



FSD Tokamaks BOARD MEETING 1

17 JUNE 2021

MINUTES

Date:	17 JUNE 2021
Time:	13:00 – 18:00 CEST
Venue:	By videoconference (Zoom): Meeting ID: 870 4662 9144 Passcode: 935394
Files (IDM & INDICO):	<p>WPTE Project Execution Plan (PEP): https://idm.euro-fusion.org/?uid=2NDN22</p> <p>WPPrIO Project Execution Plan (PEP): https://idm.euro-fusion.org/?uid=2PM877</p> <p>WPSA Project Execution Plan (PEP): https://idm.euro-fusion.org/?uid=2PLTCB</p> <p>ENR Project Execution Plans (PEPs): https://idm.euro-fusion.org/?uid=2PBJ7R</p> <p>Horizon Europe EUROfusion Consortium Agreement (GA approved draft): https://idm.euro-fusion.org/?uid=2NZTCW</p> <p>Annual Work Plan 2021 (GA approved draft): https://idm.euro-fusion.org/?uid=2PERLF</p> <p>Project Board's directory: https://idm.euro-fusion.org/?uid=2P4XSZ</p> <p>EUROFUSION GA (20) 32 - 4.7 - ITER White Paper Report WG2 Issue 3 7-Dec-2020 (Decision): http://idm.euro-fusion.org/?uid=2PRHFR</p> <p>EUROFUSION GA (20) 32 - 5.3 - Revision of ITPA membership Issue 1 20-Nov-2020 (Decision): http://idm.euro-fusion.org/?uid=2N6EQJ</p> <p>INDICO: https://indico.euro-fusion.org/event/1111/</p>
Version	1.0

Invited Participants (Present in this PB Meeting)

Chair	<u>Tony Donné</u> (Project Manager, PM)
CEA	<u>Ludovic Allegretti</u>
ENEA-01-RFX	<u>Andrea Murari</u>
EPFL	<u>Stefano Coda</u>
IPP	<u>Arne Kallenbach</u>
UKAEA	<u>James Harrison</u>
KIT	Mihaela Ionescu-Bujor
VR-02-UU	Marco Cecconello (<i>absent</i>)
LPP-ERM-KMS	Kristel Crombe
VTT	Markus Airila
FZJ	Wolfgang Biel
NCSR	Christos Tsironis
WPTE Management	Marco Wischmeier (Task Force Leader)



	Emmanuel Joffrin (Task Force Leader) Emmanuelle Tsitrone (Deputy Task Force Leader) Antti Hakola (Deputy Task Force Leader) Benoit Labit (Deputy Task Force Leader) Nicola Vianello (Deputy Task Force Leader)
WPPRIO Management	Xavier Litaudon (Project Leader) Gloria Falchetto (Project Support Officer)
WPSA Management	Carlo Sozzi (Project Leader) Alessandra Di Bastiano (Project Support Officer)
Programme Management Unit	<u>Volker Naulin</u> (Head of FSD, HoD) <u>Sara Moradi</u> (WPTE and WPW7-X Coordinator) <u>Emilia Genangeli</u> (Head of Admin Dep.) <u>Fabio Vinagre</u> (Head of PMO) <u>Denis Kalupin</u> (WPAC & ENR coordinator) <u>Joao Figueiredo</u> (WPPRIO and WPSA coordinator) <u>David Douai</u> (WPPWIE coordinator)
ITER IO	Alberto Loarte

