

Nuclear Decommissioning Authority

Infrastructure Development Working Group Meeting

8 May 2014

Natasha Hanson
Head of People Relations

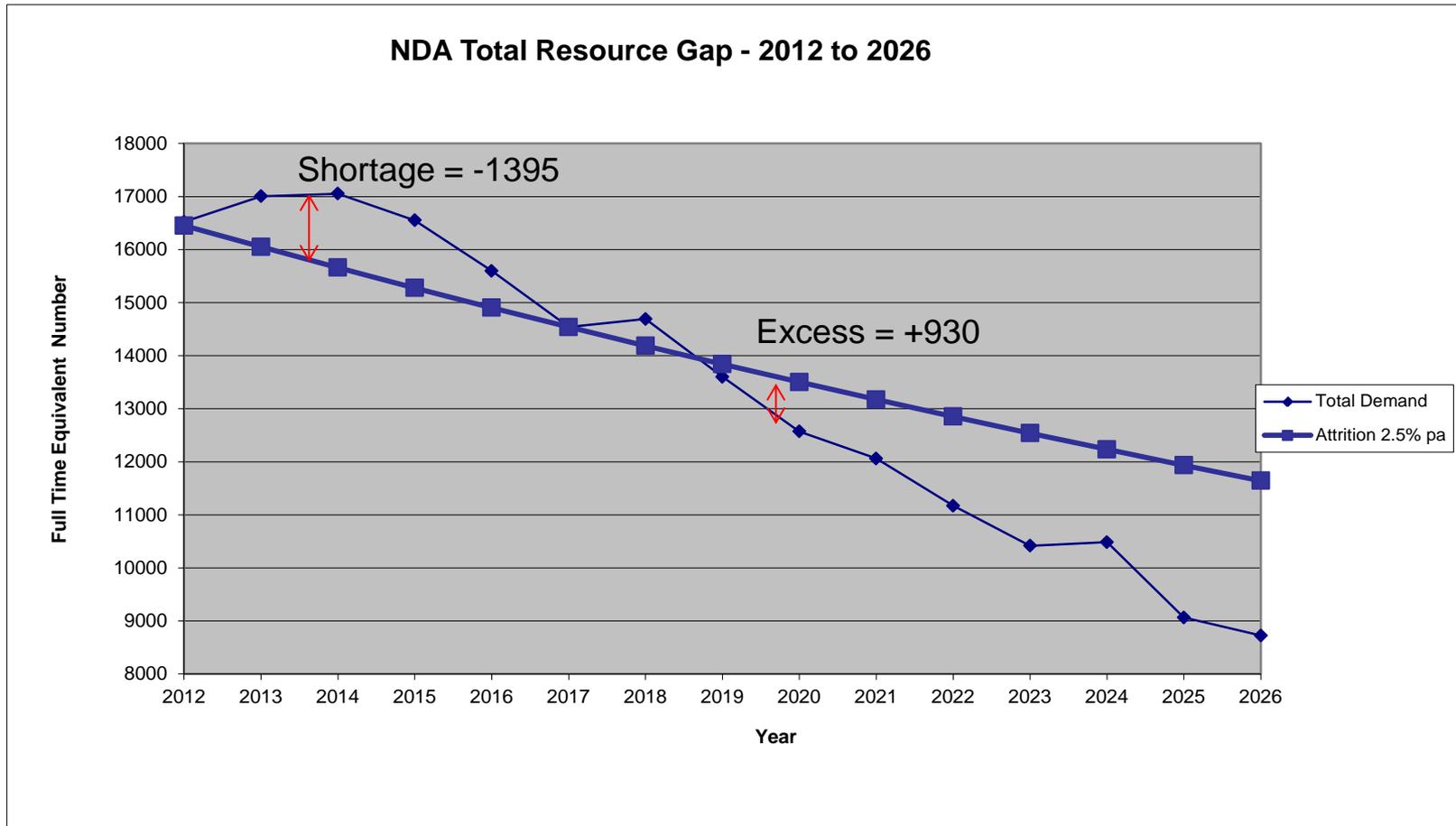
Skills Challenges

Growing Global Demand for Nuclear Skills

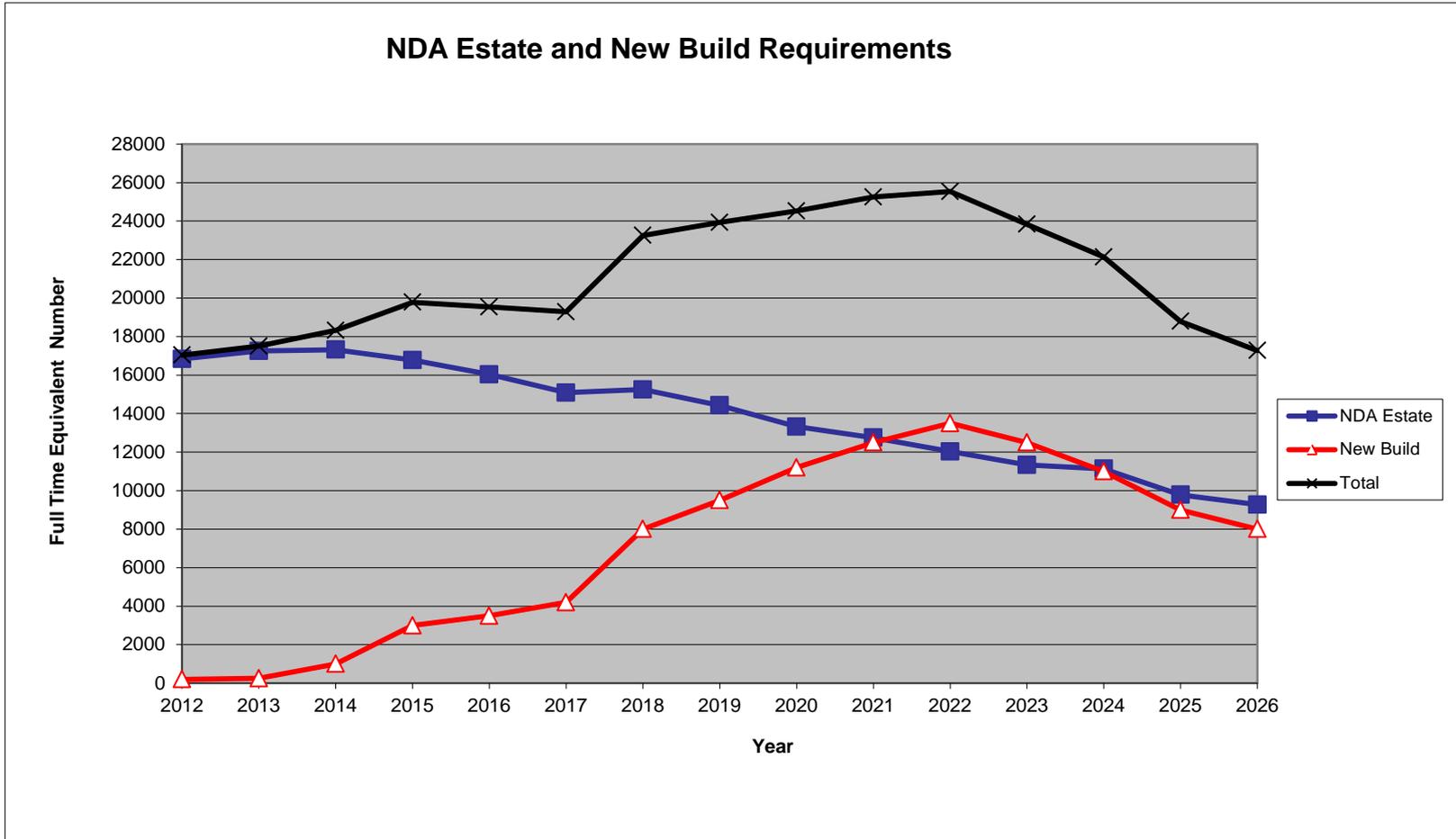
An Ageing Workforce



The NDA Estate Wide Resource Profile



NDA Estate Wide & New Nuclear Build Requirements



NDA Estate Resource Issues

- Acceleration of de-commissioning leading to early release of nuclear resources
- Low staff attrition (average of 2% for staff)
- Higher attrition of ASW staff – dependent on economic climate, opportunities within the catchment and scarcity of skill
- Over next 15 years at least 34% of the workforce will reach pensionable age
- Implied recruitment of 18% of existing population over the next 15 years
