

Open Government Status:

FULLY OPEN

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HEALTH AND SAFETY COMMISSION
NUCLEAR SAFETY ADVISORY COMMITTEE
SUB-COMMITTEE ON RESEARCH

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REPORT ON THE GUIDELINES ON SCIENTIFIC ADVICE AND POLICY MAKING

Paper by HSE

Introduction

1. In March 1997 Sir Robert May, through the Office of Science and Technology, issued a note on the use of scientific advice in policy making, the so-called May Guidelines . The implications of the Guidelines for the HSC's Nuclear Safety Research Programme were considered at the December 1999 SCR meeting. An updated version of the guidelines, Guidelines 2000, which takes account both of departmental experience in operating the original Guidelines and the results of public consultation, was published in July 2000.

2. Sir May talked about the guidelines at an EU meeting.

'Rapid progress in science and technology has often caught policy unprepared and while public scepticism about science may not have grown in absolute terms, it certainly needs to be taken seriously, and restoring confidence is one of the major challenges facing the scientific community today. In recent years, in Britain in particular, trust and confidence has been eroded with respect to a number of scientific issues, of which BSE is the most notable example. Other European countries have had similar experiences.'

3. The objectives of this paper are to report on:

- the system put into place for applying the guidelines to the nuclear safety research programme
- the results to date
- the application of the guidelines in the rest of HSE.

The Guidelines

4. The objective of the Guidelines was to set out some key principles applying to the use and presentation of scientific advice in policy making. Detailed implementation was left to the discretion of individual departments, but the Guidelines were stated to be relevant where:

- there is significant scientific uncertainty
- there is a range of scientific opinion
- there are potentially significant implications for sensitive areas of public policy (such as those involving people's health and safety, animal and plant protection and the environment).

5. There were four key principles used to structure the Guidelines and these are used for the four headings used to summarise them below.

- Identifying Issues
- Building Science into Policy
- Presenting Policy
- Review.

6. The guidelines stress the importance of:

- early identification of issues
- access to the best available scientific advice
- presumption of openness in explaining the interpretation of the advice.

Discussion

7. The May Guidelines relate to the use and presentation of scientific advice in policy making. The interpretation of 'policy' is open to question. Nuclear safety 'policy' in a narrow sense (other than research policy) is dealt with by the Nuclear and Hazardous Installations Policy Division of the Safety Policy Directorate of HSE, which is not part of NSD, and has no interaction with the research programme. With a wide interpretation of policy (including standards setting, consensus on technical issues, and establishing good practice), the HSC NSR programme is relevant to policy. The intention of the May Guidelines in regard to issues which are not potentially sensitive is open to interpretation. NSD favoured preserving the relatively free exchange of information between the licensees, NSD and NuSAC, and so has made a narrow interpretation of the May guidelines, concluding that little or no nuclear safety research work under the HSC Co-ordinated Programme is relevant to policy making.

8. Nevertheless there is a need to establish a process to ensure that any such work which does arise in the future is recognised and treated appropriately. It is clear that the overall intention of the guidelines is to promote openness and objectivity where there is sensitivity. An example of a sensitive topic is childhood leukaemia near Sellafield.

9. In a paper on FOI and dissemination to the June 2000 SCR meeting, HSE/IMC undertook to produce guidance on identifying areas with policy relevance. HSE and IMC agreed that the May guidelines were not generally relevant to the IMC commissioned research, which was primarily directed at informing NSD and advising the industry. A process for complying with the May guidelines (by identifying any policy relevant research for the levy programme) and associated guidance was issued in April 2001, but since then no such policy relevant research has been identified.

10. As part of the research review, NSD has identified that the objectives of the research programme include undertaking research to improve the way NSD regulates. HSE has issued a new Science and Innovation policy, which recognises that HSE research is intended to support the full range of needs as a regulatory body, including policy making, and to help meet business objectives. In line with the Phillips Inquiry Report on BSE, this means increasing the amount of social, economic,

behavioural and operational research so that policies take full account of these factors alongside physical scientific and technical advice. NSD is considering implications of a parallel process in the nuclear research programme, and this could have a consequent increase in the applicability of the guidelines.

11. There are currently NSD/IMC discussion on the details of the new arrangements, including the level of transparency to the public and the use made of peer review. The May Guidelines are relevant in general terms to these discussions.

12. HSE is required to report every year to the CSA, and the report has been published by DTI along with those of other departments. The reports for 1999 and 2001 are given in Appendices 1-2. HSE has also issued a quality statement for the implementation of Guidelines 2000. In future HSE reports will need to cover compliance with the Code for Scientific Advisory Committees as well as Guidelines 2000. It can be seen from the reports that the mainstream research programme is considered to have a greater connection with policy, and that greater efforts have been made with regard to openness.

