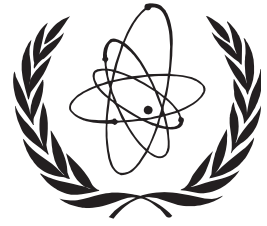


ITER CTA NEWSLETTER



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SIXTH NEGOTIATIONS MEETING ON THE JOINT IMPLEMENTATION OF ITER by Dr. Y. Okumura, Deputy Director, ITER Promotion Office, JAERI

The Sixth ITER Negotiations Meeting (N6) took place on 29-30 October 2002 at Rokkasho-mura in the Aomori Prefecture - the location of the site that Japan has offered to host the ITER project. Japan hosted the meeting, which was also attended by delegations from Canada, the European Union, and the Russian Federation. Dr. Masaji Yoshikawa, JAERI, was nominated as Moderator of the meeting, assisted by Dr. Taro Matsumoto, JAERI, as Secretary.

At the start of the meeting, Mr. Yoshiro Mori, the former Prime Minister of Japan and Chairman of the League of Diet Members for Fusion Energy Promotion, made a welcoming address to the delegates. He said that energy issues are important to achieving human prosperity, world peace and conservation of the environment, and that therefore the Japanese Government as a whole should promote the ITER project under international collaboration to realize fusion energy. Then Mr. Morio Kimura, the Governor of Aomori Prefecture, stated that Aomori would like to host ITER and contribute to the international community through promotion of the project.

In the participants' opening comments:

- The JA delegation reported that JA had sent a letter to China on 22 October 2002 on behalf of the ITER Negotiators in response to a letter from Mr. Liu, Vice Minister of Science and Technology of China. It was announced that the delegations would meet with the Chinese delegation on 1 November in Tokyo. The JA delegation also reported that there had been changes within the Japanese Cabinet on 30 September.



Participants in the Meeting

Mr. Hiroyuki Hosoda was appointed as Minister of State for Science and Technology Policy as the successor to Mr. Koji Omi. Ms. Atsuko Toyama for the Ministry of Education, Culture, Sports, Science and Technology (MEXT) and Ms. Yoriko Kawaguchi for the Ministry of Foreign Affairs (MOFA) remained in office. It was stressed that the political support for ITER promotion would be as strong as in the previous Cabinet. It was also reported that the International ITER Forum hosted by the Aomori Prefecture would be held on 31 October. The JA delegation invited all delegations to attend the forum.

- The Canadian delegation reported on the special informal ITER session at the IAEA Fusion Energy Conference in Lyon, France, and noted that it raised the ITER profile in a positive way. The CA delegation commended all delegations on the planning and execution of the special session and reported that it had been well attended, with approximately 350 conference participants. The CA delegation also reported that the Head of Delegation had responded to the letter from Vice Minister Liu of China.
- The EU delegation reported on the adoption, within the Sixth Framework Programme, of the Specific Euratom Programme, which gives an explicit basis for continuing activities in the period up to the end of 2006, including a provision of up to €200 million for a possible start of ITER construction. It was also reported that the speech given to the IAEA Conference in Lyon by Mme Haighneré, French Minister for Research, and the announcement on the Cadarache site at the subsequent special evening session on ITER, as well as the technical dossier supporting the Cadarache site candidature, had officially been transmitted to the EU Commissioner for Research by Minister Haighneré. The EU delegation distributed to participants copies of this dossier supporting the French site candidature, and gave an overview presentation, emphasizing the strong scientific and technical infrastructure already existing at the site as an important factor for the success of the project.
- The RF delegation reported that the ITER activities in the Russian Federation are conducted in accordance with the Federal Program (2002-2005) approved by the Russian Government. Funding for



Mr. Y. Mori addressing the Meeting. Sitting on the right is Mr. M. Kimura.

ITER activities in 2003 is expected to be on the same level as in previous years. It was reported that the mandate of the Russian delegation to participate in the Negotiations in 2003 is expected to be approved soon by the Government. The RF delegation also reported that they had received informal enquiries from the Republic of Korea about possible participation in ITER.

Dr. S. Matsuda, Moderator of the Fifth Meeting of the Negotiations Standing Sub-Group (NSSG-5, held in Rokkasho-mura on 7-9 October 2002) introduced the progress report of the NSSG. The delegations noted the progress report from the NSSG on the Joint Assessment of Specific Sites (JASS). The joint assessment of the Japanese site at Rokkasho-mura was conducted on 2-5 October 2002. This followed the assessment in September of the proposed Canadian site at Clarington. With the successful conduct of these two assessments, the JASS process is at the halfway mark. The last two site assessments will be carried out in December at the two sites proposed by the European Union – one at Cadarache in France and the other at Vandellòs in Spain. It was agreed that the final report of the JASS would be presented at the Eighth Negotiations Meeting (N8).

