

## **ITER state of play**

### **Information note from the Commission Services**

ITER is an experimental device aimed at demonstrating the scientific and technological feasibility of fusion energy. It is being constructed in Europe (St Paul-lez-Durance, France) under an International Agreement with six other Parties (China, India, Japan, Korea, Russia and the USA). As the host of the facility, Europe is the major contributor by funding around 45% of the cost of construction. In July 2010, the Council capped the European contribution to the construction of ITER at €6.6 billion (in 2008 value).

### **ITER state of play**

Major milestones have been achieved during the last years for ITER, such as the handover of the ITER headquarters to the ITER Organisation (IO) that was inaugurated by Commissioner Günther Oettinger and Ms Geneviève Fioraso, French Minister of Higher Education and Research, on Thursday 17 January 2013. The Headquarters is one of the contributions from Europe and France to the ITER project.

Moreover, the works for the Tokamak Pit (the hole hosting the concrete foundation and the seismic pads that will support the tokamak building) have been completed; the construction of the concrete basement is on-going and two major contracts for the construction of the tokamak complex have been awarded. Also, several key components are being manufactured by the industries of the ITER Parties, such as the vacuum vessel and the magnets needed for the ITER project. In addition, the first test convoy for heavy components started to run on 16 September and reached the ITER site on 20 September. Following the licencing process for nuclear installation in France, the French Republic has issued the Decree authorising the installation of the ITER nuclear facility in Cadarache.

Last 6 September, at the initiative of Commissioner Oettinger, the ITER Parties held a Ministerial-level meeting of the ITER Council. At this meeting the Ministerial Representatives, who last met in 2006, discussed the progress, challenges and way forward of the project and reiterated their support for the successful completion of ITER.

Nevertheless, concerns exist on the progress of the project as regards cost and schedule. For this reason, the ITER Council at its November 2013 meeting requested a series of actions as part of the overall effort to improve schedule implementation and project performance:

- finalizing the analysis of root causes of inefficiencies by issuing a comprehensive action plan;
- providing a report with the overall status of design maturity of the different components – a pre-condition for effectively defining the exact scope of the project and proceeding towards a full construction phase;
- the revision of the schedule for the Construction phase of the project, indispensable in order to correctly monitor performance and prevent unnecessary pressure to define overoptimistic implementation schedules.

Moreover, the ITER Council called for decisive action in addressing the findings of the biannual ITER Organization Management Assessment, which put forward a series of recommendations to enhance the project's management, organization and governance structure. The action plans tackling these issues will be reviewed and endorsed by the ITER Council at an extraordinary meeting to be held in February 2014.

Last but not least, the Commission has consistently pointed out to the ITER governing bodies that the budget set by the EU Council for Europe's contribution to the construction phase of the project must be strictly respected (€ 6.6 billion in 2008 value).

### **Developments on the European Joint Undertaking for the development of Fusion Energy (Fusion for Energy - F4E)**

Following the retirement of the Director of Fusion for Energy (F4E), the Governing Board of Fusion for Energy appointed Dr Henrik Bindslev as the new Director of F4E. Dr. Henrik Bindslev took up his position on 1 January 2013.

F4E is delivering Europe's contribution to ITER and by the end of 2012 had awarded contracts for an amount of €1.8 billion, representing around 40% of the procurements needed to deliver the European contribution to ITER.

In June 2013, F4E awarded the largest contract ever: the contract for the supply and installation of the mechanical, heating, ventilation and air conditioning, electrical and handling equipment for the Tokamak complex (3 buildings) and surrounding buildings (8 buildings) for a value of more than € 500 million. Moreover, a number of initiatives have been put in place at F4E to improve its project management system, based on internal and external performance assessments and to seek further measures to mitigate the costs risks.

At the end of 2013, Deloitte has delivered the second independent annual assessment of F4E activities which concludes that F4E's contribution to the ITER Project is progressing reasonably well in general terms, bearing in mind that F4E's performance depends to a large degree on the information and input received from the ITER Organization. At the same time, F4E has issued its second report to the Council on the progress of the implementation of their cost containment and savings plan, the performance and management of F4E and the fulfilment of scheduled activities. Both documents were requested by the Council of the EU in July 2010 and have been transmitted recently to the Council and to the European Parliament.