



**MEMO**

**Barcelona 19 July 2010**

## **Background information on the Winding Packs contract**

### **What is the scope of the contract?**

Fusion for Energy has signed a contract for the supply of 10 winding packs for the ITER Toroidal Field (TF) Coils. Europe will manufacture 10 of the 19 TF Coils for ITER, including a spare one, while Japan is responsible to produce the remaining nine. The signature of the contract is a significant step for the ITER project and an impressive technological milestone given the fact that winding packs of this shape and size have never been manufactured before.

### **What is the duration of the contract?**

The planned duration of the contract is 7 years.

### **What is the value of the contract?**

The overall value of the contract will be 156 million Euros.

### **To whom is the contract awarded?**

The contract is awarded to a European consortium of companies bringing together: Iberdrola Ingeniería y Construcción SAU, ASG Superconductors SpA and Elytt Energy SL.



IBERDROLA Engineering and Construction is one of the principal energy engineering companies in the world with projects in more than 30 countries, branches and subsidiaries in 24 other countries and a portfolio of projects that at the end of 2009 surpassed 2.5 billion Euros with an inter-annual growth of 10%. Its increased activity in recent years is the result of the Company's change in strategy, begun in 2004 when it directed its activity at engineering and construction, principally of electric installations for generation, distribution and control. Likewise, it executes important projects throughout the world in the nuclear and renewable energies sectors with a high component of R&D.

In the frame of the contract, Iberdrola Engineering and Construction will be responsible for the project management, engineering, control and quality of the products. More specifically, it will take responsibility for the definition of the Quality Assurance (QA) and Quality Control (QC) programmes.

Iberdrola Engineering will also coordinate the engineering activities, approve all the documentation that will be sent to F4E and review all the documentation that will be generated by the consortium. Finally, it will be responsible for developing the technical engineering which will not be associated directly with the superconductors.

**Website:** [www.iberdrolaingenieria.com](http://www.iberdrolaingenieria.com)

**Employees:** 2.400

**Address:** Ribera de Axpe, 48950 Erandio, Spain



Elytt Energy is a leading Spanish SME with a business track record on the calculation, design and manufacturing of normal conducting and superconducting magnets for particle accelerators, power electronics, radio frequency devices and particle sources. Elytt is involved in high end technology projects developed by ITER, F4E, CERN, GSI, DESY, Jülich, RAL, CIEMAT and ESS Bilbao among others.

The company is also involved in the development of products for kinetic energy storage (flywheels) and linear generators for wave energy converters.

In the frame of the contract Elytt will be responsible for the definition of the conductor insulation and double pancakes VPI process together with the related manufacturing tooling. Elytt will also be responsible for the manufacturing process definition, tooling manufacturing and manufacturing of the Helium inlet, the electrical terminators and joints of the winding packs.

**Website:** [www.elytt.com](http://www.elytt.com)

**Employees:** 22

**Address:** Polígono Industrial Bekea Nave 2, 48960 Galdakao, Spain



ASG Superconductors SpA, is an Italian company affiliated to Malacalza, manufactures conventional magnets and superconductors employed in research of high energy physics, thermonuclear fusion, optimization of power grids and medical applications. The company has achieved international status for its expertise in designing, manufacturing and testing superconducting magnetic systems. ASG Superconductors has a large record of international collaboration with leading companies in the industry and top scientific institutes and research centers.

In the frame of the contract, ASG Superconductors will lead all technological, scientific and manufacturing choices linked to the production envisaged by the contract. ASG Superconductors will also be responsible for engineering and manufacturing of all double pancakes and winding packs.

**Website:** [www.as-g.it](http://www.as-g.it)

**Employees:** 100

**Address:** Corso Perrone 73r, Zip code 16152, Genoa, Italy