- Approach (overall) is to continue with apprentice, and graduate training schemes and development of the current workforce

Skills Priorities

High Priorities

- Project / Programme Managers
- Construction Project Managers
- Steel Fixing
- High Integrity Welders
- Safety Case Authors
- R&D Personnel
- Basic Requirements and Nuclear Awareness
- Site Construction Supervisors
- Apprenticeships and Higher Apprenticeships

Other Priorities

- Design Engineers / Technicians
- Quality Assurance
- C&I Engineers
- NDT Engineers
- Safety Safeguards
- Nuclear Regulators
- Health Physics

So what have we done?

NDA Skills and Capabilities Strategy

NDA
Nuclear Decommissioning Authority



NDA
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People (including Skills and Capabilities) Strategy

August 2010



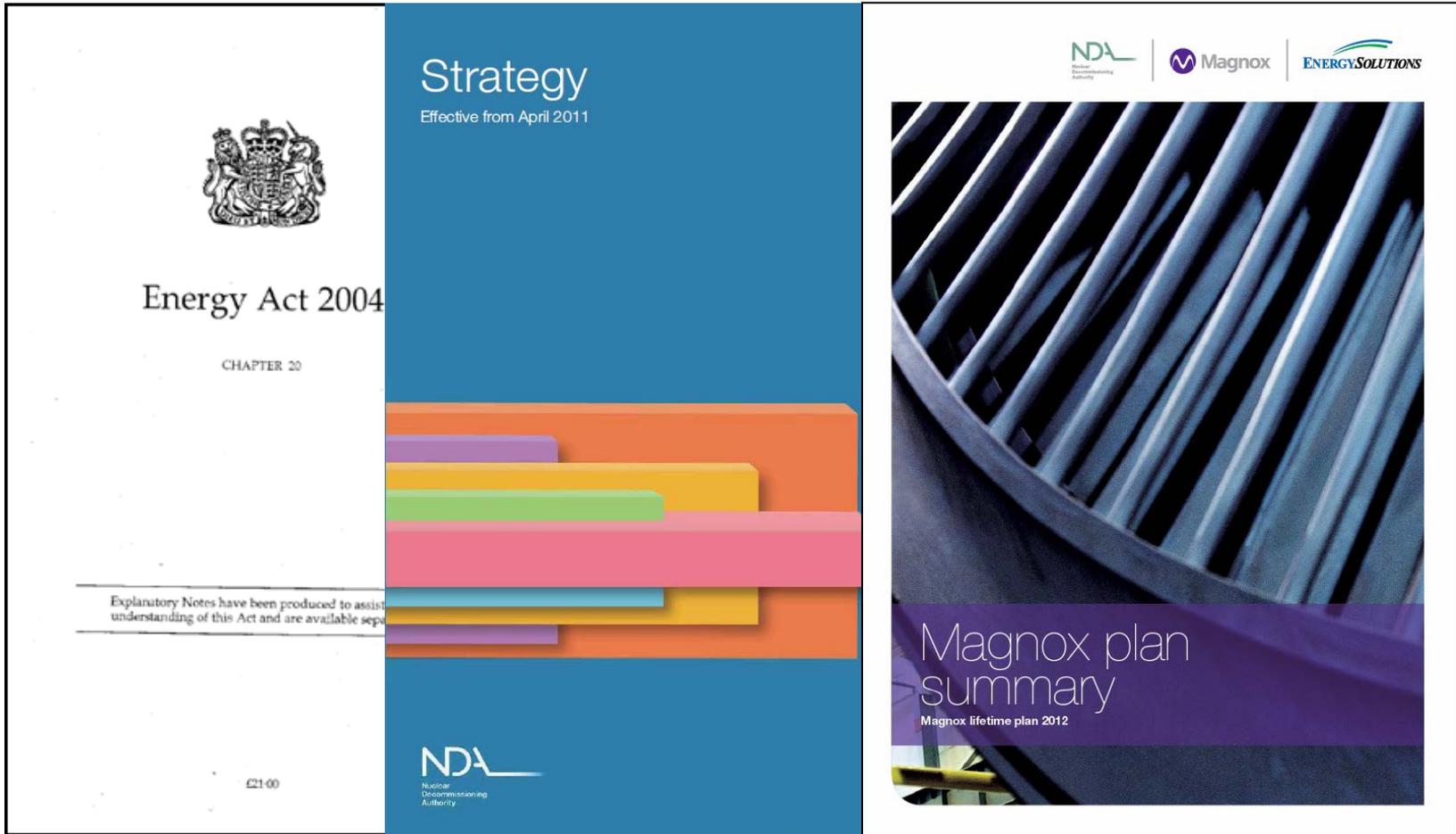
NDA
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People and Skills Strategy

