



ITER & Expectations for Fusion Research in the Next Quarter Century

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Advantages of fusion

On Earth, fusion could provide:

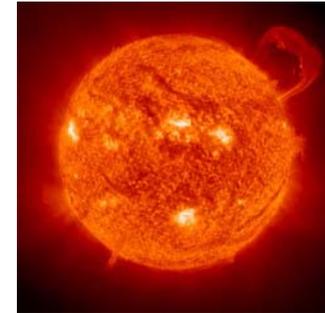
**Essentially limitless fuel, available
around the world**

No greenhouse gases

Intrinsic safety

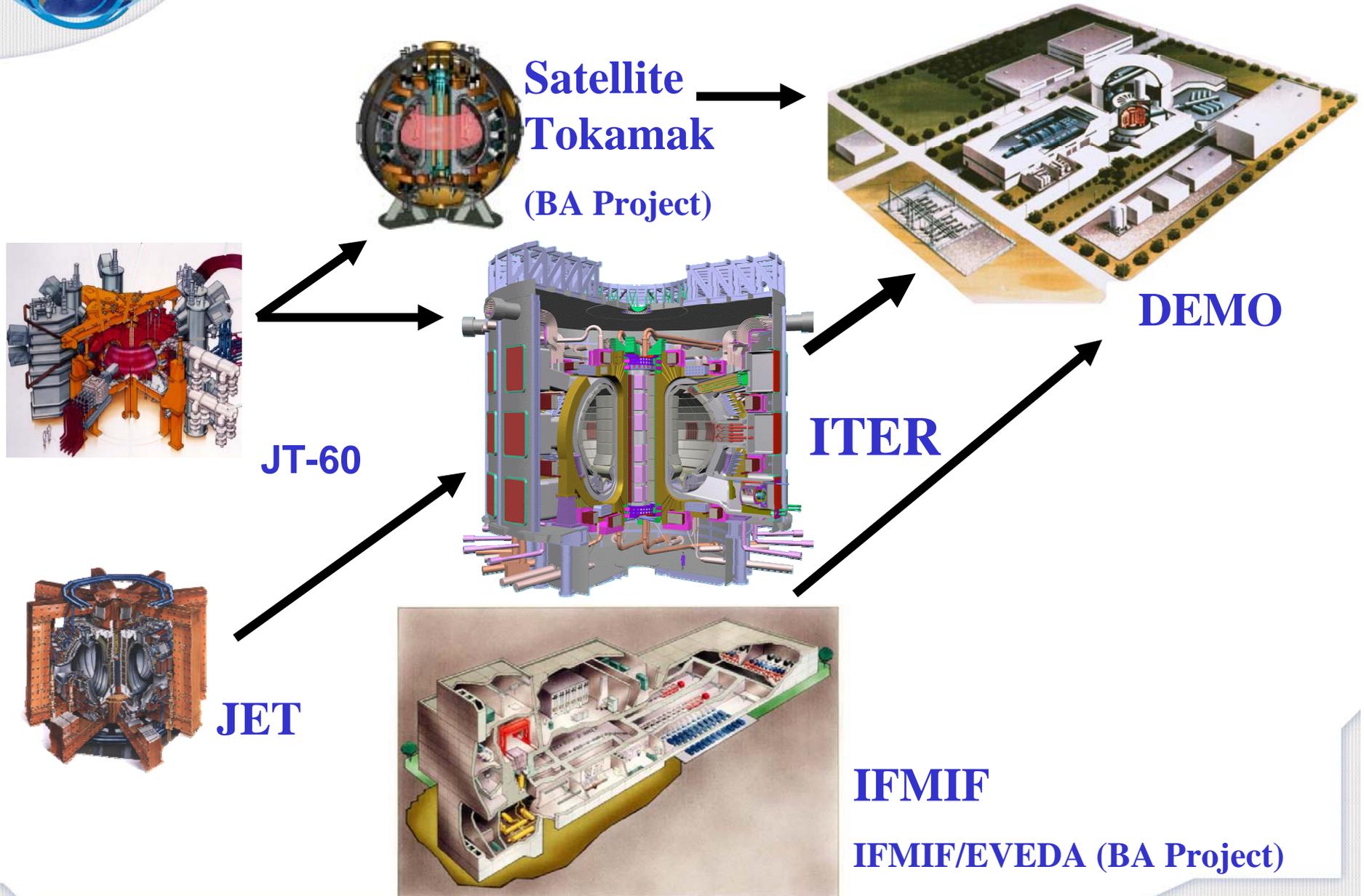
No long-lived radioactive waste

**Suitable for large-scale energy
production**





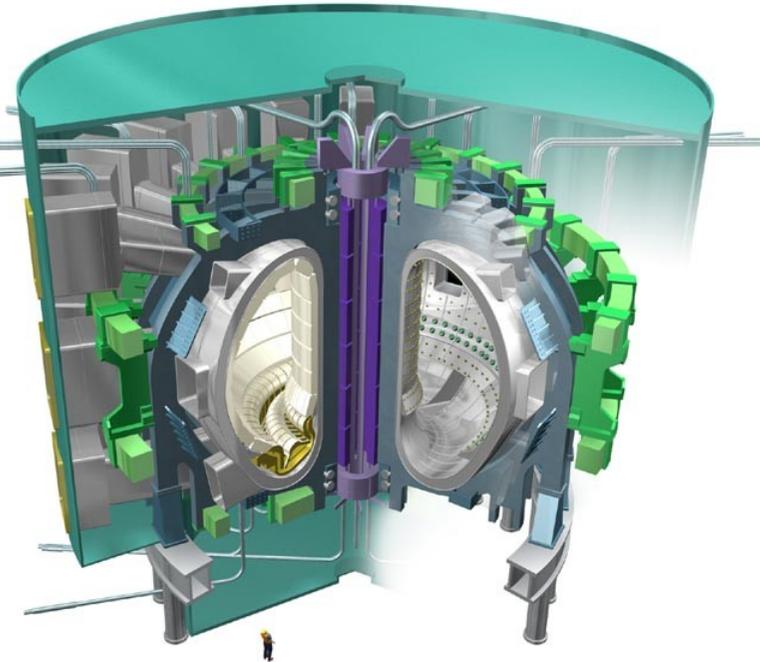
ITER: a necessary step towards fusion power





