

# INTERNATIONAL THERMONUCLEAR EXPERIMENTAL REACTOR

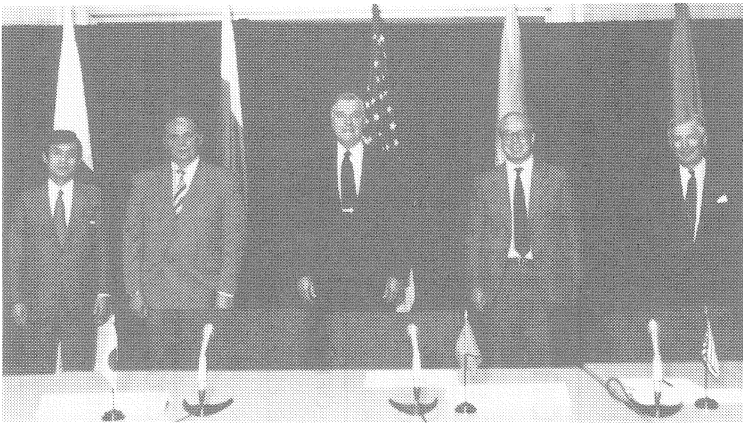
## ITER EDA NEWSLETTER

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INTERNATIONAL ATOMIC ENERGY AGENCY, VIENNA, AUSTRIA

### SIGNING OF ITER EDA AGREEMENT AND PROTOCOL 1



Participants at the Signing Ceremony (from left to right): Minister Hirabayashi, Minister Mikhailov, Secretary Watkins, Director General Blix, Ambassador Van Agt

The ITER Engineering Design Activities (EDA) Agreement and Protocol 1 were signed by the four Parties, the European Atomic Energy Community, the Government of Japan, the Government of the Russian Federation and the Government of the United States of America. This signing ceremony, held in Washington, D.C. on July 21, 1992, was conducted by IAEA Director General Hans Blix and was attended by senior representatives of each Party, Ambassador Andreas van Agt, Head of the Delegation of the Commission of the European Communities to the US, Minister Hiroshi Hirabayashi, Minister Extra-

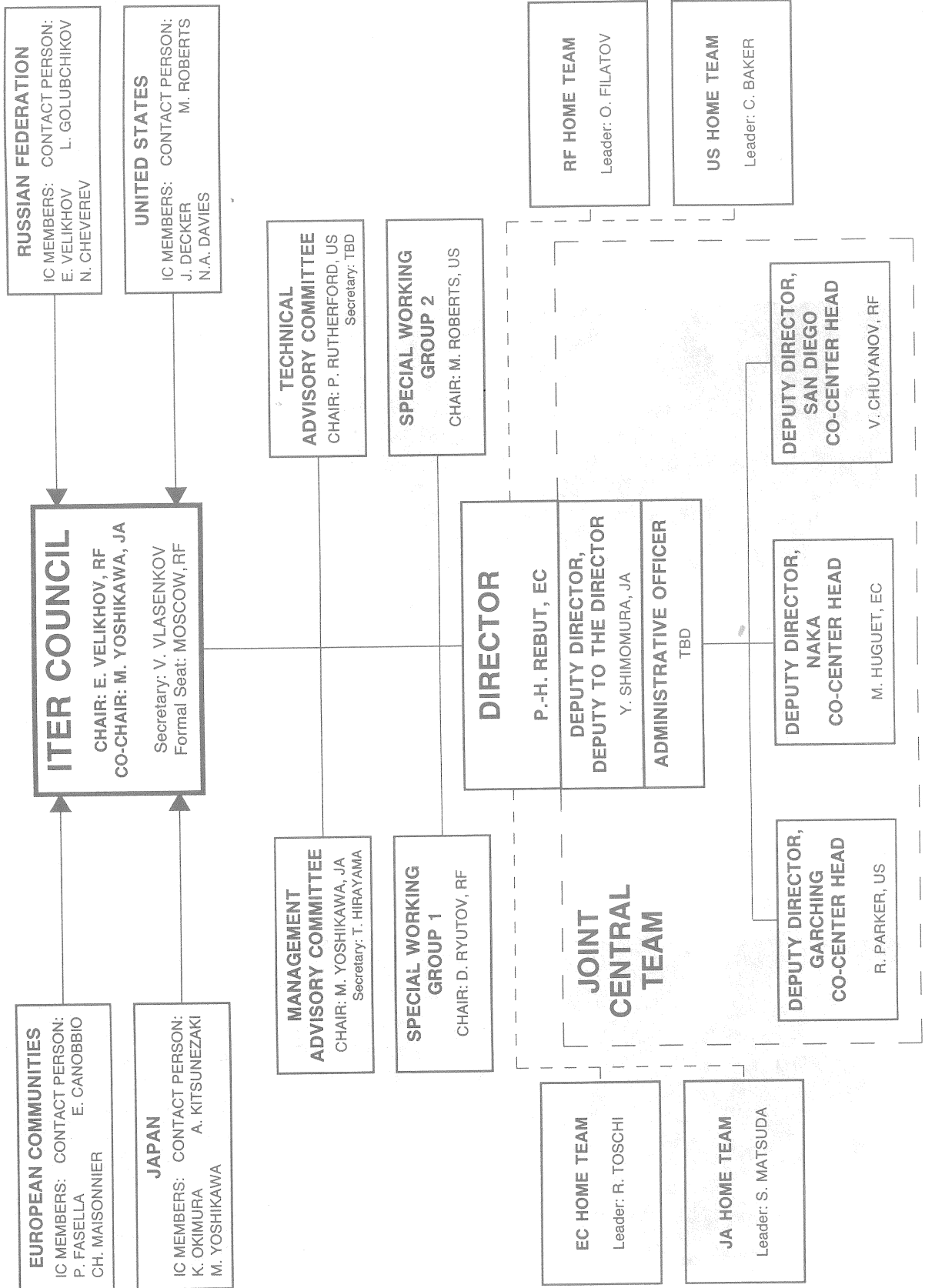
ordinary and Envoy Plenipotentiary of the Embassy of Japan to the US, Professor Viktor N. Mikhailov, Minister of the Russian Federation for Atomic Energy and Admiral James D. Watkins, U.S.N. (Retired), Secretary of Energy. After the formal signing of the texts, each Party provided to Director General Blix a letter formally designating their members of the ITER Council. With the signing and designations, Director General Blix declared that the ITER EDA had begun.