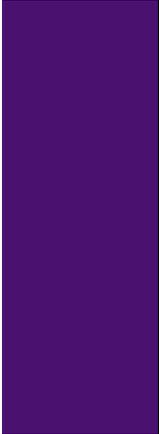
September 2013



What has influenced us Strategically?



Strategic Context – External Drivers

<p>HM Government</p> <p>Nuclear Industry Statement</p> 	<p>HM Government</p> <p>Industrial strategy: government and industry</p> <p>The UK's Nuclear Strategy</p> 	<p>Department for Education</p> <p>Department for Business, Innovation and Skills</p> <p>Rigour and Responsiveness</p> <p>April 2013</p>	<p>Skills for Scotland: Accelerating the Recovery, Sustainable Economic Growth</p> <p>WEALTHIER & FAIRER SMARTER HEALTHIER</p> 	<p>Yr Adran Plant, Addysg, Dysgu Gydol Oes a Sgillau Department for Children, Education, Lifelong Learning and Skills</p> <p>Llywodraeth Cymru Welsh Assembly Government</p> <p>Skills That Work for Wales A Skills and Employment Strategy and Action Plan</p> 
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Strategic Context – Other Influencers

National Skills Academy for Nuclear Plan 2013 – 2015

RENAISSANCE
The Civil

BRITAIN'S ENERGY COAST CUMBRIA
www.britainsenergycoast.co.uk

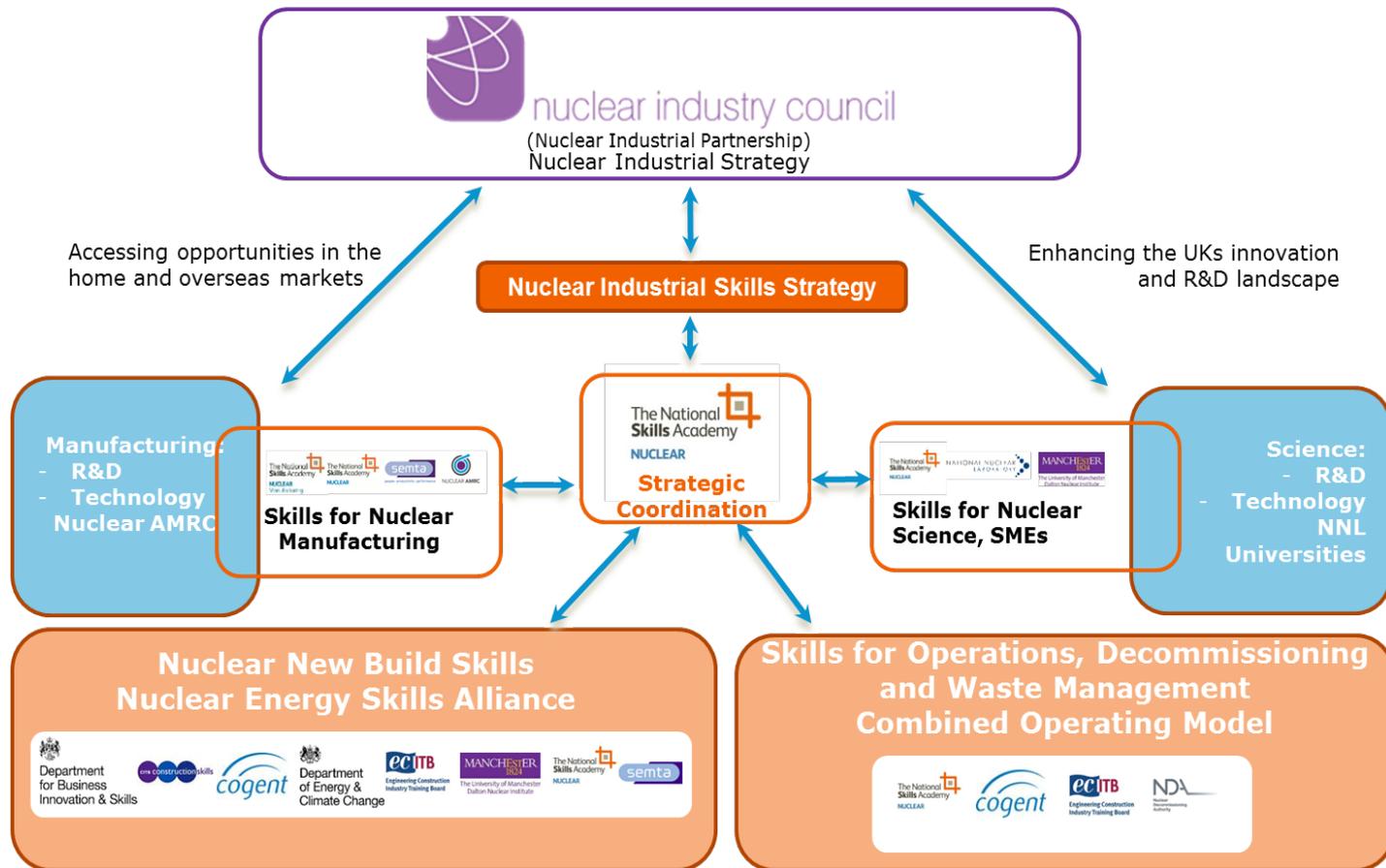
THE WEST CUMBRIA ECONOMIC BLUEPRINT
Realising the Potential of Britain's Energy Coast

