

CCTC – 18/12/2017

# SPS Crab Cavities test-stand: YETS 17/18 sequencing

Weeks 51/2017 and 02/2018

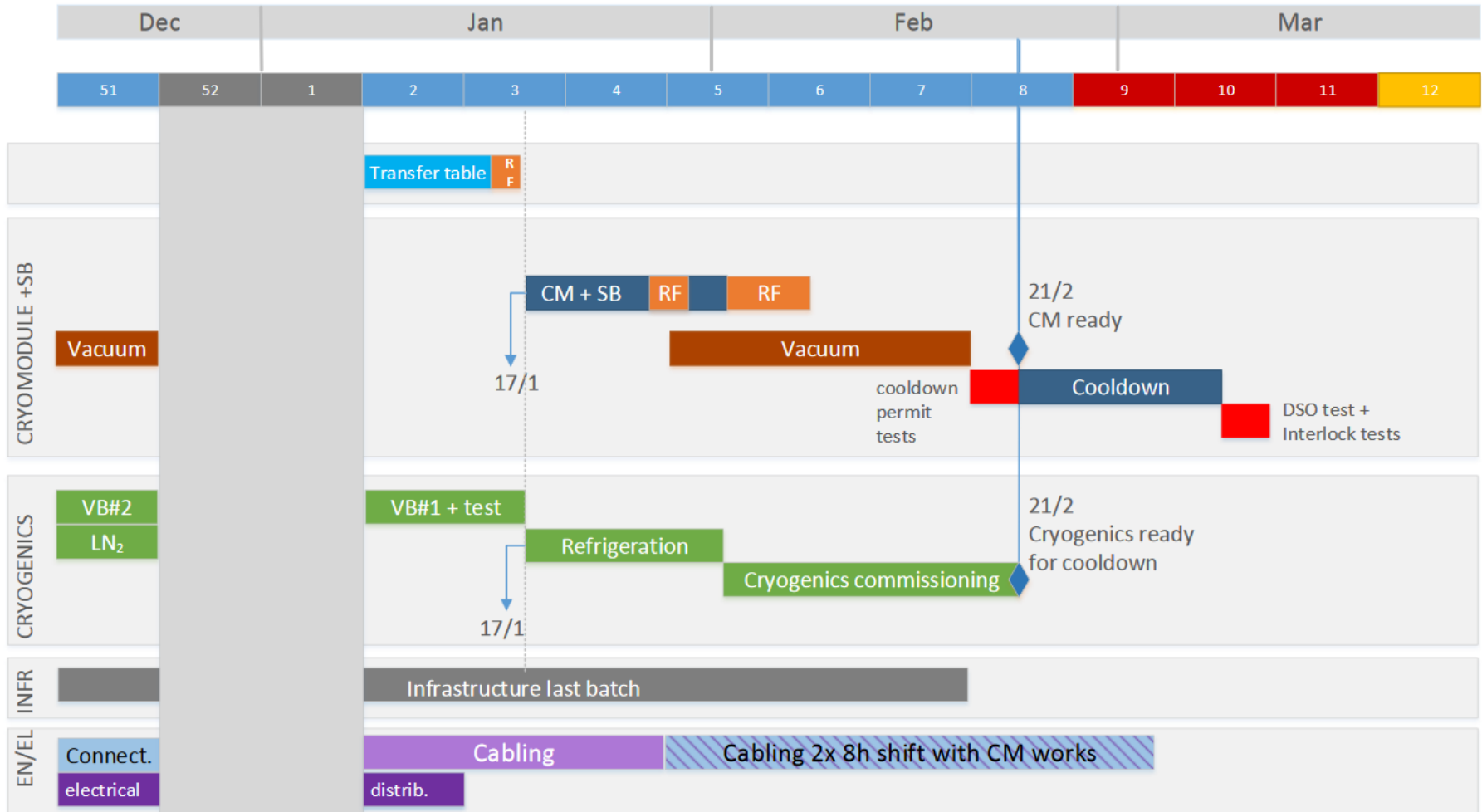
**Simon Barrière, BE-RF-SRF**

on behalf of :

