



# What we have to tackle before validation (to freeze new reference version) of UR15 /55 integration

Follow up the news !

To do

In progress

done

Stephane Maridor – WP15 integration

Integration meeting #187 12/11/2021

# Reference catia / smarteam

## Why :

We want to freeze a new version of our 3D integration and then update the reference document « Underground integration list » ([EDMS 1577001v4 15/09/2020](#)).

## Situation today :

- UR15\_1102\_INTEGRATION : ST1120748\_01 a.05 ~~25/10/2021~~(in work)  
10/11/2021(in work)
- UR55\_1503\_INTEGRATION : ST1120275\_01 a.02 ~~20/10/2021~~(in work)  
02/11/2021(in work)

## WP17.3 (CV)

- update (3D model) according to the new cryogenic configuration (2 QXL)-> adjustment position of the ducts..; removing unnecessary piping.
- Verification position of the AHU according to maintenance condition, and position of the piping (AHU problem in the ULX3 junction for the moment not in the right place), correction AHU position in the UR15 (see UR55).
- 
- Verification interfaces with WP6B; and identification of potential impact on integration.
- 
- Verification position firefighter STORZ.
- 
- Update position according to the actual section of the tunnel ("as built" of the tunnel)

In progress

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To do

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In progress

## WP17.2 (EL)

- update (3D model) according to the new cryogenic configuration (2 QXL)-> adjustment position of cable trays..
- 
- Verification position of transformers, electrical panels, UPS ...
- 
- (DFH—CDB—PC cabling) Update and verification of interfaces with WP6B and integration impact studies. (definition of all support system )
- 
- Update position according to the actual section of the tunnel ("as built" of the tunnel)
- 
- Evaluation of the filling of cable ladders (especially on the transport side) to define the cable ladder width.
- 
- integration of AUG safety equipment + emergency lighting + others? UR; AU; UL; US
- 
- Integration principle of lighting (reservation of space); ( define according to the installation phasing)
- 

In progress

To do

To do

In progress

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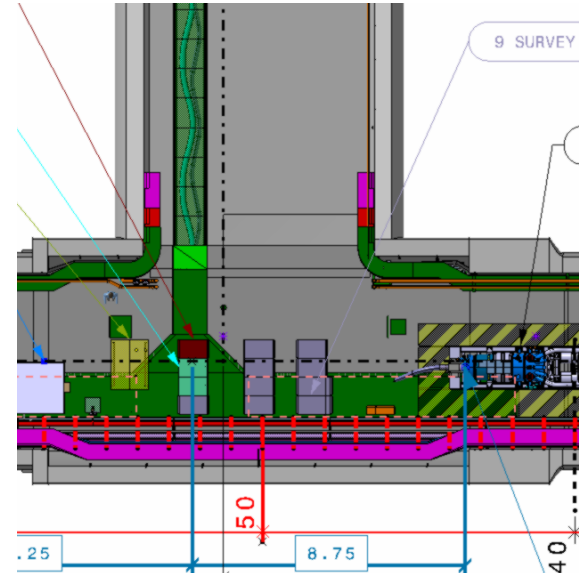
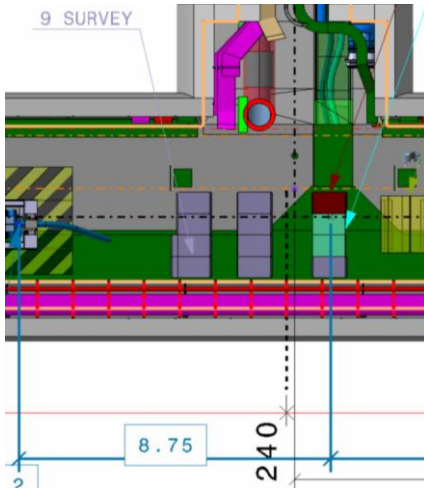
# WP15.4 (survey)

- Verification of rack implementation (GYPOS...)
- Naming
- proposal position of reference nails (WP15) on the ground for installation marker and placement of equipment (racks, others...)