This ceremony, which was videotaped, represented the culmination of years of effort by many persons who had prepared the texts of the Agreement and Protocol 1, reviewed the texts for the Parties and finally those who negotiated the final understandings leading to the signature authority granted by each Party.



Senior Representatives of the ITER Parties signing the Agreement

# INTERNATIONAL THERMONUCLEAR EXPERIMENTAL REACTOR (ITER) ENGINEERING DESIGN ACTIVITIES ORGANIZATION



## EDA ORGANIZATIONAL STRUCTURE

The overall programmatic objective of ITER, which shall guide the Engineering Design Activities (EDA), is to demonstrate the scientific and technological feasibility of fusion energy for peaceful purposes.

In accordance with the ITER EDA Agreement, the European Atomic Energy Community, the Government of Japan, the Government of the Russian Federation and the Government of the United States of America, acting as the ITER Parties, shall conduct jointly the EDA to produce a detailed, complete, and fully integrated engineering design of ITER and all technical data necessary for future decisions on the construction of ITER. The EDA will be conducted under the auspices of the International Atomic Energy Agency (IAEA). The organization prescribed by the ITER EDA Agreement for this purpose is outlined in the accompanying figure.

**The ITER Council** has the responsibility for the overall direction of the EDA and exercises overall supervision of its execution. The Council reports to the Parties and shall act by unanimity. The members of the Council designated by the Parties are as follows:

European Atomic Energy Community:  
Prof. Paolo Fasella\*  
Director General for Science  
Research and Development  
Commission of the  
European Communities

Dr. Charles Maisonnier\*  
Director of the Fusion Programme  
Commission of the  
European Communities

\* Accompanied by Prof. Klaus  
Pinkau, CCFP Chairman,  
as expert

Russian Federation:  
Acad. Evgeni P. Velikhov  
Vice-President of the  
Russian Academy of Sciences  
Head of the Scientific Programme  
on Fusion

Dr. Nikolai S. Cheverev  
Deputy Head  
Main Department on  
Fundamental Research  
in Nuclear Physics and Fusion  
Ministry of the Russian Federation  
for Atomic Energy

Japan:  
Mr. Kazuki Okimura  
Deputy Director General  
Minister's Secretariat  
Science and Technology Agency

Dr. Masaji Yoshikawa  
Executive Director  
Japan Atomic Energy Research  
Institute

United States of America:  
Dr. James F. Decker  
Deputy Director  
Office of Energy Research  
US Department of Energy

Dr. N. Anne Davies  
Associate Director for Fusion Energy  
Office of Energy Research  
US Department of Energy

At its first meeting the Council elected Acad. E.P. Velikhov as Chairman and Dr. M. Yoshikawa as Co-Chairman of the Council. Formal seat for ITER Council meetings is Moscow, Russian Federation.