Giovanna Vandoni, BE-RF  
Johan Dalla-Costa, BE-OP-SPS



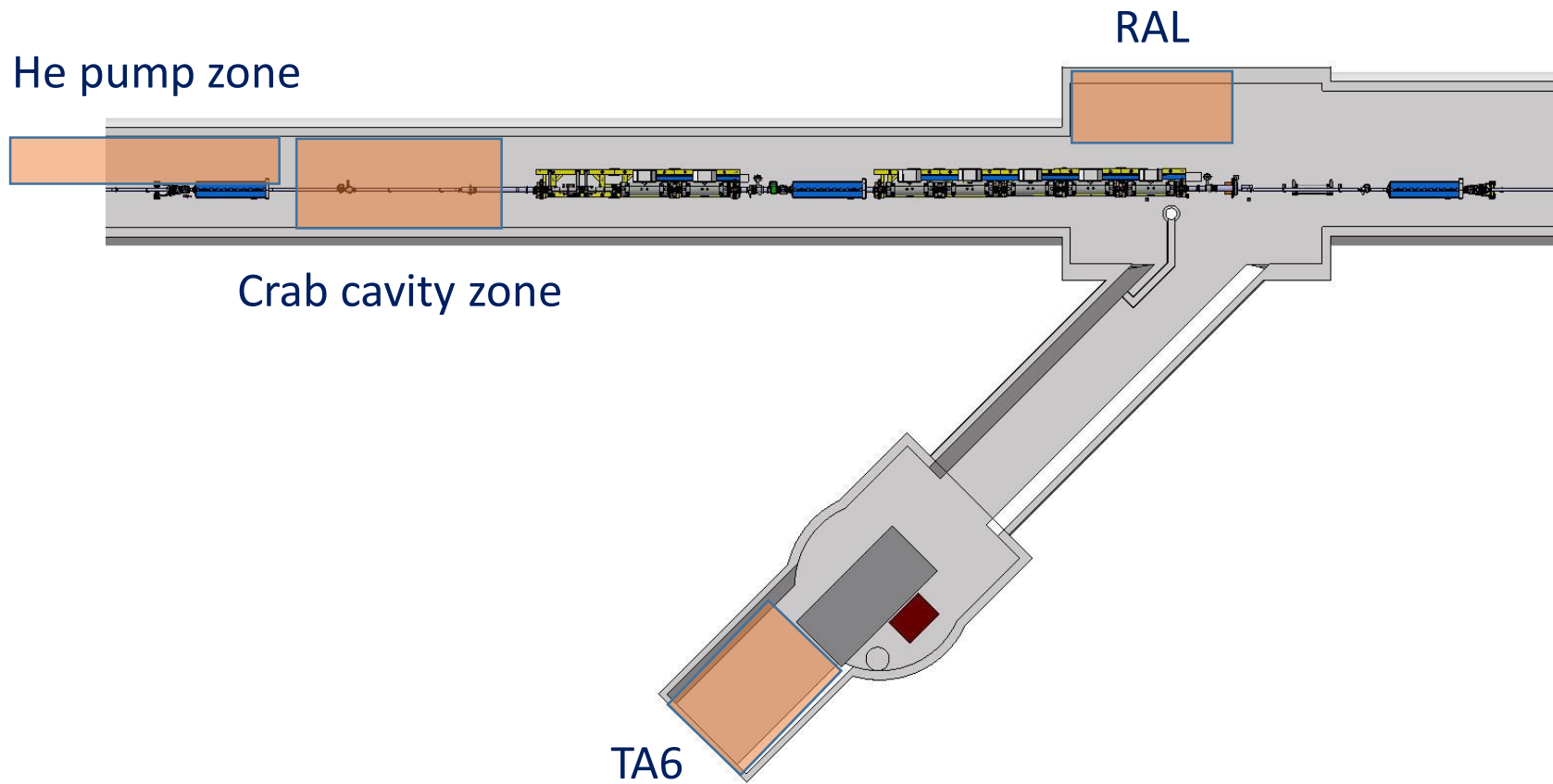
**BE** Beams Department | Radio-Frequency

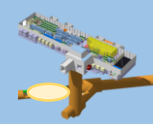


Detailed versions: EDMS [1843665](https://cds.cern.ch/record/1843665)

