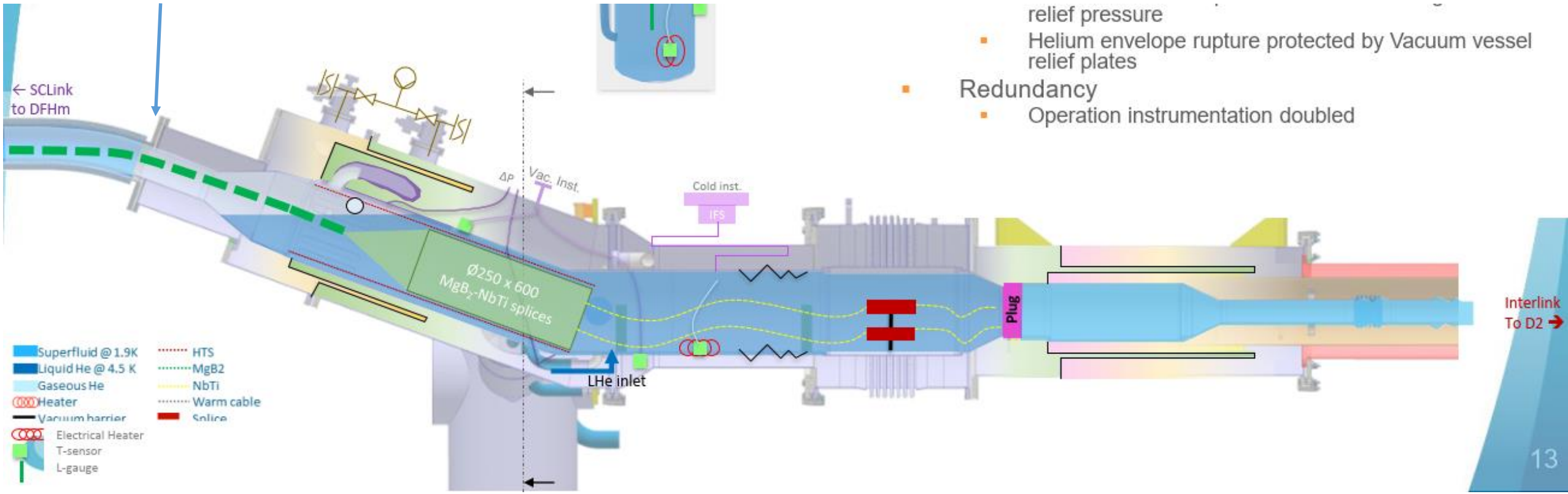
SC Link flange on cold mass shall have dimensions not exceeding those of the SC Links of Demo 1/Demo 2

