



Cadarache: a Site for ITER



Lay out

- **ITER:** the right step to be started during the 6th European Research Programme (FP6, 2002-2006)
 - Consensus both at the scientific and political level
- **Cadarache:** well equipped with both fusion and fission nuclear installations
- **European site studies**
 - First phase recently completed
- **Summary**



Existing infrastructure

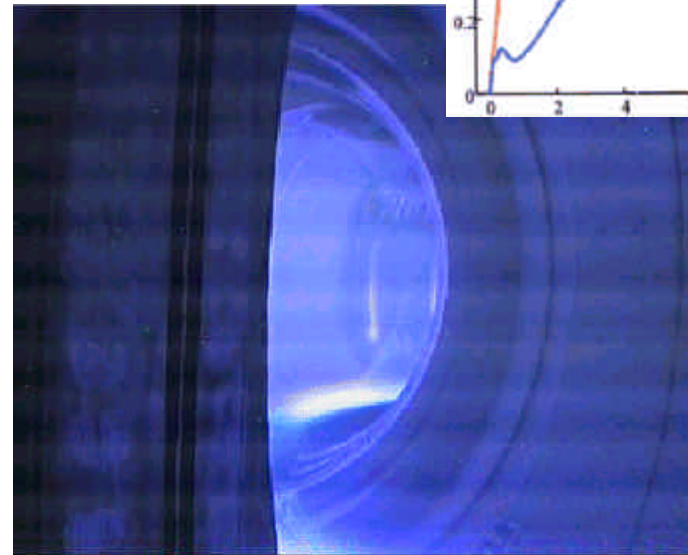
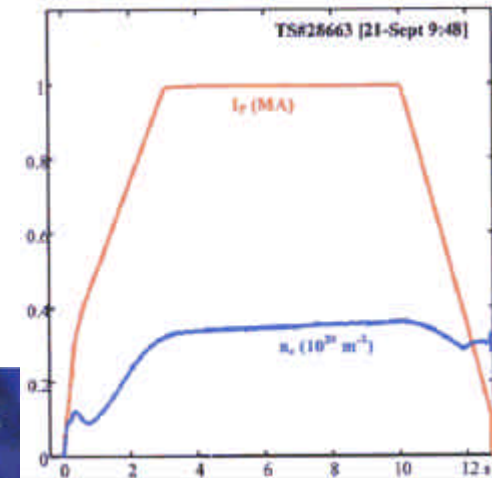
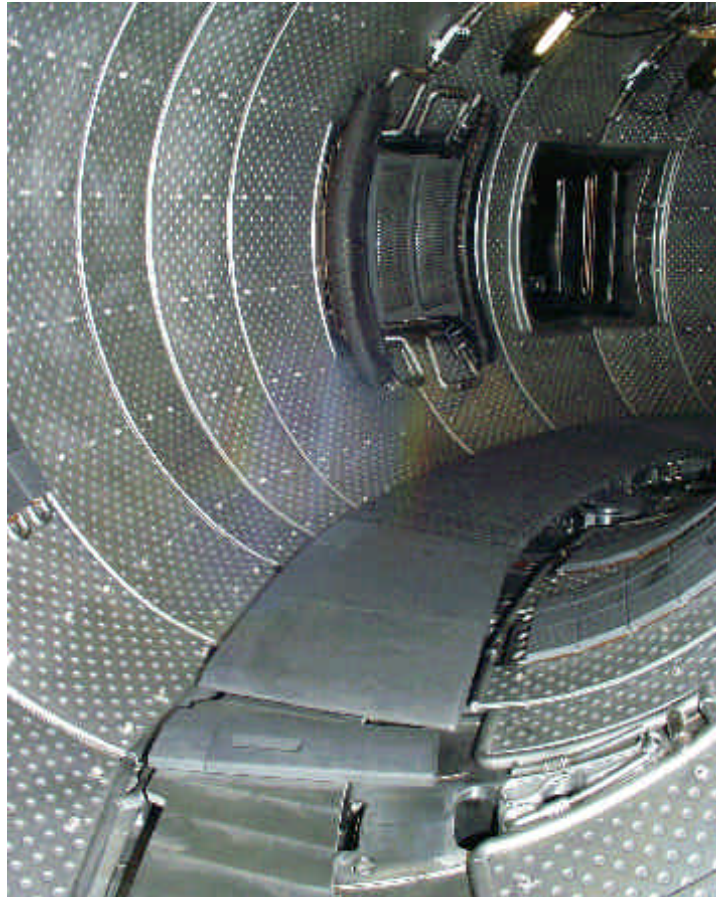
- CEA (16000persons)
 - Complete range of fundamental and applied research
- Cadarache nuclear Centre (4000persons)
 - 18 nuclear installations
 - Strong base for fusion science with TORE-SUPRA (Exp, theory, technology), participation to JET, ITER technologies
- Provence
 - Strong growth area with heavy industry, high tech and universities
 - Wonderful socially

