

EUROfusion PSD Management Meeting

WPSA report 2025-04-15

Carlo Sozzi

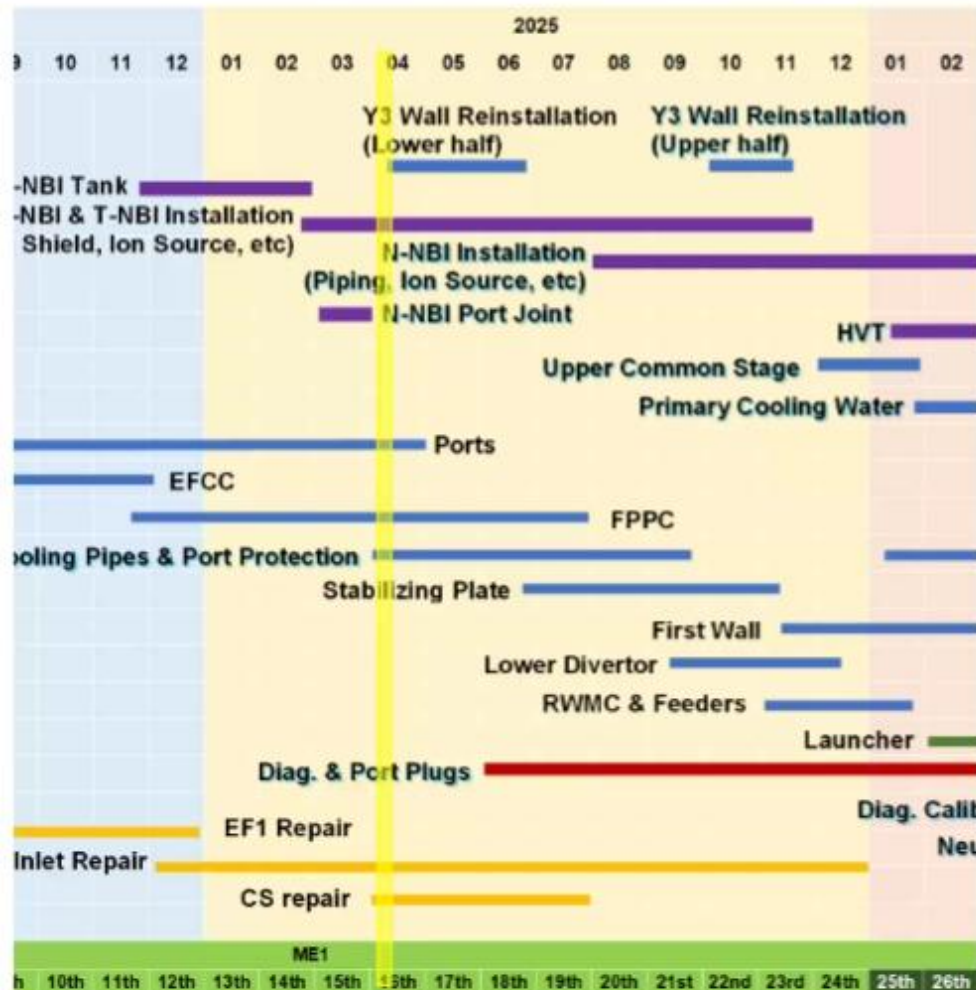


ME1 progressing smoothly



M/E1 Progress

PCM-319
4th Apr. 2025



- ✓ Port assembly: total 18 **~82%→83%**
 - **17 ports →17 ports under assembly**
- ✓ Boundary box assembly
 - Measurement on shape of cryostat port bore.**
 - Lower vertical cooling water pipe (even port)
 - Ongoing: adjust the pipe position.**
- ✓ Primary cooling water piping:
 - Upper vertical pipe unit
 - Ongoing: acceptance tests for onsite works**
 - Water supply & drain for diagnostics & in-VV coils.
 - Supply: header pipe joints completed.**
 - Drain: header pipes under weld-joint.**
- ✓ Upper Stage:
 - Pre-assembly completed (2nd Apr.)**
- ✓ FPPC: Upper coil,
 - Ongoing: coil assembled, and insulation defect at the mouth part confirmed by withstand voltage test, under repairment.**
- ✓ FPPC: Lower coil,
 - Under winding work.**

Port activities

Tokamak infra.

