

Recommendations to the UK (see chapter 8)

Recommendation 1

Given that the UK government has decided to embark on a new nuclear power programme, the Department of Energy and Climate Change (DECC) should develop a strategy that addresses the future role of nuclear power in the UK's long term energy policy. This could be facilitated by a high level, Civil Nuclear Power Council based in DECC that brings together senior representatives from the UK's nuclear industry and senior officials from government departments and agencies.

Recommendation 2

A long term strategy for nuclear power in the UK would guide a long term Research and Development (R&D) roadmap. It should be based on a review of current UK R&D, relevant international programmes and suitable UK participation in them.

Recommendation 3

The implementation of a long term R&D roadmap will need to be supported principally by government funds but also draw on industry sources. It will involve universities, the National Nuclear Laboratory (NNL) and other relevant research organisations. NNL's facilities must be fully commissioned and suitable access provided to researchers to use them.

Recommendation 4

The National Security Council (NSC) should set non-proliferation and nuclear security policy. Research priorities would be identified by a suitable technical NSC sub-committee. This will ensure co-ordination between the different interests of stakeholders and various implementing bodies. These priorities would then inform the UK's long term strategy for nuclear power and R&D roadmap.

Recommendation 5

AWE's threat reduction research must continue to be well supported. AWE's National Nuclear Security Division should be developed, exploiting the Blacknest model, so that the wider scientific community, including international partners, can engage effectively with this expertise in a non-classified environment.

Recommendation 6

The Foreign and Commonwealth Office (FCO) should set up a Non-Proliferation and Nuclear Security Network chaired by the FCO's Chief Scientific Adviser. The Network should facilitate information sharing between academia, government and industry, as well as fostering collaborations, including with international partners.

Recommendation 7

The UK's civil stockpile of separated plutonium should be reused as Mixed Oxide (MOX) fuel in a new generation of thermal Light Water Reactors. This provides an effective and technically proven management strategy for the stockpile. These reactors need to be suitably licensed and a new MOX fabrication facility now needs to be constructed in the UK.

Recommendation 8

The Department of Energy and Climate Change should carefully consider the long term consequences of its current assumptions that the UK's reprocessing activities should cease. Investment in an operational reprocessing facility and the infrastructure to reuse the UK's stockpile of separated plutonium would allow the UK to continue providing national and international reuse services.

Recommendation 9

The Office of Nuclear Regulation should develop its integrated approach to nuclear regulation by ensuring that security features explicitly in nuclear site licensing conditions. This may require the Government to update the Nuclear Installations Act.

Recommendation 10

The UK government should help to establish a CEO-led, World Nuclear Forum. This Forum would provide an interface between CEOs and government leaders to explore their respective views on the future development of nuclear power and responsibilities for non-proliferation and nuclear security. This Forum could be proposed at the 2012 Nuclear Security Summit and set up thereafter.