

5<sup>th</sup> Executive Committee Meeting of the  
**Implementing Agreement for  
CO-OPERATION ON TOKAMAK PROGRAMMES (CTP-IA)**

At Cadarache, France, Wednesday 10<sup>th</sup> December 2014

**DRAFT MINUTES**

Participants: Yutaka Kamada (JP), Kouji Shinohara (JP), Richard Pitts (ITER), Jong-Gu Kwak (KO), Yeong-Kook Oh (KO), Steve Eckstrand (US), Rich Hawryluk (US), Abhijit Sen (IN), Carrie Pottinger (IEA), Xavier Litaudon (EU), Tony Donné (EU), Lars-Göran Eriksson (EU), Duarte Borba (EU), Hartmut Zohm (EU),

**Summary**

The CTP-IA Executive Committee:

- *unanimously elected Richard Pitts (ITER) as chair of the CTP-IA executive committee,*
- *unanimously agreed to reissue the invitation to ROSATOM Russia to join the CTP-IA,*
- *adopted the Personnel Assignment reports for Jan. 2014 – Dec. 2014 and the Proposals for Assignments and Remote Participation for Jan. 2015 – Dec. 2015,*
- *agreed to the proposal by the US to organise a follow up Workshop focussed on well diagnosed experiments that can provide information to validate or disprove models for disruptions,*

**Welcome and Approval of the agenda and minutes of the last meeting**

The Chair welcomed all participants in the meeting. The proposed agenda was briefly discussed and approved. The minutes of the previous meeting (4<sup>th</sup> Executive Committee Meeting) were approved.

**Chairman's term of office**

It was pointed out that the policy is to rotate the chair among the parties. It was confirmed that ITER will take the Chair for the following two years. It was remarked that electing a new chair

every year as stated in the agreement is not practical, and it was agreed that the best solution is to re-elect the chair for an additional year, so that there is no need to change the text in the agreement.

*Decision: the CTP-IA Executive Committee unanimously elected Richard Pitts (ITER) as chair of the CTP-IA executive committee.*

## **Reports and Information from the IEA**

The Chair invited Carrie Pottinger (IEA) to inform the committee on recent IEA activities. Carrie Pottinger expressed that she was happy to be back at the ITER site and started the report by describing the IEA organizational structure that oversees the CTP-IA. She added that the Fusion Power Coordinating Committee (FPCC) meets once a year and reports to the Committee on Energy Research and Technology (CERT) that reports to the IEA Governing Board. Recently a report to the Governing Board was prepared. This was the first report in 20 years. This report was very well received with a number of very positive remarks. The Governing Board asked the CERT to look on how to raise more awareness on the work carried out under the Implementing Agreements and to improve the process for requesting extensions of the Implementing Agreements. In order to address these recommendations, the basic actions have been completed, as such improving the website, and the creation of a new website for members. She also stressed that the Implementing Agreements will be in the agenda of the ministerial meeting scheduled for 2015, raising again awareness of the work done. Carrie Pottinger (IEA) concluded her remarks by stressing that a publication on Implementing Agreements is published every 2 years, which includes a fusion article. The deadline for sumitting a contribution was 1st October 2014 but given the change in the chair, it was requested to submit the contribution related to the CTP-IA by 28th January 2015, the date of the FPCC meeting.

*Action: The chair to prepare and submit the contribution related to the CTP-IA by 28th January 2015 for the publication on Implementing Agreements published every 2 years.*

*Status: Done 9 January 2015.*

## **Discussion on annual report**

It was stressed that in the recent past, the chair asked the members of the committee for input for preparing this report. It was also requested by IEA to prepare a one page report on highlights for the governing board input document. One key highlight discussed was the important progress in the construction of JT60-SA and other labs can provide also key physics results for the report. It was proposed to organize the report by projects and not by parties and organize the presentation around the work being done for ITER. It was noted that this will require extra work, in particular by the Chair. It was also emphasized the importance to recognise the role the universities in addition to the laboratories, which will be very important in the future.

*Action: The chair to prepare and present the Annual report at the FPCC meeting (28th January 2015)*

*Action: The Members of the executive committee to provide input for preparing the annual report, including key highlights.*

## **Executive Committee Membership**

Regarding the committee membership, Lars-Göran Eriksson (EU) will prepare a proposal to replace Francesco Romanelli (EU) with Tony Donné (EU) and also possibly the addition of Xavier Litaudon (EU) as alternate. Takaaki Fujita (JP) and Yoshihiko Koide (JP) will step down as well as possibly Steve Eckstrand (US). The membership from the Korean side and India will remain the same. Carrie Pottinger (IEA) pointed out that the nominations made by the parties should be addressed in a letter to the IEA executive director Maria van der Hoeven.

Action: Carrie Pottinger to provide standard letters to the Chair.

Status: Done 11 December 2014.