Supported by
cogent Skills for Science Based Industries

December 2011
cogent Skills for Science Based Industries
The National Skills Academy NUCLEAR

Context of work done to date: Strategic

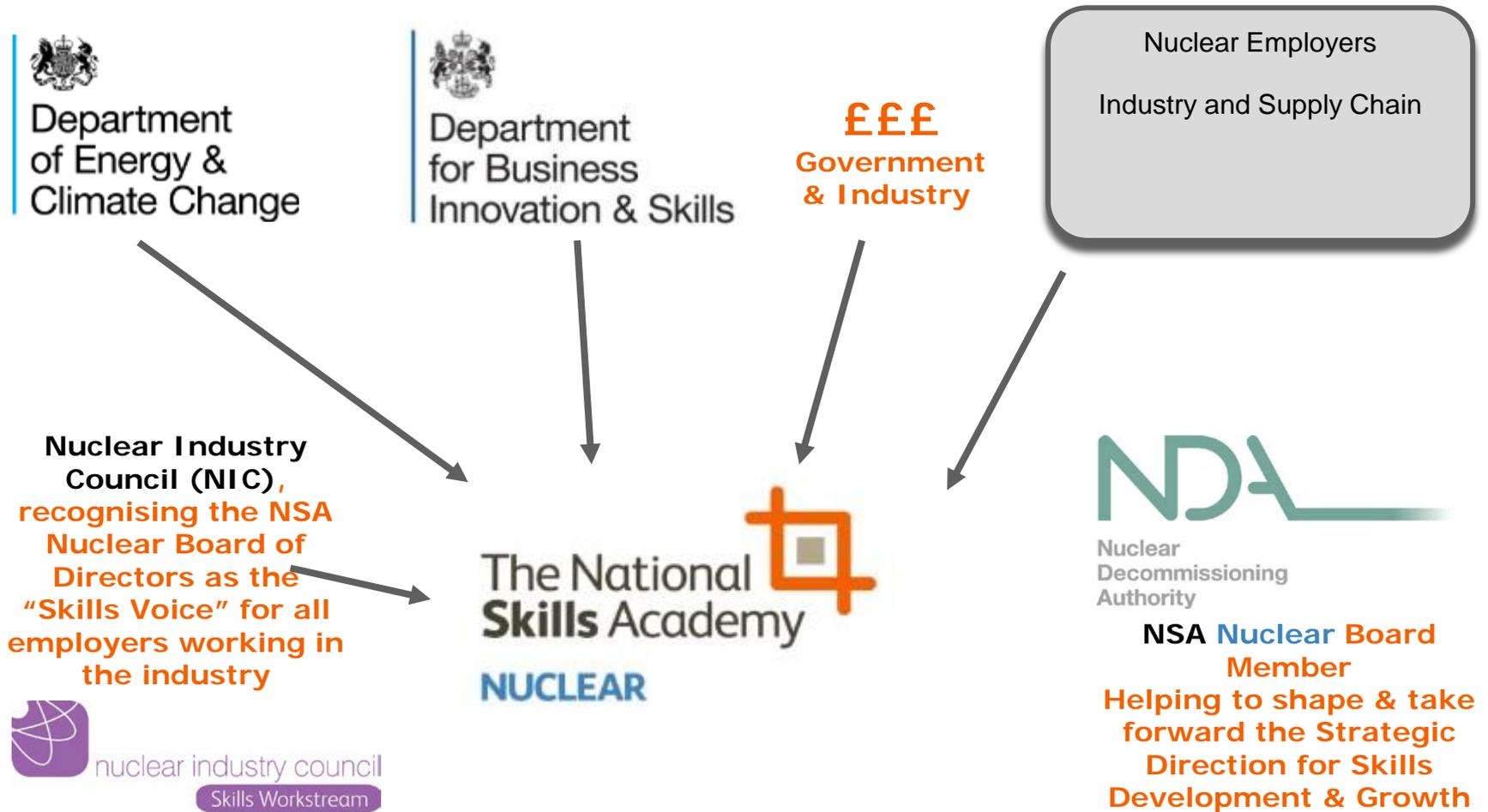
Nuclear Industrial Partnership Structure



Industry Network

- The NDA is working closely with HR representatives from the civil nuclear industry including DECC, Cogent, NSAN, ONR, EDF (Generation and New Build), Horizon, NuGen, NDA, Sellafield Ltd, Magnox Ltd, Springfields.
- The NDA is represented on the NSAN Board and provides input into the overall strategy and development of standards.
- The NDA is working closely with the sector skills bodies via NESAs (Nuclear Energy Skills Alliance) to develop appropriate action plans to address skills shortages. This includes input to the government Supply Chain Action plan that is currently being prepared.

