

n_TOF Report at the 62nd Meeting of the INTC

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Outlook

- n_TOF organization during LS2
- Main activities for LS2
 - Horizontal beam line
 - Target exchange
 - New control room

n_TOF organization during LS2

- **n_TOF Experiment LS2 Coordination Meetings (chair: D. Macina)**

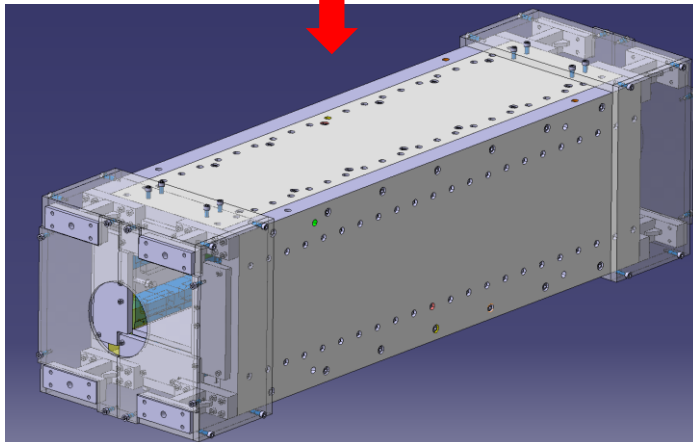
- INDICO link: <https://indico.cern.ch/category/10884/>
- Mandate: Coordinate the LS2 activities in the experimental areas (EAR₁, EAR₂), in the electronics laboratory and control room
- Meeting frequency: Twice a month

- **n_TOF Facility Technical Coordination Meetings (chair: O. Aberle, scientific secretary: M. Barbagallo)**

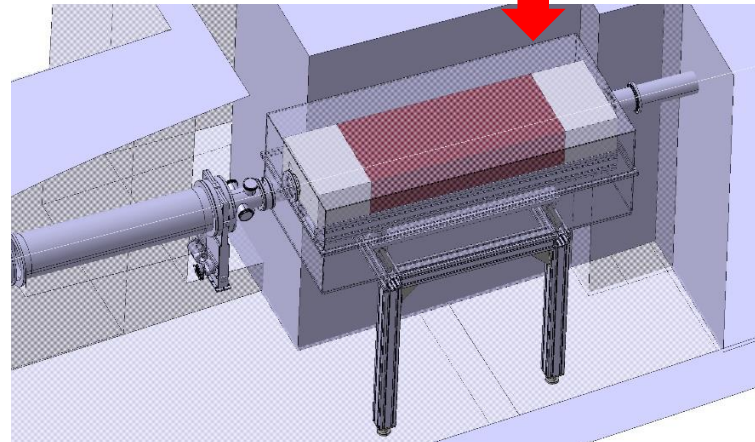
- INDICO link: <https://indico.cern.ch/category/11206/>
- Mandate: Steering of global activities related to the n_TOF Facility during LS2
- Meeting frequency: Every 6 weeks

