

Report: #22

Activity: PS complex

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LS2



Performed activities during last 4 weeks

➤ LINAC4

- Inspection RFQ LINAC2 and LINAC4

➤ AD&ELENA

- Magnet consolidation
- Cut and weld FTA chamber

➤ PSB

- Leak detection of BT20
- Installation of replacement chambers in 8L1 (scrappers) pumpdown and leak detection of BR30 vacuum sector
- Reconnect BT10 vacuum sector after alignment, pumpdown and leak test.
- Connection of BR10 vacuum sector after alignment. Pumpdown and leak detection



Performed activities during last 2 weeks

➤ PS:

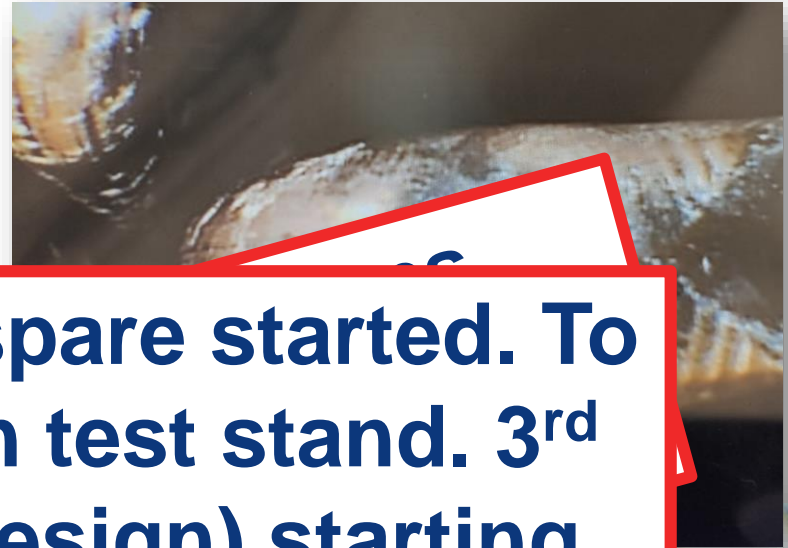
- Continue magnet consolidation(closing)
- Assembly BI and LBS lines
- Dissassembly of BTP line, modifications and realignment, pumpdown and leak test
- Installation of SMH16 and KFA45
- Installation of bumper magnets in SS40, SS41, SS43 and SS44
- Pumpdown of PR20 and leak detection
- Connect F16.10 vacuum sector

➤ Lab

- Acceptance test of scrapper (rejected)
- Acceptance test of linear SEMgrid
- Test chambers for EN-MME



Technical issues and difficulties



Carbon copy spare started. To be installed in test stand. 3rd spare (new design) starting (raw material)

Endoscopy of LINAC4's RFQ:
Damage on the surface of the vanes
Impact on operation
Produced with tolerance 0.02 mm
and Ra 0.8



Technical issues and difficulties

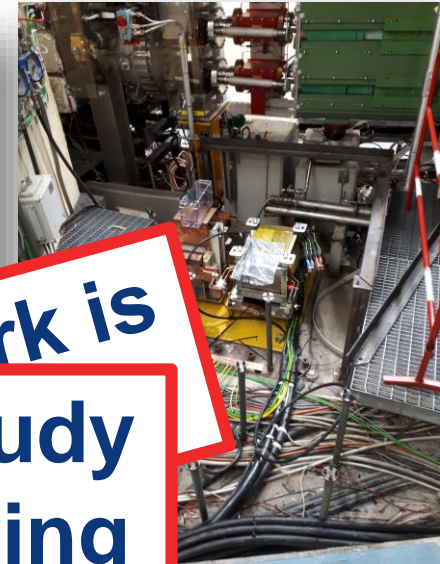


- ❑ Still issues to... bypasses
→ This could have... impact in the progress and ISTs
- ❑ Error during the installation of the first batch
→ Short-circuit through the seal
- ❑ Very poor design → Redesign after LS2



Technical issues and difficulties

- PSB amount of co-activities out of control
- EN-EL, EN-SMB, EN-CV, TE-EPC, EN-SMM and TE-VSC working in parallel with two scaffolding areas, movable and VIC!
- Planning idea or completion start or finish
- Originally January reserved for the ring and February for transfer lines without co-activity.



