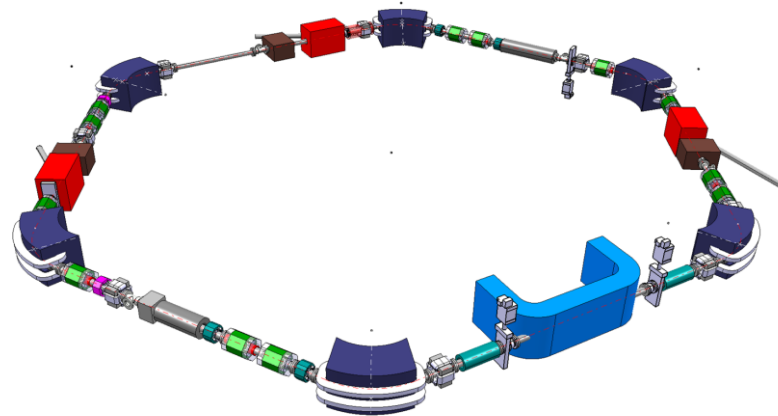


ELENA Integration



ELENA
Extra Low ENergy Antiprotons

- Position of the machine is defined
- Layout of the machine well defined
- Position of elements and envelopes known in general
- Layout naming convention approved (EDMS 1228775)
- Layout drawings version 1 available on CDD
- A number of known issues:
 - BPM geometry not yet compatible with magnetic elements
 - Integration of some vacuum flanges problematic, bellows not yet implemented
 - A (small) number of geometric interferences

- The position of the machine is now defined in a released version 1, available on EDMS



Adobe Acrobat
Document

- Next step is to go through a formal approval
- Then, new versions can only be requested via ECR procedure

- The general layout of the machine is defined in drawing ADLM___0070 released and available on EDMS



