

Draft Business Plan

Financial year beginning April 2015
to financial year ending March 2018

The logo for the Nuclear Decommissioning Authority (NDA) is centered within a circular graphic. The graphic consists of several concentric rings in shades of blue and teal. The NDA logo itself is rendered in a dark teal color, with the letters 'NDA' in a bold, sans-serif font. The 'N' and 'D' are solid, while the 'A' has a horizontal line extending to the right, ending in a small square.

Nuclear
Decommissioning
Authority

December 2014

Nuclear Decommissioning Authority Draft Business Plan

Financial year beginning April 2015 to financial year ending March 2018

December 2014

Some images supplied courtesy of site licence companies.

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Introduction to the consultation

How to respond

In this consultation, the NDA wants to hear from members of the public, nuclear regulators, employees within the Site Licence Companies (SLCs), trade unions, local authorities, Site Stakeholder Groups (SSGs), Non-Governmental Organisations (NGOs) and any other organisation or public body. In your response please state whether you are responding as an individual or representing the views of an organisation. If you are responding on behalf of an organisation, please make it clear who the organisation represents and, where applicable, how you assembled the views of the members.

We are happy to receive comments on any aspect of our Draft Business Plan and these will be considered where appropriate. When considering responses to this consultation, the NDA will give greater weight to responses that are based on argument and evidence, rather than simple expressions of support or opposition.

This consultation begins on **08 December 2014** and will close on **30 January 2015**.

You can respond to the consultation by letter or email via the contact details below:

Address – NDA Business Planning, Business Plan Consultation, Nuclear Decommissioning Authority, Herdus House, Westlakes Science and Technology Park, Moor Row, Cumbria, CA24 3HU

Email – businessplanning@nda.gov.uk

Help with queries

Any questions or queries relating to this consultation can also be directed to the address above.

Confidentiality and data protection

Information provided in response to this consultation, including personal information, may be subject to publication or disclosure in accordance with the access to information regimes (these are primarily the Freedom of Information Act 2000 (FOIA) (*ref 1*), the Data Protection Act 1998 (DPA) (*ref 2*) and the Environmental Information Regulations 2004 (EIR) (*ref 3*)).

If you want information that you provide to be treated as confidential, please be aware that, under the FOIA, there is a statutory Code of Practice with which public authorities must comply and which deals, amongst other things, with obligations of confidence.

In view of this, it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information, we will take full account of your explanation but, cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on the NDA.

The NDA will process your personal data in accordance with the DPA and, in the majority of circumstances, this will mean that your personal data will not be disclosed to third parties.

Additional copies

An electronic version of the Draft Business Plan is available on the website www.nda.gov.uk

You may make copies of this consultation document without seeking permission. We are not producing hard copies of the consultation document, however if you require a printed copy, please email businessplanning@nda.gov.uk

Consultation and conduct

If you have any comments about the way in which this consultation has been conducted please mark them 'Business Plan Consultation' and send them to:

By letter - address to – NDA Business Planning, Business Plan Consultation, Nuclear Decommissioning Authority, Herdus House, Westlakes Science and Technology Park, Moor Row, Cumbria, CA24 3HU

Email – businessplanning@nda.gov.uk

A copy of the consultation criteria can be found in Consultation Principles Guidance published by the Cabinet Office.

Next steps

The NDA will consider responses it receives to the consultation and outputs from any NDA events and revise the Draft Business Plan as appropriate. Subject to final approval by both the UK and Scottish Governments, the NDA will publish the final version of this document in early April 2015.

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Taking responsibility

We are dealing with one of the most complex, long-term environmental challenges in Britain.

We are the strategic authority with responsibility for the civil public sector nuclear estate.

We own 17 nuclear sites, their liabilities and assets. This includes the first generation of Magnox power stations, various research and fuel facilities and our largest, most complex site, Sellafield.

Our core objective is to ensure that these sites are decommissioned safely, securely, cost-effectively and in ways that protect the environment.

Our 17 sites are spread across the UK. We are the only organisation that takes an estate-wide view of the mission. We are the body that secures and allocates funding for nuclear clean-up. We work with various people, organisations and contractors in the UK and overseas to ensure that:

- the right options are considered and chosen in line with government policy
- the right plans are in place for the long-term
- the right contract models incentivise the safest and most cost-effective clean-up
- the right skills and resources are available
- the right technology is developed, and
- local communities are supported socially and economically during and after the clean-up mission

Underpinning all we do is a commitment to encourage the highest standards of safety, security and environmental responsibility and an open and transparent approach to secure the support and trust of our stakeholders.



A new era for our Magneox and RSRL sites

Museum of Science and Industry
September 2014



Cavendish
Fluor
Partnership

Foreword



This year sees the 10th anniversary of the NDA. During the past decade we have completed the restructuring of the UK civil decommissioning programme and introduced a decommissioning mindset to much of our estate. The challenge for the next decade is to build upon this and deliver a number of our sites into their interim end states, having completed bulk decommissioning, along with the removal of the majority of the nuclear waste.

In September 2014, following on from an intensive two-year competition process, the ownership of two site licence companies, Magnox Limited and Research Sites Restoration Limited (RSRL), was transferred to a new Parent Body Organisation, the Cavendish Fluor Partnership (CFP). CFP, as new commercial partners in the delivery of our decommissioning strategy, will manage the sites under a revised contracting mechanism. This will drive prioritisation of funding for high risk and hazard legacy waste facilities across the combined Magnox and RSRL sites, whilst also securing an anticipated minimum of £1 billion of savings for the taxpayer. CFP intends to embed newly consolidated lifetime programmes, covering the first three years of operation, by April 2015.

Some excellent work over the past year by Magnox has paved the way for the continued operation of the Wylfa nuclear reactor until December 2015. This continued operation will allow us to generate income on electricity sales, which in turn reduces the demand on the taxpayer. Wylfa is the world's last operating Magnox power station and turning it off will mark the end of energy production by the UK's first generation of commercial nuclear power stations.

At Dounreay, we have requested additional work scope to be incorporated into the overall life time plan. The end of the financial year 2014/15 will bring clarity on how this work will be incorporated into the site's programme. In the interim, Dounreay Site Restoration Limited continues to deliver savings, pressing forward with its decommissioning mission, with two Low Level Waste vaults now operational.

Work this year at Sellafield has focused on developing a demanding, yet realistic, performance plan with prioritisation of risk management and delivery against the high priority and high risk programmes. During 2015/16, Sellafield will embed this new performance plan alongside the Sellafield Excellence Plan, with a drive to deliver long-term, sustainable, improved performance.

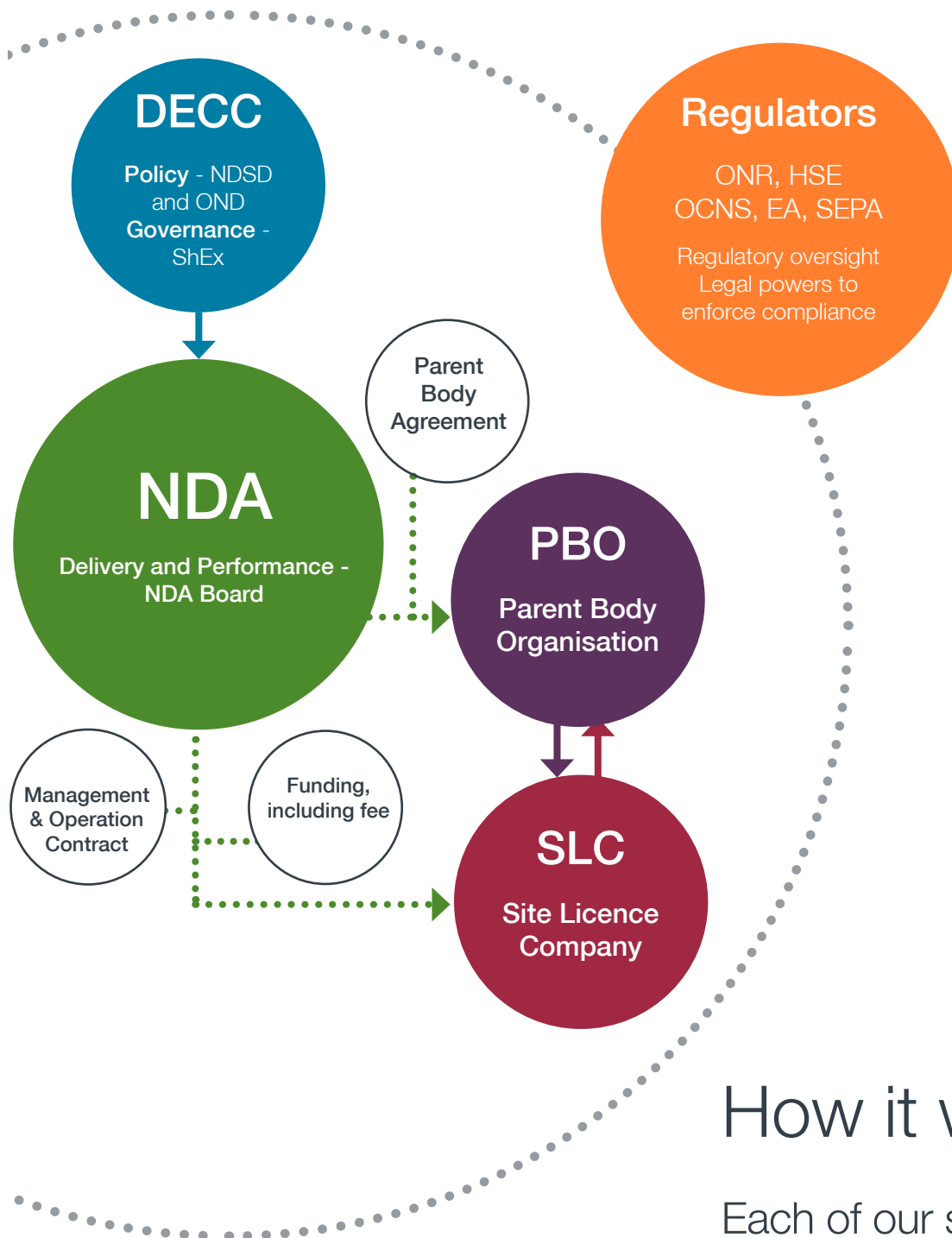
For the NDA itself, the upcoming year will be dominated by the development and public consultation of the third edition of our overarching decommissioning strategy. With publication anticipated for March 2016, efforts will be concentrated on fully re-affirming the strategic direction of travel and confirming that it will deliver the long-term outcomes required for the success of our mission. This strategic review will take place alongside preparation for what is expected to be a challenging Spending Review in 2015.

