**Meeting of the Steering Committee for the IO-EUROfusion Collaboration on IMAS #2021.8**

**18 May 2021**

**MINUTES**

**Participants**

Steering Committee Members

* Alberto Loarte (Head, IO Science Division)
* Volker Naulin (Head, EUROfusion Fusion Science Department)

Additional attendees

* Hartmut Zohm (Head, Plasma System Division, EUROfusion Fusion Technology Department)
* Pär Strand (Acting Project Leader, EUROfusion Code Development for Integrated Modelling project as of July 2020)
* Richard Kamendje, (Steering Committee Secretary, EUROfusion)
* Denis Kalupin (Responsible Officer, EUROfusion Advanced Computing project)
* Simon Pinches (Section Leader, IO Plasma Modelling & Analysis Section)
* Richard Pitts (Section Leader, IO Experiments & Plasma Operation Section)

Apologies

* Tim Luce (Head, IO Science and Operations Department)
* Xavier Litaudon (Project Leader, EUROfusion Preparation for ITER Operation project )

**Agenda**

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| **start** | **duration** | **Item** |
| **14:00** | **2’** | 1. **Opening and welcome (A. Loarte, V. Naulin)** |
| **14:02** | **1’** | 1. **Approval of the Agenda** |
| **14:03** | **10’** | 1. **Approval of the Minutes of previous meeting and review of open actions** |
| **14:13** | **75’** | 1. **Organization of review of all the activities with overlap between EUROfusion and IO (all)** |
| **15:28** | **5’** | 1. **Any other Business** |
| **15:33** | **4’** | 1. **Record of Decisions and Actions** |

**Summary of the discussions**

1. Volker Naulin (VN) opens the meeting and welcomes all participants.
2. The Agenda of the meeting is approved.
3. The minutes of the previous meeting are approved. Action 1 remains open. Action 2 is ongoing and being taken care of by Clarisse Bourdelle as TSVV leader. Action 3 is closed. Regarding action 4, Alberto Loarte (AL) reports the following:
   * Three existing ITPA databases are available in Excel format at ITER SharePoint: H-mode-1998, L-mode-1997, LH-transition-2008. Those could be expanded if needed
   * Discussions with EUROfusion on databases were held on 29th of April
   * Several EUROfusion on-going database activities were reviewed: H-mode database, disruption database, pedestal database, … A possible creation of a profile database is being discussed.
   * Scalar databases will use IMAS summary IDS to map data
   * For existing (old) databases, definitions of parameters should be kept
   * Since mapping of H-mode database to IMAS is on-going and this will be similar to L-mode database, IO will start with mapping o LH transition database to avoid duplication of work
   * Old H-mode and L-mode databases can be mapped to IDS by IO using mapping developed by EUROfusion while clearance to make new data public proceeds
4. In the absence of Xavier Litaudon (XL), current EUROfusion activities within WPPrIO cannot be reasonably discussed and are postponed to the next meeting.

The continuity of relevant WPCD activities within FP9 is seen as important to be ensured in order not to waste the investment made over the past years, the problem being that WPCD no longer will exist and the IMAS-related activities supporting the Administrative Arrangement (AA) with IO have not yet found a home in the new structure. It is agreed VN will be making the case at the E-TASC Scientific Board and that Simon Pinches (SP) will be sitting in this board as IO observer. In addition, Pär Strand (PS) will prepare a note to the E-TASC SB articulating the programmatic needs in supporting the AA as a joint proposal with IO. As far as DEMO is concerned the use codes is being considered to adhere to the IMAS standard, thanks in particular to Florian Köchl as new add to the DEMO Central Team (DCT). However, the establishment of a DEMO machine description database remains an issue to be addressed.

On the subject of the Pulse Design Simulator, the prohibitive costs of the use of MATLAB within IO means that IO has decided to go their own way by using internal effort to adapt codes that are routinely used for plasma start up to IMAS and building them into a framework that will start to be developed later this year. In any event, channels shall be kept open between IO and the DCT for information exchange and identification of synergies on the subject.

On the subject of databases, discussions on the alignment are already taking place and appear to be at adequate level.

With regard to the development of synthetic diagnostics, discussions have already taken place with a presentation by XL on ongoing as well as planned activities within EUROfusion. Within IO a review is planned to take place in July. With regard to DEMO, synthetic diagnostics are dealt with by the Work Package on DEMO diagnostics and control (WPDC).

1. The next meeting is agreed to take place on 15 September at 14:00.
2. Review of decisions and actions

The new actions agreed are as follows:

1. Richard to verify if mapping tool to IMAS for H-mode database already exist or when it will do so in the EU; if yes, make sure IO gets it.
2. Pär to organize a meeting in September with IO to discuss the latest results of WPCD
3. Volker to organize the invitation of Simon as IO observer in the E-TASC SB