



VIC - Installation of the ALICE IP2.X vacuum sector during the LS2

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Content of the presentation

- **Overview of the activities;**
- **Expected schedule;**
- **Worksite and intervention related co-activities;**
- **Overview of the environmental and equipment risks;**
- **Discussion;**

Overview of the activities

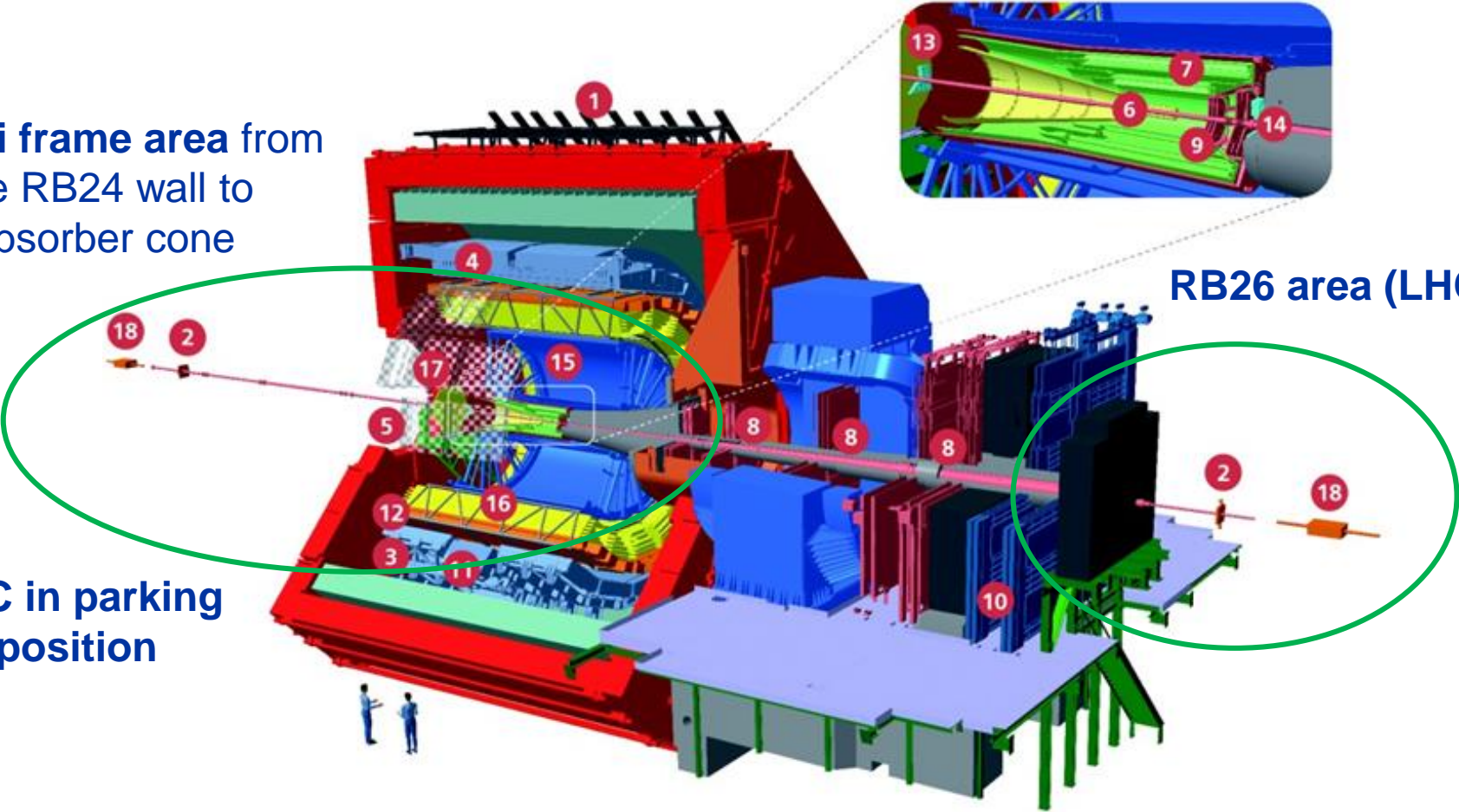
Installation of the LHC beam vacuum equipment (IP2.X) takes place in two main zones

