

NuLeAF seminar

Consolidation of Intermediate Level Wastes

9th March 2012

Consolidation of Wastes, Fuels and Nuclear Materials

The movement of waste and/or nuclear materials between nuclear licensed sites that will secure a clear business benefit. Consolidation may be considered at a local, regional, NDA-wide or UK-wide level

Why are we interested?

Benefits of consolidation may be realised at four different levels:

- **Early site clearance**
- **Reduction in site footprint**
- **Hazard, risk and security level reductions**
- **Infrastructure optimisation**

Types of wastes in the UK



LLW



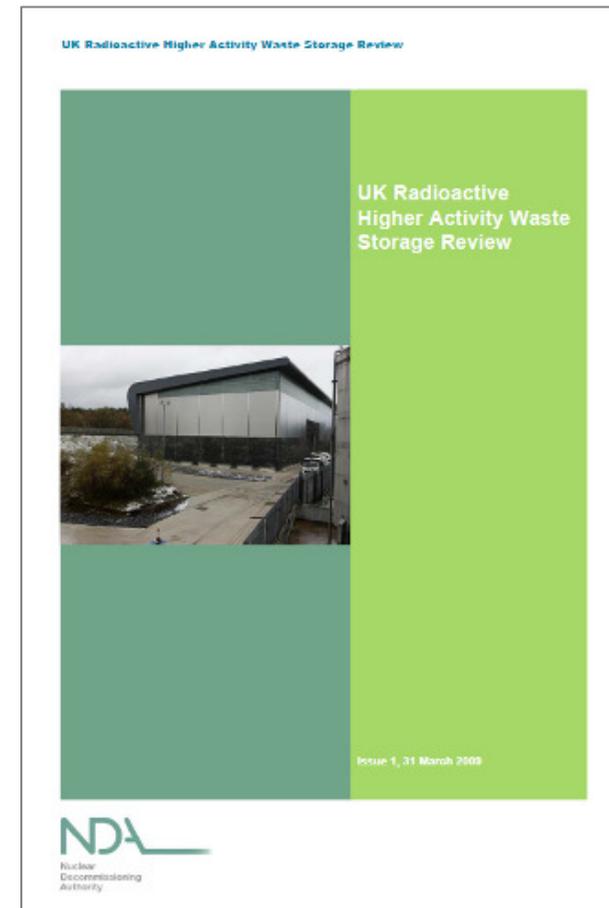
Long-lived ILW



Vitrified HLW

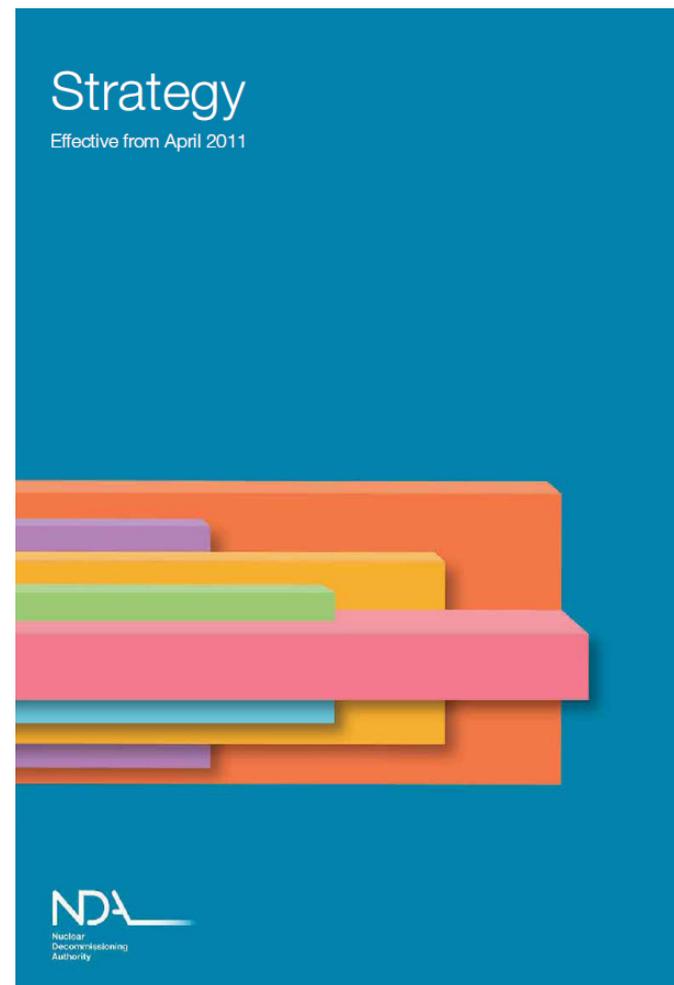
What has gone on before?

