



LLW Repository Ltd

National Waste Programme

International Knowledge and Experience Sharing

– how it has benefited LLWR since 2008

David Rossiter

Head of National Programme

LLW Repository Ltd

National Waste Programme



LLW Repository Ltd

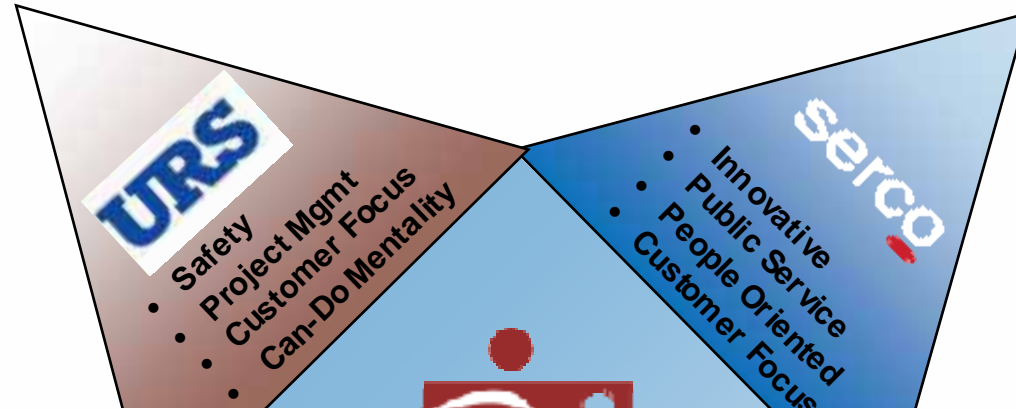
LLWR Mission

- LLW Repository Ltd.
 - Manage and operate UK's primary LLW disposal facility near Drigg in Cumbria
 - SLC owned by UK NWM Ltd.
(Consortium of URS, Studsvik, AREVA and Serco Assurance)
 - Contract with NDA for up to 17 years (5+5+5+2)
 - Partnership with NDA to develop and implement UK LLW Strategy
 - Mission: Waste disposal → Integrated Waste Management

