

Vacuum sectorisation H- Injection

Some history

Wim Weterings

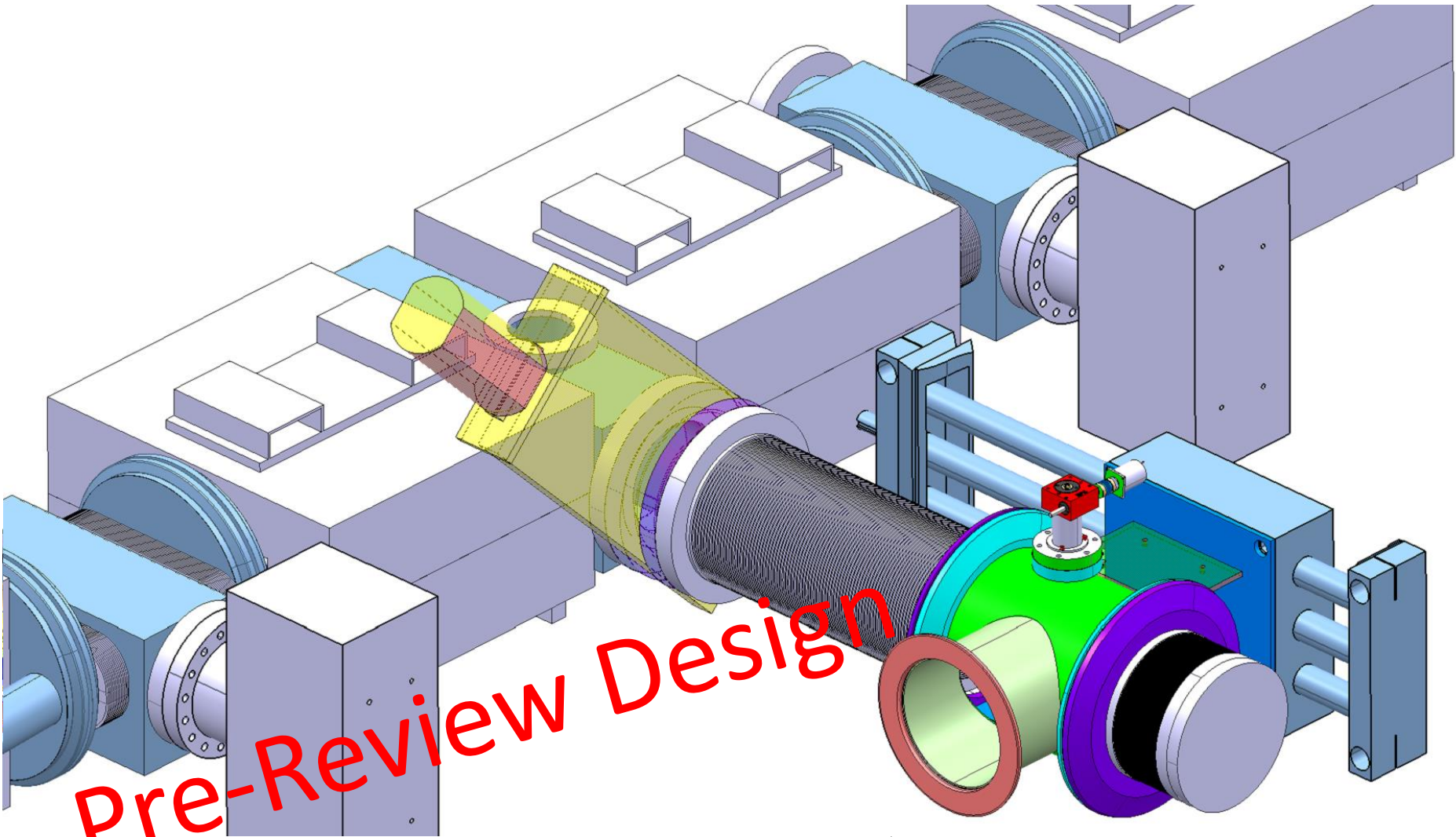
19-09-2013

Recommendations and Outcome Review 2011

- **Vacuum isolation**

- Possibility to isolate foils from PSB vacuum to avoid foil damage due to differential pressure.
- Interlock to avoid venting of the PSB vacuum system before isolation of foil exchange unit.