Conclusions

13. 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.
- The guidelines have had less effect on the NSD programme than on the HSE mainstream research programme, due to the different research arrangements and to NSD's wish to preserve the relatively free exchange of information with the industry
- There are some changes being considered for the nuclear research programme that might lead to a greater applicability of the guidelines
- Consideration of the guidelines is relevant to details of the new research system being developed between NSD and IMC.

Actions

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

- the procedures in place for implementing the May Guidelines, and
- the application of the Guidelines to the future arrangements.

References

DTI - The use of scientific advice in policy making (the "May guidelines") Office of Science and Technology, March 1997

<http://www.ost.gov.uk/policy/advice/index.htm#1997>

DTI - The use of scientific advice in policy making: Implementation of the guidelines

http://www.ost.gov.uk/policy/advice/implement_98/index.htm

DTI - The use of scientific advice in policy making: Implementation of the guidelines

Second annual report by the former Chief Scientific Adviser Sir Robert May, November 1999 http://www.ost.gov.uk/policy/advice/implement_99/index.htm

DTI - Code of practice for scientific advisory committees

<http://www.ost.gov.uk/policy/advice/index.htm#2000>

NSD Business Management System RES/008 Policy relevant research

NSD Business Management System G/RES/001 Guidelines: Implementing May guidelines for IMC / levy programme

NuSAC/SCR/99/8 The use of scientific guidelines in policy making – The May guidelines

NuSAC/SCR/00/8 Freedom Of Information Bill, Dissemination and Knowledge management

May R, Bringing science into governance, EC JRC Institute for Prospective Technological Studies, Report no 52 <http://www.jrc.es/pages/f-report.en.html>

Appendix 1 - 1999 HSE report to CSA

Introduction

Science and Technology play a key role in helping the Health and Safety Executive (HSE) to ensure that risks to people's health and safety from work activities are properly controlled.

Measures taken to raise awareness of the Guidelines within HSE have included wide circulation to staff, the Health and Safety Commission and its Advisory Committees, posting on the Chief Scientist's electronic Bulletin Board and inclusion in introductory training for new staff. Research Co-ordinators from HSE Divisions meet on a regular basis and discussions have included monitoring awareness of and compliance with the Guidelines. A sub-group of Research Co-ordinators has been established to consider how implementation can be further strengthened.

Early Identification of Issues

HSE's 'Strategic Foresight' programme is intended to assist in identifying a wide range of issues promptly and to respond effectively. A formal project is underway to establish a structured and robust framework for ongoing mapping and analysis of technological trends. These trends are being captured on a database which has been placed on HSE's internet site and which will be linked to the 'Foresight Knowledge Pool'. HSE is also undertaking strategic reviews of occupational health and of safety.

Priorities for future research are established by policy and operational divisions, with cross-HSE interaction and communication achieved through a series of Portfolio and Subject Research Groups. 'Guidelines for HSE's Research Programmes' have been published and these provide a medium term look at key influences likely to impact on business and possibly give rise to the need for research. HSE maintains extensive contacts with the scientific community e.g. a number of research programmes are established in consultation with non-HSE experts, HSE participates in national and international networks and the Chief Scientist organises monthly seminars at which independent experts discuss developing health and safety issues. HSE's Research Strategy Committee oversees the whole process.

Building Scientific Advice into Policy

HSE policy makers receive guidance from in-house scientific and technical staff on selecting appropriate sources of scientific advice. Compliance with the guidance is monitored as part of the regular monitoring of policy and project plans. All those putting policy proposals to the HSE Board are required to give assurance that the proposals are based on the best available scientific advice. The Chief Scientist is a member of the Board and exercises a challenge function. The key advisers to HSE policy makers will normally be the organisation's own scientific staff, although they do have extensive links with the wider national and international scientific community, and this is reflected in their advice. Other Departments are involved in areas of overlapping interest.

HSE is leading the interdepartmental research project that is seeking to provide a sound framework on which to assemble expert advice.

All of HSE's research projects must have full ROAMEF (*note - ROAMEF = Rationale Objective Appraisal Monitoring Evaluation Feedback*) statements and HSE research

contract staff examine these proposals for evidence of adequate consultation. ROAMEF statements are circulated to members of appropriate Portfolio and Subject Research Groups and others for comment before they are finalised.

Open Presentation of Policy

HSE's policy is complete openness of the scientific data underlying health and safety information, moderated to the minimum extent necessary where there is a possibility of commercial development. Compliance is monitored by the HSE Board and the HSE's Research Strategy Unit (RSU) operates a key challenge role. The decision on whether or not the results of a research project should be published is taken by the customer (*note - this means the HSE project officer*). However, the presumption is that results will be published for all research and RSU will require a customer to justify any decision not to do so. The normal mechanism for publication is in HSE's Contract Research Reports, which is a numbered sequential series. All past HSE Contract Research Reports will be made freely available on the its web site by the end of 1999. All future Reports will be placed on this site. All those bidding for research funds are required to prepare a ROAMEF statement which specifically includes consideration of how results will be published.