Meeting twice a week to study co-activities. Activities during IST!

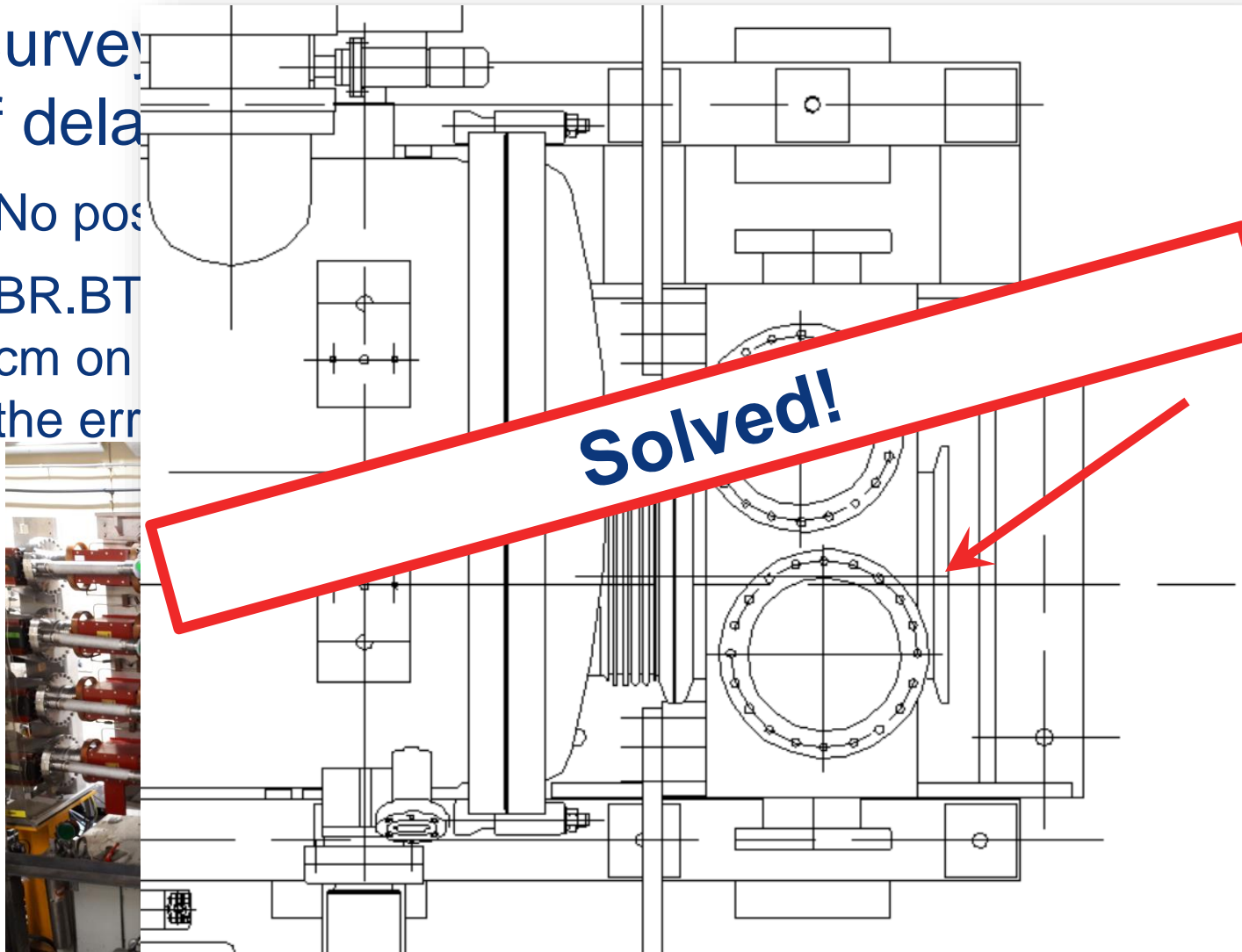


Technical issues and difficulties

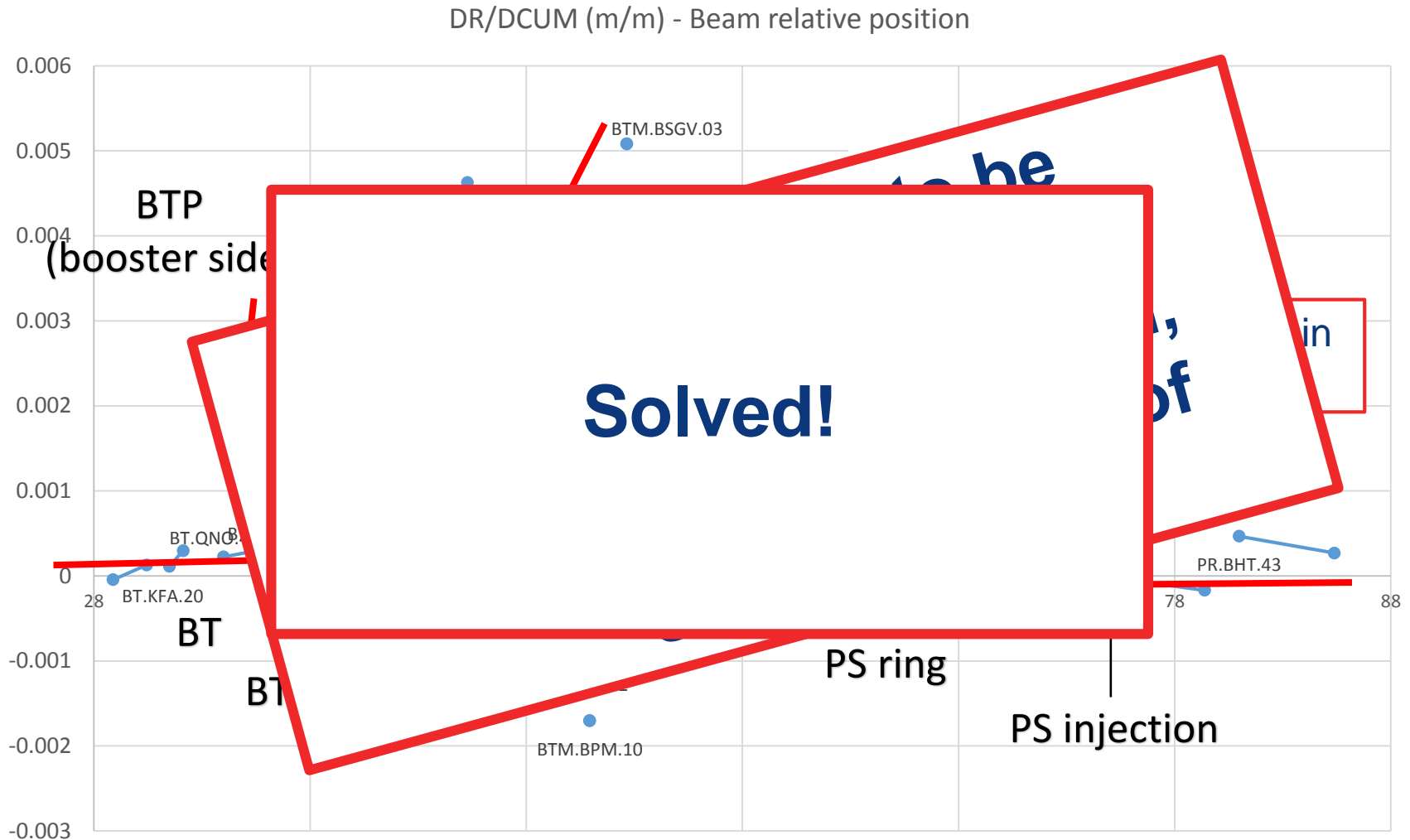
➤ Survey of delays

➤ No position

➤ BR.BT
cm on
the error

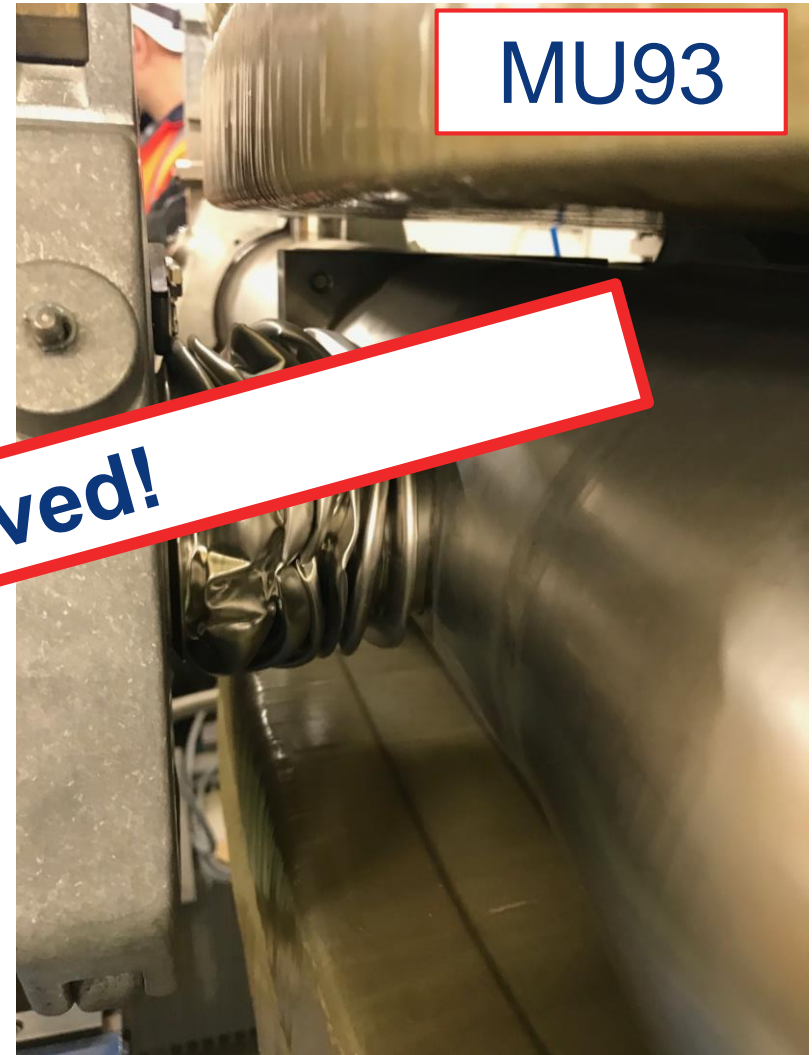


Technical issues and difficulties



Technical issues and difficulties

- Survey a recurrent source of delays:
 - Correct tilt of MU96, MU93 and MU75
→ 0.25 mrad (<0.025 mm edge of flange)
 - Agreed maximum movement 1-2 mrad (<0.2 mm edge of flange)
 - Strategy: First MU96 (ok then correct MU93)
 - Survey team (contractor) and transport without supervision and not informed!
 - Use of hydraulic machine (overshoot) broke the bellow (magnet not under vacuum!)



Planned activities for next 2 weeks

➤ AD&ELENA:

- Magnet consolidation
- Finish FINEMET assembly

➤ LINAC4

- Close RFQ in LINAC4 ?

