

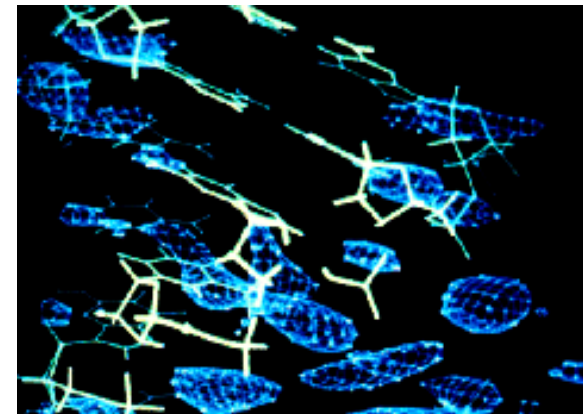
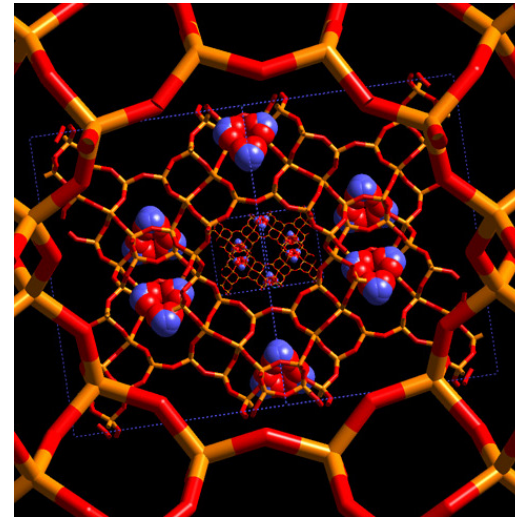
# European Spallation Source

## Videnskabelige og forskningspolitiske perspektiver

Jørgen Kjems  
Medlem af European Strategic  
Forum for Research Infrastructure  
March 2009

# Science Drivers for ESS

- Neutron scattering is a tool to study structure at the atomic level
  - Materials
  - Engineering
  - Soft condensed matter
  - And increasingly into biology



# What is ESFRI?

- A European Strategy Forum on Research Infrastructures
- Launched in April 02
- Brings together representatives of the 25 Member States, 7 Associated States, and one representative of the European Commission (EC)



## **Role of ESFRI**

*(and of its ad-hoc Working Groups)*

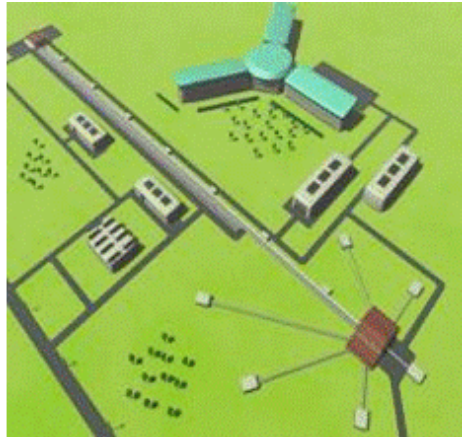
- To foster an “open method of coordination” between different countries
- To discuss the long term vision at European level and to support the development of a European RI policy
- To bring initiatives and projects to a point where decisions by ministers are possible