HSE uses a wide range of mechanisms to publish research results including the internet, seminars, conferences, press releases, press conferences, and articles in trade journals and magazines. Research results are also incorporated into a wide range of guidance material and summarised in the Annual Report and Accounts.

Appendix 2 - 2001 Report on Implementation by the HSE

The business of the Health and Safety Executive (HSE), working to the Health and Safety Commission (HSC), is to ensure that risks to people's health and safety from work activities are properly controlled. To enable HSE to be an effective regulator and to ensure that the policy and standards that we set are technically sound and cost effective, high quality scientific and technological underpinning is essential.

HSE fully supports OST's view that we should make the self-reporting approach work. As discussed in more detail below, we are committed to the introduction of a quality management system and procedures for securing implementation of the Guidelines.

However, an important concern raised by colleagues is that a strategic EU policy overlay can render ineffective whatever carefully crafted domestic systems exist for ensuring that policy is based on evidence and the best available scientific advice. The European Commission can, and does, feed in proposals to Presidencies for negotiation at Council Working Group without evaluating existing law, researching scientific & technological evidence, assessing impact etc. This has recently happened on two Directives on physical agents (vibration and noise) being negotiated by HSE. Presidencies pick them up because they want to gain a success and arguments about Guidelines 2000 etc fall on deaf ears. It would be interesting to know if other departments have suffered similar problems and, if so, to consider how this matter might best be addressed.

Specific examples of where HSE has followed good guidelines practice

- Workshop on Variability and Susceptibility in Human Response to Occupational Exposure to Chemicals in the UK
- Ageing Workforce
- Review of Current Legislation Governing the Control of Levels of Inhalable Dust in Coal Mines
- The Year 2000 Problem

Specific examples of where HSE could have done better

1. Publication of Research Reports

HSE has long followed a policy of openness and our published Intellectual Property Policy Statement and Exploitation Plan records our intention 'that the results of [HSE's] research should be published freely in accordance with scientific practice, except where timing is affected by considerations of commercial exploitation.

However, during 1999/2000, persistent enquiries by a journalist seeking large numbers of HSE reports revealed that a few of these had not been published. Discussions with responsible customers indicated that, with many pressures on their scarce resources, they had not considered publication to be a priority. Reports were, however, made available on request. The journalist was not satisfied and a lengthy exchange of correspondence ensued.

This gave added impetus to the implementation of systems improvements in HSE to ensure increased rigour in the publication of all appropriate research results. All HSE customers for research will be required to provide a publication plan and our Research Strategy Unit will monitor this actively and rigorously challenge any claims that results should not be published. HSC/E's Science and Innovation Strategy sets

out how we will achieve our policy that research results are disseminated to the right audience at the right time to encourage application and use of this information. All research results will be required from suppliers in electronic form and placed in full and free of charge on the HSE Website. There will be an associated 'reasonable cost' charging regime but limited to the supply of a print-on-demand service for first generation quality hard copies.

2. Linking Research to Business Objectives

During 2000, HSE commissioned Technopolis Ltd to undertake a cross-cutting analysis of a number of our research portfolio evaluations. The findings were generally positive with most of the research judged to be of high quality. However, a number of areas for improvement were identified, in particular the need to demonstrate an explicit connection between the research portfolios and the high level objectives set out in the HSC/E Strategic Plan. Examination of the portfolios suggested that, historically, HSE senior management had not sought to direct R&D investment in a strategic manner.

The report of this Technopolis study was a key working document for the Project Group which drew up HSC/E's Science and Innovation Strategy. A Director of Technopolis was recruited as an external member of that Project Group. Individual copies of the report were sent to all members of the HSE Board and an electronic copy is available on the HSE intranet. Technopolis presented their findings to HSE staff at seminars in London and Bootle.

Any new policy initiatives taken since the last implementation report

None but see below.

Any future initiatives planned or under development

HSE is in the process of developing a quality management system and procedures for securing implementation of the Guidelines and we aim to complete this work by the Autumn. The quality system will set out the roles and responsibilities of everyone concerned, particularly the policy makers. It will establish the competences required and provide training and coaching. For policy makers this will include being able to identify the appropriate scientific and technological experts and working with them to define the issues/questions that need to be addressed. Given that such competences will be needed across Whitehall, it would be helpful if such courses could be organised centrally, e.g. run by the Civil Service College or the Centre for Management and Policy Studies. HSE will also be developing and implementing appropriate monitoring and review arrangements to ensure all parties fulfil their obligations.

The name of the official who will be the contact point for public complaints

Dr John McGuinness (John.Mcguinness@hse.gsi.gov.uk) will take on this role.