# Week 51/2017: 18<sup>th</sup> to 22th of December

# Activity zones underground



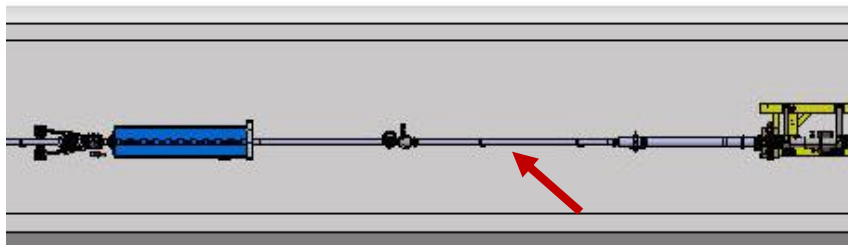


- From Monday 18<sup>th</sup> onwards: TE-VSC dismounts vacuum lines

Crab Cavity zone vacuum line

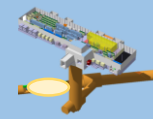


Extraction zone vacuum line



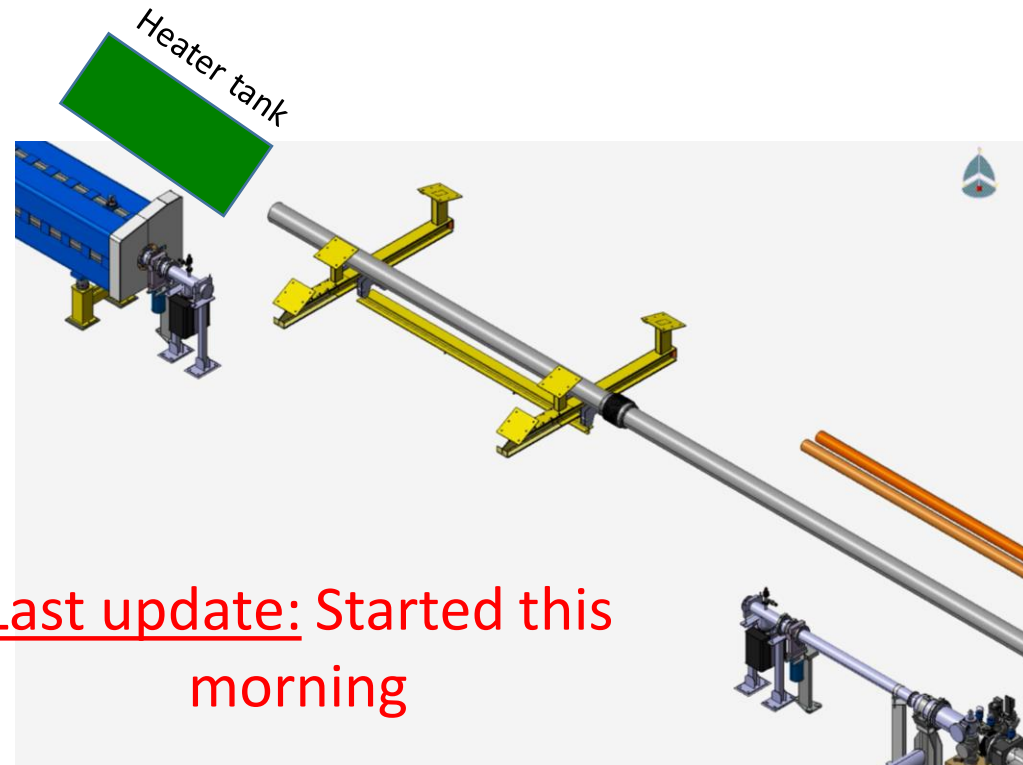
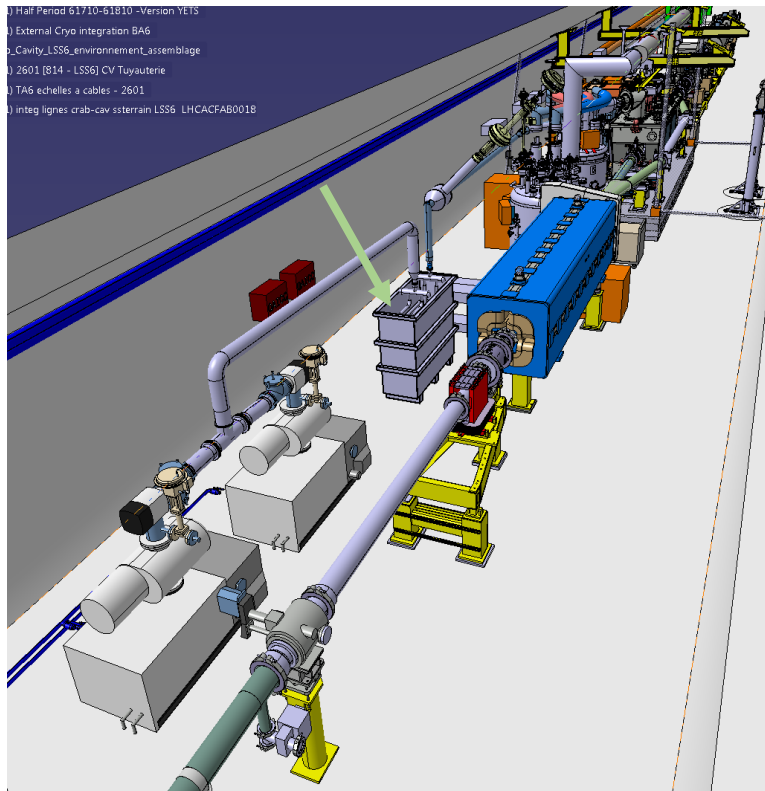
Last update:  
Will be finished today