Messrs. E. Canobbio (EC), L. Golubchikov (RF), A. Kitsunozaki (JA) and M. Roberts (US) have been identified by the respective ITER Parties as their Contact Persons (CPs). The CPs will, as they did successfully during the CDA and the interim period, work to ensure satisfactory resolution of any substantive points of difference. Mr. M. Drew has been identified by the ITER EDA Director as his person of contact with CPs.

**The ITER EDA Director** shall direct and coordinate the performance of all activities pertinent to the EDA and organize, direct and supervise the Joint Central Team. Dr. Paul-Henri Rebut was appointed as Director by the Council.

**The Technical Advisory Committee (TAC)** shall, upon request by the Council, advise it on technical matters and perform such other tasks as the Council may request it to undertake. The members of the TAC designated by the Council upon recommendation by the Parties are as follows:

European Atomic Energy Community

Dr. R. Andreani  
Dr. R. Aymar  
Dr. D. Robinson  
Prof. F. Troyon

Russian Federation

Dr. E. Adamov  
Acad. V. Glukhikh  
Acad. B. Kadomtsev  
Dr. M. Solonin

Japan

Dr. I. Inoue  
Dr. S. Itoh  
Dr. K. Miya  
Dr. M. Seki  
Dr. S. Shimamoto

United States of America

Prof. P. Rutherford, Chairman  
Dr. E. Brolin  
Dr. J. Clarke  
Dr. J. Sheffield

The members of the TAC were designated so as to ensure that all areas of expertise required for the performance of the EDA are represented at the TAC. These eminent scientists and engineers shall, as members of the TAC, be acting in an individual capacity.

The Council designated Prof. P. Rutherford as Chairman of the TAC.

**The Management Advisory Committee (MAC)** shall advise the Council in management and administrative matters, including finance, personnel, and assignment of tasks to the Home Teams in approximately equal shares and to the Joint Central Team. The members of the MAC designated by the Parties are as follows:

European Atomic Energy Community

Dr. E. Canobbio  
Prof. R. Toschi  
Dr. J. Vetter

Russian Federation

Dr. Y. Balasanov  
Dr. O. Filatov  
Dr. L. Golubchikov

Japan

Dr. M. Yoshikawa, Chairman  
Mr. E. Imai  
Dr. S. Matsuda

United States of America

Dr. C. Baker  
Dr. A. Glass  
Dr. T. James

The Council appointed Dr. M. Yoshikawa as Chairman of the MAC.

**The Joint Central Team (JCT)** will assist the Director in the definition, direction and coordination of the performance of the engineering design activities. It shall also integrate all scientific and technological contributions into a coherent design. Each Party shall make available to the JCT qualified persons in approximately equal numbers. Members of the JCT shall be chosen by the Director from among these persons. All members of the JCT shall come under the management authority of the Director.

The JCT will be located at the Joint Work Sites: Garching near Munich, Naka (Ibaraki), and San Diego (California). At each of these sites an ITER EDA Co-Centre will be established.

The Council agreed that the Parties should provide a total of 150 professionals to the JCT by the end of Protocol 1, with the buildup done as fast as possible.

**Home Teams.** Each ITER Party shall, in consultation with the Council, establish and organize its Home Team which shall perform the tasks assigned to it in accordance with the EDA Work Programme. Each Party has already submitted its Home Team organization for consideration by the Council. Subsequently, the Council stated that each Party established its Home Team.

The Parties have designated their Home Team Leaders who are Prof. Romano Toschi for the European Atomic Energy Community, Dr. Shinzaburo Matsuda for Japan, Dr. Oleg Filatov for the Russian Federation and Dr. Charles Baker for the United States of America.

**Special Working Groups (SWGs)** may be established by means of the Protocols to the Agreement or by decision of the Council. They may be entrusted with specific tasks which are outside the responsibilities of the Director. SWGs will have lifetimes limited to the duration of their tasks. So far, two SWGs, namely SWG-1 and SWG-2, were established by means of Protocol I.

**SWG-1** shall, based on the Conceptual Design Report, review the detailed technical objectives along with technical approaches including appropriate safety margins to determine the best practicable way to achieve the programmatic objectives of ITER. The results of the review should be compatible with the aim of maintaining the cost of the device within the limits comparable to those indicated in the final report of the ITER CDA, as well as keeping its impact in the long-range fusion programme.