Critical enabler initiatives will provide estate-wide support, particularly with reference to information governance, asset management, socio economics, skills maintenance and supply chain development. Notably, the NDA's Small and Medium Enterprise (SME) agenda will continue to be pursued with the intention of reflecting the UK government's Growth Agenda at all levels of the supply chain. Furthermore, during 2015/16 we plan to secure a design and build contractor for the build of the NDA Nuclear Archive in Caithness, a key element of delivering our commitments around knowledge management and socio-economics.

A handwritten signature in black ink, appearing to read 'John Clarke'. The signature is fluid and cursive, with the first name 'John' being more prominent than the last name 'Clarke'.

John Clarke
Chief Executive

*Photographs: opposite page, top - Sellafield site
opposite page, bottom - The Magnox/RSRL Share Transfer Event*



How it works

Each of our sites is operated by an SLC under contract to the NDA.

SLCs are responsible for day-to-day operations and the delivery of site programmes.

On a number of our sites we have appointed a PBO through a competitive process to bring in private sector expertise.

They own the SLCs for the duration of their contract with the NDA, earning fee based on performance and efficiencies gained.

Our plans

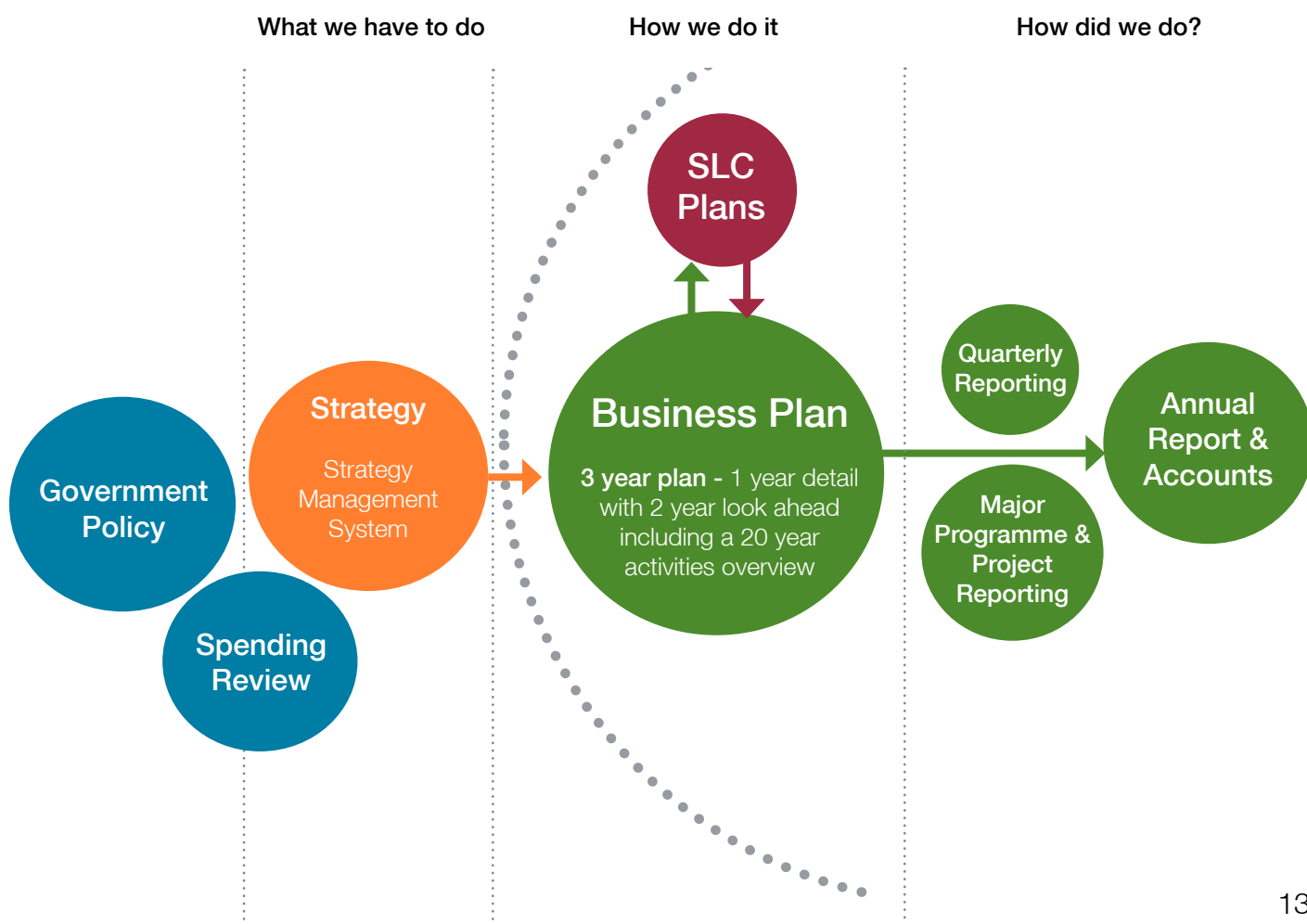
This Business Plan sets out our key objectives and plans for delivering our priorities over the next three years.

The NDA is a Non-Departmental Public Body set up under the Energy Act 2004 (ref 6) to ensure that the UK's 17 designated civil public sector nuclear sites are decommissioned and cleaned up safely and efficiently.

The Secretary of State for the Department of Energy and Climate Change (DECC) approves our Strategy and Annual Plans in consultation with the Scottish Ministers as required by the Energy Act 2004. The NDA Board is responsible for delivery of these plans. The Government holds us to account for performance against our Strategy and Plans. The Shareholder Executive (ShEx) acting as part of DECC, provides governance over the NDA for DECC.

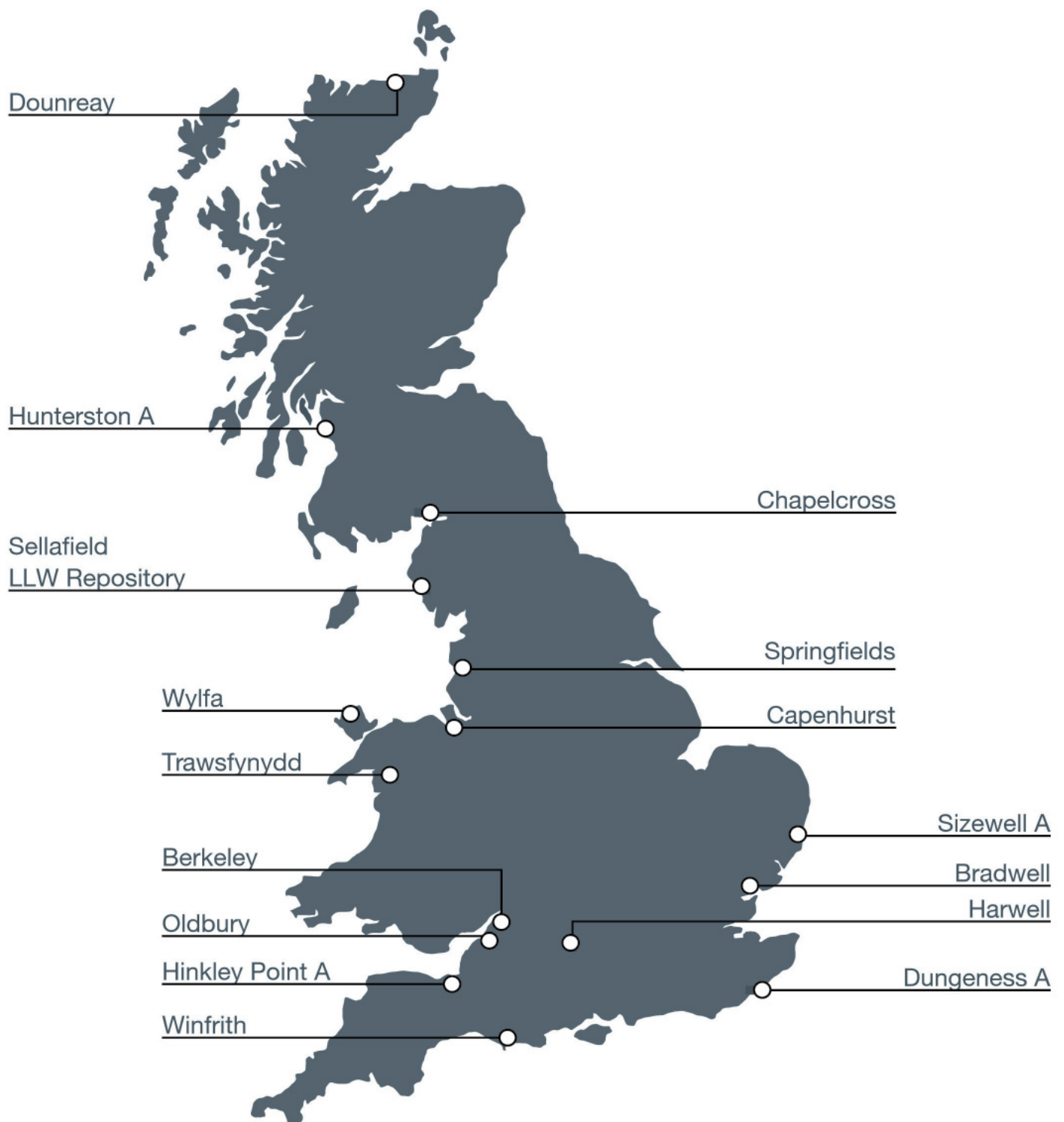
DECC and the Scottish Government have a target to make tangible progress in decommissioning and clean-up. This is demonstrated by reducing the UK civil nuclear liabilities and the risks associated with high hazards (by progressively mitigating hazards and ensuring radioactive waste continues to be put into a passively safe form).