First roadmap  
in 2006

Update in  
Dec 2008

*A stimulation  
and incubator role*

# Material Sciences



ESS



XFEL



IRUVX

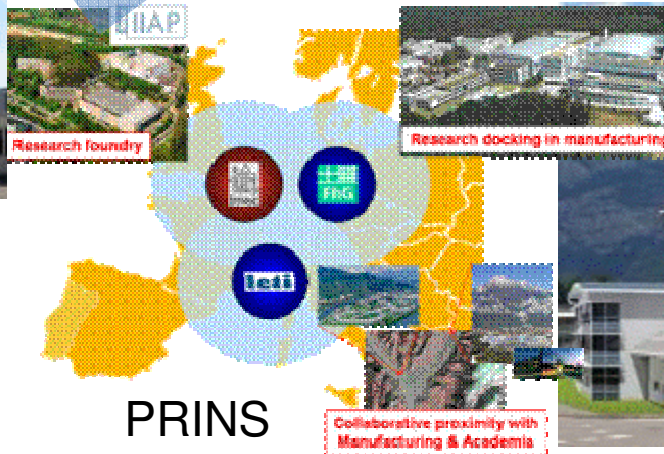
ESRF



ILL



ELI



PRINS

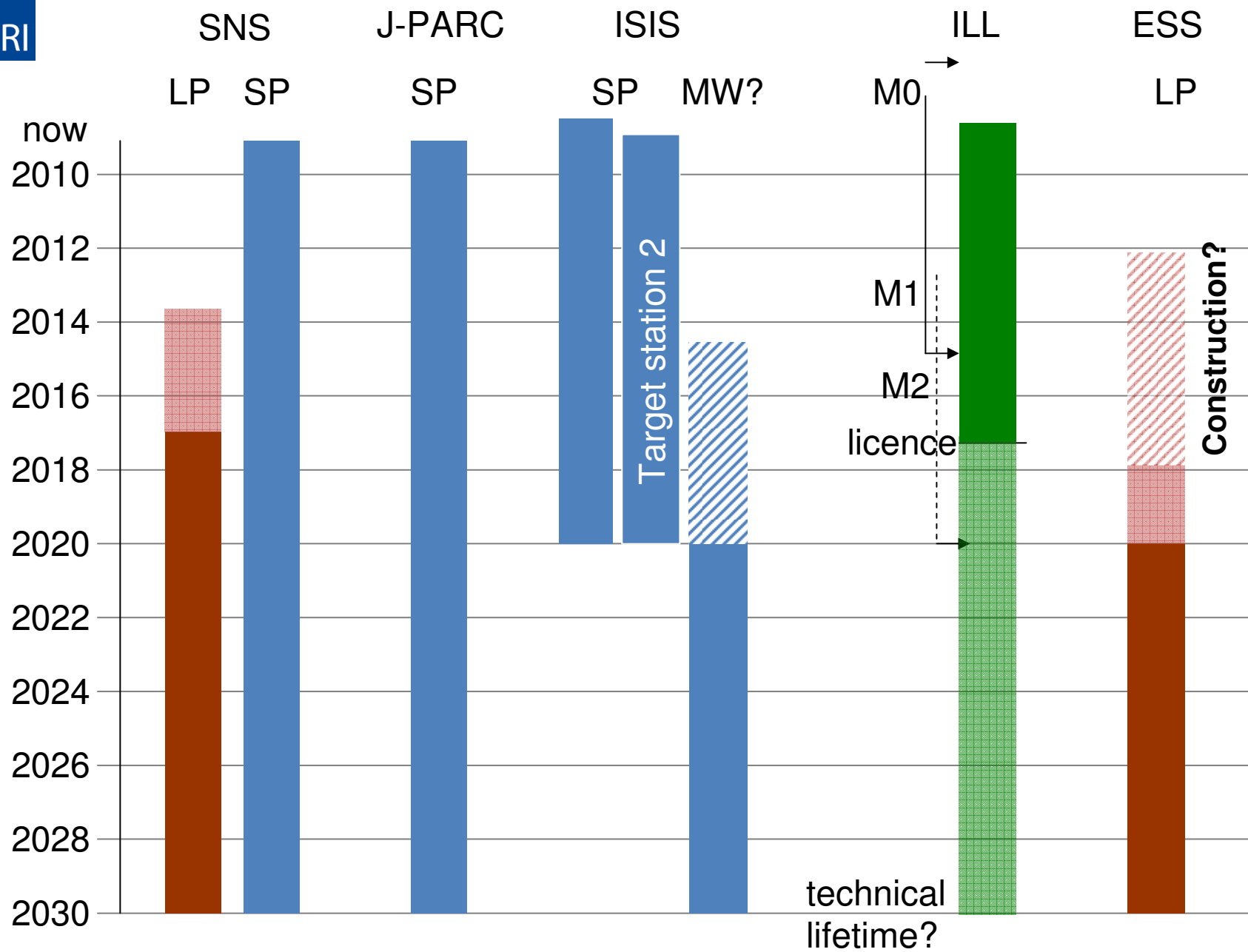


## Global context

- OECD Megascience Forum, Neutron Sources Working Group (1996): looked to construction of advanced neutron sources in each of the three regions
  - Asia/Pacific – J-PARC
  - Europe – ESS ←
  - North America – SNS
- Also refurbishment/upgrading front-line facilities including ILL (Millennium Programme) and ISIS (Target Station 2)

# Recent developments in the US

- US Department of Energy Roadmap “Facilities for the Future of Science”
- Neutron Facilities:
  - SNS 2–4 MW Upgrade
  - SNS 2<sup>nd</sup> Target Station [long-pulse]
- And in the long term, upgrades to the HFIR reactor



## Where to build ESS

Candidate sites:

- Øresunds region
- Hungary
- Spain, Bilbao

ESFRI has developed a procedure:

- independent international assessments
- core group negotiations
- high level political decision

