

The ILL's Millennium Programme


1999 onwards...



It was a Watershed

Let's look at time horizons

The User

 2 - 4 years

The Instrument Builder

 10 -12 years

The Source Constructor

 40 - 50 years

So how do we take decisions?

Let's ask the user community!



So in 1999 5,000 letters were sent out to users



Dirk Dubbers

“No one tells a W3 professor what to do”

Less than 10 replies were received

But that was the start of the Millennium Programme !

Let's concentrate on the forest, the trees and the wood



The Neutron Source

The Instruments

The Science

Reactor Refit
Programme

The Millennium
Programme

User Interface Facilities
Dlab, PSB, FaME

- Was the ILL still fit for purpose? 5-year Conventions were being talked about...
- ISIS – Competitive; Shamelessly building large detectors !
- Get the neutrons from the source to the instruments – guides, focussing monochromators
- Detect what you scatter – large detectors, modernise the instrument suite
- “More than simply neutrons” – the tide was turning
- Demand for User facilities – PSB, FaME, C-lab...
- Demand for Reliability
- Demand for Security – City of Grenoble – Groupe Permanente
- Saint Raymond – ASN “We will shut you down !”
- The Reactor Refit Programme
- EIROforum, the ESFRI Roadmap and EU DG Research - Togetherness
- Pure undiluted pride in the place – but no UK Minister visited during my 7 years

The time was ripe for investment

How much would it cost to rebuild this place?

2B€...?



3B€...?



4B€...?



Investment was called for
1% p.a. is 20-40M€; 2% p.a. is 40-80M€

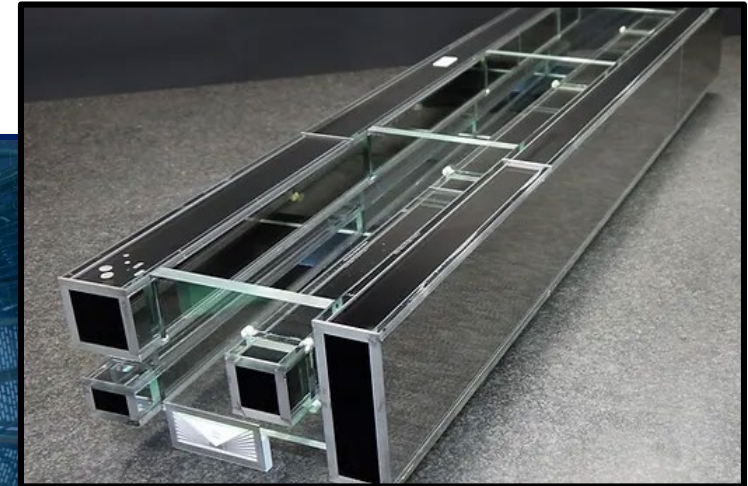
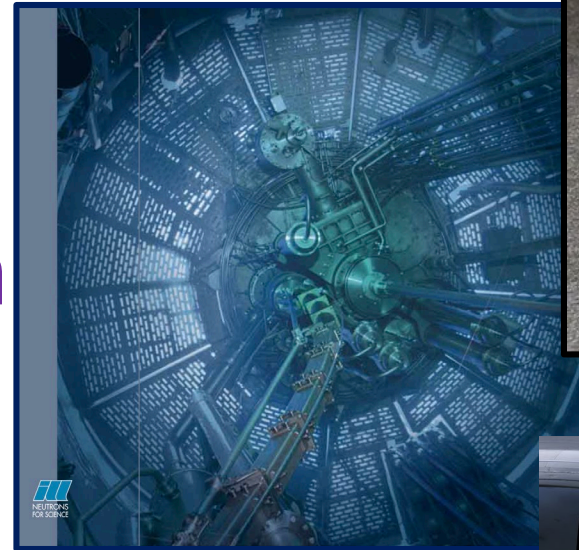
Where would the money come from?

- The UK going back to 33% - David Schildt & EPSRC
- The Associates – If we find money, will you match it?
- Realising assets – eg Uranium in Y10
- Roadshows & More Partners CZ, SE, HU, BE, PL, DK



What was achieved?