Main n_TOF LS2 activities

New sweeping magnet



Consolidation of collimator N°2



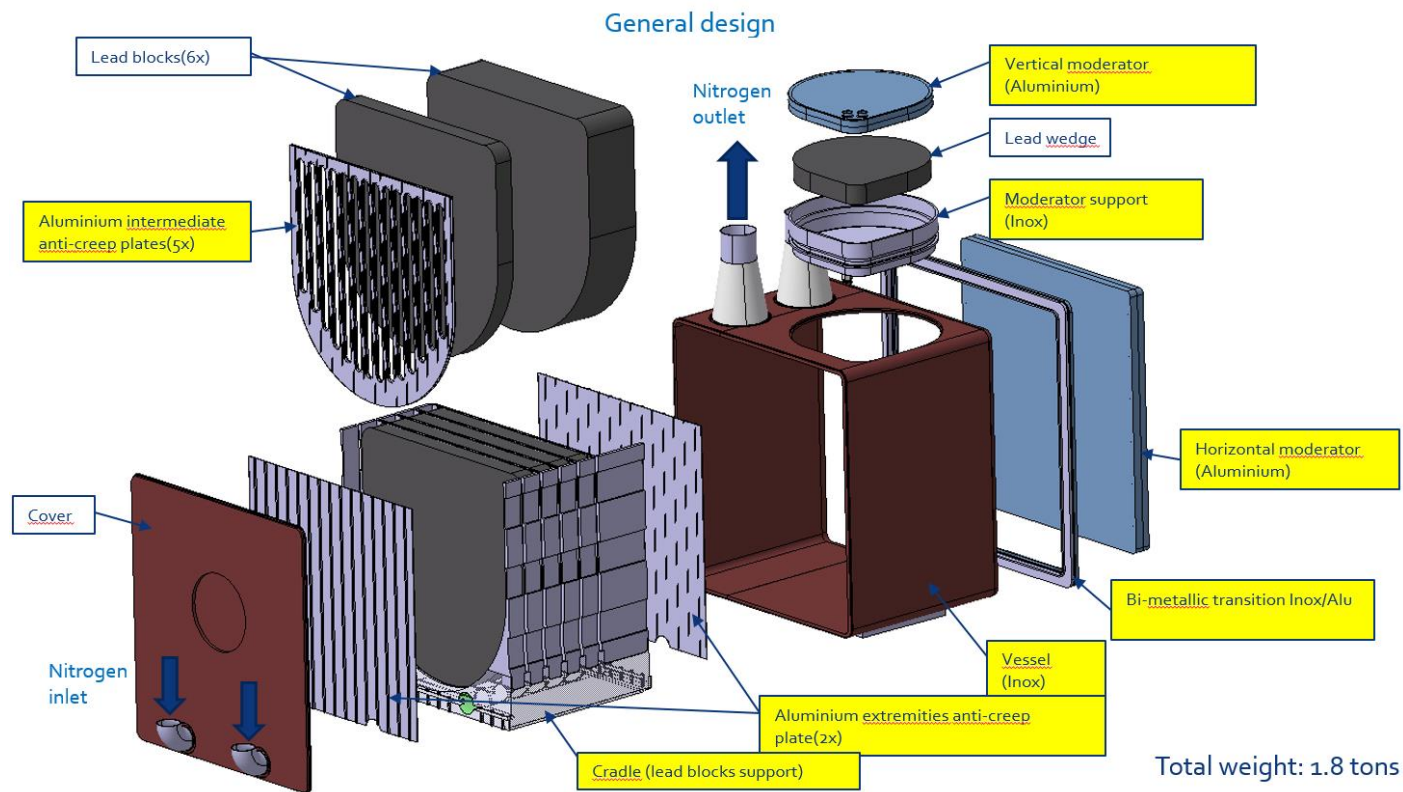
n_TOF target #3

n_TOF Target #3 Production Readiness Review, held on May 29th

https://indico.cern.ch/event/807540/contributions/3360962/attachments/1853310/3044330/n_TOF_Target_review_3.pdf

The review committee has provided a complete list of findings and recommendations.

- Go ahead, production started!



n_TOF target #2 removal



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nTOF – Target 2 REMOVAL HANDLING TASKS (Sequence of Operations)

Abstract – This document outlines the tasks needed to remove n_TOF Target 2 in order to allow its replacement with Target 3. The tasks include removal of the equipment and items in the vertical beam pipe to gain access to the n_TOF target 2 from the technical gallery. It is assumed the detectors and the associated equipment have been removed before this work starts.