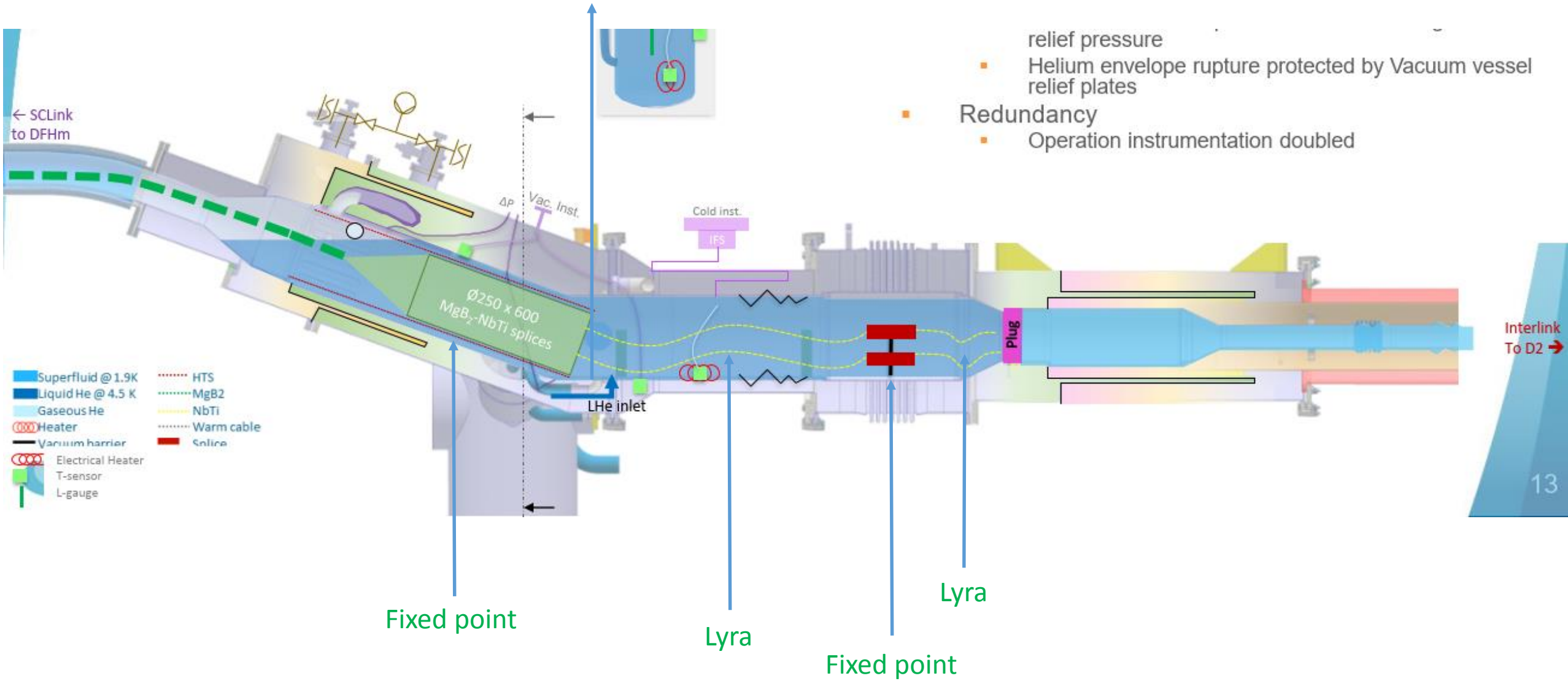
SC Link flange on vacuum envelope

Flange of the SC Link cold mass and to the DFM cold mass ?



Amalia, 23/04/2020

How do we deal with thermal contractions ?



Amalia, 23/04/2020

- Needed realistic dimensions of DFM, including length of different cryostat components/cables and dimensions of cold mass

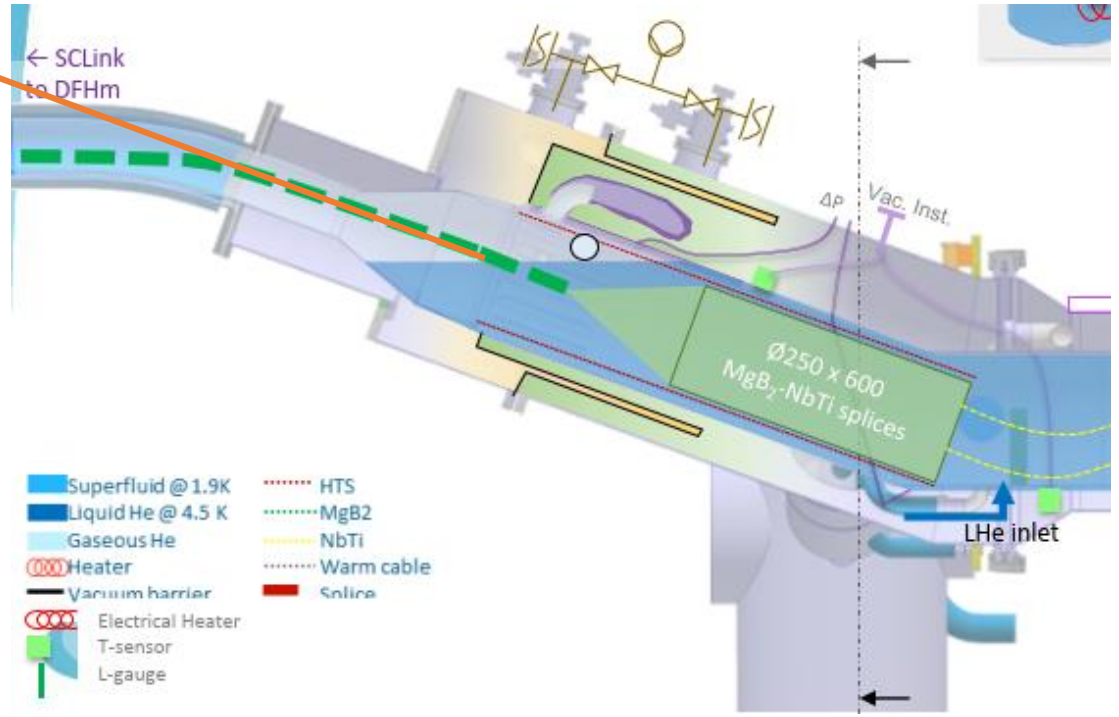
- SC cables shall always be supported (avoid problem found in DDFX with Demo 2): fillers needed at the level of change of cross sections

- Geometry of SC Link has to be defined, so that also forces during assembly of the DFM can be calculated

Geometry of SC Link

SC Link supported on the ceiling and snaking all along (up to the shaft)

About 10 m long "descent" toward the DFM with S-shape geometry



Amalia, 23/04/2020

- Needed in plane bending of the SC Link before the “descent”. Exact geometry to be drawn – including supporting structure fixed to the ceiling

- Design the whole supporting structure on the SC link - hanging on the ceiling till the shaft

- When SC Link plus DFM module 2 rotate (in reality for the SC link **it is NOT a rotation**, but a **longitudinal tilt**), if the splices are treated as a fixed inside the DFM 2, which forces are applied to the cable ? **Can they be fixed to the cold mass after tilting** ? How much is the tilt - 25 or 30 degrees ?

Amalia, 23/04/2020