done

In progress

In progress

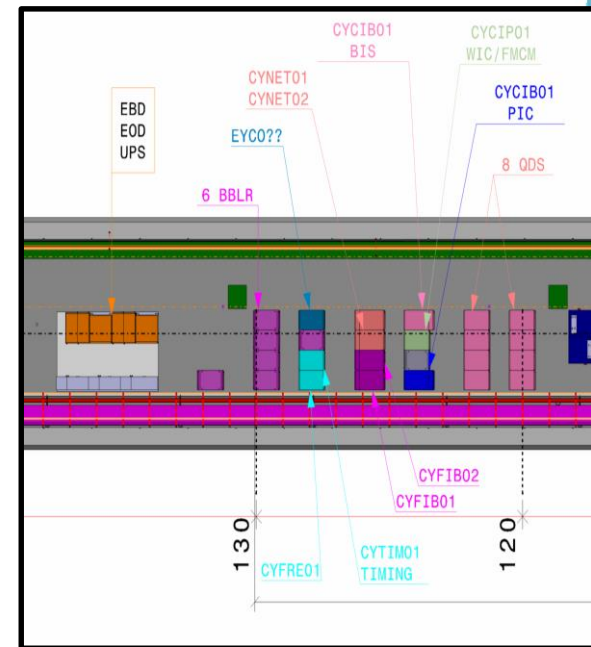
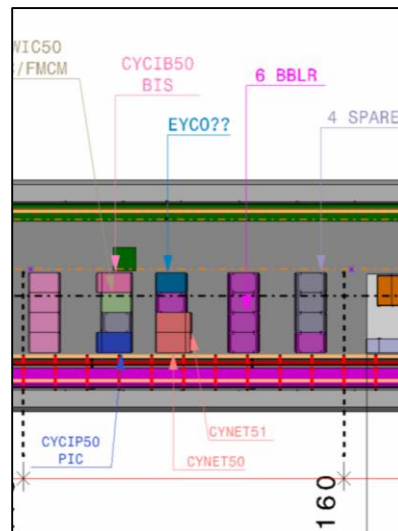
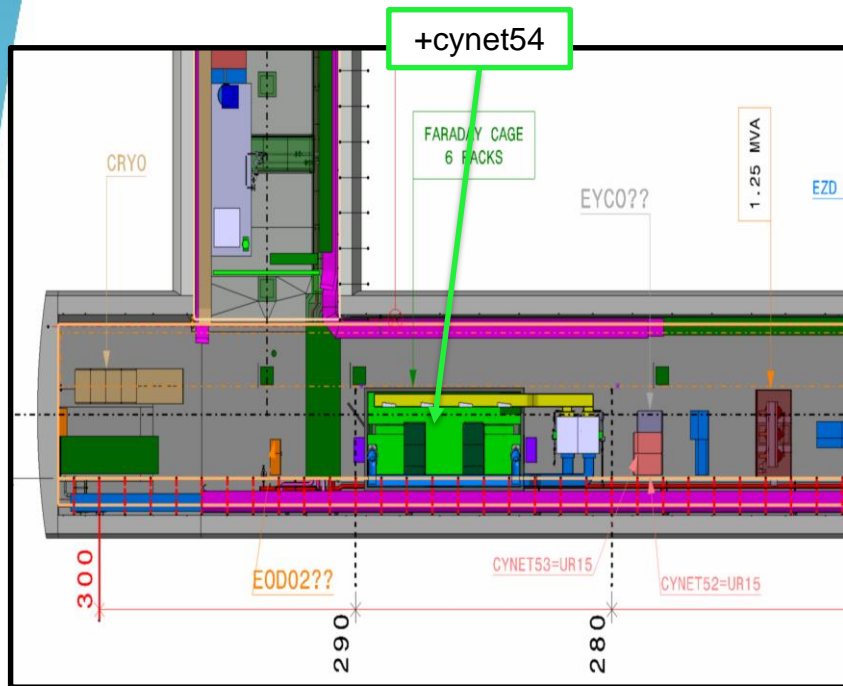
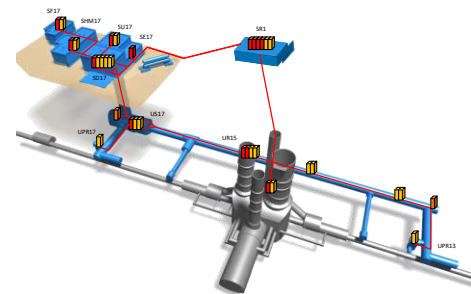


