

Rack space and layout of the BSW magnet power converters in the BRF2 for the Stripping Foil Chicane (LIU-PSB Project)

D. Hay EN-MEF-OSS on behalf of all contributors.



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Reference Functional spec Appendix B (describing the specifications for the power converters for BSW magnets of the Half Sector Test and Booster stripping foil chicane)

- PSB-R-ES-0001 v.0.2 "Power Converters for BSW Magnets of the Half Sector Test (HST) and Booster Stripping Foil Chicane in the Framework of LIU-PSB Project" by Davide Aguglia in status: Under Approval
- This document covers the power converters functional specification for two correlated Work Units ...

Link: <https://edms.cern.ch/document/PSB-R-ES-0001/0.2/TAB3>

Roadmap & traceability

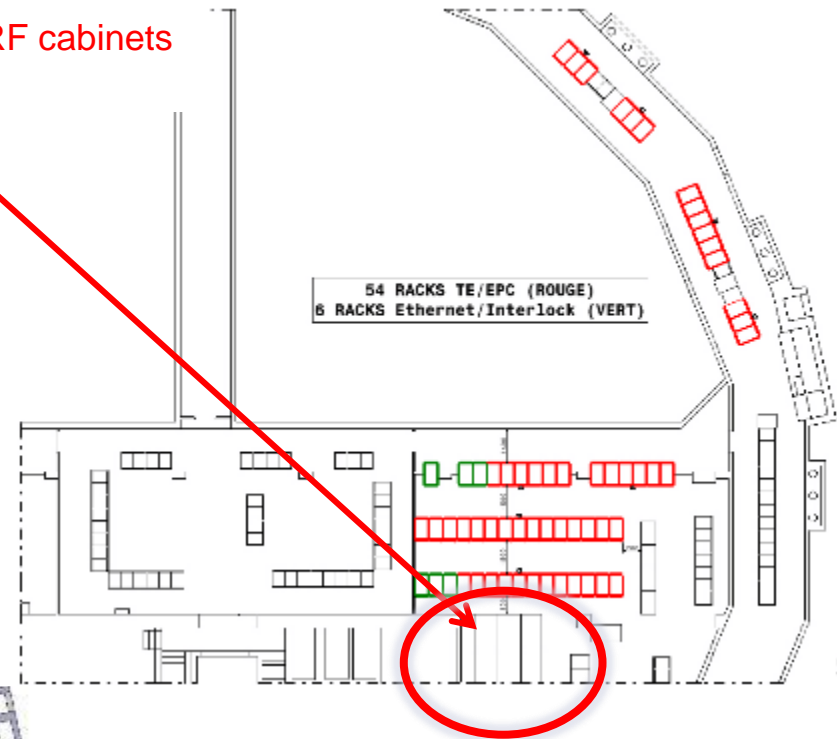
- Reference; 5 dedicated PSB injection EPC powering rack space coordination meetings.
 - Mtg 1 <https://indico.cern.ch/event/332291/>
 - Mtg 2 <https://indico.cern.ch/event/332292/>
 - Mtg 3 <https://indico.cern.ch/event/341991/>
 - Mtg 4 <https://indico.cern.ch/event/381757/>
 - Mtg 5 <https://indico.cern.ch/event/393088/>
- Site meeting: 5.5.2015, present: D. Hay EN-MEF, C. Coupat TE-EPC, S.Pittet TE-EPC, G. Georgiev EN-EL, D. Parchet GS-SE.

Two options considered

Option 1

- Place only found for 54 racks.
- Additional space required for 6 racks (Ethernet & interlocks)
- Max 30M cable length restrictions from the transformers.