The diagram below provides an overview of NDA Plans and reporting process. SLCs formulate their plans based on the NDA's Strategy and the budget allocated in the Spending Reviews. Activities for each site are detailed in this Plan. Progress on activities is reported on a quarterly basis on our website, with the year-end performance reported in the Annual Report and Accounts.



The estate

All 17 sites are currently at various stages along the route to their particular end state as the following pages indicate.





SELLAFIELD



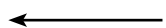
Contaminated metal being retrieved from the Pile Fuel Storage Pond.

This is a key part of reducing the risk and hazard for one of the highest priorities in the NDA estate and a crucial stage in the decommissioning process.

OPERATIONS/DECOMMISSIONING



BERKELEY



The removal of 15 boilers each weighing 310 tonnes from the site. More than 4,000 tonnes of metal has been recycled and returned to the open market.

CARE AND MAINTENANCE PREPARATIONS



BRADWELL



12,000 tonnes of waste have been removed following the demolition of the turbine hall, 92% of which was recycled.

CARE AND MAINTENANCE PREPARATIONS



CHAPELCROSS



Project to remove 3,300 tonnes of asbestos - the largest known asbestos strip in Europe.

CARE AND MAINTENANCE PREPARATIONS



DUNGENESS A

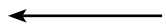


A link bridge being taken down, isolating the turbine hall and surrounding buildings ready for demolition.

CARE AND MAINTENANCE PREPARATIONS

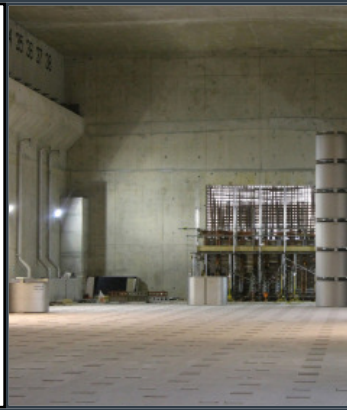


HINKLEY POINT A

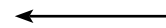


Installation of laser cutting equipment that can quickly and cleanly cut up redundant skips to a point where they are suitable to recycle.

CARE AND MAINTENANCE PREPARATIONS



HUNTERSTON A

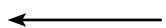


The transportation of the first active waste package into new ILW store. Over the next few years approximately 1,650 packages of ILW will be put in the store.

CARE AND MAINTENANCE PREPARATIONS



OLDBURY



More than half of the site's fuel elements have been removed from reactors and shipped to Sellafield.

DEFUELLING



SIZEWELL A



The final fuel element has been removed meaning 99% of the radioactive hazard has now gone from the site.

CARE AND MAINTENANCE PREPARATIONS

	<p>TRAWSFYNYDD</p> <p>←</p> <p>The sludge filtering and drying vessel has been successfully decommissioned - a major hazard reduction milestone.</p> <p>CARE AND MAINTENANCE PREPARATIONS</p>		<p>WYLFA</p> <p>←</p> <p>The world's last operating Magnox nuclear power station will continue to generate until December 2015.</p> <p>GENERATION</p>
	<p>DOUNREAY</p> <p>←</p> <p>The newly constructed Low Level Waste Vaults have been handed over ready for use. This will mark the completion of a major milestone on the journey to site closure.</p> <p>DECOMMISSIONING</p>		<p>HARWELL</p> <p>←</p> <p>Cleaning up the British Experimental Pile Zero (BEPO) storage block. The BEPO was a 6MW experimental reactor.</p> <p>DECOMMISSIONING</p>
	<p>WINFRITH</p> <p>←</p> <p>Work has been completed on Phase 1 of DRAGON decommissioning, a key challenge on the path to Interim End State. DRAGON is one of Winfrith's two iconic reactors.</p> <p>DECOMMISSIONING</p>		<p>LLW REPOSITORY</p> <p>←</p> <p>Major decommissioning milestone achieved with the removal of more than 11,000 drums of bulk Plutonium Contaminated Material from bunkers at LLWR.</p> <p>OPERATIONS/ DECOMMISSIONING</p>
	<p>CAPENHURST</p> <p>←</p> <p>Continuation of safe storage of uranic material as well as decommissioning of redundant areas.</p> <p>OPERATIONS/ DECOMMISSIONING</p>		<p>SPRINGFIELDS</p> <p>←</p> <p>Decommissioning of redundant facilities used in the fuel manufacturing process.</p> <p>OPERATIONS/ DECOMMISSIONING</p>

The key stages in the life of a Magnox site are as follows:

Generation - Sites that are still producing electricity.

Defuelling - Reactors, cooling ponds and fuel cells containing fuel are emptied and the fuel is transferred off-site for reprocessing.

Care and Maintenance Preparations - Hazards are reduced, buildings are deplanted and demolished. Waste is managed and maintenance requirements minimised.

Care and Maintenance - The site is maintained in a passively safe and secure state while radiation levels are left to decay naturally.

Final Site Clearance - The removal of reactor vessels and building demolition. Sites will be declassified as nuclear licensed sites.

Non Magnox sites are currently in decommissioning stages equivalent to Care and Maintenance Preparations, with some individual facilities still operating e.g. THORP reprocessing at Sellafield.

Our strategy

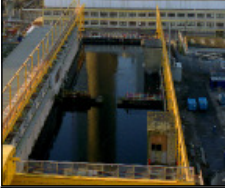
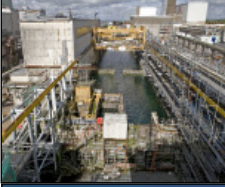
We group our work under the following six strategic and delivery themes; each have their own objectives:



18 20 year overview of estate activities

Programme	Strat. Theme	Site(s)	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	Out-years	
1. Pile Fuel Storage Pond	SR	Sellafield	Retrievals in preparation for de-watering						Retrievals during de-watering																		
2. Pile Fuel Cladding Silo	SR	Sellafield	Prep						Retrievals																		
3. First Generation Magnox Storage Pond	SR	Sellafield	Prep						Bulk Retrievals										Residual Retrievals		to 2035						
4. Magnox Swarf Storage Silo	SR	Sellafield	Prep						MBGW Retrievals			Prep			Bulk Retrievals				*								
7. Metal Fuels (MOP)			<p>Defueling</p> <p>Dungeness 100%</p> <p>Chapelcross 100%</p> <p>Sizewell 100%</p> <p>Calder Hall 14%</p> <p>Oldbury 52%</p> <p>Wylfa 11%</p> <p>Magnox reprocessing</p> <p>18% 18% 14% 18% 18% 15% POCO</p> <p>*Percentages indicate the amount of fuel defuelled as of November 2014</p> <p>*Timing of POCO will depend on MOP9 schedules. Based on PP14 figures.</p> <p>*Percentage treated per year of total amount remaining</p>																								
8. Oxide Fuels	SF	Sellafield	22% 22% 20% 23% 13% POCO																						*Percentage treated per year of total amount remaining		
9. High Level Waste Management			<p>Vitrification VM/SF/S Sellafield 13% 12% 10% 11% 12% 13% 14% 15% POCO *Percentage treated per year of total amount remaining</p> <p>HAL Stocks 100% 94% 89% 84% 80% 72% 54% 30% POCO *Net reduction in HAL stocks per year</p>																								
11. LLW	IWM	All SLCs	Deliver the Joint Low Level Waste Management Plan																						*Lifetime plan to 2080		
12. MODP	E/IWM/E	Magnox	<p>Sites into C&M</p> <p>Bradwell Traws Berkeley Hunterston Hinkley Wylfa . **</p> <p>* Dungeness; Sizewell; Oldbury</p> <p>** Chapelcross</p>																								
13. RSRL Optimisation	SR	RSRL	Optimised decommissioning within funding constraints including movement of NM										IS														
			SGHWR & Dragon Demolition Complete						IS																		
14. Dounreay Optimisation			<p>Contract SR Dounreay Decommissioning under target cost contract IS</p> <p>LLW facility IWM Operations Includes final capping of facility.</p>																								

Note - dates are subject to change due to contractual re-baselining activities currently underway for a number of sites

The bigger picture		Business Plan - Key activities 2015-2018	
SR	Complete all retrievals from the Pile Fuel Storage Pond		<p>SLC: Sellafield, Programme: LP&S</p> <p>Pile Fuel Storage Pond - Completion of export of Canned Oxide Fuel from the pond.</p>
	Complete all retrievals from the First Generation Magnox Fuel Storage Pond		<p>SLC: Sellafield, Programme: LP&S</p> <p>First Generation Magnox Storage Pond - Continue to develop the capability to support export of material from the pond.</p>
	Accelerated entry into Care and Maintenance of Trawsfynydd		<p>SLC: Magnox, Programme: MODP</p> <p>Trawsfynydd - Decommissioning and demolition activities in preparation for entry into Care and Maintenance.</p>
	Accelerated entry into Care and Maintenance of Bradwell		<p>SLC: Magnox, Programme: MODP</p> <p>Bradwell - Reactor buildings safestore - weather envelope completed.</p>
SF	Complete defuelling of the Magnox reactor fleet		<p>SLC: Magnox, Programme: MOP9</p> <p>Magnox Operation Programme - Ongoing defuelling in line with MOP9 (ref 5).</p>
	Close-out of commercial reprocessing contracts		<p>SLC: Sellafield, Programme: MOP9</p> <p>Oxide Fuels - Completion of all oxide spent fuels contracts for overseas customers.</p>
NM	Ongoing safe and secure storage of plutonium		<p>SLC: Sellafield & NDA</p> <p>Continue with the safe and secure storage of plutonium in line with UK policy.</p>
	Accelerated entry into Care and Maintenance of the Winfrith and Harwell research reactors		<p>SLC: RSRL & Sellafield, Programme: RSRL Optimisation</p> <p>RSRL - Continued implementation of a programme for the transfer of nuclear materials.</p>
	Dounreay progressed into Interim End State		<p>SLC: DSRL & Sellafield, Programme: Dounreay Optimisation</p> <p>Dounreay - Sellafield to receive first transports of unirradiated exotic fuel from Dounreay.</p>

IWM	Complete processing of all Highly Active Liquor stocks		SLC: Sellafield, Programme: High Level Waste Continued delivery of Highly Active Liquor (HAL) stock reduction.
	Implementation of the National Low Level Waste Strategy		SLC: LLWR, Programme: Low Level Waste Delivery of the National LLW Programme to optimise LLW Strategy implementation.
BO	Ongoing income generation to offset cost to the UK taxpayer		SLC: Magnox Magnox - Continued electricity generation at Wylfa and ongoing provision of fuel services to EDF Energy.
CE	Ensuring ongoing strategic cohesion of our mission		NDA Develop and consult upon Strategy III.
	Long-term sustainable performance at Sellafield		NDA NDA and Sellafield - Continue with the capability improvements programme (Excellence Plan) at Sellafield.

