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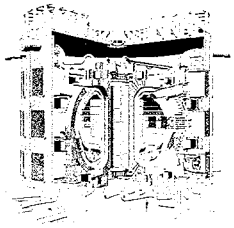

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FIRST FORMAL ITER NEGOTIATIONS MAKE EXCELLENT PROGRESS

by Dr. P. Barnard, Chairman and CEO, Iter Canada

November 8 and 9 2001 marked the historic beginning of formal Negotiations Meetings on the ITER project. Delegations from Canada, the European Union, Japan and the Russian Federation met in Toronto, Canada, for the first in a series of Negotiations that is expected to lead, by the end of 2002, to an agreement on the joint implementation of ITER. This agreement will govern, under international law, the construction, operation and decommissioning of ITER. All four Participants have been authorized by their governments to proceed to negotiate.

Preparatory meetings were held in Vienna in July and in Moscow in June, where Canada's Ambassador Rod Irwin presented his country's offer to host the ITER project. Japan and the European Union have also expressed an interest in presenting a bid. Preparatory experts meetings were held in Toronto in late September.

The final Preparatory Meeting for the first Negotiations Meeting was also held in Toronto, Canada, on 7 November 2001. The results of this meeting formed the basis for key agenda items for the Negotiations Meeting the following day.

The Negotiations, chaired by Iter Canada Chairman and CEO Dr. Peter Barnard, began with the acceptance of a defined Work Plan and Milestones for the Negotiating Process. The Work Plan foresees the development of a consensus on the preferred site for ITER by mid-2002 and finalizing the Joint Implementation Agreement by the end of 2002. The Delegations then established the Negotiators' Standing Sub-Group (NSSG), approving its charter and noting the following designated members: Canada - M.J. Stewart and J. Campbell; European Union - J. Grunwald and J.-P. Rager; Japan - S. Ohtake, J. Michigami and H. Kishimoto; and Russian Federation - V. Korzhavin and Y. Konashkov.

Participants in the meeting

The meeting addressed the recommendations from the Preparatory Meeting and reached agreement on a way forward on the following key issues:

1. The Delegations endorsed the recommendation of the Preparatory Meeting that a Working Document prepared by the EU should be the basis for the elaboration of a first draft of the Joint Implementation Agreement at NSSG-1 for consideration at the next Negotiations Meeting in January.

2. The Delegations undertook to provide information on their intention with respect to the preferred procurement items to be contributed inkind to ITER construction. The International Team will also provide technical advice on this matter.

3. The Delegations endorsed the conclusion of the Preparatory Meeting with respect to the joint assessment of specific sites that a consolidated paper should be developed for the NSSG-1 meeting, taking advantage, as much as possible, of further exchanges of views in advance.

All of these issues will be pursued by the NSSG. In addition, the Delegations assigned an additional Task to the sub-group. Owing to the importance of defining the management structure of the ITER Legal Entity and the transition into construction and operation, the NSSG, with the technical assistance of the Coordinated Technical Activities (CTA) personnel, is to give early consideration to this issue.

Dr. P. Barnard chairing the Negotiations

The Delegations also took note of the record of the Project Board meeting of 7 November 2001 that reported on the group's progress and set out the Work Plan for the CTA.

The Negotiations Meetings next addressed the status of site offers. The discussion included acknowledgement of the Canadian site offer, review of comments on other possible offers from the European Union (France and Spain) and from Japan (Naka and Rokkasho), and commendations to the Canadian delegation for the preparation of its site offer and for the Workshops held on 5 and 6 November 2001 (see separate article in this issue).

During the Negotiations Meetings participants reported on the positive tone that had characterized recent high-level contacts with a number of United States of America authorities concerning possible re-entry of the US. The delegations shared the view that all ITER EDA Parties would be welcome to join the Negotiations while they were in progress. At the same time, they recognized the advantages of early participation, particularly as it concerns the agreements that will have to be worked out on the allocation of responsibilities for providing ITER components and systems.

