

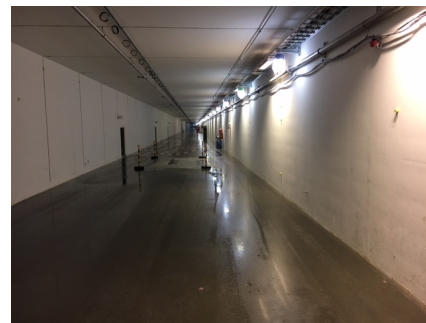
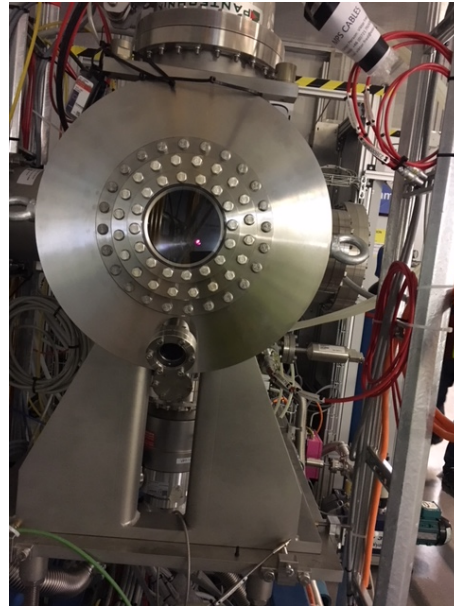
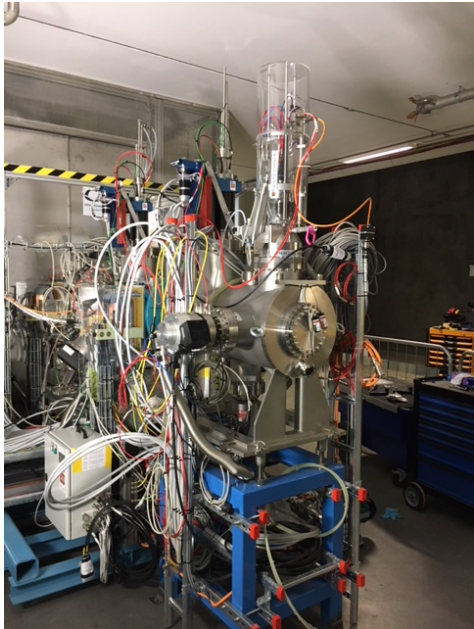
Installation of BI systems

Viatcheslav GRISHIN

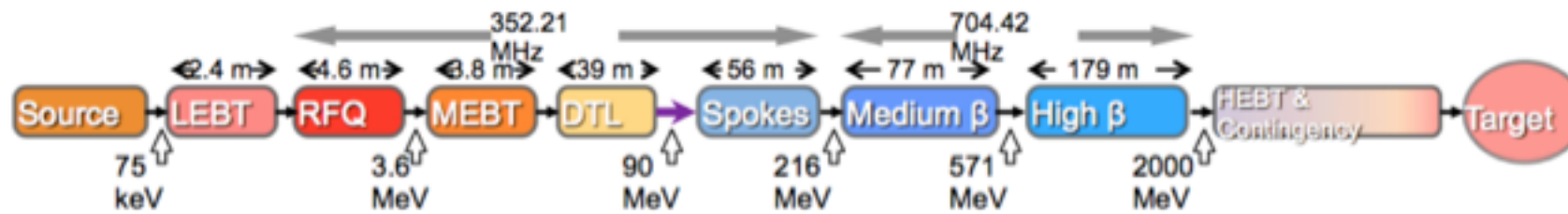
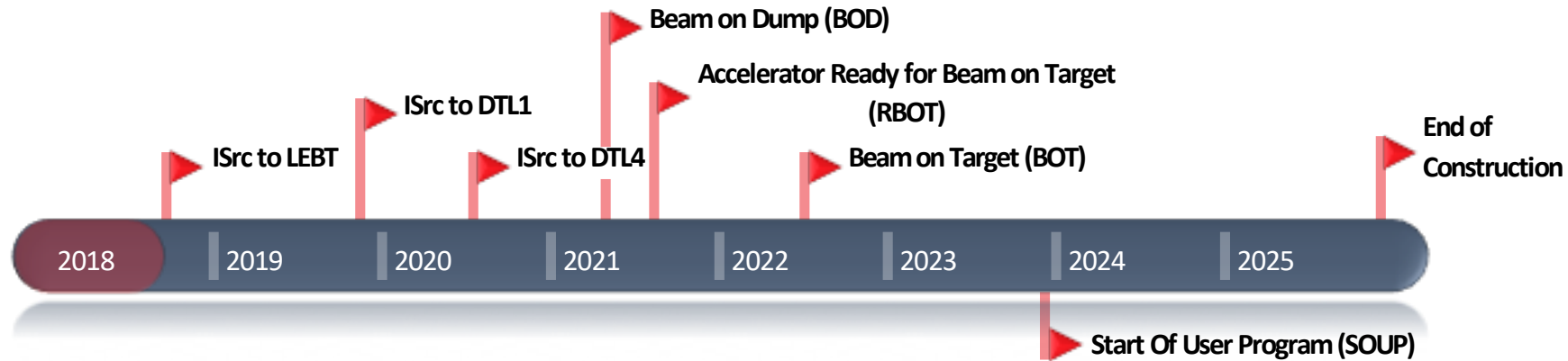
European Spallation Source ERIC