ITER – Key facts

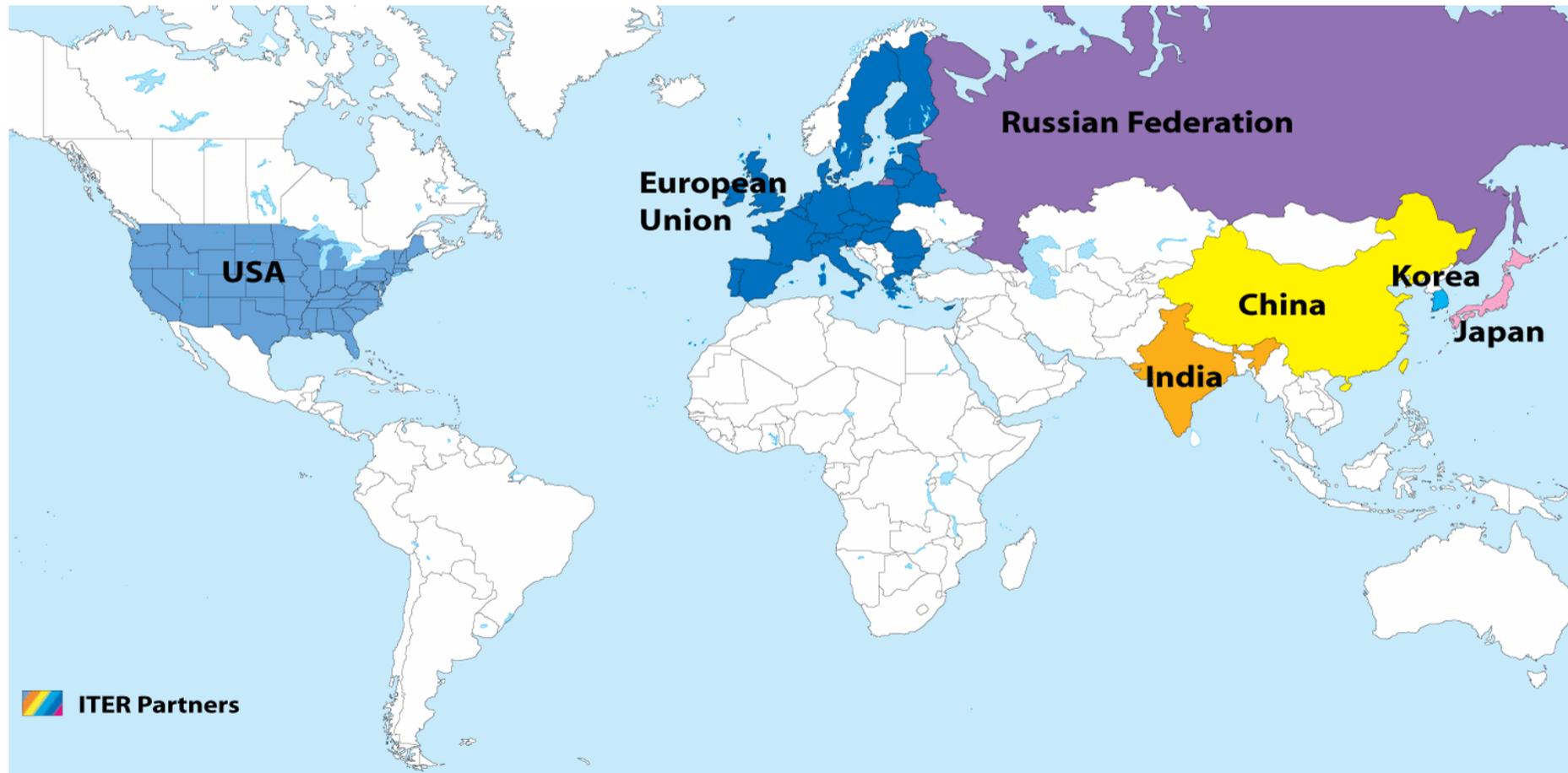
- Objective: to demonstrate the scientific and technological feasibility of fusion power
- Designed to produce 500 MW of fusion power (tenfold the energy input) for an extended period of time
- 10 years construction, 20 years operation
- Cost: 5 billion Euros for construction, and 5 billion for operation and decommissioning
- Parties represent half the world's population





ITER – an International Cooperation...

Seven Parties, representing more than half of the world's population, are involved in the ITER construction