The members of SWG-1 were designated by the Parties, after consultation with the Council.

SWG-1 shall submit its findings in a Review Report to the Council for approval at its second meeting.

The Council appointed Acad. D. Ryutov as Chairman of SWG-1.

**SWG-2** shall submit guidelines for implementation of task assignments by the Home Teams to the Council for approval at its second meeting. This SWG shall also draft Protocol 2 to the ITER EDA Agreement and submit a draft to the Council not later than by 21 May 1993.

The members of SWG-2 were designated by the Parties, after consultation with the Council.

The Council appointed Dr. M. Roberts as Chairman of SWG-2.

**Deputy Directors.** The Council appointed Deputy Directors and Co-Centre Heads as follows:

- Dr. Michel Huguet (EC) as Deputy Director and Head of the Co-Centre in Naka, Japan
- Dr. Yasuo Shimomura (JA) as Deputy Director and Deputy to the Director
- Dr. Valerij Chuyanov (RF) as Deputy Director and Head of the Co-Centre in San Diego, USA
- Dr. Ronald Parker (US) as Deputy Director and Head of the Co-Centre in Garching, Germany.

**The ITER Office in Vienna** is located at the IAEA Headquarters. This office is responsible for the publishing of various books in the ITER EDA Documentation Series and of the ITER EDA Newsletter, with the assistance of the IAEA. The Office is also maintaining the library of ITER documents and reports and, if requested by the Council, will perform additional functions contributing to the ITER EDA.

## **FIRST ITER EDA COUNCIL MEETING**

The First ITER EDA Council Meeting took place in Vienna, Austria, at the IAEA Headquarters on 10-11 September 1992.

Dr. Hans Blix, Director General of the IAEA, under the auspices of which the quadripartite ITER EDA collaboration is taking place, presided over the opening session. He welcomed the ITER Parties to Vienna and expressed the Agency's willingness to assist the Parties in their joint effort.

The leaders of the four delegations to the Council Meeting were Ambassador D. Hammer, Head of the Delegation of the Commission of the European Communities to the International Organizations in Vienna, Ambassador Extraordinary and Plenipotentiary K. Kume, Head of the Permanent Mission of Japan to the International Organizations in Vienna, Minister M.P. Beliakov, Acting Head of the Permanent Mission of the Russian Federation to the International Organizations in Vienna, and Counsellor Michael Lawrence, for Ambassador Jane Becker, Head of the United States Mission to the United Nations System Organizations in Vienna. Reaffirming the principle of equality of the Parties with regard to their status in, contributions to, and benefits from the collaboration, each of the delegation leaders made statements about the importance of ITER to their domestic fusion programmes, the strength of their Party's commitment to the successful completion of the EDA and stressed the unprecedented nature of the collaboration.

The leaders of the delegations introduced the members of the ITER Council. Academician E. Velikhov (RF) was elected Council Chairman, and Dr. M. Yoshikawa (JA) was elected Council Co-Chair. Then the Council began its work.

The agenda of the First ITER EDA Council Meeting comprised 24 items relevant to the initiation of the EDA. Upon addressing the issues covered by the agenda, the Council took the respective decisions, when appropriate, or otherwise asked for its views to be reflected in the minutes of the meeting.

Among the decisions taken by the Council were the following:

- Appointment of Dr. P.-H. Rebut as ITER EDA Director.
- Designation of Prof. P. Rutherford as Chair of TAC and appointment of Dr. M. Yoshikawa as Chair of MAC.
- Appointment of the ITER EDA Deputy Directors and of the Heads of Co-Centres.
- Appointment of the Chairs of SWG-1 and SWG-2.
- Agreement that the Parties should provide a total of 150 professionals to the JCT by the end of Protocol 1, with the buildup done as fast as possible.
- Acceptance of the Director's proposals regarding the main structure of the JCT at each Joint Work Site (ITER Co-Centre) and functions of the Deputy Directors.
- Approval of JCT's staff selection procedures and acceptance of the draft Agreement prepared by the WG as a basis for the Secondment Agreement.
- Assignment of initial MAC tasks.

Home Team Organizations of each Party were submitted to the Council for consideration. After discussing them, the Council stated that each Party established its Home Team following consultation with the Council. With regard to the ITER EDA work program the Council decided that related proposals should be discussed at the TAC and MAC and then the draft of the program should be submitted for approval at the Council Meeting. In addition, an outline of the ITER design shall be prepared by the Director and presented to the Council within about 10 months.