# WP17.5 (tec. monitoring)

- Rack Implementation Verification (CYNET )
- Naming

done

done

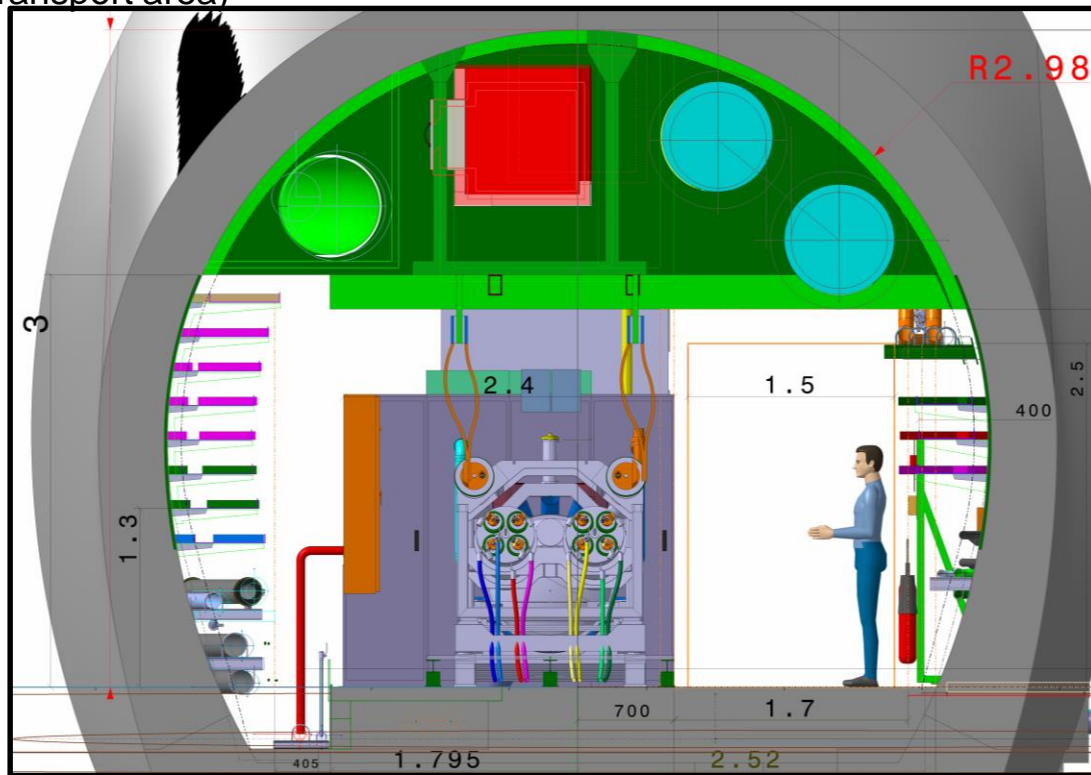


# WP17.7 (transport)

- Transport area verification

done

(No change of transport area)



# WP6b (warm powering)

- Verification integration of power converters according to latest version, DFHX and DFHM cluster, (Minor adjustment always possible); example: pc 18ka possibility of displacement for identical length of cables (left / right side).

We have Meeting next week to treat

In progress

- Check interfaces with CV(wp17.3) , and integration impact study.

To do

- wp6b/wp15/be/wp6a: structure support bus-bar et cdb situation ,impact,(nouveau /sm18).

In progress

- Naming .

In progress

- Vérification « spare racks » et utilisation.

