

ITER – A GLOBAL COLLABORATION

ITER's establishment and organisation, comparison to JET, schedule, budget



FUSION ENERGY FOR MANKIND

1958: Atoms for Peace –
worldwide agreement on
the peaceful use of atomic
energy.



ITER – FUSION FOR MANKIND

The idea of the ITER project was outlined in **1985**:

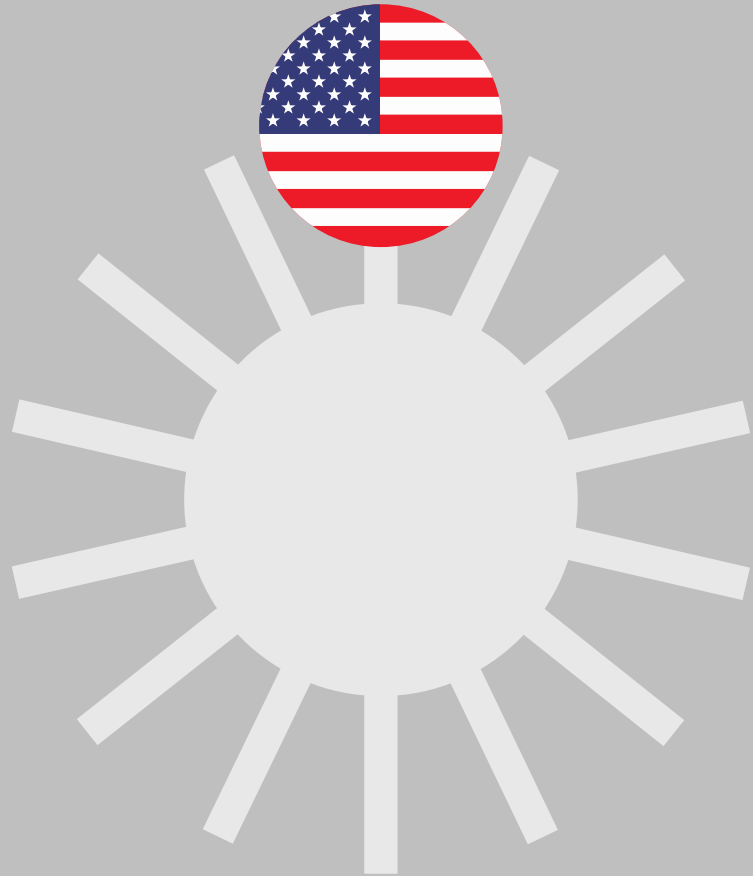
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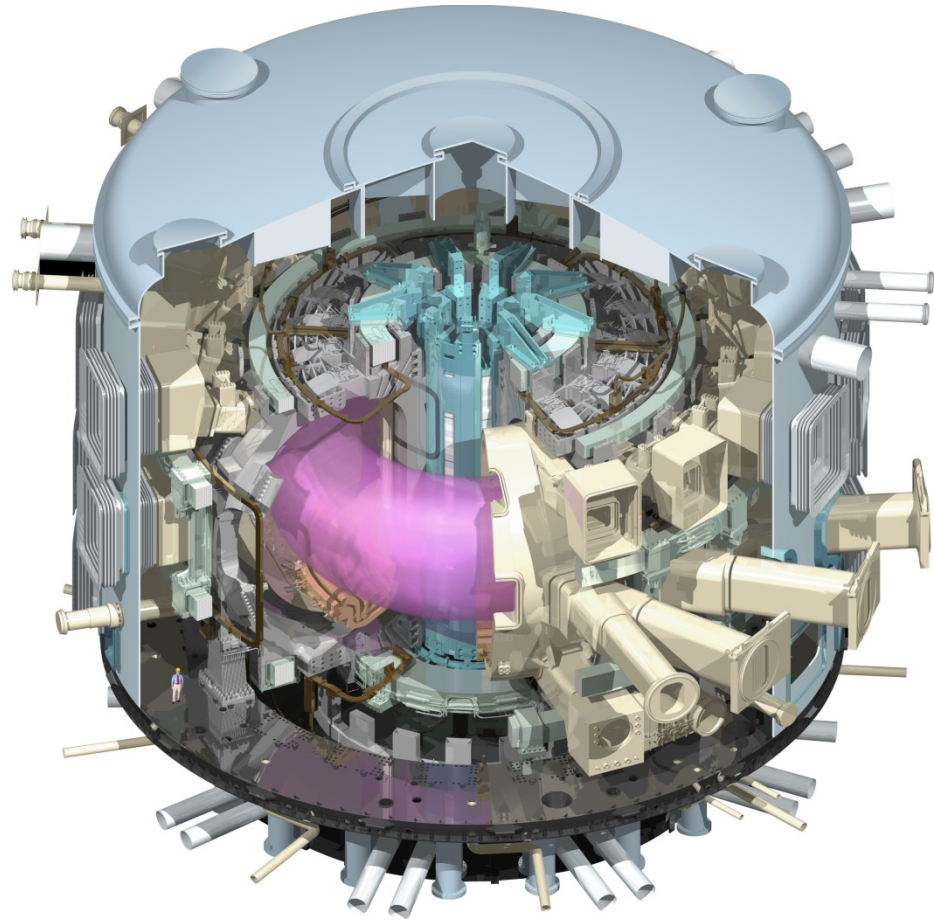
ITER SITE