22 November 2018 , BI forum

BD team and IS&LEBT

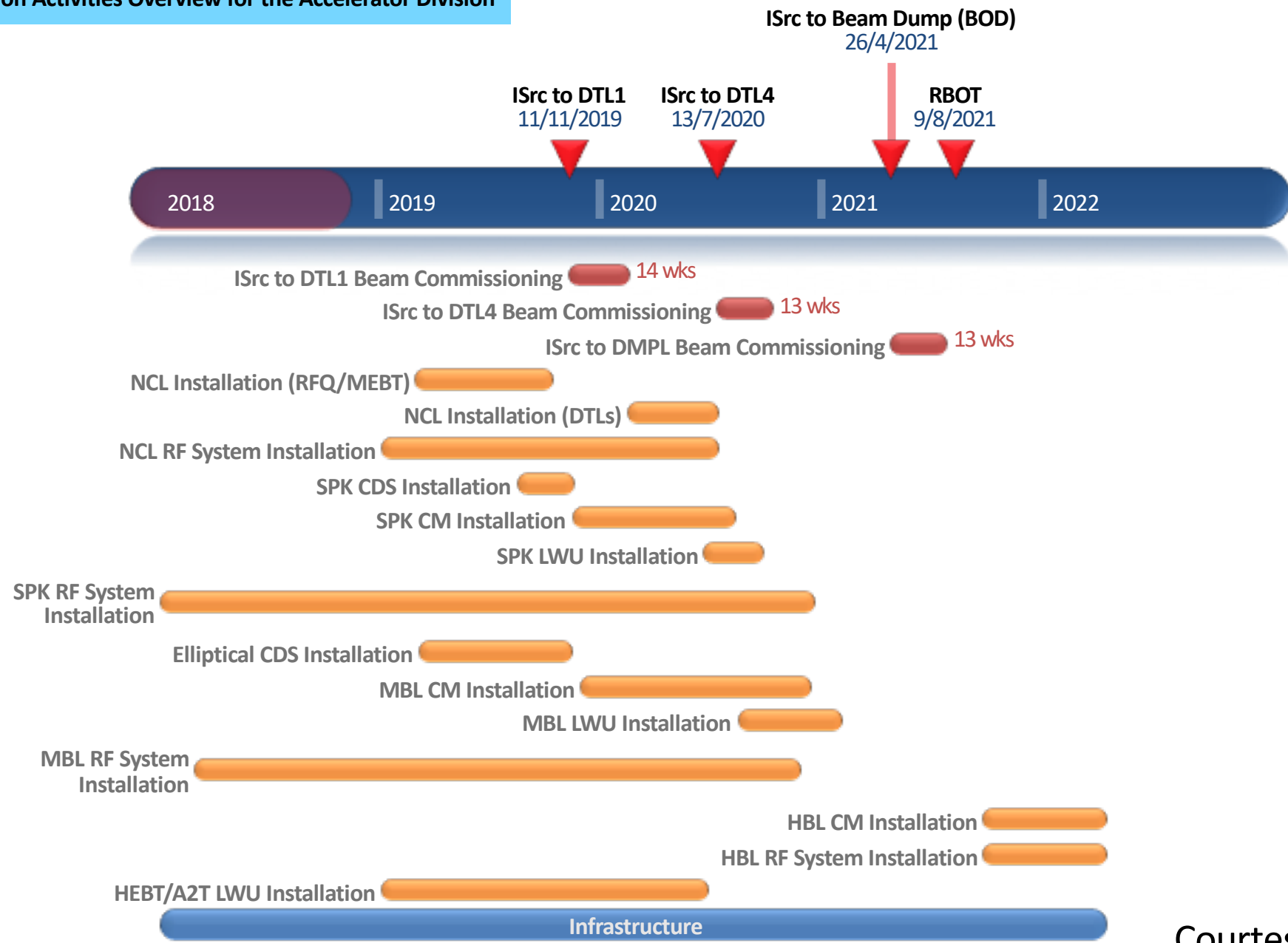


ESS Project – The Big Picture



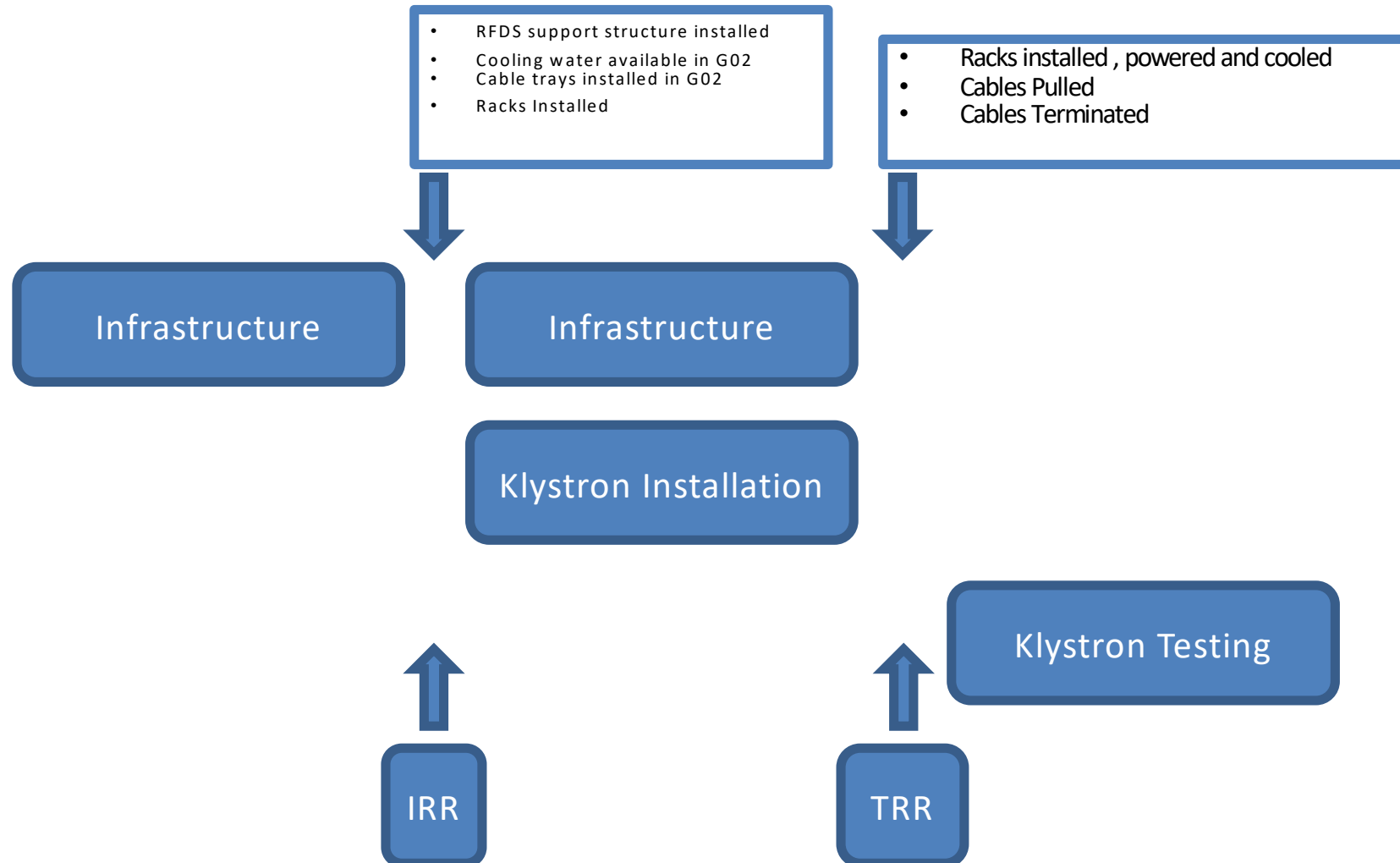