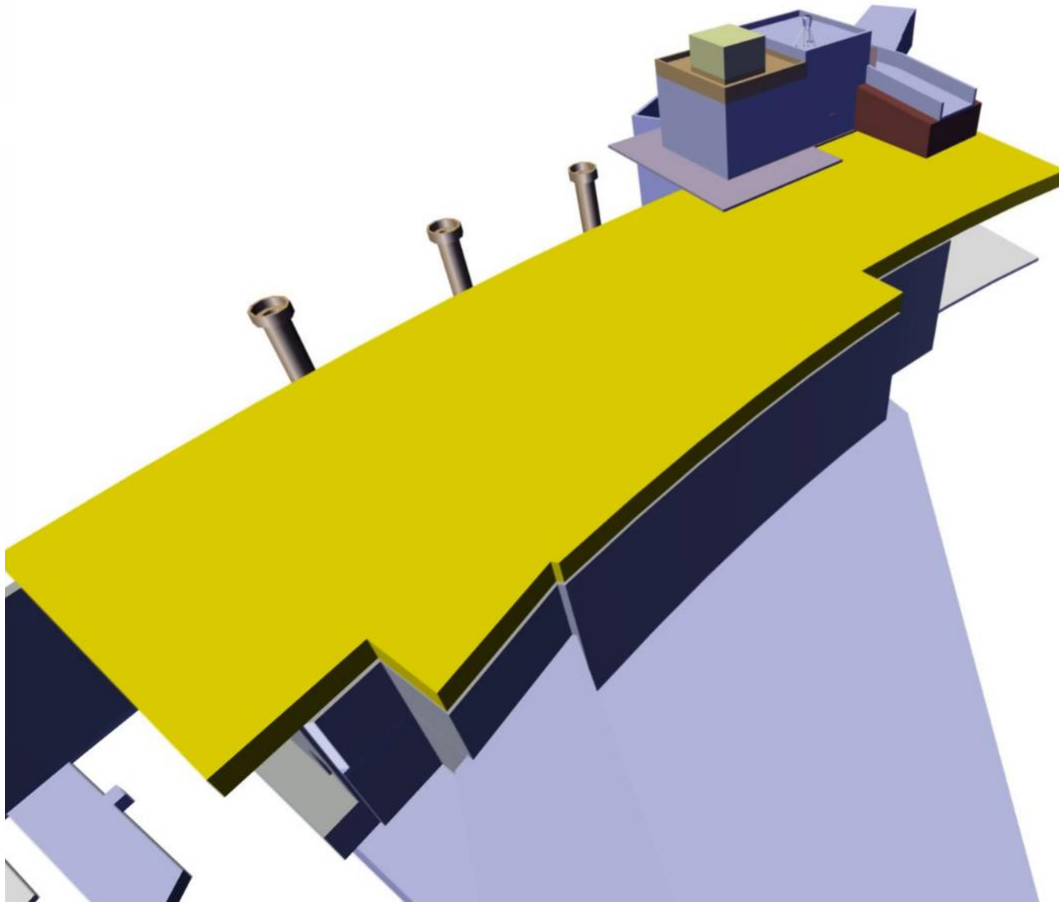
This document identifies tasks where remote handling will be required. The details of remote handling operations will be covered in a separate document that will be annexed to this document once completed.