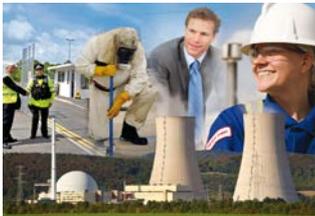
Context of work done to date: Government and Industry Collaboration



Raising Standards across the NDA Estate

Magnox Sites – full implementation April 2014

Sellafield, DSRL & RSRL in transition



TRIPLE Bar
Existing Sites

three short courses enabling an understanding of the nuclear safety culture and behaviours required for safe working practice on a nuclear licenced site

BCIS

Basic Common Induction Standard

providing individuals with an awareness of **WHAT** is required for Site Licence 'compliance' for entry to a nuclear site

BNIC

Basic Nuclear Industry Context

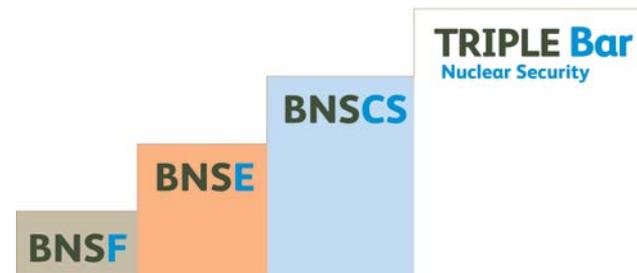
providing individuals with industry knowledge and **WHY** they need to comply

BNIB

Basic Nuclear Behaviours

providing individuals with an awareness of **HOW** they need to behave to promote and encourage a 'nuclear safety culture'

Developing a Suite of Training



Innovative Skills Solutions

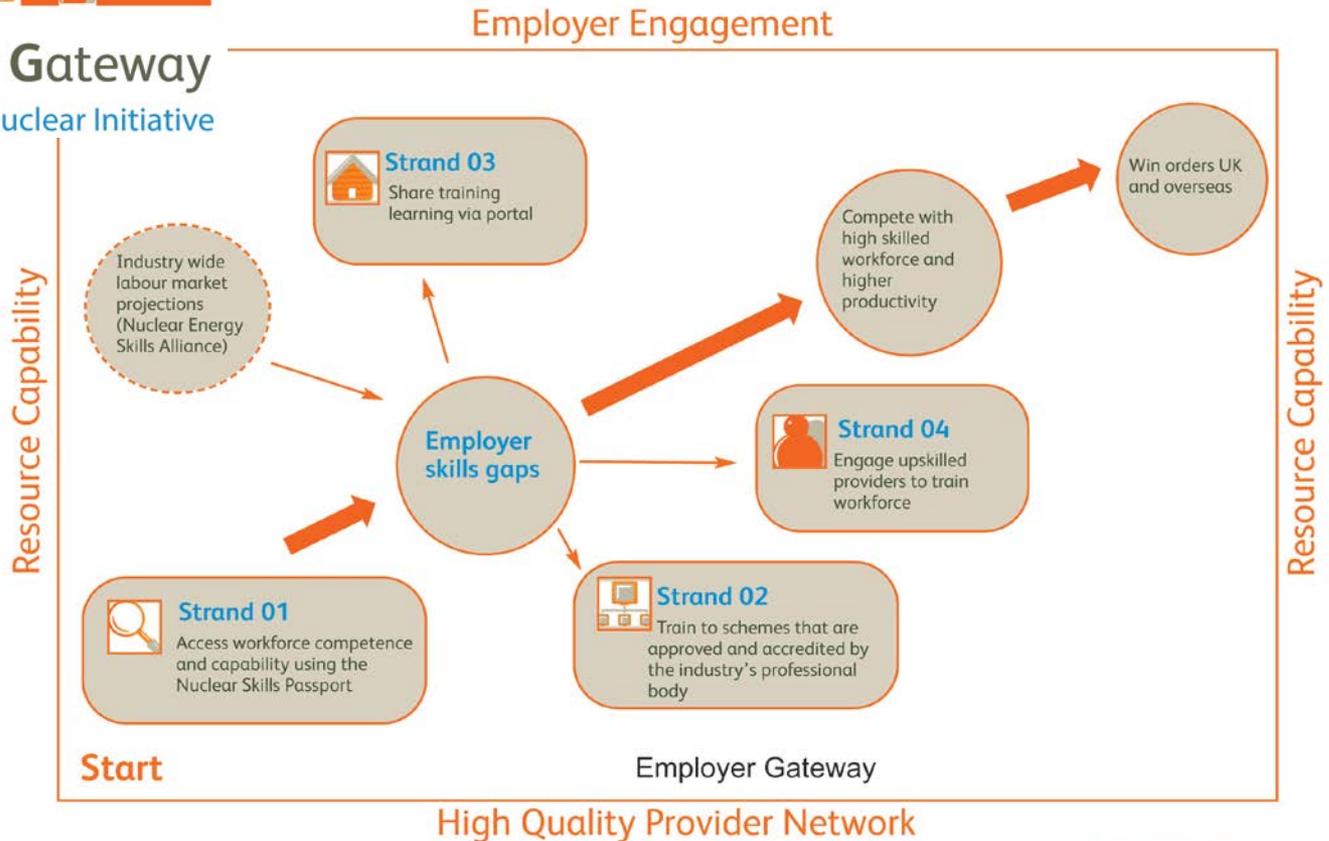


National Nuclear Gateway

A National Skills Academy Nuclear Initiative

“Transformational Skills Growth for the UK Nuclear Industry”

“A 2 year project (Oct 2012 to Nov 2014), leading to sustainable outputs to support industry skills growth”



Supporting the 'Transformational Growth of the Industry'



NNG Strand 1 Recording Training & Competence

Sites – Gatekeepers for the NSP to ensure supply chain focus on and record industry required training and skills

NUCLEAR Skills Passport®



"A New Competence Framework"
Pilot April 2014

NS⁴P

NS4P launch October 2014

- All industry roles
- For SLCs and Supply Chain
- Links with existing Professional Institutes

NNG Strand 3 - Creating easy access to Learning

Sites – Using the **On-line Learning Portal** to make training and learning resources available to the industry and wider community



April 2014
2550 accounts created

Completing Training required by the industry
STEM Learning resources for individuals at all levels

A New Industry Learning Platform
Sign up & create a learner profile
"It's easy"
www.nucleartrainingnetwork.com