Courtesy Ciprian Plostinar

High Level Installation Activities Overview for the Accelerator Division

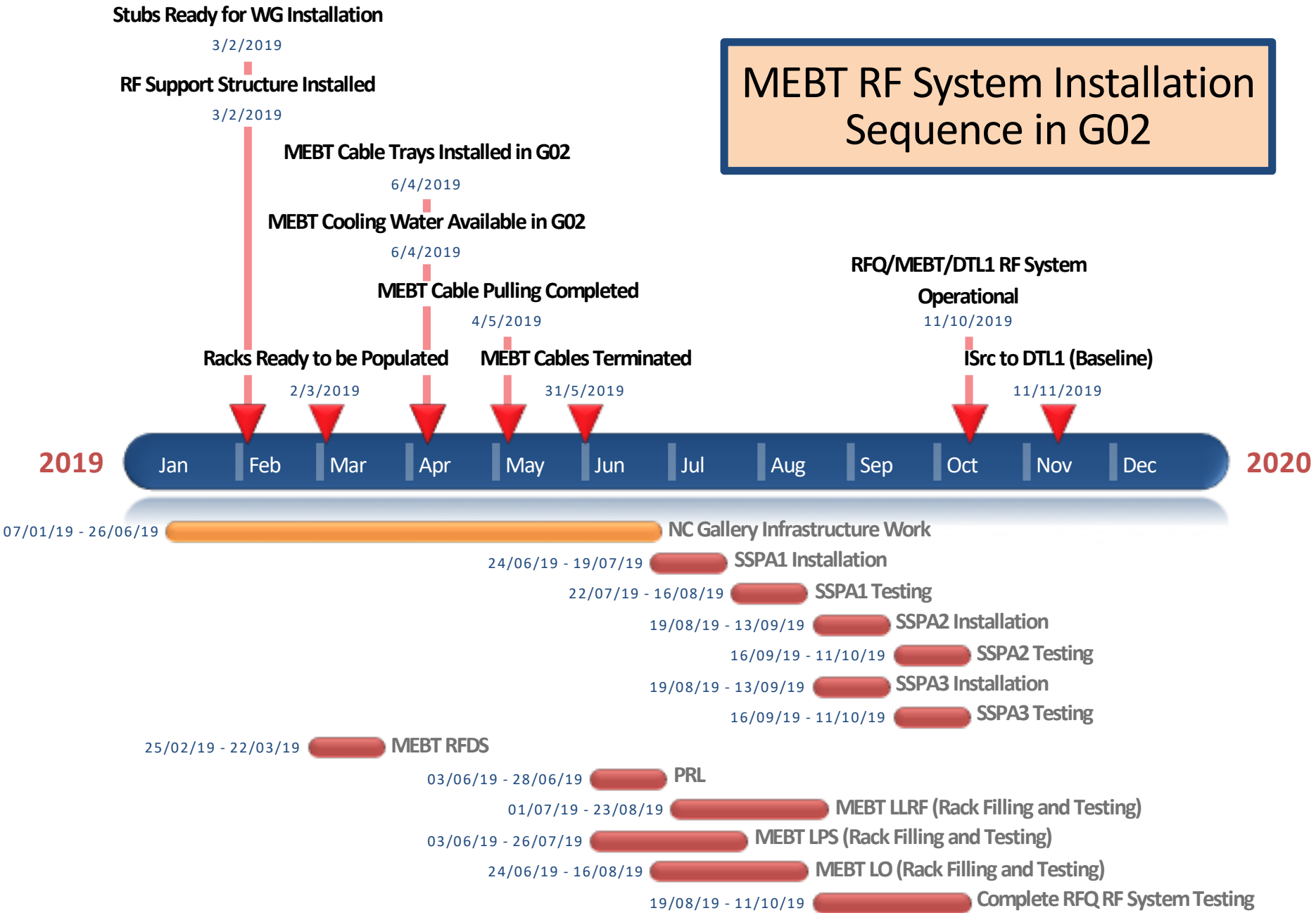