Location: Cadarache, France

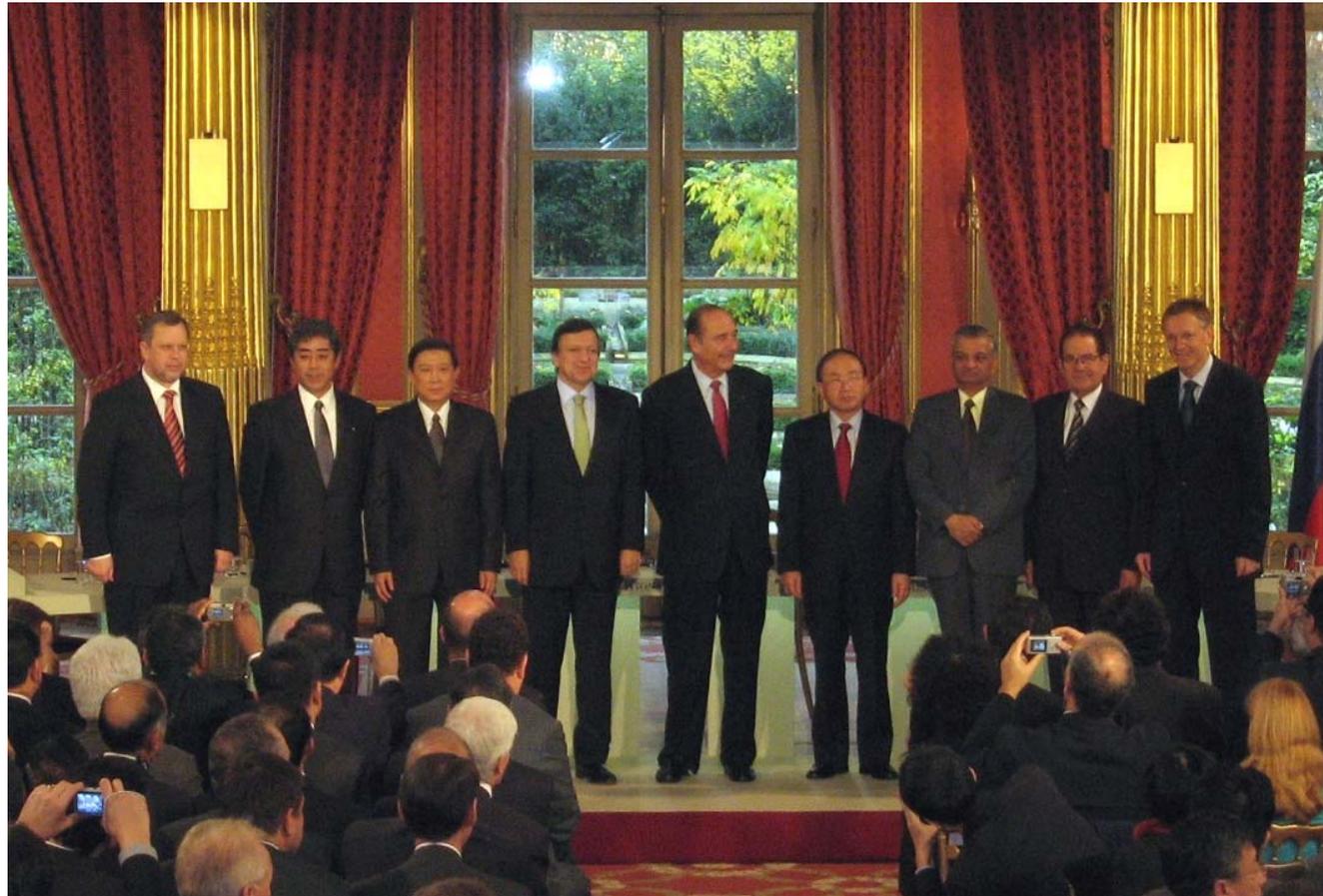


— = Itinerary ITER components





ITER Agreement Signature, Elysée Palace, 21 November 2006



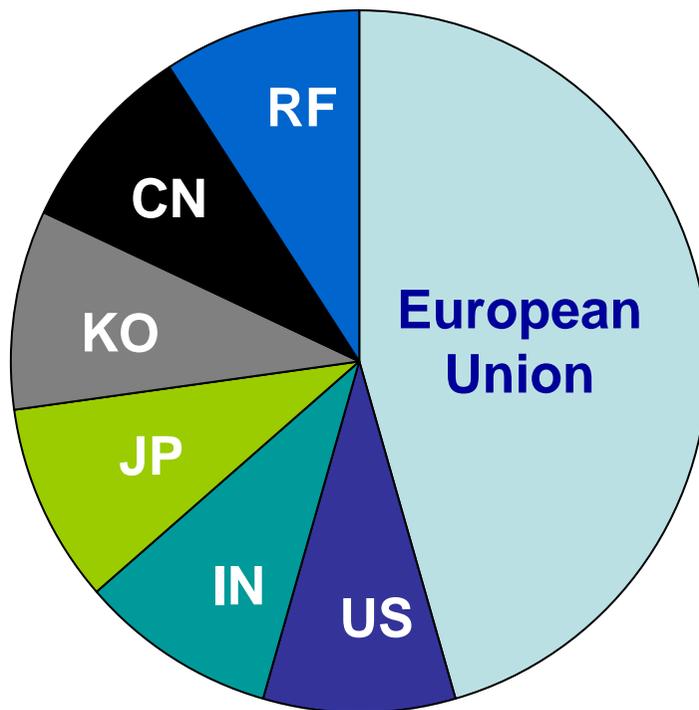
Representatives of the ITER Parties:
From left to right: Russian Federation, Japan, China, with the President of the European Commission and the President of the French Republic, Korea, India, U.S.A, and the EU



Construction (2007-2016) Sharing

Overall sharing:

EU 5/11, other six parties 1/11 each. Overall contingency of 10% of total. Total amount: 3578 kIUA (about 5,079 million Euro in 2007)