Adobe Acrobat Document

- The new iterations will be clearly identified by their release version number



Adobe Acrobat Document



Adobe Acrobat Document



Adobe Acrobat Document



Adobe Acrobat Document



Adobe Acrobat Document

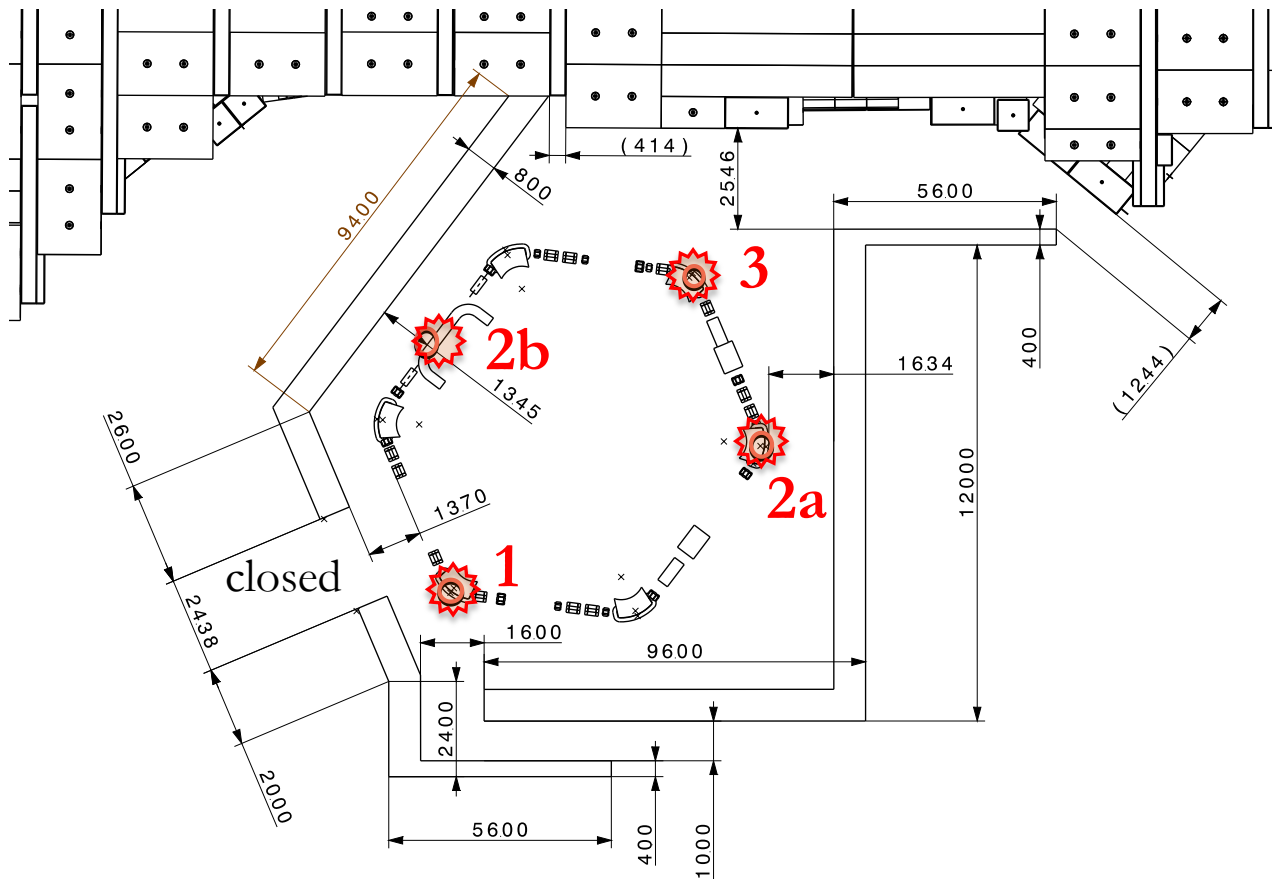


Adobe Acrobat Document

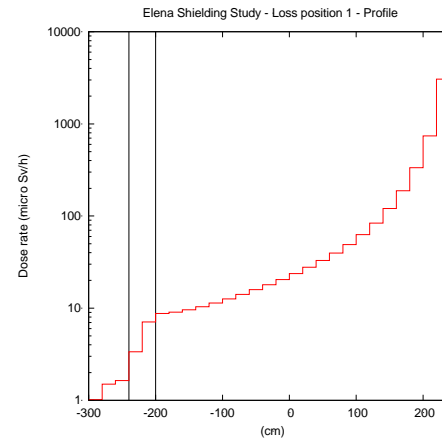
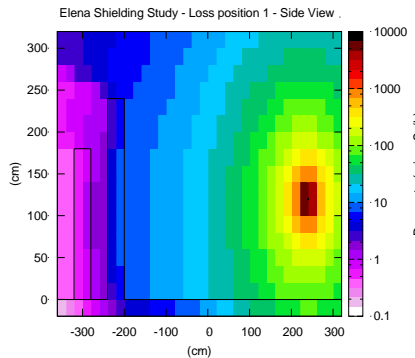
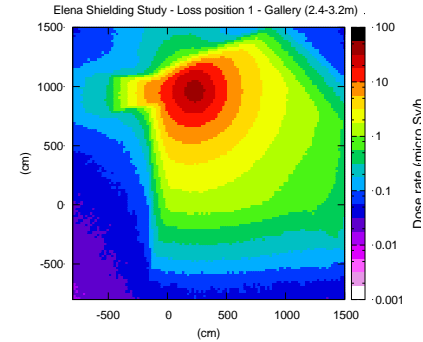
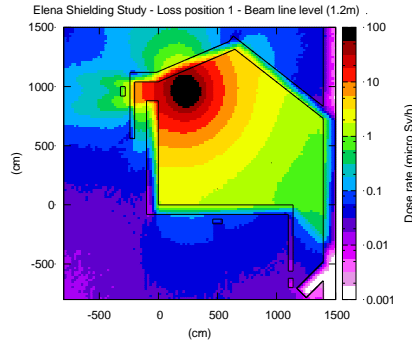
- In order to solve integration issues, we can:
 - Reconsider Quadrupoles envelope (340 mm)
 - Reconsider Scraper / RF / Schottki PU /
e⁻ cooler envelopes
 - Reconsider necessity and position of
bellows/flanges /valves
 - Re-design of BPM feedthroughs (on-going) to
be compatible with quads and solenoids
 - Possibly integrate coorrectors in dipoles...

