DFM transport & installation brainstorming

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WP6a : integration meeting #3

DFM installation

Each IP1 and IP5 sides equipped with 2 cold powering chains of cryostats

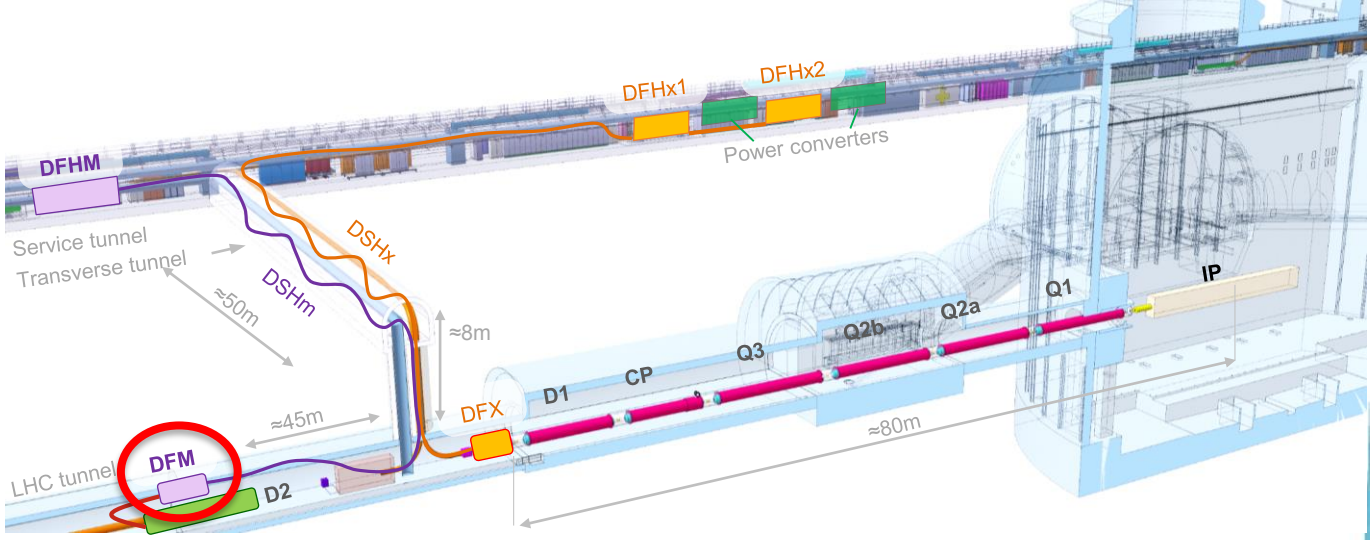
- Triplet insertion : DFHx – SC Link (DSH) – DFX
- Matching sections : DFHm – SC Link - DFM

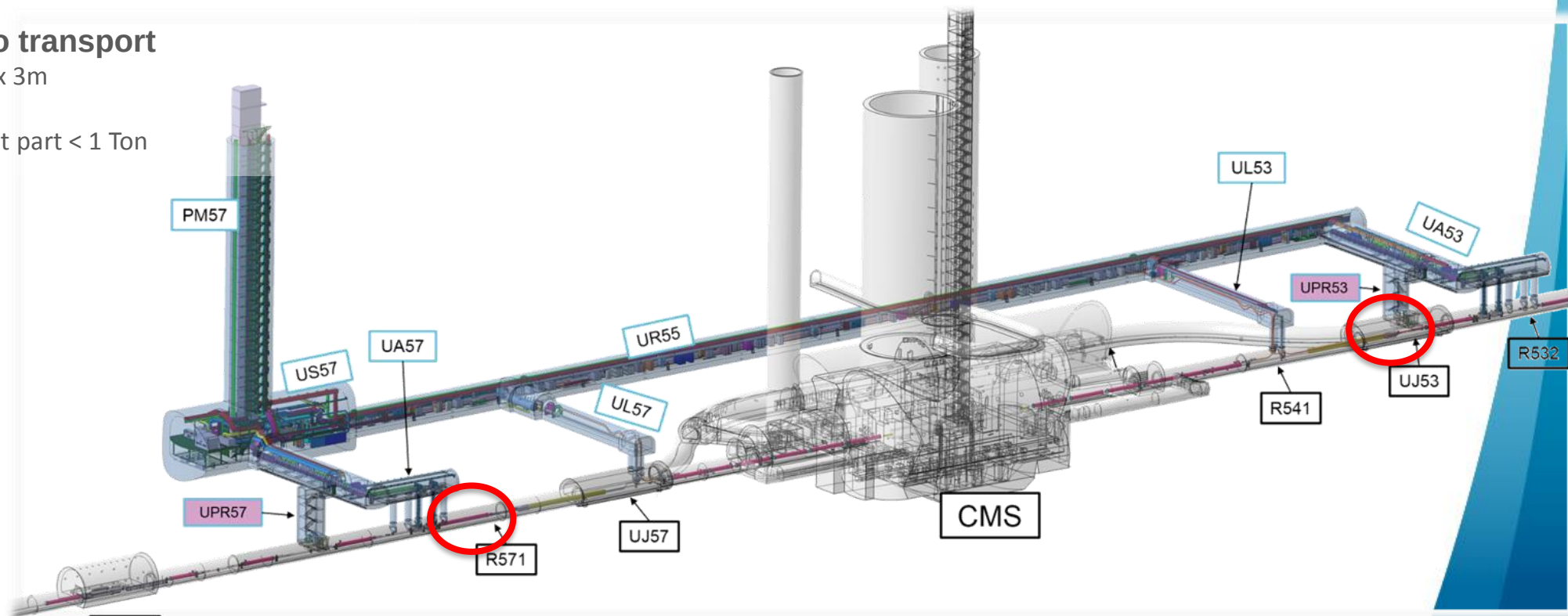
DFX/DFM basic functions:

- Electrical interface between SC Link and superconducting magnets
- Supply cryogenics to the SCLink

Total : 4 DFM boxes to install

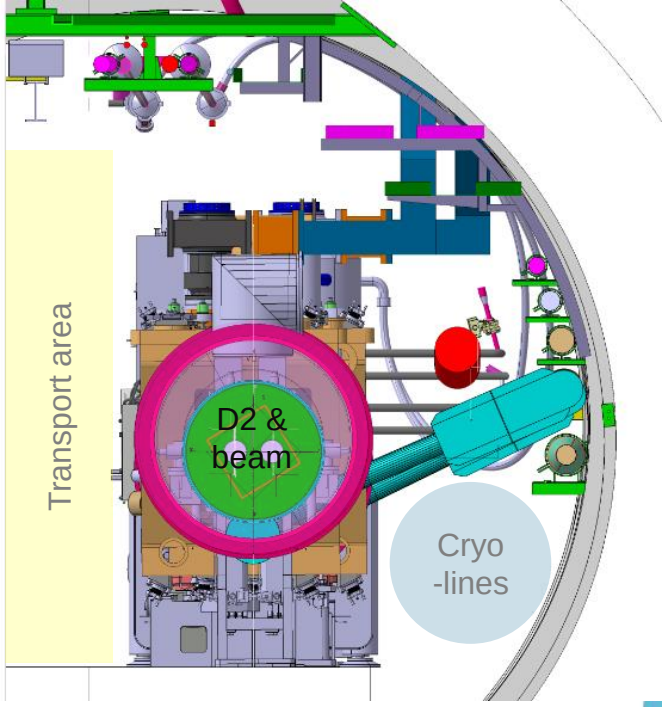
- **Weight < 1 Tons**
- **Biggest component to transport**
  - Pre-assembly : Ø1m x 3m
  - D2-DFM link :
  - Heaviest independent part < 1 Ton



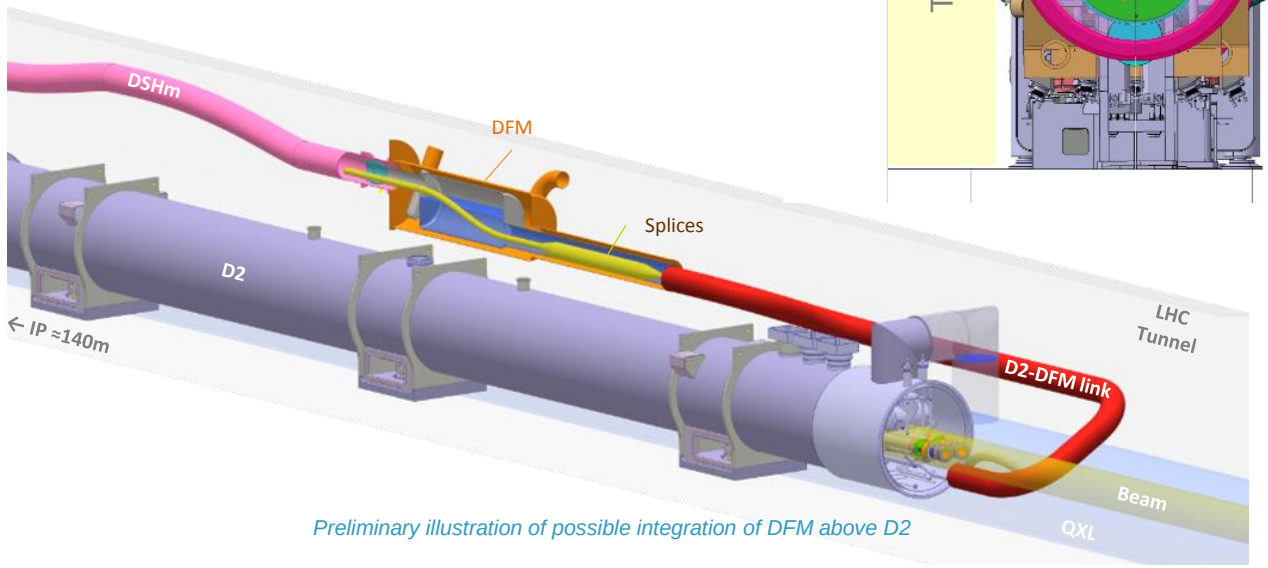


DFM installation overview

- DFM location
  - Close to D2 for electrical connection
  - Aligned with SCLink to ensure interface
  - Provide access for in situ electrical connections
  - Match with various reservations
  - ➔ Above D2
- Assembled DFM dimensions: ≤ Ø1.5 m x 5m
- Proposed assembly sequence:
  - Install D2
  - Install Link D2-DFM
  - Install DFM
  - Connect SCLink & DFM
- Transport
  1. D2
  2. D2-DFM link (up to 6m long)
  3. DFM pre-assembled (Ø1 m x 3m)
  4. SCLink (DSHm)



Transport path to be discussed



Preliminary illustration of possible integration of DFM above D2