- 180 hectares of land in St-Paul-lez-Durance, in southern France
- Scientific buildings and facilities are constructed on the approximate size of 60 soccer fields



ITER – SCIENTIFIC GOALS

- to demonstrate the feasibility of fusion as an energy source
- to prove integrated operation of technologies for a fusion power plant
- to test concepts for a tritium breeding module
- to produce 500MW of fusion power, 10 times the input power



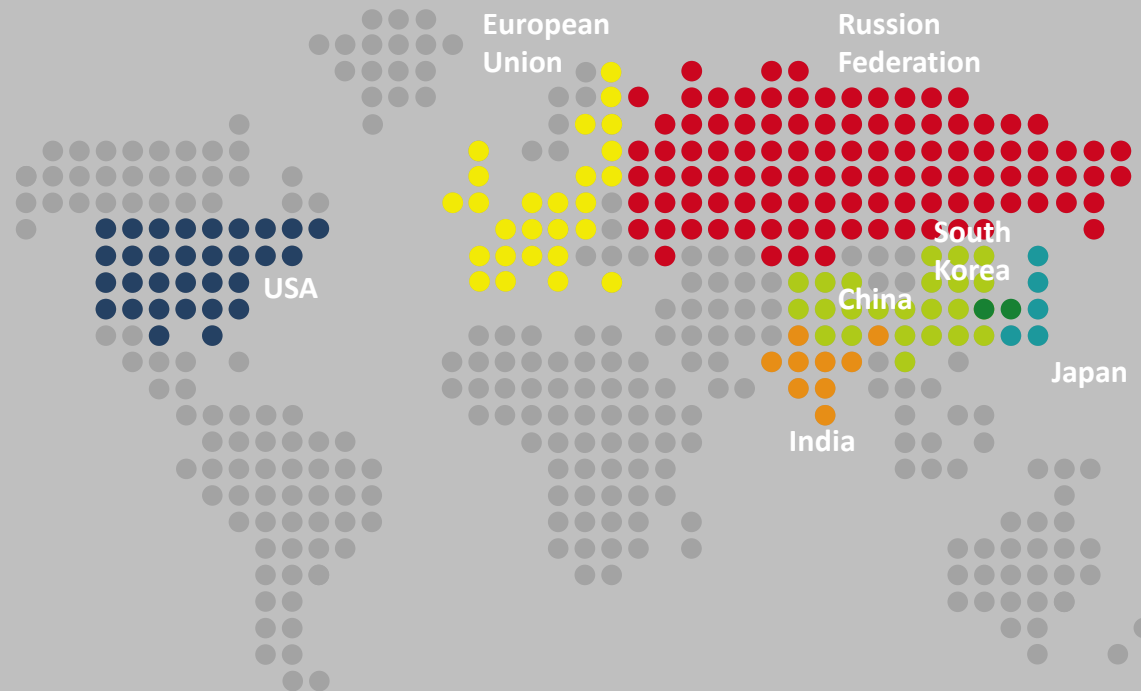
BENEFITS OF ITER

- ITER paves the way to a CO₂-free, sustainable energy source
- ITER benefits from the cultural and disciplinary diversity of its staff
- ITER helps to establish international collaboration