Total procurement value : 3021

Staff: 477

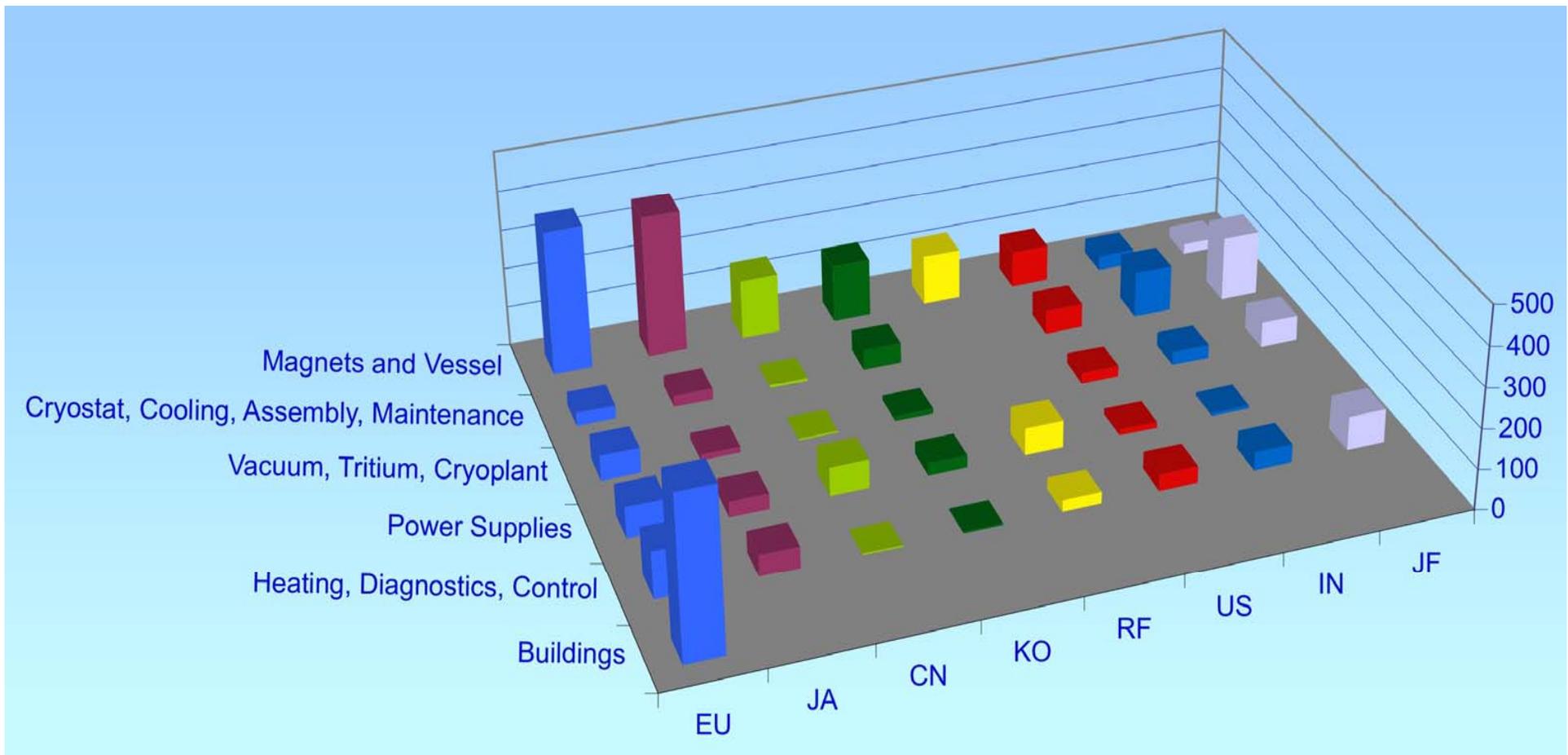
R&D: 80

Total kIUA: 3578



Contributions in kind

A unique feature of ITER is that almost all of the plant components will be fabricated through *in kind* contributions from the Members





