

Gen 2b Decommissioning Outline

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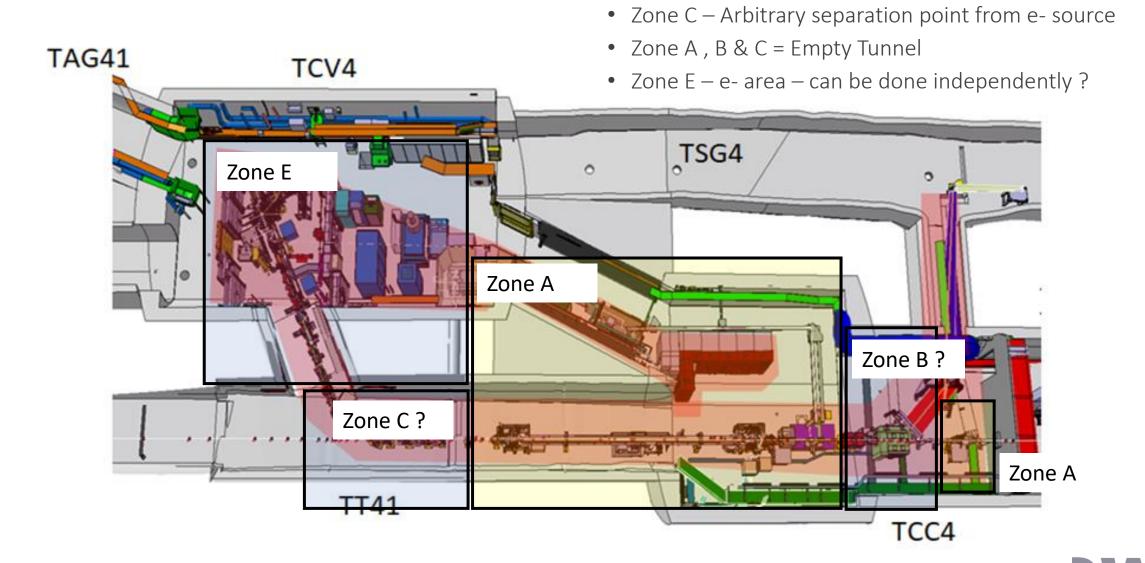
11/03/24 - v0r3

Scope & Assumptions

- Systems to addressed
 - Run 2b system in TT41/TCC4
 - EHN1 Gen 1 Demo System (Rb contaminated)
- Outline plan
 - Start decom. Oct 24
 - Minimise experimental distraction pre-Oct
 - Tunnel hardware clear End Jan 25
 - Cable removal complete March 25
 - Disposal & decontamination ?2025



Extraction Plan Scope?



Zone A – Core AWAKE Only (scope of works)

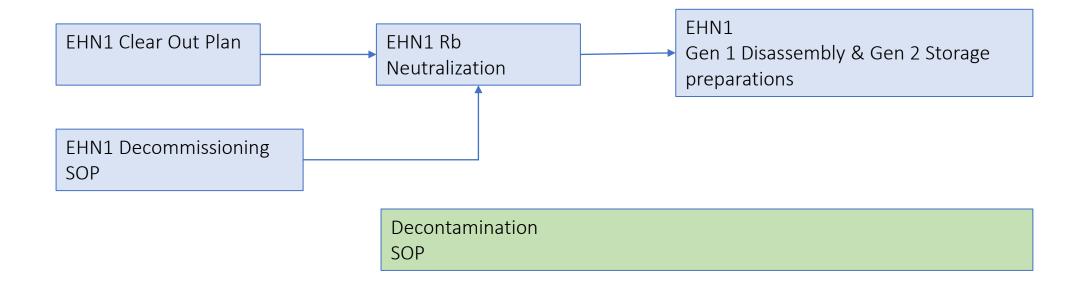
• Zone B - Magnets & diagnostics

Initial observations

- EHN1 storage space has a high chance of overload
 - Need to prepare & remove non-essential kit ahead of proper decommissioning
 - Need storage plan
- A quick route for disposal/recycling of non-reusable, non-Rb contaminated parts needs to be agreed to avoid them adding to the EHN1 storage load (ie: straight from tunnel > disposal)
- Cleaning and washing process & additional facilities will need some investigation for Rb contaminated parts



Decommissioning Preparatory Phase (Pre-October)





Decommissioning Preparatory Phase (Pre-October)

- EHN1 clear out general assumptions:
 - 10m 'dirty' plasma cell
 - Removal & disposal of all of 'dirty' 10m system
 - Disposal of bath
 - Return/dispose of pumping group (was it a long term loan?)
 - Rb contaminated parts (plasma cell & 'chamber') isolated and retained in EHN1 (cleaned with other contaminated parts from Gen 1/Gen 2)
 - Retain 19" rack in EHN1 (use for main system spares)
 - HPP
 - Disassembly and disposal
 - Retain copper shells (or recycle/resell)
 - Retain 19" rack in EHN1 (use for main system spares)
- Review run 1 retained parts for likely reuse in run 2c
- Industrial storage rack solution



