### International Deep Repository Progress: Status of the UK Programme

Glenda Crockett Nuclear Decommissioning Authority (UK)

WM2013: Session 70 27 February 2013

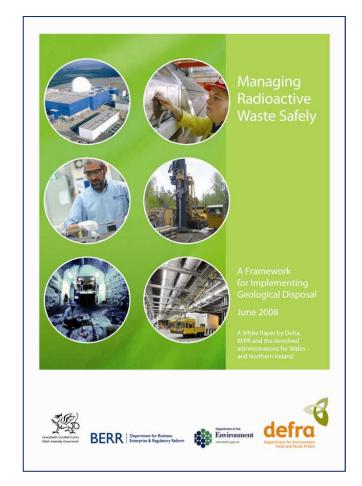


### Managing Radioactive Waste Safely (MRWS)

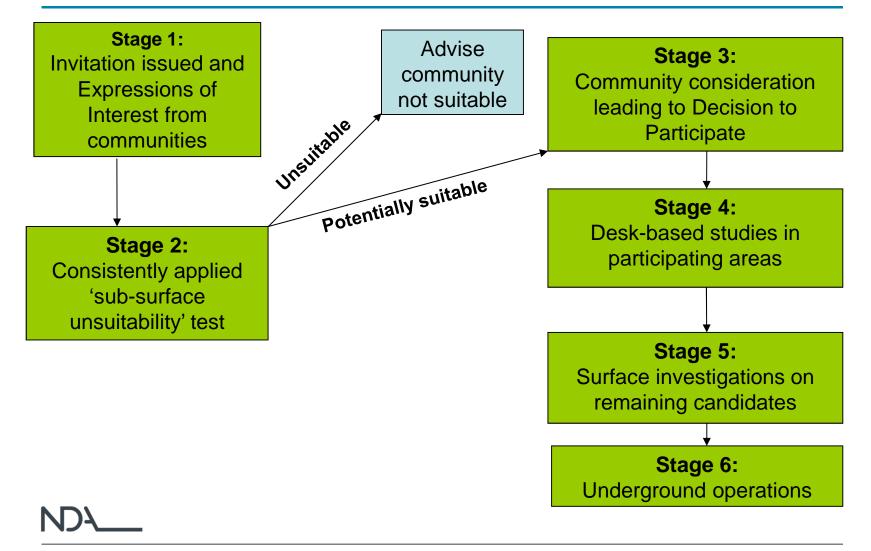
Work	Timing
The MRWS consultation process	2001-02
<ul> <li>Establishment of Committee on Radioactive Waste Management (CoRWM)</li> <li>Research and public debate involving option evaluation, using public and stakeholder engagement and the best available scientific knowledge</li> <li>Government decision on the option to implement</li> </ul>	2002-06
Consultation on the Government's framework for implementing its preferred option	2007
Implementation of preferred option	2008 onwards

## **Government Policy**

- Published June 2008
- Government's framework for managing higher activity radioactive waste through geological disposal
- NDA as implementing body committed to:
  - Programme of R&D
  - Development of RWMD into delivery organisation
  - Preparation and planning for geological disposal
- Geological disposal policy doesn't cover Scotland



## The site selection process



# Progress with identifying a potential host community

- 3 Expressions of Interest (for 2 areas)
- Local engagement on issues including
  - Safety
  - Community benefits
  - Siting/Planning
  - Tourism impacts
  - Inventory
- British Geological Survey initial sub surface
   unsuitability test
- Local authorities (Decision Making Bodies) made a decision on 30<sup>th</sup> January 2013 not to participate in the process