DOCUMENT PREPARED BY: H. Crossman O. Aberle K. Kershaw JL. Grenard JF. Gruber S. Girod	DOCUMENT CHECKED BY: M. Calviani O. Aberle JL. Grenard JF. Gruber S. Girod J. Vollaie L. Ulrici M. Di Castro L. Buonocore K. Kershaw D. Grenier N. Roget Y. Body	DOCUMENT APPROVED BY: S. Gilardoni M. Calviani
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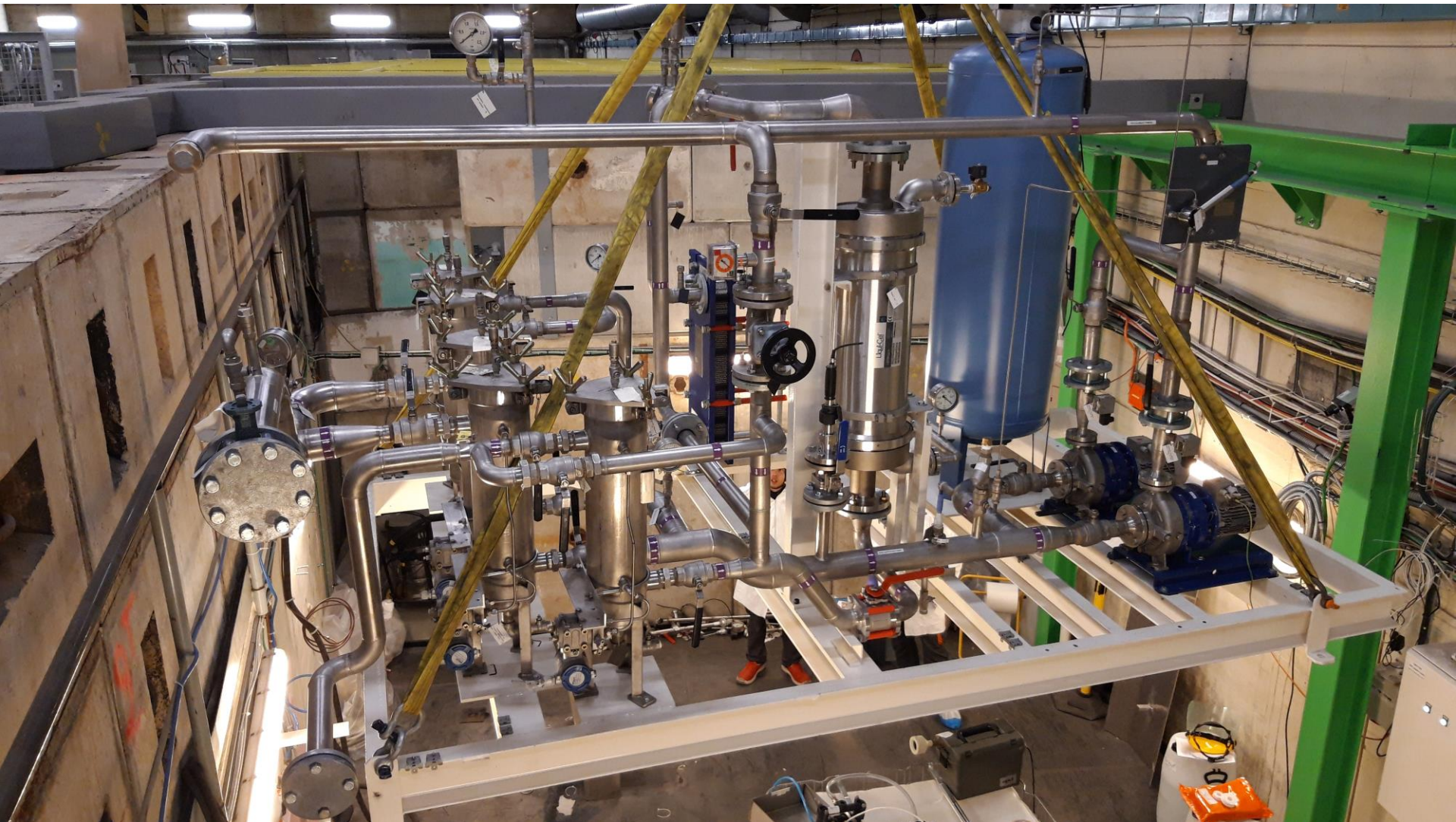
<https://edms.cern.ch/document/1867100/0.4>

n_TOF facility

Video by Jose Maria Martin Ruiz (EN/STI)