Delphi frame area from the RB24 wall to absorber cone

TPC in parking position

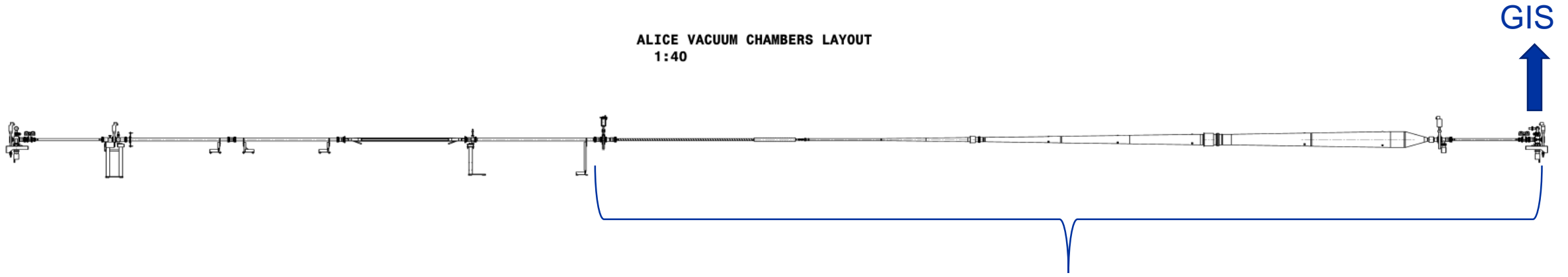
RB26 area (LHC)

- 1 ACORDE | ALICE Cosmic Rays Detector
- 2 AD | ALICE Diffractive Detector
- 3 DCal | Di-jet Calorimeter
- 4 EMCal | Electromagnetic Calorimeter
- 5 HMPID | High Momentum Particle Identification Detector
- 6 ITS-IB | Inner Tracking System - Inner Barrel
- 7 ITS-OB | Inner Tracking System - Outer Barrel
- 8 MCH | Muon Tracking Chambers
- 9 MFT | Muon Forward Tracker
- 10 MID | Muon Identifier
- 11 PHOS / CPV | Photon Spectrometer
- 12 TOF | Time Of Flight
- 13 T0+A | Tzero + A
- 14 T0+C | Tzero + C
- 15 TPC | Time Projection Chamber
- 16 TRD | Transition Radiation Detector
- 17 V0+ | Vzero + Detector
- 18 ZDC | Zero Degree Calorimeter