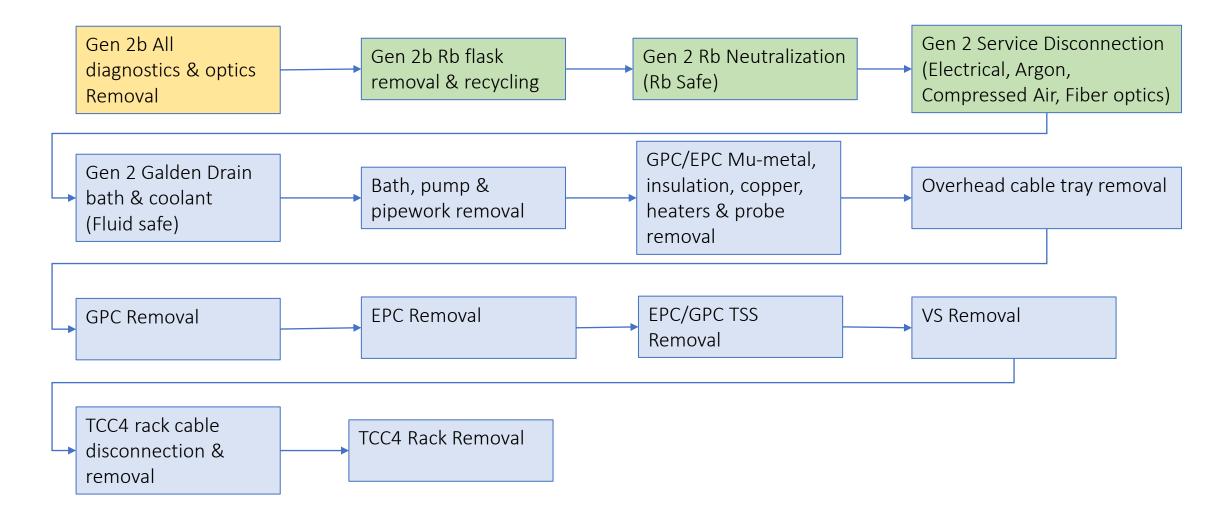
Decommissioning Phase - Step 1 (October)

Basic approach/rationale

- Clear from middle of the plasma cell outwards
- Maximizes working space and access within middle of TT41/TCC4 for more complex disassembly and cable removal
- Remove Rb handling controls ASAP
- Allows better access to laser dump/downstream elements
- Allows better access to upstream elements

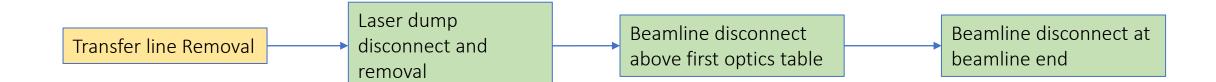


Decommissioning Phase - Step 1 (October)





Decommissioning Phase - Step 2 (October)



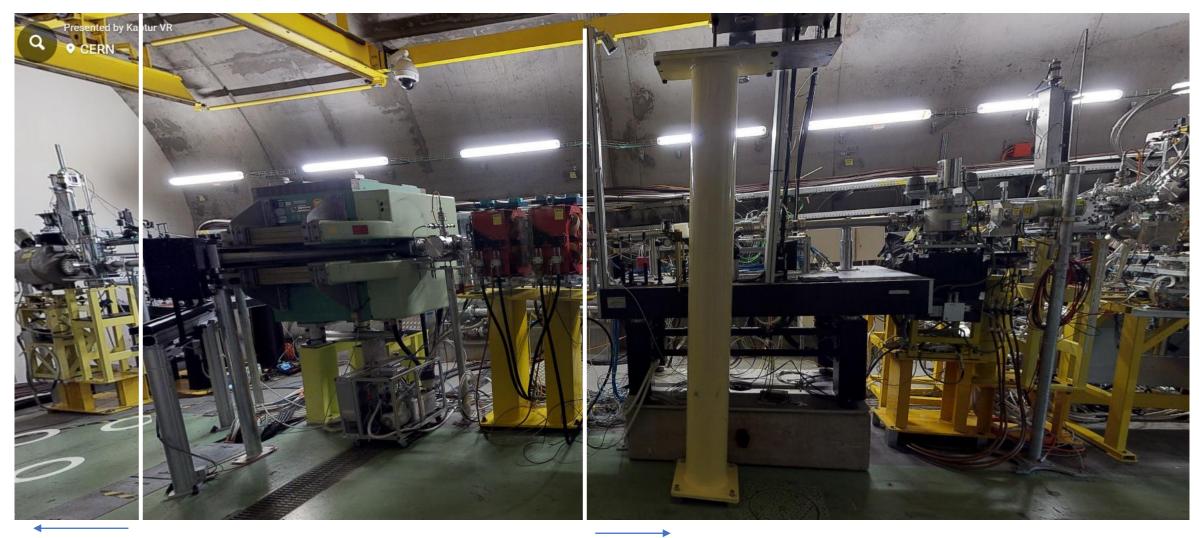


Run 2b Decommissioning general notes

- Drag EPC and GPC out on TSS wheels as per install process
- EPC Cu de-clad pre-disassembly and retained > EHN1
- Separate at top of tunnel
- Plasma cell > EHN1
- VS >EHN1
- Direct to RP managed recycling TSS parts?
- Lots of equipment for storage (just for plasma cell) approx. pallets
 - 2 x copper shells
 - 3 x TSS?
 - 2 x VS
 - 3 x Retained cables (MPP 'internal' TCC4 to experiment cables)
 - 1 x Overhead tray & supports
 - 1 x Mu-metal
 - 1 x heaters/probes/interface boxes



Beyond the plasma cell



Zone A (included in scope of works) Zone B (excluded from scope)

Zone A (included in scope of works)