The Council confirmed the following understandings:

1. It is understood that the Parties to the ITER EDA Agreement may designate, as appropriate, governmental or non-governmental entities to implement the provisions of the Agreement, but shall not thereby be released from any of their obligations and responsibilities under the said Agreement.
2. It is understood that paragraph I of Article 17 applies to all activities provided for in the ITER EDA Agreement, including the provision of resources and support under Articles 12 and 14.

The Council decided that the IC-2 meeting will take place in Moscow on 15-16 December 1992. The Council also decided that IC-3 and IC-4 will take place on 21-22 April 1993 and 27-28 October 1993, respectively, and IC-5 tentatively in March 1994. The locations for each meeting will be determined at the previous meeting. It was understood that Japan had offered to host IC-3, the United States of America IC-4 and the European Atomic Energy Community IC-5.



Participants of the First ITER EDA Council Meeting, Vienna, Austria

## OPENING CEREMONY OF THE ITER EDA NAKA CO-CENTRE

by Dr. A. Kitsunezaki, JAERI

The opening ceremony of the Naka Co-Centre for ITER EDA was held on 21 October at Naka site. Nearly 300 persons including the Minister of State for Science and Technology Mr. Tanigawa, more than ten Diet members and their secretaries, Japanese government officials, members of local congress and local government attended the ceremony. Dr. W. Dircks, Deputy Director General of IAEA, ITER Council members of the four Parties, Acad. E.P. Velikhov, Dr. N.S. Cheverev, Dr. N.A. Davies, Dr. C. Maisonnier, Mr. K. Okimura and Dr. M. Yoshikawa were also among the guests of honour. Congratulating speeches were delivered by Minister Tanigawa, Dr. S. Shimomura, President of JAERI, Mr. M. Maeda, Vice Prefectural Governor, Dr. P.-H. Rebut, ITER EDA Director, as well as by the Council Members representing the ITER Parties and a representative of the IAEA. Congratulatory messages from the IAEA Director General, Dr. H. Blix, Mr. F.M. Pandolfe, Vice-President of the Commission of the European Communities, Prof. V. Mikhailov, Minister of the Russian Federation for Atomic Energy, and Admiral J. Watkins, U.S.N. (retired) Secretary of Energy of the United States of America, were read to the attendants. These speeches were followed by a brief declaration of resolve by Dr. M. Huguét, the Head of the ITER Co-Centre and ITER EDA Deputy Director, after which the name plate of the Naka Co-Centre was unveiled. The participants applauded this historic moment enthusiastically.



Prominent participants at the Opening Ceremony (from left to right):  
P.-H. Rebut, S. Shimomura, K. Tanigawa, M. Huguét, M. Maeda, W. Dircks,  
Ch. Maisonnier, E. Velikhov and N. Anne Davies

This ceremony was followed by a large reception at a hotel in Mito where Dr. M. Huguét expressed his hopes in the unique international collaboration of ITER EDA and requested continuous support from the local community for the scientists and their families from other Parties.

The opening ceremony continued in Tokyo on October 22 in form of a seminar on fusion research. At the seminar the speakers were Mr. T. Fukuda, ex-Prime Minister of Japan, followed by Prof. M. Rosenbluth of the University of California at San Diego, USA. An audience of about 300 persons, including Diet members, eagerly listened to the speeches.

Ex-Prime Minister Fukuda, 87, is a strong supporter of nuclear fusion in Japan and is also a strong proponent

of greater international collaboration. This reputation was appropriately recognized in 1991 when he was awarded a US prize for his efforts in assisting international fusion research.

Ex-Prime Minister Fukuda spoke of his experience relating to nuclear energy and international collaboration. Prof. Rosenbluth presented a simple, yet informative and inspiring picture of the status of fusion research and described the vital role of ITER in the realization of commercial fusion power. The seminar was attended by many members of the Diet, staff of government ministries and JAERI as well as by some guests from the international diplomatic corps.

At the reception after the seminar, Mr. Y. Mori, Chairman of Diet Members' Federation for Nuclear Fusion and Mr. M. Tanabu, Secretary General of the Federation stressed their support and hope to the ITER co-operation.

## FIRST MEETING OF THE ITER TECHNICAL ADVISORY COMMITTEE (TAC)

by Prof. P.H. Rutherford, TAC Chairman

The first TAC meeting was held at the ITER Co-Centre, San Diego, USA, on 11-13 November 1992. Thirteen TAC members were in attendance, namely R. Andreani, R. Aymar, D.C. Robinson and F. Troyon from the EC, N. Inoue, S. Itoh, K. Miya and M. Seki from Japan, V.A. Glukhikh from the RF, and E.C. Brolin, J.F. Clarke, P.H. Rutherford (Chair) and J. Sheffield from the US.

