

**Open Government Status:**

**FULLY OPEN**

**NuSAC/SCR/03/14**

**HEALTH AND SAFETY COMMISSION**

**NUCLEAR SAFETY ADVISORY COMMITTEE  
SUB-COMMITTEE ON RESEARCH**

**19 September 2003**

**REPORT ON USING RESEARCH IN POLICY MAKING &  
REVIEW OF GOVERNMENT DEPARTMENTS' USE AND MANAGEMENT OF  
SCIENCE**

**Paper by HSE**

**Introduction**

1. This paper updates the 2002 report on the implementation of the Office of Science and Technology (OST) guidelines on scientific advice and policy making. The guidelines are best practice requirements. The paper also considers a forthcoming government review on the use of science.

**Implementation of Guidelines 2000**

2. It was reported to NuSAC SCR last year that the nuclear safety research programme was not in general aimed at advising policy. A system had been put in place to identify any such research, so the guidelines could be applied if need be. In the last year, no HSE levy projects were identified as being policy sensitive or of high public concern, consistent with the previous statement, so there was no need for any further action.

3. At one level of meaning, regulatory policy can be interpreted as being not specifically nuclear, but as being more socio-economic in character. Such research is better done (and is done) by HSE centrally. HSE's central capabilities in this

respect have been strengthened by the recent creation of a Chief Scientist's Unit (CSU). NSD gives advice to CSU (and gave advice to its predecessors) on specifically nuclear aspects of such research.

4. There is a central HSE Nuclear and Major Hazards Policy unit, but it has little interaction with the nuclear safety research programme, other than through providing the secretariat for the main NuSAC.

5. For HSE as a whole there was no 2002 report on implementation of the guidelines. The Office of Science and Technology (OST) decided that the (very low) level of interest did not justify the effort involved in producing an annual report. HSE's performance against Guidelines 2000 will be monitored as part of the external review by OST scheduled for early 2004. It is unclear whether this will suffice for OST or whether further implementation reports will be produced in the future. Further details of the review (which may include NSD) are given below.

#### **Relationship of HSE use of research to that of other government departments**

6. According to a recent National Audit Office (NAO) report, government research could be divided into 4 categories, with the percentage expenditure on each:

- general support for research (5%)
- government services (55%)
- policy support (25%)
- technology support (15%).

7. Regulation in this scheme may be considered a government service, so the HSC coordinated programme of nuclear safety research falls into government services and technology support categories, rather than policy support.

8. The cross-cutting review states that research is typically about 1% of departmental budgets. This can be compared with the figures for HSE and NSD:

- HSE
  - gross budget £260m
  - mainstream non-nuclear research budget £20m from grant-in-aid, not counting industry contributions
  - non-nuclear technical support - about £20m (largely at in-house labs)
- NSD
  - gross budget £20m
  - levy research programme £2.3m
  - technical support programme £2.2m
  - licensee research addressing NRI issues £7.0m (not in NSD budget)

HSE and NSD are technology based organisations that use proportionally much more research than average government departments. General government guidelines cannot be applied without adaptation, but the research strategies of departments such as DEFRA that are large users of science can be used as benchmarks.

9. There is much written about research management in general and management of public research more specifically. However there is a lack of publications on regulatory research. In the more specific field of nuclear regulatory research, the International Atomic Energy Agency and the OECD Nuclear Energy Agency have published some statements / guidance. Here again these need to be interpreted for the effects of the different regulatory regimes (prescriptive v goal setting) and reactor design (unique gas cooled design or standard PWR).

### **Advisory committees**

10. Similarly the DTI guidance on scientific advisory committees is aimed at scientific advice being given to government, and has been heavily influenced by issues such as BSE. It is not directly applicable to NuSAC SCR, which advises on the content and management of a programme. HSE is currently reviewing the general arrangements to provide HSC with independent scientific advice if the need arises.

## **OST S&I reviews**

11. The OST conducted a 'cross-cutting review' of science and research, which concluded that the Government's Chief Scientific Adviser should be responsible for a rolling programme of reviews of Government departments' use and management of science. It was recommended that a new team (the Science Review Directorate) should be established in OST to develop and deliver the review programme.

12. The overall aims of the review programme are to:

- Maintain and improve the quality and use of science in government;
- Review existing departmental systems for assuring the quality of their science;
- Disseminate examples of best practice from within the UK and abroad;
- Inform and support the Government's Chief Scientific Advisor in his role of "advising the PM and the Cabinet on the overall health of science and scientific research funded by Government departments".

13. The success criteria which the reviews are intended to address were set out in the Cross-Cutting Review of Science and Research. They relate to how effectively departments:

- Have developed a clear, overall science strategy;
- 'Horizon scan' to identify future science-related issues;
- Harness existing research and identify gaps;
- Commission and manage new research;
- Ensure the quality and relevance of the work they sponsor;
- Use the research and scientific advice in formulating policy;
- Publish results and debate their implications openly;
- Share and transfer knowledge;
- Have implemented the guidance contained in Guidelines 2000 and the Code of Practice for Scientific Advisory Committees.

14. Some of these issues are more applicable to NSD than others. Remarks have already been made about policy and the OST guidelines. Relevance and fitness for purpose of research is arguably more important than its scientific quality. NSD has chosen to favour dialogue with the licenses over openness, and this is open to challenge. Most of these issues were considered in the review leading to the new research arrangements. As always, there are resource limitations affecting how far they can be addressed

15. The National Audit Office has assessed how government departments procure research, against the background of the OST's programme of rolling reviews. NSD is considering the two reports published from the review. NAO and OST are organising a workshop in November 2003 to establish an interdepartmental network of research managers and inform departments about the NAO recommendations. NSD intends to participate at this workshop.

## **Conclusions**

16. The conclusions are:

- A system has been put into place formally implementing the May guidelines, but there has been no research yet identified to which they are applicable.
- Given the lack of relevant research and the decision by HSE not to produce an annual report, the regular annual report by NSD to NuSAC SCR will also be stopped, although anything significant will be reported.
- HSE is preparing for a review of the Science and Innovation programme by OST. Most of the issues have already been considered in the review that led to the introduction of the new research arrangements. NSD is considering how it might be affected by a review.
- Much of the general government guidance on the use of science needs adaptation for application to NSD.
- NSD has contributed to recent international agency publications on nuclear safety research, which may be used for the review, if NSD is included.

## **Actions**

17. Members of the NuSAC SCR are invited to comment on:

- the proposal to stop reporting on the implementation the May Guidelines,
- the preparation for the potential OST review.

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