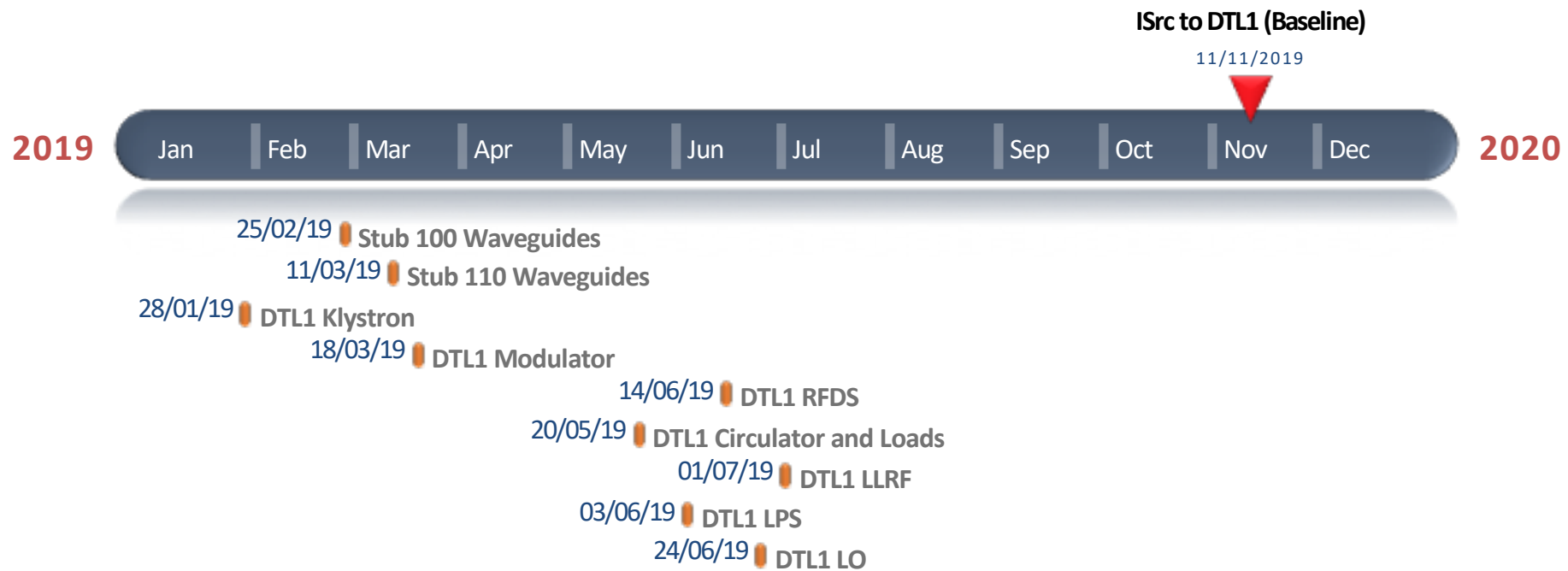
Courtesy Ciprian Plostinar

WP8 – RFQ/DTL Klystron Installation and Testing Sequence and Infrastructure Requirements