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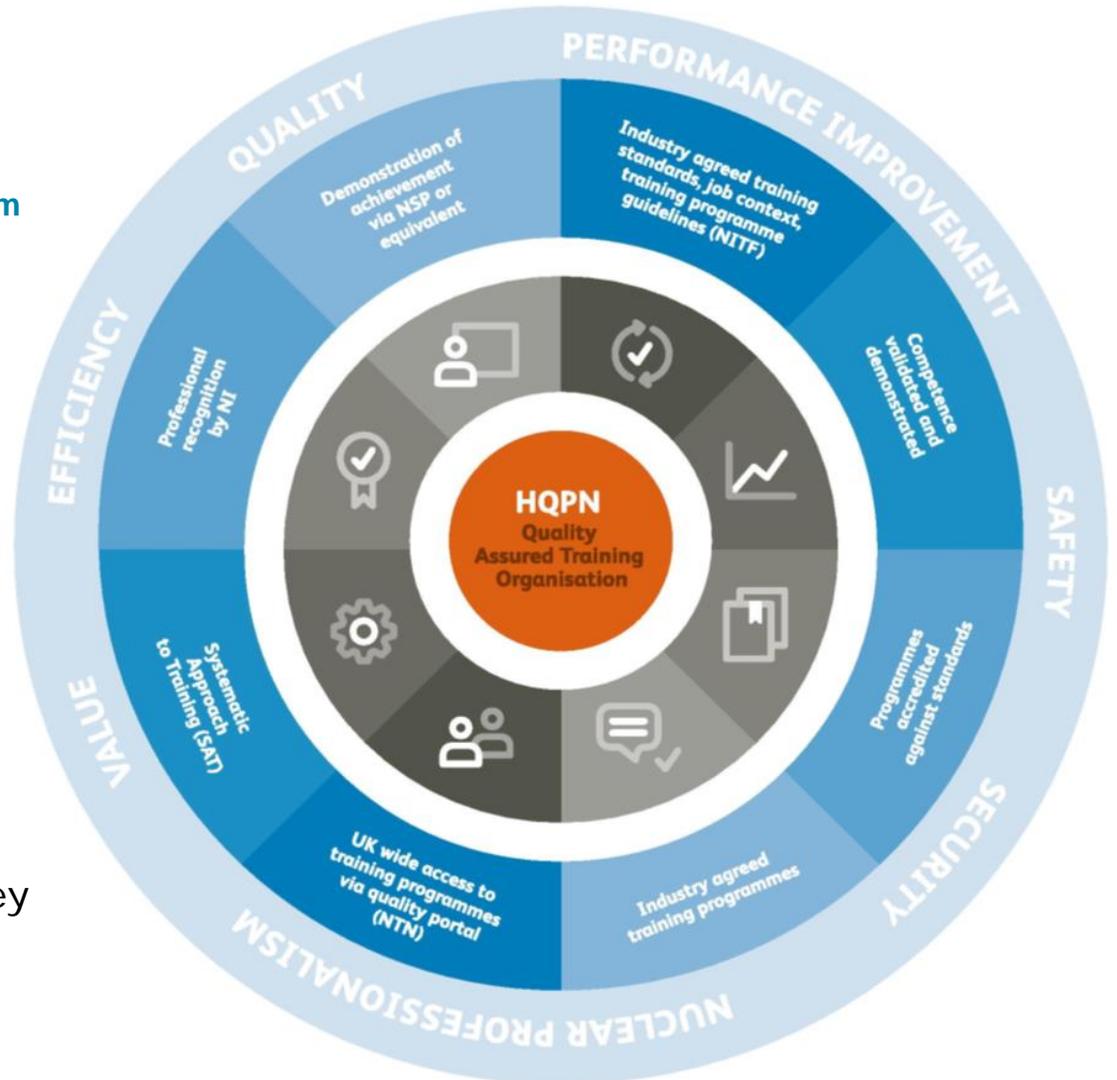
Innovative Skills Solutions

Capability Model for the UK Nuclear Industry

– Good Practice Approach to Training, Accreditation and Nuclear Professionalism

“A dynamic and flexible model that will enable Companies to assess workforce capability and support the development of a demonstratable competent, safe and secure UK nuclear workforce with the highest standards of nuclear professionalism”

Supporting the ‘Journey to Excellence’



Context of work done to date: Infrastructure



Energus £21.5M (NDA £5M)



Dalton Cumbria Facility £20M (NDA £10M)



BEC Construction Skills Centre £7M (NDA £2M)



Energy Skills Centre Bridgwater £8M
(NDA £0.5M)



Energy Centre Anglesey £6M (NDA £1.5M)



Engineering Skills Centre Thurso £7M
(NDA £2M)



Energy Coast UTC £7.8M (DfE)



Summergrove Accommodation Facility
Refurb £2.3M (NDA £1.5M)

Total Investment:
£79.6M

NDA contribution:
£22.5M

Leverage: 3.5:1
Over 5 years

Context of work done to date:

Resources

nucleargraduates

COMMUNITY APPRENTICESHIP SCHEME

NDA Business Administration Apprentices

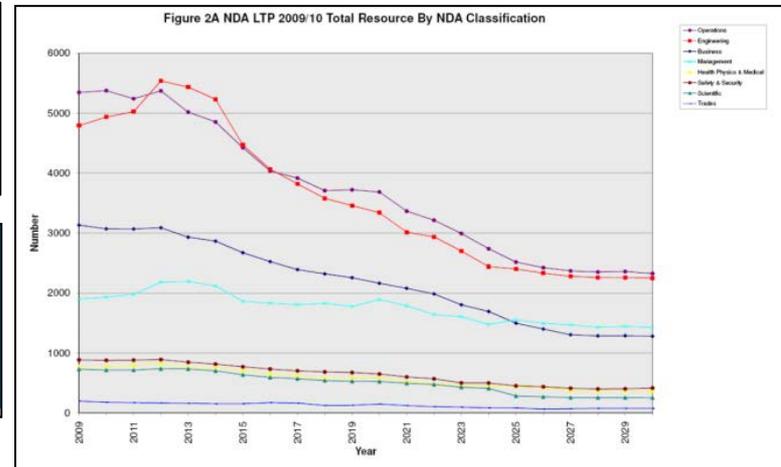
Nuclear Decommissioning Authority

NDA Estate-wide
Standard Resource
Coding and Mapping



cogent | Skills for Science Based Industries

Nuclear Workforce Model



Context of work done to date:

Resource planning and management

- The NDA estate is working with a number of organisations to share detailed resource information.
- There are currently formal protocol agreements in place with the following companies: EDF, Lloyds Register, Nuclear Technologies, Amec, Jacobs, NNL, Rolls Royce, Doosan
- Talent Retention Solution – Magnox, Sellafield, Dounreay and RSRL.

