

EHN1 Extension Integration

Status Report
2nd Detector Integration Meeting

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News

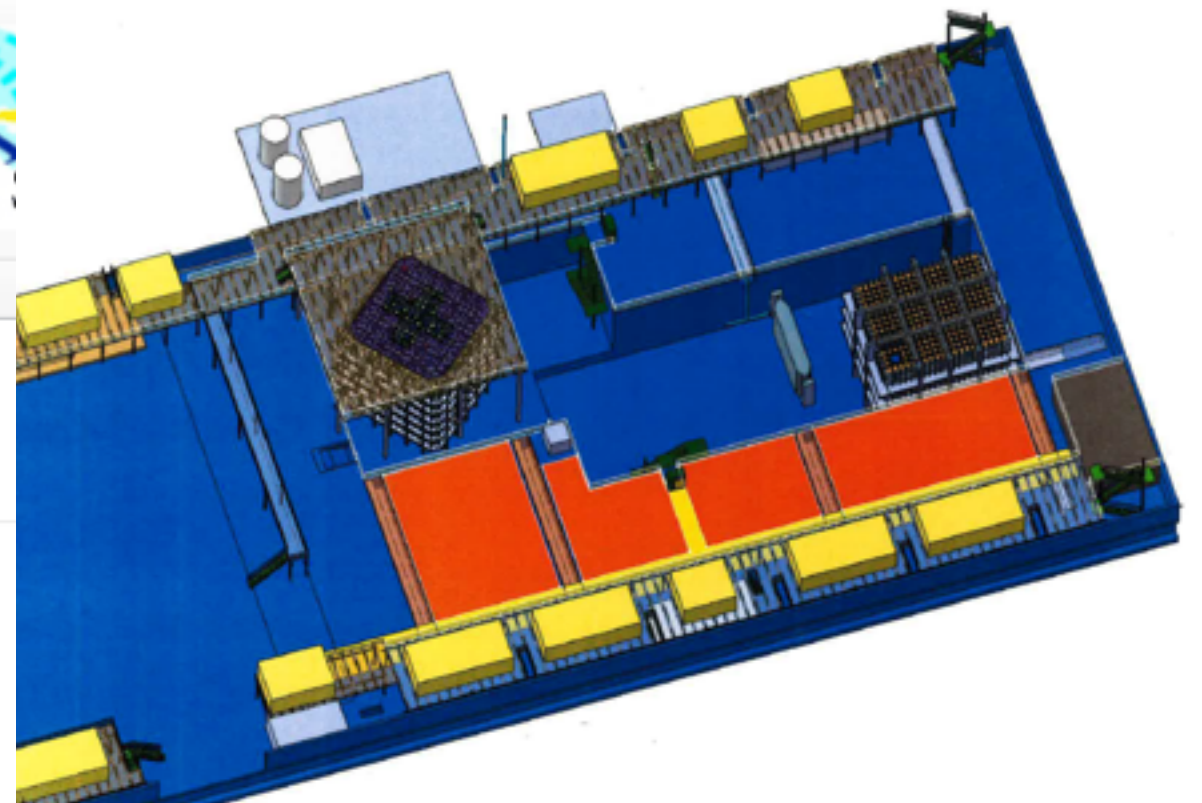
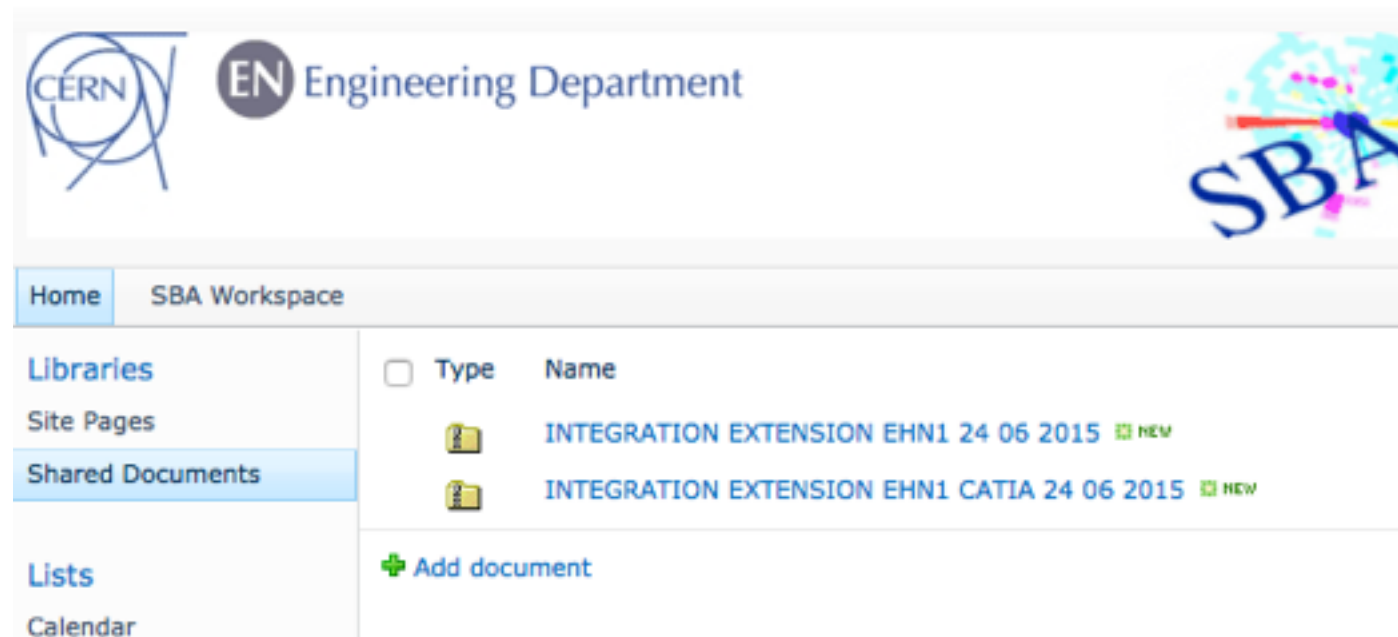
- ▶ Sharepoint web for information exchange
 - <https://cern.ch/sba-workspace/ehn1-ext>
- ▶ Can find links to meetings, documents, and drawings
 - Note: some of the links require CERN login
 - If you can't access part of the information let me know...