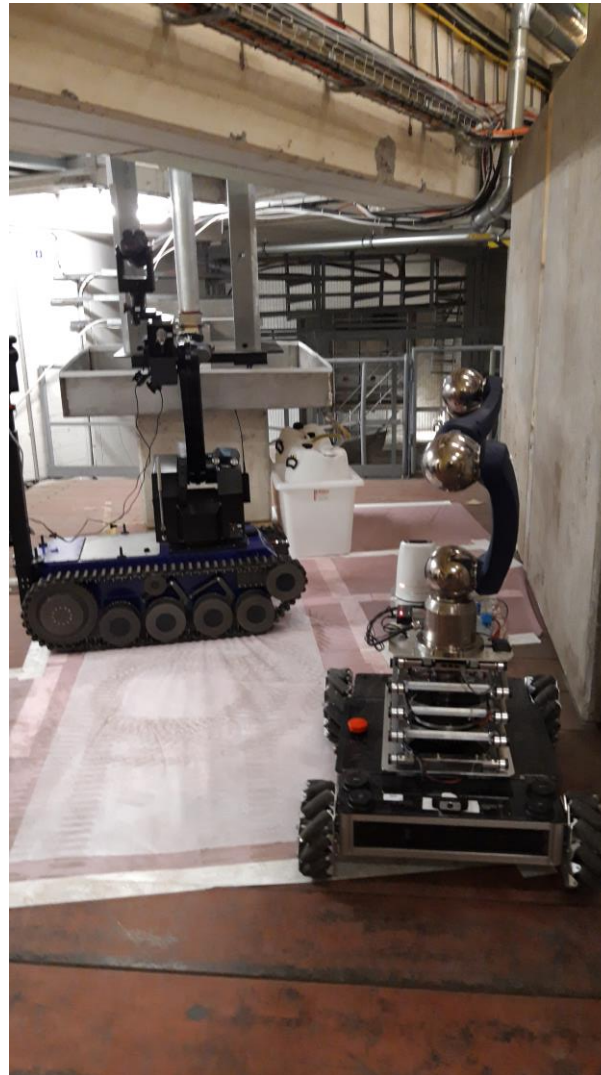
n_TOF target cooling station



n_TOF target cooling station



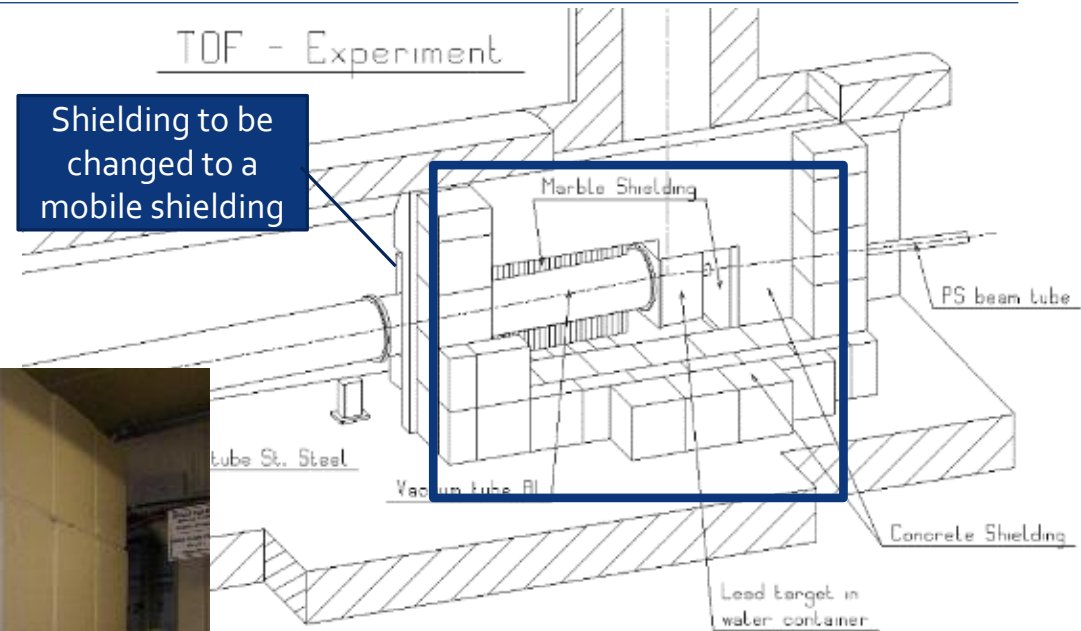
n_TOF target cooling station



- Testing for remote interventions done
- Preparation for the target removal this week
- Removal planned week 47/48

Modification of the target side shielding

Reconfiguration of the (fixed) shielding around the spallation target.



Opening of shielding
early 2020

Modification of the target side shielding





nTOF Experiment LS2 Coordination Meeting

- Projects followed up until now:
 - Experimental Areas Preparation for the LS2 work. In particular,
 - remove all radioactive samples and sources to be stored by RP
 - Contamination control performed by RP confirms absence of contamination
 - Cabling campaign in EAR₁ (remove the old sweeping magnet cables, replace the detector cables in the rack/bunker area)
 - Implementation of the ASN-OFSP safety recommendations in EAR₂, next technical meeting in December
 - Consolidation of the gas system in EAR₂ – start in December
 - Consolidation of the alignment system
 - Upgrade of the nTOF electronics laboratory and control room
 - DAQ upgrade
 - Consolidation and R&D program for detectors

Upgrade of the nTOF electronics laboratory

- Doubled the surface
- Laboratory fully equipped to perform tests in parallel on two different detectors
- DAQ system identical to the one used in the areas
- Laboratory declared as Supervised Area to allow tests with sealed sources
- New access system with dosimeter