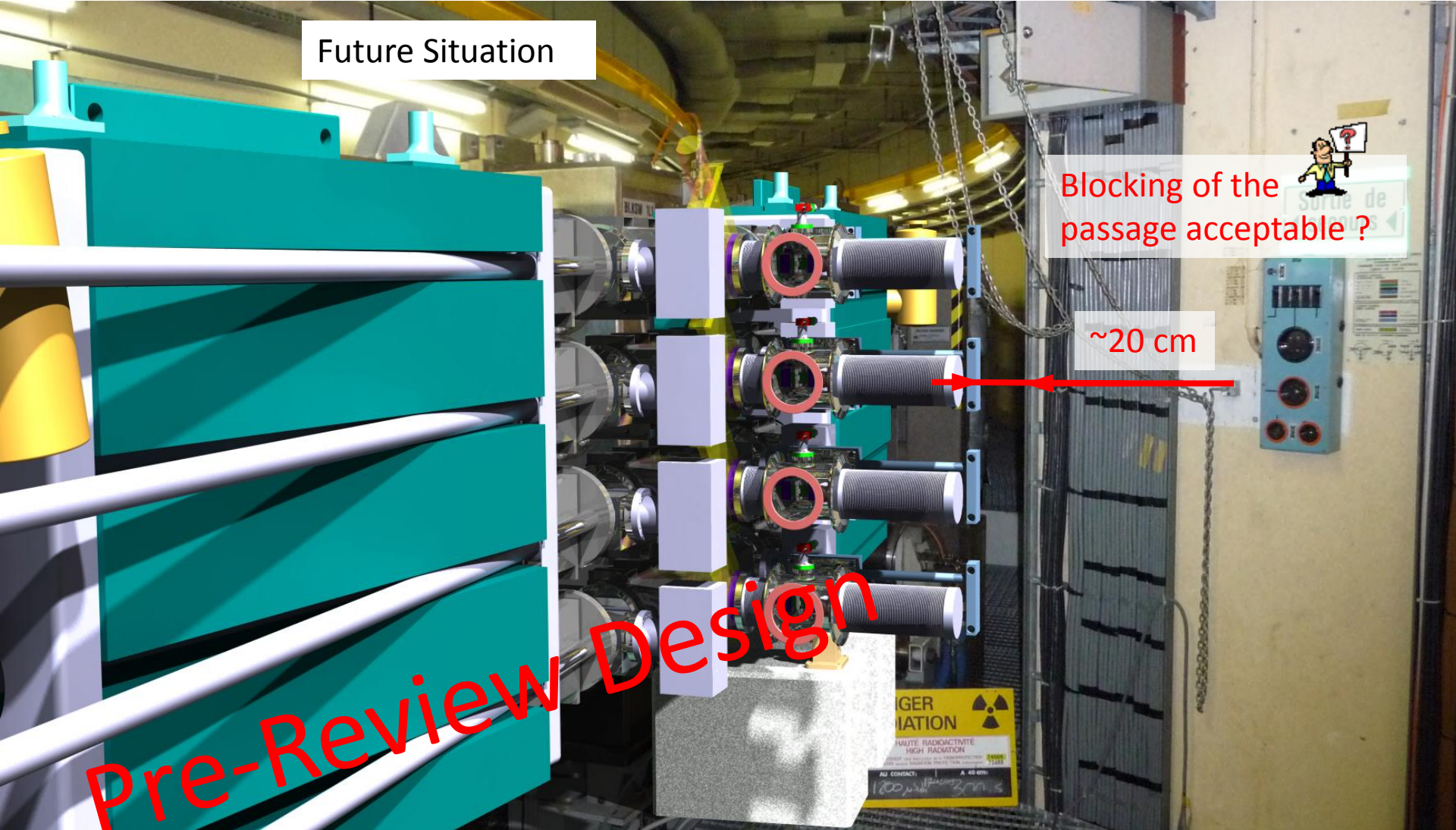
Foil exchange unit - 2



Pre-Review Design

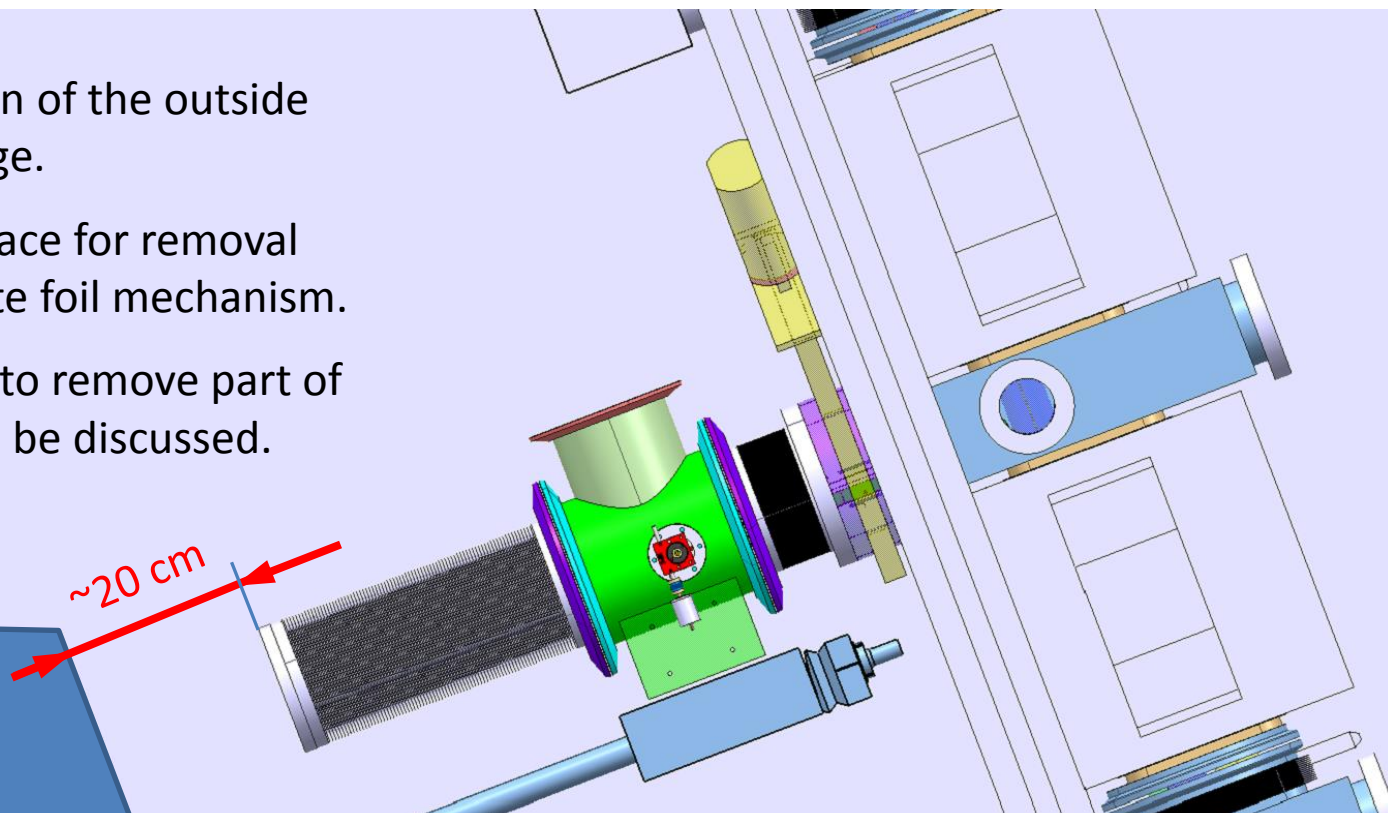