Overview of the activities

ALICE VACUUM CHAMBERS LAYOUT
1:40



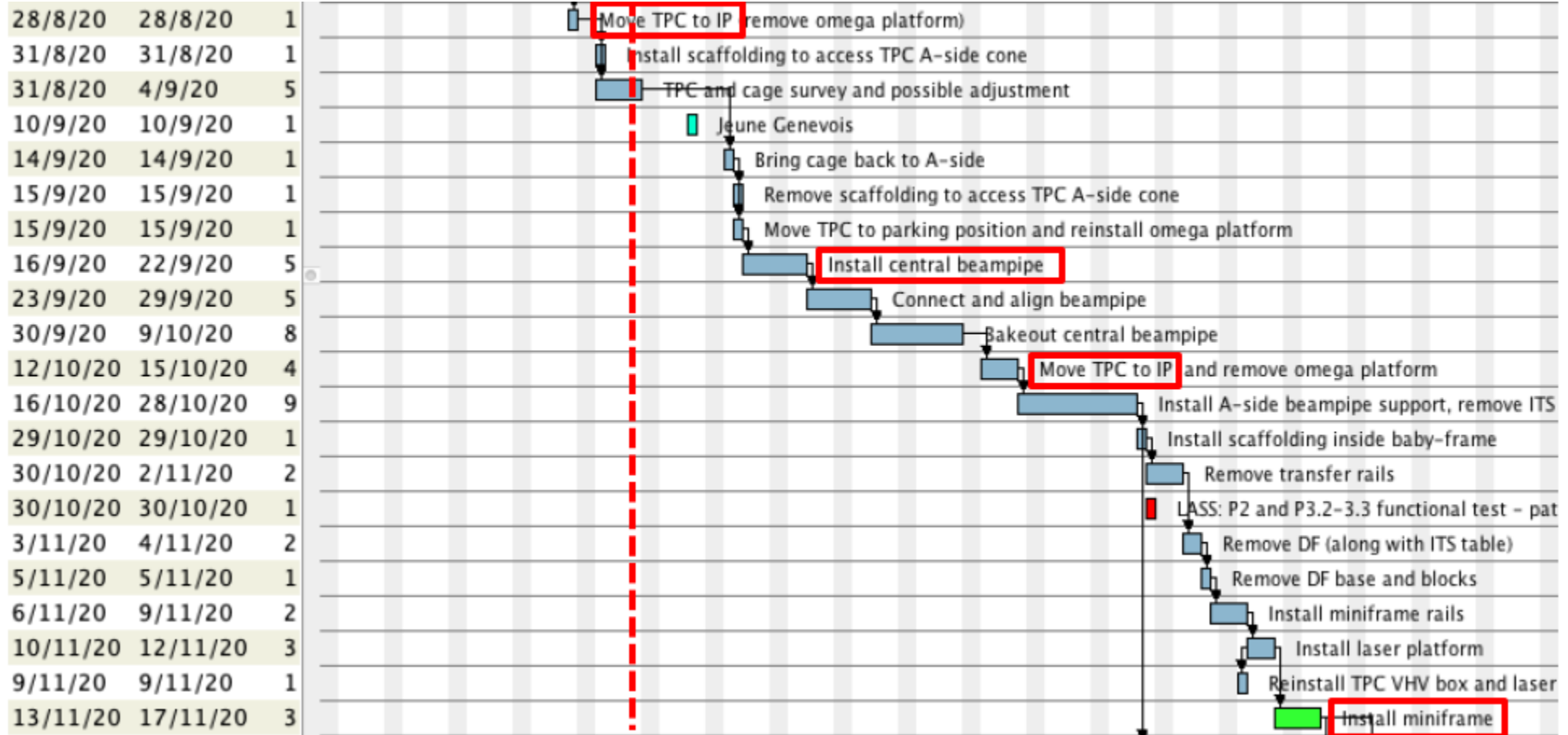
IP2.X recommissioning requires common
recommissioning with A1R2.X (GIS connection)

