INSTALLATION SEQUENCE OF WP6A DEVICES:
1 - PRELIMINARY PLANNING

WP6A Follow-up # 7
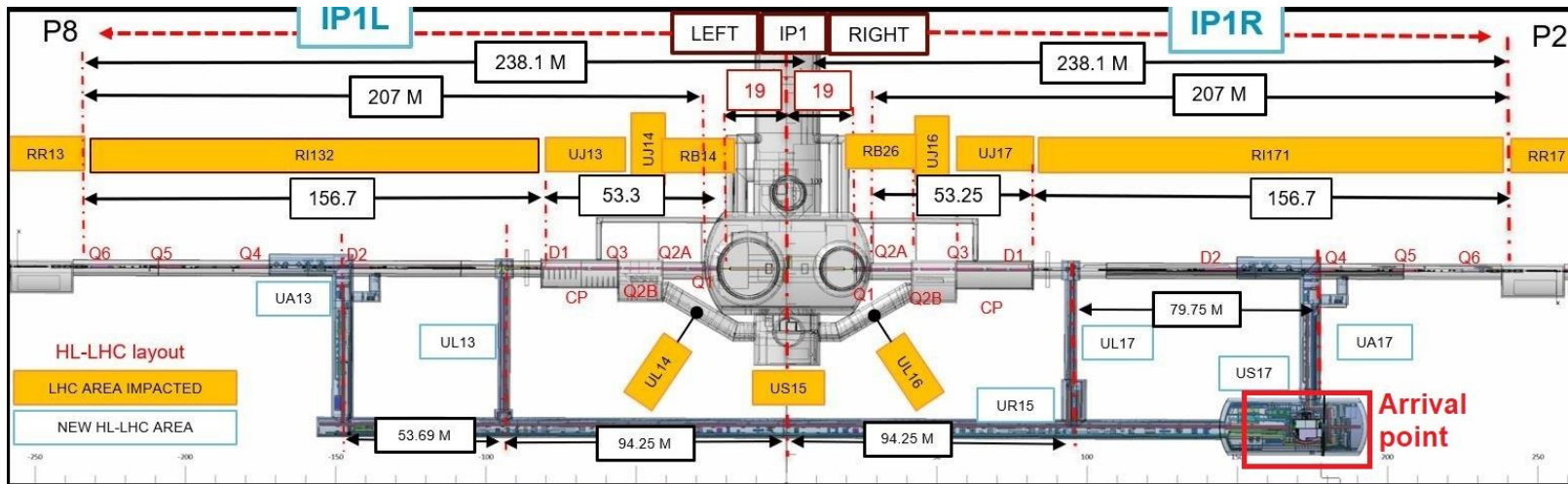
M. Curylo

TOPICS DO DISCUSS

Main actions:
- Clarification of current situation.
- Indication issues to solve (tooling's, support structures etc.).
- Proposal of installation sequence due to WP6a needs during LS3 (update global installation sequence if necessary).

Current references:
- Version 1 of Installation sequence (WP15), EDMS: 2400939

- Preliminary assembly sequence of DFH in the tunnel, EDMS: 2492613
- Handling of WP6A equipment in new HL-LHC infrastructure, EDMS: 2157603
- Transport and installation of DFX in the LHC underground areas
- …

HL-LHC GALLERY OVERVIEW

WP15 preliminary: 3   4   2   1   **SEQUENCE TO DISCUSS**
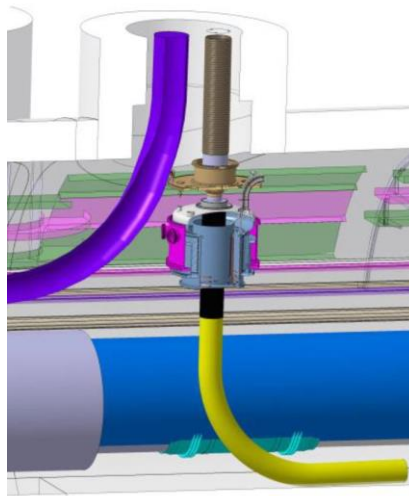(2400939)

WHY NOT :   1 ?   2 ?   3 ?   4 ?

