

## Meeting Notes

Subject: WP6a @ Cluster F2 - Assembly & installation sequence of cold powering systems - meeting #1

Present: P.Cruikshank (PC), A.Gharib (AG), F.Di Ciochis (FdC), M.R.Curylo (MRC), A.Gharib (AG), J.Fletier (JF), S.Spathopoulos (SS), JB.Deschamps (JBD), E.Richards (ER), Y.Leclercq (YL)

Meeting date: 14/04/2022

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- DFHX:
  - SS presented two scenarios for the DFHX manipulation (dedicated presentation on Indico).
    - JF stated that the 5m extra-length of MgB2 cables could not be enough; in case of issues with the splices we would need to repull the cables.
      - Extra-length to be calculated (JF recalled that the cables pitch is  $\approx 1\text{m}$ ).
    - JF underlined that we need to enter straight with the cables trying to minimize as much as possible the longitudinal misalignment between the DFHX and the spool.
      - Smooth and gentle waves along the SC Link might be acceptable.
    - AG stated that if we moved the cables with the spool, there would be a risk of damaging/degrading the cables. He would prefer to cut the cables considering the extra length and protect it with a cover.
    - PC asked if we could place the spool at  $90^\circ$  wrt the cryostat (to save longitudinal space). AG underlined as it is important to perform the insertion of the cables having the spool longitudinally aligned with the cryostat to avoid damaging/degrading the cables.
    - PC proposed to assign a duration to each phase to be then presented to the SM18 manager.
    - PC pointed out as the cryo-vessel will most probably stay there, he will check for confirmation.
    - JF recalled that the delivery of cables is expected by beginning of May.
      - Cables need to be tested; in case something goes wrong on the Fresca test station we might delay accordingly.
      - The insertion of cables into DFHX is expected by the end of May.
    - JF recalled the need of the anti-pulling system to avoid applying forces on the cables during the spool operations.
      - PC will summarise the spooling test results next week; results to be then used as inputs for designing the anti-pulling system.
- DFX:
  - YL stated that the DFX was delivered to SM18.
    - They are currently solving some problems with the top flange/frame interface.
- AOB
  - YL stated that the SC Link is being tested, leak test to be performed soon.
  - PC stated that the delivery of the gas mix chamber for the Cluster F2 bench is expected by next week. Discussions ongoing about the pressure test, the system will pressure tested in close-loop.
  - PC stated that the copper busbars are not delivered yet.
  - MRC stated he is preparing the lifting test of the cables.
    - Some parts to be fabricated; test to be performed next week.
- Next meeting:
  - Next meeting 21/04/22 at 11:00. Indico site <https://indico.cern.ch/event/1151977/>
  - Zoom <https://cern.zoom.us/j/64254018121?pwd=WHF6Rml2T01uM1RjTmhlOWtoZDliZz09>