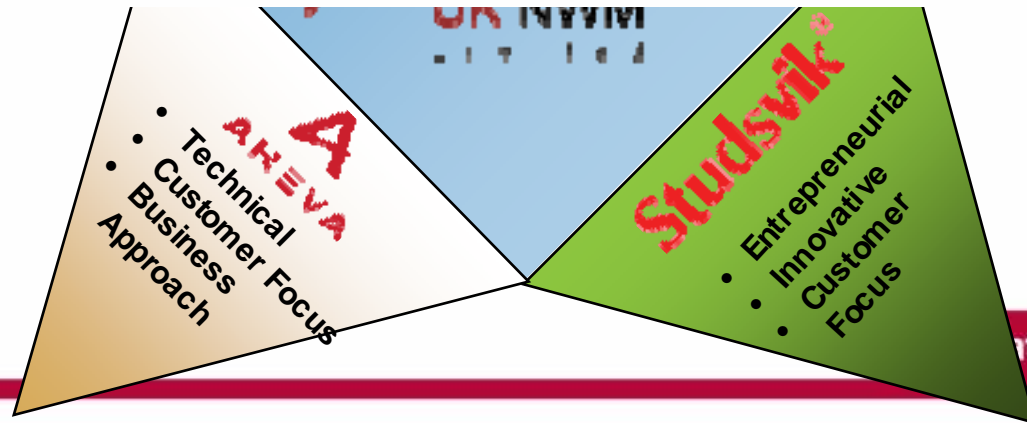


National Waste Programme

International Experience



LLW Repository Ltd



International Waste Programme



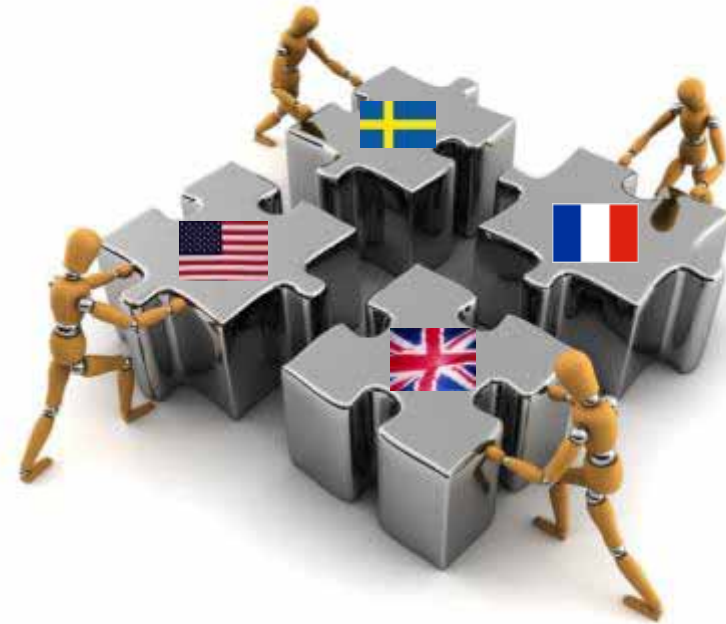
LLW Repository Ltd

Cultural Differences?

People thought it would be like this....



We made sure it was like this....



National Waste Programme

Implementing a national strategy and programme



The WIPP Experience – filling a repository....

- The repository was open but only a small fraction of the TRU waste in the complex was shippable to WIPP in 1999
- Integrated National Programme established in partnership with DOE
- Leadership and co-ordination
- Focus on characterisation, packaging, and transport requirements
- The repository went out and helped the consignors!