Technical contact: Chiara Pasquino TE-VSC

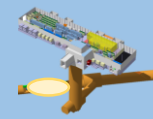


- Monday 18<sup>th</sup>: TE-CRG installs the heater tank

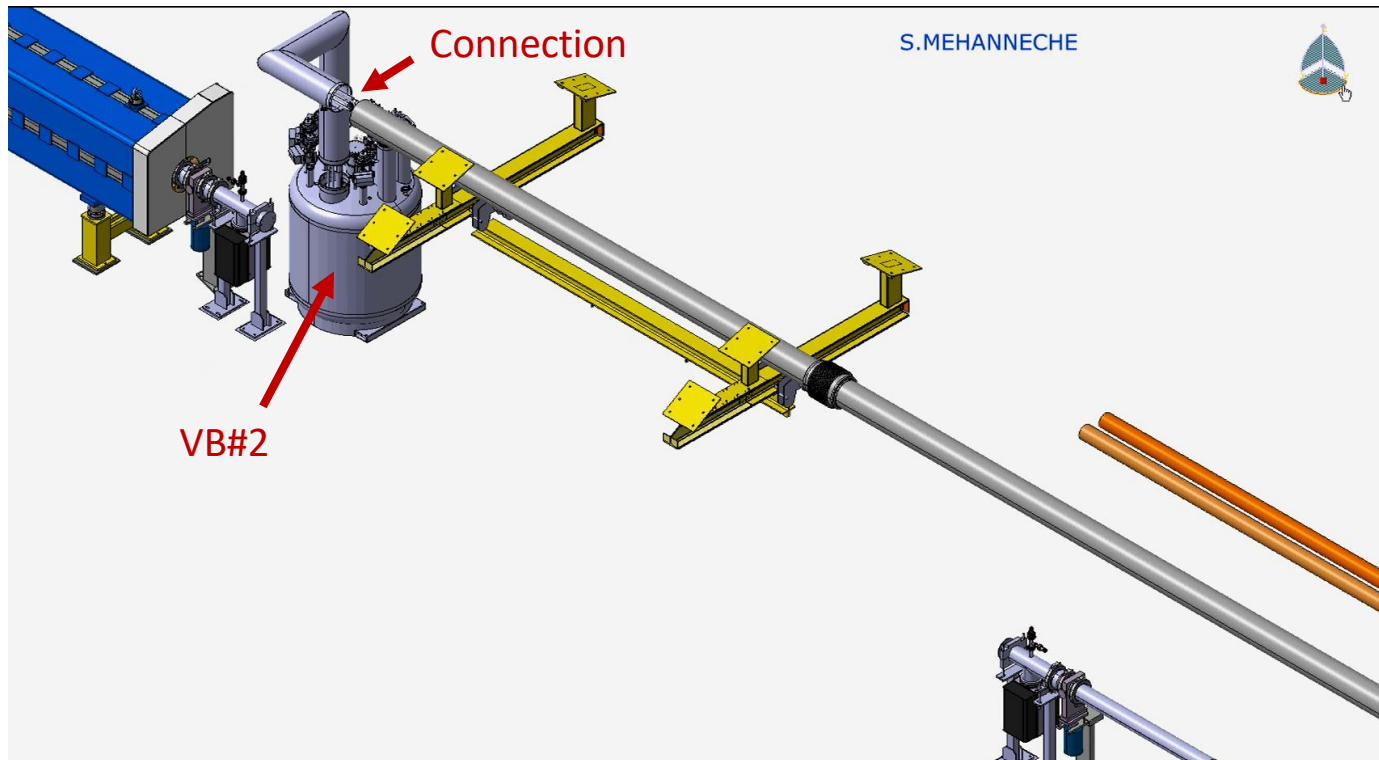
0.5 day activity (AM)