- Various simulations have been run so estimate the dose in normal operation and in accidental losses scenarios
- Some parameters must be refined in order to provide more realistic and reliable values
- A parameter list will be produced (action Pavel) and handed to RP in this objective

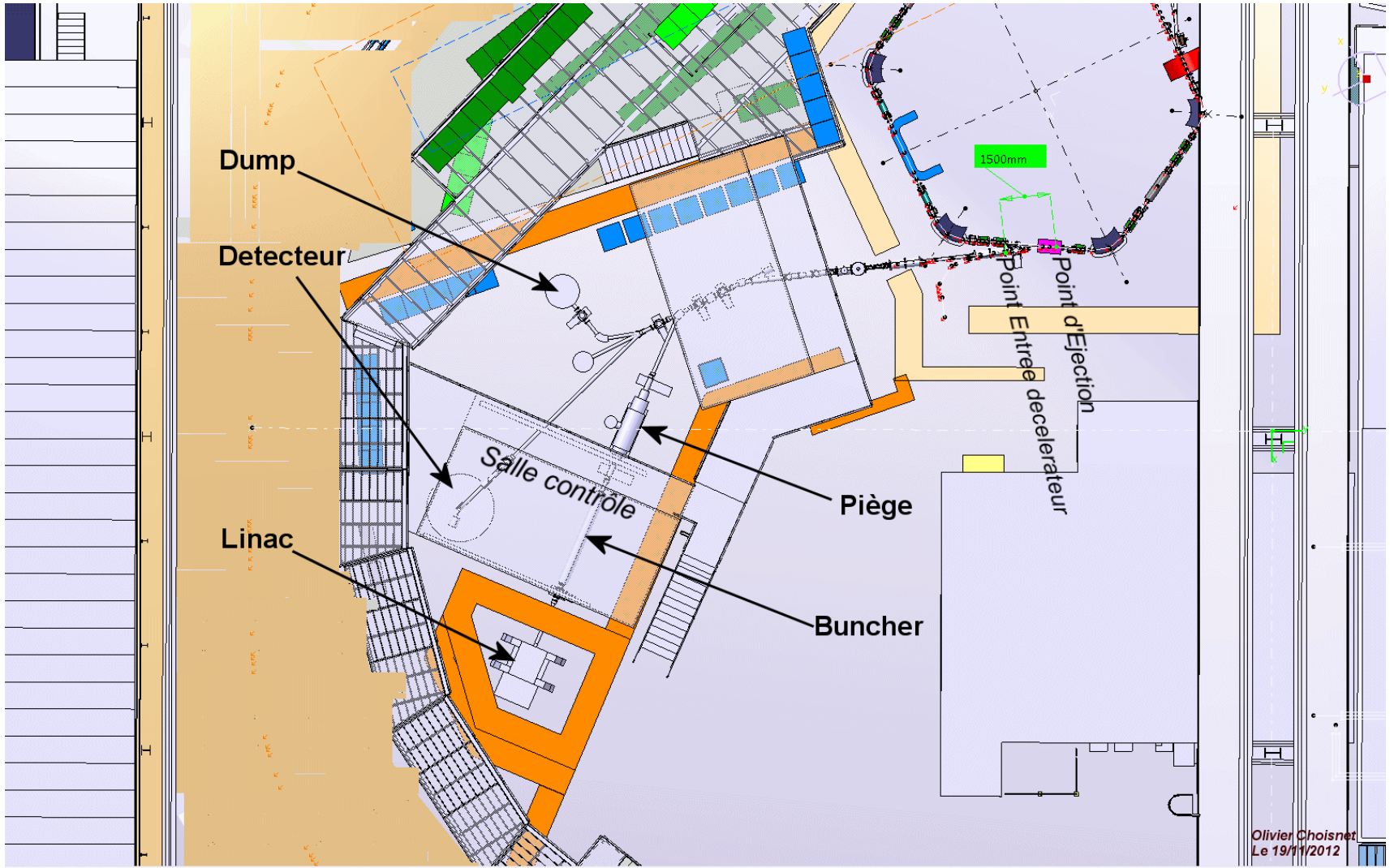