TORE SUPRA

The largest Tokamak with superconductors



TORE SUPRA back into operation in the CIEL configuration



Socio-economic Infrastructure

- In the heart of Provence



Marseille, 800 000 p, 40' to Cadarache

Aix, 134 000 p, 30'

University, festival, hospitals

Manosque, Pertuis, 20 000 p, 10'

- Network of Motorways
- High speed train TGV since June 2001
- Airport (Marseille-Provence, 40')





European ITER Site Studies (EISS)

- EISS (2001, 5 M€)
 - Technical assessment (seismic, electrical and water supplies, transport, costs, etc.)
 - Licensing procedure started
 - Socio-economic studies
 - EISS (2002, ~ 10 M€)
 - Licensing procedure continued
 - ITER/site adaptation studies with CTA
 - Design of infrastructure
- All demands fulfilled, costs 1~2 %, strong support from regional authorities**



Task	Description of the 13 tasks
TR1	Land
TR2	Seismic Issues and External Hazard Safety
TR3	Heat Sink and Water Supply
TR4	Electrical Supply
TR5	Transport and Shipping
SL1	Review of Accidental and Normal Operation Safety Analysis
SL2	Definition of a Quality Assurance Procedure
SL3	Effluents and releases
SL4	Waste Management and Decommissioning
SL5	Tritium Transport and Control
SE1	Socio-economic Infrastructure
GAC1	Cost Estimate
GAC2	EISS Documentation and Synthesis

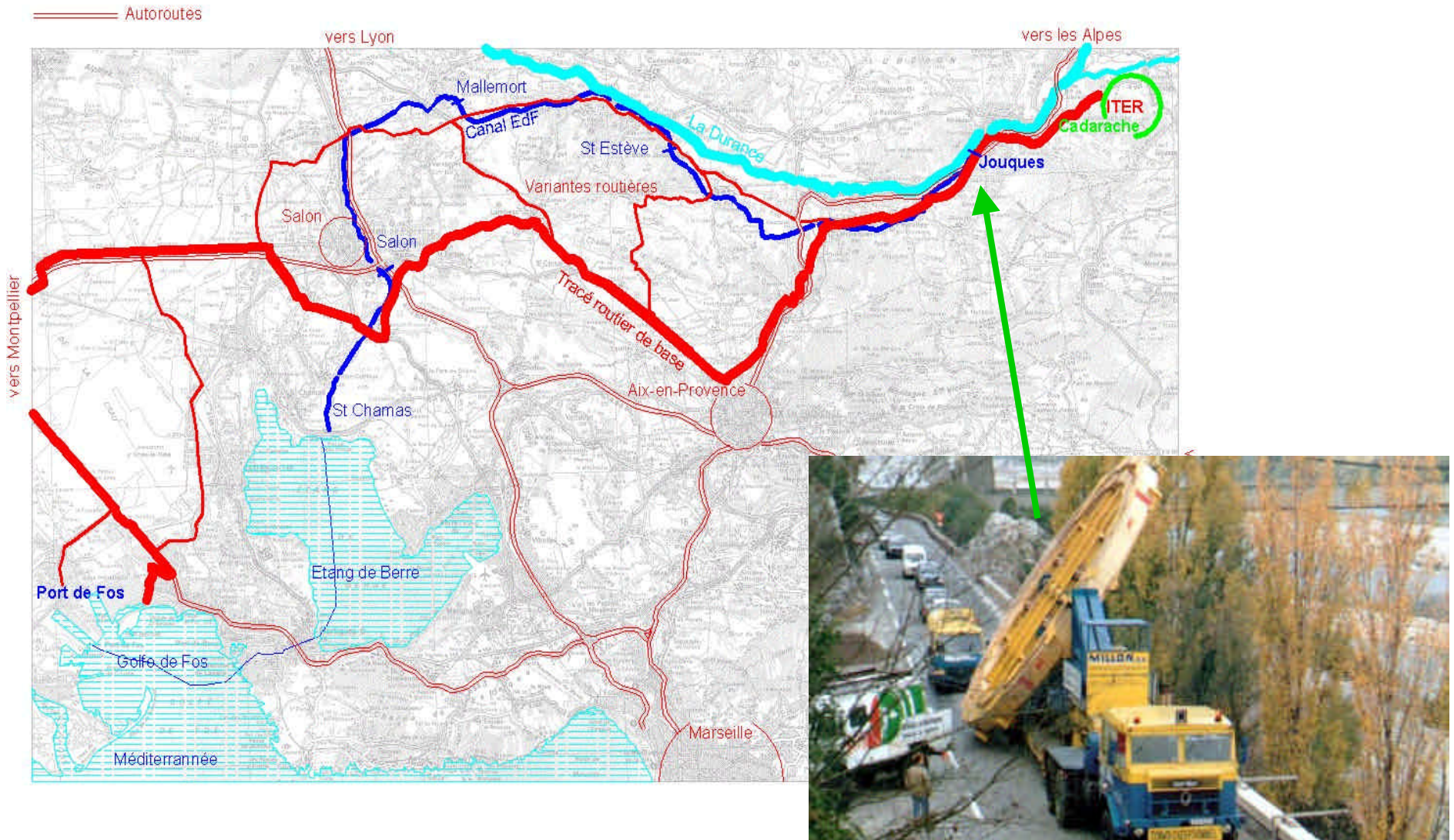
A European site study group is assessing Cadarache as a potential site for ITER.

