

UK National Nuclear Laboratory

November 2017

Rob Whittleston
VP Global Insight



NNL Governance, facts and figures



Approximately **900 staff**, over 60% with science or engineering degrees / PhDs

Annual turnover of around £100M, typical profit of around £10M

We operate primarily as a commercial business, with very little direct funding from Government

Key customers

- Sellafield Ltd, EDF Energy, NDA, Magnox, MoD, Westinghouse, UK Government, Regulators

Many links into Government



Department
for Education

Development of skills
& subject matter experts



HM Treasury

Governance via UKGI



Home Office

Threat reduction



Department for
Business, Energy
& Industrial Strategy

Primary
relationship



Ministry
of Defence

Submarine fuel PIE



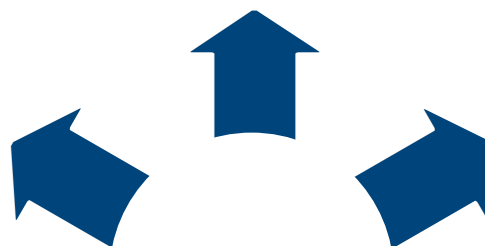
Department for
International Trade

International business



Foreign &
Commonwealth
Office

Embassy links



NATIONAL NUCLEAR
LABORATORY



**To serve the national interest
and create value for our
customers, by pushing the
boundaries of science,
technology and innovation**

Three roles of the national laboratory



1) Technical Advisor to UK Government

Technical Advisor

- Civil Nuclear Fission
- Key skills
- Infrastructure
- Opportunities for Collaboration
- Represent UK at EU, IAEA, Global level



2) National Strategic Assets

Strategic Assets

- Exert stewardship of UK's strategic skills, capabilities, assets and knowledge
- Co-ordination of UK R&D covering Energy, Security & Sustainability



3) Commercial Business

Commercial Business

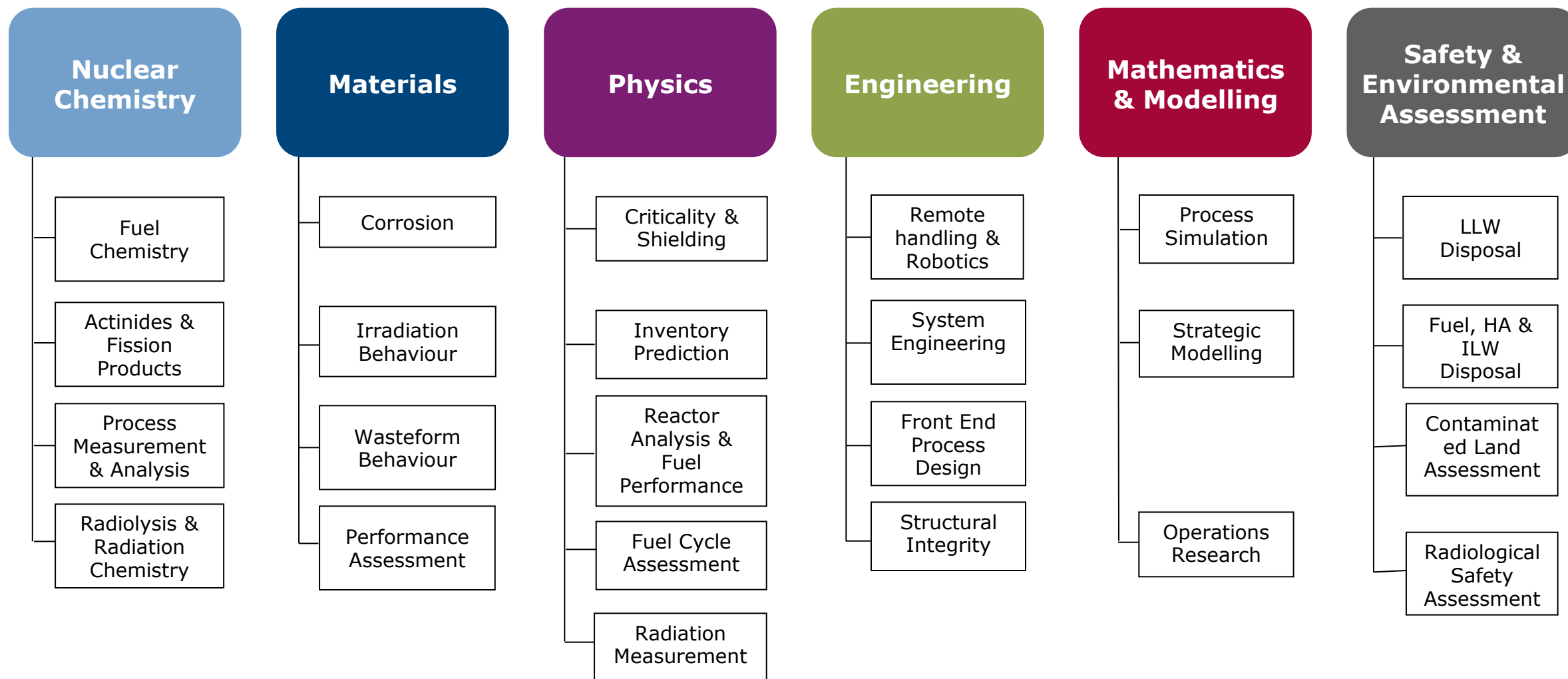
- Centre of Excellence in applied R&D for private customers
- Maintain sound commercial footing supporting national and international customers