Significant progress was also made on a wide range of other issues, including matters such as the treaty to implement ITER (the Joint Implementation Agreement - JIA), procurement allocation and the intellectual property rights that would accrue to participants in the project. The Negotiators agreed that the international organization responsible for implementing the project would be called the ITER International Fusion Energy Organization. The delegations noted the progress in developing the fifth draft of the JIA and charged the NSSG to elaborate further the JIA and Related Instruments.

The delegations accepted the oral report of NSSG-5 on the management and organizational structure of the organization, and noted that JA and EU would prepare consolidated papers on the organizational structure and the staffing, respectively.

It was agreed that the ITER Transitional Arrangements would be conducted during the transition period between the end of the current Co-ordinated Technical Activities and the establishment of the ITER International Fusion Energy Organization. The delegations noted that the Parties have received the letters from the Director General of the IAEA inviting participation in the activity, and encouraged the Parties to reply promptly. The delegations requested the CTA Project Board to prepare a brief final report on the CTA.

The delegations discussed the Work Plan and Milestones adopted at the Fifth Negotiations Meeting (N5). No change was proposed but the delegations noted the necessity for higher political level discussions sufficient to decide on the site and the need to continue the negotiations process after N8.

At the conclusion of the N6 meeting, the delegations reaffirmed their belief that the critical issues are being successfully addressed and that the ITER fusion energy research project is well on the way to being implemented.

ITER Session AT THE IAEA Fusion Energy Conference by Dr. M. J. Stewart, President and CEO, Iter Canada

A highlight of this year's Fusion Energy Conference, held in Lyon, France, on 14–19 October, was the participation by the ITER Parties in both a Special ITER Informal Session and in the Fusion Institute Exhibition at the Palais des Congrès de Lyon. These gave conference participants an opportunity to hear the latest on this collaborative international fusion energy research and development project, and to speak with the experts from each of the four sites being offered for the construction of ITER. The Special ITER Informal Session was held on the evening of 16 October and it was very well attended, with approximately 350 conference participants attending.

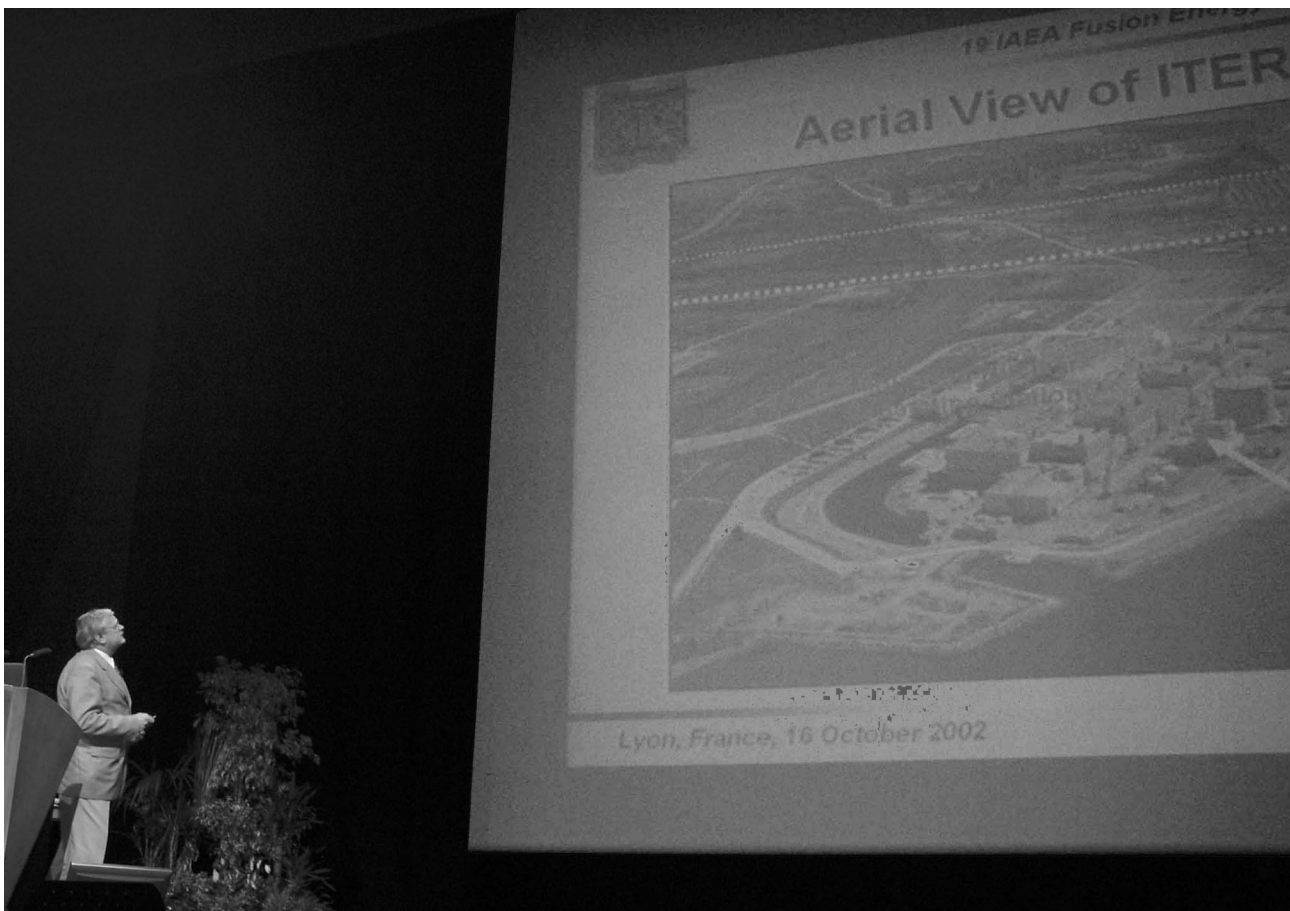
Academician Evgeny Velikhov introduced the project and chaired the session. He was followed by Dr. Hiroshi Kishimoto, who updated the audience on the progress to date in the Negotiations on ITER Joint Implementation. The objective of the Negotiations is clear: to implement ITER. Key steps in this process are the series of meetings of the ITER Parties and the resulting work, including the Joint Assessment of Specific Sites (JASS), establishing the ITER Transitional Arrangements, developing the ITER Implementing Agreement and creating the ITER international organization.