EHN1 Integration status - WA105

- ▶ Implemented the new model for the cryostats
 - input from the design team (update today)
 - we'll keep the models synchronised in CATIA to allow easy transfer of modifications
- ▶ Simplified EHN1 extension drawing (step file) available in the web page
 - could be used for conceptual studies related to the detector installation
 - we must assure the proper synchronisation with the CERN integration team
 - ▶ inform the integration team (Vincent, Sylvain) of new versions or studies
 - use the web page as repository for drawing exchange (at least for the moment)
 - ▶ integration and approval of designs should go through the Thursday Detector Integration meeting

EHN1 Integration drawing

- Integration drawing (CATIA model and step file)



- Note : this is a simplified version not including all infrastructure of the building

EHN1 Integration status - WA105

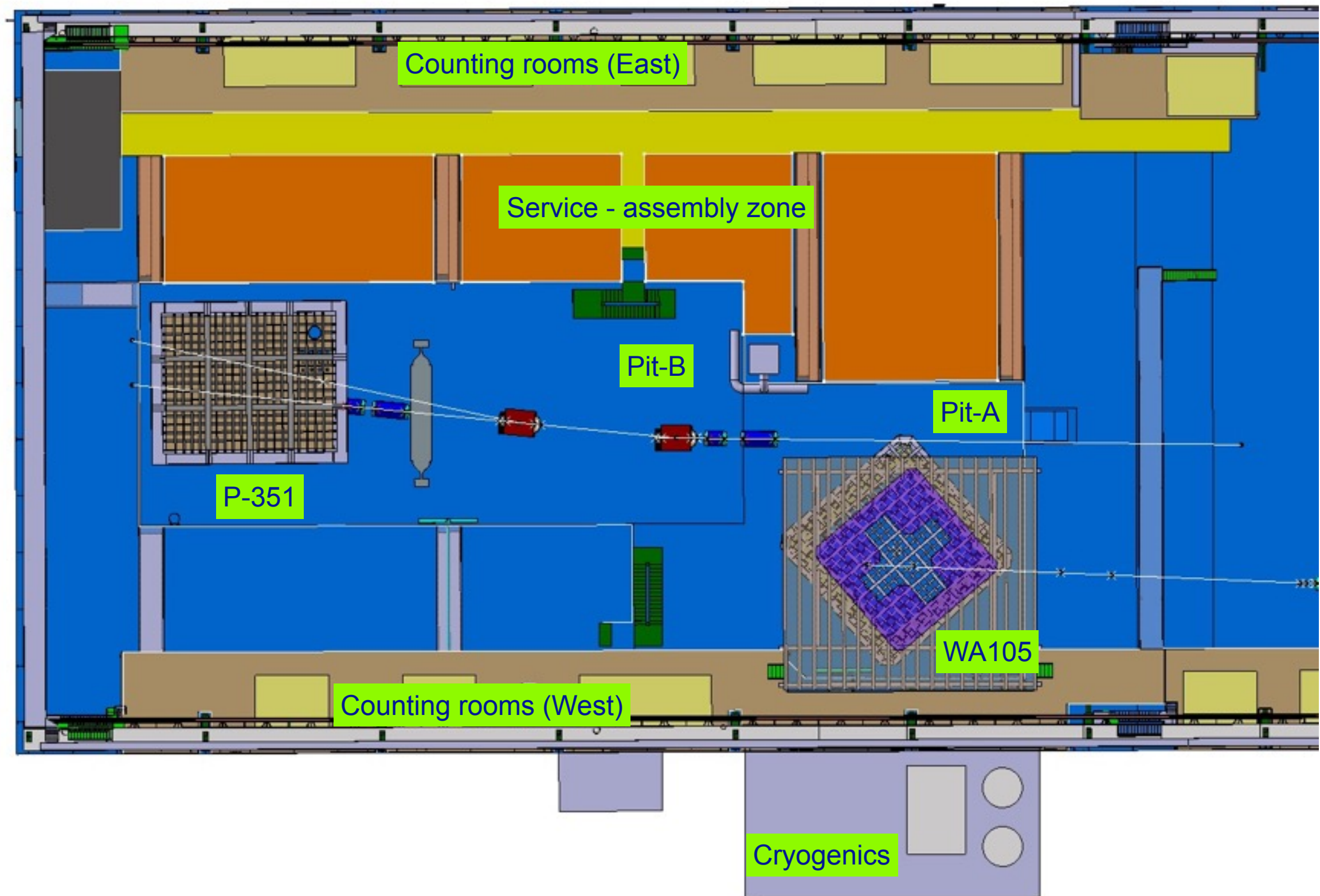
▶ **WA105 cryostat**

- the new iron-structure cryostat is somewhat larger than the previous model → the cryostat is shifted towards East by approx. 800mm
 - ▶ need to re-design the beam line to the new location
 - ▶ affects the passage of the H4 beam extension - new design in progress
- Clean room for assembly and adjacent working/assembly area remain as before
- Presently working on a proposal for the top platform (presentation today)