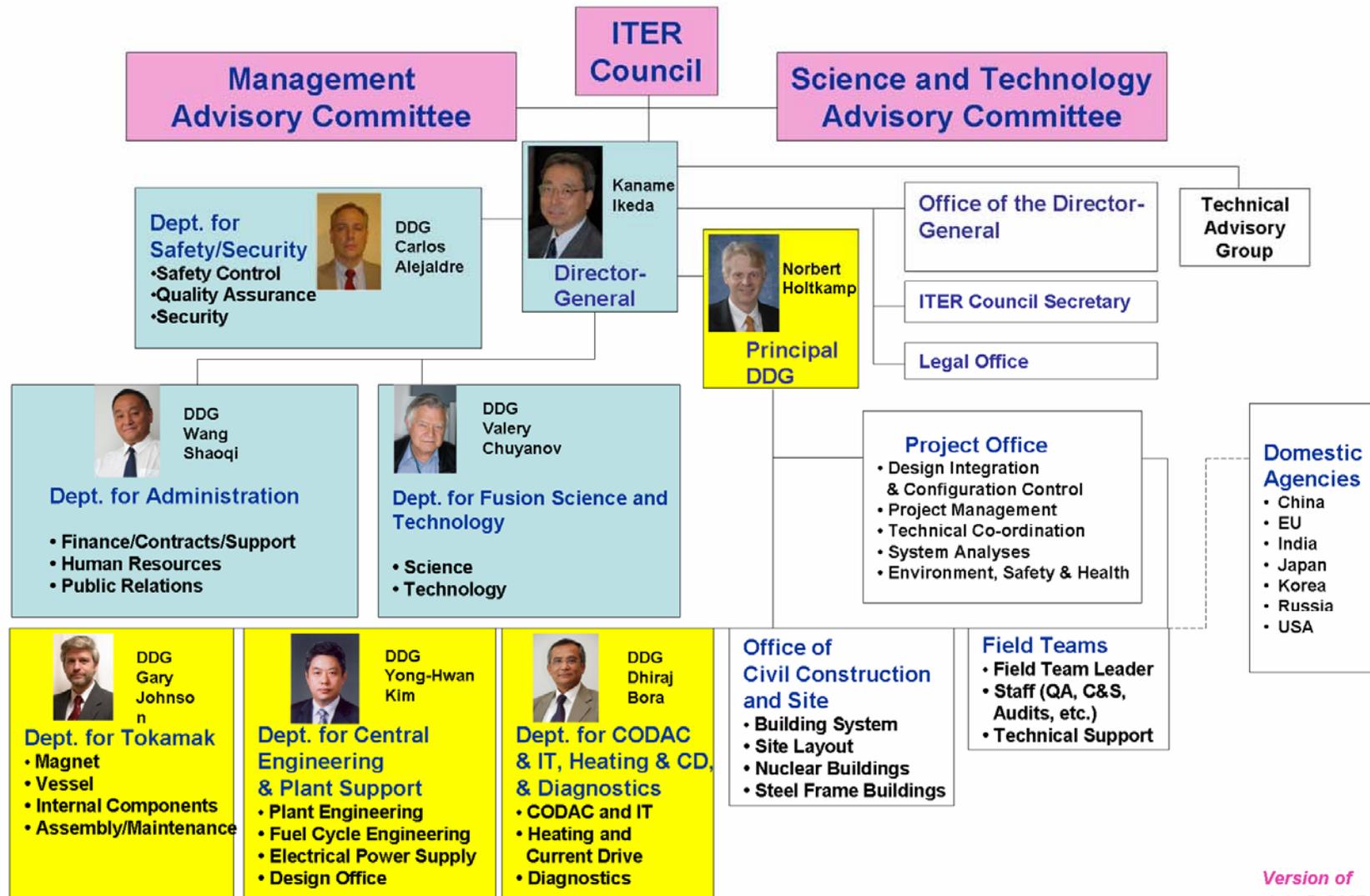
Roles & Responsibilities for Construction

The ITER Organization, all the Parties, and the Fusion Community work together on ITER.

