





BDF Target WP Planning

1st Beam Dump Facility (BDF) Targetry Systems Advisory Committee (TSAC)

4th – 6th March 2025

Rui F. Ximenes on behalf of WP3 & HI-ECN3 Project team

04/03/2025



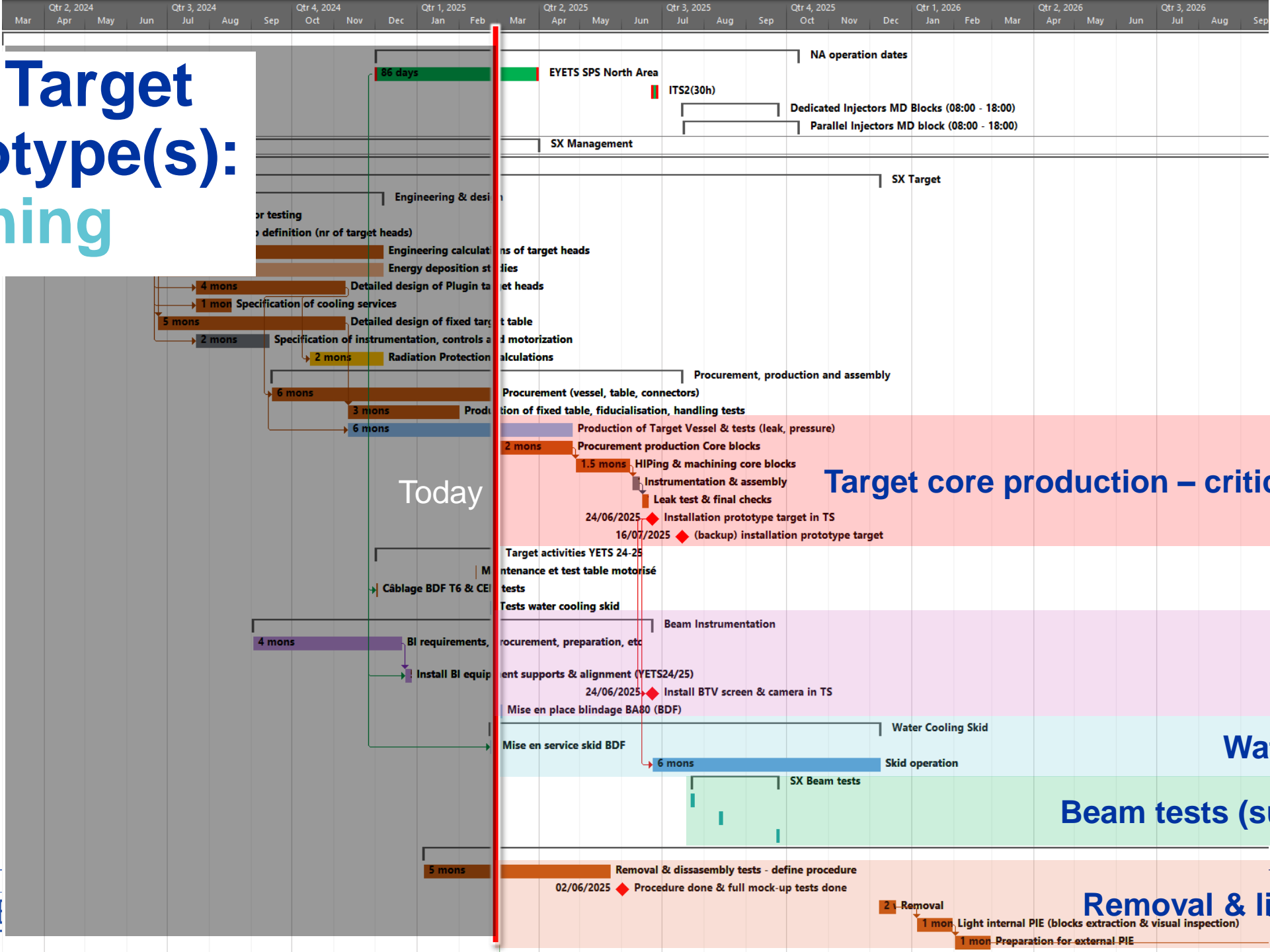
Take-home objectives of this talk

- ❑ 2025 Prototype Target planning – recap what is critical
- ❑ 2026 Prototype Target planning – planning & challenging aspects of installation
- ❑ Final Target project planning- What, when and how decisions need to be made?