NDA Transition Framework Development

Objective

To maximise the utilisation of skilled resources across the nuclear sector

Outcomes for 2014 are:

O1: To build the engagement of unions at national and local level

O2: To engage with the workforce to build the profile and interaction

O3: To build / extend relationships with the supply chain , new build and other organisations

O4: To develop and build the tangible mechanisms and processes

O5: To establish the enablers for the medium to long term

Proposed key actions are to:

- 1.1 Establish / utilise / agree the appropriate forums for consultation
- 1.2 Develop appropriate principles with the unions

- 2.1 Establish network of contacts
- 2.2 Define approach / strategy to communication and promotion
- 2.3 Identify and encourage 'quick wins' / early adopters (Pro-activity)

- 3.1 Identify and develop estate wide supply chain relationships
- 3.2 Develop new build relationships
- 3.3 Identification of 'best practice' with other organisations

- 4.1 Embed principles for transfer and management of staff
- 4.2 Embed appropriate governance of the arrangements
- 4.3 Develop IT platforms / information requirements to enable the delivery
- 4.4 Develop and report on metrics

- 5.1 Develop plans for key scenarios
- 5.2 Liaise with sector skills to ensure solutions are in place for transition

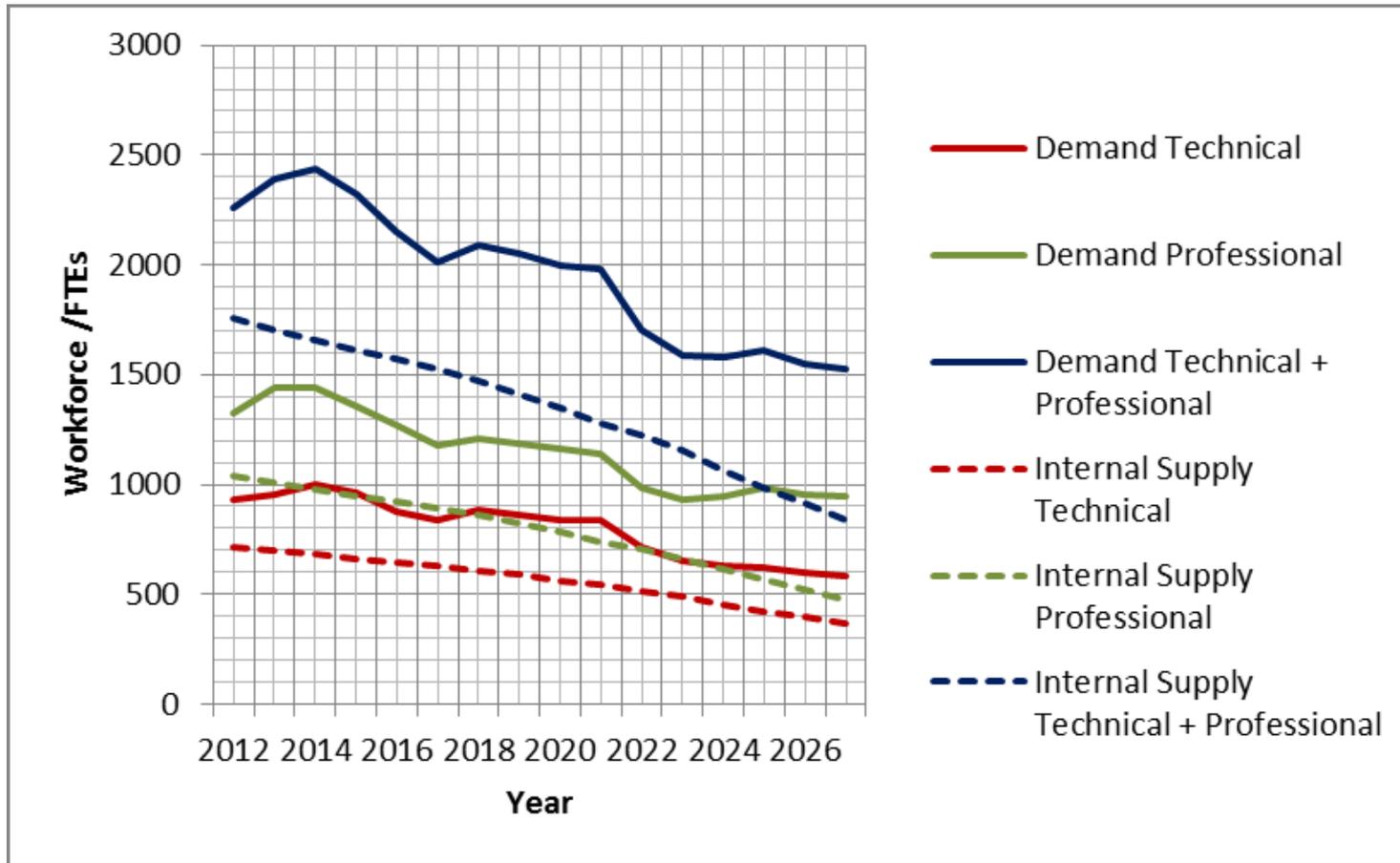
Nuclear Workforce Model

- **Modelling the UK Civil Nuclear Workforce: to ensure the right people with the right skills are available at the right time for a sustainable future**
- **The model aims to**
 - Give advance warning of potential national nuclear skills pinch points
 - Prompt timely skills interventions
 - Identify opportunities for workforce transition (e.g. operations to de-commissioning)
 - Provide demand signals to training providers
 - Reflect the impact of macro changes to the UK civil programme