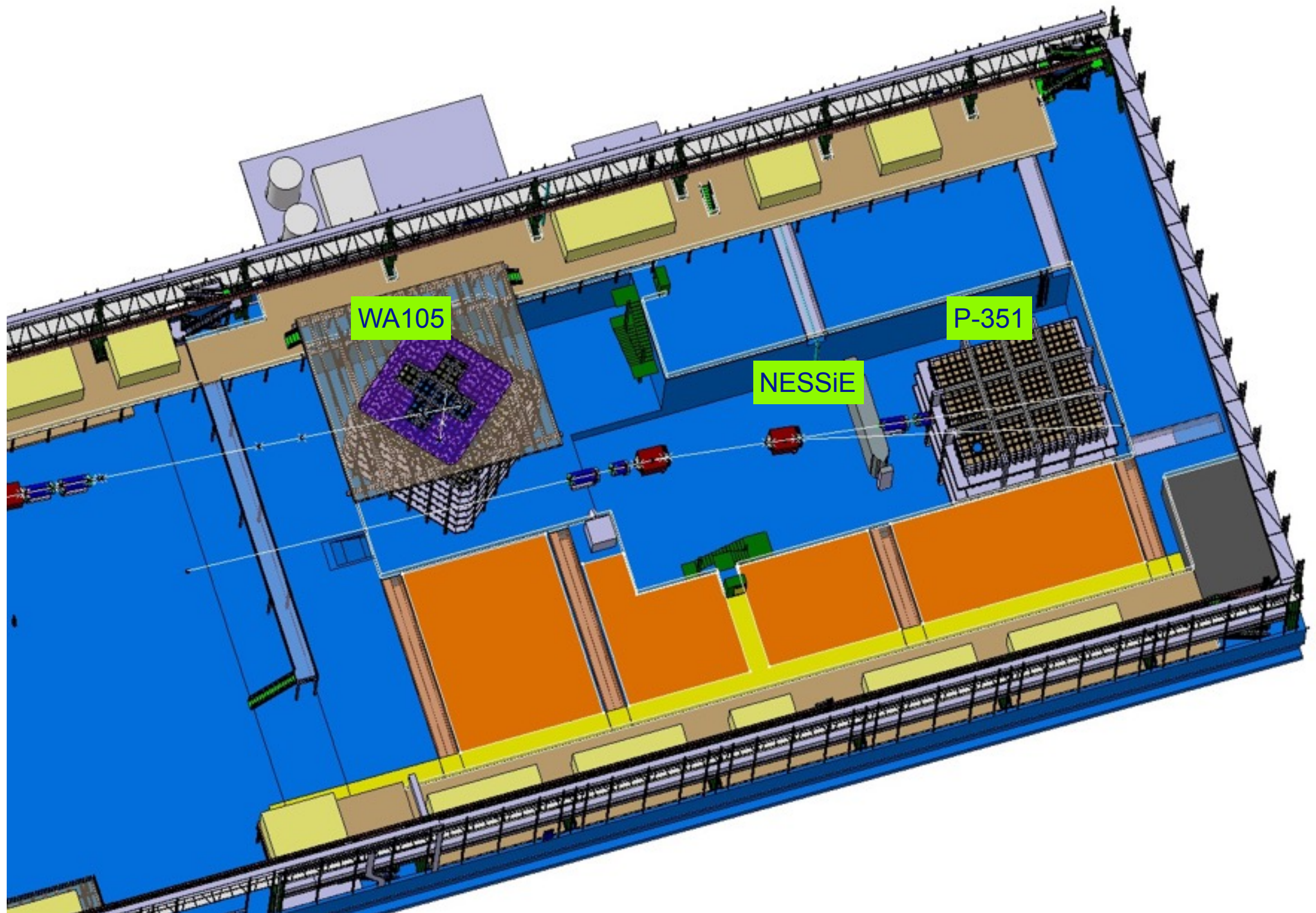
▶ **P-351 cryostat**

- position not changed wrt last time
- new beam design to go through the WA105 cryostat