To do



# WP6a (cold powering)

- Intégration DFHX et DFHM,
- sc link (**last DSHM still missing**).
- we are waiting the protections (covers) for the part of SCLink when this enter or exit the trench.
- wp6b/wp15/be/wp6a : structure support bus-bar; and cdb situation ,(nouveau /sm18).
- Naming
- Possible Next steps : wp6a/wp15 plan d implantation DFH

done

In progress

To do

To do

In progress

To do

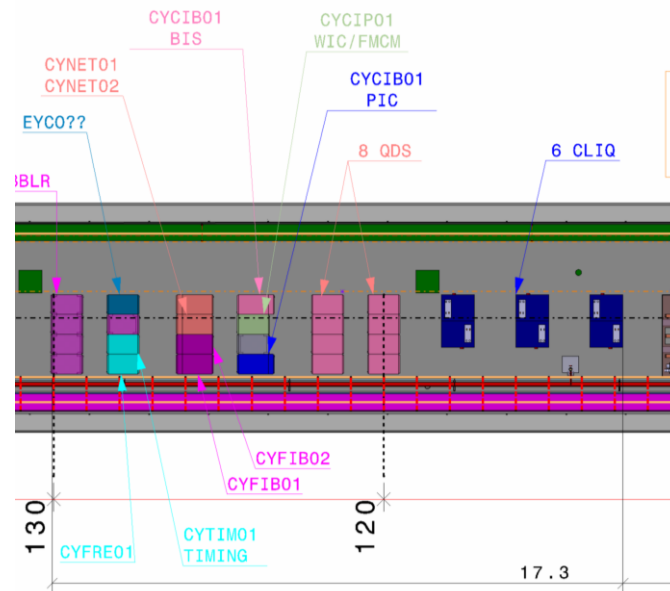
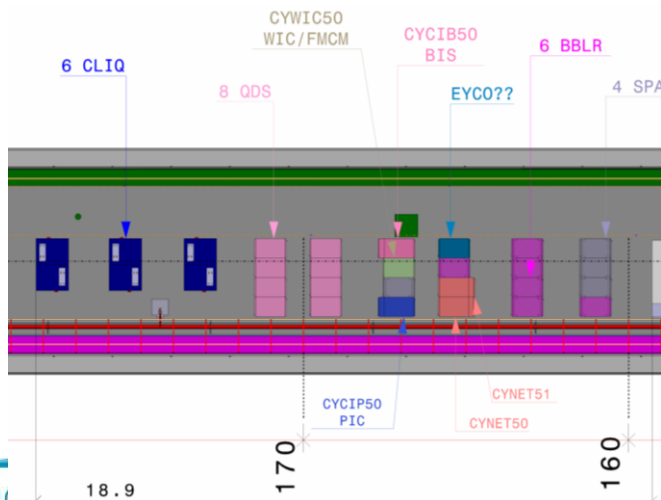
# WP7 (Machine protection)

- Rack Implementation Verification
- naming

In progress

To do

In progress



# WP9 (cryogenie)

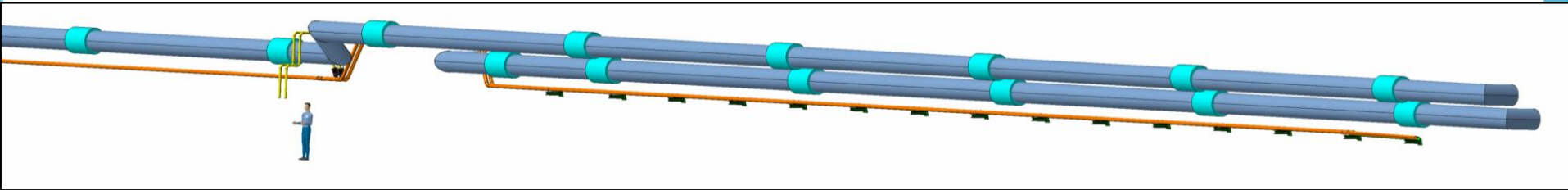
- Implementation new configuration (modèle 3D :space réservation).
- racks (fip): check the request and proposal for location for validation.
- Naming racks

done

In progress

[SLIDE16](#)

