

Annex 3: WPTE Research Topic Coordinators Terms of Reference

The primary responsibility of the Coordinator of a Research Topic (RTC) is to ensure that all the tasks of their Research Topic (experiments, modelling, analyses, etc) are coordinated with the goal to achieve the scientific objectives in the most efficient and complete manner. The Research Topic Coordinator is responsible to report on the outcome of the coordinated tasks.

Research Topic Coordinators should have high scientific and/or technical expertise in the Research Topic they are proposed for, and good communication and presentation skills. They should be able to interact with a multi-cultural experimental team in an efficient way and be ready to integrate new scientists to the Research Topic. This implies organising regular meetings, coordinating the actions, keeping the teams regularly informed and updating regularly the dedicated wiki pages of the Research Topic.

The RTCs should foresee their on-site presence when an experiment included in their Research Topic is executed on one of the tokamaks of WPTE (AUG, TCV, MAST-U, WEST). It is also strongly advised that the RTCs spend at least one week prior to the experiment on-site for the detailed preparation and one week after the experiment to initiate the analysis or to supervise contingency time.

The RTCs are supported and guided by the WPTE Task Force Leaders (TFLs) but also by local machine experts (including reference Session Leaders) if they are not familiar with the details of the WPTE devices. The RTCs are expected to advise the TFLs in formulating the final deliverables of their Research Topic and in selecting the experimental team participants.

Several RTCs can be appointed per Research Topic.

Requested commitment for Research Topic Coordinators:

EUROfusion contributes to the salary costs of the selected RTCs - and to the necessary mission days that will be also granted to participate to relevant WPTE planning meetings. The reimbursement of both salary and mission costs are funded according to internal rates as agreed within the new Consortium Agreement for the period 2026-2027.

A minimum commitment of about 3 person-months (~ 10 weeks) per year is requested. The final allocation of time including extra missions to the devices is determined during the Call for Participation process.

Detailed responsibilities of the Research Topic Coordinator

1. Prior to the experiment

- Together with the TFLs, present at the WPTE planning meeting the status of the work on the relevant Research Topic.
- Provide input to TFLs on experimental team competencies required (including modelling) and review the proposed scientific team members during the selection process.
- **Develop a detailed experimental strategy and work/task breakdown (including the foreseeable analysis and modelling tasks). Key steps for a coherent programme are:**
 - **Integration of WPTE devices and integration of selected proposals**

- **Assignment of clear and realistic tasks to team members (or group of members) by identifying responsible roles within the scientific team.**

The Task Force Leaders will assist the Research Topic Coordinators in laying out this strategy and adapt the resources when needed.

2. Prior to each experimental session

- Organise regular meetings with the Research Topic experimental team, reference TFLs and, when relevant, machine operation experts (session leaders, heating experts, diagnosticians) in order to define thoroughly the experimental strategy and details that address the deliverables.
- **Fill in and maintain the related wiki pages regularly with the progress made.** The experimental strategy, work breakdown, diagnostics and machine requirements as well as the pulse plan 4 weeks ahead of an experimental session. Please note that the scientific readiness of the experiments must be validated in advance in the WPTE programme committee meetings (CoTEC) by the machine representatives and the TFLs.
- Provide the necessary documents for formal approval of the experiments on each device, in due time and adhering to the local rules (e.g. AUG shot request, MAST-U experimental wiki proposal etc, ...).
- The RTCs have the responsibility to integrate any modelling activities and when relevant, any additional technical development work required for achieving the deliverables and experimental goals.

3. During experimental sessions

- Organize the roles of each experimental team member in the control room and on remote connections and inform them in advance about the next pulse details.
- With the help of the experiment team members, check that the last pulse met its objectives, make decision for next pulse and provide clear information to the local session leaders and the reference TFLs.
- Check with the diagnosticians or diagnostic co-ordinator the diagnostic status and make sure the essential diagnostics and systems are set up according to the demand.
- In case of a diagnostic or system failure affecting the experiment objectives, inform the local Machine Representative and reference TFLs/duty TFLs as soon as possible.
- **Provide a pulse-by-pulse report of the session in the wiki page immediately after the operation.**

4. After each experimental session

- Make sure that a brief summary is presented on the obtained results in local weekly meetings of each device.
- Provide a summary slide to be presented by TFLs in the relevant WPTE programme committee meetings (CoTEC). The slide should be provided at latest on the Monday of the week after the experiments.
- Organise meetings with the experimental team, reference TFLs and, when relevant, machine operation experts (session leaders, heating experts, diagnosticians) to review the past experiments and define the requirements for the next experiment.
- **Update the wiki pages with the performed pulses, the main results, deficiencies and conclusions achieved in relation with the scientific objectives and the strategy.**

- When required prepare a justified contingency request with the team to be send by email to the TFLs for prioritization.

5. Following the experiment

- Present the progress of the experiments and related analysis in a WPTE task force and review meeting.
- Propose and coordinate the publication plan of the results at conferences and peer-reviewed scientific journals.
 - The RTCs are expected to have at least one publication at a conference or in a refereed scientific journal.
 - With the help of the TFLs, the RTCs should also encourage the team members to publish specific results from the work made in the Research Topic.
- At the end of the calendar year, provide a report on progress achieved toward the scientific objectives of the Research Topic. This report, requested by EUROfusion PMU, will be prepared together with the reference Task Force Leaders.
- Ensure, with the TFLs, that the presented analysis is of the highest quality and rigour.
- If an Analysis Campaign is needed after the experiments, Research Topic Coordinators are also responsible for the coordination of these activities. The needed competencies for the analysis will be defined by the RTCs together with the TFLs.