MEBT RF System Installation Sequence in G02





Lessons from IS&LEBT



Catania's boxes, CEA EMU delivery



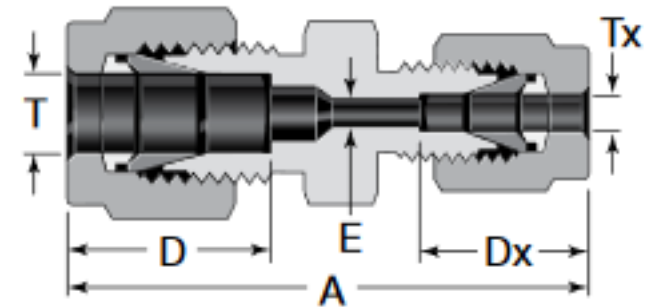
1) Catania's boxes

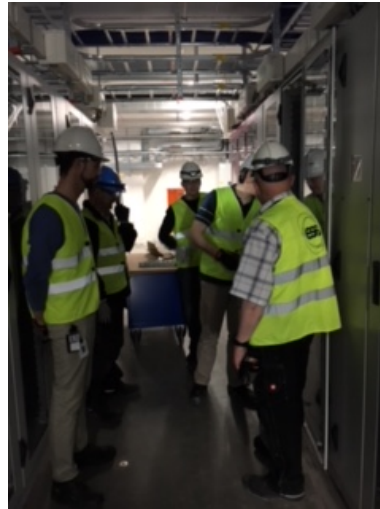


2) CEA 2nd EMU

The cardboard box in FEB090 with pipe fittings for this work did not contain the Swagelok reducers from 12mm to 10 mm. Does anyone else have them elsewhere? If not, they must be ordered which may take until next week via procurement.

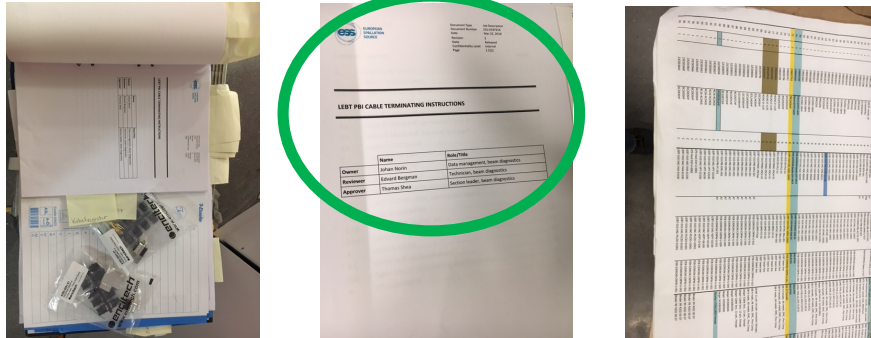
Anyone knows about these?



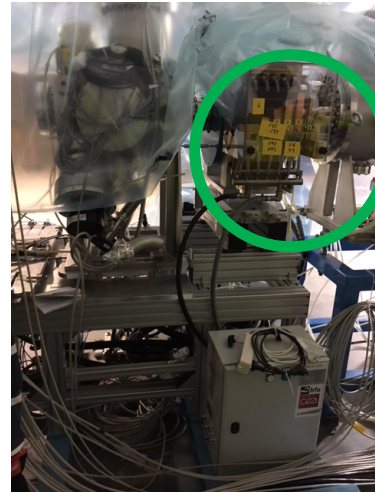


Connectors and termination

1)



3)



4)



Length and termination



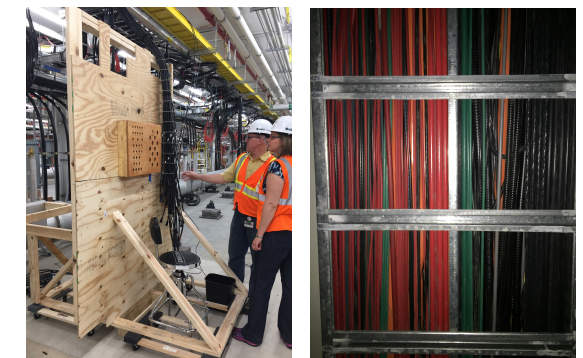
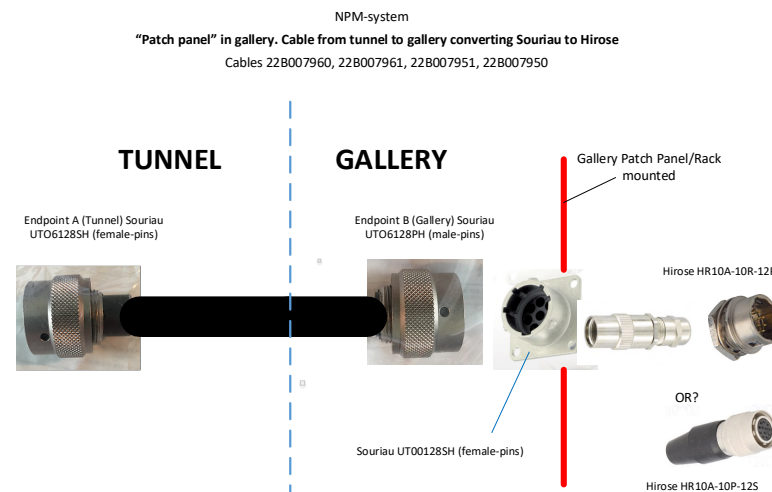
2)



