## Key points from the FSD Planning Meeting on June 10-12, 2024

Overall

***Improved communication with STAC:*** Key links and materials, such as TSVV research plans, materials from TSVV and ACH reviews, and links to Wiki and INDICO pages, should be made available to STAC. Documents like the AWP or Technical Report should be provided as early as possible, to give STAC sufficient time to review and comment. STAC would like to see specific achievements and highlights.

***Code down-selection:*** By the end of the current funding period in 2025, a down-selection of codes in certain research areas is anticipated, prepared and conducted by the E-TASC SB. The aim is to strive for a healthy balance between risk mitigation and efficient use of EUROfusion resources, avoiding financing an unreasonably high number of comparable codes.

Developing predictive capabilities

***Increased focus on ITER and DEMO:*** Providing predictive capabilities is one of the key goals of E-TASC. In this context, VVUQ will be a priority in 2025.A main concern is the reliability of simulations when extrapolating to ITER and DEMO. Validation of TSVV codes on several increasingly large machines should be encouraged.

***Opportunities provided by W7-X and JT-60SA:*** Important opportunities to validate codes and develop predictive are also expected from W7-X and JT-60SA.

Code dissemination and training

The primary focus until the end of 2025 should be on stimulating the community's use of the tools developed within E-TASC. In this context, several aspects need to be addressed:

* ***Attracting trainees:*** Under the current 50% EUROfusion funding scheme, attracting new trainees can be challenging, especially when competing with 100% national funding schemes.
* ***Code readiness:*** Information on code readiness for certain tasks and available functionalities should be improved to keep WPs promptly informed.
* ***Focused training:*** It is important to bring the training capacities in line with particular research opportunities/needs as identified within various WPs.
* ***Personnel and resources:*** Efficient training will require the availability of personnel familiar with the respective tools as well as financial resources to allow for in-person interactions.

Simulation/modelling needs

To align the code development efforts with community needs, input from various WPs is essential:

* ***JT-60SA:*** Should share their strategy on code validation and extrapolation.
* ***ITER:*** Promised to distribute their "wish list" soon.
* ***WPTE:*** Modelling needs were presented at the last meeting of Thrust 1.
* ***Other WPs*** should be asked to contribute their requests to the overall list.

Corrections to Grant Deliverables and Milestones

***Revision of the ITER Timeline:*** The revision of the ITER timeline affects the Grant Deliverables and Milestones initially planned in 2021 for the entire framework. Some of these may now be considered obsolete.

* PRIO.D.06 Report on full-pulse predictive modelling of current, heat, particle, momentum for ITER relevant heating (ICRH, ECRH, NBI) and fuelling (gas puff, pellets) schemes from breakdown to termination (L or H-mode phases) demonstrated on three different tokamaks, together with operational limit predictions (Responsibility of TSVV11)
* PRIO.D.07 Report on the simulations of the first ITER operational phase (simulation of dynamic phases at 1/3 and 1/2 magnetic field in H and He plasmas) (Responsibility of TSVV11)