Space limitation - 1



Space limitation - 2

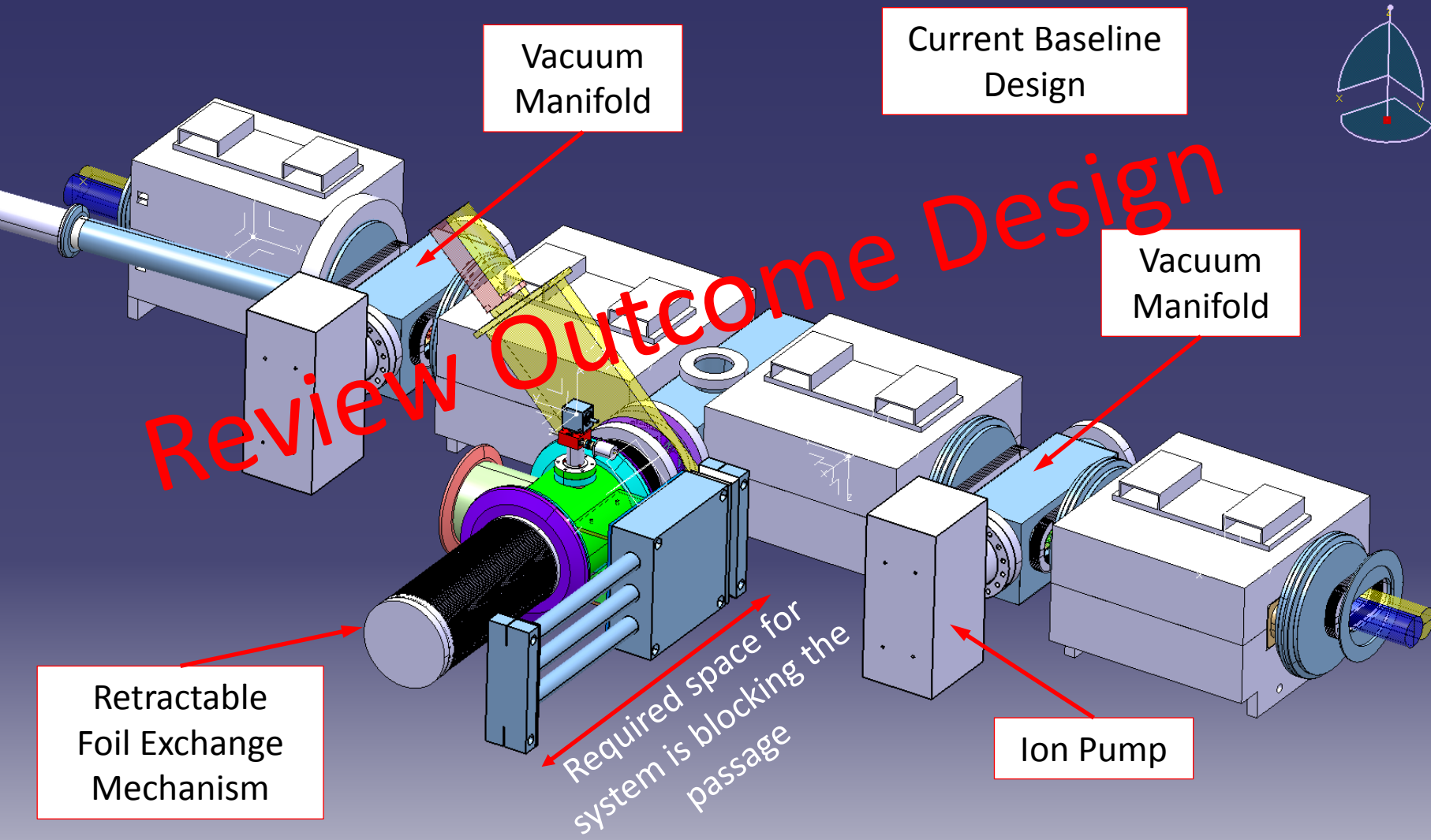
- Obstruction of the outside PSB passage.
- Limited space for removal of complete foil mechanism.
- Possibility to remove part of the wall to be discussed.