BRAINSTORMING

OPEN POINTS:

- **Are we sure that M goes first than X ?   - STARTING POINT**

- Installation sequence of DFX in the tunnels …   (mock-up plan + DSHm geometry).
  - how to remove the security cup of termination inside the core with installed DSHM …

MACHING SECTION
(IF WE MAINTAIN CURRENT PROPOSAL)

GENERAL SEQUENCE

1. DFHM + DSHM arrives in US cavern.
2. Unspooling + rotation (unroller + tractor + cart system).
3. Transport DSHM to core area.
4. Winch operation (termination head rotation).
5. Vertical transport.
6. DSHM Installation above QXL tray (tray + slide system).
7. Connection to DFM.
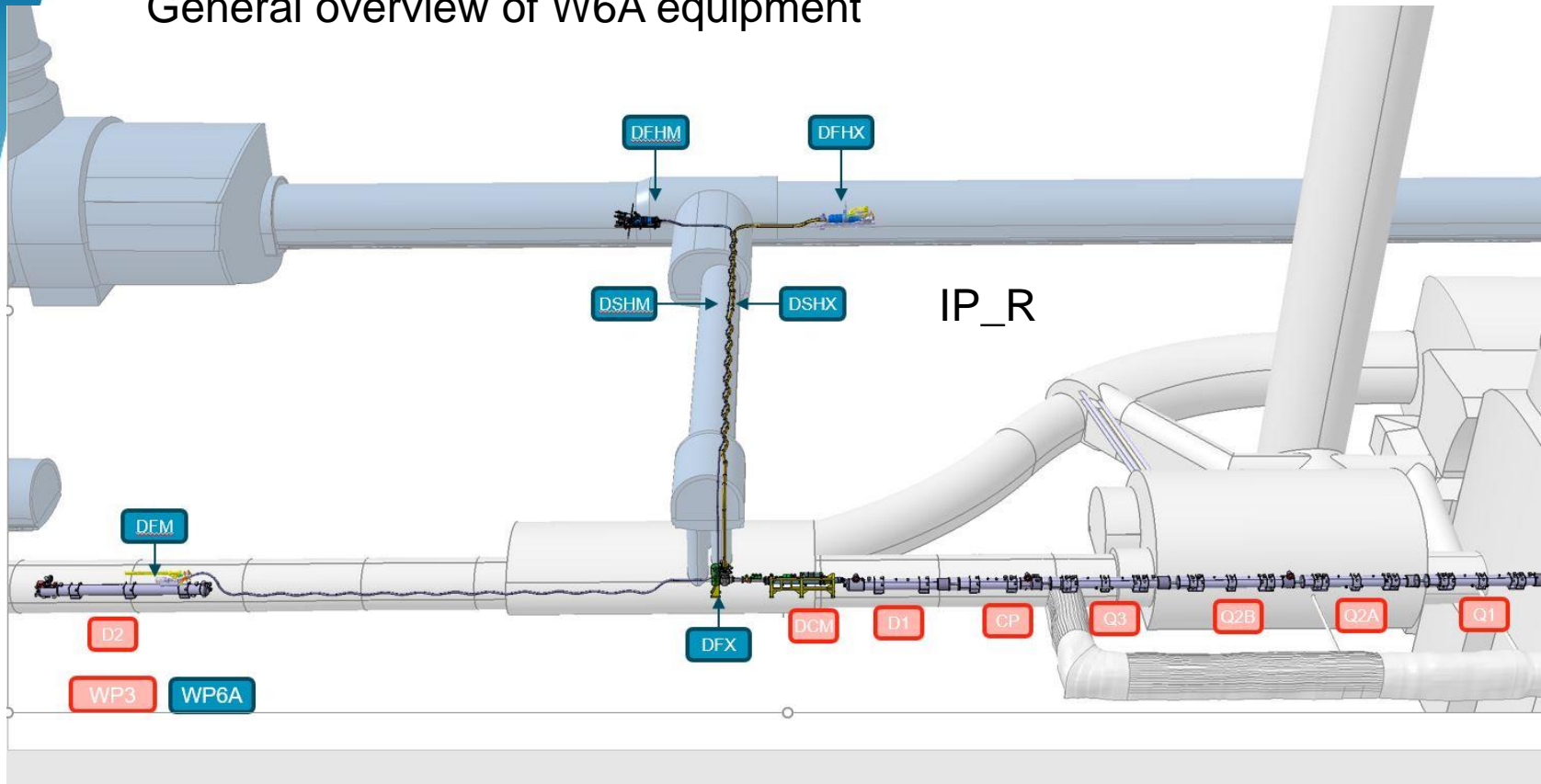
→ **DSHX INSERTION**