Minutes

	Item
1	<p>Introduction</p> <p>T. Donn� introduced the agenda. There were no objections to the agenda.</p>
2	<p>Round the table introduction of Members of the Board & Project Board's duties and responsibilities (ToR)</p> <p>The members of the Project Board, the WPTE Tasks Force Leaders, WPPRIO and WPSA Project Leaders, their PSO support and the PMU members introduced themselves.</p> <p>V. Naulin explained the ideas behind a smaller Project Board and stated that he hopes that due to the reduced size deeper discussions will be possible.</p> <p>Discussion:</p> <p>A. Murari requested access to complementary documents regarding STAC and GA decisions that could be helpful for the board members in reviewing the activities of the related WPs. Chair (Tony) agreed when possible, and further two documents were shared by the Board members via email.</p> <p>A. Murari also enquired if further meetings with the WPs team can be organized for the board members in order to follow the day-to-day activities. FSD HoD (Volker) reminded the board members that the PB has the duty to monitor the activities of the WPs on a high level and day-to-day management is not part of its responsibilities. However, board members are welcomed and encouraged to attend WP related meetings such as WPTE's weekly Task Force meetings where the participants report to TFLs on their progress.</p>
3	<p>WPTE</p> <p>a) WP organization & Project Execution Plan (PEP)</p> <p>M. Wischmeier reported the scientific objectives, the status of WPTE 2021 campaign, and theory and predictive modelling activities including the interfaces with related TSVVs. The schedule of the WPTE machine operations in 2021 and expected for beyond 2021 was presented. Distribution of the</p>



resources over the scientific topics (Research Topics) and preliminary plans for organization of the 2022 campaigns were shown.

The structure of Task Force for the preparation of campaigns and the timelines relevant for planning the WPTE tasks in 2021 were introduced. The project and the management structure as well as opportunities for synergies with other FSD and FTD work packages were discussed.

The risks of the workplan were outlined.

Discussion:

A. Murari remarked on the large number of Research Topics (18) and the rational for the distribution of the resources per topic. M. Wischmeier explained the rational and that the prioritizations are done based on the ITER and DEMO needs, and also taking into account which areas are to be addressed more by other WPs, e.g., for RT12 where JT60 (WPSA) will have a big role. Also, for RT7 (on negative triangularity) AUG is not yet able to run experiments for it, and next year when AUG is prepared, WPTE will have an experimental programme on that. A. Kallenbach commented on technical preparation of the AUG for next year's negative triangularity experiments.

A. Murari asked about the availability and access to data from internal programmes to WPTE participants, and M. Wischmeier explained the procedure and that data related to internal share of the experiments will be available for the participants to access and analyse however rights to any resulting publications will be given first top internal teams and coordination with Machine heads is needed regarding publishing on such data.

J. Harrison questioned the deliverables for 2021 and if the TFLs have the breakdown of the experimental scenario developments and if possible, to make use of the results for projection to future machines? M. Wischmeier explained that there are no scenario developments as such for ITER or DEMO only experiments addressing the physics bases for development of such scenarios, e.g., divertor and exhaust related physics which will be examine through snow-flack and super-X divertor experiments.

S. Coda questioned what is the support of the WPTE programme on 4 machines for the dT campaign at JET? How can the WPTE contribute to that? M. Wischmeier explained that WPTE will provide the JET team the results of their analysis and of course can help with further analysis needs for DT.

T. Donn  asked if there is a difference in the on-site/off-site activities of the WPTE participants between pre-corona and corona times? M. Wischmeier explained that the travels to machine sites or other on-site activities have been for most part canceled so far and only few urgent and required trips for manning or installing the diagnostics have been permitted. The situation however might change and more travels might take place in the second half of the year as the situation improved in Europe.

b) Financial Overview

The present expectation is a total budget for FP9 (costs) of 749 M  including 200 M  UK contribution.

E. Genangeli presented the share of WPTE in the FSD budget.



c) Project Change Requests (PCRs)

Change requests:

- Changes in the Deliverable regarding the delay in WEST experimental campaign till 2022.
- Changes in the Deliverable regarding the addition of JET experimental campaigns to the WPTE programme from November 2021.

All Project Change requests were accepted by the PB.

Action WPTE: implement the changes in a new version of the PEP and upload it to IDM.

d) Approval of PEP

PB Decision:

TD declared the WPTE 2021 is approved by the PB

The PB unanimously approved the PEP 2021 including the change requests.