➤ PSB:

- Leak detections BR10, BR30, BT10 and BT20
- Installation of stripping foils in 1L1
- Bake-out of BE.SMH and BT.SMV10

➤ PS:

- Finish magnet consolidation MU27
- TT2 quads: nTOF
- Finish BI line and pumpdown of BI and LBS lines
- Installation of SMH23, Pumpdown of PR30
- Pumpdown PR40
- Close F16.10 pumpdown and leak detection
- Bakeout SMH16, bakeout SMH26

➤ ISOLDE:

- Replacement of elastomer seals of FE in bat. 179
- Leak detection of TMPs in transfer lines of HIE-ISOLDE after maintenance. General leak check.

Resources distribution

- ❑ Russian team :
 - ❑ PSB ring and transfer lines and switchyard works.
- ❑ 1x40/30 team working in PS magnet consolidation and vacuum consolidation.
 - ❑ BTP line, Magnet consolidation PS and TT2 campaign
- ❑ Paul and Guillermo: Coordination of PS and PSB works, preparation of interventions. Pumping group consolidation
- ❑ Alex + 40/30 support: AD& ELENA
- ❑ Alice and Nico: Lab and LINACs
 - ❑ Connection of BI and LBS lines
 - ❑ Acceptance test
- ❑ Claude: ISOLDE and nTOF
 - ❑ FrontEnd leak detection and follow up of TT2 work