- Wave pattern in LHC tunnel.
- Wave pattern in UL tunnel.
- Insertion into the trenches.
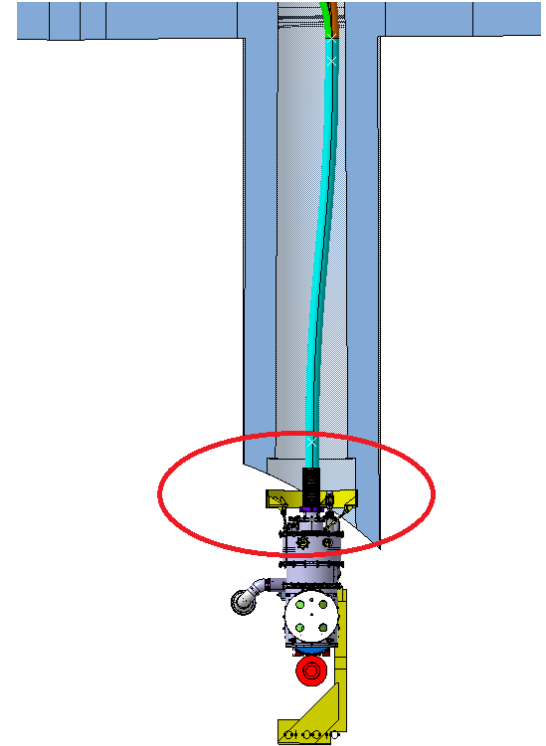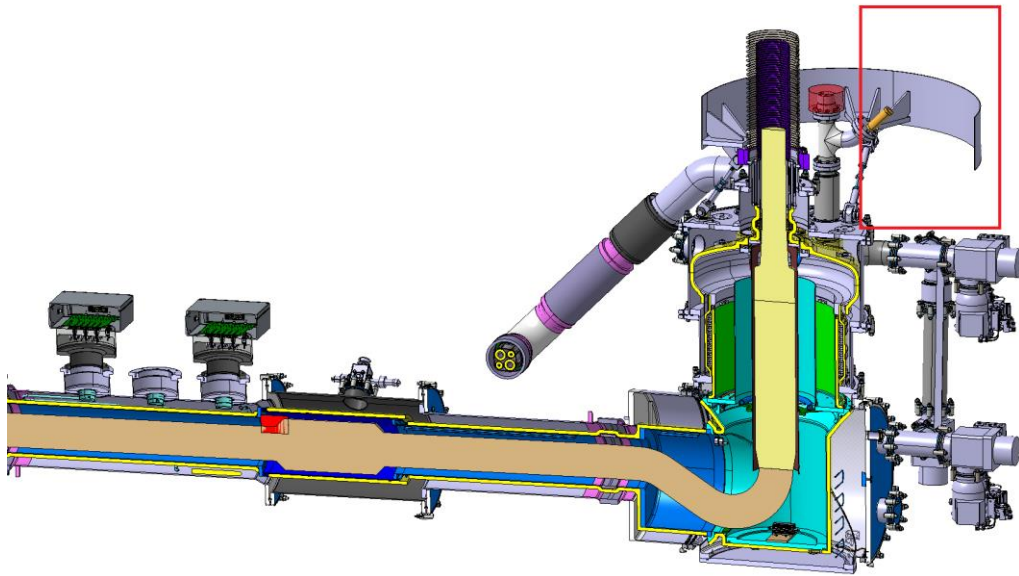- Wave pattern close to DFH.