ITER Organization	Seven Members
<ul style="list-style-type: none">• Planning/Design• Integration / QA / Safety / Licensing / Schedule• Installation• Testing + Commissioning• Operation	<ul style="list-style-type: none">• Detailing / Design• Procurement/Fabrication• Delivering• Support installation



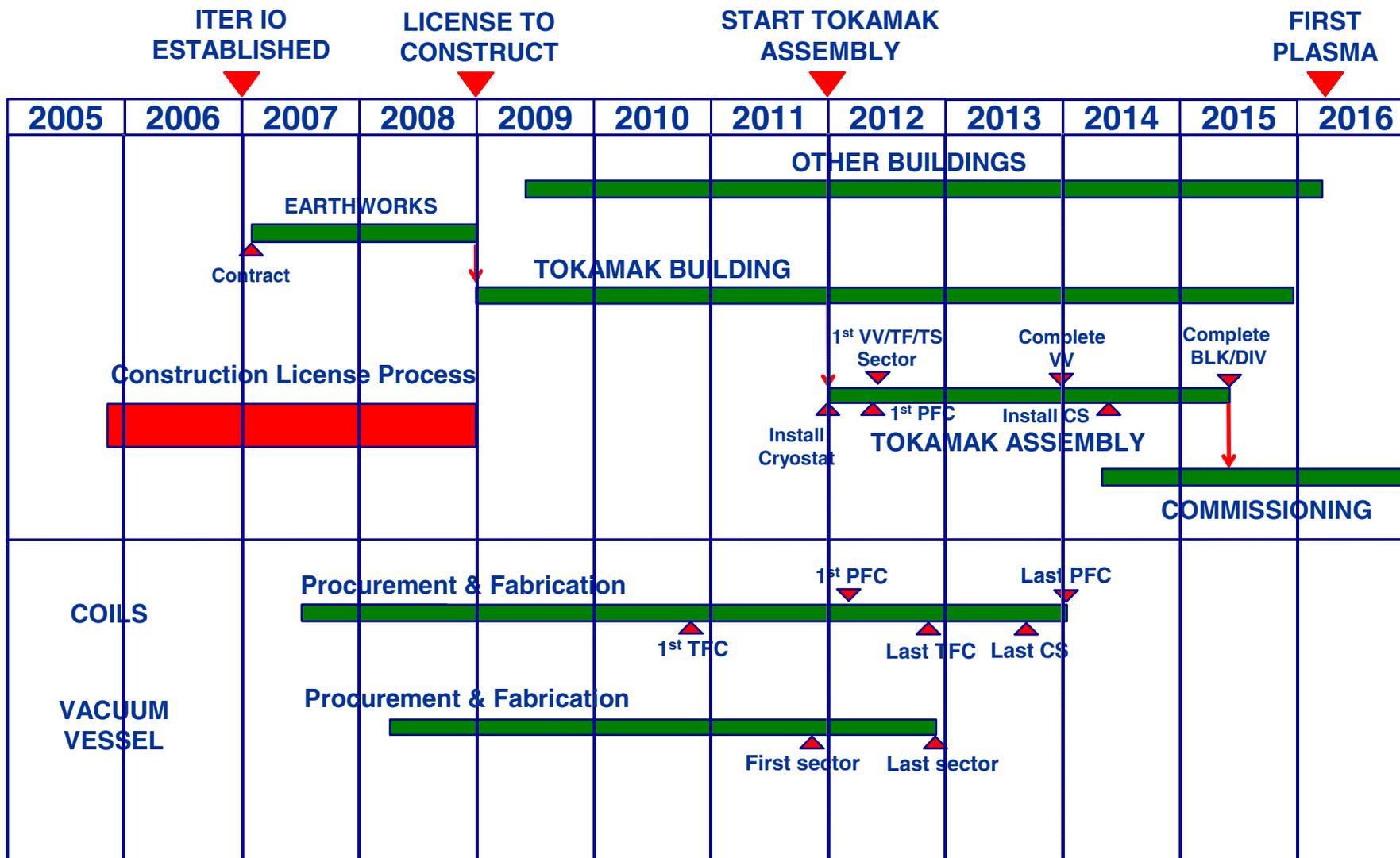
Management Structure of the ITER Organization



Version of
July 5, 2007



Project Schedule





Conclusions

- ITER is one of the most challenging and innovative scientific projects in the world today
- Most of the ITER components will be procured and fabricated through *in kind* contributions, demanding a very high level of international cooperation
- The ITER Organization is building up quickly at Cadarache, with strong support of the ITER Members



Thank you for your attention!