- Instruments comprehensively upgraded
- Neutron Transport - beam tubes and guides renewed
- Monochromators/Analysers
- Detectors/Polarisers
- Strengthening the Reactor
- A Long-term strategic plan
- Friendship with ESRF
- Investment in the staff

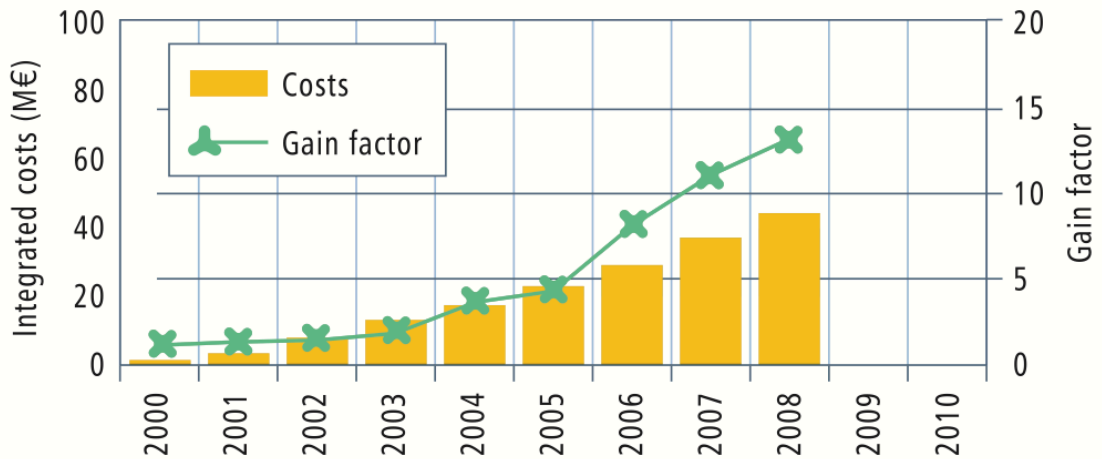


The instruments

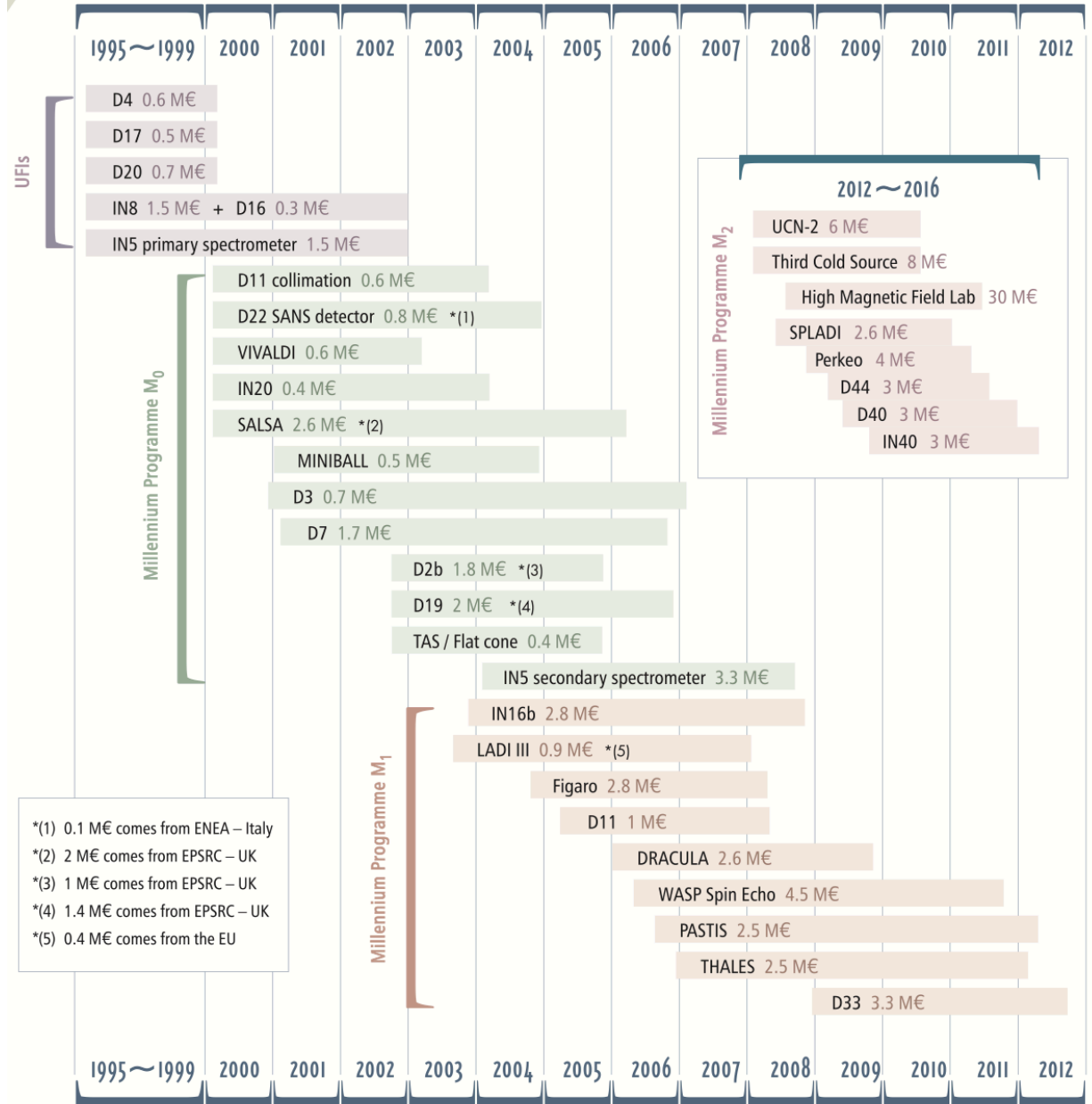
The costs

The payback

Millennium programme M₀



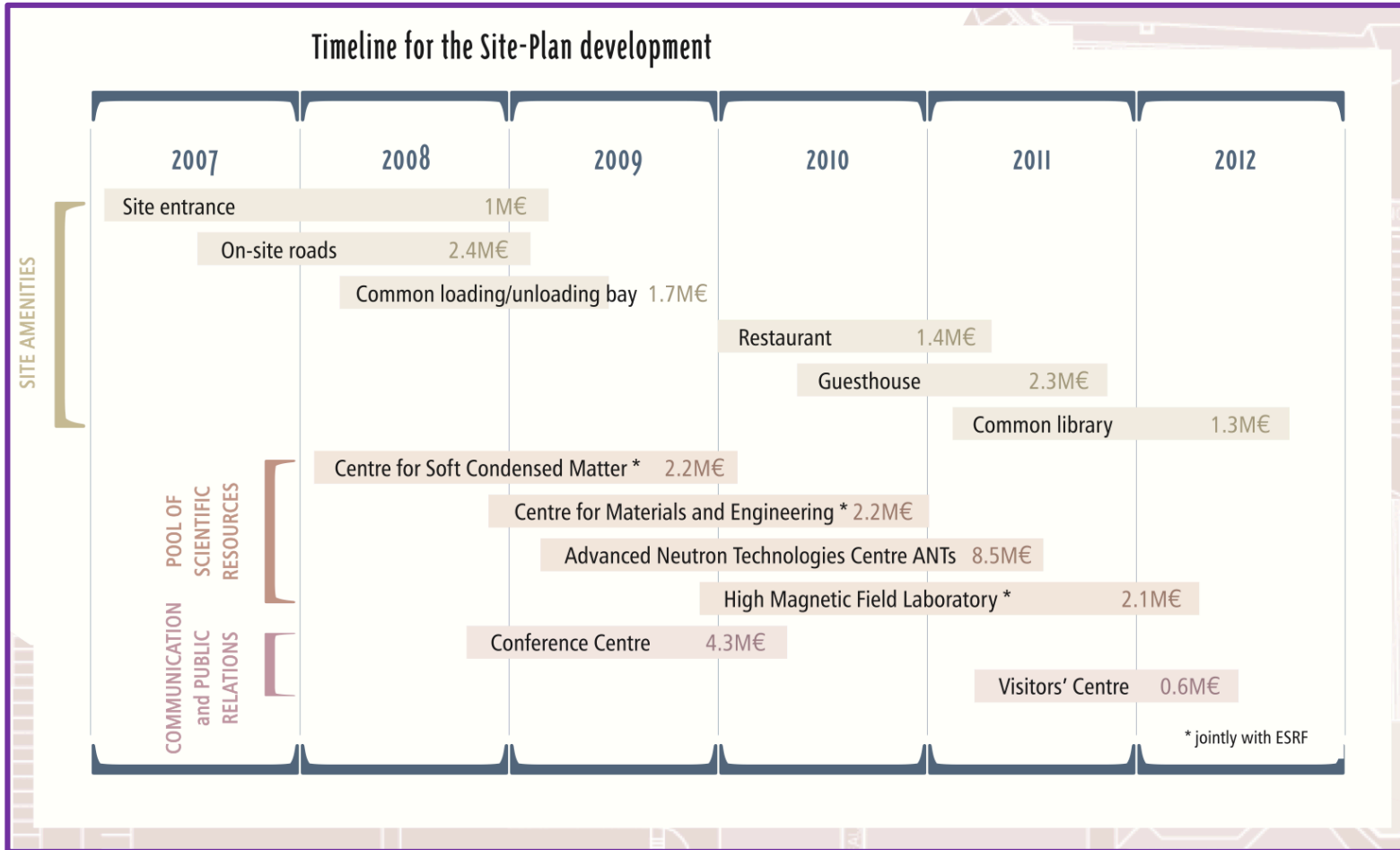
Millennium Programme – instruments and budgets