The Negotiations concluded by issuing a joint news release, reflecting a commitment to share the progress reports on the efforts to implement ITER. In the words of the release: "The participants in the Negotiations took important first steps on a variety of issues, and plan to hold the second round of Negotiations in Japan in January of 2002." These meetings will be in Tokyo on 22 and 23 January, and the third and fourth Negotiations Meetings are tentatively scheduled for March in Moscow and May in Cadarache, France. The first meeting of the Negotiators' Standing Sub-Group is also set for 18 - 20 December 2001 in Tokyo.

MEETING OF THE ITER CTA PROJECT BOARD

by Dr. V. Vlasenkov, Project Board Secretary

The meeting of the ITER CTA Project Board took place in Toronto, Canada on 7 November 2001, on the occasion of the first Negotiations Meeting (N1). Twelve participants, representing PB Members and experts from Canada, the EU, Japan, the RF and the International Team (IT), attended the meeting chaired by Acad. E. Velikhov.

Discussions on the Preliminary Work Programme for the CTA and organizational arrangements for the IT and PTs took most of the time of the meeting. The Project Board approved the Preliminary Work Programme as presented by the IT Leader.

Regarding the ten procurement packages identified in the Programme as having high priority, the PB:

- Pointed out that work on the technical specifications for these priority procurements must be started without delay. Amongst other things, this will allow timely identification of possible design issues associated with different manufacturing options.

- Recommended that the IT and interested PTs (in accordance with their tentative expression of interest in the procurement allocation) work together on this activity by jointly defining responsible people for each procurement item. Active participation of domestic industries will be important to focus this activity on the optimization of the manufacturing processes that are envisaged.

Regarding preparations for transition to the ITER Legal Entity (ILE), the PB:

- Recognized the urgent need to define the construction phase organization of the Project sufficiently early for an efficient transfer of responsibilities and design authority to the ILE.

- Acknowledged the need to have a unique line management for the Project as a whole, under the authority of the Director General, so as to ensure licensing of the facility and effective project management.

In order to implement the Work Programme in the most efficient way, the PB recognized the urgent need for the Negotiators to define the procurement packages allocation amongst the Participants. The PB noted the PTs' proposals for their possible contributions, tabled at the meeting, to the Work Programme and asked the IT Leader to integrate them into an overall joint Programme.

The PB took note of the IT organizational arrangements at Garching and Naka and the PTs' ongoing provision concerning their CTA domestic organization.

The PB took note of the JA PT request to the IT and other PTs to collaborate in investigating the possibility of reducing radioactive waste and tritium inventory, and to demonstrate power generation through one blanket test module. All PTs willing to host ITER were requested to provide the IT with their domestic guidelines for categorization of radioactive waste management.

It was agreed among of all the PTs to continue the EDA arrangements concerning copyright matters. The PTs acknowledged their availability to bear the costs of publications authored by their respective members of the IT.

The PB took note of the PB Chairman's statements on the need and possibilities for implementing remote participation during ITER operation.

The PB recognized the inconvenience encountered by the IT in operating in the absence of a Joint Fund and encouraged the PTs to exercise their best efforts for the prompt resolution of the difficulties that may arise.

The next meeting of the Project Board will be held on 21 January 2002 in Tokyo.

ITER WORKSHOPS DEMONSTRATE DETAILS OF CANADA'S BID

by Dr. P. Barnard, Chairman and CEO, Iter Canada

On 5 and 6 November a series of five Workshops were held in Canada that provided thirty international ITER participants with significant background on various aspects of the Canadian offer. The public - private sector partnership basis for the Canadian offer is unique, and the Workshops provided an opportunity for participants from the EU, Japan and the Russia Federation to broaden their understanding of the offer and to share and discuss issues that may be relevant in the preparation of other site offers. Workshop co-ordinators came from 12 corporations, three levels of government, one university and one technical college. Contributions were made by more than thirty Canadians involved in managing the various aspects of the Canadian offer.

Workshop #1 addressed public-private sector financing and risk management

Worldwide trends in building major infrastructure projects were reviewed, showing a shift away from strict reliance on government financial resources and towards public-private partnerships, particularly in the higher-tech sectors such as telecommunications and energy. These partnerships are increasing in popularity in all parts of the world. Iter Canada's corporate members' experience has shown that they strengthen a project, with governments ensuring long-term support and stability, and the private sector providing security of performance resulting in more effective implementation.