6 Locations across the UK

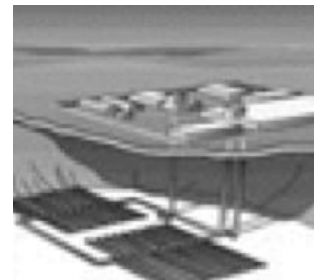


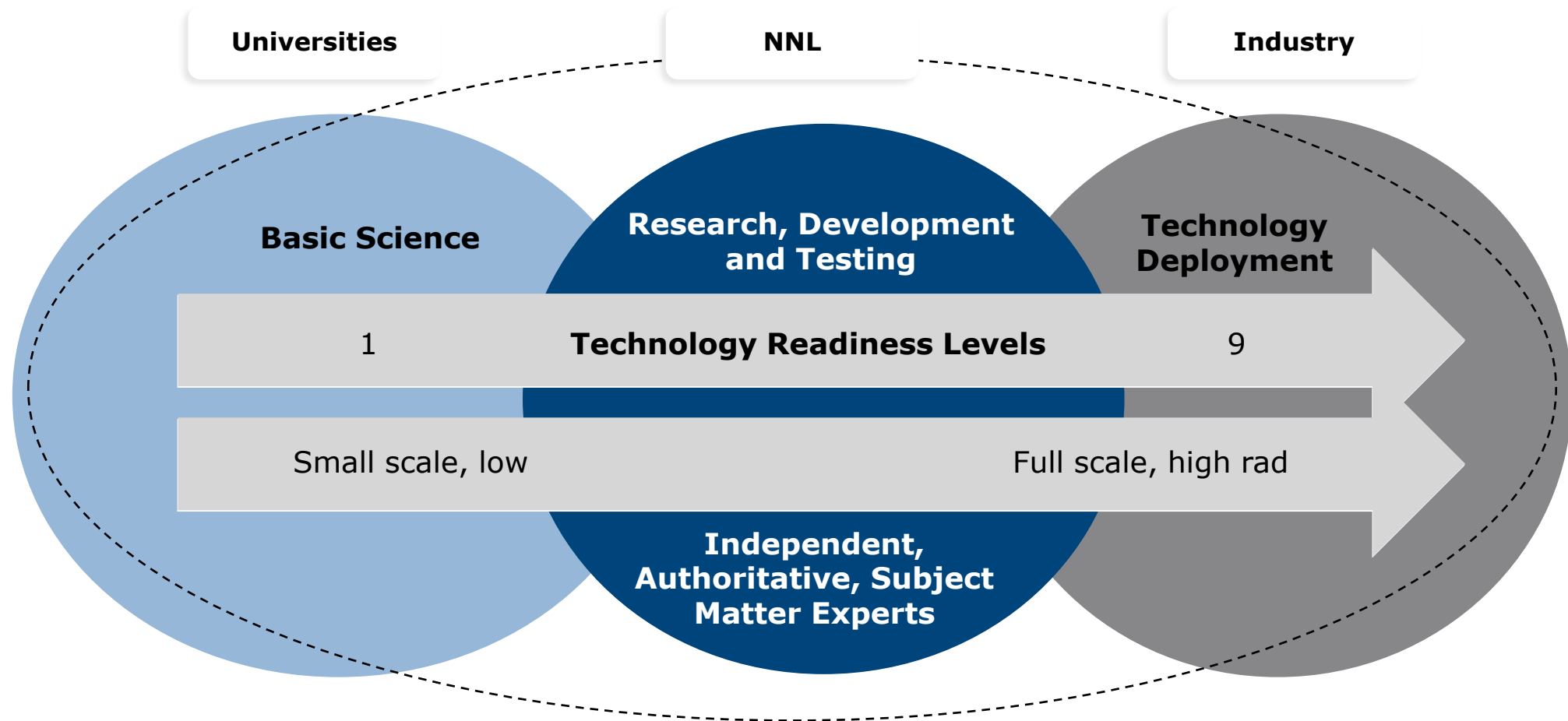
- **Sellafield**
 - Central Laboratory
 - Windscale Laboratory
- **Workington Laboratory**
- **Springfields**
 - Preston Laboratory
- **Risley**
- **Stonehouse**
- **Culham**



