

PSD Management Meeting

# Briefing

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## Topics for discussion today

- Status exploitation of JT-60SA
- JET data access – ITER
- Organization of Departments and offices
- Operational time and resources...
- Next steps... for AWP?





# Alternate Proposal to generate ~1.5Mio Euro for WP TE Campaign

## Step 1: Slightly reduced operation in 2027

	assumed % of EUROfusion usage		resulting EUROfusion cost share (CC @80%)		for ADMIN use only: corresp. EC contr.
	2026	2027	2026	2027	2026+27
AUG	40%	30%	6,826	5,120	8,213
W7X	30%	30%	8,325	8,325	11,447
WEST	40%	30%	5,765	4,323	6,936
TCV	30%	30%	2,527	2,527	3,475
					30,071

Bureau on 7<sup>th</sup> of March

assumed % of EUROfusion usage		resulting EUROfusion cost share (CC @80%)		for ADMIN use only: corresp. EC contr.	latest budget file
2026	2027	2026	2027	2026+27	2026+27
40%	27,5%	6.826	4.693	7.920	8.101
30%	27,5%	8.325	7.632	10.970	6.369
40%	27,5%	5.765	3.963	6.688	5.200
35%	27,5%	2.948	2.317	3.620	2.442
total:				29.198	22.111

Proposal by HoD PSD → Reduction of operation by 0.873 Mio Euro EC



## Alternate Proposal to generate ~1.5Mio Euro for WP TE Campaign

Device	Project
AUG	FIRE&GO - Fast Ion Research Enhancements and Gamma-ray Observations [at ASDEX]
	Ultra-fast-swept profile reflectometer on AUG
	Direct Digital Synthesis for the O-mode Profile Reflectometer at ASDEX Upgrade
	Real-time spectroscopy at ASDEX Upgrade
COMPASS-U	Tungsten impurity monitoring and control at the COMPASS-U tokamak
	Characterisation of advanced confinement modes at COMPASS-U
	PFCs and diagnostics for power exhaust studies at COMPASS-U
MAST-U	Neutron Detectors suite for 14 MeV neutron triton burnup and 2.5 MeV neutron spectroscopy measurements at MAST Upgrade
TCV	New 100-Hz Laser for the TCV Thomson Scattering System
	Runaway Electron Mitigation Coil for TCV
	Upgrade of the TCV LHPI antenna
	Implementation of the 4th dual-frequency gyrotron for TCV
	Collective Thomson Scattering (CTS) diagnostic for TCV
	Runaway electron mitigation and velocity analysis by magnetic-ripple manipulation [at TCV]
WEST	Upgrade of the TCV ECRH high voltage power supply
	A retarding field analyzer for ion temperature measurements in the SOL of WEST
	Boronization Probes for WEST
	LIBS4FUSION: in-vessel fuel Inventory and deposited layers composition in a full tungsten device
	Fast Ion Loss Detector in WEST
	IRBO IR Bolometry for WEST
	High Definition Visible Endoscope for WEST

Step 2:

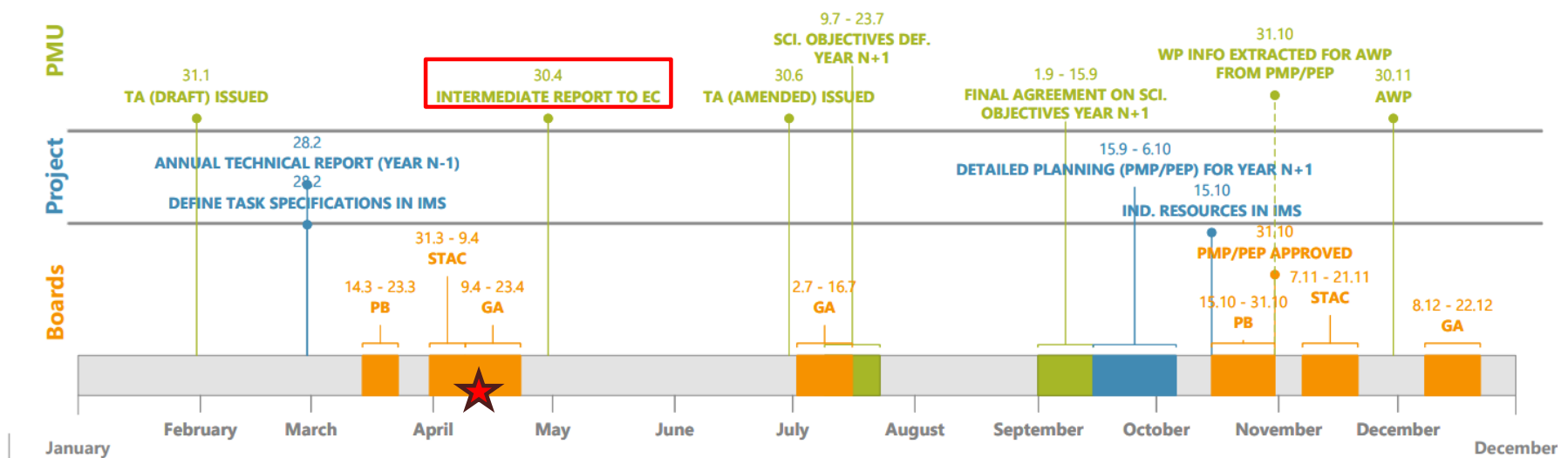
- ❖ No re-instatement of entire TE enhancements budget, instead:
    1. Retain delay of COMPASS-U diagnostics (+196kEuro EC)
    2. Cancel Priority 3 diagnostics (marked in red in table) (+597kEuro EC)
    3. Retain priority 1 and 2 Te enhancements
- ➔ 793kEuro for TE Campaign