To do



# WP18 (control.)

- Rack Implementation Verification (CYFRE ; CYTIM; CYRST)
- Naming

In progress

To do

In progress

# WP15 (integration team)

- ULX7 Evaluation of the use of the available space and proposal for implementation (potential space for spare EPC rack for example) .
- Follow up last modification, update integration and Preparation for validation before Christmas
- Correction documentation EDMS

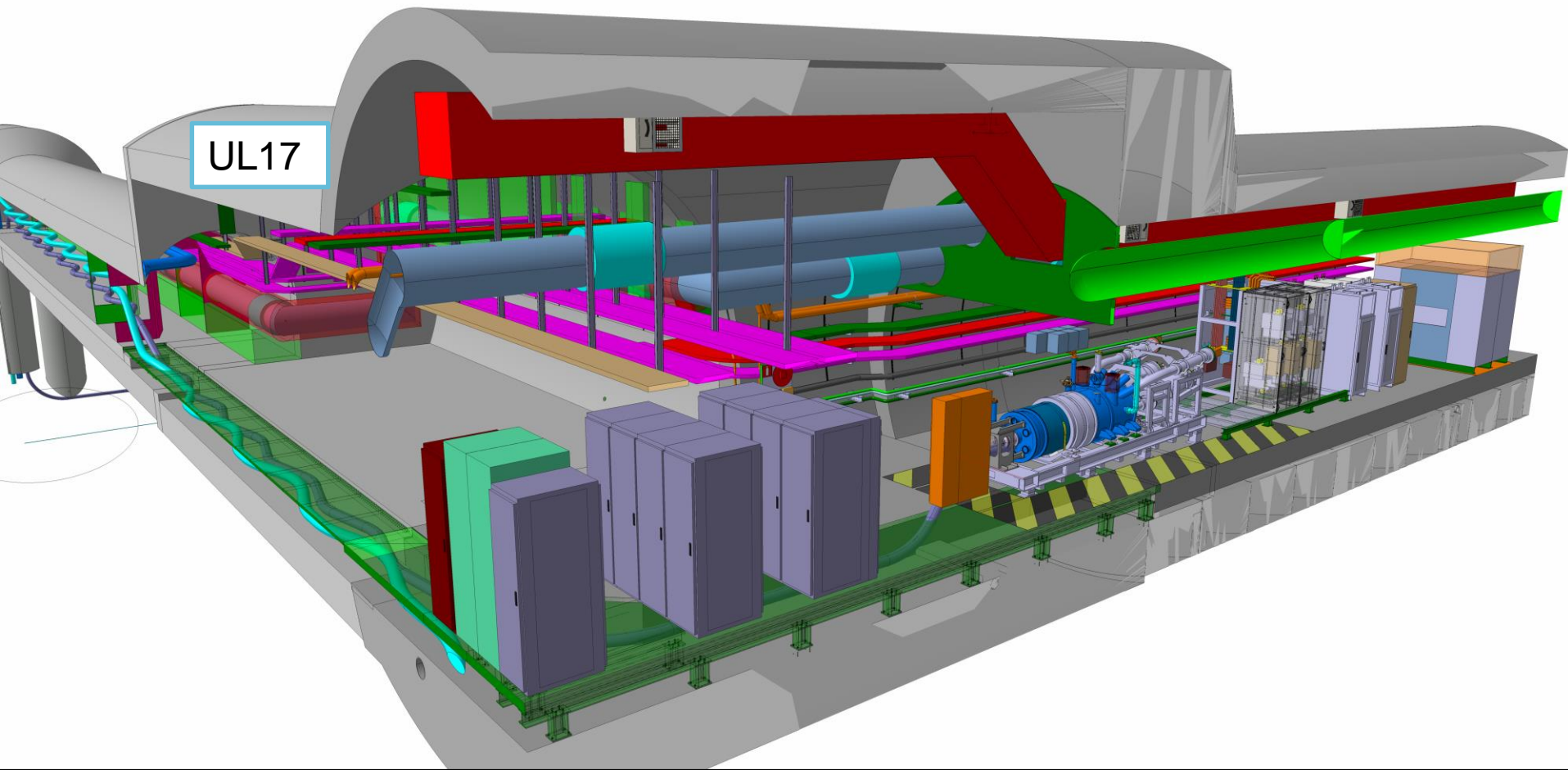
To do

In progress

To do

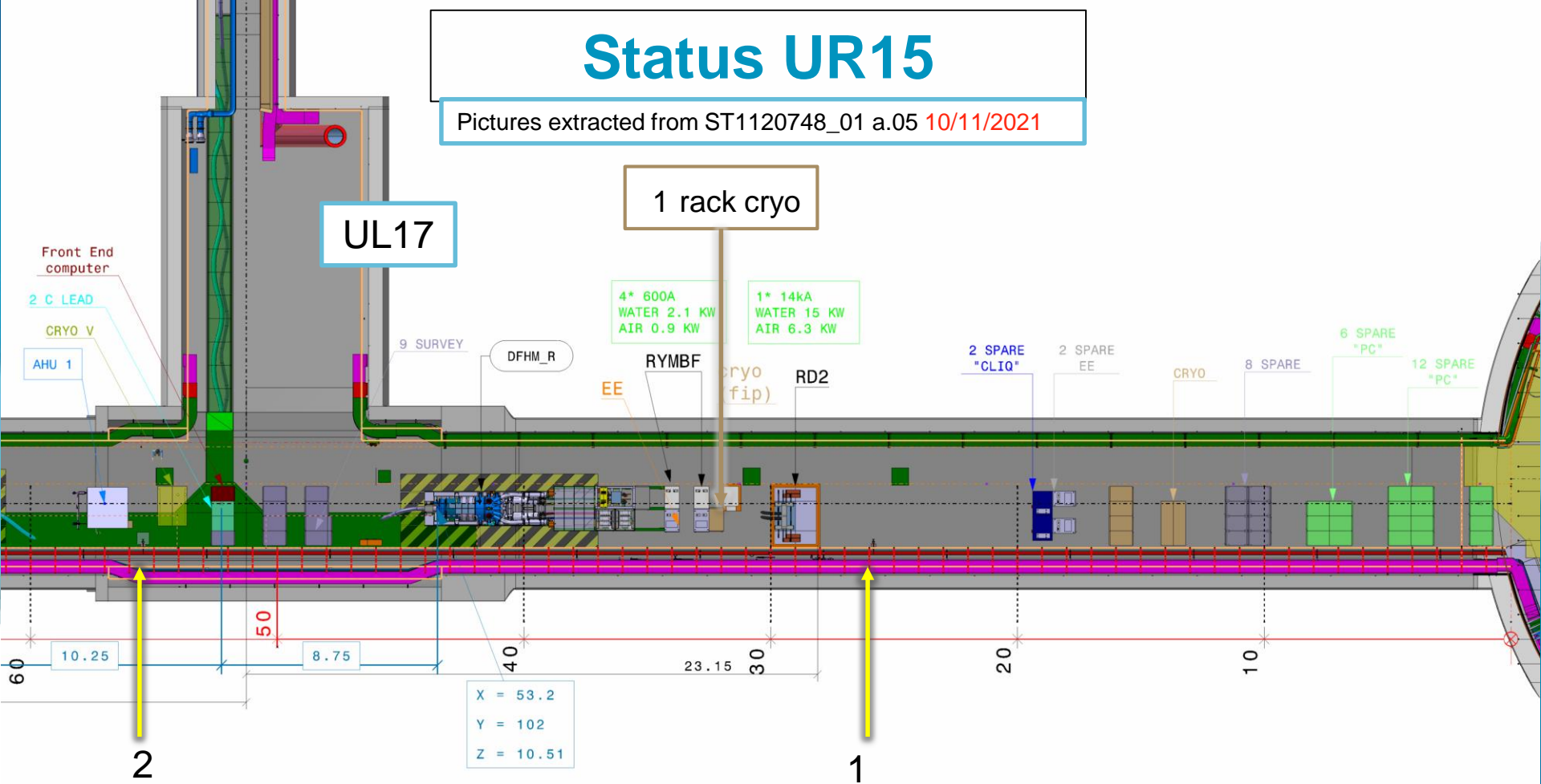
Pictures extracted from ST1120748\_01 a.05 25/10/2021