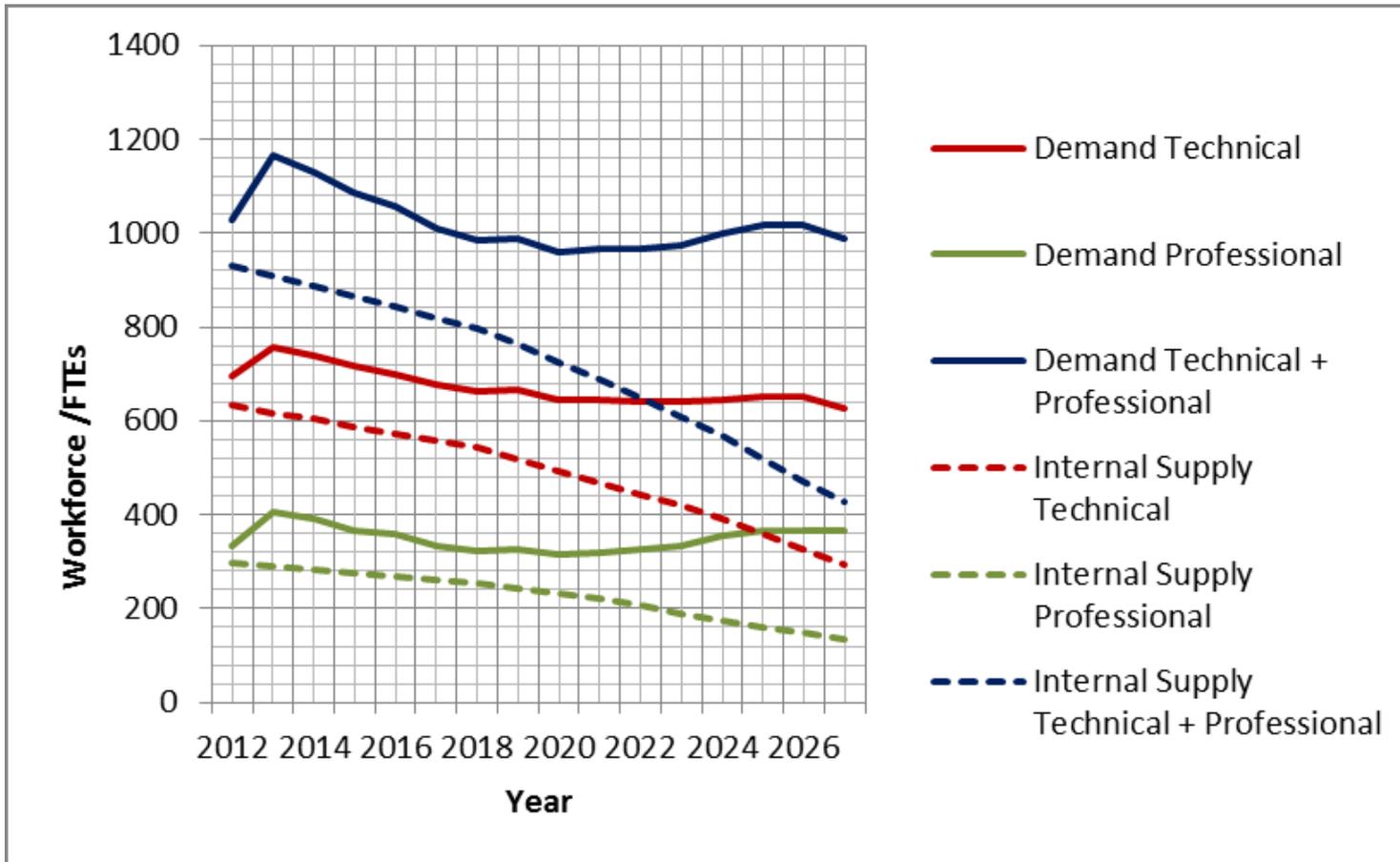
Nuclear Workforce Model

- **The initial model findings support what the industry is experiencing**
 - Shortage in project management and project control staff
 - Shortage of engineering designers, and safety case authors
 - Increasing age demographic
 - A need to develop apprentices and graduates
- **The model provides**
 - General trends - the precision of the model is not critical
 - Opportunity to test scenarios and understand the impact of changes (sensitivity analysis)
 - Transition planning for both workforce increases and decreases because it provides an overview of the availability of skills currently employed

Examples of Model Output – Project and Programme Managers



Examples of Model Output - Security and Safeguards



High level overview of work planned

Focus Areas

- **Retraining and redeployment**

- Talent and succession sharing (*nucleargraduates growth, Internships, Pipeline*)
- Nuclear Skills Passport (*Gatekeeper in SLCs for Supply Chain*)

- **Efficiency and effectiveness improvements**

(*Sector Skills Bodies Model review*), (*Supply Chain Apprentices Nuclear – SCAN*), (*Employer Ownership Pilot*)

- **Resource / Infrastructure**

- Better allocation of resources (*Apprentices, Higher Level Apprentices, Tech Trainees, Graduates*)
- Optimising the infrastructure (*NSAN Provider Network, NDA investment utilisation*)

- **Resource Planning**

- Change in skills profiles (*Cogent Nuclear Workforce Modelling*), (*Skills Capability Reviews*)
- Deal with the challenges for skills from new build / energy industries impact on terms and conditions, attracting skills for the future (*STEM developments*), (*Transition Framework*)

- **People Relations**

- Industrial relations environment - Cultural shift, working with a long serving, older workforce with inflexible terms and conditions (*Collaborative support with SLCs*)

- **Outstanding People Strategy 2010 commitments**

- Providing a robust infrastructure (*BEC Campus Programme completion*)