Dashboard and work evolution

Fri 08-06-18 - Mon 29-03-21

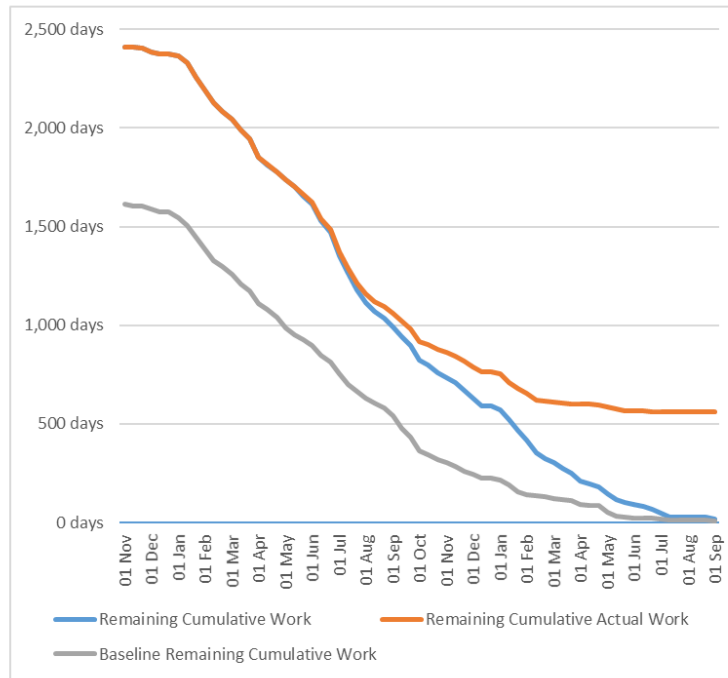
BURNDOWN

% Complete

80%

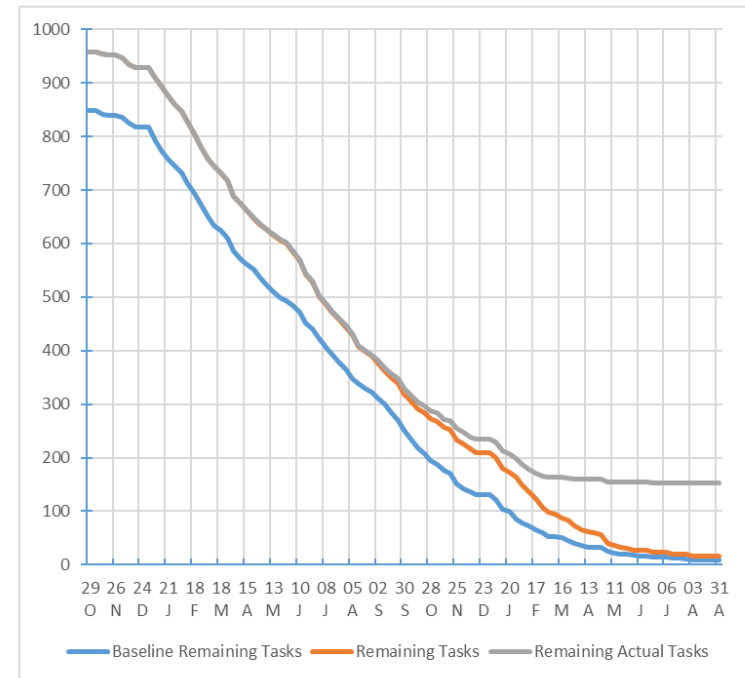
Remaining Work

562.28 days



WORK BURNDOWN

Shows how much work you have completed and how much you have left. If the remaining cumulative work line is steeper, then the project may be late. Is your baseline zero?