The first day's meeting was informal and was devoted to a general discussion of technical issues involved in possible design concepts and approaches, as described in presentations by P.-H. Rebut and Y. Shimomura. In addition, presentations were given on a recent ITER Workshop on Safety and Environment Issues and on an earlier ITER Workshop on Divertor Issues.

The second and third days' meetings, after adoption of proposed rules of procedure for TAC, were devoted entirely to consideration of three proposals from the Director and the Joint Central Team (JCT) for urgent R&D tasks, which are proposed for initiation before the full ITER Work Programme is adopted. These three proposals were as follows:

1. Proposal for ITER Model Coil Test Facilities;
2. Proposal for the Procurement of Long-Lead-Time Materials for the Manufacture of the ITER Model Coils;
3. Proposal for the Study of the Manufacture of ITER Magnets.

By invitation of the Chair, four experts in magnet technology attended the TAC meeting and made presentations of their views, namely P. Komarek (KfK, EC), S. Shimamoto (JAERI, Japan), O.G. Filatov (Efremov Institute, RF), and D.B. Montgomery (MIT, USA).

The first proposal was for the construction and/or modification of two facilities to be used for the testing of ITER model coils. The first of these proposed facilities would be used for testing of a model central solenoid (CS) coil at fields up to 13 T, including pulsed testing using the JT-60U power supplies. The second proposed facility would be at KfK, Karlsruhe, and would be used for testing of a model toroidal field (TF) coil, including simulation at 8 T of ITER structural behaviour at full stresses. Construction of the model coils themselves was not included in the Director's proposals for urgent R&D tasks. Assuming parallel construction and operation of both facilities, the magnet testing programme could begin in late 1996, thereby providing test data for both model coils before the target date for completion of the final magnet design at the end of 1997. Extended reliability testing of the model coils would continue in 1998.

The second proposal for urgent R&D was for the procurement of long-lead time materials, especially niobium alloy rods and tantalum/vanadium sheets, which would be used in the construction of the ITER model coils.

The third proposal for urgent R&D was for initiation of small industrial studies of the manufacturing feasibility of ITER magnets; these studies are intended to be carried out in each Party.

The TAC carried out a brief technical evaluation of the proposals, especially the proposed model-coil test facilities. The TAC's report will be presented to the ITER Council at its meeting in Moscow on December 15-16, 1992.

## **ACTIVITIES OF SPECIAL WORKING GROUP 1 (SWG-1)**

**by Acad. D. Ryutov, SWG-1 Chairman**

SWG-1 has been established according to the ITER EDA Agreement in order to "review the detailed technical objectives along with technical approaches to determine the best practicable way to achieve the programmatic objectives of ITER ...". The Parties' representatives in SWG-1 were:

EC: Dr. R. Aymar  
Dr. E. Canobbio  
Dr. K. Lackner  
Prof. R. Toschi

RF: Dr. O.G. Filatov  
Acad. B.B. Kadomtsev  
Acad. D. Ryutov  
Dr. Yu. Sokolov

JA: Dr. S. Matsuda  
Dr. K. Miya  
Dr. M. Nagami  
Dr. K. Tomabechi

US: Dr. D. Baldwin  
Prof. R.W. Conn  
Dr. T. James  
Dr. J. Sheffield

The ITER Council appointed Acad. D. Ryutov as Chair of SWG-1. The Secretary of SWG-1 is Dr. W. Spears. After the organizational meeting held in Vienna in September, the SWG-1 held two meetings in October: a 3-day meeting in Wuerzburg and a 2-day meeting in Milan. During the meetings, the Parties presented their views



on the key elements of the ITER project, both in terms of the facility itself and the operation plan. At the Wuerzburg meeting, Dr. Rebut, ITER Director, presented his approach to the ITER project. Dr. D. Jackson (Canada) has informed the Working Group members on the possibilities of tritium supply from the Canadian fission reactors. The information on the availability of tritium from Russia was also distributed among the group members.

On the basis of in-depth discussions of the Parties' views and the aforementioned additional information, the SWG-1 has prepared and unanimously adopted its report to the ITER Council.