2025 Prototype(s)

Planning

2025 Target Prototype(s): Planning



Target core production – critical path

BTV

Water skid

Beam tests (summer)

Removal & light PIE

2025 Prototype Target(s) - Status

Planning dates

- Fixed SX setup refurbished & re-cabled – **done**
- Water skid re-commissioning – **ongoing**
- Target table re-used and adapted – **almost done**
- BTV setup preparation – **end YETS24/45**
- Pre-alignment – **ongoing**
- Target vessel in production – **April**
- Core blocks procurement – **now**
- Core blocks manufacturing – **~May**
- Instrumentation & assembly – **June**
- Target and BTV installation – **24th of June**
- Installation backup – **16th of July**
- Beam Tests MDs – **23/7, 13/8, 24/9**
- Removal and “light” inspection – **YETS25/26**

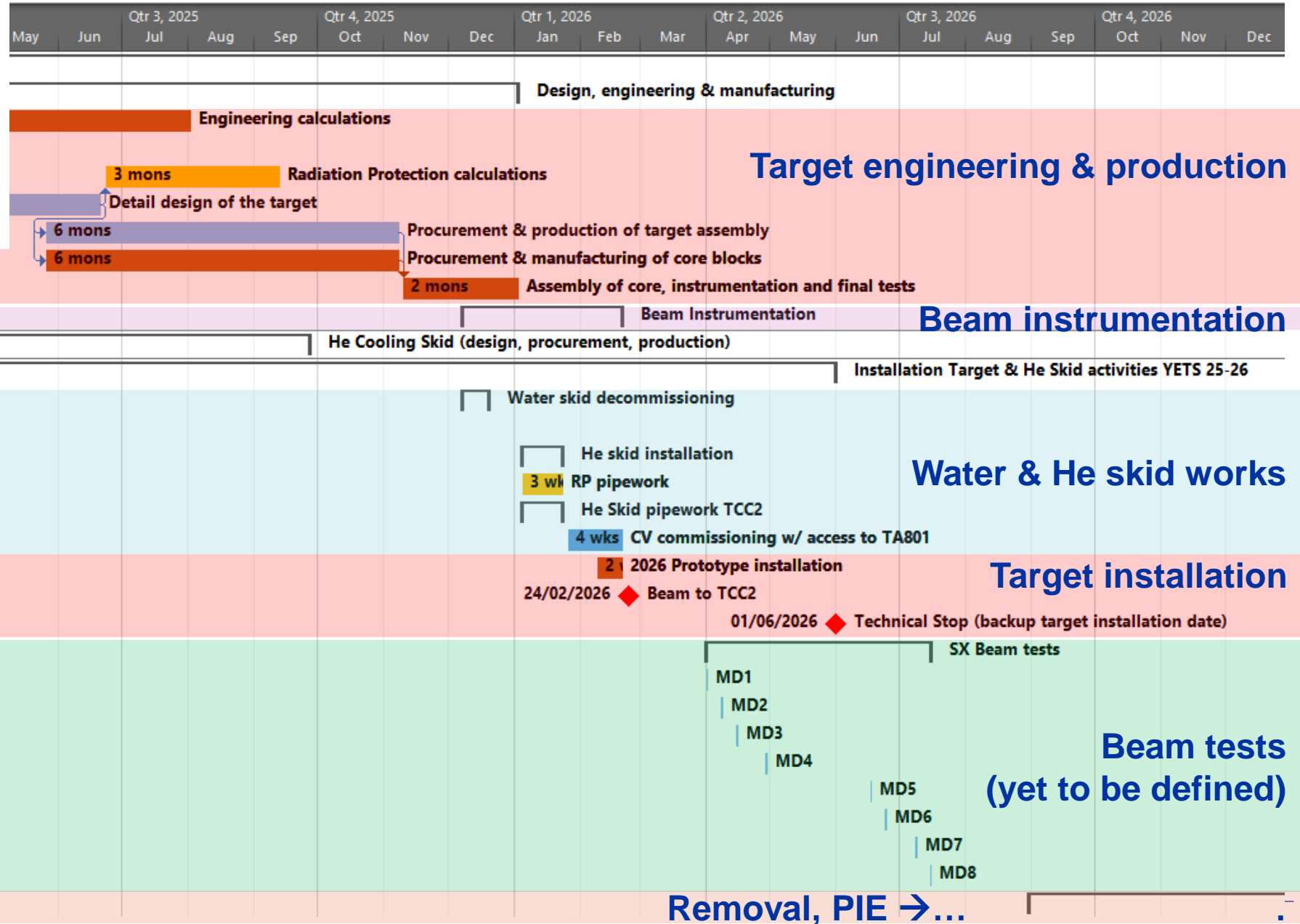
Planning criticality: OK, Critical, Very Critical