Dr. Murray Stewart of Canada reviewed the process established by the ITER Negotiators for proceeding to implementation of the ITER project. This includes the Negotiators' work plan, milestones and transitional arrangements to be made until the four ITER parties – Canada, the European Union, Japan and the Russian Federation – reach agreement on all of the issues.

Five Negotiations Meetings had been held by that time and the Parties rotate as hosts. Many key milestones have been reached, including completion of site assessments for two of the four proposed host locations, approved ITER Transitional Arrangements, detailed drafting of the Agreement and progress on related issues such as cost sharing, procurement allocation, and intellectual property arrangements.

In parallel with the Negotiations are the Co-ordinated Technical Activities, established in July 2001 and continuing until December 2002. Conducted under the auspices of the IAEA, these replaced the ITER Engineering Design Activities and ensured continuity and continued progress on ITER technical issues. Effective January 2003, these activities will be conducted under the ITER Transitional Arrangements, which include the organizational preparations to enable implementation of ITER immediately following ratification of the Agreement. The ITER Transitional Arrangements, which also will be conducted under the auspices of the IAEA, are overseen by an ITER Preparatory Committee that has overall responsibility. This Committee, a Nominee Director General, assisted by his Transitional Team, and Participant Teams comprise the structure of the Transitional Arrangements. Dr. Robert Aymar has been designated Interim Project Leader prior to the appointment of the Nominee Director General, and is overseeing the Transitional Project Team and its current work sites at Naka in Japan and Garching in Germany.

Dr. Valery Belyakov of the Russian Federation presented an overview of the current ITER site candidates and a description of the process for the JASS. An Ad Hoc Group has been formed to conduct the assessment, comprised of representatives from each of the four ITER participants – Canada, the European Union, Japan and the Russian Federation – and the ITER International Team. The assessment process will look at a variety of criteria, including technical aspects such as site requirements and site design assumptions; sociocultural,



Dr. V. Belyakov presenting an overview of the four sites

licensing and financial aspects; and the site support that the host site would provide to the international organization.

The JASS Ad Hoc Group will visit all of the proposed sites by the middle of December 2002, and the final report of the group is planned for completion and presentation to the ITER Negotiators in early 2003. It is expected that the final selection of the ITER site will be made by the middle of 2003.