## **ACTIVITIES OF SPECIAL WORKING GROUP 2 (SWG-2)**

**by Dr. M. Roberts, SWG-2 Chairman**

Upon the signing of the Agreement and Protocol 1, SWG-2 was established with the charge given in Protocol 1, Section 1 to submit "guidelines for implementation of task assignments, as defined in Section 3(1), to the Council for its approval, ...". At the first Council meeting, the Parties, after consultation with the Council, designated their representatives as indicated in the table below. The Council appointed Dr. Michael Roberts as Chair of SWG-2.

SWG-2 held two meetings: a 3-day meeting in Vienna and a 2-day meeting in Bethesda, Maryland, near Washington, D.C. At the first meeting, the members considered the general principles contained in the Agreement and the specific principles and procedures contained in Protocol 1 and on those bases developed a draft set of guidelines. These draft guidelines dealt with four topics: 1) Distribution Approach, 2) Selection Criteria, 3) Project Cost Estimates, and 4) Valuation of Near-term Program. Following the first meeting, the introductory text was written and the entire draft report distributed to SWG-2 members for review.

During the second meeting, the draft report was reviewed in detail. The guidelines were re-organized into three areas: A. Approvals and Revisions of Task Assignments, B. Task Identification, Definition and Valuation, and C. Selection Criteria. A section on recommendations for practical application of the Guidelines was added. The net result is a set of guidelines presented to the ITER Council by SWG-2 for consideration at IC-2, planned for Moscow on December 15 and 16. SWG-2 was assisted by the Director P.-H. Rebut and his representative in the meetings.

### **MEMBERS OF SWG-2 FOR THE TASK SHARING GUIDELINES WORK**

EC:	Dr. R. Andreani Dr. E. Canobbio Dr. F. Engelmann Mr. P. Kind	RF:	Dr. Yu. Balasanov Dr. M. Chaplinsky Dr. L.G. Golubchikov Dr. L.G. Golubchikov
JA:	Dr. S. Aoyama Dr. A. Kitsunozaki Dr. H. Tsuji Dr. T. Tsunematsu	US:	Dr. C. Baker Dr. L. Howe Dr. W. Marton Dr. A. Opdenaker Dr. M. Roberts

## **ITER EDA MAGNET TECHNICAL MEETING**

**by Dr. B.J. Green, Meeting Secretary**

The ITER EDA Magnet Technical Meeting was held at the Naka Co-Centre on 16-21 October 1992. Four experts from each of the ITER Parties, as well as four members of the JCT (see table) discussed the progress which the Home Teams have made in ITER magnet studies and attempted to detail and plan the magnet research and development activities required. As a result some detailed specifications for possible task agreements were drafted.

**LIST OF PARTICIPANTS  
IN THE  
ITER EDA MAGNET TECHNICAL MEETING**

- |     |   |      |   |
|-----|---|------|---|
| EC: | Prof. P. Komarek, Director<br>Institute for Technical Physics<br>Kernforschungszentrum Karlsruhe                                    | JA:  | Dr. H. Tsuji<br>JAERI, Naka   |
|     | Dr. N. Mitchell, Head of Magnet Group<br>The NET Team, Max Planck Institut fuer<br>Plasmaphysik, Garching                           |      | Dr. T. Ando<br>JAERI, Naka  |
|     | Dr. M. Spadoni, Senior Scientist<br>Fusion Department, ENEA   |      | Dr. T. Kato<br>JAERI, Naka  |
|     | Dr. B. Turck, Leader of Super-<br>conducting Magnet Group, STIF/DRFC<br>Centre d'Etudes Nucleaires de Cadarache                     | US:  | Dr. W. Hassenzahl, Leader<br>Applied Superconductivity Group<br>LLNL  |
| RF: | Dr. A.I. Kostenko, Head of Laboratory<br>D.V. Efremov Scientific Research<br>Institute of Electrophysical Apparatus<br>Petersburg   |      | Dr. J.V. Minervini, Associate Head<br>Fusion Technology & Engineering Division<br>Leader, Superconducting Magnet<br>Developing Group<br>Massachusetts Institute of Technology |
|     | Dr. G.V. Tzokhachev, Head of Department<br>D.V. Efremov Scientific Research<br>Institute of Electrophysical Apparatus<br>Petersburg |      | Dr. R.P. Reed<br>Cryogenic Materials, Inc.  |
|     | Dr. A.K. Shikov, All Union Scientific<br>Research Institute of Inorganic Materials<br>Moscow  | JCT: | Dr. M. Huguet, JET,<br>ITER Deputy Director, Naka   |
|     | Dr. V.E. Sytnikov, Chief of Department<br>All Union Research Institute of<br>Cable Industry<br>Moscow                               |      | Dr. B.J. Green (as Meeting Secretary), JET  |
|     |   |      | Dr. R.J. Thome (as Dr. Huguet's Technical<br>Assistant), Head, Technology & Engineering<br>Division, Massachusetts Institute of<br>Technology                                 |
|     |   |      | Dr. K. Okuno (as Technical Assistant)<br>JAERI, Naka  |

This activity emphasized that considerable work must be done with limited resources, in a limited period of time. In particular, a model superconducting coil programme is being planned which calls for the manufacture of scalable model (superconducting) coils and their testing as part of the EDA.