Our funding

Funding framework

The NDA is publicly funded, which is partially offset by the income it generates from its commercial activities. Our total planned expenditure is voted upon annually by Parliament.

Government funding

NDA's current funding allocations were made in Spending Review 2010 (for financial years 2010/11 to 2014/15) and Spending Round 2013 (for 2015/16). We expect a further Spending Review to be announced in 2015, setting the NDA's funding envelope for 2016/17 and probably beyond.

Commercial income

Our commercial operations fall broadly into two areas:

- electricity generation and associated trading
- spent fuel and nuclear materials management, including reprocessing

Our objective is to maximise revenue from our existing assets and operations to help fund decommissioning and clean-up, thereby reducing the burden on the UK taxpayer. To achieve this we will include optimised income from electricity generation, leasing property and selling land or other assets in response to market interest.

The nature of our commercial activities means we have to manage a significant degree of income volatility, largely due to our operations relying on ageing assets and infrastructure. Furthermore, this income will decline in future years as plants close and enter decommissioning. Wylfa, for example, is more than 40 years old and will cease operation by December 2015.

Prioritisation and allocation of funding

Within affordability and funding allocation constraints, we will seek to maintain progress and maximise value for money. We will do this by focusing on the highest hazards and risks, whilst ensuring that safe, secure and environmentally responsible site operations are maintained across our estate.

The Spending Review 2010 and Spending Round 2013 process used criteria drawn from our Value Framework to evaluate options. These criteria - Affordability (short, medium and long-term), Value for Money, Safety and Environmental Impact, Deliverability, Socio-Economic and UK Government Policy Impact - will inform the management decisions to be taken in the process of allocating the available funding over the Business Plan period.

Planned income and expenditure in 2015/16

This Business Plan sets out our anticipated income and expenditure for 2015/16 in line with the settlement agreed in Spending Round 2013.

Our total planned expenditure for 2015/16 is £3.31 billion, of which £2.09 billion will be funded by UK government and £1.22 billion by income from commercial operations. Planned expenditure on site programmes will be £2.91 billion, while non-site expenditure is expected to be £0.19 billion. This non-site expenditure includes skills development, socio-economic, research & development (R&D), insurance and pension costs, fees to SLCs, implementing geological disposal and NDA operating costs as detailed on page 23.

Funding cont'd

Planned income and expenditure summary

£M SLC/Subsidiaries/Sites	Decom & Clean-up Costs (A)	Total Operations Costs		2015/16 Plan Total (A+B+C)	2014/15 Plan Total
		Running Cost (B)	Capex (C)		
Sellafield Ltd	1,050	643	257	1,950	1,800
Magnox Ltd and RSRL	513	87	2	602	729
Dounreay Site Restoration Ltd	209			209	172
LLWR Ltd	69			69	51
Springfields Fuels Ltd	41			41	50
Capenhurst	41			41	21
Electricity Trading and Gas Costs		96		96	74
Nuclear Transport and Contract Management		119	2	120	146
Non-Site Expenditure	186			186	185
TOTAL	2,108	944	261	3,313	3,228
Income				1,224	993
Net				2,089	2,236

Notes:

1. Numbers may not cast due to rounding.
2. Final Annual Site Funding Limits issued in March 2015 may be adjusted to reflect efficiency performance and portfolio pressures.
3. The NDA reserves the right to reallocate funding to meet prioritised programme needs.

Summary NDA Spending Review 2010 (SR10) funding

Summary NDA SR10 funding	2012/13 £M	2013/14 £M	2014/15 £M	2015/16 £M
Income	717	887	993	1,224
Government Funding	2,286	2,280	2,236	2,089
Expenditure	(3,003)	(3,167)	(3,228)	(3,313)
Net	0	0	0	0

Funding cont'd

2015/16 breakdown of non-site expenditure

Non-site expenditure	2015/16 Plan £M	2014/15 Plan £M
NDA Operating Costs	44	43
Radioactive Waste Management Directorate	25	26
Socio Economic, Skills, R&D, Knowledge	27	29
Insurance	14	12
Contractor Fees	77	75
Total	186	185

2015/16 breakdown of of planned income by category

Income source	2015/16 Plan £M	2014/15 Plan £M
Reprocessing and Fuel Management Services	817	620
Electricity Generation	134	220
NDA - INS Transport	198	82
Intra Site Services	76	70
Total	1,224	993

Sellafield Limited (PBO - Nuclear Management Partners Limited)

The SLC responsible for the operation of the Sellafield nuclear licensed site.



Planned expenditure for 2015/16 - **£1,950 million**

Key facts

Location - Cumbria

Area - 276 hectares

Status of land - all 276 hectares covered by the nuclear site licence

Current key milestones

2015-18 - Commence sludge retrievals from the First Generation Magnox Storage Pond

2015-18 - Commence sludge exports from the Pile Fuel Storage Pond

2015-18 - Completion of all oxide fuel contracts for overseas customers

2015 - 2016 Key Activities¹

SR

The areas of principal focus are the redundant Legacy Ponds & Silos facilities, which are made up of the Pile Fuel Storage Pond, Pile Fuel Cladding Silo, First Generation Magnox Storage Pond and Magnox Swarf Storage Silo. These facilities supported the development of the nuclear programme in the UK from the early 1950s. Latterly, they have supported the generation from the fleet of Magnox power stations. The programmes include the removal of nuclear fuel, sludge and solid material which require the provision of equipment to retrieve the various wastes and then treat and store them in passive condition. This process needs to take into account the role of Integrated Waste Management in achieving hazard reduction and long-term safety, security and environmental protection requirements.

The following activities are key steps in the delivery of these major clean-up programmes:

Pile Fuel Storage Pond

- Continue consolidation of sludge within the pond.
- Continue with consolidation and export of contaminated metals for treatment and storage.
- Continue consolidation and export of metal fuel from the pond and wet bays.
- Completion of export of Canned Oxide Fuel from the pond.

Pile Fuel Cladding Silo

- Continue development of the capability to retrieve waste.

First Generation Magnox Storage Pond

- Active commissioning of Sludge Packaging Plant 1.
- Export of material from wet bays.
- Continue to develop capability to support export of material from the pond.

Magnox Swarf Storage Silo

- Continue to develop the downstream capability to receive and treat material from this facility.
- Commence installation of Silo Emptying Plant 2 machine.
- Commence construction of the Silo Maintenance Facility flask loading and maintenance cave.

Decommissioning

- Continue the decommissioning and demolition of the diffuser from Windscale Chimney Pile.
- Continue work to support demolition of First Generation Magnox Reprocessing stack.

¹A revised Lifetime Plan for the Sellafield SLC is currently under review by NDA. The finalisation of the Lifetime Plan may change the delivery dates of the activities included in this Business Plan. Any significant changes will be reflected in next year's plan.

SF	<p>All of the spent fuels discharged from the operating Advanced Gas-Cooled Reactor (AGR) power stations and the operating or defuelling Magnox power station reactors are sent to Sellafield for management. The management of AGR fuel under contracts with Electricité de France Energy (EDF Energy) provides a significant income stream to the NDA (offsetting the cost to the taxpayer). Sellafield will continue to implement the strategy to reprocess all Magnox fuel and to complete the Thermal Oxide Reprocessing Plant (THORP) reprocessing contracts for both EDF Energy's AGR fuel and overseas customers' fuels.</p> <p>The following activities highlight the key steps:</p>
	Continue to reprocess Magnox spent fuel in line with MOP9 (<i>Ref 5</i>).
	Complete all receipts of out of reactor breeder material from Dounreay.
	Continue to receive and manage AGR spent fuel from EDF Energy.
	Continue to reprocess oxide spent fuel through THORP from EDF Energy and overseas customers.
	Continue preparations for the long-term interim storage of AGR spent fuel following the completion of THORP reprocessing.
NM	<p>Sellafield is the custodian of the majority of the UK's stockpile of plutonium which is held in safe and secure storage. Consolidation of materials is an ongoing activity and will continue to be part of the site's mission.</p> <p>The following activities highlight the key steps:</p>
	Continue the safe and secure storage of plutonium in line with UK policy.
	Receive first transports of exotic fuel from Dounreay.
	Continue the implementation of a programme for the transfer of materials from Harwell.
IWM	<p>The various activities of the site produce wastes in many forms. These require varying degrees of treatment and onward processing. The site will continue to focus on safe, efficient management of these wastes, including the reduction of the stocks of Highly Active Liquor (HAL) which are produced as part of the reprocessing operations, the return of vitrified material overseas and the management of on-site intermediate and low level wastes.</p> <p>The following activities highlight the key steps:</p>
	Continue to process HAL through the Waste Vitrification Plant.
	Continue to repatriate overseas owned vitrified waste to its country of origin.
	Progress inactive commissioning of Evaporator D.
	Continue to generate savings and preserve capacity at the LLW Repository (LLWR) by diversion of materials into the supply chain in line with the National LLW Strategy implementation and optimisation plan.
CE	<p>A number of key enabling activities require specific focus ranging from infrastructure refurbishment or replacement projects in support of the above activities, through to key change programmes which aim to improve operational delivery and efficiency on site.</p> <p>The following activities highlight the key steps:</p>
	Continue the Sellafield infrastructure enhancement programme.
	Continue with the capability improvements programme (Excellence Plan).
	Support Small & Medium Enterprise organisations by increasing overall spend with them to 22% ² .
Reg. ³	Continue joint working between ONR, EA, Sellafield Ltd, NDA, ShEx and DECC with the overriding objective of accelerating risk and hazard reduction.
	Deliver performance plan milestones to reduce environmental risk (including retrieval and treatment of legacy wastes, reduction of HAL stocks and continued delivery of MOP9).
	Minimise discharges in line with UK discharge strategy and develop contingency against failure of vessels and pipework in the Site Ion Exchange Plant.
	Continue to deliver the suite of improvements necessary to ensure that the site is resilient to severe events.
	Maintain an asset management regime that takes into account the impact of asset condition on meeting regulation and delivery of milestones.