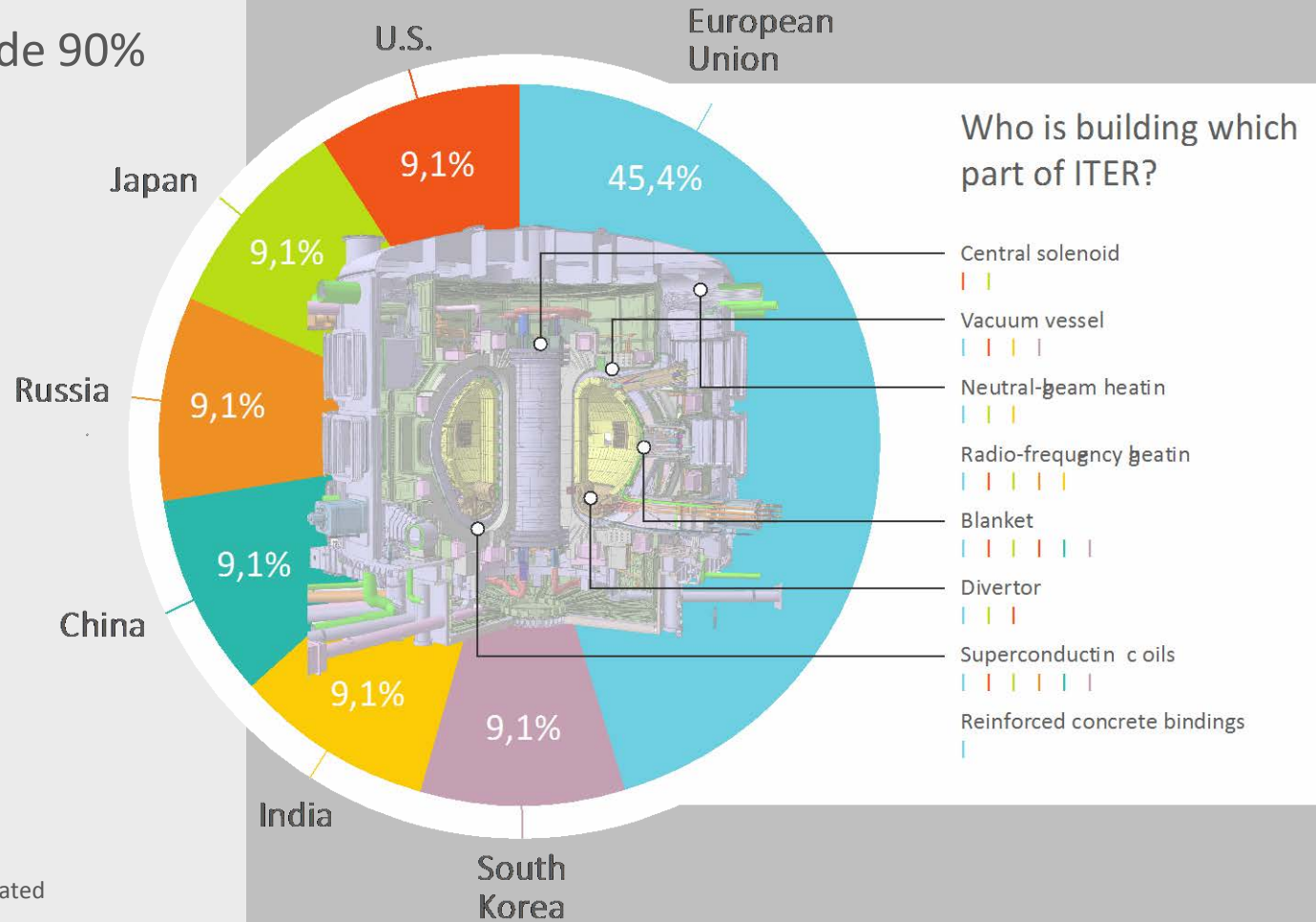
CHALLENGES FOR ITER

- ITER is tackling different safety & industrial standards, employment schemes, measure standards ...
- ITER is challenged by differences in culture and mentality of its staff



ORGANIZATION

ITER parties provide 90% of components.

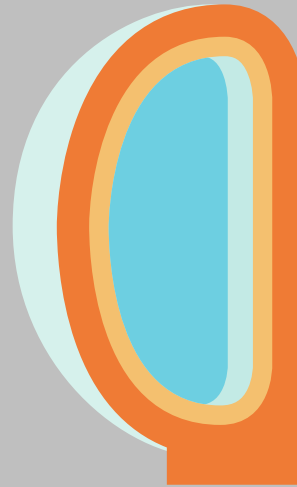


Relative contribution to the estimated \$20-Billion construction costs.

ITER, THE NEW GENERATION



JET



ITER

	JET	ITER
Radius	3 m	6.2 m
Volume	90 m ³	840 m ³
Power factor Q	0.65	10
Fusion Power	16 MW	500 MW

SCHEDULE

- ITER First Plasma will be in December 2025.
- ITER will run experiments with real fusion fuel in the 2030's.



ITER BUDGET

- As the host party, the EU covers about 45% of ITER's costs.