The collaborative work arrangements involved to date appear to be satisfactory but the arrangements for the task sharing of major activities (e.g. coil fabrication and testing) will have to be established with considerable care.

P.-H. Rebut attended the last day and a half of the meeting and presented his views on the overall ITER design to the participants. This interaction was particularly useful for highlighting several design integration problems.

## **ABOUT THE ITER EDA NEWSLETTER**

Many people around the world involved in nuclear fusion research or having some interest in this matter, may recall that during the ITER Conceptual Design Activities (September 1988 - December 1990) a monthly publication of the ITER Newsletter had been arranged by the staff of the ITER Secretariat in Vienna in co-operation with the International Atomic Energy Agency. This publication continued also through the interim period, although with lower frequency. In total, 32 ITER Newsletters had been published and distributed to some 1500 addressees in many countries, disseminating broad information within the scope of the ITER Agreement and related activities. After the ITER Engineering Design Activities (EDA) Agreement and Protocol 1 had been signed by the four ITER Parties on July 21, 1992 and had entered into force, the ITER Council suggested at its first meeting (Vienna, September 10-11, 1992) that the publication of the ITER Newsletter be continued during the EDA with assistance of the International Atomic Energy Agency. This suggestion was supported by the Agency and subsequently the ITER Office in Vienna assumed its responsibilities for planning and executing activities related to the publication of the Newsletter.

The ITER EDA Newsletter is a monthly publication. Its purpose and editorial policy may be summarized as follows:

- Its purpose is dissemination of broad information and understanding rather than being an official record.
- It shall include information not only on the activities within the scope of the ITER EDA Agreement and Protocol 1, but also on any other activities that materially affect ITER.
- Articles shall not be restricted to technical facts about ITER but shall also depict the personal and institutional involvements in this international co-operation.
- Responsibility for the Newsletter rests with the ITER Council, acting through its Chairman.
- The Newsletter shall be assembled by the ITER Office in Vienna and edited, printed and distributed by the IAEA.
- Items from the Newsletter may be extracted or reprinted, provided that acknowledgement of the source also appears.

It goes without saying that suggestions on the possible contents of further issues of the ITER EDA Newsletter are always welcome. Articles and other inputs to be considered for inclusion in the Newsletter should be submitted to B. Kouvochinnikov, ITER Office in Vienna, IAEA, Wagramerstrasse 5, P.O. Box 100, A-1400 Vienna, Austria, or Facsimile: 0043-1-237762.

## **NEWS IN BRIEF**

A Relocation Service has been established at the ITER Co-Centre Garching. This Service will help in assisting the staff in finding housing, etc. Of course, this Service is also available for inquiries, and every candidate or persons seriously considering a position in the Garching Co-Centre is invited to contact Ms. Hilly Weinfurter (Tel. 060 89 3299 4177 or fax 060 89 3299 4163/5) for information concerning relocation in the Garching area.

## **COMING EVENTS**

ITER Council meets on 15 and 16 December 1992 in Moscow, Russia.

REGRETTABLY THE FOLLOWING MISTAKES WERE MADE IN THIS ISSUE IN LISTING MEMBERS OF TWO ITER BODIES:

1. DR. S. SHIMAMOTO IS NOT A MEMBER OF TAC
2. DR. A. GRABOV WAS OMITTED AS MEMBER OF SWG-2
3. DR. L. GOLUBCHIKOV WAS LISTED TWICE AS MEMBER OF SWG-2

UNFORTUNATELY THESE MISTAKES WERE RECOGNIZED TOO LATE FOR CORRECTION BEFORE PRINTING.

Items to be considered for inclusion in the ITER Newsletter should be submitted to B. Kouvcinikov, ITER Office, IAEA, Wagramerstrasse 5, P.O. Box 100, A-1400 Vienna, Austria, or Facsimile: 43 222 237762 (phone 23606392).

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