Operational since September



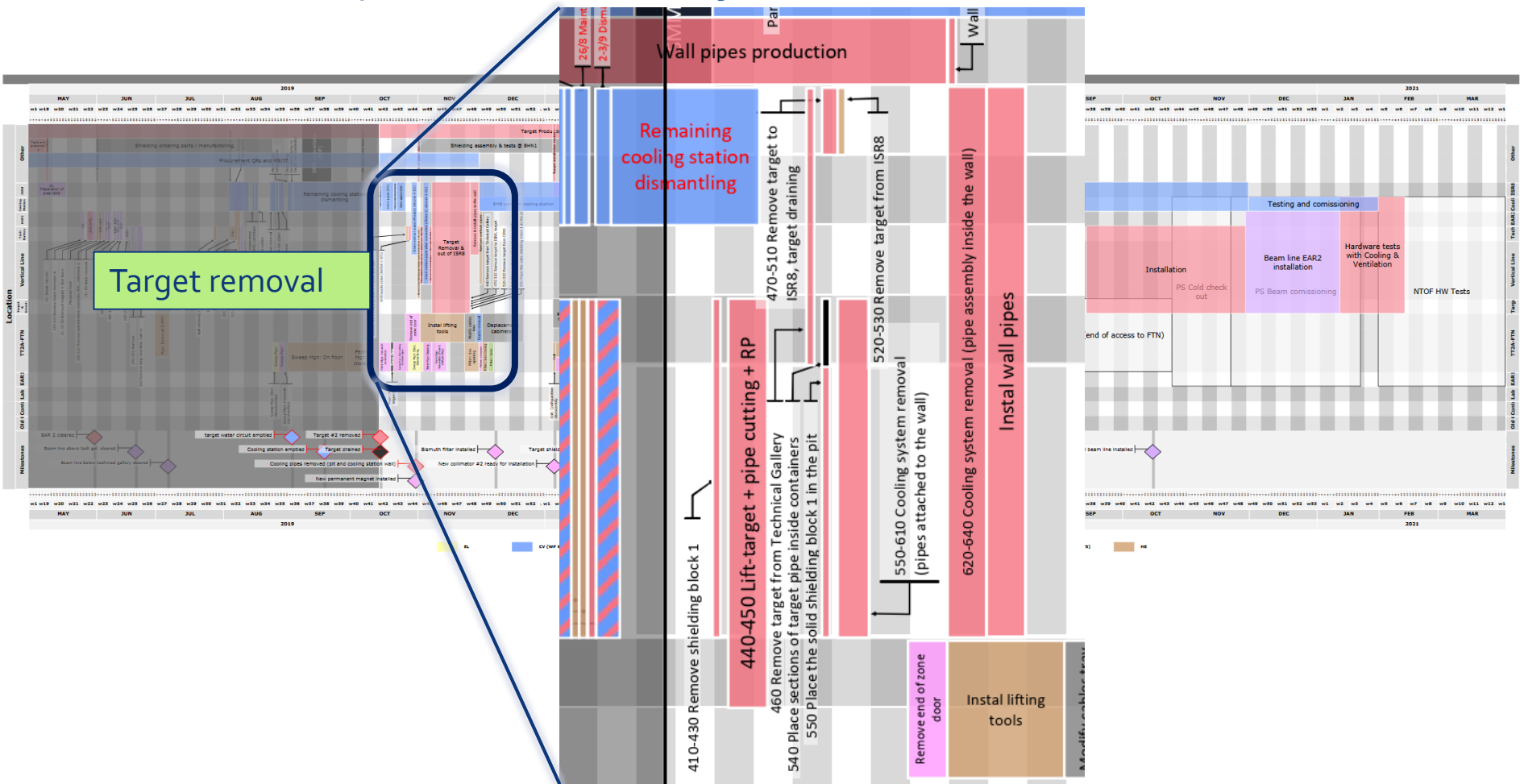
n_TOF control room and ASN-OFSP comments

- Control room in B 506
 - Left B 603 last week
 - After emptying B 506, work starts in week 46
 - Set up of the control room with the DAQ upgrade early next year
 - Temporary office space for n_TOF local staff and visitors in B 864

- ASN-OFSP safety recommendations
 - Possibility for a beam stop button and door opener from the bunker inside studied and solution found
 - Sink for EAR 2 in place, (evacuation towards the B 506)
 - Buffer zone for RP checks on exiting material

Schedule and coordination

- n_TOF Facility Refurbishment Project Schedule: EDMS 2001626



Summary

- n_TOF organization during LS2
- Main activities for LS2 - Facility
 - Horizontal beam line modifications
 - Target exchange
- Main activities for LS2 – Experiment
 - Electronic lab completed
 - New control room in work
 - Detector upgrade ongoing
- 2019 INTC reporting on the progress of activities in the beam lines and EA's
- Detector upgrade reporting on commissioning plans for 2021
- new requests for the future physics program to INTC next year



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Thank you