2016 - 2018 Planned Key Activities	
SR	Pile Fuel Storage Pond: first export of sludge to Waste Encapsulation Plant.
	Pile Fuel Cladding Silo: continue development of capability to retrieve waste.
	First Generation Magnox Storage Pond: commence pond bulk sludge retrievals.
	Magnox Swarf Storage Silo: continue to develop the downstream capability to receive and treat material from the facility.
	Magnox Swarf Storage Silo: commence active commissioning of Silo Emptying Plant 2.
	Decommissioning: continue to retrieve and treat legacy flocculent from the flocculent storage tanks.
SF	Continue to reprocess Magnox spent fuel in line with MOP9 (ref 5).
	Completion of all oxide spent fuel contracts for overseas customers.
	Continue preparations for the long-term interim storage of AGR spent fuel following the completion of THORP reprocessing.
	Continue to receive and reprocess AGR spent fuel from EDF Energy.
NM	Continue the safe and secure storage of plutonium in line with UK policy.
	Continue to receive exotic fuels from Dounreay.
	Continue the safe, secure management of our uranics inventory.
IWM	Continue to process Highly Active Liquor (HAL) through the Waste Vitrification Plant.
	Complete active commissioning of Evaporator D.
	Continue to repatriate overseas owned vitrified HAL to country of origin.
	Continue to generate savings and preserve capacity at LLWR by diversion of materials into the supply chain in line with the National LLW Strategy implementation and optimisation plan.
CE	Continue with the capability improvements programme (Excellence Plan).

² The NDA target for SME spend in 2015/16 cannot be confirmed until the completion of the general election and the new Parliament's priorities are understood, however an aspirational target of 22% would be in line with previous expectations.

³ The regulatory (Reg.) sections throughout the document describe any regulatory matters to be addressed alongside the Key Activities.



Research Sites
Restoration Ltd



Magnox

Magnox Limited and Research Sites Restoration Limited (both SLCs are now owned by the same PBO - Cavendish Fluor Partnership)

Magnox Ltd is the SLC responsible for the operation of the Berkeley, Bradwell, Chapelcross, Dungeness A, Hinkley Point A, Hunterston A, Oldbury, Sizewell A, Trawsfynydd and Wylfa sites.

Research Sites Restoration Ltd (RSRL) is the SLC responsible for the operation of the Harwell and Winfrith sites.

Planned expenditure for 2015/16 - **£602 million**

During 2014 the NDA completed a competition for the Parent Body Organisation for Magnox and RSRL. As a result of this competition we have secured a target cost contract with the SLCs and their parent organisation, Cavendish Fluor Partnership, which should enable significant cost savings against the previous plans. The consolidation phase of the new contract will involve the development of a new Performance Plan, which will incorporate work to be completed by both of the SLCs.

One feature of the new arrangements is that fee is paid out against output based milestones, giving the SLCs the ability to flex the delivery of many of those milestones over the first seven years of the contract (Phase 1). Key milestones, known as Authority Milestones, are required to be delivered by a defined date.

As a result the NDA will monitor against Phase 1 and report on the delivery of the target cost contract and the milestones, noting that many milestone dates may flex through the phase to meet operational demands.

The NDA requires Magnox SLC to manage the generation and defuelling of the Magnox reactor fleet and, together with RSRL SLC, to progress the preparations to enter effective Care and Maintenance, the interim Care and Maintenance phase and final site clearance of the Magnox and RSRL reactor fleets.

The key activities are maintaining safety and security at all times and managing the environmental impact of:

- the extension of electricity generation at Wylfa and continued electricity generation at Maentwrog
- defuelling in line with MOP9⁴ (ref 5)
- taking Bradwell and Trawsfynydd into early effective Care and Maintenance
- the continuation of decommissioning and demolition of facilities throughout the Magnox and RSRL fleet, in support of the NDA's mission
- delivery of Winfrith into its agreed Interim End State
- the achievement of agreed regulatory standards for Interim End States with a passive management arrangement
- LLW retrievals, processing and passive storage
- nuclear materials transfers

2015 - 2016 Magnox and RSRL Key Activities⁵

SR	Delivery of programmisation principles across Magnox and RSRL SLCs.
	Continuation of estate decommissioning and demolition activities.
SF	Management of MOP9 and co-ordination of Magnox fuel management activities with Sellafield and Dounreay.
	Progression of Oldbury defuelling.
NM	Delivery of the RSRL nuclear materials programme activities.
IWM	Delivery of the Magnox and RSRL elements of the estate-wide Low Level Waste management plan.
BO	Optimisation of electricity generation at Wylfa.
	Support to NDA in property activities to reduce NDA decommissioning liability and achieve best value on asset disposal.

⁴ Magnox will defuel their remaining sites in line with MOP9. The use of upper and lower bound performance levels provides a realistic indication of the potential range of key dates and means MOP9 will remain valid, provided average reprocessing performance lies within the performance range.

⁵ Current key activities will be subject to change to realign to the new Performance Plan, which is currently being developed through the consolidation period of the new contract.

CE	Complete consolidation activities in support of the new contract under one PBO.
	Information Assurance Maturity Model - progression of delivery of enabling activities.
	Support Small & Medium Enterprise organisations by increasing overall spend with them to 22%. ²
	Development of Interim Care & Maintenance and Interim End State approaches, utilising revised management arrangements.
Reg.	NDA and regulatory permissioning in support of the Care and Maintenance entry definitions and arrangements.
	NDA and regulatory permissioning in support of the transfer of Nuclear Materials between sites.
	NDA and regulatory permissioning in support of the Interim End State definition and arrangements for Winfrith.

2016 - 2018 Planned Key Activities	
SR	Continuation of estate decommissioning and demolition activities.
SF	Management of MOP9 and co-ordination of Magnox fuel management activities with Sellafield and Dounreay.
	Progression of Oldbury and Wylfa defuelling.
NM	Continuation of the RSRL programme for the transfer of nuclear materials and contact-handled Intermediate Level Waste (ILW).
IWM	Delivery of the Magnox and RSRL elements of the estate-wide Low Level Waste management plan.
BO	Support the NDA in property activities to reduce NDA decommissioning liability and achieve best value on asset disposal.
CE	Enacting management arrangements for Care and Maintenance state.
	Support Small & Medium Enterprise organisations by continued support of the government Growth Agenda.
	Information Assurance Maturity Model – delivery of improvement activities.
Reg.	NDA and regulatory permissioning in support of the Care and Maintenance entry definitions and arrangements.
	NDA and regulatory permissioning in support of the transfer of Nuclear Materials between sites.
	NDA and regulatory permissioning in support of the Interim End State definition and arrangements for Winfrith.
	NDA and regulatory permissioning in support of RSRL decommissioning and demolition activities.



Berkeley



Key Facts

Location - Gloucestershire

Area - 27 hectares

Status of land

De-licensed: 11 hectares of the site have been de-licensed

De-designation: Modification of Designating Direction signed by the Minister in January 2012

Current Key Milestones

2021 - Site enters Care and Maintenance

2070 - Final site clearance commences

2079 - Final site clearance achieved

2015 - 2016 Key Activities

IWM	Continuation of ILW plant retrievals and packaging.
Reg.	NDA and regulatory permissioning in support of the Berkeley ILW Management Programme.

2016 - 2018 Planned Key Activities

SR	Decommissioning and demolition activities ongoing in preparation for entry into Care and Maintenance.
IWM	Completion of chute silo retrievals.
IWM	Continuation of retrieval activities in the active waste vaults.
Reg.	NDA and Regulatory permissioning in support of the Berkeley ILW Management Programme.
	NDA and Regulatory permissioning in support of the Care and Maintenance entry definitions and arrangements.

Bradwell



Key Facts

Location - Essex

Area - 20 hectares

Status of land - all 20 hectares remain covered by the nuclear site licence

Current Key Milestones

2016 - Site enters Care and Maintenance

2083 - Final site clearance commences

2092 - Final site clearance achieved

2015 - 2016 Key Activities

SR	Decommissioning and demolition activities in preparation for entry into Care and Maintenance.
	Reactor buildings safestore – weather envelope completed.
IWM	Continue Fuel Element Debris (FED) dissolution and retrievals.
Reg.	NDA and regulatory permissioning in support of the Care and Maintenance entry definitions and transitional arrangements.

2016 - 2018 Planned Key Activities

SR	Ponds complex and contaminated structures (vaults) completed for entry into Care and Maintenance.
	Site completes activities to enable entry into effective Care and Maintenance.
IWM	Completion of FED dissolution and retrievals.
	All ILW passively stored.
CE	Interim State achieved.
	Completion of transition management arrangements for Care and Maintenance state.
Reg.	NDA and regulatory permissioning to enter Care and Maintenance state.