EHN1 Extension Integration Layout

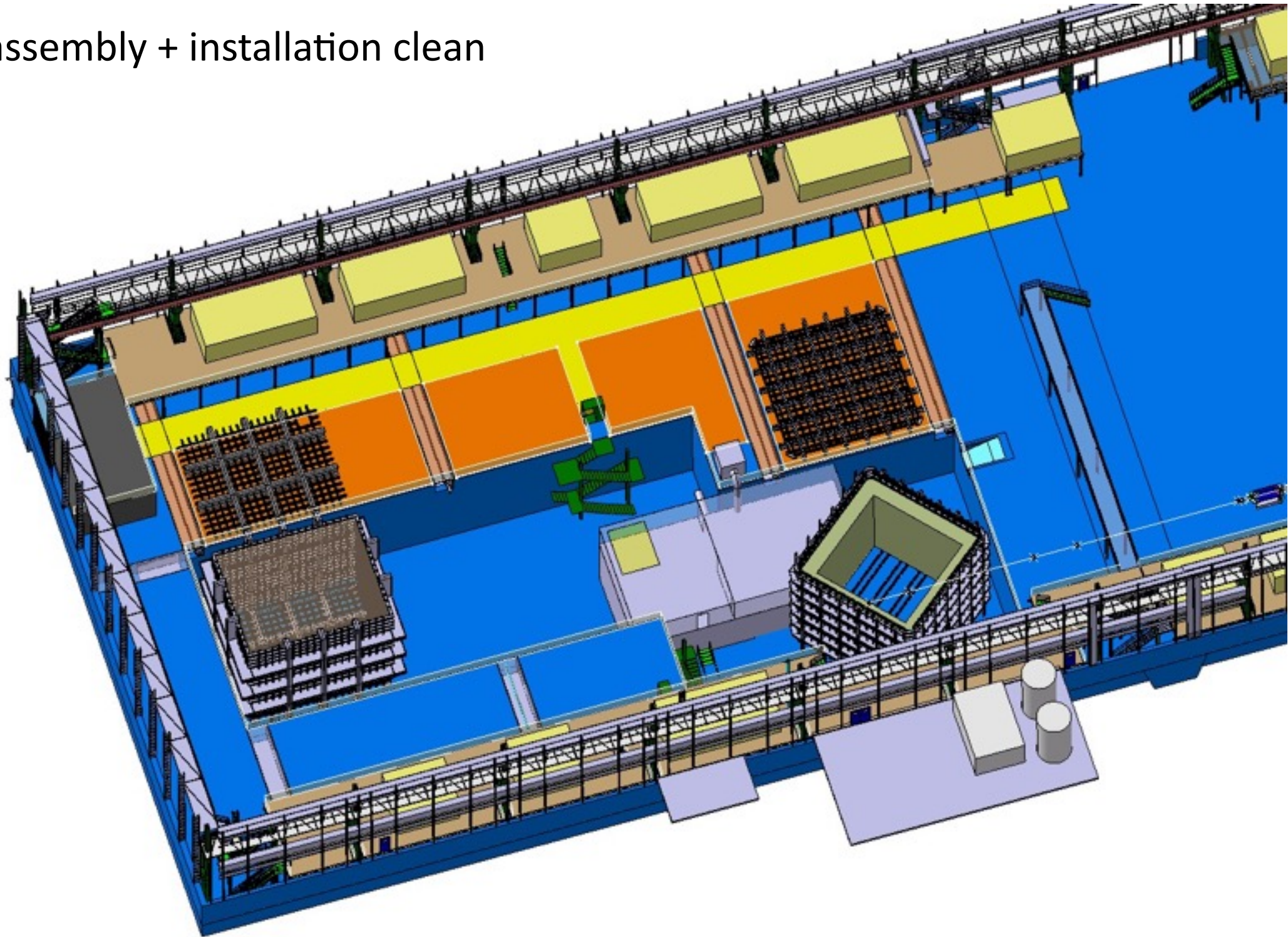


EHN1 Extension Integration Layout

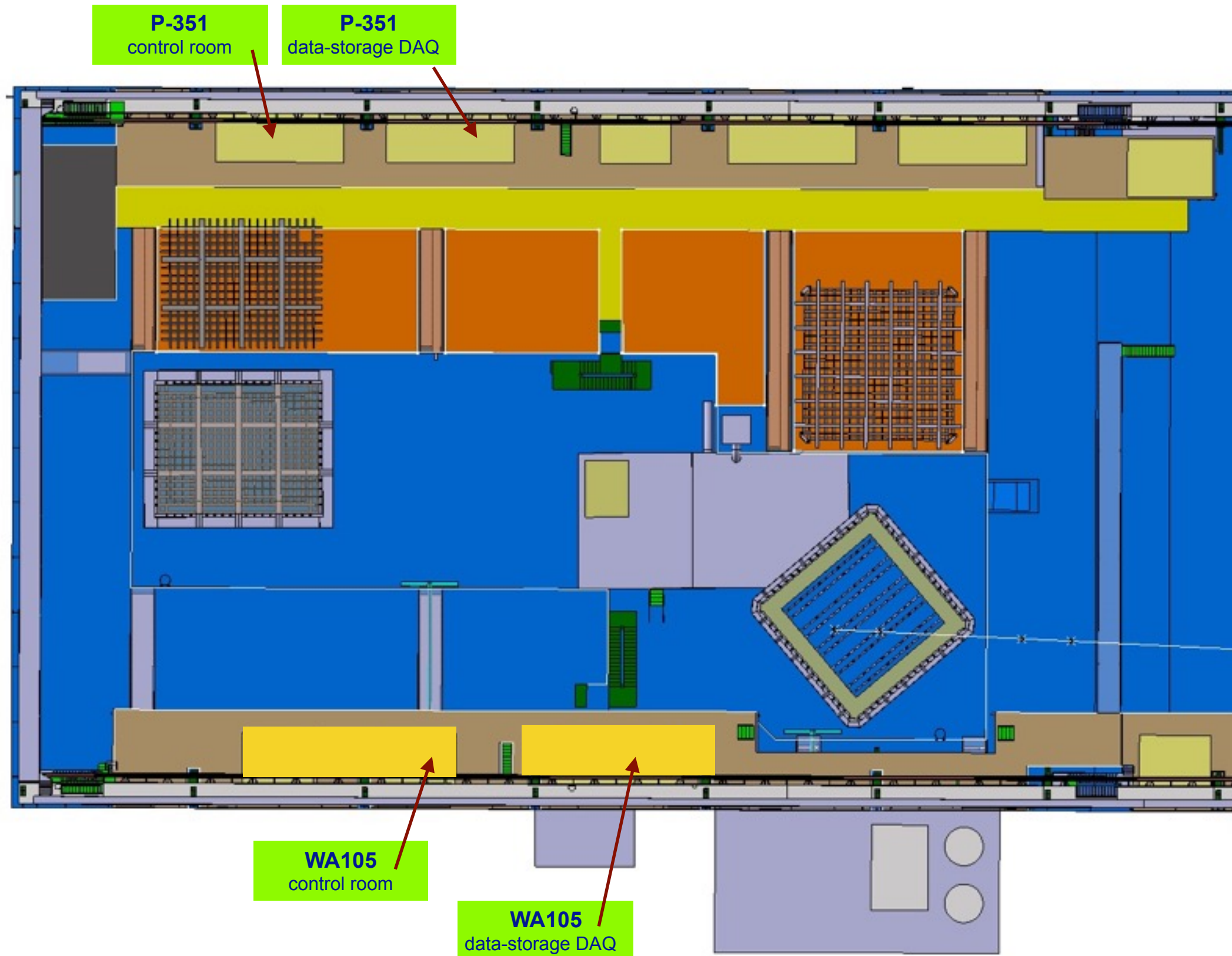


EHN1 Extension Integration Layout

- ▶ WA105 assembly + installation clean room



EHN1 Extension Integration Layout

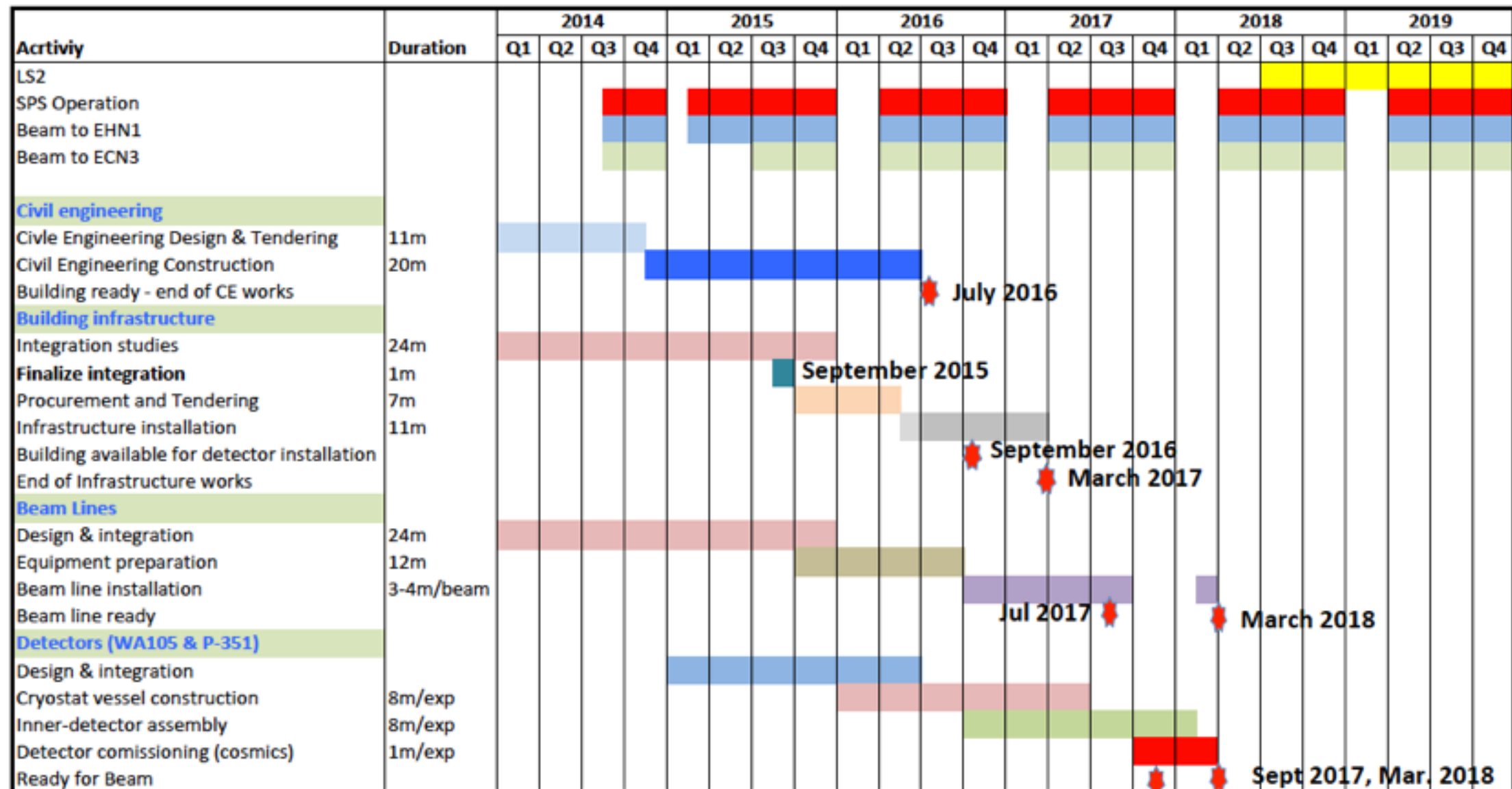


EHN1 Integration status - Next steps

- ▶ Critical : need to work out the space allocation and layout of the cryogenic system
- ▶ Other infrastructure:
 - electrical distribution:
 - ▶ power on top of the platform for racks/equipment
 - ▶ power for DAQ/data-storage system in the adjacent counting rooms
 - ▶ “standard” power (220/380V, 10/16/32A) on platform, counting rooms (PCs. etc.), ground floor and assembly zones
 - network connectivity
 - ▶ “standard” GPN network : few plugs on top platform, counting rooms + wifi in the control room + possibly on the platforms?
 - ▶ discuss with IT the needs and installation for a dedicated data-transfer to computer centre
 - topic in next Detector Integration meeting (in two weeks)
 - cooling system (besides cryo)
 - ▶ ventilation system for clean room of WA105
 - ▶ cooling system for racks in the DAQ/data-storage room
 - ▶ ventilation system for counting rooms
- ▶ Anything else?
- ▶ I will prepare and circulate a document summarising all the technical specifications

we should try to converge and conclude by September'15

Planning timeline



EHN1ExtProject-Timeline v2.0
Last update: ie_02Jul2015

- ▶ This is a first draft proposal, based on the information available so far.
- ▶ We should go through the various parts and define the schedule in details
 - Bastien Rae from EN-MEF-LE maintains the overall planning