- **2006 NDA Strategy commitment to investigate ‘storage optimisation’ at a NDA level**
- **Position provided in the NDA’s 2009 HAW Interim Storage Review:**
 - The Review of Storage Optimisation concluded that the main focus of investigating storage opportunities should be southern Magnox sites and RSRL
 - NDA has no intention of pursuing a radically altered waste storage regime such as a single very large low maintenance UK facility



Current situation

- Consolidation is a key enabler for specific business benefits
- Continued NDA Strategy commitment
- Scottish Government's HAW Policy for the long-term management of higher radioactivity wastes in *near-surface facilities*
- NDA Business Plan – 2011-14;
 - Developing a plan for the transfer of ILW away from the Winfrith and Harwell sites



The Approach

- **Help develop coherent waste, nuclear materials, spent fuel and site restoration strategies**
- **The approach could be on a national, regional or local basis and will support or align to other strategic initiatives**
- **Continued stakeholder engagement especially with Government, Regulators, Planning Authorities and SSGs**
- **Case-by-case - supported by overall National Programme**
- **Underpinned Business Case which followed the Value Framework process and considered :**
 - The balance between cost reduction and hazard, risk and security management
 - Affordability
 - Alignment with NDA Strategy and overall decommissioning and clean-up mission

For illustrative purposes only

- Others**
- EdF – Energy
 - MoD
 - AWE

- Sellafield Ltd**
Baseline
- On-site ILW storage

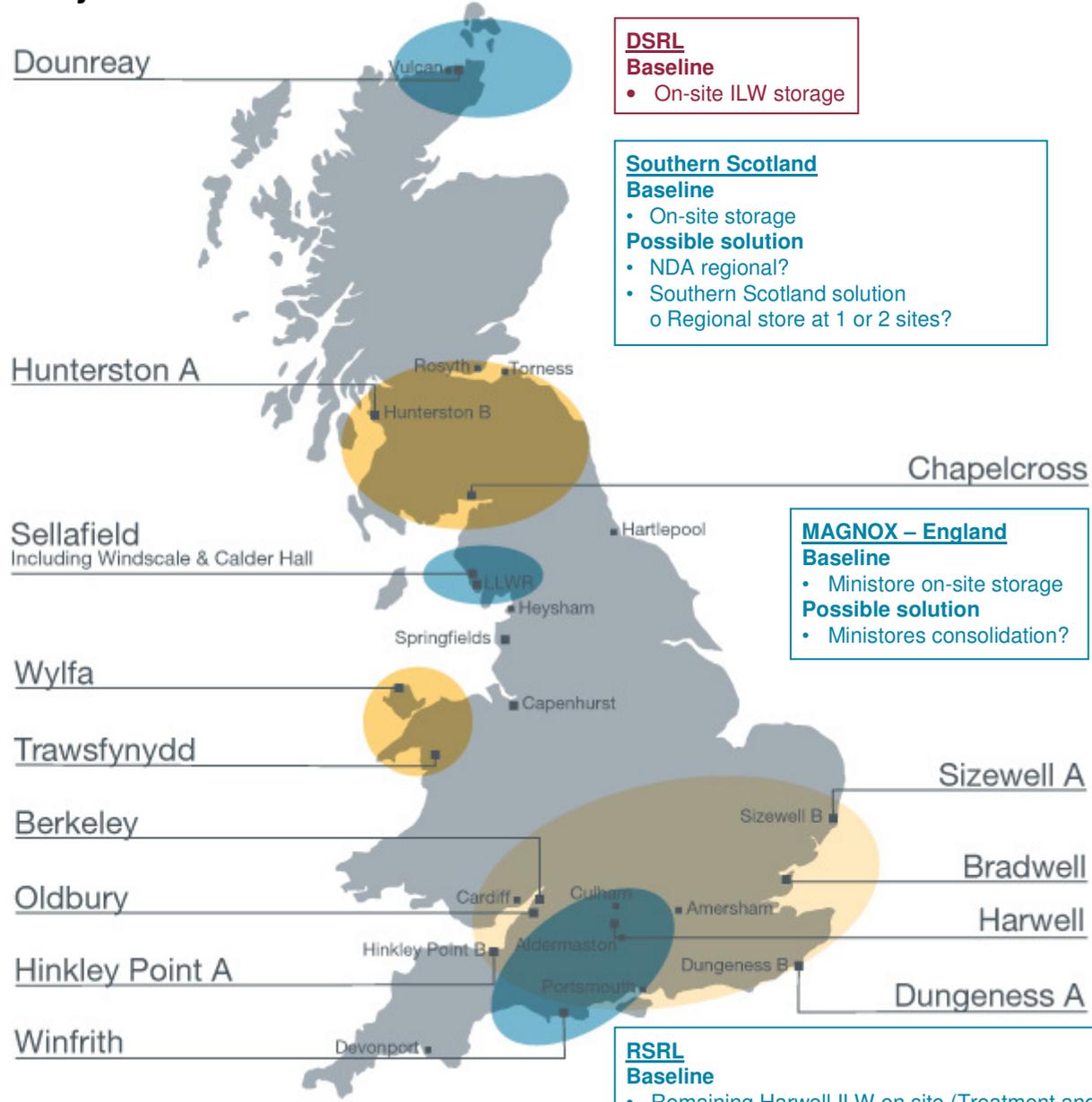
- Magnox – Wales**
Baseline
- On-site storage
- Possible solution**
- ILW store 1 site?

- DSRL**
Baseline
- On-site ILW storage

- Southern Scotland**
Baseline
- On-site storage
- Possible solution**
- NDA regional?
 - Southern Scotland solution
 - o Regional store at 1 or 2 sites?

- MAGNOX – England**
Baseline
- Ministore on-site storage
- Possible solution**
- Ministores consolidation?

- RSRL**
Baseline
- Remaining Harwell ILW on site (Treatment and Storage)
- Possible solution**
- Winfrith ILW offsite?
 - Harwell ILW offsite?