**Combination of reduced device operation in 2027 (+873kEuro) + retaining delays and stopping prio 3 in TE enhancements (+793kEuro):**

**+ 1.666 M Euro EC for TE participation budget compared to GA 9<sup>th</sup> April or ~ 0.83 Mio Euro budget reduction for WP TE (~10% compared to 21-25 average / 30% (instead of 43%) compared to 2025 budget)**



## 3.1 - Planning of events - EUROfusion calendar

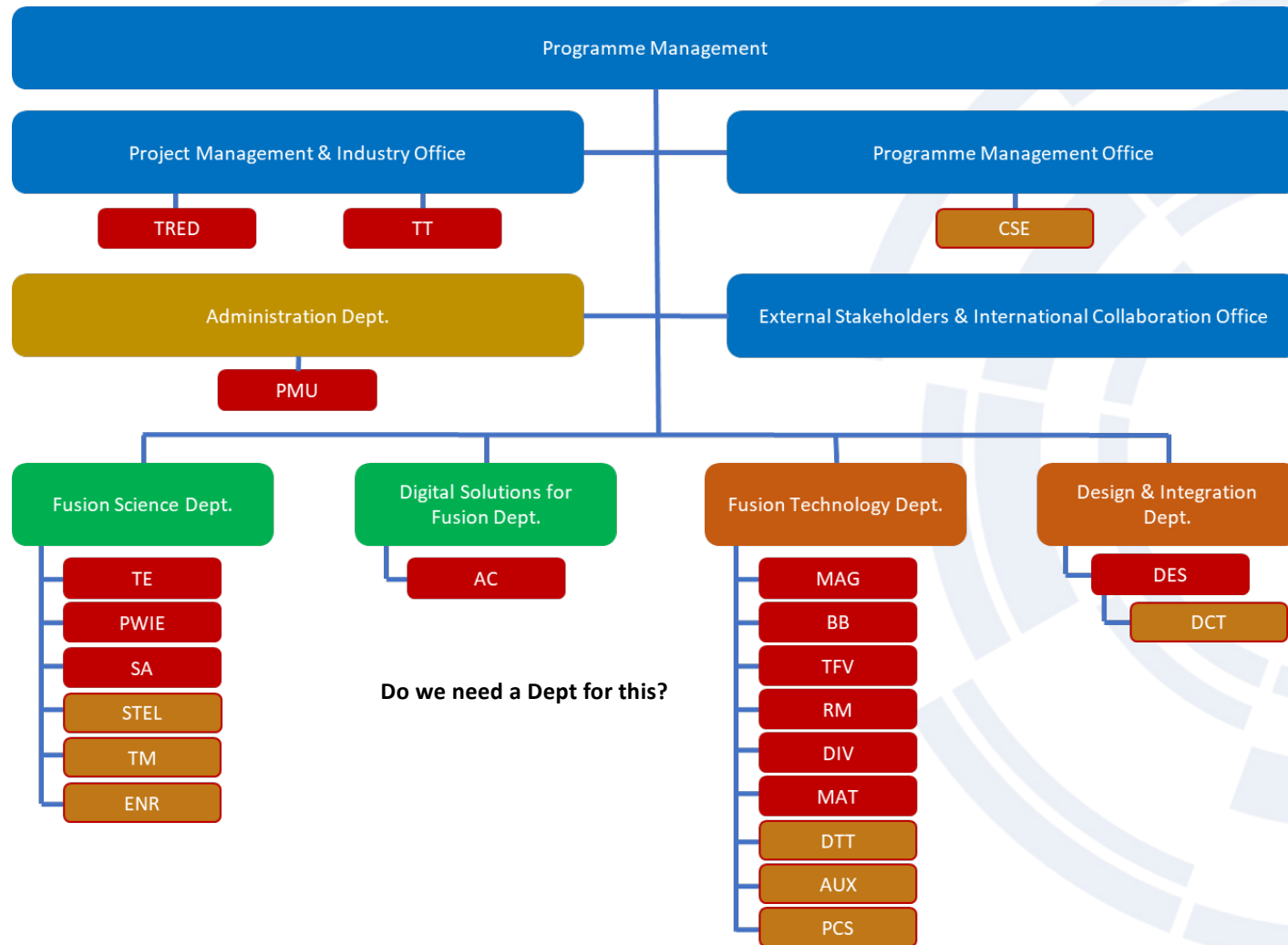


### Upcoming events

51 <sup>st</sup> Bureau meeting	23 June 2025	Remote
51 <sup>st</sup> General Assembly meeting	15-16 July 2025	Poland
52 <sup>nd</sup> Bureau meeting	22 September 2025	Prague, Czech Republic
52 <sup>nd</sup> General Assembly meeting	7-8 October 2025	Remote
53 <sup>rd</sup> Bureau meeting	14 November 2025	Remote
53 <sup>rd</sup> General Assembly meeting	16-17 December 2025	Saariselkä, Finland



## Revised PMU & WP organisation





## Composition of new WPs

### Fusion Technology Department

<b>MAG</b> includes PRD-MAG
<b>BB</b> includes PRD-BB & ENS medium flux irradi. module
<b>TFV</b>
<b>RM</b> includes ENS RH equipment design & validation
<b>DIV</b> includes PRD-LMD
<b>MAT</b> includes PRD-MAT & ENS
<b>DTT</b>
<b>AUX</b> includes DC, HCD, PRD-HCD, PrIO SP-3&4
<b>PCS</b> includes BOP & PES

### Design & Integration Department

<b>DES</b> includes DCT, SAE, ENS engineering & PrIO SP-5
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### Fusion Science Department

<b>TE</b> including PrIO SP-2
<b>SA</b>
<b>PWIE</b>
<b>STEL</b> including W7X & PRD-SPPS
<b>TM</b> including AC TSVVs
<b>ENR</b> including ICF activities

### Digital Solutions for Fusion Department

<b>AC</b> including CHW, ACH and DTE
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**CHW** (Computational Hardware): Including HPC, Gateway, and LTDSF

**ACH** (Advanced Computing Hubs): ACH activities across three categories, with the data-oriented hub also integrating DMP development and AI support

**DTE** (Digital Twin Environment): Consolidating various activities related to DT, PoCs, AI projects, Synthetic Diagnostics, and Visualization



## Copy of JET Data Centre

- IO proposes to host a copy of the JET database at the newly opened ITER data centre.
- We are investigating the matter with EC noting the boundary conditions that we need to be aware of, e.g. the fact that by default both China and especially Russia (or indeed USA) will have automatic access to these data, something that our political masters (either in Brussels or individually in the Member States) may object to given the current situation.