2026 Prototype

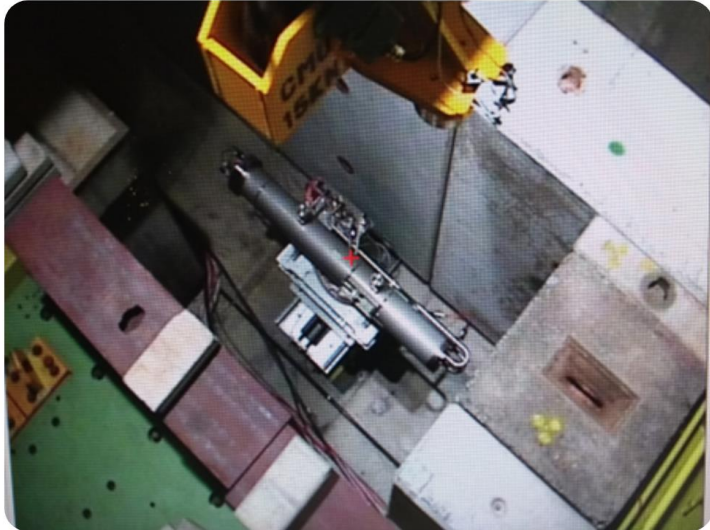
Planning

2026 Prototype: Planning



Today

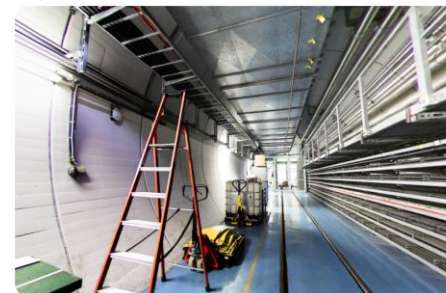
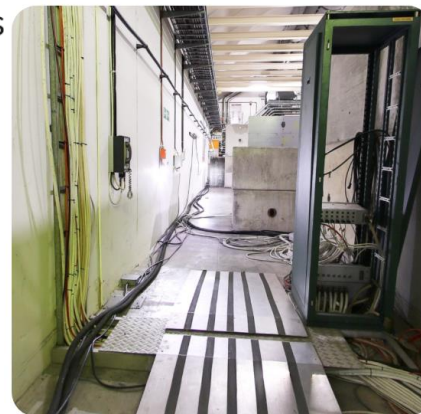