The Workshop reviewed the ITER International Organization requirements from a financial perspective, described the application of the public-private partnership concept to ITER, outlined the Strategic Risk Analysis Process and its implications for the project, and gave a detailed review of the financial plan for Canada hosting ITER. This plan attributed the value of direct Canadian contributions at about CA $3 billion, such as the current Clarington site, the buildings and infrastructure and the operating phase support, and presented a cost comparison suggesting that selection of the Canadian site would yield savings in total project costs compared to other possible sites

Workshop #2 reviewed the environmental assessment and licensing process already underway for the ITER Project in Canada

The Environmental Assessment and Licensing process have been initiated with the Canadian Nuclear Safety Commission. This process initiated in Canada will ensure that a licence is available for the implementation of the ITER Project in Canada at the time of the establishment of the ITER Legal Entity.

The Environmental Assessment process is comprised of technical studies and stakeholder consultation. The technical studies look at the environmental effects of the project for a specific geographic area and for specific periods of time. The effects are reviewed under normal operations and during malfunctions and accidents, and the studies consider feasible mitigation measures and cumulative environmental effects. Both the natural and the socio-economic environment are considered.

The stakeholder consultation, or Public Involvement Programme, is designed to inform, consult with and address the concerns of the public. The programme defines the various publics to be consulted about the project, and identifies specific programme elements to ensure issues of concern are identified and considered in the assessment. The programme also helps establish the future direction for Iter Canada's ongoing communications programmes. Results to date demonstrate strong support for hosting ITER in Canada and show that the level of support increases with greater public understanding.

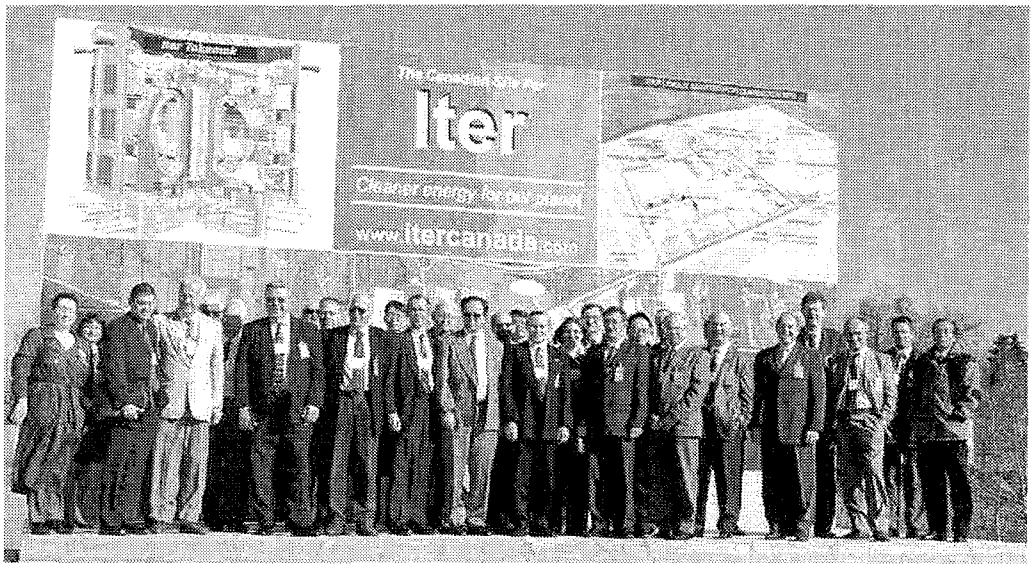
Workshop #3 outlined the Canadian experience with program management of major international projects

Past and current experience was reviewed on overall project management; integration and co-ordination; project requirements and system design, cost and scheduling baselines and performance measurement; risk management and systems integration. Private sector members from Canada discussed their experience with several world-scale projects including the International Space Station, the Diavik Diamond Mine, Hibernia, James Bay, nuclear power plants, and Lester B. Pearson International Airport.

Conclusions from the Workshop focused on the importance of on-budget and on-time project execution, the factors underlying success in delivering a project of the magnitude and complexity of ITER, the essential role of integrated project control systems and the value of experienced human input and decision-making. The Canadian private sector corporations demonstrated their expertise and track record in these areas.