Action 28: Investigate civil engineering for more space.

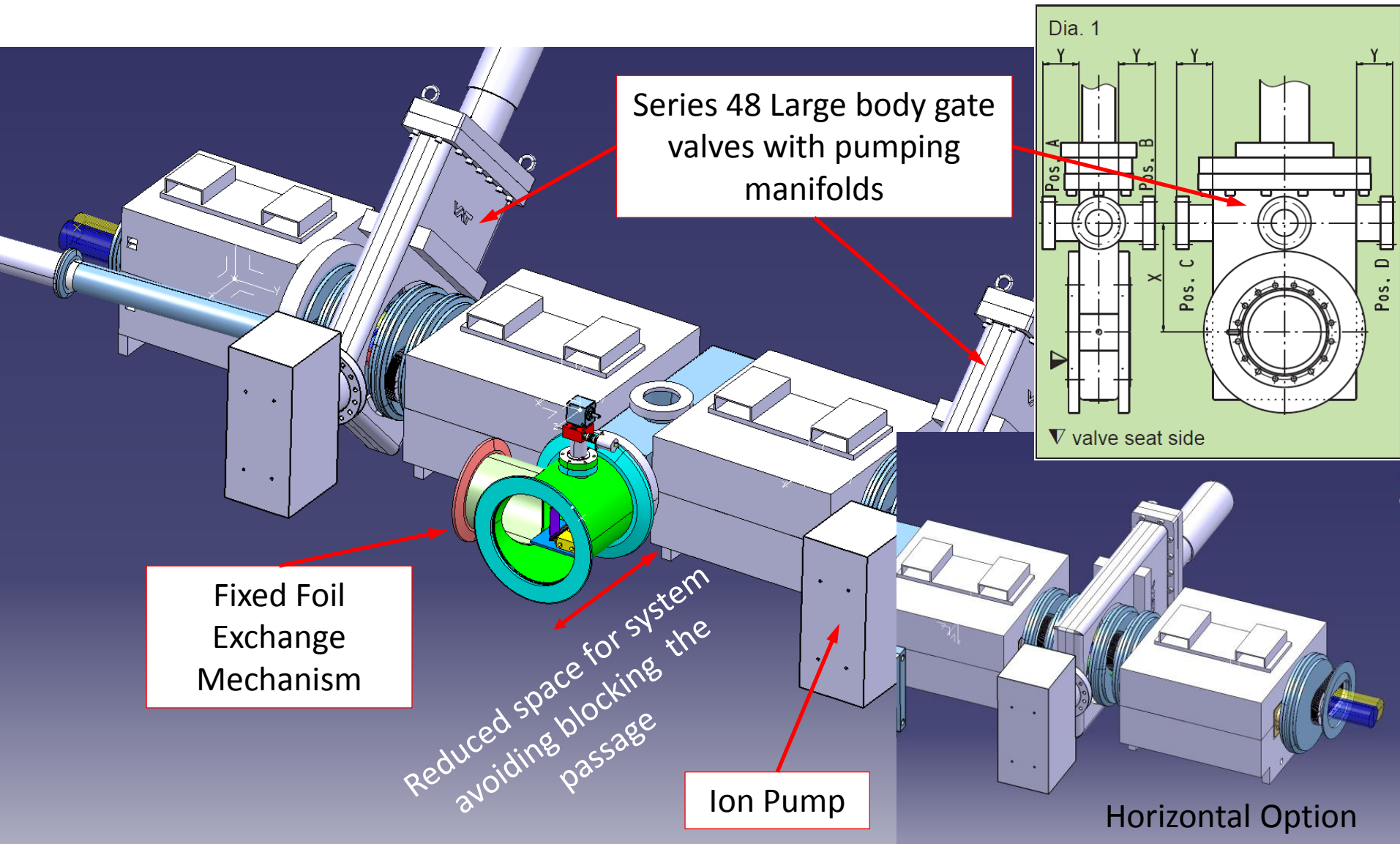
'Impossible', Supporting wall of main PSB cross beam and complete dismantling of region would be required for intervention. Very complicated and costly operation