Courtesy R. Froeschl

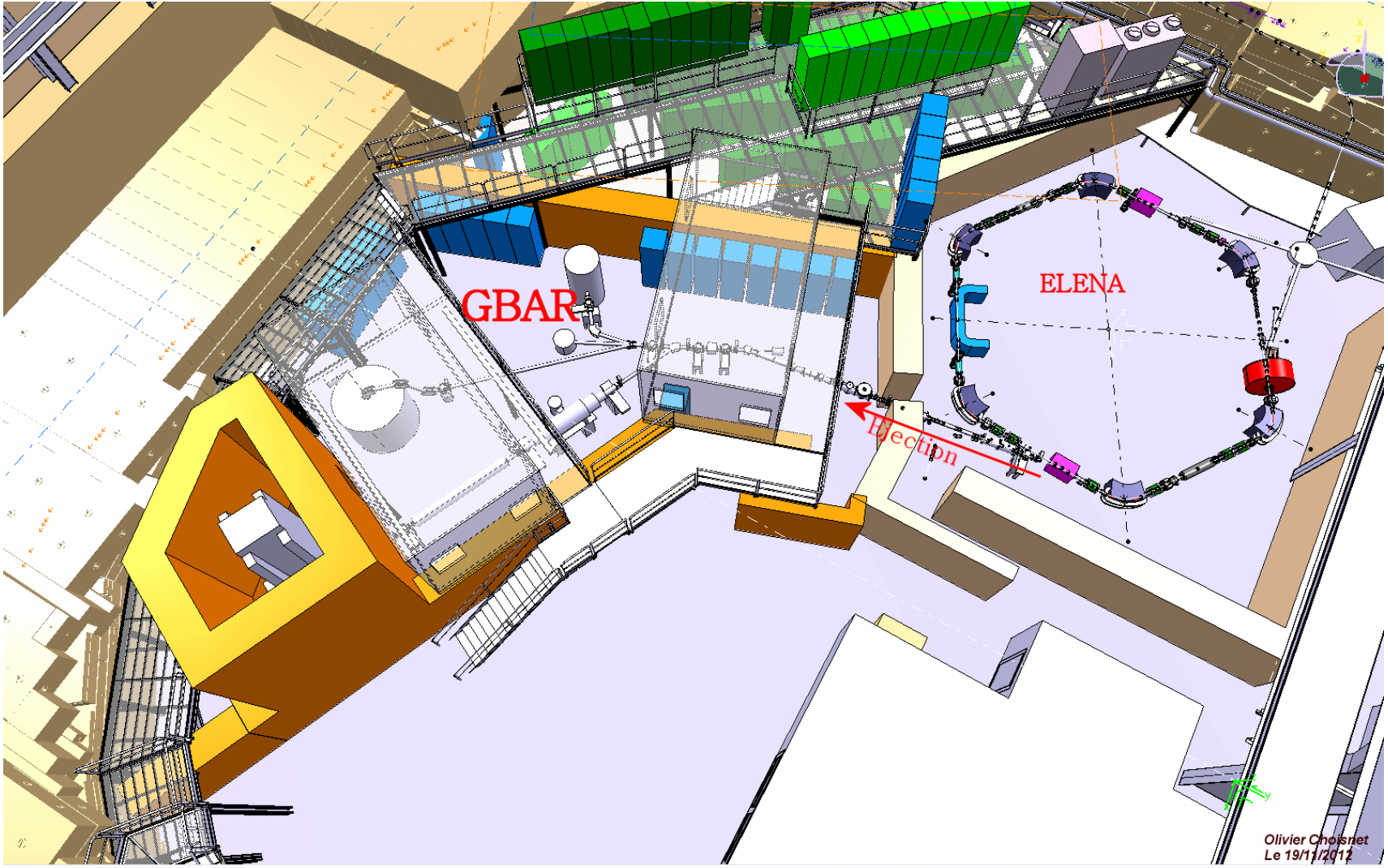


■ Examples of Results of simulations



Courtesy R. Froeschl





- Preparing the CfT of fabrication: docs are being approved on EDMS
- Integration meeting planned on 23rd Nov to better define distribution of services
- Access road redefined



