

6<sup>th</sup> executive committee Meeting of the  
**IEA Implementing Agreement for  
CO-OPERATION ON TOKAMAK PROGRAMMES (IEA CTP-IA)**

At Cadarache, France, Thursday 10<sup>th</sup> December 2015

**MINUTES**

Participants: Richard Pitts (ITER)-Chair, Duarte Borba (EU-EUROfusion)-Secretary, Jong-Gu Kwak (KO-NFRI), Yeong-Kook Oh (KO-NFRI), Rich Hawryluk (US-PPPL), John Mandrekas (US-DOE), David Hill (US-GA), Shunsuke Ide (JP-JAEA), Abhijit Sen (IN-IPR), Xavier Litaudon (EU-EUROfusion), Tony Donné (EU-EUROfusion), Lars-Göran Eriksson (EU-European Commission), Hartmut Zohm (EU- IPP), Ge Zhuang (CN-Huazhong Univ of Sci & Tech), Min Xu (CN-Southwestern Institute of Physics),

**Summary**

The IEA CTP-IA Executive committee:

- *unanimously confirmed Richard Pitts (ITER) as chair of the IEA CTP-IA executive committee for 2016,*
- *adopted the Personnel Assignment reports for Jan. 2015 – Dec. 2015,*
- *agreed to reformulate the Proposals for Assignments and Remote Participation for Jan. 2016- Dec. 2016 to make them more uniform and representative,*
- *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,*

- *unanimously agreed to take the required steps to prepare the agreement extension request, which expires 30 June 2017,*
- *took note of the rebranding of the Implementing Agreements as IEA Technology Collaboration Programmes (IEA TCPs), endorsed at the IEA Governing Board meeting at Ministerial level held on 17-18 November 2015.*

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

The chair welcomed all participants in the meeting and the executive committee agreed that the meeting secretary is Duarte Borba (EU). The chair remarked that all members were present, including representatives from China; Ge Zhuang (CN-Huazhong Univ of Sci & Tech), Min Xu (CN-Southwestern Institute of Physics) and that John Mandrekas (US-DOE) replaces Steve Eckstrand (US-DOE). The proposed agenda was briefly discussed and approved. The minutes of the previous meeting (5<sup>th</sup> executive committee Meeting) were also approved.

## **Status of Open Actions**

The executive committee reviewed the status of the open actions and the chair remarked that all actions from the previous meeting have been completed. Namely, the chair prepared and submitted a contribution related to the IEA CTP-IA for the publication on Implementing Agreements and presented the Annual report at the FPCC meeting on 28th January 2015. The chair also sent a letter to Dr. Borovkov reissuing the invitation for Russia to join the IEA CTP-IA, but no reply was received. This was the second letter issued by a chair of the IEA CTP-IA Executive Committee and it was agreed that no follow up letter would be sent in 2016. However, it was remarked that the participation of Russia in this agreement would be very much welcomed and that discussions with Russia would continue regarding this matter. The chair also contacted the head of the Chinese ITER Domestic Agency in order to clarify the participation of China in the IEA CTP-IA, in particular the role of SWIP and ASIPP. In reply, the Chinese ITER Domestic Agency have confirmed that they would discuss this matter, but no representative of the Chinese ITER Domestic Agency was present at the meeting and this matter is still to be clarified.

*Action: The chair to contact the Chinese ITER Domestic Agency for confirmation of their membership of the IEA CTP-IA executive committee and to clarify the participation of China in the IEA CTP-IA, in particular the role of SWIP and ASIPP.*

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

It was pointed out that the policy on the chair of the Executive Committee is to rotate the chair among the parties. Following the discussion that took place at the 5<sup>th</sup> Executive Committee meeting, where it was proposed that ITER will take the chair for the following two years, it was confirmed that Richard Pitts (ITER) will continue as the chair for one additional year (2016). There was also a brief discussion on the succession after the ITER term of two years. The list of past chairs was presented at the meeting for information (Annex 1). It was noted that the most recent members China and India have not had yet the opportunity to take the chair and therefore that it would be appropriate if one of these parties would agree to take the chair next time around. After that, among the other members, the EU has not chaired the Executive Committee since 2009 (Annex 2). Therefore, the EU would be the next party to take the chair after India and China.