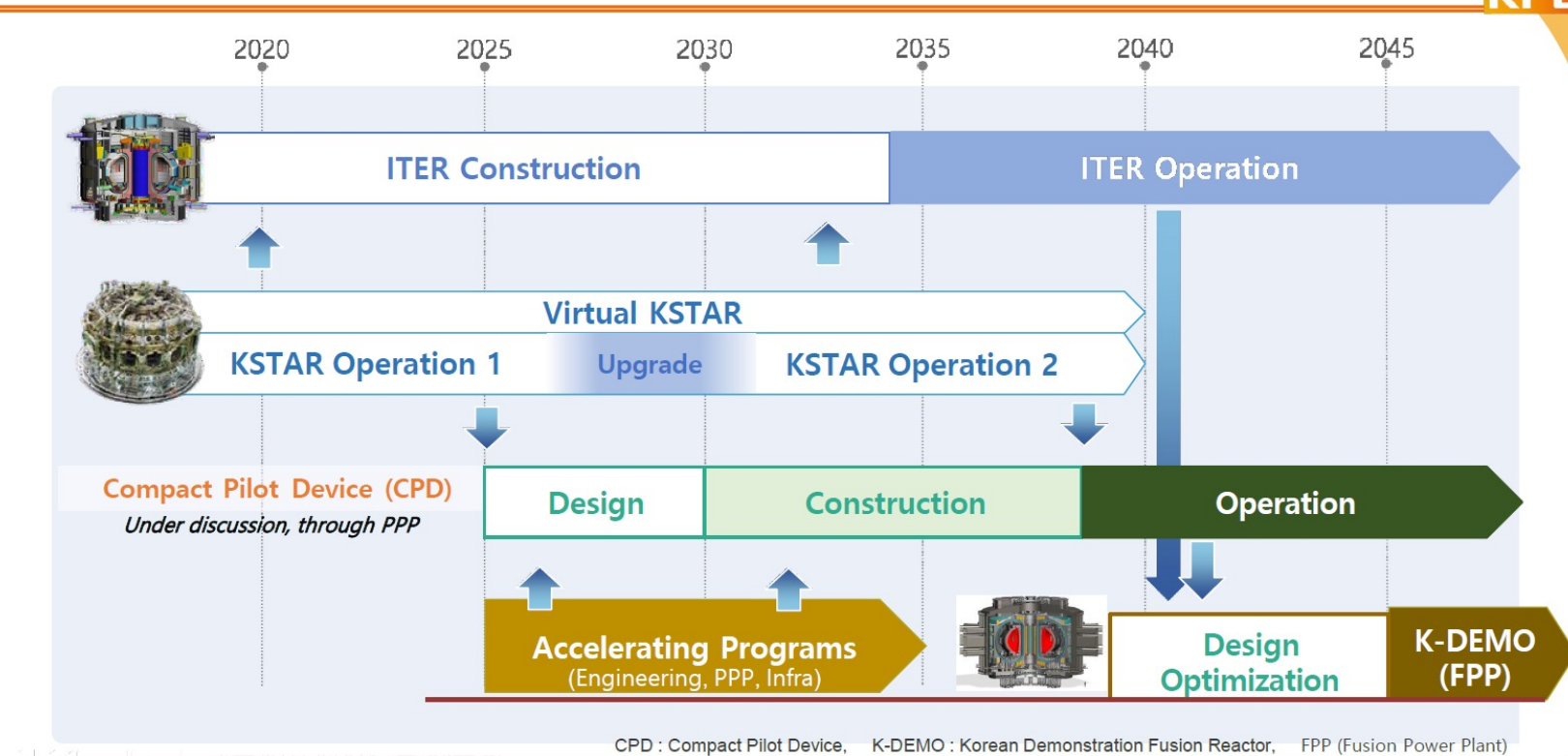
**WORK IN PROGRESS**





- The new strategy includes the possible implementation of a compact burning plasma device to operate in parallel with ITER

## Proposed Timeline of Key Fusion Programs *(Under Discussion)*





# Fusion Expert Group Opinion Paper

Towards the EU Fusion Strategy

Independent Expert Report





## Potential showstoppers, Timeline, Costs

Excerpt from STAC report presented by F. Villone to the GA in December 2024:

### **Topics that might potentially lead to a showstopper after the conceptual design phase:**

- Steady state availability of heating systems
- Development of an integrated core-edge scenario
- Radioactive waste management and cost implications
- Integrated solution for plasma control and magnetic configuration (PF-in-TF vs. traditional)

**No comments are provided on timeline and costs.**

**STAC encourages the GA to discuss the timeline, i.e. how a VNS will fit in an EU roadmap, or limit the topics to be detailed in the next steps of the VNS conceptual design phase until the new EU roadmap is on the table.**



# STAC recommendations wrt. the extension Workplan 2026/2027



## General STAC recommendations wrt the Ext. Workplan 2026/27 (1)

STAC's recommendations to the PMU were taken into account in the presented Workplan. (see document sent to PMU on April 3<sup>rd</sup>: [STAC\\_PMU\\_4\\_2025\\_vs4.pdf](#))

*The following recommendations are meant for the EC and the GA:*

STAC suggests to put the EC requirements for the Extension Workplan in the broader context of the future framework programme and fusion roadmap. In this regard, it would be beneficial for the community to understand if the activities cancelled under this budget restriction are intended to be restarted or if the community needs to focus on a smaller programme.