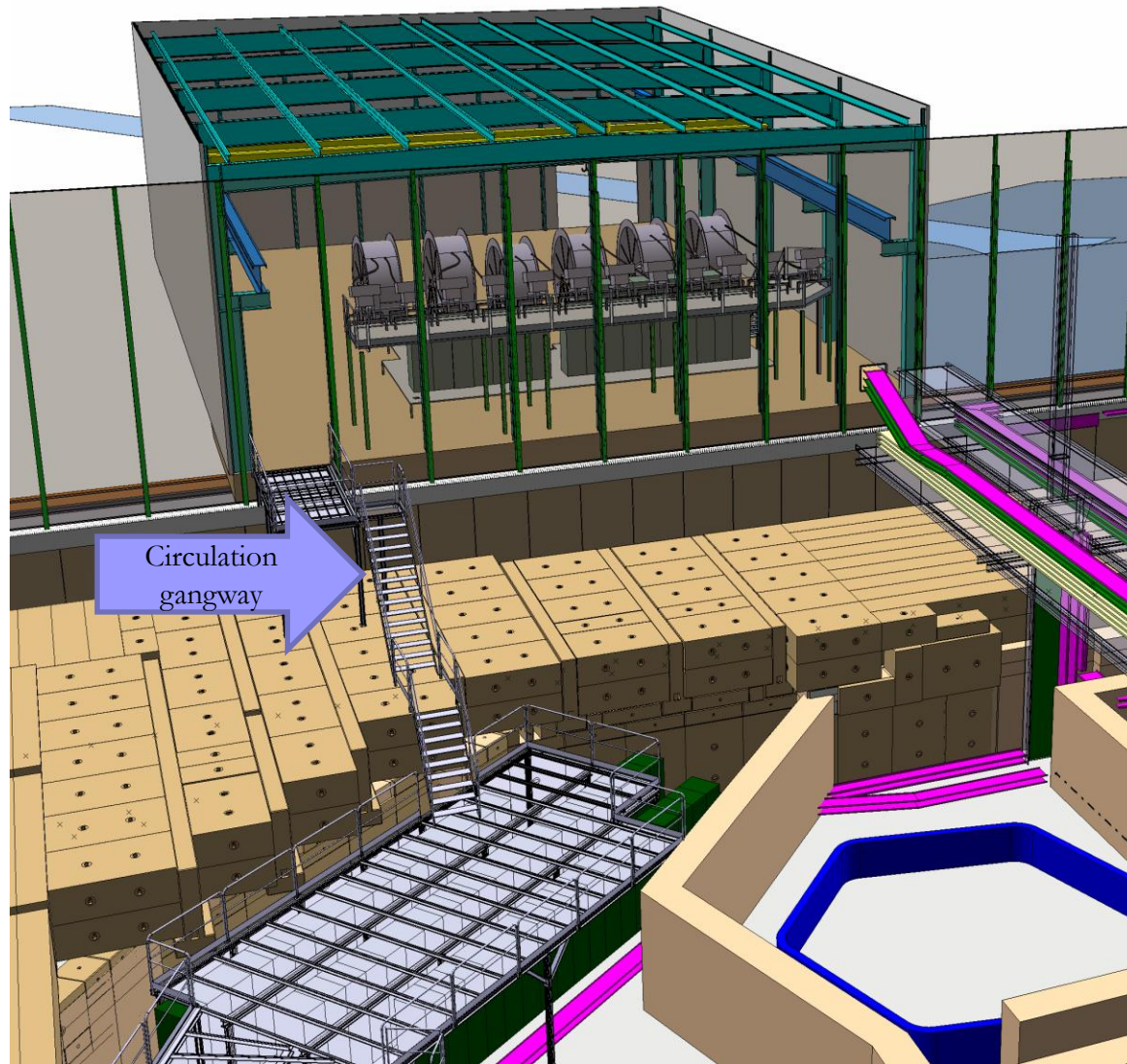
Adobe Acrobat
Document

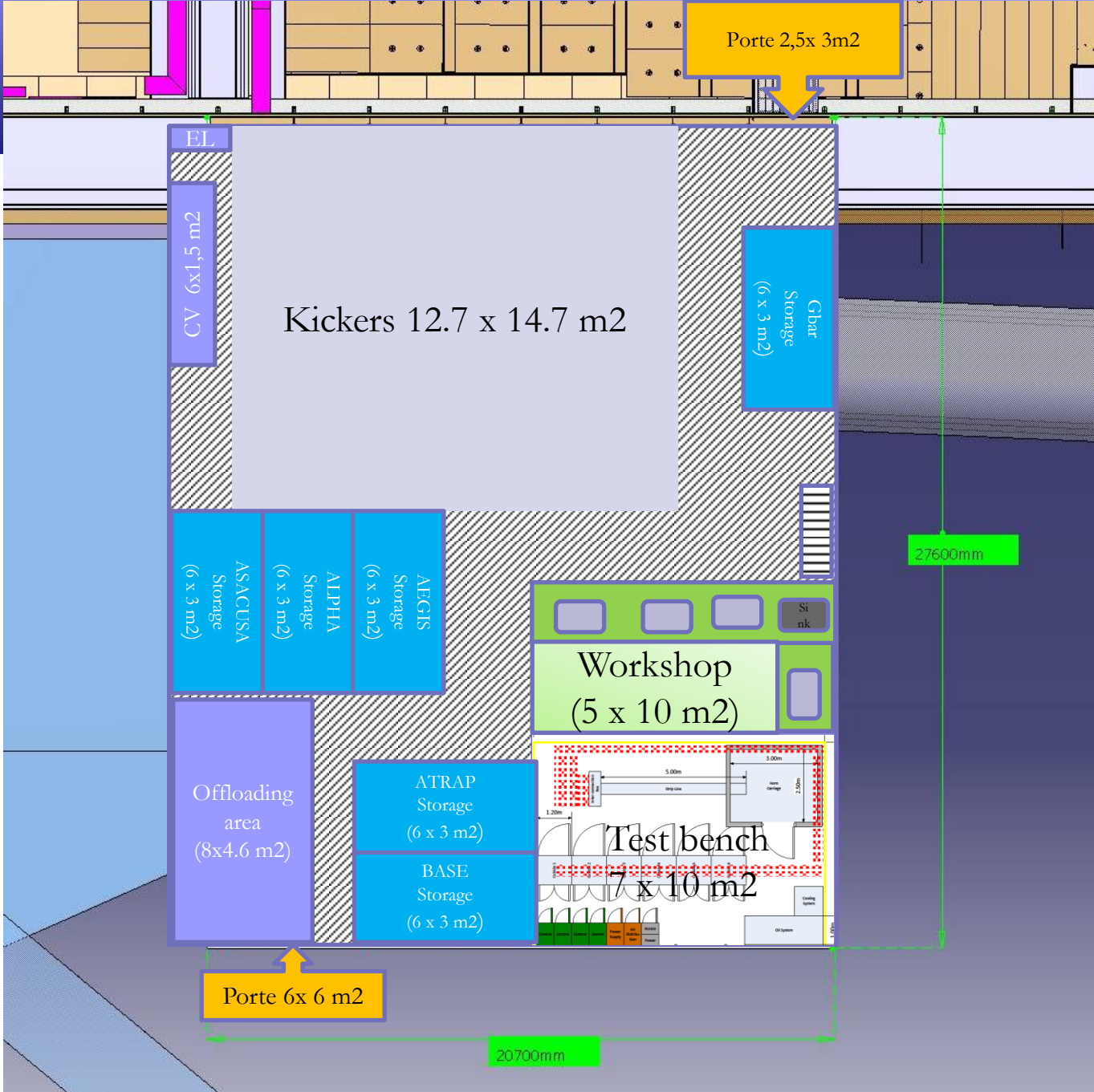


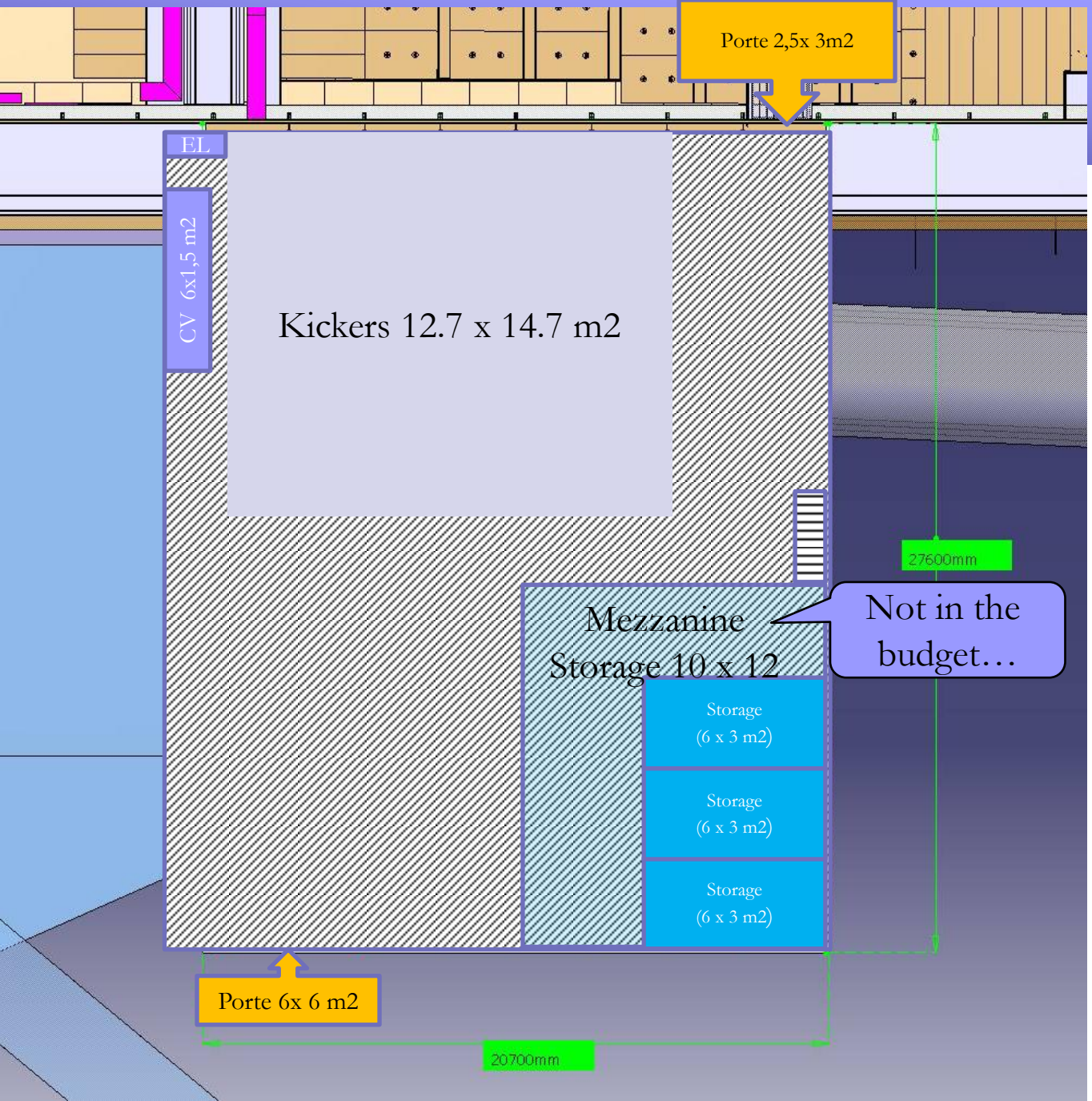
Adobe Acrobat