4 WPPrIO

a) WP organization & Project Execution Plan (PEP)

X. Litaudon reported the scientific objectives, the status of WPPrIO sub-project set up and activities in 2021, and theory and predictive modelling activities including the interfaces with the related TSVVs. Distribution of the resources over the sub-projects were shown.

The sub-projects and the management structure as well as opportunities for synergies with other FSD and FTD work packages were discussed.

The risks of the workplan were outlined.

Discussion:

A. Murari asked about the possibility of creating a multi machine data base, and also the neutron leak activities under the WPPrIO. X. Litaudon explained that indeed the data base is under developments and commented on the importance of keeping the European expertise on the neutron leak research alive through the WPPrIO related activities.

A. Murari commented that in his opinion the support the NBTF facility in Padua is insufficient and below the expectations, a fact which is compromising the integration into EUROfusion of such a fundamental system for ITER.

T. Donné commented on link with ITPA on a working level, and perhaps a need for additional meetings to be set up before the ITPA-CC main meetings? X. Litaudon suggested a brainstorming session in order to define the best way to get involved with the ITPA activities and preparations for the ITPA-CC meetings. A. Loarte (ITER) suggested adding X. Litaudon to all related mailing lists.

A. Loarte commented on the importance of a decision for a Fast ion detector for ITER either based on RP or any alternative to be made as soon as possible. As the design of the diagnostics ports is being prepared it is crucial to find a solution soon.



A. Kallenbach also commented on the importance of a strong European involvement in the operation of the ITER and its Task Force team. WPPrIO would be in a good position to define and suggest a plan for that. T. Donné mentioned that a WG with members from both EDGs, EUROfusion and F4E is set up specially to look into preparation of Europe for ITER operation and to provide recommendations.

E. Joffrin commented that WPTE programme is also periodizing their activities in view of the ITPA priorities.

b) Financial Overview

The present expectation is a total budget for FP9 (costs) of 749 M€ including 200 M€ UK contribution.

E. Genangeli presented the share of WPPrIO in the FSD budget.

c) Project Change Requests (PCRs)

Change requests:

- Request of increase of Accompanying Research (AR) for IPPLM (subprojects 4 and 5).

- Calls issued to replace colleagues that have left or will leave NBTF and IPP-Garching (subproject 4).

- As consequence of slight delay in DTE2, FP8 JET3 will cover the full 2021. Unused resources will be shifted to 2022 and are to be allocated following the Working Group recommendation (subproject 5).

All Project Change requests were accepted by the PB.

Action WPPrIO: implement the changes in a new version of the PEP and upload it to IDM.

d) Approval of PEP

PB Decision:

[TD declared the WPPrIO 2021 is approved by the PB](#)

The PB unanimously approved the PEP 2021 including the change requests.

5 WPSA

a) WP organization & Project Execution Plan (PEP)

C. Sozzi reported the scientific objectives, the status of WPSA Enhancement projects, international collaborations, and the four areas of activities in 2021. Distribution of the resources over the sub-projects were shown.

The organizational and the management structures as well as opportunities for synergies with other FSD and FTD work packages were discussed.

The risks of the workplan were outlined.

Discussion

A. Murari pointed out that, since the resources are very limited and one of the main risks quoted in the PEP is the lack of resources, it seems not really consistent to launch



new scoping diagnostic studies. The risk of spreading the European effort too thin is high.

b) Financial Overview

The present expectation is a total budget for FP9 (costs) of 749 M€ including 200 M€ UK contribution. E. Genangeli presented the share of WPSA in the FSD budget.

c) Project Change Requests (PCRs)

Change requests:

Due to 6-12 months delay in the start of operation of the JT60-SA, a revision of the CWP milestones and Deliverables were proposed.

All Project Change requests were accepted by the PB.

Action WPSA: implement the changes in a new version of the PEP and upload it to IDM

d) Approval of PEP

PB Decision:

TD declared the WPSA 2021 is approved by the PB

The PB unanimously approved the PEP 2021 including the change requests.