1999

Today



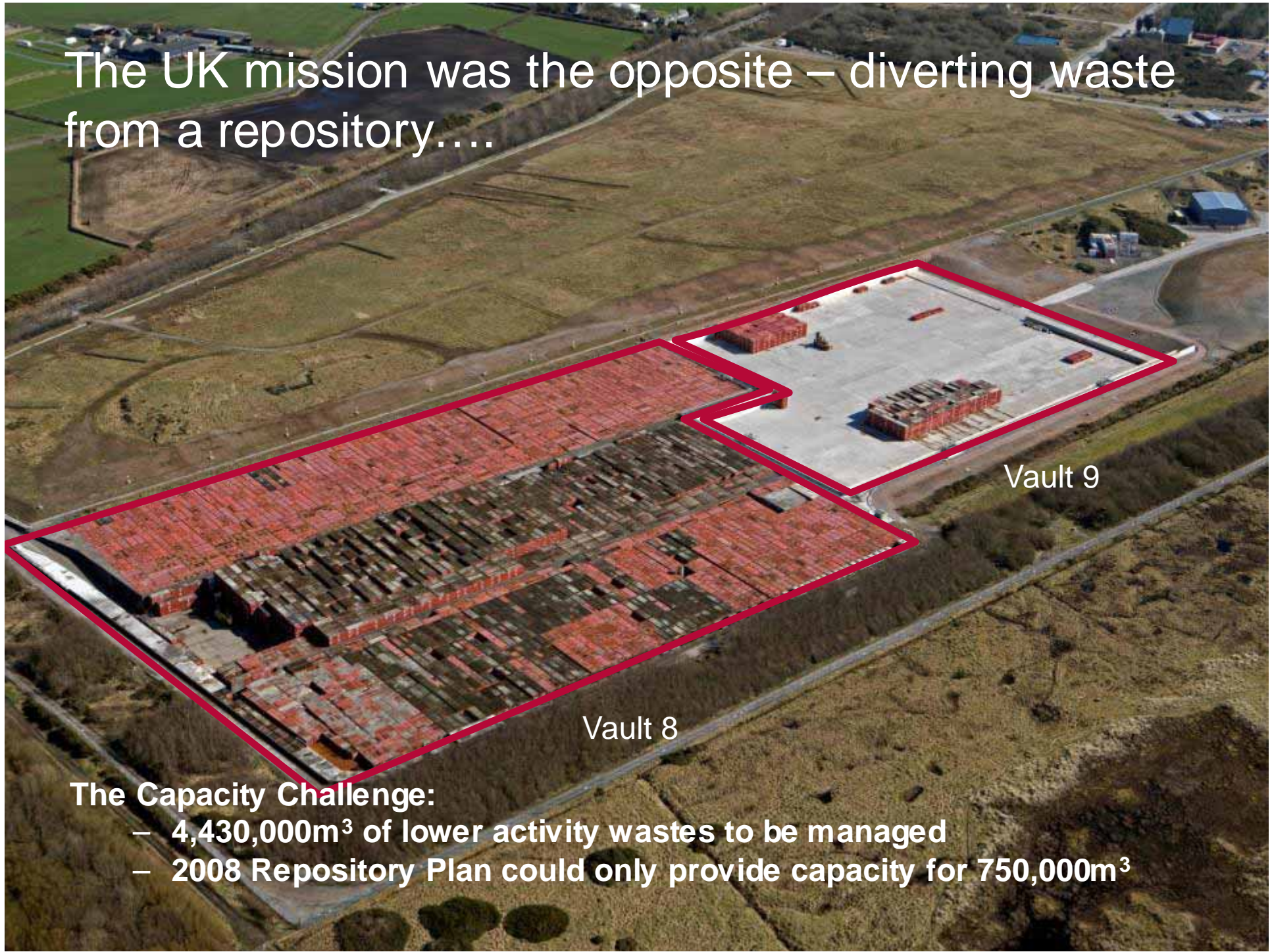
1 shipment per week



25-30 shipments per week
Beyond the original design capacity

National Waste Programme

The UK mission was the opposite – diverting waste from a repository....



The Capacity Challenge:

- 4,430,000m³ of lower activity wastes to be managed
- 2008 Repository Plan could only provide capacity for 750,000m³

LLW Capacity Challenge

- Solutions:
 - Reduce the volume of waste for disposal:
 - Characterise waste to increase opportunities for exemption
 - Segregate waste for recycling and volume reduction
 - Disposal of Very Low Level Waste at alternative facilities
 - Maximise capacity at the Low Level Waste Repository:
 - Increase site capacity through the Environmental Safety Case
 - Optimise waste packaging and vault disposal methods



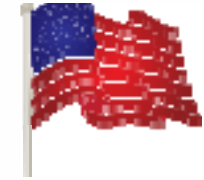
National Waste Programme

LLWR at Centre of National LLW Programme



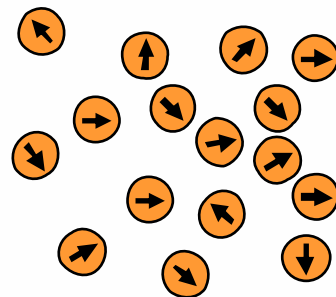
National Waste Programme

Stakeholder participation

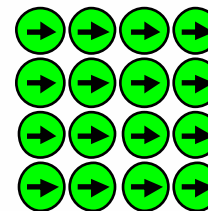


- New industry group formed by NDA and LLWR in 2008
- Enables those people who implement LLW management to contribute to strategy development
- Promotes an integrated approach to the management of LLW
- Enable participants to provide information on their plans to others
- Has developed a level of “buy-in” to the strategy
- Strategy more robust and implementable
- Not, however, the decision-making body