Document

- Work expected to start May-June 2013

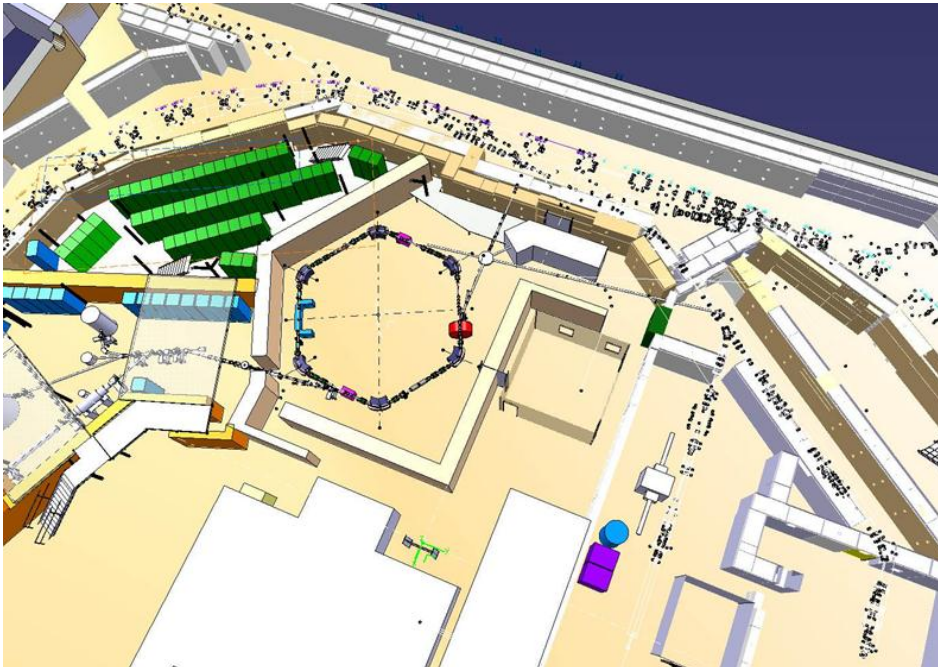
Internal distribution







- Transfer lines towards existing experiments
Design in progress (W. Bartman)
- Transfer line to Gbar is quite well advanced
- Integration of elements will follow



O. Choisnet

S. Maridor

For drawings