# Status UR15

Pictures extracted from ST1120748\_01 a.05 10/11/2021





# Status UR15

Pictures extracted from ST1120748\_01 a.05 10/11/2021

2 racks  
cryo

UL17

8\* 2kA  
WATER 6 KW  
AIR 3 KW

1\* 14kA  
WATER 15 KW  
AIR 6.3 KW

1\* 18kA  
WATER 44 KW  
AIR 10 KW

Front End  
computer

2 C LEAD

CRYO V

AHU 1

DFHX\_R

RQX

RD1

cryo  
(fip)

3

2

X = 53.2  
Y = 83  
Z = 10.28

61.5

100

90

80

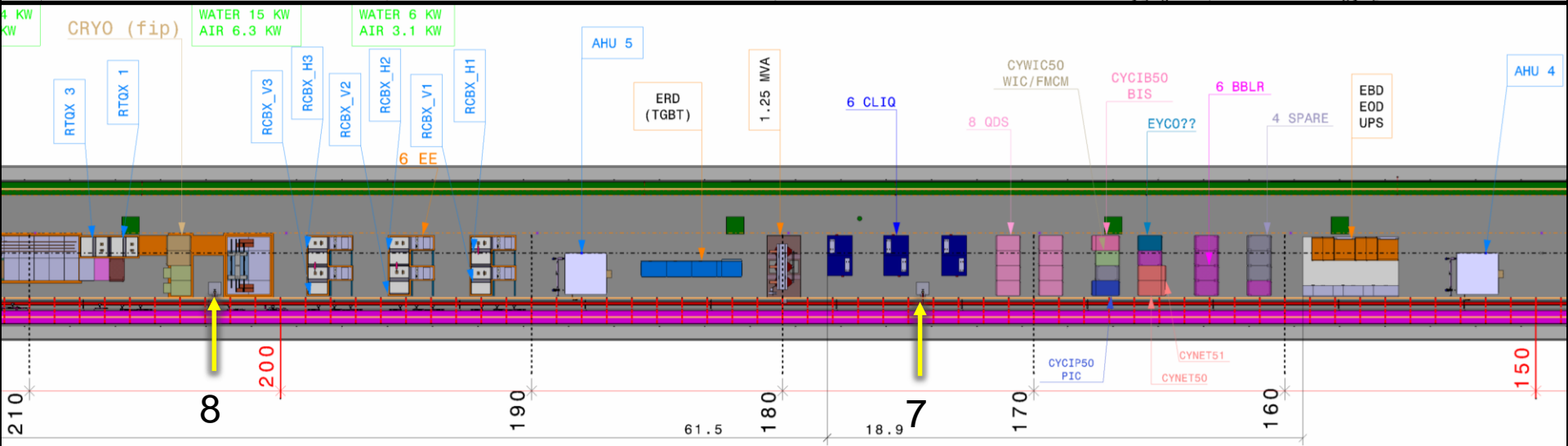
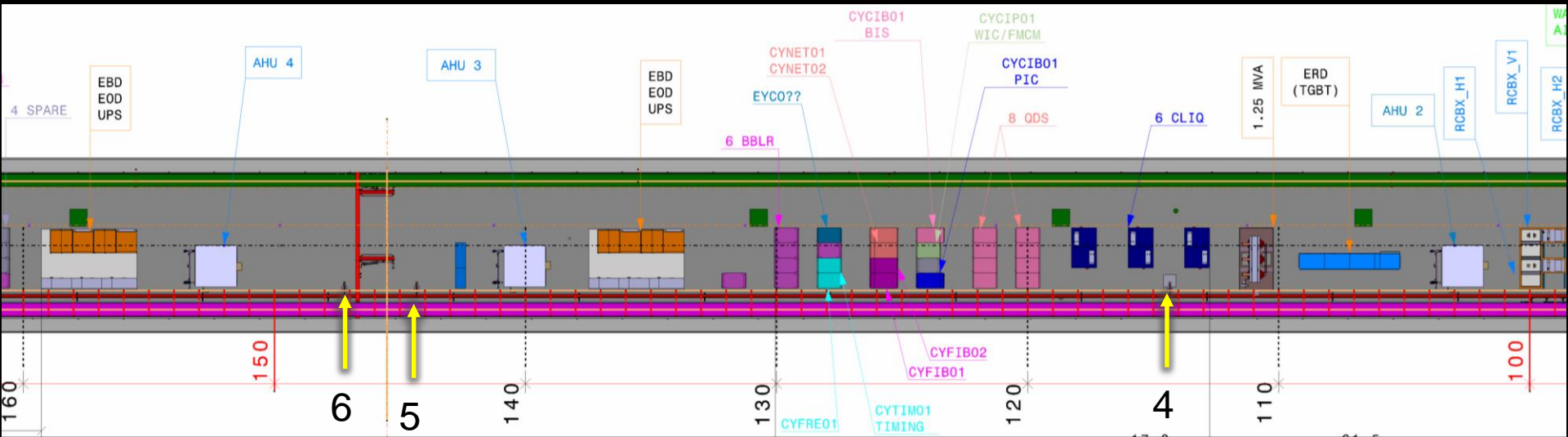
70