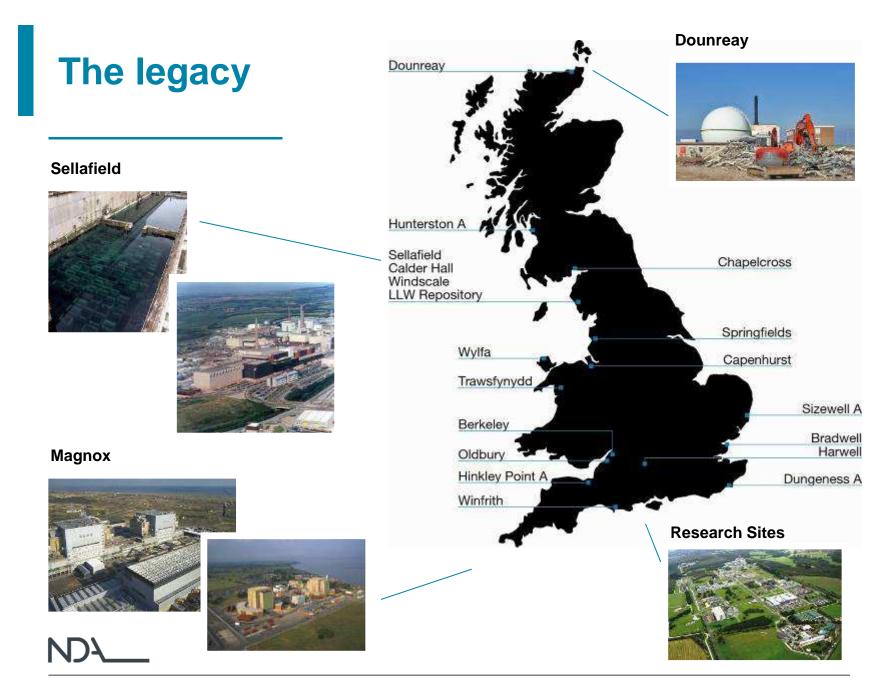


Geological mapping BGS © NERC. OS topography © Crown Copyright. All rights reserved. 100017897/2010

# **Progress with identifying further potential host communities**

- Shepway District Council took 'soundings' Romney Marsh Nuclear Research & Disposal Facility
- Produced web site, leaflets, held public meetings, gave presentations and wrote to all businesses and residents
- Over 3,300 responses, 63% negative
- 19 September 2012 decided not to make an Expression of Interest





# Volumes of waste

Waste / Material	2010 Baseline Inventory	Upper Inventory as estimated in 2010
Low Level Waste (m <sup>3</sup> )	13,800	150,000
Intermediate Level Waste (m <sup>3</sup> )	490,000	786,000
High level waste (m <sup>3</sup> )	6,910	12,000
Spent fuel (m <sup>3</sup> )	6,440	22,200
Plutonium (m <sup>3</sup> )	7,820	10,400
Uranium (m <sup>3</sup> )	106,000	183,000
Total (m <sup>3</sup> )	631,000	1,160,000

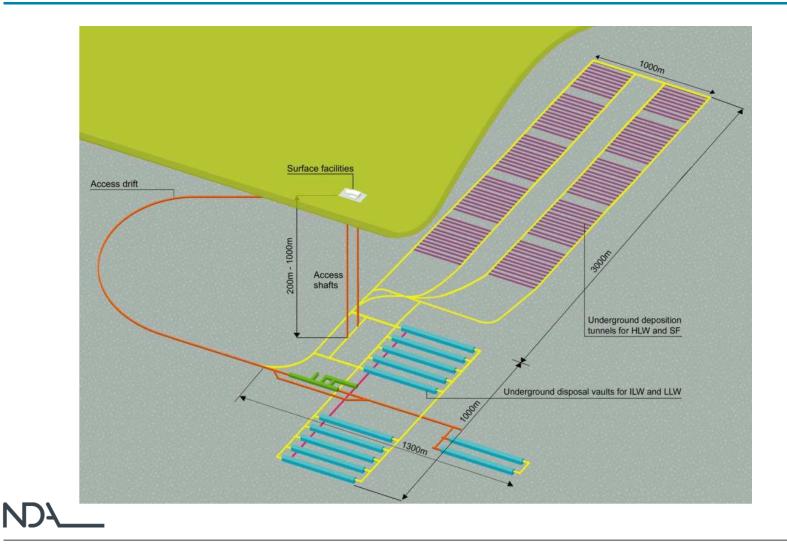
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# **Disposal system specification**

NDA Report inc. NDARRANDIGO	
Geological Disposal Generic Disposal System Functional Specification	NDA Report no. NDA RE
	Geological Disposal Generic Disposal System Technical Specification
	December 2010

- Disposal system specification
  - What the disposal system needs to deliver
- Generic waste package specification
  - What the wasteform and waste container combination needs to deliver
- Based on illustrative disposal concepts for three generic geological settings

### **Geological disposal facility**



# Future programme – policy

#### • The MRWS process continues

- UK Government is committed to geological disposal
- UK Government is committed to voluntarism

#### • Need BOTH willing community AND suitable geology

• Must be shown to meet all the stringent safety regulations before a GDF can be built

#### • Opportunities for other communities to express an interest

- Review of process to identify improvements
- New drive to find other communities

# Future programme – science

- Expanding our knowledge base
- Structuring disposal system requirements
- Focussing on safety functions
  - Developing underpinning information
- Developing an approach to technology transfer
- Identifying key information to support decision making