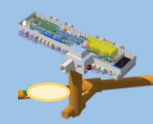
Technical contact: Jos Metselaar TE-CRG



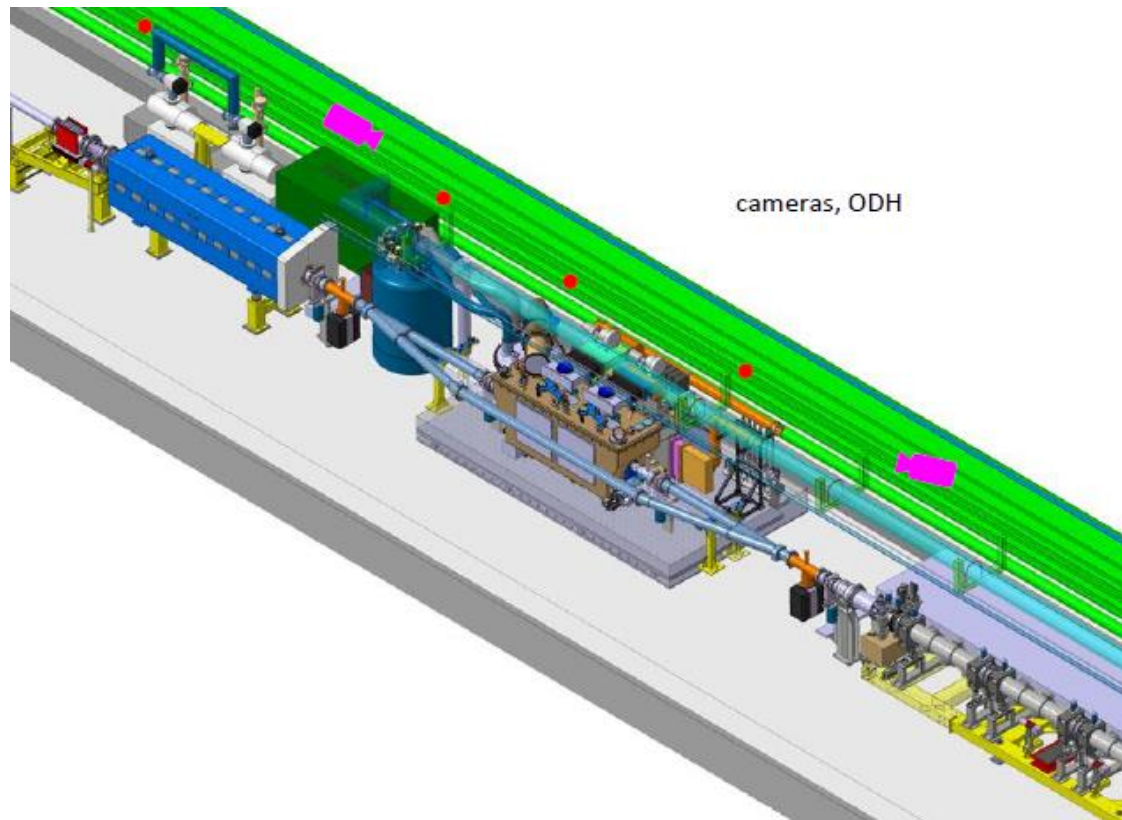
- Monday 18<sup>th</sup>: EN-HE installs the VB#2  
0,5 day activity (PM)
- Connection by TE-CRG to start on Thursday 21<sup>th</sup> or Mon. 18<sup>th</sup> PM.  
5 days activity



Technical contact: Jos Metselaar TE-CRG / Sylvain Fumey EN-HE

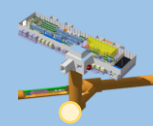


- Thursday 21th: ODH can be installed, cameras as well  
0.5 day activity



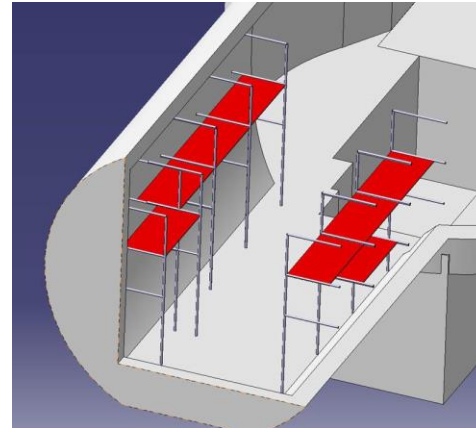
Technical contact : Nicolas Broca BE-ICS





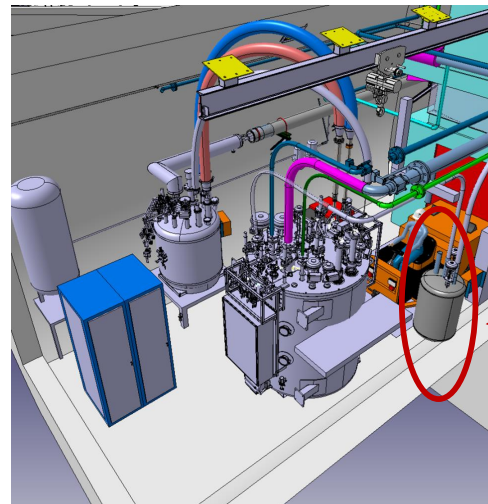
- Monday 18<sup>th</sup> morning: installation of scaffold for TE-CRG

0.5 day activity



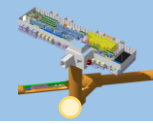
- Monday 18<sup>th</sup>: start of LN<sub>2</sub> line and phase separator installation