Converter-box for LEBT mismatched connector Hirose to the "monster" cable 4P18IOSLSHF.

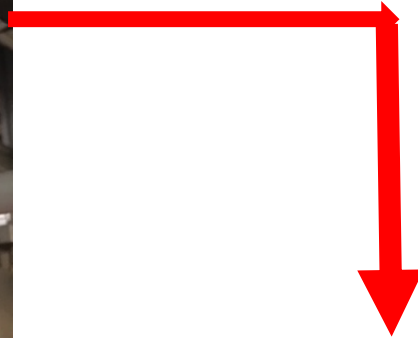
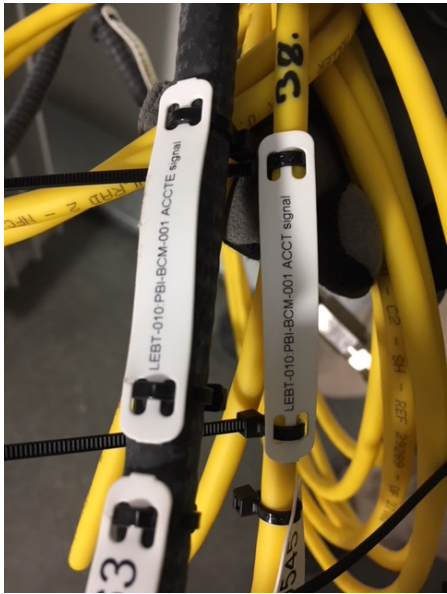
Connector converter needed!

Courtesy Edvard

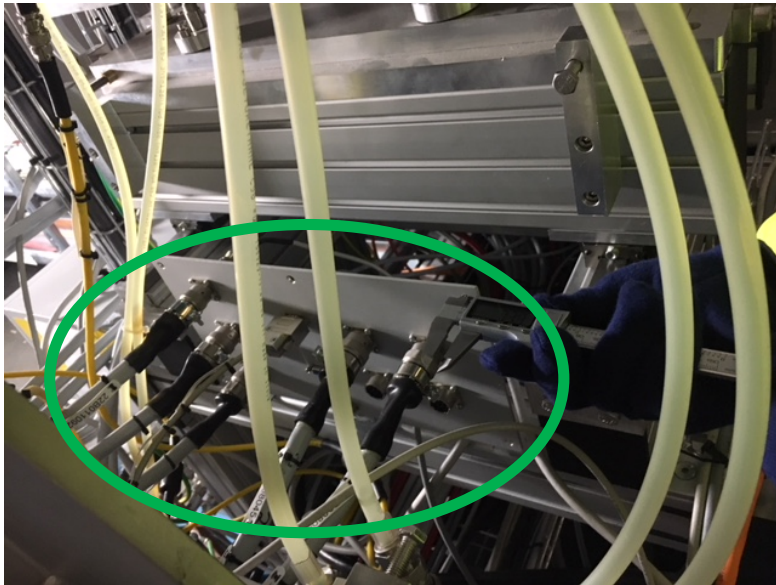


Wood mockup of patch panels in tunnel (this one is for the cryomodules) - put in place to assist cable termination:

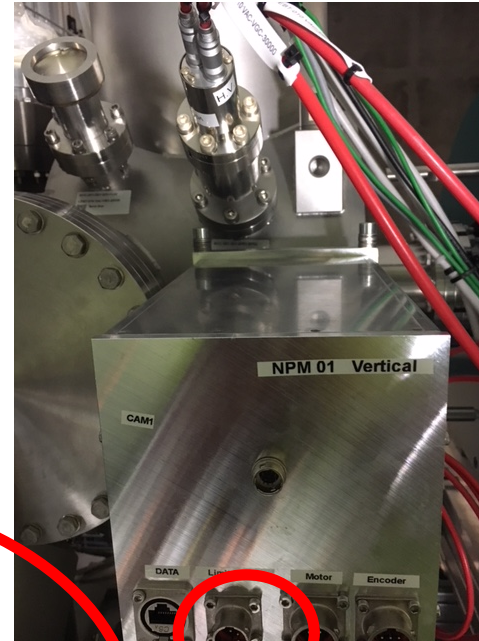
Labels



Courtesy Johan



WUT PP!