Workshop #4 detailed Iter Canada's Site Specific Design Team's adaptations of the generic ITER design to suit the specific characteristics of the proposed Canadian site

The participants made the short journey to the Clarington area, just east of Toronto, where Canada's proposed site for ITER is located. At the invitation of the Mayor of Clarington, John Mutton, the Workshop was held in the Council Chambers of the Municipality of Clarington. The Canadian industry team reviewed their site adaptation activities and results in site development, building modifications, geo-technical review, cooling systems and electrical interface.



Participants in front of the sign at the Iter Canada site at Clarington

The detailed layout of the ITER facility on the Clarington site was reviewed, demonstrating opportunities for improved operational flexibility. The site modifications to road, rail, bridge, utility services, and concrete and steel-framed buildings were outlined. Options for cooling systems and the details of the electrical interface and plans to meet power load requirements were also discussed.

The site's size, seismic characteristics, and proximity and access to outstanding transportation and electrical power systems showed that Clarington meets or exceeds each of the ITER site requirements and site design assumptions. There are also several opportunities for further optimization of the ITER design to take advantage of the superior site characteristics.

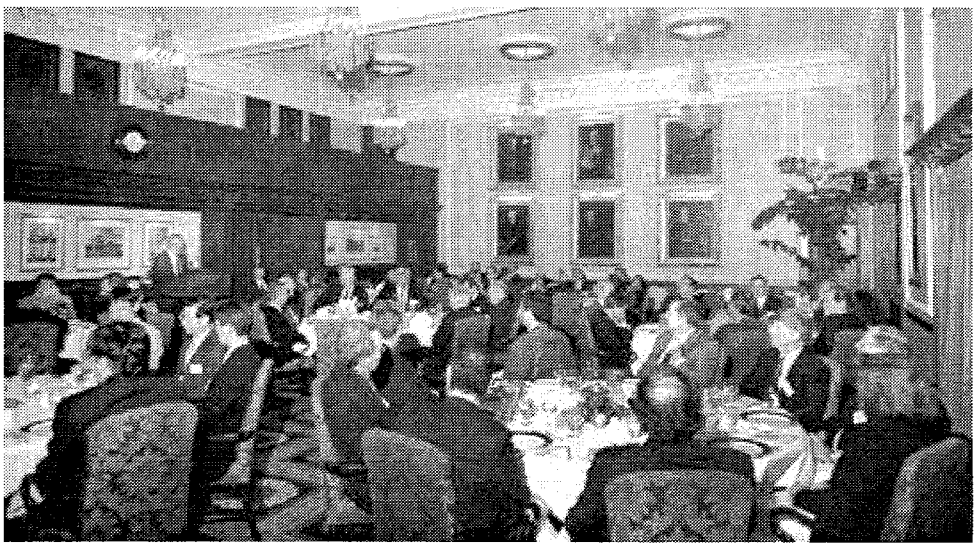
The Workshop concluded with tour of the site at Clarington, giving participants a first-hand opportunity to view the actual site and surrounding services.

Workshop #5 addressed the socio-economic aspects of Canada's offer and was designed to demonstrate all aspects of the living environment available for ITER scientists and their families

The Mayor of Clarington, John Mutton, hosted a wide-ranging tour of the region. Participants were given a "passport" which contained a comprehensive selection of specific information about aspects of life in the Clarington area. The tour featured visits to a number of community facilities, including a local hospital, a primary school for young children, a local church and the headquarters of General Motors Canada. Community leaders at each facility reviewed the range of facilities and services available in Clarington in their area of expertise.

Throughout the tour, experts spoke about other aspects of life in the community, including the various real estate options, transportation alternatives, community safety and emergency services, and cultural and recreational facilities and opportunities. The tour ended with a visit to the home of Gary Polonsky, President of the Ontario Institute of Technology (Canada's newest university) and chair of the ITER Community Council, a group of local leaders that fosters communications about the ITER project. Participants, throughout the day, had an opportunity to experience the wide range of socio-economic choices that would make Clarington a welcoming community environment for ITER scientists and their families.

Throughout the two days of Workshops, ITER participants received a wide range of new and detailed information about Canada's offer and the unique contribution possible through the public-private partnership approach.



Items to be considered for inclusion in the ITER 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).

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