In-vessel



Enhancements



- Edge Thomson Scattering port plug, retractable supporting structure, collection optics delivered to Naka. Last TS component, well in time for installation (September 2025)
- Divertor VUV in preparation for acceptance test in ENEA Frascati, planned for week of 18th May
- On site visit of Doppler Reflectometer team (CIEMAT) planned for first week of June for port inspection
- Final (formal) Design Review Meeting for Tangential Phase Contrast Imaging being organized (before May). Agreed partial installation of ex-vessel components (being procured by EPFL) to facilitate complete installation in ME2



JT-60SA Operations

- Guideline for Machine Operations in OP2 and beyond being discussed with involvement of all the contributing parties (JT-60SA PL and PMs, ET, QST, F4E, WPTE, WPSA)
- “Rules” (CQMS documents) being prepared
- Among the other topics, long-term secondment (~several months to ~several years) for EU personnel being planned (~15 persons, tbd)
 - Scientific programme role
 - Experiment execution role
 - Diagnostics experts (support for commissioning and operation)
 - Data flow and data validation
 - Scientific Assistants for session planning (pulse design)
 - PhD students with supervisors on site (tbd)



Data access

- Full data access NOT yet restored
- Reference plan confirmed: access available when the Analysis Cluster moved in the IFERC network (August + test period=September 2025)
- In the meanwhile only local access available: PCs in the QST network can access the database
 - 1 access point (1 PC in the QST network with defined user account) given to F4E
 - All the QST PCs in the QST network can currently access the data
- On request, 1 user account given to one EU person on site for accessing data from the control room PCs. Report on the activity and usability being prepared



Other news

- JT-60SA International Fusion School 2025 - Innovations in Fusion
- 1–12 Sept 2025 Naka Fusion Institute, QST, Naka, Japan [indico page](https://indico.euro-fusion.org/event/3385/overview)
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- deadline for application 8th May 2025 23:59 Central European Time
- Work package SA – Feasibility study and design of Edge and SOL Diagnostics
- call CfP-FSD-AWP25-SA-08 in IMS <https://ims.euro-fusion.org/fp9/Call>
- information meeting held on Wednesday 26th March 2025 8:30-9:30 CET
- Call closed, 16 proposals received, being analyzed



TCM-43 draft agenda (Frascati week of 18th May)

Day-1 @ 21 May 2025

CET	Duration	JST	Subject in Session
9:00	0:20	16:00	internet connection, payment for banquet, logistics, etc.
9:20	0:25	16:20	(1) Welcome and introduction
9:20	0:05	16:20	Opening talk
9:25	0:05	16:25	Agenda of TCM-43
9:30	0:15	16:30	Action List to be updated at TCM-43
9:45	1:00	16:45	(2) Overall Progress
9:45	0:20	16:45	M/E-1 schedule update and Tokamak Assembly
10:05	0:20	17:05	Enhancement of VV baking system
10:25	0:20	17:25	VV safety logic and exhaust system including drain
10:45	1:45	17:45	(3) In-vessel
10:45	0:15	17:45	MGI and path towards acceptance
11:00	0:10	18:00	Divertor cassette - manufacturing and installation
11:10	0:15	18:10	FPPC design/manufacturing/feeders/interfaces
11:25	0:10	18:25	Cryopumps trial installation and preparation for installation in VV
11:35	0:10	18:35	JA other in-vessel activities
11:45	0:10	18:45	Tungsten ACD procurement
11:55	0:25	18:55	Transition to Tungsten + summary of satellite meeting
12:20	0:10	19:20	Allowed materials for in-vessel components (QST proposal)
12:30	0:40	19:30	Lunch Break
13:10	1:20	20:10	Technical Tour / Photo
14:30	1:10	21:30	(4) Diagnostics
14:30	0:10	21:30	Status of Neutronics studies
14:40	0:20	21:40	VUV
15:00	0:20	22:00	TSS
15:20	0:20	22:20	TPCI
15:40	0:15	22:40	Coffee break
15:55	0:40	22:55	QST diagnostics + XICS
16:35	0:30	23:35	New enhancements
17:05	0:30	0:05	US diagnostics
17:35	0:30	0:35	FIDA