## **Discussions on the membership and role of the CTP-IA**

In the discussion of the present membership of the IEA-CTP IA, it was pointed out that Russia was invited to join the CTP-IA but no positive response was received. After a unanimous vote it

was agreed to reissue a new invitation to Russia to join the CTP-IA and to address this invitation to Dr. Borovokov.

*Decision: CTP-IA Executive Committee unanimously agreed to reissue the invitation to Russia to join the CTP-IA.*

*Action: The chair to send a letter to Dr. Borovokov reissuing the invitation to join the CTP-IA.*

It was also agreed to clarify the participation of China in the CTP-IA. It was stressed that the invitation was directed to the participation of SWIP and ASIPP, but the contracting party to the agreement was finally the Chinese ITER Domestic Agency (ITER-China). Carrie Pottinger (IEA) confirmed that China usually requires a specific procedure and that contacting the head of the Chinese ITER Domestic Agency is the correct approach.

*Action: The chair to contact the head of the Chinese ITER Domestic Agency in order to clarify the participation of China in the CTP-IA, in particular the role of SWIP and ASIPP.*

There was also a general discussion on the use of the CTP-IA and how it relates to the bilateral agreements, in particular, related to the use for personal assignments and exchange of hardware. Carrie Pottinger (IEA) stressed that the CTP-IA has a very broad scope and that there are several other agreements under IEA that covers fusion research, in particular, there is a specific Stellarators implementing agreement. Carrie Pottinger (IEA) also emphasized that the CTP-IA can be amended to include other activities. It was also clarified that the agreement allows the activities related to ITPA, and that for exchange of hardware the bilateral agreements are more appropriate in particular regarding the questions of liability and intellectual property. It was stressed that historically the CTP-IA was created with the objective to provide a legal framework for the ITPA activities.

### **Reports on the Completed Workshops and Personnel Assignments for**

**Jan. 2014– Dec. 2014 and Proposals for Personnel Assignments and Remote Participation for Jan. 2015 – Dec. 2015**

Steve Eckstrand (US) reported on the workshop organized in Princeton under the auspices of the CTP-IA. He remarked that the workshop was very successful with 30 participants and 24

presentations and it was proposed to carry out a follow up workshop on the same topic in 2015. He added that information regarding the outcome of the workshop is accessible on the website and he will check access requirements and inform the executive committee of the web address.

*Action: Steve Eckstrand (US) to inform the executive committee of the web address containing the information regarding the workshop organized in Princeton under the auspices of the CTP-IA.*

Status: Done 15 January 2015 (2014 Presentations: <https://ext-sweb.pppl.gov/tsd2014.pppl.gov/schedule.html>).

*Decision: CTP-IA Executive Committee unanimously agreed to the proposal tabled by the US to organize a follow up Workshop focused on well diagnosed experiments that can provide information to validate or disprove models for disruptions.*

It was added that in the past there was the rule to have one workshop per year on a different topic. But there are many workshops on these subjects and the number of Workshops organized under the auspices of the CTP-IA was less in the recent past.

There will be a Workshop to discuss and decide on the ITER plasma shape and the proposal by the Chair is to organize this workshop under the auspices of the CTP-IA. This will make it easier for the participants to get financial support to participate in the workshop.

The EU assignments were presented by Duarte Borba (EU), the US assignments were presented by Steve Eckstrand (US) and the KO assignments were presented by Jong-Gu Kwak (KO). Regarding the report on KO assignments, there was the comment to replace the contact for the JOEREK code at JET and that the EPED model was applied to JET data in the past.

The ITER assignments were presented by Richard Pitts (ITER). Regarding the ITER outgoing exchanges the question was raised why all the reported exchanges were to the EU. It was clarified that there were other ITER outgoing exchanges but not covered by CTP-IA and that the participation of ITER in the JET programme can only be done under the framework of the CTP-IA. That is the reason why the CTP-IA is important for JET in particular with regards the participation of ITER in the JET experiments.

Carrie Pottinger (IEA) asked about the reporting process of the results obtained by the personnel exchanges. Steve Eckstrand (US) replied that the results are usually presented at conferences and published in relevant publications. Carrie Pottinger (IEA) stressed the importance of using the scientific results obtained as an opportunity to raise the visibility of the CTP-IA.

It was also mentioned that proposals related to steady-state operation should be coordinated with the ITPA IOS topical group activities.

### **Date of the Next meeting**

The 6<sup>th</sup> Executive Committee Meeting is scheduled for 9<sup>th</sup> December 2015, from 14:00 to 16:00, after the next ITPA Coordinating Committee meeting.

### **Any other business**

It was added that Rachael Briggs recently took up a position at IEA and she is now responsible for legal issues. It was also noted that the information on the CTP-IA executive committee representatives is outdated in the share point ITPA pages hosted by ITER and that needs to be updated.