Chapelcross



Key Facts

Location - Dumfries and Galloway

Area - 96 hectares

Status of land - all 96 hectares remain covered by the nuclear site licence

Current Key Milestones

2017-23 - Interim Care and Maintenance

2028 - Site enters Care and Maintenance

2085 - Final site clearance commences

2095 - Final site clearance achieved

2015 - 2016 Key Activities

SR	Decommissioning and demolition activities in preparation for entry into Interim Care and Maintenance.
	Complete bulk asbestos removal from third and fourth reactor buildings.
Reg.	NDA and regulatory permissioning in support of the Care and Maintenance entry definitions and transitional arrangements.

2016 - 2018 Planned Key Activities

SR	Ponds drained and stabilised.
	Continue hazard reduction activities towards Interim Care and Maintenance.
IWM	All ILW retrieved and passively stored.
Reg.	NDA and regulatory permissioning in support of the Care and Maintenance entry definitions and transitional arrangements.

Dungeness A



Key Facts

Location - Kent

Area - 20 hectares

Status of land - all 20 hectares remain covered by the nuclear site licence

Current Key Milestones

2019-23 - Interim Care and Maintenance

2027 - Site enters Care and Maintenance

2087 - Final site clearance commences

2097 - Final site clearance achieved

2015 - 2016 Key Activities

SR	Decommissioning and demolition activities in preparation for entry into Interim Care and Maintenance.
Reg.	NDA and regulatory permissioning in support of the Care and Maintenance entry definitions and transitional arrangements.

2016 - 2018 Planned Key Activities

SR	Continue hazard reduction activities towards Interim Care and Maintenance.
SR	Ponds drained and stabilised.
Reg.	NDA and regulatory permissioning in support of the Care and Maintenance entry definitions and transitional arrangements.

Harwell



Key Facts

Location - Oxfordshire

Area - 99 hectares

Status of land -

De-licensed: 22 hectares of the site have been de-licensed

De-designation: Modification to Designating Direction signed by the Minister in December 2012.

Current Key Milestones

2023 - Primary facilities decommissioning complete

2025 - Reactor decommissioning complete

2027 - Interim State achieved

2064 - Final site clearance achieved

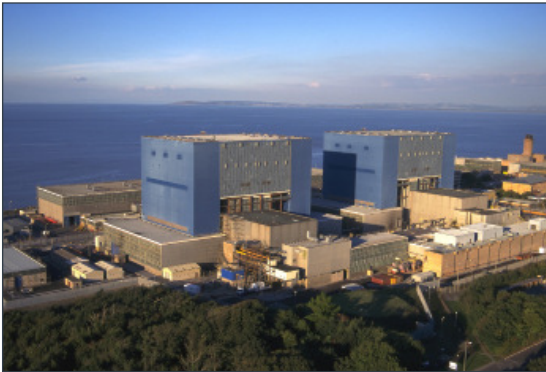
2015 - 2016 Key Activities

SR	Continuation of decommissioning and demolition activities.
	Decommissioning of redundant facilities.
NM	Continuation of the programme for the transfer of nuclear materials and contact-handled ILW.
IWM	Recovery, processing and packaging of solid ILW.
Reg.	NDA and regulatory permissioning in support of RSRL decommissioning and demolition activities.

2016 - 2018 Planned Key Activities

SR	Continuation of estate decommissioning and demolition activities.
NM	Continuation of the programme for the transfer of nuclear materials and contact-handled ILW.
IWM	Recovery, processing and packaging of solid ILW.
Reg.	NDA and regulatory permissioning in support of RSRL decommissioning and demolition activities.

Hinkley Point A



Key Facts

Location - Somerset

Area - 19 hectares

Status of land - all 19 hectares remain covered by the nuclear site licence

Current Key Milestones

2025 - Site enters Care and Maintenance

2081 - Final site clearance commences

2090 - Final site clearance achieved

2015 - 2016 Key Activities

SR	Ongoing activities for the draining and stabilisation of Reactor 1 ponds.
	Decommissioning and demolition activities in preparation for entry into Care and Maintenance.
IWM	Continuation of Fuel Element Debris (FED) retrieval activities and establishment of buffer storage arrangements.
Reg.	NDA and regulatory permissioning in support of the Care and Maintenance entry definitions and transitional arrangements.

2016 - 2018 Planned Key Activities

SR	Ongoing activities for the draining and stabilisation of Reactor 1 ponds.
IWM	Interim Storage Facility inactive commissioning complete.
	Commissioning of IONSIV Cartridges waste processing facility complete.
Reg.	NDA and regulatory permissioning in support of the Care and Maintenance entry definitions and transitional arrangements.

Hunterston A



Key Facts

Location - Ayrshire

Area - 15 hectares

Status of land - all 15 hectares remain covered by the nuclear site licence

Current Key Milestones

2022 - Site enters Care and Maintenance

2071 - Final site clearance commences

2080 - Final site clearance achieved

2015 - 2016 Key Activities

SR	Decommissioning and demolition activities in preparation for entry into Care and Maintenance.
	Completion of the pond floor surfaces stabilisation.
IWM	Progressing of ILW retrievals, processing and storage activities.
Reg.	NDA and regulatory permissioning in support of the Care and Maintenance entry definitions and transitional arrangements.

2016 - 2018 Planned Key Activities

SR	Decommissioning and demolition activities in preparation for entry into Care and Maintenance.
IWM	Continue ILW retrievals, processing and storage activities.
	Completion of solid ILW encapsulation civil construction.
Reg.	NDA and regulatory permissioning in support of the Care and Maintenance entry definitions and transitional arrangements.

Oldbury



Key Facts

Location - South Gloucestershire

Area - 51 hectares

Status of land -

De-licensed: 39 hectares of the site has been de-licensed

De-designation: Modification of Designating Direction signed by the Minister in January 2012.

Current Key Milestones

2027 - Site enters Care and Maintenance

2092 - Final site clearance commences

2101 - Final site clearance achieved

2015 - 2016 Key Activities

SR	Preparations for decommissioning and hazard reduction.
	Decommissioning and demolition activities in preparation for entry into Care and Maintenance.
SF	Continue reactor defuelling in line with MOP9 (ref 5).
Reg.	Defuelling in line with Office for Nuclear Regulation and Environment Act requirements.

2016 - 2018 Planned Key Activities

SR	Continue preparations for decommissioning and hazard reduction.
	Decommissioning and demolition activities in preparation for entry into Care and Maintenance.
SF	Complete defuelling in line with MOP9 (ref 5).
Reg.	Fuel free verification agreed with Office for Nuclear Regulation (ONR).
	NDA and regulatory permissioning in support of the Care and Maintenance entry definitions and transitional arrangements.

Sizewell A



Key Facts
Location - Suffolk
Area - 14 hectares
Status of land - all 14 hectares remain covered by the nuclear site licence

Current Key Milestones
2027 - Site enters Care and Maintenance
2088 - Final site clearance commences
2097 - Final site clearance achieved

2015 - 2016 Key Activities

SR	Decommissioning and demolition activities in preparation for entry into Care and Maintenance.
Reg.	Fuel free verification agreed with ONR.
	NDA and regulatory permissioning in support of the Care and Maintenance entry definitions and transitional arrangements.

2016 - 2018 Planned Key Activities

SR	Decommissioning and demolition activities in preparation for entry into Care and Maintenance.
IWM	Commencement of Fuel Element Debris (FED) Retrievals.
	Progression of activities supporting ILW Passive Storage.
Reg.	NDA and regulatory permissioning in support of the Care and Maintenance entry definitions and transitional arrangements.

Trawsfynydd



Key Facts

Location - Gwynedd, North Wales

Area - 15 hectares

Status of land - All 15 hectares remain covered by the nuclear site licence

Current Key Milestones

2016/17⁶ - Site enters Care and Maintenance

2027 - Safestore completed

2074 - Final site clearance commences

2083 - Final site clearance achieved

2015 - 2016 Key Activities

SR	Decommissioning and demolition activities in preparation for entry into Care and Maintenance.
	Strategy agreed for ponds Interim End State entry.
IWM	Progressing of encapsulation of Fuel Element Debris (FED).
Reg.	NDA and regulatory permissioning in support of the Care and Maintenance entry definitions and transitional arrangements.

2016 - 2018 Planned Key Activities

SR	Decommissioning and demolition activities in preparation for entry into Care and Maintenance.
	Interim State Achieved (except Safestore height reduction and cladding).
IWM	Completion of FED retrievals and encapsulation.
	All ILW passively stored.
CE	Completion of transitional management arrangements for Care and Maintenance state.
Reg.	NDA and regulatory permissioning to enter Care and Maintenance.

⁶ Date currently under review and will be updated when the final version of this Business Plan is published in April 2015.

Winfrith



Key Facts
Location - Dorset
Area - 59 hectares
Status of land -
De-licensed: 44 hectares of the site have been de-licensed
De-designation: Modification of Designating Direction signed by the Minister in December 2012.
Current Key Milestones
2021 - DRAGON reactor complex decommissioning complete
2021 - Steam Generating Heavy Water Reactor (SGHWR) complex decommissioning complete
2021 - Interim End State achieved

2015 - 2016 Key Activities

SR	DRAGON reactor – integrated scheme design completed.
	Continuation of decommissioning and demolition activities.
	SGHWR – continue decommissioning of the primary containment areas.
	SGHWR – completion of the contract award for reactor core detailed scheme design and build.
Reg.	NDA and regulatory permissioning in support of RSRL decommissioning and demolition activities.
	NDA and regulatory permissioning in support of the Interim End State Definition and arrangements for Winfrith.

2016 - 2018 Planned Key Activities

SR	Continuation of estate decommissioning and demolition activities.
	SGHWR – development of the detailed design to remove the reactor core.
	DRAGON – continue reactor decommissioning.
	SGHWR – completion of primary containment decommissioning activities.
Reg.	NDA and regulatory permissioning in support of RSRL decommissioning and demolition activities.
	NDA and regulatory permissioning in support of the Interim End State Definition and arrangements for Winfrith.

Wylfa



Key Facts

Location - Anglesey

Area - 21 hectares

Status of land - All 21 hectares remain covered by the nuclear site licence

Current Key Milestones

2025 - Site enters Care and Maintenance

2096 - Final site clearance commences

2105 - Final site clearance achieved

2015 - 2016 Key Activities

SR	Decommissioning and demolition activities in preparation for entry into Care and Maintenance.
SF	Defuelling activities in line with MOP9 (<i>ref 5</i>).
BO	Continued electricity generation.

