### Chapter 15

# Demonstrating and Communicating the Value of Nuclear Decommissioning to Society

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#### **ABSTRACT**

The UK Nuclear Decommissioning Authority (NDA) is a Non Departmental Public Body (NDPB) responsible for the remediation of the UK's civil nuclear liabilities. To secure government funding and demonstrate that the NDA is delivering its mission, it must be able to show that it provides value for money across its estate. Value comes in many forms, such as an improved environment, hazard reduction, changes in sky line, social amenities, money, employment, and so forth. Depending on the perspective of the receiver, and their closeness to the affected area, the weighting placed on the different aspects of value will vary. Therefore, the challenge has been to get a consistent approach that measures value and is broadly acceptable to stakeholders in which different aspects are compared and decisions are made on a national basis.

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### 1. INTRODUCTION

The UK Government through HM Treasury has developed guidance on options appraisal and value assessment which it has published in 'The Green Book' (HM Treasury, 2003). This guidance is mandatory on all government departments, or bodies such as the NDA. The Green Book provides clear guidance on how most financial effects should be appraised and the impact of time on these. However, it also states that these are not the only consideration when determining value and that other benefits and detriments should be factored into any analysis.

The Green Book provides a range of examples of benefits and detriments that might be considered and splits these into two types:

- Tangible benefits and detriments ie those which can be measured and ideally to which a monetary value can be assigned
- Intangible benefits and detriments ie factors that are important and need to be considered but which cannot be readily quantified.

However, the Green Book represents general guidance and cannot cover all aspects of value across all spheres of Government activity. Therefore, it requires individual organisations to develop their own guidance, on what they value and how to measure it.

For most government organisations such as those associated with health, education etc it is relatively easy for the government and the general populace to see what they get for their money as investment generates physical assets and improved services which they are then able to derive direct benefit from using. In the case of nuclear decommissioning the value and benefits of what is being done are far less tangible in that society has already received the apparent benefits from the facilities etc in terms of electricity generation or enhanced security, and therefore all that is seen is

the cost. The true benefits of decommissioning are more abstract in that it is the removal of the risk posed by the existence of the facilities, and if the job is done well society will never see the risks realised or experience the associated detriment. Therefore the challenge for the NDA has been how to quantify the avoidance of societal harm in a consistent way that supports decision making but also takes account of the negative impacts that decommissioning activities also entail.

## 2. THE VALUE FRAMEWORK CONCEPT

To address the problem of assessing and communicating value the concept of a the Value Framework was developed, the vision being that it would form part of a tool kit that could be used by NDA, its contractors and stakeholders to consistently assess the value and impact of different strategies, funding scenarios and options. This aligns with thinking such as expressed by Zeleny (2008) in describing the need for minimising trade offs in decision making, and in processes such as the Investment Management Standard used by government organisations in Australia and New Zealand (State Government Of Victoria, 2010).

The Value Framework would consist of a set of criteria (attributes) that represent the key aspects of NDA's mission, which are then subdivided into individual metrics to which national valuations can be assigned. This would then allow direct comparison and summation to provide an overall assessment of the value that is being delivered.

The intention was that the Framework would not be used in isolation and must operate within the wider decision making processes. It was also recognised that like any tool kit some tools are used to craft out the overall shape whilst others are used with these to apply the finer detail, this would mean that some metrics and attributes are more influential than others dependent on the level of the decision. 12 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

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