



# Follow up of integrated commissioning in 2021

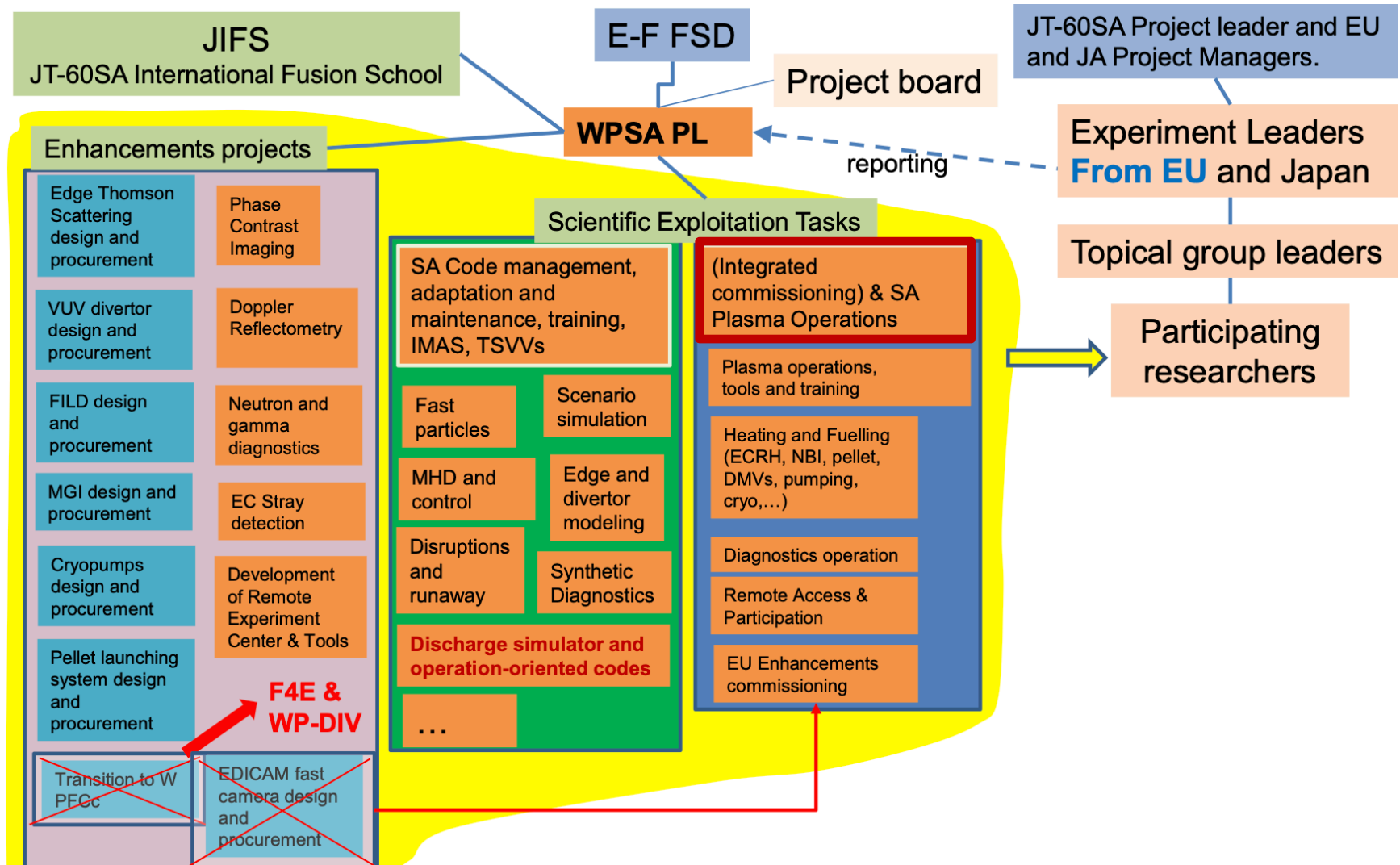
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# WPSA in FP9



# WPSA Operations Activities in FP9



Activity	2021	2022	2023	2024	2025
Cryo and Magnets	Review coil energisation in the integrated commissioning, analyse lessons learned and support EEG on magnets.	Review coil energisation in the integrated commissioning, analyse lessons learned and support EEG on magnets.			
EDICAM operation	Review operational experience from the integrated commissioning	update where needed	diagnostics operation	diagnostics operation	diagnostics operation
Plasma Operations	Review the operational experience of the integrated commissioning in 2021	Train and contribute to plasma operation preparations	Train and contribute to plasma operations	Train and contribute to plasma operations	Train and contribute to plasma operations
Real-time Networks	Consider tools for JT-60SA based on integrated commissioning experience	Learn about the RT networks at JT-60SA. Develop / integrate suite of tools for JT-60SA	Develop RT networks and support operation	Develop RT networks and support operation	Develop RT networks and support operation
Wall conditioning	Review vacuum conditioning and the ECWC in 2021 from the operational aspect	Contribute to preparation of vacuum conditioning for the 2023 campaign	Monitor wall condition and contribute to operation of ECWC	Monitor wall condition and contribute to operation of ECWC	Monitor wall condition and contribute to operation of ECWC
Divertor Cryo operation		Installation and test	Commissioning and operation, training of resident staff	Commissioning and operation, training of resident staff	Commissioning and operation, training of resident staff
ECH		prepare for operation	Support operation	Support operation	Support operation
NBI			Support operation	Support operation	Support operation
Edge Thomson Scattering		Installation	Installation / commissioning	diagnostics operation	diagnostics operation
VUV operation		Installation	Installation / commissioning	diagnostics operation	diagnostics operation
FILD operation				Installation / commissioning	diagnostics operation
Massive Gas Injection			Installation / commissioning	operation	operation
Pellet Launching System			Installation / commissioning	operation	operation

# Transition from IC 2021 to FP9 Operations



Integrated commissioning was planned to finish in June 2021 lead by the EU Coordination Team (Leader: E. Joffrin, Deputies: G. de Tommasi, E. Belonohy)

Preparation of commissioning and operations of the 2023-25 campaigns are under the FP9 Operations activity (Leader: E. Belonohy)

Waiting for information from the investigation to the coil fault that occurred on 9/3/2021.

- Impact on the integrated commissioning timeline is still unclear
- Further information expected after the warm-up of the coils in April 2021
- Transition between the EUCT and the FP9 Operations Activity to be confirmed once the impact is known.



**Plan to start discussion with Fusion for Energy and QST on the installation support, commissioning and operations in 2023-25 in mid-2021 or after the completion of the integrated commissioning phase.**

- Preparation: share operational experience, Naka-site training and experience exchange?

**Knowledge transfer** of Operational Experience from the integrated commissioning phase 2021

- PPCF Special Issue on Operations or other refereed journals
- EDICAM 2021 deliverable of reporting on the installation and commissioning of the EDICAM camera system
- Wall Conditioning deliverable on reporting on the wall conditioning experience (to be discussed in the Wednesday, 17/3/2021 afternoon session)
- Other reports on coil energization, cryo commissioning?

Lessons learned, suggestions for future operations

- Feedback and suggestions would be very welcome