PARALLEL:

DFM PRE-INSTALLATION
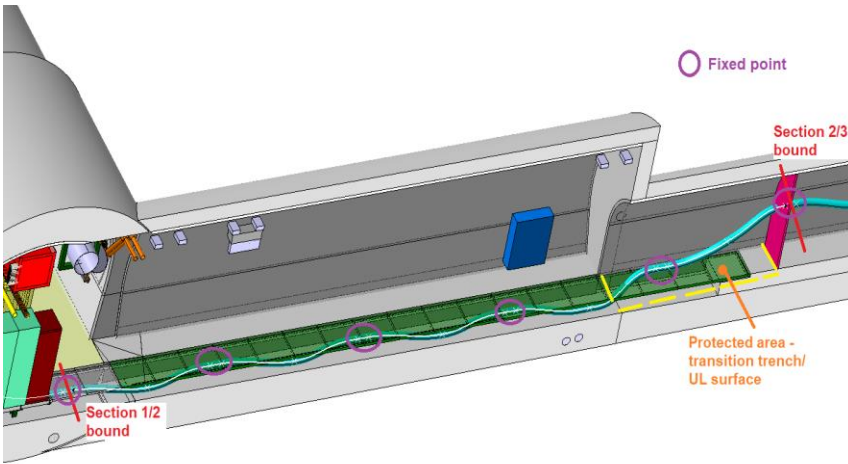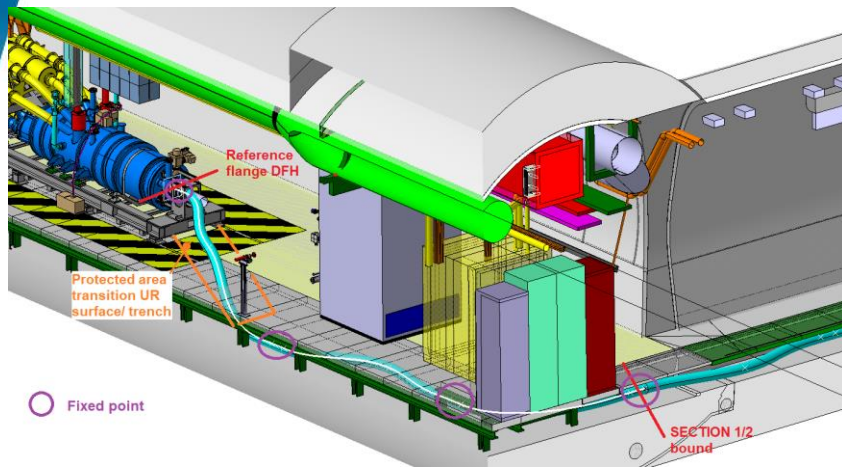**SUPPORTS INSTALLATION**
CLAMPS FOR FIXED POINTS

07/10/2021

Backup slides

General overview of W6A equipment

DEHM · DFHX · DSHM · DSHX · IP_R · DEM · D2 · DFX · DCM · D1 · CP · Q3 · Q2B · Q2A · Q1 · WP3 · WP6A

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Topic to solve: How to remove protection of DSHX termination when DSHM already installed ?
Updated DFX installation sequence needed.

Topic to solve: transition between two levels

(enter/exit from trench)