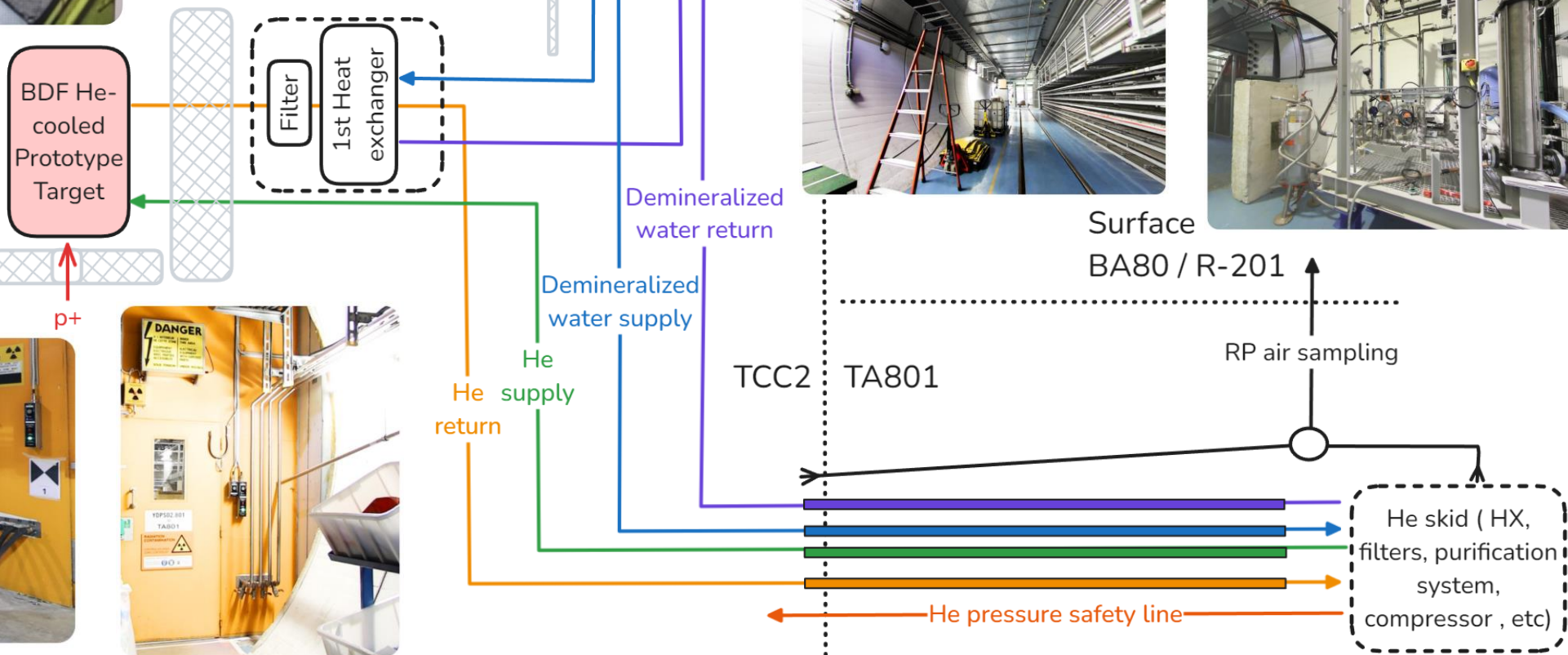
TCC2 Target Area



TCC2 services corridor



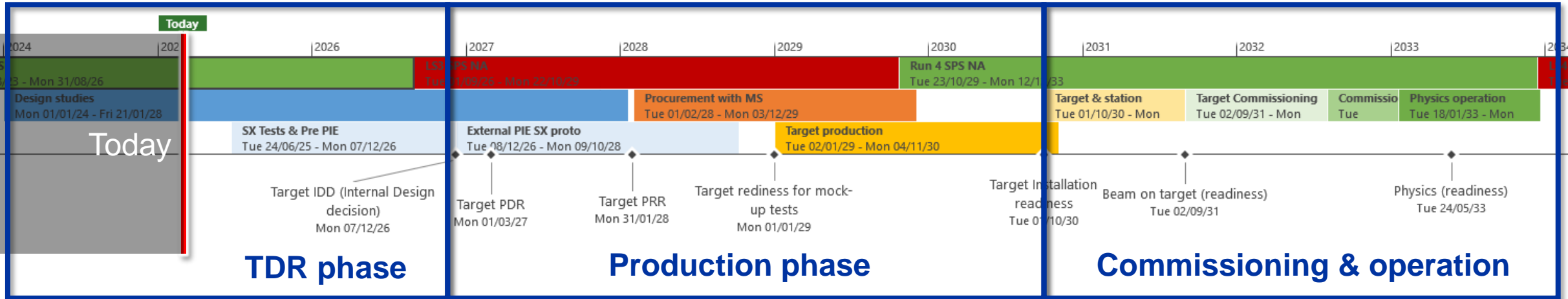
Surface BA80 / R-201



Final Target

Global (Target) Planning

Final Target system planning



TDR phase (main activities) – (2024 - end 2026)

- 1) Target (& BIDs) conceptual design followed by detailed design
- 2) Prototype(s) Target Design, construction and beam tests
- 3) Material studies, R&D

Production phase – (2027 – 2031)

- 1) Detailed Design phase
- 2) Procurement & production of components and systems
- 3) Tests/dry-run, installation activities
- 4) Material tests/PIEs



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HI-ECN3.