1 day activity

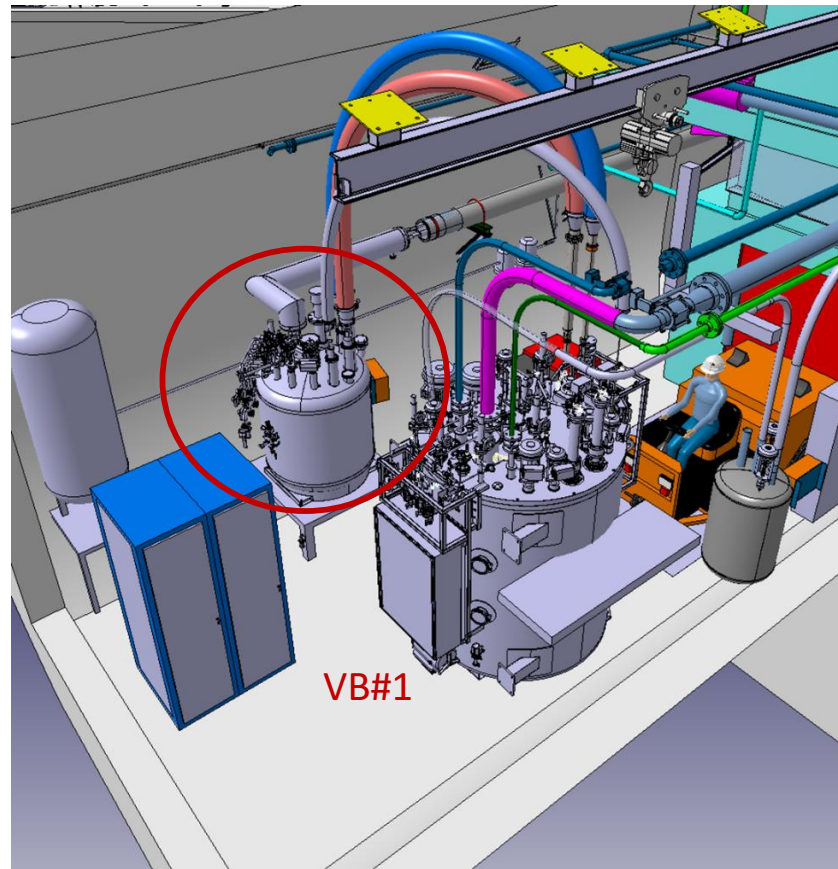


← Phase separator

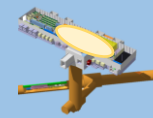
Technical contact: Jos Metselaar TE-CRG



- VB#1 to be installed before mid. week 2 : will start on Monday as well  
0.5 day activity



Technical contact: Jos Metselaar TE-CRG / Sylvain Fumey EN-HE



- SMB/SE to drill holes in BA6 for warm pipework

0.5 day activity

Technical contact: Alejandro Martinez Selles SMB-SE

- Install ODH racks

*1 day activity?*

Technical contact: Nicolas Broca BE-ICS

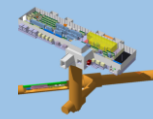
- Warm pipework under the false floor

3 weeks activity

Technical contact: Jos Metselaar TE-CRG



- Devices to be moved in BA6 to allow for compressor transport



- From Monday 18<sup>th</sup> onwards:
  - Cabling campaign 2018 (signal cables)
  - Connectors on RAL
  - Power distribution