* (1) 0.1 M€ comes from ENEA – Italy
 * (2) 2 M€ comes from EPSRC – UK
 * (3) 1 M€ comes from EPSRC – UK
 * (4) 1.4 M€ comes from EPSRC – UK
 * (5) 0.4 M€ comes from the EU

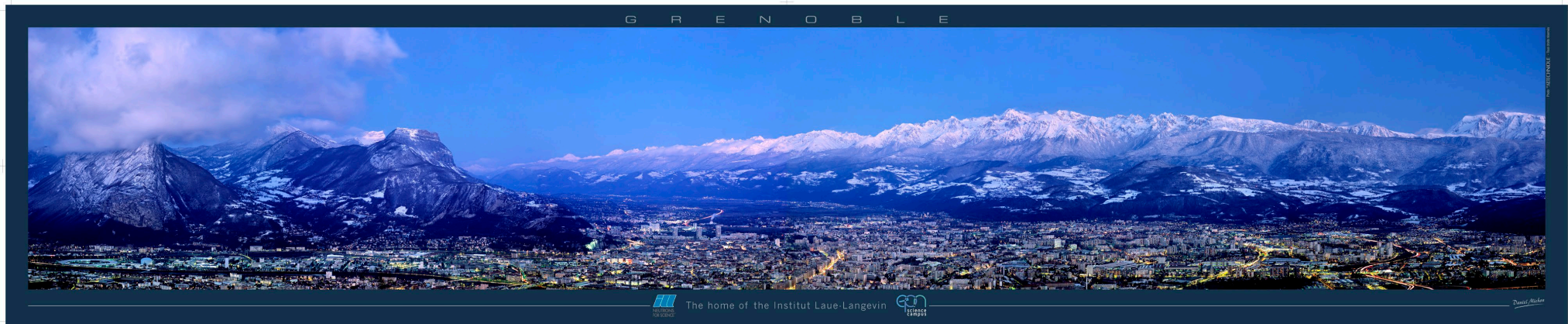
Collaboration with the ESRF

Timeline for the Site-Plan development



What's the Take Home Message?

- This place will never be built again
- It is still the gold standard
- It is the complete neutron source
- Do not think of shutting it down...
 - unless its scientific output becomes uncompetitive
 - unless it becomes unreliable or unsafe
- So, continue to invest in the place and reap the reward

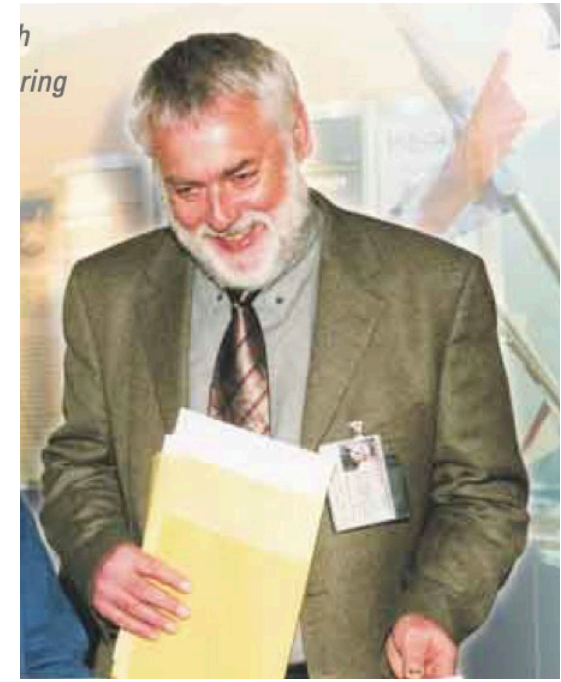


Congratulations on 50 splendid years !



The Future is now the Past so let's look to the Future once again !

Thanks to my fellow Directors



And good luck to Ken !



DD "We are the only neutron source that is run by our rivals"

And finally...
a few more people who
have helped to define the ILL
There are many...



UK 5@11
years