Main categories of the activities

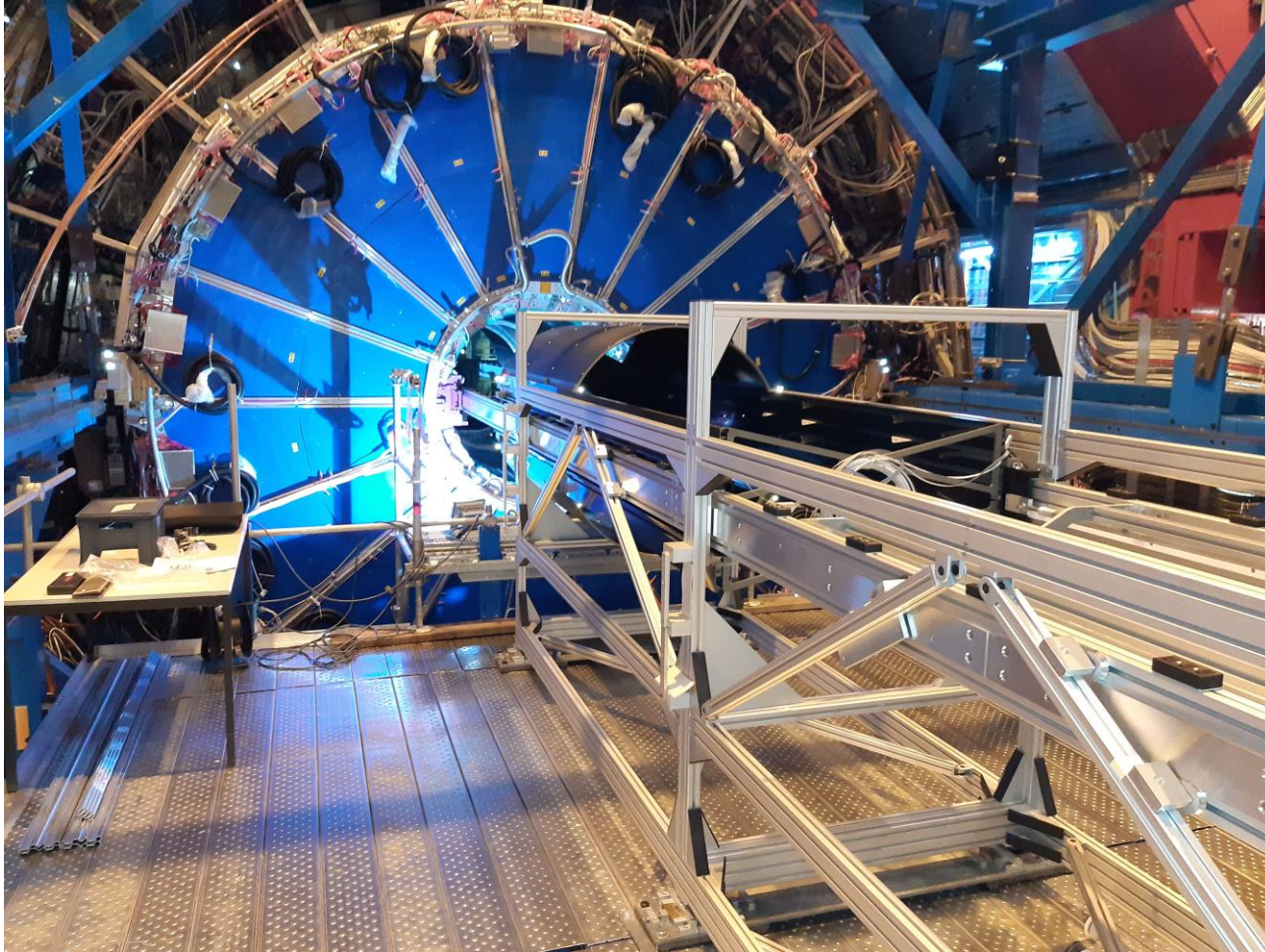
- Transport (EDH requests in preparation for both Meyrin to SX25; SX25 to UX25);
- Mechanical activities (BVO team 2 – 3 person + 1 – 2 from ALICE);
- Bake-out preparation activities (BVO team 2 person);
- Vacuum related activities – Pump-down, Activation, Neon injection (BVO team 3 person);
- Survey activities (ALICE in charge);

Expected schedule

Main intervention contains weeks 38, 39, 40 and 41



Worksite and intervention related co-activities



Worksite UX25

- Cage and installation frame on Delphi;
- Absorber cone area;
- Bake-out interconnection patch-panels;
- GIS area on RB26 side;

Worksite LHC

- RB26 (between the cavern wall and Q1R2)
- Rack zone.

Separate IMPACTS for Cavern, LHC and control activities in preparation

Transport team assistance for VC2C handling activities + bake-out racks

Overview of the environmental and equipment risks

- Equipment under the vacuum (no access in close vicinity or above);
- Bake-out – temperatures up to 250 degrees of Celsius (GIS even more);
- Beryllium chamber.

Activities within the cavern should be limited once the system is under the vacuum

No activities around the beam-pipe!



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