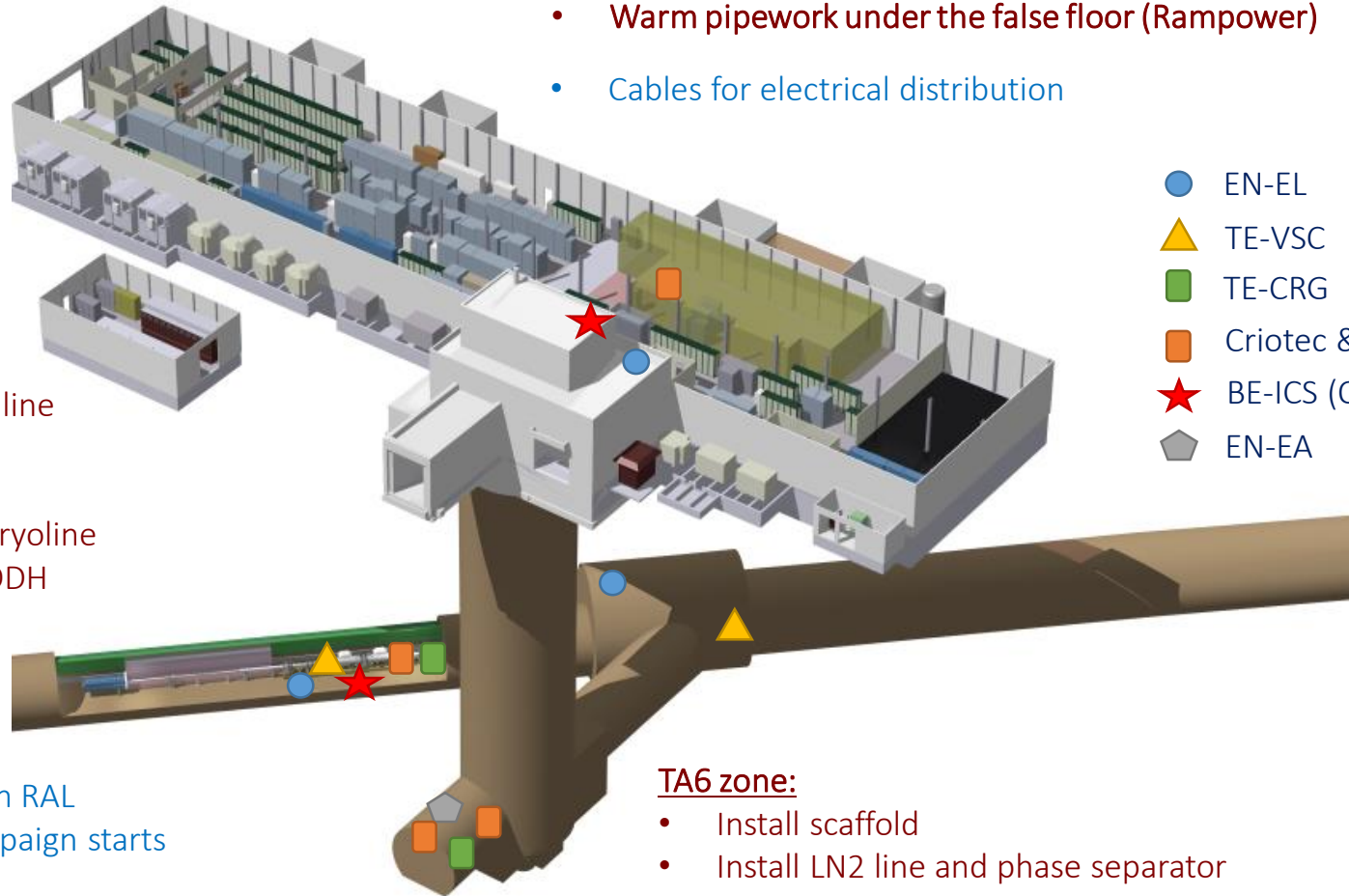
Technical contact: Guillaume Gros, Thomas Slettestol EN-EL

DAY

DAY/ NIGHT

### BA6 zone:

- Install ODH racks
- Drilling of wall for cryolines
- **Warm pipework under the false floor (Rampower)**
- Cables for electrical distribution



### LSS6 CC zone:

- Dismount vacuum line
- Install heater tank
- Position VB#2
- Connect VB#2 to cryoline
- Install cameras + ODH