Missing information about PPP makes identification of transferable topics difficult, if not impossible. Analysis needs to be done to identify which items are ready and appealing to industry, and could therefore be transferred to PPP.

STAC suggests a close cooperation of PMU with the GO4Fusion Coordination and Support Action so that the PPP and the EUROfusion (EF) work programme can be evolved together to maximise opportunities through industry involvement.

The budget decrease leads to a severe reduction in those resources and skills that are needed for the realisation of fusion in Europe. This is contradictory to the overall aim of fostering a fusion work force.

The addition of tasks (e.g. ICF, DTT and VNS) broadens the scope, which is good, but it is done at the given reduced budget. This looks contradictory.

The provisions for JET data validation beyond 2025 need to be agreed with UKAEA.



## General STAC recommendations wrt the Ext. Workplan 2026/27 (2)

Some of STAC's recommendations that arose from the analysis of the Facilities Review and the EFPW in Granada may appear outdated, because the EUROfusion landscape has to change due to the budget allocation from the EC, which is reduced by 30% as compared to previous years.

This is especially true for recommendations regarding DONES and JT-60SA, as these topics are largely omitted in the extension workplan 2026/2027.

STAC appreciates the efforts of the PMU and encourages the GA to seek a solution for the EU scientific contributions to the programmes of DONES and JT-60SA together with F4E.

STAC suggests that the GA nominates an additional STAC member from the ICF community.