Day-2 @ 22 May 2025

CET	Duration	JST	Subject in Session
9:00	0:15	16:00	(5) Diagnostics (Cont.)
9:00	0:15	16:00	PLS
9:15	0:30	16:15	(6) NBI system
9:15	0:30	16:15	NBI system restoration
9:45	0:45	16:45	(7) Power Supplies
9:45	0:15	16:45	ECRF PS
10:00	0:15	17:00	JA activities for Magnet Power Supplies
10:15	0:15	17:15	EU activities for Magnet Power Supplies under MSMPS PA + TF grounding resistor final decision
10:30	0:45	17:30	(8) ECRF system
10:30	0:15	17:30	EU activities (TL components/loads/windows/vat valve/vacuum components)
10:45	0:15	17:45	JA activities
11:00	0:15	18:00	TL components procurement
11:15	0:15	18:15	Coffee break
11:30	0:45	18:30	(9) Data access etc.
11:30	0:15	18:30	Progress report on IFERC network integration
11:45	0:10	18:45	Progress report on the procurement of the new analysis server
11:55	0:10	18:55	Cyber-attack and related actions (temporary local access, EU backup server, etc..)
12:05	0:10	19:05	Improvements on JT-60SA Machine Protection System for OP-2
12:15	2:15	19:15	(10) Magnet / Cryogenic system
12:15	0:15	19:15	EF reinforcement
12:30	0:20	19:30	CS reinforcement
12:50	0:20	19:50	VMS PA and overview on activities



TCM-43 draft agenda + sat. meetings

13:10	1:00	20:10	Lunch Break
14:10	0:20	21:10	Summary of satellite meeting on Cryopant maintenance PA
14:30	0:20	21:30	Summary of satellite meeting on quench detection and quench analysis (including Coil protection interlock)
14:50	0:20	21:50	HTS CL (PA introduction)
15:10	0:10	22:10	CS joint activities
15:20	0:20	22:20	Summary of satellite meeting on thermo-hydraulic simulations of PF coils
15:40	0:20	22:40	Summary of satellite meeting on cryopump operation
16:00	0:15	23:00	Coffee break
16:30	2:20	23:30	(11) Preparation for OP2
16:15	0:20	23:15	Overall plan for Op2
16:35	0:20	23:35	Experiment Team Report
16:55	0:30	23:55	HV tests strategy of EF and CS magnets in preparation of OP2
17:25	0:40	0:25	Experimental program, scenarios and essential tools for main research items
18:05	0:30	1:05	Commissioning plan
18:35	0:30	1:35	(12) Project management
18:35	0:15	1:35	Status and issues of Configuration Control Models (scope may change)
18:50	0:10	1:50	PID update (input request)
19:00	0:05	2:00	Action list during TCM-43
19:05	0:05	2:05	(12) Future plans
19:05	0:05	2:05	Future plans
19:10		2:10	Closing

date / place	Room A	Room B	Room c
19 May 2025 09:00 - 11:00	Tungsten Transition meeting	Satellite meeting Status of CS joint mock-up	
19 May 2025 11:00 - 13:00	MGI installation/RE detection & Synergies with DTT		
19 May 2025 14:00 - 16:00	Satellite Meeting Magnet quench detection meeting	Satellite Meeting OP2 planning	
20 May 2025 09:00 - 11:00	Satellite Meeting Cryopump operation, installation, schedule and interfaces	Satellite Meeting thermo-hydraulic simulations of PF coils	
20 May 2025 11:00 - 13:00	VUV installation and testing		
20 May 2025 14:00 - 16:00	Cryogenics Satellite Meeting	TSS installation and testing	
21 May 2025	TCM-43 0x:00 - 1x:00		
22 May 2025	TCM-43 0x:00 - 1x:00		
23 May 2025 09:00 - 11:00	Neutronics & neutron and gamma diagnostics	EU workplan on TFQDV	Materials for in-vessel components