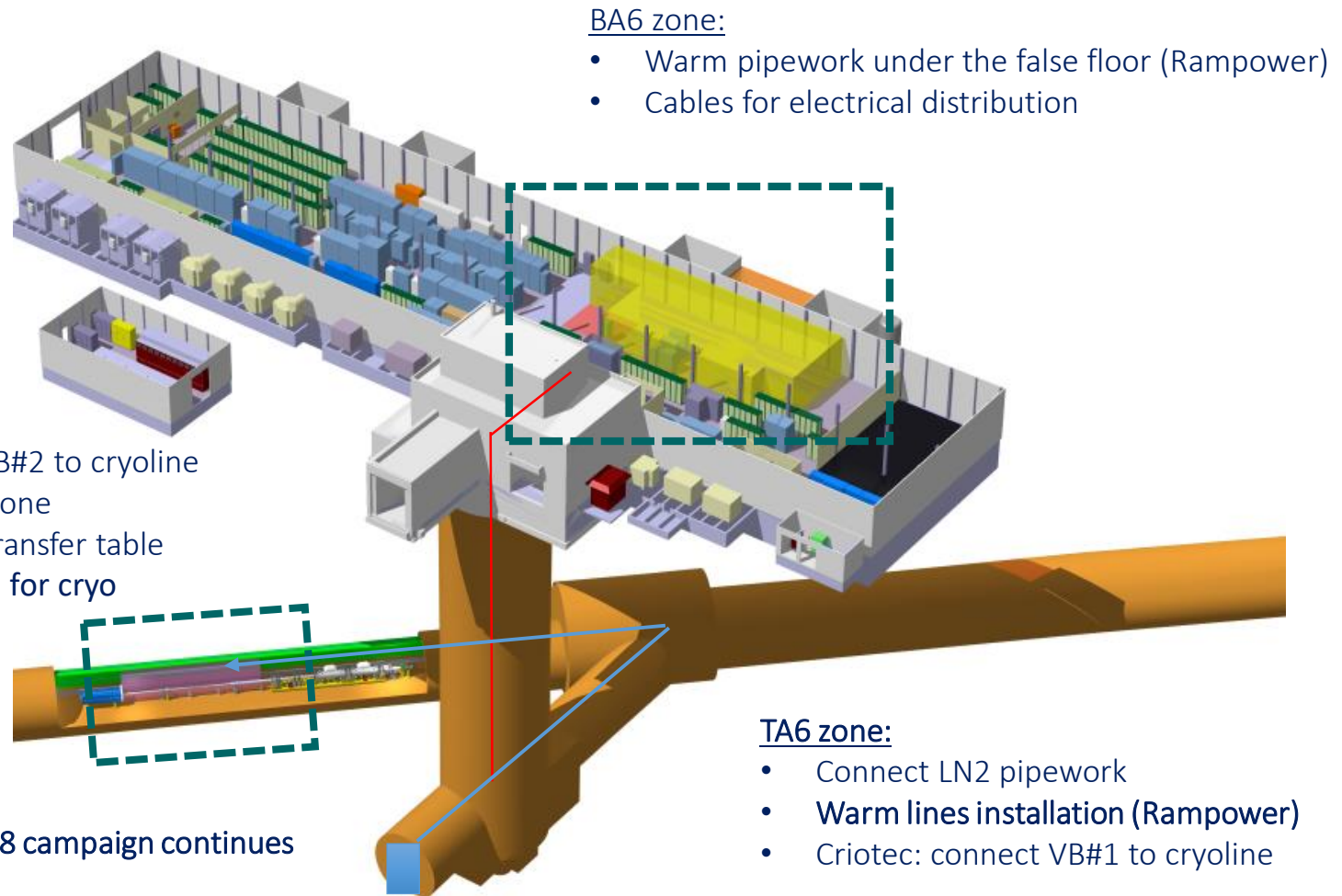
- Cable connectors in RAL
- Cables – 2018 campaign starts

### TA6 zone:

- Install scaffold
- Install LN2 line and phase separator
- **Warm lines installation (Rampower)**
- Position VB#1 if possible (anyway before mid wk2)

# Week 02/2018:

## 8<sup>th</sup> to 12<sup>th</sup> of January





**BE** Beams Department | Radio-Frequency



## Coordination team:

- Giovanna Vandoni, BE-RF (16 3269)
- Simon Barrière, BE-RF (16 0085)
- Johan Dalla-Costa, BE-OP (16 3575)

## Engineering Referent for Operational Safety:

- John Etheridge, EN-ACE (16 4647)

## MONDAY 18<sup>th</sup>



Joint VIC for EN/EL (distribution, cables, fibers)  
VSC Dismounting vacuum line in crab zone  
EN/EA Installation of scaffold in TA6  
If possible, VB#2



Connectors (RAL zone) /el. distribution (shaft)

## TUESDAY 19<sup>th</sup> to WEDNESDAY 20<sup>th</sup>

6:30 (patrol) Tuesday to 17:00 Wednesday :  
**No access to underground areas**

## WEDNESDAY 20<sup>th</sup>

17:00 Wednesday: **switch to open access by J. Bauche**



EN/EL/FC Connectors  
EN/EL/EIC el. Distribution underground + 2 cables pulled under the false floors in BA6



## CONSTRAINTS

Tunnel access only by keys (24 max)  
Priority to EN/EL, VSC, EN/EA for keys  
**No work under false floor in active cable zones**

Access from BA1 or BA5 possible

THURSDAY 21<sup>th</sup> –FRIDAY 22<sup>th</sup>

EN/EL/FC in the crab cavity zone  
EN/EL/FC-fibers under the false floors and in crab cavity zone

Rampower in the TA6 alcove  
Installation LN<sub>2</sub> line in alcove  
VIC Criotec (Thursday afternoon)

BA6 SMB/SE drilling of the wall for cryogenic pipework  
Thursday: [transport of the kickers for alignment & pumpdown Friday/](#) transport of **heater** tank if not done  
At latest Friday: if kickers finished, installation of VB#1 (or later?) and VB#2



EN/EL/FC in crab cavity zone and RAL  
EN/EL/EIC continues underground

Question: If needed, can we install VB1 & VB2 on 4-5/1/2018?