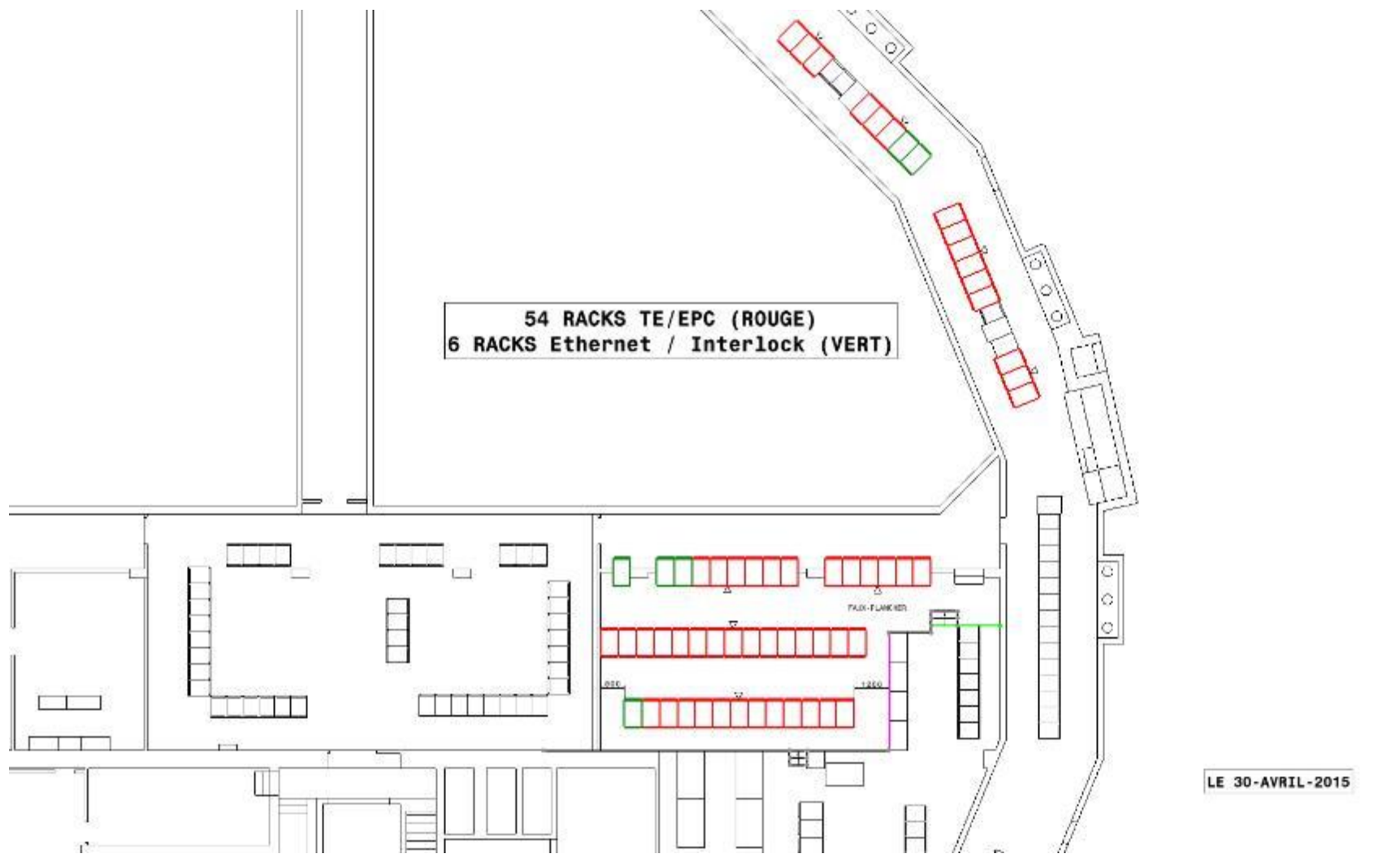
Possible only if the four RF cabinets are displaced.



