

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

At Cadarache, France, Wednesday 11<sup>th</sup> December 2013

**MINUTES**

Attendance: Abhijit Sen (IN), Charles Greenfield (US), Rajesh Maingi (US), Alejandro Zurita (EU), Duarte Borba (EU) *Secretary*, Yutaka Kamada (JP), Kouji Shinohara (JP), Steve Eckstrand (US) *Chair*, Mickey Wade (US), Jong-Gu Kwak (KO), Yeong-Kook Oh (KO), David Campbell (ITER-IO), Steve Lisgo (ITER-IO)

**Summary**

The CTP-IA Executive Committee:

- adopted the Personnel Assignments reports for Jan. 2013– Dec. 2013 and the Proposals for Assignments and Remote Participation for Jan. 2014 – Dec. 2014,
- approved the proposal tabled by the US to organise a Workshop focussed on well diagnosed experiments that can provide information to validate or disprove models for disruptions,
- approved the proposal that the Chair will be taken by ITER for the next two years.

**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 (3<sup>rd</sup> Executive Committee Meeting) were approved, taking into account the comments made by David Campbell (ITER-IO) by e-mail.

**Reports on the Completed Workshops and Personnel Assignments for  
Jan. 2013– Dec. 2013**

There were no Workshops organised in addition to the CTP-ITPA Planning Meeting for Joint Experiments (JEX) (W75), which took place on 9th to 11th December 2013 at the ITER-IO Head Quarters in Cadarache. The Personnel Assignments reports were presented by the different parties and adopted. Duarte Borba (EU) presented the EU report on Outgoing Assignments and made the remark that there were a small number of exchanges, but following the ongoing

restructuring of the EU fusion accompanying programme, there is the intention to make a more extensive use of this agreement in the future. Yutaka Kamada (JP) presented the report on JT-60 Outgoing Assignments emphasising the participation to JET. He thanked JET for welcoming Dr. Nakano and Dr. Suzuki. The report on US Outgoing Assignments was presented by Steve Eckstrand (US) and the Report on KSTAR Outgoing Assignments was presented by Jong-Gu Kwak (KO). Yutaka Kamada (JP) raised the question regarding the collaborations between Tokyo University and Korean Universities, since this collaboration is not under JAEA, therefore, it should not be conducted under the CTP-IA. Jong-Gu Kwak (KO) took note of this remark and agreed to withdraw the collaborations between Korea and Japanese universities from the list of collaborations carried out under the CTP agreement. Steve Eckstrand (US) made the remark that a similar question was raised regarding China, since it was the Chinese ITER domestic Agency that has joined the agreement. The answer given was that it is up to the government to decide the organisations that are part of the agreement; but this is also under discussion. There was also the remark that the Japanese Universities can use the Spherical Tokamak IEA Agreement for their collaborations. The Report on ITER Outgoing Assignments was presented by David Campbell (ITER-IO). He stressed that the CTP-IA agreement was used for collaborations with JET, i.e. for assignments related to the JET experiment. But he added that in the coming year, it is expected that ITER will have collaborations with other laboratories, in particular for the participation in experiments as discussed in the ITPA co-ordination meeting. He added that the Tungsten Lamella Melting experiments carried out at JET are a perfect example for the use of this agreement. There were no reports either from China or India.

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

Regarding the EU Proposals for next year Duarte Borba (EU) added that the use of the CTP-IA will be discussed in the frame of the new EUROfusion consortium and new proposals for assignments will be submitted for consideration by the Executive Committee in the beginning of 2014. Regarding the JT-60 Proposals, Mickey Wade (US) asked why the report on the assignments of Dr. Nakano and Dr. Suzuki were not presented at the meeting. Yutaka Kamada (JP) replied that these assignments will be completed in 2014 and that a comprehensive report regarding these assignments will be presented at the next meeting. Charles Greenfield (US) pointed out that there is a typo in the contact person of ASDEX Upgrade in the assignments to the EU. Regarding the US proposals for assignment, Steve Eckstrand (US) stressed that there

is a large collaboration with the EU, mostly regarding the continuation of previous exchanges. Regarding the collaboration with the EAST Tokamak in China, since EAST is part of the Chinese Academy of Science, it is not sure that this can be formalised under the CTP-IA and it might be conducted under the DOE - Chinese Academy of Science bilateral agreement. Nevertheless, it is useful to note these exchanges at this meeting. The proposed list have been reviewed and approved by the Chinese Colleagues. Regarding the KSTAR proposals, Jong-Gu Kwak (KO) said that the list of proposed exchanges with Japan have not yet been finalised. Regarding the proposed exchanged related to ITER, David Campbell (ITER-IO) added that proposals are expected for collaborations and assignments with JET, ASDEX-Upgrade, KSTAR, EAST and DIII-D. Regarding collaborations with China, Steve Eckstrand (US) added that there are no proposals from China, since it is not clear this can be covered under this agreement. Mickey Wade (US) stressed again that since EAST is the main machine in China at present, the exchanges with EAST should be covered under the CTP-IA. Steve Eckstrand (US) agreed to follow up on this matter.