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ENR

a) ENR organization & Project Execution Plan (PEP)

D. Kalupin provided an overview of the ENR projects, the stakeholder roles and responsibilities, and the project's life cycle.

b) Financial Overview

The present expectation is a total budget for FP9 (costs) of 749 M€ including 200 M€ UK contribution. E. Genangeli presented the share of ENR in the FSD budget.

c) Project Change Requests (PCRs)

No changes were requested.

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AOB & Closing

T. Donné suggested organizing the next Project Board Meeting in fall 2021.

The PB agreed that the next PB meeting will take place on 8th of November 2021. **Action S. Moradi:** organize the next Project Board Meeting for 08.11.2021.

The meeting was adjourned.



Annex 1- Actions form this PB Meeting

No.	Resp. person	Description (brief)	Status Comments
PB01-01	A. Dinklage	bring Y. Kazakov's suggestion of having a dedicated ICRH working group to Topical Group Coordination Meeting	
PB01-02	T. Donné	develop generic solution for handling missions >3months	
PB01-03	A. Dinklage PSO WPW7X	call for a meeting w. ADMIN (P. Haucke) to discuss the budget neutral shift of resources between IPPLM and IPP (affecting 2021 and 2022) and subsequently carry out the changes in IMS together with the WPW7X PSO	
PB01-04	A. Dinklage PSO WPW7X	implement the changes in a new version of the PEP (version 1.3) and upload it to IDM	
PB01-05	S. Moradi	organize the next WPW7X Project Board Meeting for 15.11.2021	



Annex 2 – Agenda

<p>13.00 — 13.10 (10')</p>	<p>Introduction</p> <p>Tony Donné, EUROfusion Project Manager</p>
<p>13.10 — 13.30 (20')</p>	<p>Round the table introduction of Members of the Board & Project Board's duties and responsibilities (ToR)</p> <p>Volker Naulin, Head of FSD</p>
<p>13.30 — 14.50 (80')</p> <p>a) 20' + 20' disc. b) 10' + 10' disc. c) 10' + 5' disc. d) 5'</p>	<p>a) WPTE organization & Programme Execution Plan (PEP) Emmanuel Joffrin & Marco Wischmeier, WPTE Task force Leaders</p> <p>b) Financial Overview Emilia Genangeli, Head of Admin department</p> <p>c) Project Change Requests (PCRs) Marco Wischmeier & Emmanuel Joffrin, WPTE Task force Leaders</p> <p>d) Approval of PEP Tony Donné, EUROfusion Project Manager</p>
<p>14.50 — 14.55 (5')</p>	<p>Break</p>
<p>14.55 — 16.05 (70')</p> <p>a) 15' + 15' disc. b) 10' + 10' disc. c) 10' + 5' disc. d) 5'</p>	<p>a) WPPrIO organization & Programme Execution Plan (PEP) Xavier Litaudon, WPPrIO Project Leader</p> <p>b) Financial Overview Emilia Genangeli, Head of Admin department</p> <p>c) Project Change Requests (PCRs) Xavier Litaudon, WPPrIO Project Leader</p> <p>d) Approval of PEP Tony Donné, EUROfusion Project Manager</p>
<p>16.05 — 16.10 (5')</p>	<p>Break</p>
<p>16.10 — 17.20 (70')</p> <p>a) 15' + 15' disc. b) 10' + 10' disc. c) 10' + 5' disc. d) 5'</p>	<p>a) WPSA organization & Programme Execution Plan (PEP) Carlo Sozzi, WPSA Project Leader</p> <p>b) Financial Overview Emilia Genangeli, Head of Admin department</p> <p>c) Project Change Requests (PCRs) Carlo Sozzi, WPSA Project Leader</p>



	d) Approval of PEP Tony Donné, EUROfusion Project Manager
17:20 — 17.30 (10') a) 5' b) 5'	a) ENR organization Denis Kalupin (PMU Coordinator for ENR) b) Financial Overview Emilia Genangeli, Head of Admin department
17:30 — 18.00 (30')	AOB & Closing <ul style="list-style-type: none">- Project Board Process – Members views on the meeting structure & pre meeting preparations, - Next meeting date and time