

## **European Technological Effort in Preparation of ITER Construction**

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Europe has started, since the years '80s with the preparatory work done on NET, the Next European Tokamak, the successor of JET, to prepare for the construction of the next generation experiment on the road to the fusion reactor. In 2000, the European Fusion Development Agreement (EFDA) has been signed by sixteen countries, including Switzerland, not a member of the Union. Now the signatory countries have increased to twenty-five. A vigorous programme of design and R&D in support of ITER construction has been conducted by EFDA through the coordinated effort of the national institutes and laboratories supported financially, in the framework of the VIth European Framework Research Programme (2002-2006), by contracts of association with EURATOM. In the last three years, with an expenditure of 160 M€, the accent has been particularly put on the preparation of the industrial manufacturing activities of components and systems for ITER. Prototypes and manufacturing methods have been developed in all the main critical areas of machine construction, with the objective of providing sound and effective solutions: vacuum vessel, toroidal field coils, poloidal field coils, remote handling equipment, plasma facing components and divertor components, electrical power supplies, generators and power supplies for the Heating and Current Drive Systems and other minor subsystems.

Europe feels to be ready to host ITER site and to provide adequate support and guidance for the success of construction, wherever needed, to our partners in the ITER collaboration.