Sub-optimal individual site strategies

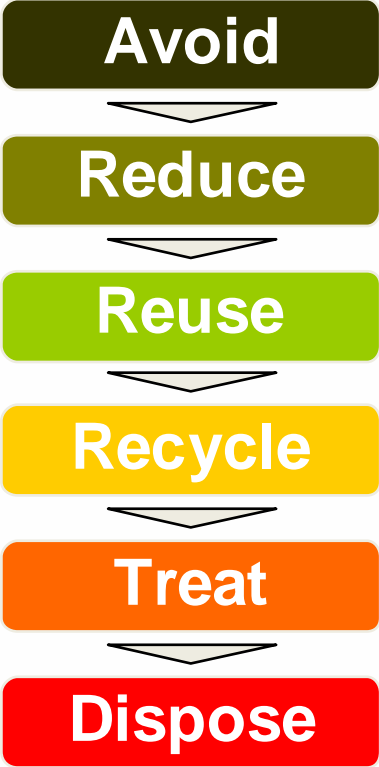


Delivery of Integrated National Strategy



National Waste Programme

Repository led solutions



New Services



Traditional Services



packaging



transport



waste characterisation



metallic



combustible



supercompactable



very low level



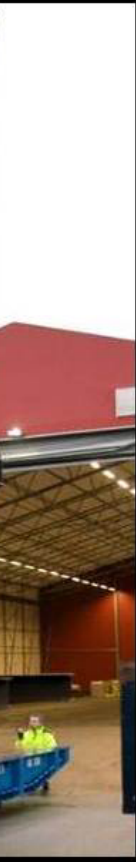
low level

National Waste Programme

Shipment of Large Items



Faster, cheaper, safer decommissioning



National Waste Programme

Waste Segregation



National Waste Programme

Use of reusable containers for transport of LLW



National Waste Programme

Soft-sided packages for low activity material



National Waste Programme

Transferring knowledge

- Combination of long-term management secondees and short-term reachback:
 - Experience of implementing the WIPP National TRU Waste Programme
 - Repository operations (Disciplined Ops and Maintenance)
 - Business change and project management
 - Waste strategy development
 - Integrated transport
 - Environmental safety cases
 - Understanding of new treatment routes and how to access market to bring on stream
- Grow and enhance the existing SLC capabilities



Overcoming the barriers...

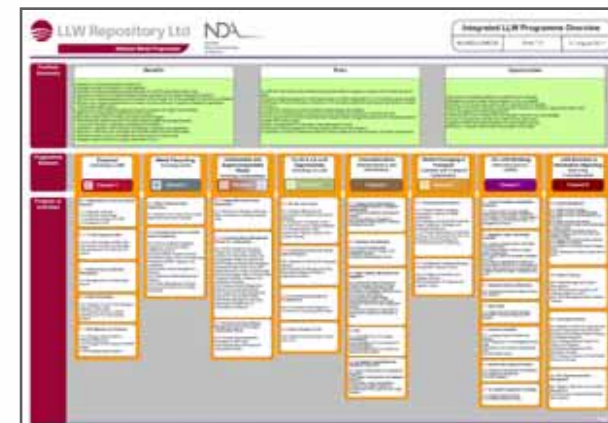
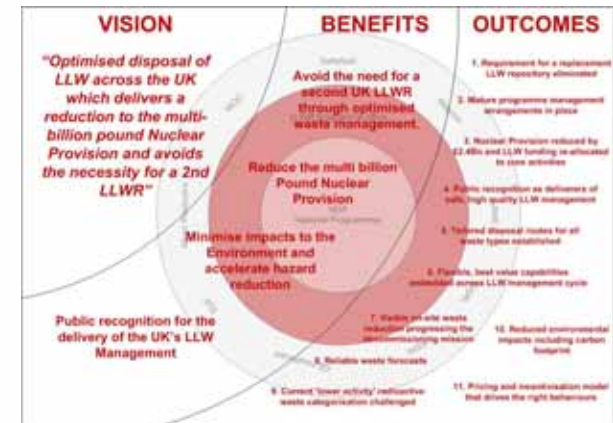
- “Not invented here”
- “We have never done that before”
- “We said this a few years ago but management didn’t listen”
- “The regulator wouldn’t allow that”
- “Our procedures are too difficult to change”



National Waste Programme

Summary

- International experience has been a catalyst for change
- Some things are different for a good reason
- Adapt the good stuff – leave the bad!
- International best practice deployed across UK through the national programme
- LLWR SLC is becoming more self-sufficient and less reliant on reach-back support from PBO
- Its not rocket science – just good management....



National Waste Programme

Questions

National Waste Programme