PP

3D drawings
are not all absolutely correct

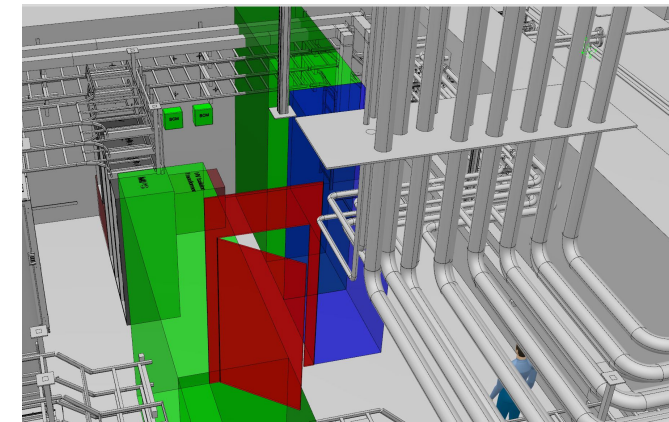
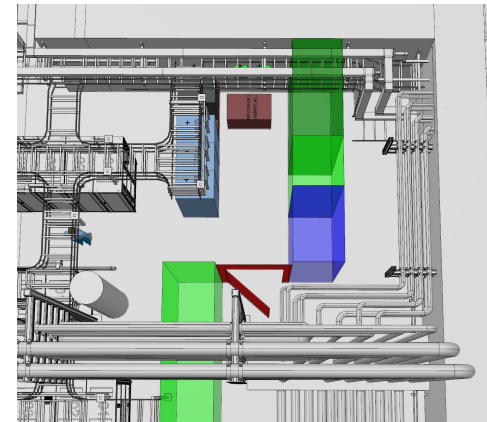
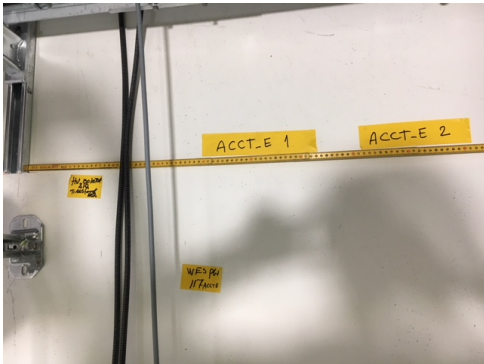
Doppler FEB rack



not "trivial" but effective solution



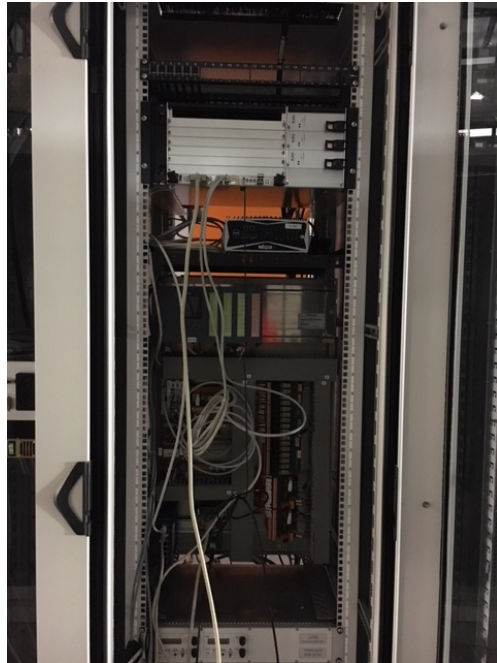
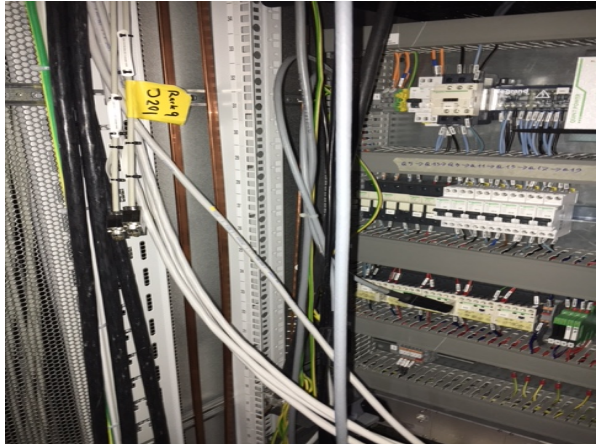
1) Wall & ACCT