A first batch of 13 tasks has been completed this summer.

A second batch (Licensing + site design) is foreseen for 2002 – 03

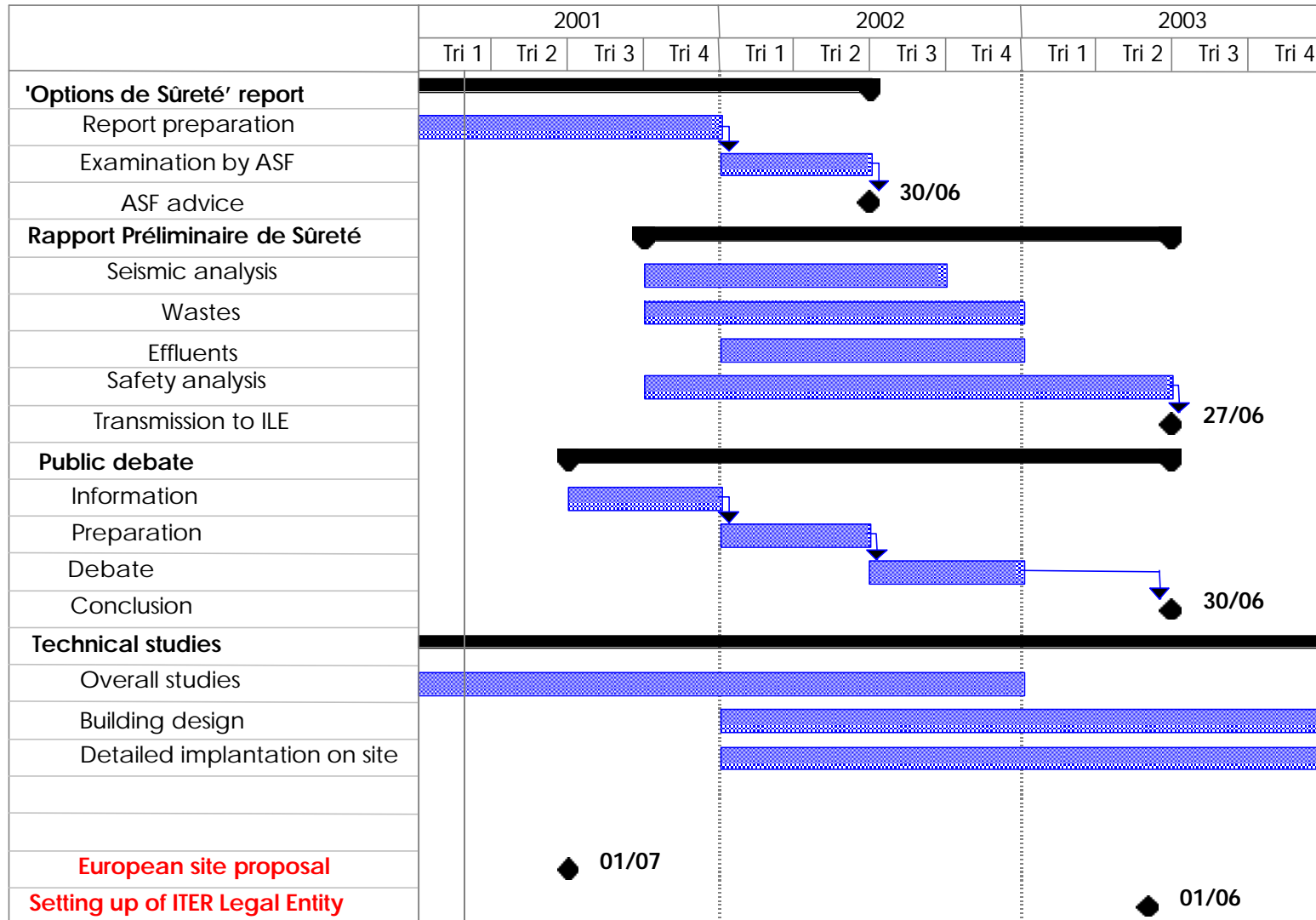
No insurmountable difficulties identified