*Decision: the CTP-IA Exco adopted the Personnel Assignments reports for Jan. 2013– Dec. 2013 and the Proposals for Assignments and Remote Participation for Jan. 2014 – Dec. 2014.*

*Action on Steve Eckstrand (US) to follow up on the agreement with China and clarify what is covered under the CTP-IA.*

No proposals were tabled by China or India. Jong-Gu Kwak (KO) asked if there will be proposals from India. Abhijit Sen (IN) replied that proposals will be submitted next year.

### **Proposals for Workshops for Jan. 2014 – Dec. 2014**

Steve Eckstrand (US) presented one proposal from the US. It is proposed that the Workshop will focus on well diagnosed experiments that can provide information to validate or disprove models for disruptions, following on a similar Workshop organised in the US earlier in the year. The idea is that this Workshop is opened to all CTP-IA members. Yutaka Kamada (JP) asked about what is the relation with the ITPA activities? Steve Eckstrand (US) replied that due to its' narrow focus, the proposed workshop is better than combining it with the ITPA activities. The purpose is to find a balance between theory and experiments. The ITPA meetings will be organised together with the 2014 IAEA Fusion Energy Conference in St Petersburg, Russia.

Yutaka Kamada (JP) asked a question regarding the intended participation to the Workshop, will it be a meeting involving research leaders or working scientists. Steve Eckstrand (US) replied that it meant to be a working level meeting. David Campbell (ITER-IO) added that he participated in the first workshop and that it was very valuable. This is a very immature field in terms of simulations. Therefore, the organisation of a focussed meeting is very useful. He added that organising a similar 3 day meeting is very good. It is important to encourage the people with the right skills to develop the field of Disruptions. This has been done in an ad hoc manner, so a more focused activity is very important. Charles Greenfield (US) added that there were quite a few international participants in the previous meeting. Therefore, trying to make the participation even wider is a good idea, aiming at a good balance between experiments and theory. The proposal to organise the workshop was then endorsed by the committee.

*Decision: the CTP-IA Exco approved the proposal tabled by the US to organise a Workshop focussed on well diagnosed experiments that can provide information to validate or disprove models for disruptions.*

### **Discussion on annual report**

Steve Eckstrand (US) said that he will prepare a presentation reporting on the activities from the parties to be presented at the meeting of the IEA FPCC, at the end of January 2014. The presentation that he put together for 2012 was sent for comments last year. It is proposed that each party sends 5-6 viewgraphs for this report. The slides should not necessarily focus on scientific results, but more on the construction and status of facilities. He also stressed that the IEA FPCC is mainly a managerial meeting. He also requested that the members of the Exco, send a summary of the exchanges with updates; and updates on the membership of the CTP-IA Exco by January 7<sup>th</sup> 2013. Yutaka Kamada (JP) asked about the period covered by the report. Steve Eckstrand (US) confirmed that the report will cover the period between Jan-13 to Dec-13.

### **Chairman's term of office**

Steve Eckstrand (US) introduced the topic regarding the election of the new chair. The policy is to rotate the chair among the parties. The proposal would be that ITER will take the Chair for the following two years. David Campbell (ITER-IO) replied that ITER will accept this proposal and he will confirm who will be nominated from ITER to be the chair person.

*Decision: the CTP-IA Exco approved the proposal that the Chair will be taken by ITER for the next two years.*

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

The 5<sup>th</sup> Executive Committee Meeting is scheduled for 10<sup>th</sup> December 2014, from 14:00 to 16:00, after the next ITPA Coordinating Committee meeting.

## Annex I Summary on IA-CTP Membership Status

India has joined the IA-CTP in April 2011, the ITER-IO in October 2012 and China ITER domestic agency joined in 16 January 2013.

## Annex II Executive Committee Membership

### December 2013 CTP Executive Committee Membership

Name	Delegation	E-mail Contact	
<b>Francesco Romanelli</b>	<b>EU</b>	francesco.romanelli@jet.efda.org	<b>Member</b>
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