Support for all nuclear programmes

- Continued operation of existing reactors & fuel cycle facilities (fuel fabrication, reprocessing)
- Legacy waste management / decommissioning
- New nuclear build
- Geological disposal
- Plutonium stockpile disposition
- Naval propulsion support
- Advanced reactor & fuel cycles
- Space energy systems
- Security, non-proliferation & safeguards





Box Encapsulation Plant - Robots from the Motor Industry



Hexacopter



Video Ray ROV



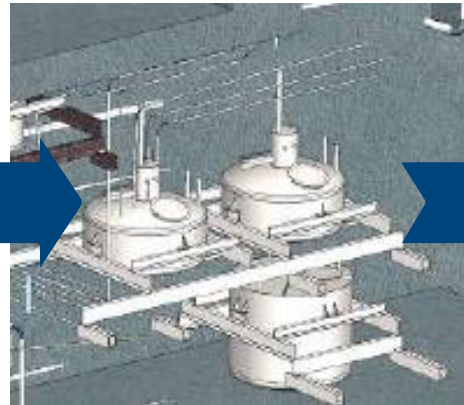
Wallrover



Innovative Technology to Support Clean-up



**Laser scanning
of legacy facilities**



**Reconstruct CAD
drawings**



**Enable remote operations
to be deployed**



**Remotely decommission
& decontaminate**



Waste Immobilisation Technologies Demonstrated



The voice of a leading nuclear nation



Technical Expertise-
Support to all aspects
of the nuclear industry



Excellence in Skills for Nuclear - To improve the performance of companies in the nuclear industry through collaboration and action on skills.



Advanced Manufacturing for Nuclear - Helping UK Manufacturers to win work in the global nuclear market



Decommissioning - Delivering the decommissioning, waste management and clean-up of the UK's civil nuclear legacy



Commercial Assistance - Trade association for the nuclear industry in the UK



Professional Standards - Professional Institute and learned society



Regulation - efficient and effective regulation of the nuclear industry.



UK Atomic
Energy
Authority

Fusion - technical expertise and support to all aspects of nuclear fusion research and development

Thanks and further information

rob.a.whittleston@nnl.co.uk
www.nnl.co.uk