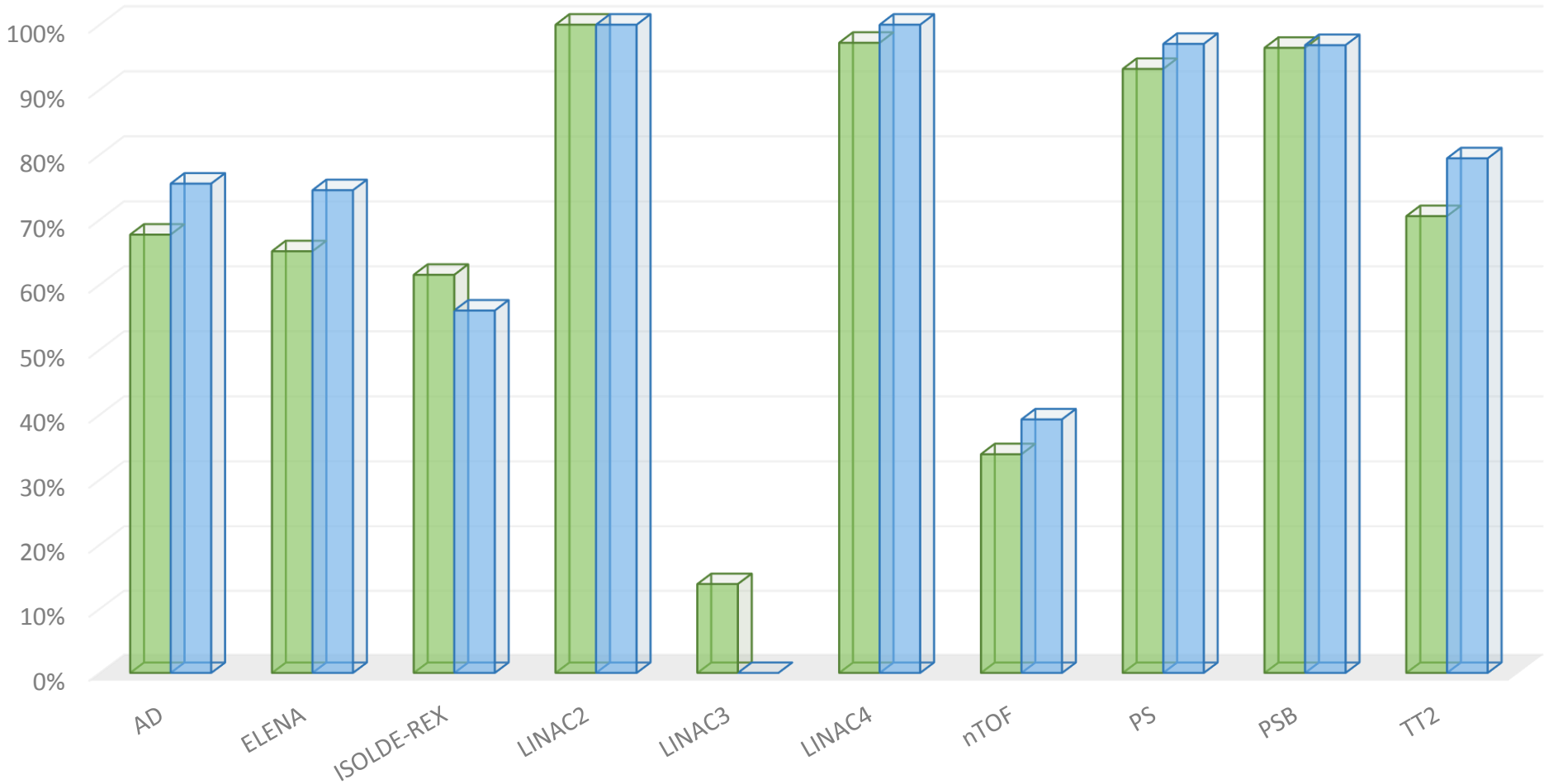


TASK BURNDOWN

Shows how many tasks you have completed and how many you have left. If the