2016 - 2018 Planned Key Activities

SR	Decommissioning and demolition activities in preparation for entry into Care and Maintenance.
SF	Reactor bulk defuelling in line with MOP9.
IWM	Progression of ILW retrievals and packaging.
Reg.	Fuel free verification agreed with the Office for Nuclear Regulation (ONR).
	NDA and regulatory permissioning in support of the Care and Maintenance entry definitions and transitional arrangements.



**Dounreay Site Restoration Limited
(PBO - Cavendish Dounreay Partnership Limited)**

Dounreay Site Restoration Ltd (DSRL) is the SLC responsible for the decommissioning of the Dounreay site.



Planned expenditure for 2015/16 - **£209 million**

Key Facts

Location - Caithness, Scotland

Area - 62 hectares (including 12 hectares designated for LLW facility)

Status of land - all 62 hectares remain covered by the nuclear site licence

Current Key Milestones

2017 - Complete Dounreay Fast Reactor fuel removal from reactor

2022 - Decontamination of Dounreay Fast Reactor structures suitable for demolition

2024 - Prototype Fast Reactor liquid metal residues destroyed

2027 - Shaft backfilled and capped

2027-2029 - Interim End State achieved

2015 - 2016 Key Activities

SR	Decontamination of Prototype Fast Reactor pond suitable for final disposal.
NM	Completion of removal of spent fuel cans from the buffer store and pond matrix.
	Completion of construction of new fuel characterisation facilities.
IWM	Material Test Reactor raffinate complete.
CE	Continuous improvement in health, safety and environmental performance.

2016 - 2018 Planned Key Activities

SR	Post Operational Clean Out (POCO) for building housing underground tanks of raffinate.
NM	Complete removal of all fuels from Dounreay Fast Reactor.
IWM	Dounreay Fast Reactor raffinate immobilisation complete.
	Prototype Fast Reactor raffinate immobilisation complete.
Reg.	Letters of consent received from disposal authority for all wastes in store at Interim End State.

Low Level Waste Repository Limited (PBO - UK Nuclear Waste Management Limited)

Low Level Waste Repository Limited (LLWR) is responsible for both the operation of the LLW site and the delivery of the National Low Level Waste Programme on behalf of the NDA.



Planned expenditure for 2015/16 - **£69 million**

Key Facts

Location - near the village of Drigg, Cumbria

Area - 110 hectares

Status of land - all 110 hectares remain covered by the nuclear site licence

Current Key Milestones

2015 - Complete the review of the UK Nuclear Industry Solid Low Level Waste Strategy

2022 - Complete decommissioning of Plutonium Contaminated Material facilities

2007-2055 - Engineered vaults construction

2080 - Final site closure achieved

2015 - 2016 Key Activities

SR	Ongoing site preparation for phased construction of final cap for trenches 1 to 7 and for Vault 8.
	Ongoing decommissioning of Plutonium Contaminated Material facilities.
	Engaging with key stakeholders to progress environmental permits and planning approvals for continued use of the site.
IWM	Continue segregated waste, treatment and disposal services in line with UK Low Level Waste Strategy.
	Work with consigning SLCs to improve waste forecasts and the waste inventory.
	Delivery of the National LLW Programme to optimise LLW Strategy implementation.
	Complete the review of the UK Nuclear Industry Solid Low Level Waste Strategy.
CE	Support Small & Medium Enterprise organisations by increasing overall spend with them to 22%. ²
	Continue to pursue overall cost savings in delivery of the Lifetime Plan.
	Maintain the momentum of the supply chain investment in waste treatment arrangements.
	Continue upgrades to the infrastructure.
Reg.	Demonstrate conduct of operations and maintenance improvements to ONR.
	Support the Environment Agency in the LLWR environmental permit consultation process.
	Support Cumbria County Council in determination of the site optimisation and closure works planning application.
	Permanent recovery of leachate management systems.
	Demonstrate hazard reduction in Plutonium Contaminated Material facilities.

2016 - 2018 Planned Key Activities	
SR	Ongoing site preparation for phased construction of the final cap for trenches 1 to 7 and Vault 8.
	Ongoing decommissioning of Plutonium Contaminated Material facilities.
IWM	Continue segregated waste, treatment and disposal services in line with UK LLW Strategy.
	Work with consigning SLCs to improve waste forecasts and inventory.
	Delivery of the National LLW Programme to optimise LLW Strategy implementation.
CE	Maintain the momentum of the Supply Chain investment in waste treatment arrangements.
	Complete the upgrades to the perimeter fencing.

Springfields Fuels Limited (Westinghouse Electric)

Planned expenditure for 2015/16 - **£41 million**

Springfields is a nuclear fuel manufacturing site and is located near Preston in Lancashire. The site is operated by Springfields Fuels Limited and used to manufacture a range of fuel products for both UK and international customers and for the decommissioning of historic uranic residues and redundant facilities.

From April 2010, the NDA permanently transferred ownership of the company to Westinghouse Electric including the freedom to invest for the future under the terms of a new 150 year lease. Springfields Fuels Limited is contracted to provide decommissioning and clean-up services to NDA to address historic liabilities ongoing prior to the sale.

2015 - 2016 Key Activities

SR	Continue the Post Operational Clean Out (POCO) and decommissioning of redundant buildings including fuel production and assembly plants, hex production plant and associated facilities.
NM	Processing of historic and offsite residues through various facilities to make ready for safe long-term storage whilst recovering any uranium for return to the nuclear fuel cycle.
	Continue the management and disposal of legacy wastes.
	Complete cylinder washing and disposal processes.

2016 - 2018 Planned Key Activities

SR	Continue the POCO and decommissioning of redundant buildings including fuel production and assembly plants, Hex production plant and associated facilities.
NM	Processing of historic and offsite residues through various facilities to make ready for safe long-term storage whilst recovering any uranium for return to the nuclear fuel cycle.
	Continue the safe management and disposal of legacy wastes.



Capenhurst Nuclear Services (URENCO)

Planned expenditure for 2015/16 - **£41 million**

The Capenhurst site is located near Ellesmere Port in Cheshire, and was formerly home to a uranium enrichment plant and associated facilities that ceased operation in 1982.

In November 2012 the site was transferred to URENCO, owners of the adjacent licensed site with amalgamation into a single nuclear licence. Existing activities previously undertaken by Sellafield Ltd have now been assigned to URENCO.

An agreement has been signed for processing of NDA owned legacy materials.

NDA and URENCO have also signed an agreement for the processing of government owned by-product/legacy material from uranium enrichment (known as "Tails") through URENCO's Tails Management Facility.

It is anticipated that this agreement will reduce NDA's net liabilities for managing and clearing the site while also paving the way for URENCO to invest in new facilities as required in order to meet future customer demand.

2015 - 2016 Key Activities

SR	Continue the decommissioning of redundant areas including completion of the site wide asbestos remediation project.
	Continue land remediation projects such as East Side Curtilage.
NM	Conclusion of reference design phase for the Legacy Cylinder Facility.
	Conclusion of Hex bottle washing operations and the Post Operational Clean Out (POCO) of facility.
	Continue the safe storage of uranic material including the over drumming of Magnox Depleted Uranium and upgrading of storage facility.
	Continue the safe management and disposal of legacy wastes and residues.

2016 - 2018 Planned Key Activities

SR	Continue the post operational clean out and decommissioning of redundant areas.
	Continue land remediation projects such as East Side Curtilage.
NM	Detailed design phase of the Legacy Cylinder Facility and enabling works.
	Continue the safe storage of uranic material including the over drumming of Magnox Depleted Uranium and the upgrade of the low voltage electrical system.
	Continue the safe management of legacy wastes and residues.

Nuclear Decommissioning Authority

Nuclear Decommissioning Authority

The Energy Act 2004 (ref 6) transferred the assets and liabilities of all the sites included in this Business Plan to the NDA. The NDA has six offices located across the UK with its headquarters in Cumbria.

Delivery of the NDA's mission is primarily through the SLCs, and relies upon organisations and individuals working effectively and collectively.

Our approach is defined by five core processes.

Strategy - the framework for delivery of our mission that sets out our strategic direction and long-term objectives and allows us to make recommendations on a series of discrete issues.

Planning - facilitates estate-wide decisions over the short and long-term, setting out the activities and outcomes that will deliver what we want, in the right timeframe and within the estate budget.

Contracting - contractual arrangements for the management and operation of our SLCs enables effective performance management and provides appropriate reward to our contractors.

Performance Management - analyses SLC performance and programme / project plans, as well as proposals for managing deviations from plans, with rigorous verification of claims ensuring that there is robust challenge, dialogue and action where appropriate.

Assurance of Delivery - provides confidence to the NDA and our stakeholders that the NDA Strategy will be delivered, that we have the right people and plans in place and that hazards are reducing as planned.

2015 - 2016 Key Activities

Development, public consultation, and publication of the third edition of our Strategy.

SR	Continue working with regulators and government to determine institutional controls appropriate to restoration of nuclear sites.
NM	Continue to support the development of government policy for the management of nuclear materials and provide advice to government.
IWM	Mid-term review of Low Level Waste Repository contract.
	Update the revised UK Nuclear Industry Solid Low Level Waste Strategy following consultation in preparation of publication by DECC.
CE	Magnox/RSRL - establish the benefits of the target cost contract that are to be tracked and the mechanisms with which to track them.
	Performance tracking of the Sellafield Performance Plan 2014.
	Performance tracking against the Sellafield capability improvements programme, the Excellence Plan.
	Performance tracking and against the newly approved baseline at DSRL.
	Continue the collaborative research and development programme with Innovate UK and the Department of Energy and Climate Change (DECC).
	Progress spending review optioneering through to settlement.
	Ongoing delivery against the Information Governance Programme, including the development of the NDA Nuclear Archive.
	Obtain ISO9001 and ISO14001 re-certification for NDA.
	Review and assess the value of the implementation of the NDA's Strategic People Delivery Plan to enable resource planning, skills development and flexibility and mobility across the estate.
	Embed risk management improvements in NDA and across the NDA estate.
	Provide support to government on nuclear new build decommissioning planning.
	Confirm strategies, policies and actions for NDA's internal environmental management process to deliver our contributions to DECC's Greening Government Commitments target reductions.