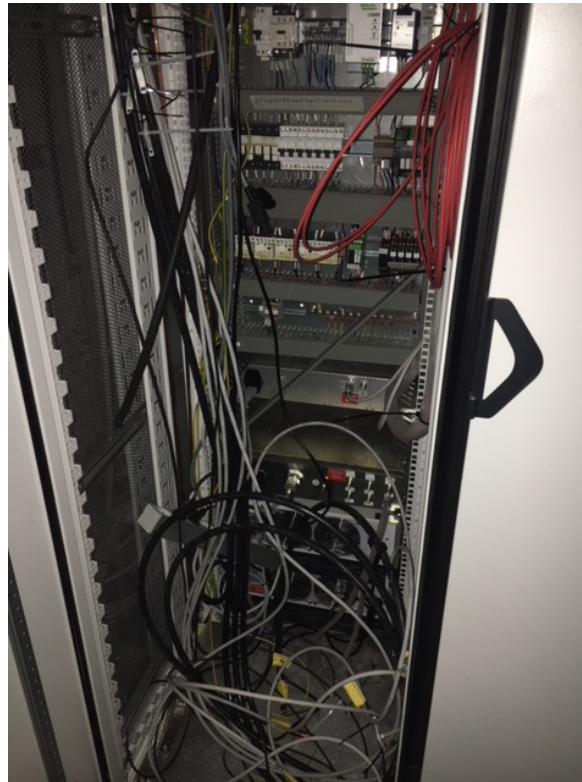
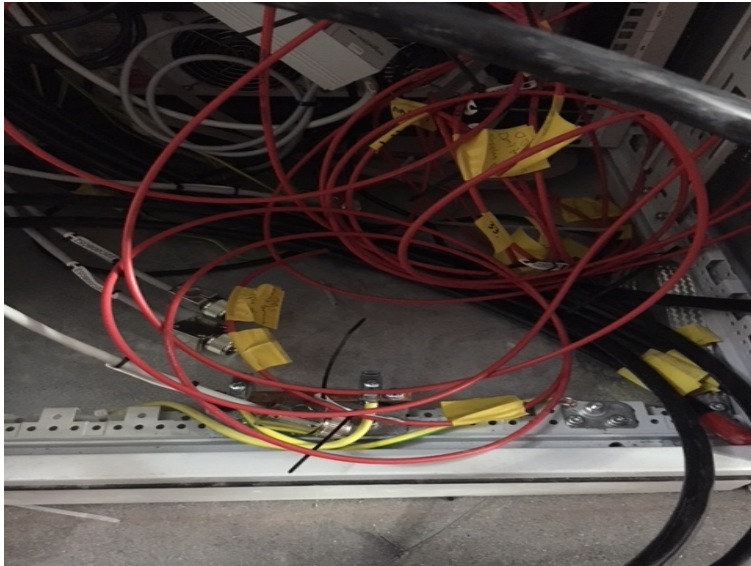
2)



"I would like to clarify once more that the Accelerator Installation organization does not have its own technicians who can perform installation tasks on behalf of the work packages. The work package is responsible to organize this work themselves. If, for example, you require to drill, I can provide you with a drilling machine and drills. I can give you the details of a drilling company or help you setting up a JIRA request to CF for drilling the holes. The cost still have to be taken by the WP."



Cleaning and culture of work



Stubb: BD cables, conduit, from stubb to racks



MoM G01 Installation meeting #41. 13 November 2018

The Polish from IFJ-Pan will start with installing the conduits in the stubs as soon as the drilling is completed.

Gallery: 3D drawings, PP in time, schedule of installation



- Minutes:
- Clarifications on IRR
 - IRR will be done in Lund, typically 3-4 weeks before the installation start (It is foreseen to occur in February).
 - Edgar will send an example of the IRR charge document to Bilbao for information (see attached)
- JIRA issue NCLIN-422, **MEBT ESS Bilbao racks**
 - For complete systems delivered by Bilbao like magnets, chopper, **EMU and FC, the rack equipment installation, internal cabling and testing will be done by ESS-Bilbao. ESS BI and Polish in-kind will provide support, including producing ePlan drawings/wiring diagrams**
 - For the scrapers/collimators, ESS-Bilbao does not provide a complete system and therefore may not be fully in charge of rack equipment installation, cabling and testing.
 - **Bilbao team offers himself to lead it, but there is some important information HARDWARE missing.**
 - **Decision by BI if they should lead this task.**
- ePlan drawings/wiring diagrams
 - **Bilbao team proposed strategy to minimise risks: to do the ePlan drawings by Polish in-kind once the systems are installed (as built) at ESS to minimise the preparation work beforehand. ESS-Bilbao will provide the necessary description documentation beforehand for rack equipment installation and cabling.**
- JIRA issues NCLIN-494 to NCLIN-501 (BI integrated tests) appear to be on the same day and the duration is 1 day for each. Make separate days for each task, check the duration (may need more than 1 day) -> seems to be already done?
- JIRA issues NCLIN-498 and NCLIN-501, **WS, BCM and BPM tests**
 - Partial delivery by ESS-Bilbao, consider the same approach as for the collimator? Need ESS-Bilbao support?

Some FC, EMU, CHOPPER, PS, integration activities shall not happen in parallel.

- ACTIONS
- **Ibon Bustinduy, Thomas Shea and Viatcheslav Grishin to discuss and agree who leads the collimator rack equipment installation, cabling and testing. If Bilbao team leads the activity, what is missing (hardware?) to enable that? 05 Oct 2018**