remaining tasks line is steeper, then your project may be late.

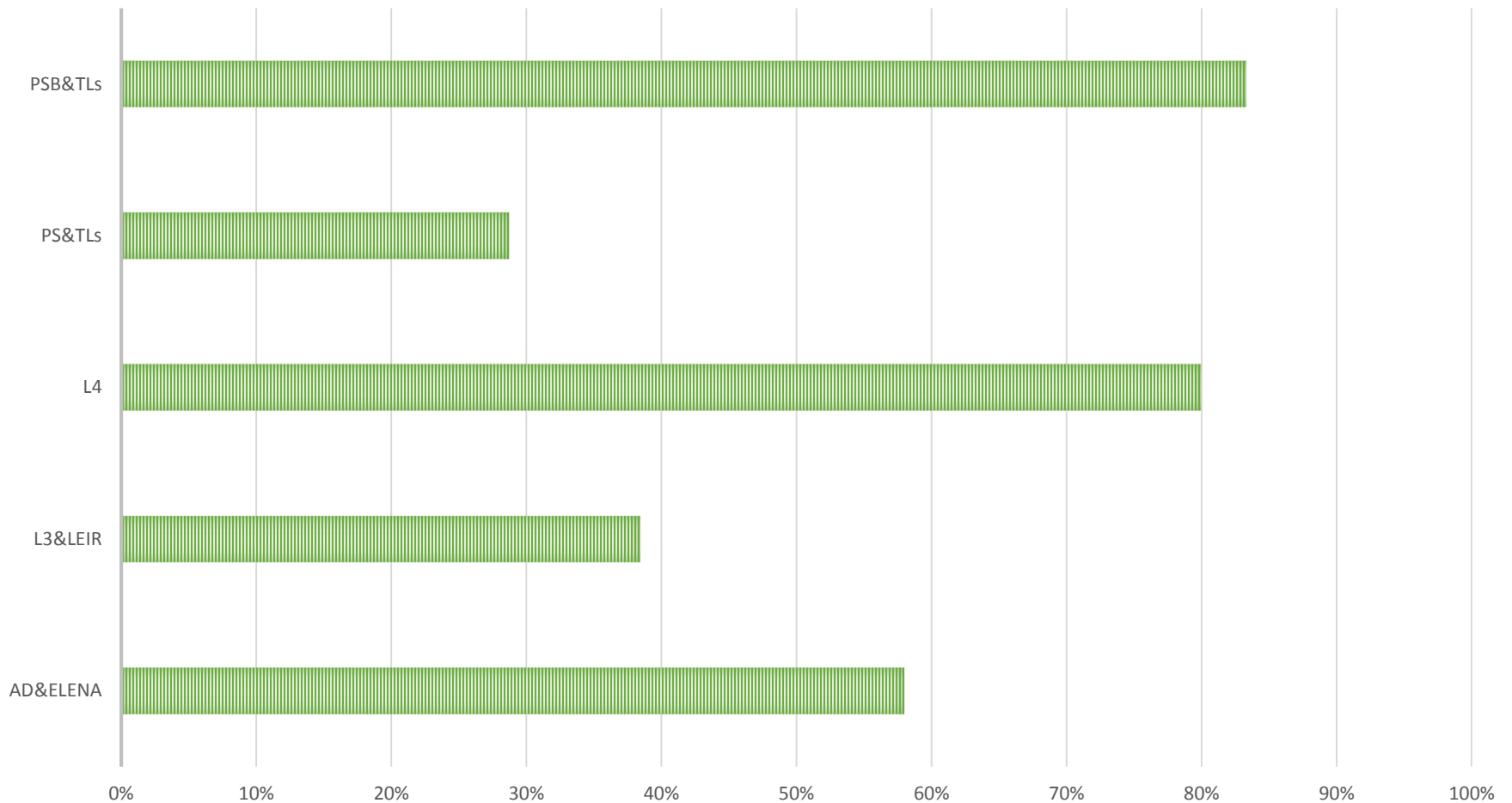
Dashboard by Machine (end February)