Transport of large loads



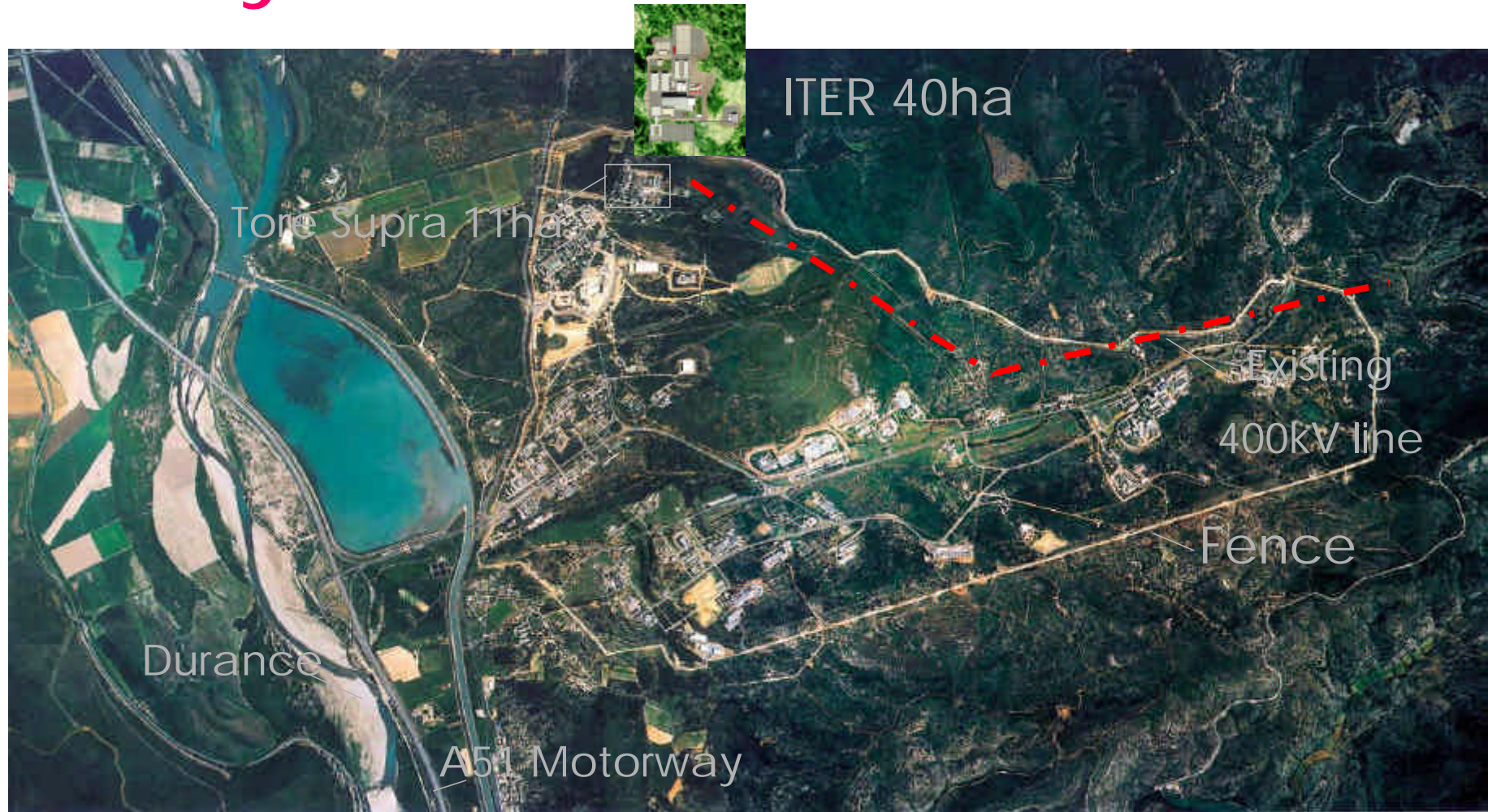


Planning





Layout





ITER, seen from Cadarache castle





SUMMARY

- **Cadarache provides the required nuclear infrastructure including a large fusion centre with experience of international project construction (JET & Tore-Supra)**
- **Cost effectiveness**
 - Electricity, full tendering practice, low site adaptation costs, no extra charge for seismic
- **Wonderfully hospitable and attractive region: top class international participation guaranteed!**



NEXT

- In-depth site studies and licensing are underway. **No show stoppers identified**
- Official European site designation expected in a few months
- We would love to welcome the world fusion community in Provence