2016 - 2018 Planned Key Activities	
SR	Continue working with regulators and government to determine institutional controls appropriate to restoration of nuclear sites.
NM	Continue to support the development of government policy for the management of nuclear materials and provide advice to government.
CE	Magnox/RSRL - report progress against the benefits selected for tracking against the target cost contract.
	Ongoing performance tracking of the Sellafield Performance Plan 2014.
	Ongoing tracking of delivery against the Sellafield capability improvements programme, the Excellence Plan.
	Ensure the outputs of NDA estate research and development projects are shared through the Nuclear Waste Research Forum.
	NDA Nuclear Archive operational, with a 'Place of Deposit' status.
	Implementation of our strategic people delivery plan to enable resource planning, skills development and flexibility and mobility across the estate.
	Provide support to government on nuclear new build decommissioning planning.

NDA Subsidiary Companies

The NDA has a number of subsidiary companies to manage a range of business interests. The following section describes the planned activities for our key operating subsidiaries for the next three years.

Radioactive Waste Management Limited

Government has made the NDA the implementing organisation for geological disposal of Higher Activity Waste; this includes both planning and delivery. On 1 April 2014 NDA established the Radioactive Waste Management Directorate into a wholly owned subsidiary, Radioactive Waste Management Ltd. The subsidiary is running the geological disposal programme, alongside the government's geological disposal siting process, and is being developed into a competent delivery organisation which, as a separate legal entity, will be able to apply for and hold regulatory permissions in due course. We will continue to work with government to implement the Managing Radioactive Waste Safely programmes, working with interested communities and other stakeholders.

This approach does not apply in Scotland. The Scottish government has published 'Scotland's Higher Activity Radioactive Waste Policy 2011'. Scottish government Policy states that:

"The long-term management of higher activity radioactive waste should be near-surface facilities. Facilities should be located as near to the site where the waste is produced as possible".

Radioactive Waste Management Ltd's mission is to deliver geological disposal and provide radioactive waste management solutions and has the following objectives:

- engage with national and local governments and communities to identify a geological disposal facility site
- develop the specification, design, safety case and environmental and sustainability assessments for the disposal system and obtain regulatory support
- in conjunction with waste producers, identify and deliver solutions to optimise the management of Higher Activity Waste
- develop and maintain an effective organisation and secure resources to deliver the Geological Disposal Facility programme
- obtain and maintain stakeholder support for our activities
- deliver a focused technical programme to support geological disposal and optimised packaging solutions
- deliver sustainable, innovative and cost effective solutions that have public support and are in the best interest of the UK.

2015 - 2018 Planned Key Activities

Implement government policy on Geological Disposal of Higher Activity Waste.

Deliver a robust technical programme to address knowledge gaps arising from their design and safety assessment work.

Develop Radioactive Waste Management Limited into a competent delivery organisation.

Work pro-actively with waste producers, planning for and delivering disposability assessments for their range of wastes.

Direct Rail Services Limited

Direct Rail Services Limited (DRS) was established in 1995 to provide a rail service for the transportation of nuclear materials. As part of a broader portfolio including commercial freight, the key focus for DRS over the next three years is to grow profitably in all strategically identified markets with particular focus on supplying safe, secure and reliable services to the nuclear transport market.

2015 - 2018 Planned Key Activities

Continue to support all NDA facing activities in order to remain the supplier of choice in the nuclear industry and secure DRS' position as leader in the nuclear rail transport market.

Focus on developing business opportunities in accordance with the agreed strategy.

Renewal of the transport contract for EDF spent fuel, addressing NDA long-term rail capability requirements.

Capability in place for first mixed waste transport (combined ILW / LLW / spent fuel).

Delivery of rail transport element of programmes for the movement of nuclear materials.

Delivery of rail transport element of Harwell transport programmes.

Development, design, delivery and deployment of Class 88 locomotives.

Development of an appropriate disposal route for redundant nuclear wagons.

NDA Properties Limited

NDA Properties Limited primarily acts as a property management company for non-operational NDA properties outside the nuclear licensed site boundaries, in accordance with the NDA's Land and Property Management Strategy. Over the next three years, NDA Properties will act to selectively develop property to support the NDA mission and continue to optimise use of, and dispose of surplus assets.

2015 - 2018 Planned Key Activities

Effective management of the property within the company portfolio, meeting landlord obligations and generating an operating profit before revaluation adjustments.

Undertake the construction of the NDA Nuclear Archive building in Caithness.

Implement building strategy for Hinton House critical plant and machinery assets in order to extend the life of the building.

Lead all property development off nuclear licenced sites in support of NDA estate requirements, including development of office accommodation in support of SLCs.

Undertake construction of the Civil Nuclear Constabulary Training Facility in West Cumbria.

Continue the programme of disposal of property assets not required by the NDA mission.

International Nuclear Services Limited

International Nuclear Services Limited (INS) manages a large portfolio of UK and international contracts for nuclear fuel recycling and transport services on behalf of the NDA. INS operates its own subsidiary company, Pacific Nuclear Transport Limited, the world's leading marine transporter of specialist nuclear materials.

Over the next three years, INS will continue its focus on the return of vitrified wastes to their country of origin. In addition INS will continue to provide marine transport services internationally whilst also developing opportunities for new business both internationally and in support of the UK decommissioning programme.

2015 - 2018 Planned Key Activities

Continue management of contracts with international customers for spent fuel business on behalf of the NDA.

Manage uranium and plutonium services for international spent fuel business.

Transport of nuclear materials, including spent fuel, Mixed Oxide fuel, vitrified High Level Waste and conditioned Intermediate Level Waste (ILW) internationally and shipments of materials under the US government's Global Threat Reduction Initiative.

Support the NDA in the development and implementation of transport solutions to enable the UK decommissioning programme.

INS has a strategy for developing and growing new business within shipping, transport package and system design for radioactive materials, and acting as an agent for the overseas sale for UK intellectual property in relation to spent fuel and waste management, nuclear decommissioning and transport.

Rutherford Indemnity Limited

Rutherford Indemnity Limited is registered in Guernsey and is regulated by the Guernsey Financial Services Commission. The company provides insurance cover for the NDA and its estate. Over the next three years, Rutherford will continue to focus on the provision of insurance cover, at competitive rates, to support the NDA programme, with particular focus on nuclear liability cover and provision of support for changes arising from expected revisions to the Nuclear Installations Act 1965.

2015 - 2018 Planned Key Activities

Provide optimal insurance services to the NDA to support its estate-wide insurance programme and continue to exploit opportunities where Rutherford can help reduce overall cost of insurance.

Work closely with the estate to develop appropriate insurance solutions in response to emerging demands for new or additional policy cover.

Support the NDA in relation to the new insurance requirements which will result from implementation of changes to the Paris and Brussels Conventions on nuclear third party liability.

Deliver target return on the investment portfolio, protecting Rutherford's ability to offer insurance on a cost effective basis.

Glossary

AGR	Advanced Gas-Cooled Reactor	ShEx	Shareholder Executive
BO	Business Optimisation (Strategic Theme)	SLC	Site Licence Company
CE	Critical Enablers (Strategic Theme)	SME	Small and Medium Enterprises
CFP	Cavendish Fluor Partnership	SR	Site Restoration (Strategic Theme)
C&M	Care and Maintenance	SR10	Spending Review 2010
DECC	Department of Energy and Climate Change	THORP	Thermal Oxide Reprocessing Plant
DPA	Data Protection Act		
DRS	Direct Rail Services		
DSRL	Dounreay Site Restoration Limited		
EA	Environment Agency		
EDF	Electricité de France		
EIR	Environmental Information Regulations		
FED	Fuel Element Debris		
FOIA	Freedom of Information Act		
HAL	Highly Active Liquor		
HSE	Health and Safety Executive		
ILW	Intermediate Level Waste		
INS	International Nuclear Services		
IWM	Integrated Waste Management (Strategic Theme)		
LLW	Low Level Waste		
LLWR	Low Level Waste Repository		
LP&S	Legacy Ponds and Silos		
MBGW	Miscellaneous Beta Gamma Waste		
MODP	Magnox Optimised Decommissioning Programme		
MOP	Magnox Operating Programme		
NDA	Nuclear Decommissioning Authority		
NDSD	The Nuclear Decommissioning and Security Directorate		
NM	Nuclear Materials (Strategic Theme)		
OCNS	Office for Civil Nuclear Security		
OND	Office for Nuclear Development		
ONR	Office for Nuclear Regulation		
PBO	Parent Body Organisation		
POCO	Post Operational Clean Out		
PP	Performance Plan		
Reg.	Regulatory Matters		
RSRL	Research Sites Restoration Limited		
R&D	Research and Development		
SEPA	Scottish Environment Protection Agency		
SF	Spent Fuels (Strategic Theme)		
SGHWR	Steam Generating Heavy Water Reactor		

References

1. **Freedom of Information Act (2000)** - published by Her Majesty's Stationery Office (HMSO)
2. **Data Protection Act (1998)** - published by Her Majesty's Stationery Office (HMSO)
3. **Environmental Information Regulations (2004)** - published by Her Majesty's Stationery Office (HMSO)
4. **Magnox Optimised Decommissioning Programme (2010)** - published by Magnox Ltd
5. **Magnox Operating Programme 9 (2012, ninth update)** - published by the Nuclear Decommissioning Authority
6. **Energy Act (2004)** - published by Her Majesty's Stationery Office (HMSO)

A graphic consisting of a teal circle on the left containing contact information. A horizontal teal line extends from the right side of the circle across the page. A dotted teal line starts from the right side of the horizontal line and curves upwards and then downwards towards the right edge of the page.

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