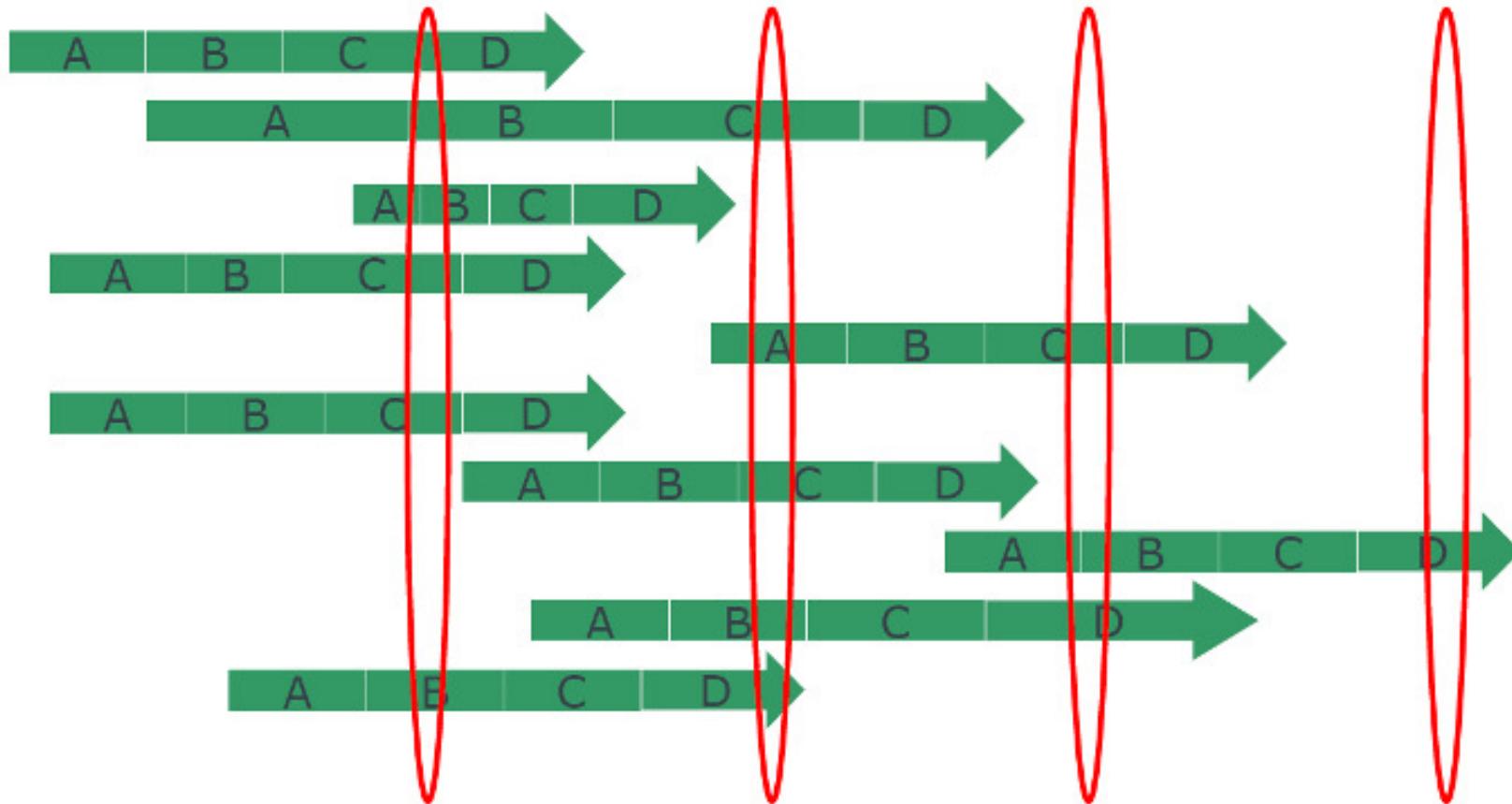
Summary

Strategy	Key Benefits
Co-location of Exotic Fuels and other nuclear materials	Hazard and security level reductions Infrastructure optimisation
National alpha-waste management strategy	Hazard and security level reductions Infrastructure optimisation
Harwell & Winfrith off-site transfers of ILW	Early site clearance/reduction in footprint Infrastructure optimisation
Consolidation of southern and central Scottish ILW	Infrastructure optimisation
Regional storage of Magnox MiniStores	Infrastructure optimisation
Local initiatives	Infrastructure optimisation
Where appropriate, support to other waste owners	Infrastructure optimisation

Strategy Management System

- **Research and Case for Change** - identify the scope, issues and all the potential options for dealing with the topic.
- **Define Credible Options** - distils the initial options into a list of approaches that can credibly deliver the objective.
- **Assess and select preferred option** - during which each of the options are evaluated against agreed criteria to arrive at a preferred option.
- **Approve Strategy** - when formal written approval of the Topic Strategy is sought from the highest accountable decision body.
- **Implement Strategy** - when the NDA formally requires its SLCs to adopt our strategic approach when they draw up their decommissioning and clean up plans.

Strategy Management System



For discussion

- **Theoretical acceptance of waste and material transfers that secures an important strategic objective.**
 - Building on the previous presentation; how do you gain local stakeholder support especially at communities adjacent to the recipient site?
 - What other issues and opportunities would you like NDA to consider as part of any waste transfer?