60

10.25

50

8.75

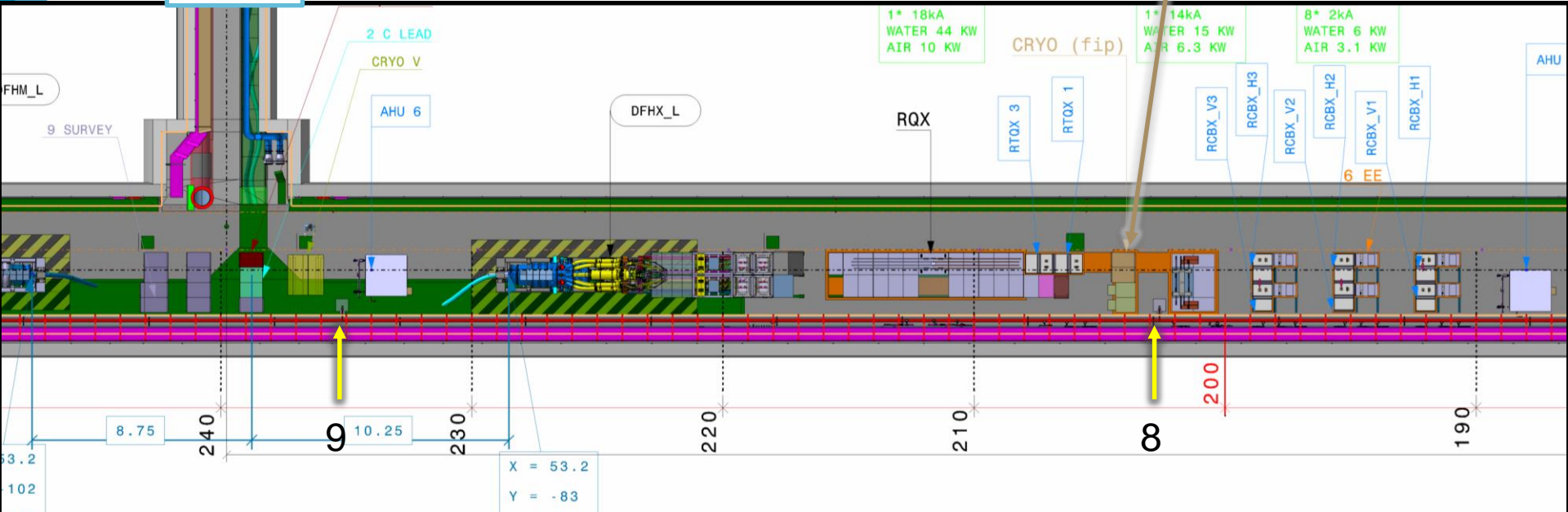


# Status UR15

Pictures extracted from ST1120748\_01 a.05 10/11/2021

UL13

2 racks  
cryo



# Status UR15

Pictures extracted from ST1120748\_01 a.05 10/11/2021

UA13

1 rack cryo