*Decision: The IEA CTP-IA executive committee unanimously confirmed Richard Pitts (ITER) as chair of the IEA CTP-IA executive committee for 2016.*

### **Discussion on annual report**

It was stressed that as in the recent past, the chair will ask the members of the committee for input in preparing the CTP-IA annual report. The Executive Committee took note of the new report template proposed by the IEA and discussed using it for this report. The new template is organised as a two-page annual updates, with the topics: Highlights of experiments or analysis during the year; outcomes during the year; current annexes, tasks or other activities during the year; co-operation with other fusion collaborative groups and participation.

*Action: The chair to prepare and present the annual report at the FPCC meeting (28-29 Jan 2016)*

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

## **Executive Committee Membership**

Regarding the Executive Committee membership, the proposal to formalise the replacement of Francesco Romanelli (EU) with Tony Donn  (EU) and also possibly the addition of Xavier Litaudon (EU) as alternate was not yet been completed due to the reorganisation of the participation of the European Commission in the IEA agreements. Regarding the US membership, it was pointed out that an e-mail with the new proposal for the membership was sent by James Van Dam on 23 October 2015. This proposal is attached in Annex 3. As it was pointed out by Carrie Pottinger (IEA) at the 5<sup>th</sup> executive committee meeting, all nominations must be addressed in a letter to the IEA Executive Director.

## **Reports on the Completed Workshops and Personnel Assignments for Jan. 2015–Dec.2015 and Proposals for Personnel Assignments and Remote Participation for Jan. 2016 – Dec. 2016**

J. Mandrekas (US) reported on the workshop organized in Princeton under the auspices of the IEA CTP-IA. He remarked that the workshop was very successful and it was proposed to carry out a follow up workshop on the same topic in 2016. The information regarding the outcome of the workshop is accessible on the website (<http://tsdw.pppl.gov/>).

*Decision: The IEA 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.*

The EU assignments were presented by Duarte Borba (EU). It was remarked that only the assignments marked specifically to be conducted under the CTP-IA have been listed and that there is a large list including a number of scientific exchanges under bilateral agreements, and a specific collaboration with China on both physics and technology areas. The US assignments were presented by J. Mandrekas (US). It was noted that the assignments marked as “delete” should not be included in the final report. It was also noted that there was a significant increase in the proposed US assignments, which is a very good sign. The KO assignments were

presented by Jong-Gu Kwak (KO). A typo was noted on the assignment of Sun-Hee Kim in that the ITER contact does not have a EURATOM affiliation. The JP assignments were presented by Shunsuke Ide (JP). It was noted that the visit of Urano to JET has been very productive but the present assignment cannot be extended. However, new assignments of Urano are foreseen in the near future. The ITER assignments were presented by Richard Pitts (ITER). It was also noted that there are a number of assignments from India, in particular to DIII-D in the US.

*Action: On India and China representatives to prepare a list of scientific assignments for submission to the IEA CTP-IA Executive committee.*

It was suggested to distribute the proposed Personnel Assignments ahead of the meeting to be reviewed and commented by the executive committee members.

*Action: The secretary to distribute the proposed Personnel Assignments ahead of the meeting to be reviewed and commented by the Executive Committee members.*

After the review of the proposed Personnel Assignments there was a discussion on how to make the proposals more uniform and representative. It was clarified that the parties should list the outgoing assignments. It was agreed that assignments regarding the participation in review panels and related committees should not be listed, as well as assignments to ITER to participate, for example in design review meetings or related to specific ITER contracts. However, the lists should contain all scientific assignments including scientific assignments to the ITER-IO. It was agreed to list all scientific exchanges and include the exchanges carried out under bilateral agreements for information, with a column indicating the international cooperation agreement covering the scientific assignment. It was agreed that the chair and secretary should prepare and circulate a note on the agreed guidelines on how to prepare the list of assignments. The parties will revise the staff assignment lists taking into account the agreed guidelines as summarised in Annex 4.