Possible solution for integration of sector valves - 1



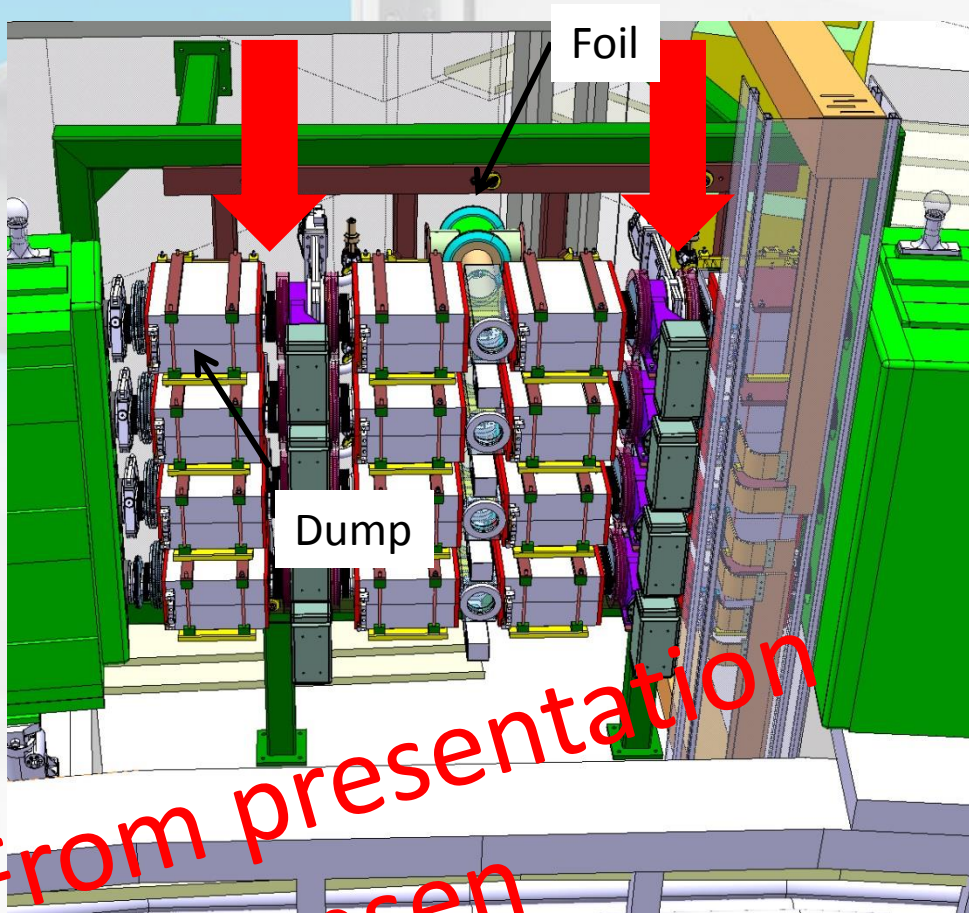


Possible solution for integration of sector valves - 2



Why re-sectorising this sector?

At the moment the sector valves are foreseen to be positioned right before and right after the stripping foils;



From presentation
Jan Hansen

- A different sectorisation would allow:
- Less radiation for TE/VSC during pumping and leak detection.
 - More space for installation of stripping foils.
 - Positioning of the sector valves away from a radioactive area;
 - Less problems to find space for pumping and venting.
 - A bigger sector might help in controlling the initial phase of the pump down and venting, preventing a sudden rupture of the graphite foils (experimental test are ongoing...)