% Completed % Baseline

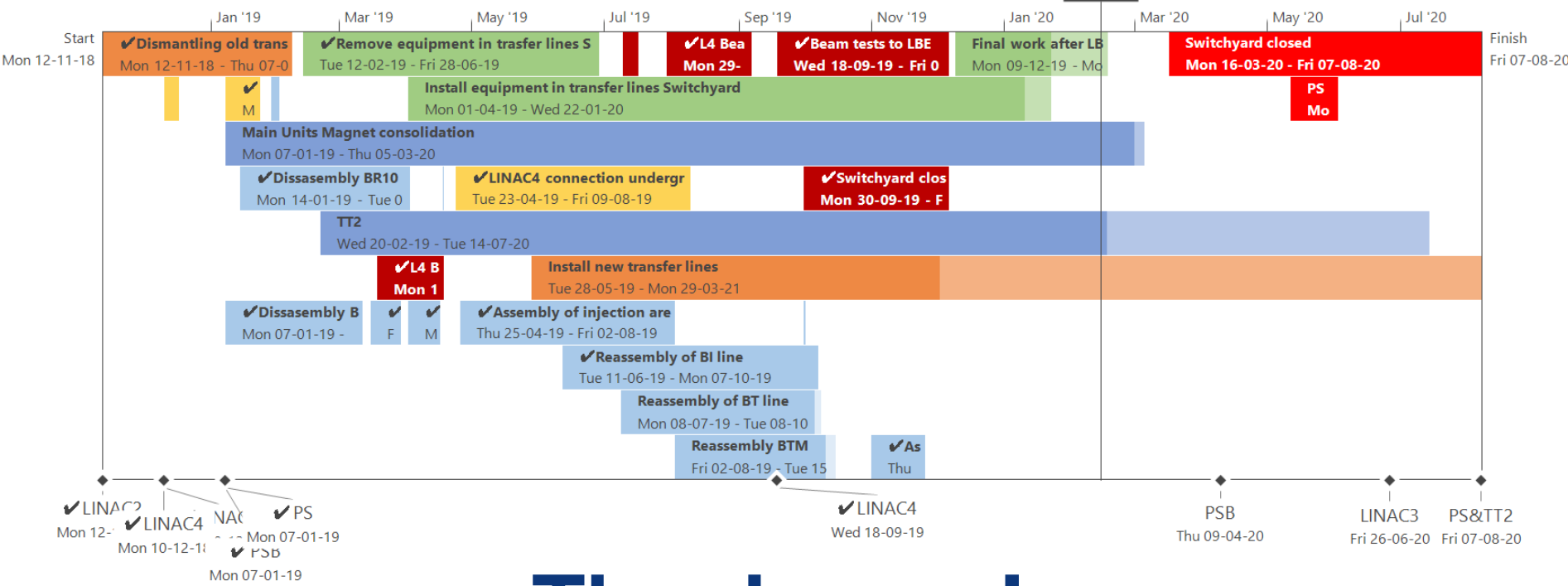


Sectors under vacuum

SECTORS UNDER VACUUM



Today



Thank you !



LS2

