

# **Decommissioning The World-wide Challenge**

**Dr John McKeown CEO, UKAEA**

**Presentation to the IAEA Scientific Forum - Nuclear Power Life Cycle Management**

# Liability Management

- **World-wide Task**
- **Current Activities**
- **Technologies and Lessons Learned**
- **The Challenges Ahead**

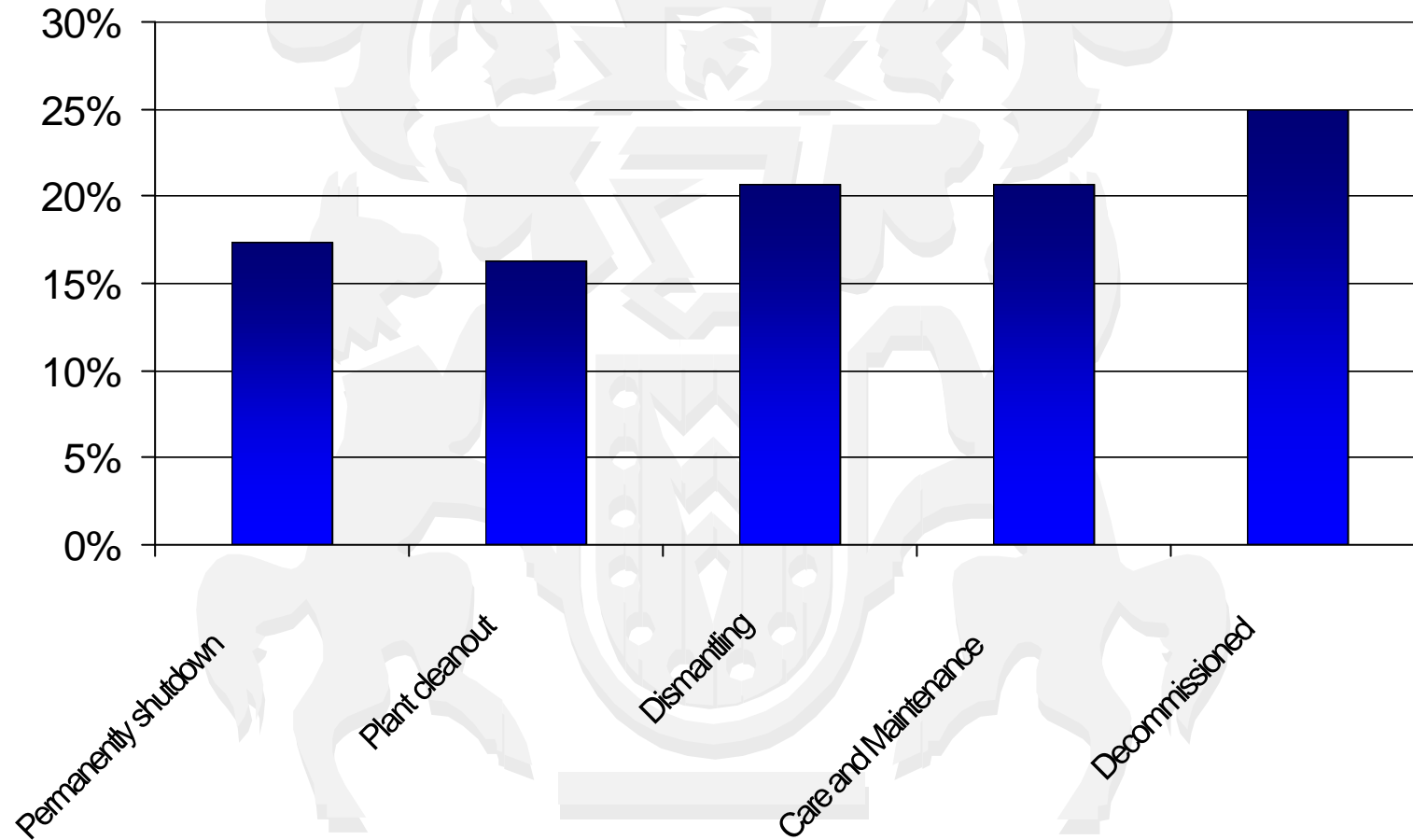
# World-wide Task

World-wide, the following nuclear facilities have been retired from operation and are either awaiting or undergoing decommissioning:

- **93** commercial power reactors
- **22** research reactors
- **5** reprocessing facilities
- **14** fuel fabrication plants and
- **60** mines

# Current Activities

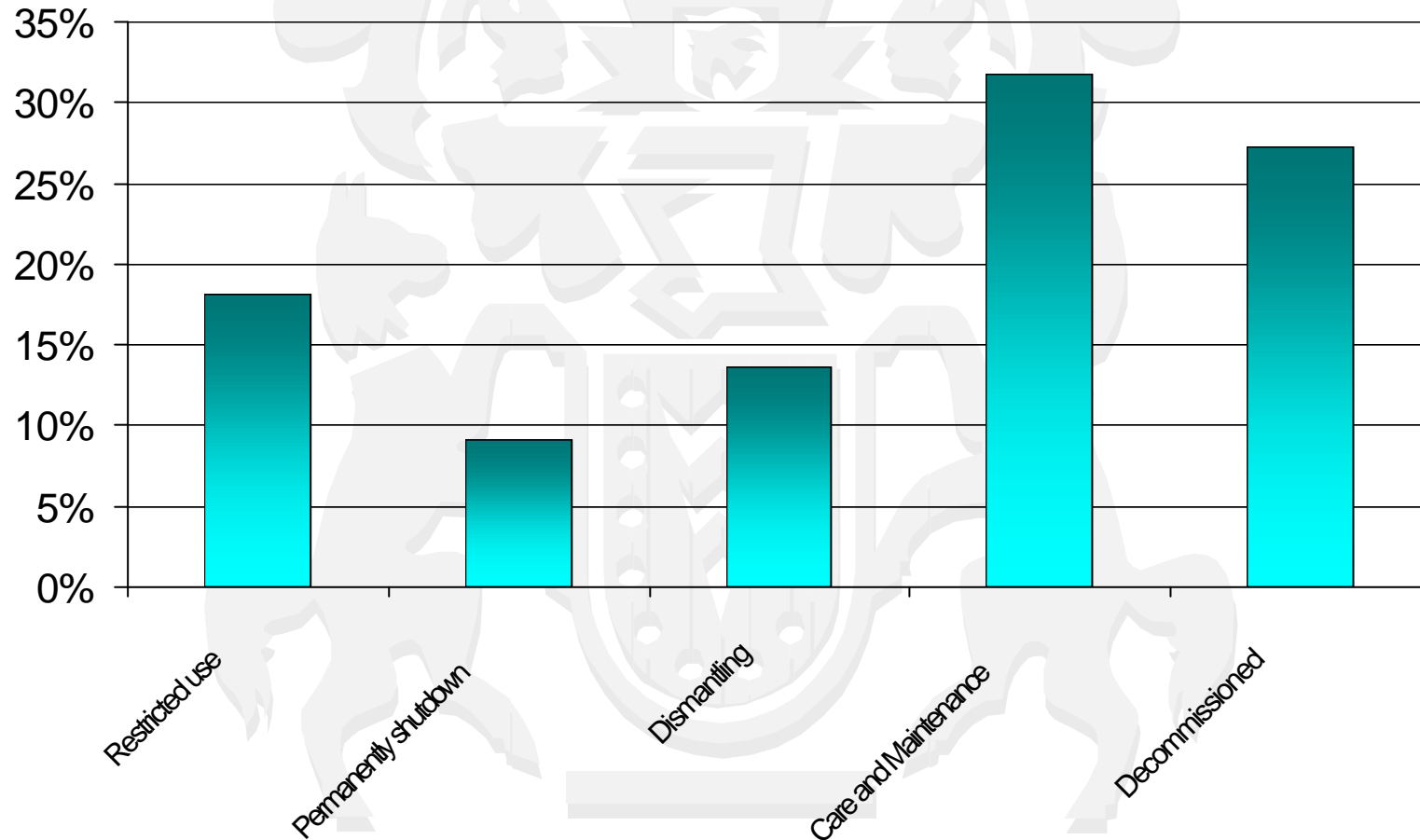
'Status' of Closed Power Reactors



Source - World Nuclear Association,  
Decommissioning Database, Sept 02

# Current Activities

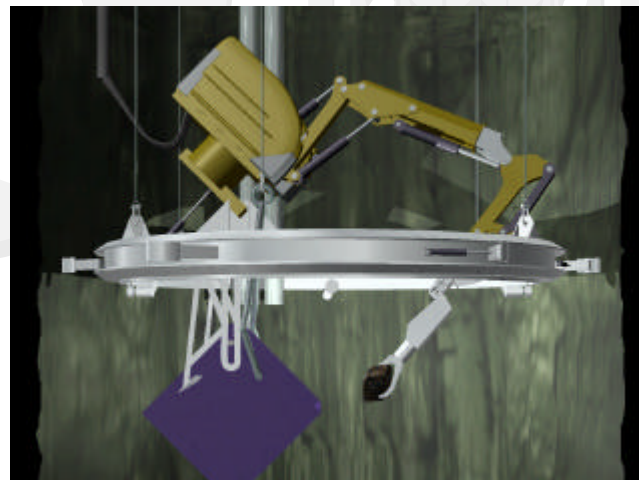
'Status' of Closed Research/Prototype Reactors



Source - World Nuclear Association,  
Decommissioning Database, Sept 02

# Technology and Lessons Learned (1)

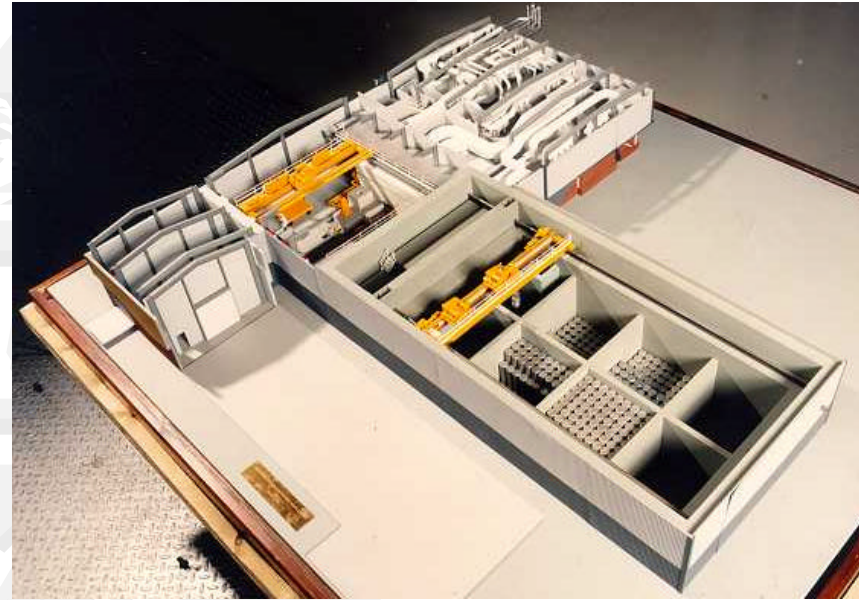
- **Simple is Best**
- **Where possible, use commercially available equipment - adapting as necessary**
- **Test remote operations in a mock-up facility**



- **manage waste to meet existing and final disposal requirements**
- **Segregate waste to minimise cost and resources**

# Technology and Lessons Learned (2)

- Prioritise work against objective criteria to ensure programmes are optimised and ‘best value for money’
- Start decommissioning whilst facilities are in ‘good’ condition - solve tomorrows problems today
- develop plans for waste storage and longer term waste management



- Learn from the experience of others - **‘be second first’**
- Spend wisely early and benefit later

# The Challenges

- **Recruiting and maintaining necessary skills and expertise**
- **Developing robust cost effective strategies**
- **Gaining and maintaining public acceptance**
- **Disposal of nuclear waste to standards acceptable to regulators and 'above all' in a way acceptable to the general public**
- **Secure Funding to implement agreed programmes of work**