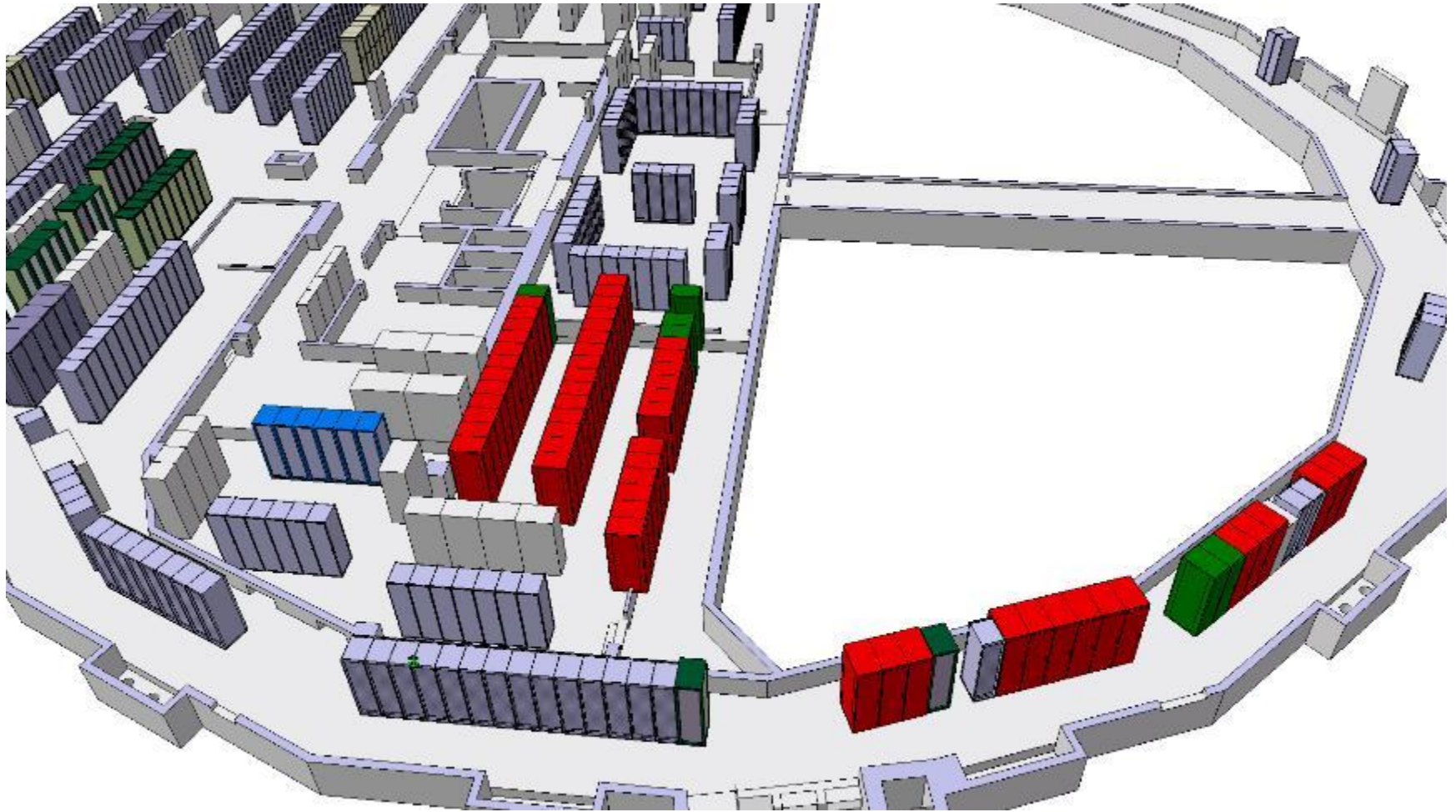
Option 2

Source A. Kosmicki & G. Georgiev

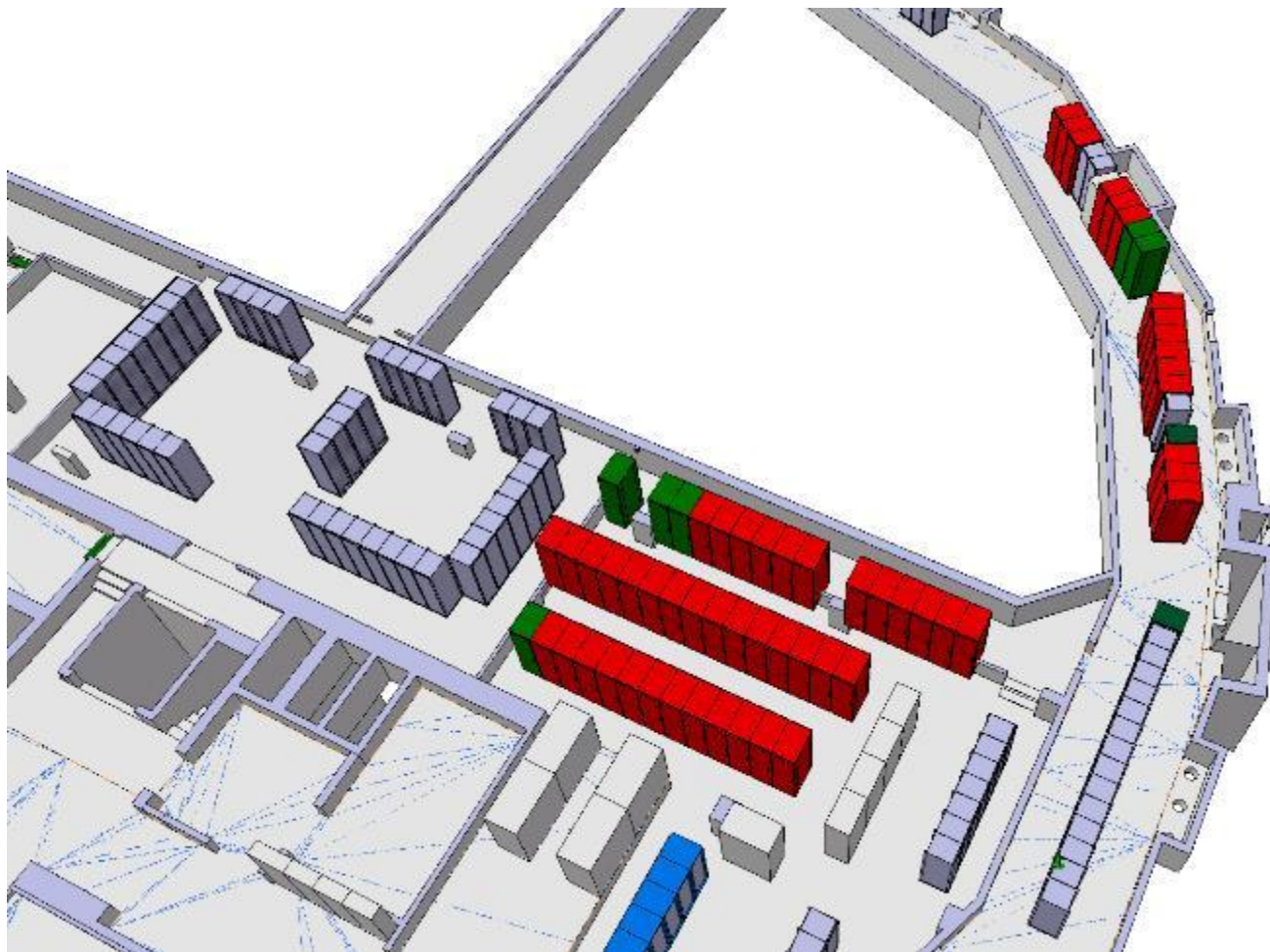
Approved BRF2 & BAT EPC rack layout



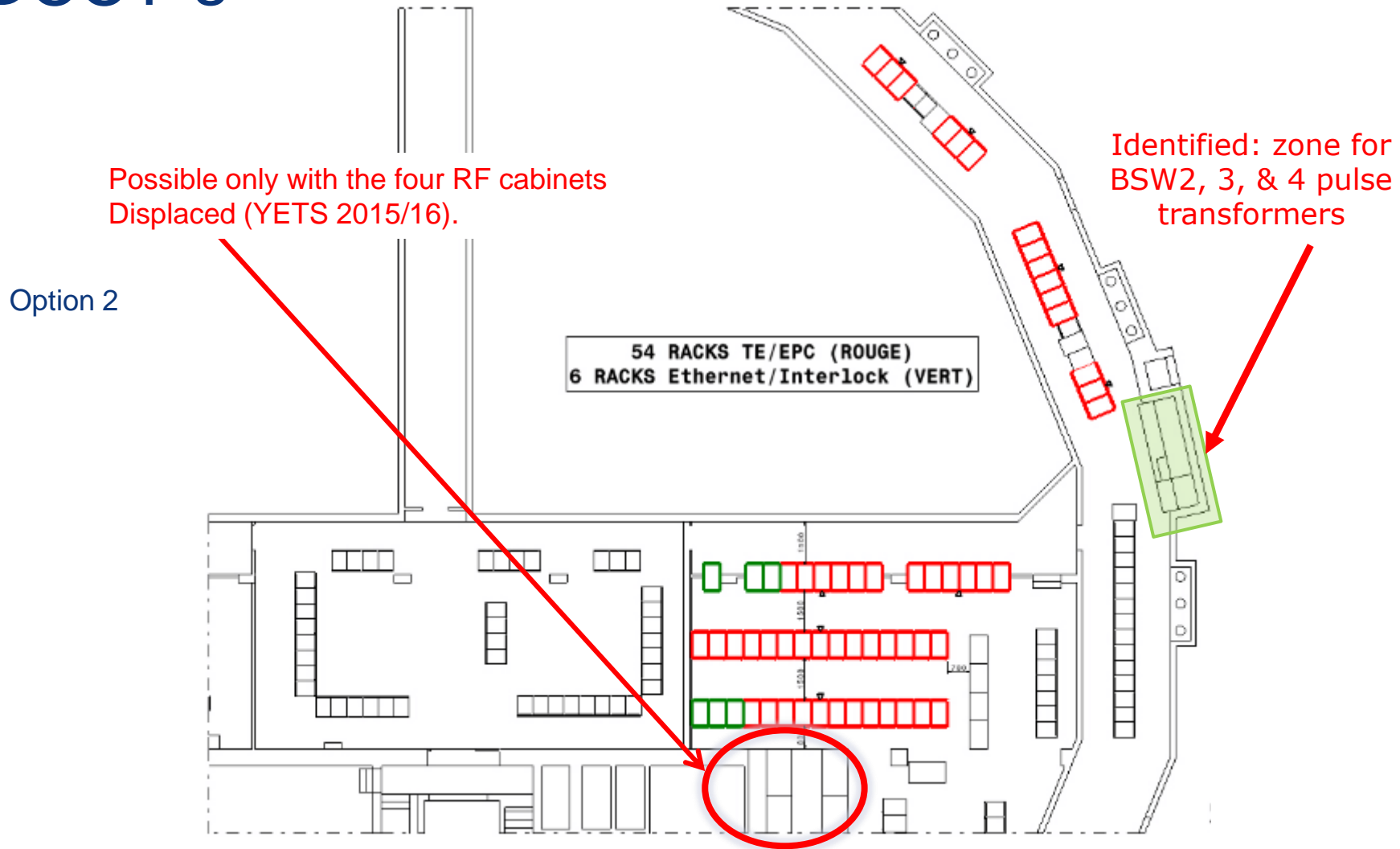
Approved BRF2 & BAT EPC rack layout (img1)



Approved BRF2 & BAT EPC rack layout (img2)



Integration of the BSW transformers and DCCT`s



Next steps

- Finalise integration studies, including the BSW transformers & DCCT`s.
- Resolve equipment transportation issues.
- Finalise power requirements (ERD* dist bd modifications local to BRF2)
- Finalise cooling and ventilation requirements.
- Prepare the displacement of the RF racks.
- Prepare the area including the removal of the storage cabinets in BAT.
- Obtain costs estimates and agree schedule (Co-activity issues during YETS 2015/16).



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Thank You & Q`s