Dr. Belyakov's presentation was followed by a review of each of the four proposed sites for ITER. Canada's site presentation was made by Mayor John Mutton of the Municipality of Clarington – Canada's proposed location. The sites proposed by the European Union were reviewed by Dr. Carlos Alejaldre for the Spanish site at Vandellos and by Dr. Bernard Frois for the French site at Cadarache. Finally, Dr. Satoru Ohtake of Japan described Japan's proposed site at Rokkasho-mura. All of the site presentations used the latest audio-visual techniques to give those attending a good understanding of the characteristics of the different sites.

The session concluded with a presentation on the "Fast Track" approach to fusion by Dr. Jean-Pierre Rager of the European Commission. He discussed the option of the Fast Track approach proposed by Dr. David King and under consideration by the ITER Parties. It envisions a materials development facility (International Fusion Materials Irradiation Facility) in conjunction with ITER in order to see earlier realization of a fusion power plant.

An exhibition, held in the forum of the Palais des Congrès de Lyon, featured displays by the International Team and the four groups representing the site offers to host the ITER project – those from Cadarache, France; Clarington, Canada; Rokkasho-Mura, Japan; and Vandellos, Spain. Experts from the International Team and the potential host sites were on hand at their booths throughout the conference. They acquainted conference participants with the attributes of the ITER project and the proposed sites and answered questions. These displays were a popular stopping point for participants and it is estimated that nearly 1000 people took advantage of the opportunity to learn more about the ITER project.



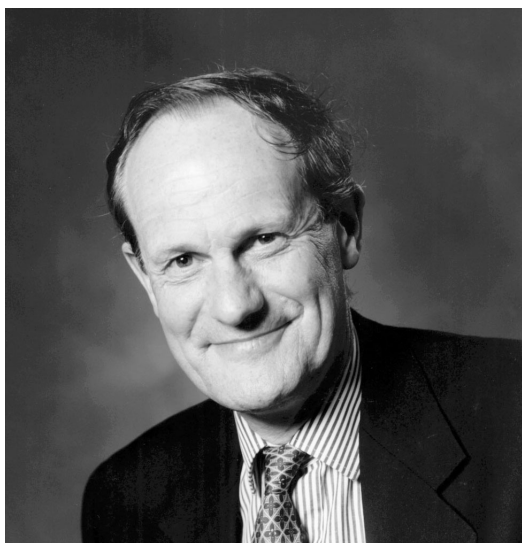
A view overlooking the displays of the ITER site candidates and the poster session area.

In summary, the information about ITER in both the conference programme and the exhibition was of great interest to participants. The project's importance as the next major step in fusion energy research is widely recognized and participants welcomed the opportunity to learn more about the project and the progress being made towards its implementation.

The Canadian delegation reported to the ITER Negotiators at their sixth meeting (N-6) on the Special ITER Informal Session, noting that it raised the ITER profile in a positive way. All delegations participating in N-6 were commended on the planning and executing of the Special Session.

Dr. Derek Robinson FRS

in memoriam



Dr. Derek Robinson, Head of the UKAEA Fusion programme, died from cancer on 2 December 2002 in Oxford at the age of 61.

He gained a First Class Physics Degree and his PhD at Manchester University. His doctoral research involved the study of plasma turbulence in the ZETA experiment at the Atomic Energy Research Establishment, Harwell. He started work at Culham Laboratory, the newly established UK centre for fusion research, in 1970, becoming Director in 1996. He was elected to the Royal Society in 1994 and at the time of his death was a Vice President of the UK Institute of Physics and Chairman of its Board of Publications.

His participation in the historic Culham mission, which measured the electron temperature with Thomson scattering on T3 and confirmed the startling results presented at the Novosibirsk Conference in 1968, reflects two prominent facets of his activity: his interest in international collaborations, backed by great diplomatic skills, which he had plenty of occasions to apply

within the framework of ITER, and his belief in the development of a successful thermonuclear reactor based on the tokamak concept. His broad and deep knowledge of tokamak physics and the supporting techniques, such as heating and control, made him an invaluable member of the numerous technical committees in which he participated. He was a member of the ITER Technical Advisory Committee from the start, and a member of every ITER Committee or Special Working Group that evaluated the various phases of ITER.

On the human side, Derek was a man of consensus, believing that finding the common points rather than the differences in opinion is the most constructive way to move forward. This respect for others - even if they held very divergent opinions - explains the great respect he enjoyed worldwide. It was also of inestimable value in discussions and decision-making in a project such as ITER.

Items to be considered for inclusion in the ITER CTA Newsletter should be submitted to B. Kuvshinnikov, ITER Office, IAEA, Wagramer Strasse 5, P.O. Box 100, A-1400 Vienna, Austria, or Facsimile: +43 1 2633832, or e-mail: c.basaldella@iaea.org (phone +43 1 260026392).