*Action: The secretary to distribute a note on the agreed guidelines on how to prepare the list of assignments.*

*Action: The party representatives to revise the staff assignment lists taking into account the agreed guidelines*

## **Renewal of the Agreement**

A discussion took place on the procedure for the Renewal of the IEA CTP-IA Agreement. The Executive Committee took note that the agreement will expire on 30 June 2017 and that the documents required to be submitted for extension are currently being discussed by the CERT. The documents under consideration are shorter and streamlined. They comprise:

- an end-of-term report (maximum of 5 pages)
- a strategic work plan
- a qualitative and quantitative questionnaire

A final decision on the documents required for the extension of the agreements is expected in February 2016. If agreed, the new requirements would apply to all extensions requested after 1 January 2017, which is the case for the CTP. The Executive Committee discussed the extension of the agreement and the required steps. There was a unanimous view that the agreement should be extended, since it provides the required framework for important collaborations that could not otherwise take place, such as the participation of ITER-IO scientists in the JET programme. It was agreed to organise the preparation of the required documents, once the procedure is clarified from the IEA side. The representatives of the parties will take the appropriate action to seek approval from their respective governmental representatives.

*Decision: The IEA CTP-IA Executive Committee unanimously agreed to take the required steps to prepare the agreement extension request, which expires 30 June 2017.*

*Action: representatives of the parties to take the appropriate action to seek approval from their respective governmental representatives regarding the request for extension of the agreement.*

## **Outcome of the IEA Governing Board meeting at Ministerial level held on 17-18 November 2015**

The Energy Secretary of the United States, Hon. Ernest Moniz, chaired the IEA Governing Board meeting at ministerial level held on 17-18 November 2015. The theme of the 2015 IEA ministerial level meeting was “Innovation for a Clean, Secure Energy Future”, emphasising the

importance of heightened co-operation among IEA member countries and key emerging economies as well as the business community. Ministers also endorsed the rebranding of the Implementing Agreements as **IEA Technology Collaboration Programmes (IEA TCPs)**

*Decision: The IEA CTP-IA Executive Committee took note of the rebranding of the Implementing Agreements as IEA Technology Collaboration Programmes (IEA TCPs), endorsed at the IEA Governing Board meeting at Ministerial level held on 17-18 November 2015.*

### **Date of the next meeting**

The 7<sup>th</sup> executive committee meeting is foreseen for 8<sup>th</sup> December 2016, from 14:00 to 16:00, after the next ITPA Coordinating Committee meeting. The date will be confirmed when the date of the next ITPA Coordinating Committee meeting is fixed.

## **Annex 1 list of past Chairs was presented at the meeting for information**

2014 - Richard Pits (ITER)  
2013 - Steve Eckstrand (US)  
2012 - Steve Eckstrand (US)  
2011 - Myeun Kwon (KO)  
2010 - M. Mori (JAEA)  
2009 - F. Romanelli (EU)  
2008 - E. Oktay (US)  
2007 - M. Kikuchi (JA)  
2006 - F. Romanelli (EU)  
2005 - E. Oktay (US)  
2004 - M. Kikuchi (JA)  
2003 - J. Pamèla (EU)  
2002 - E. Oktay (US)  
2001 - H. Ninomiya (JA)  
2000 - J. Pamèla (EU)  
1999 - K. Young (US)  
1998 - H. Ninomiya (JA)  
1997 - A. Gibson (JET)  
1996 - R. J. Hawryluk (TFTR)  
1995 - H. Kishimoto (JT60)  
1994 - A. Gibson (JET)  
1993 - R. J. Hawryluk (TFTR)  
1992 - S. Tamura (JT60)  
1991 - A. Gibson (JET)  
1990 - D. M. Meade (TFTR)  
1989 - S. Tamura (JT60)  
1988 - R. Bickerton (JET)  
1987 - D. Grove (TFTR)  
1986 - M. Yoshikawa (JT60)



## **Annex 2 Members last time holding the Chair**

CN: never

IN: never

EU: 2009

JA: 2010

KO: 2011

US: 2013

IO: 2015

## **Annex 3 New proposal for the US membership as sent by James Van Dam on 23 October 2015**

- Replace Randy Wilson with Richard Hawryluk
- Replace Mickey Wade with Dave Hill
- Replace Punit Gohil with Charles Greenfield

## **Annex 4 Guidelines for the preparation of the staff assignment lists for approval at the executive committee meeting.**

- The parties should list the outgoing assignments.
- The participation in review panels and related committees should not be listed, as well as assignments to IO to participate in review meetings or meetings related to specific IO contracts.
- Lists should contain all scientific assignments, including scientific assignments to the IO.
- Lists should contain all scientific exchanges, including the exchanges carried out under bilateral agreements for information, with a column indicating the international cooperation agreement covering the scientific assignment.