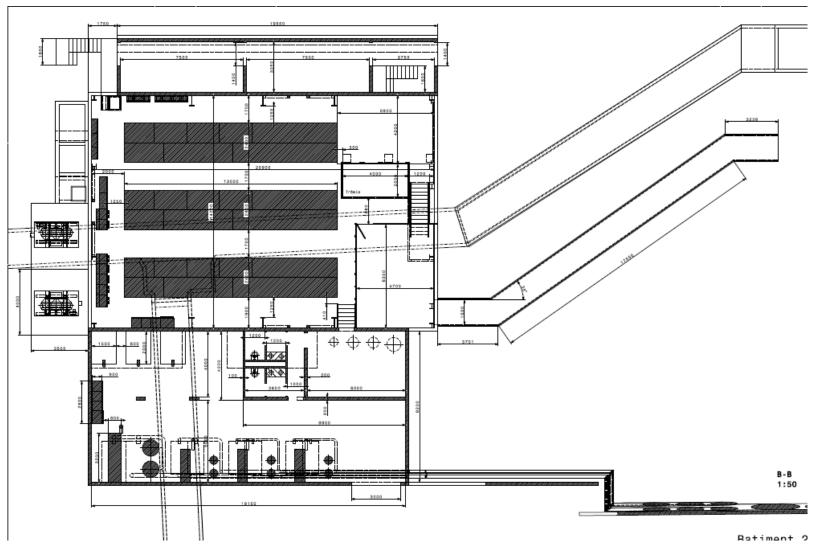










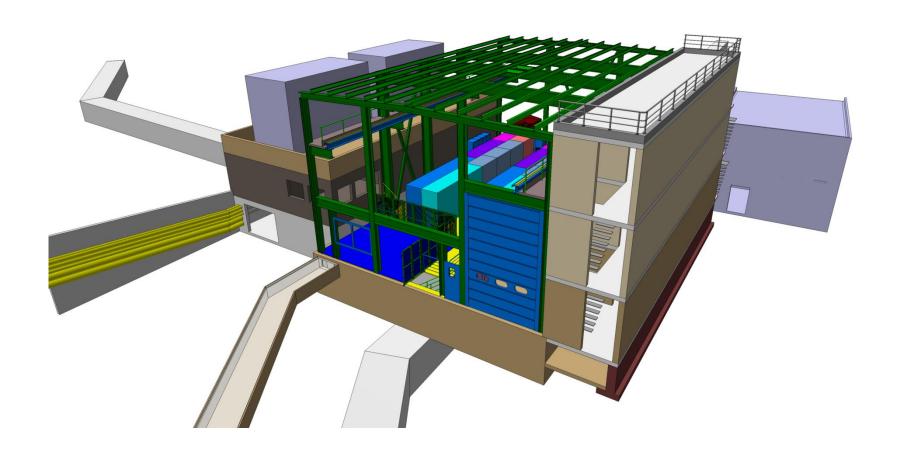




## Building 245 layout (b271 side)





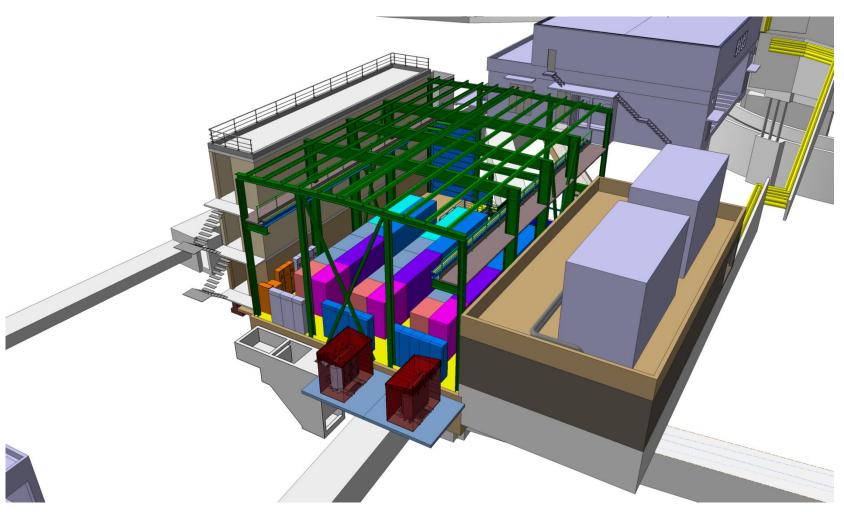




# **Building 245 layout (Isolde side)**

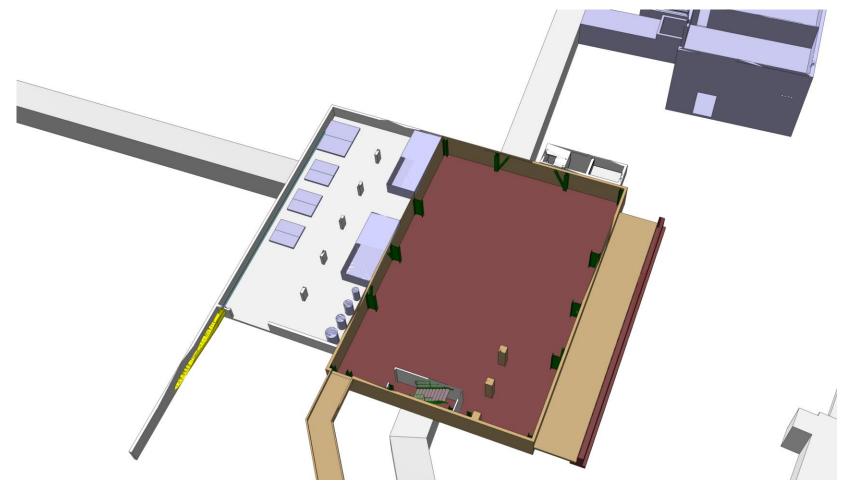








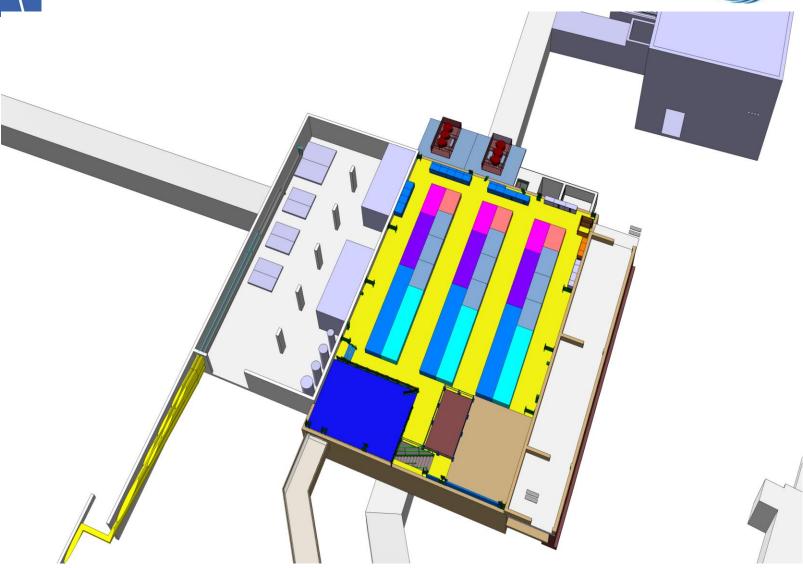






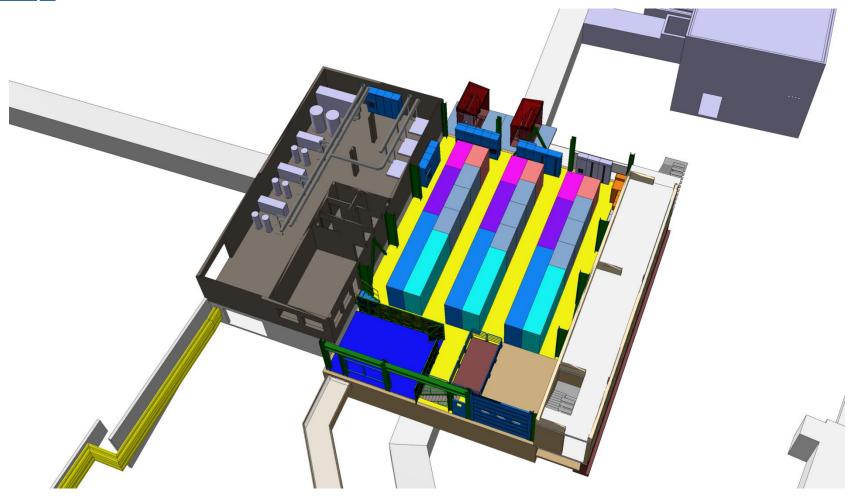






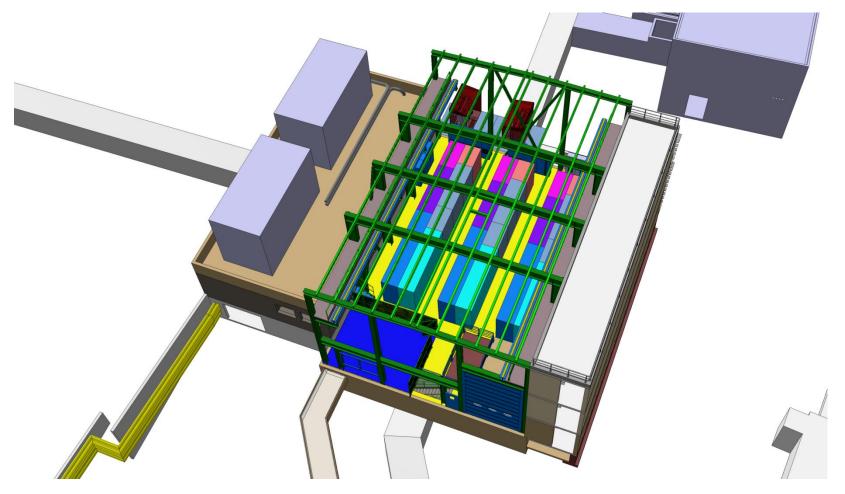








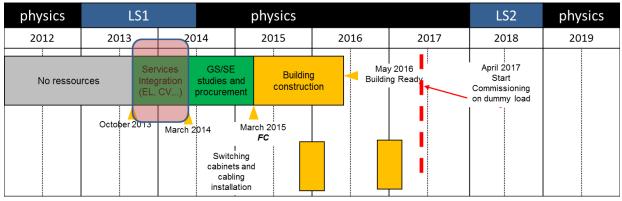






#### **MPSB Time Schedule**





#### **INTEGRATION PROJECT OPEN POINTS:**

- EN/CV needs to work more on layout design of the cooling part
- EN/EL TE/EPC need to find a solution for the EN/EL cabinets layout.
   EN/EL is starting to test two solutions on the 3D model but more detailed input from EN/CV is needed.
- Cost estimation needs to be provided by all services of the building

#### **INTEGRATION PROJECT CRITICAL POINTS:**

 EN/CV announced Glen will have no time for completing the design the cooling components. Michel will replace him during his absence, but in the whole process we take more than one month of delay.



# Bulding 245 schedule update



17

#### THANKS FOR THE ATTENTION

**QUESTIONS?** 





