

Health and Safety Commission Paper		HSC/08/05	
Meeting Date:	15 January 2008	Open Gov. Status:	fully open
Type of Paper:	below the line	Paper File Ref:	2007/286119
Exemptions:	none		

## HEALTH AND SAFETY COMMISSION

### An Update on science in HSE

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#### Issue

1. This paper reports on progress
  - implementing the HSC Science Strategy 2005-2008, and
  - implementing recommendations about improving the delivery of science.

#### Timing

2. Routine.

#### Recommendation

3. For information.

#### Background

4. HSC approved publication of its Science Strategy in May 2005 and the first annual report was presented to the HSC in May 2006. At that time, the Office of Science and Innovation (OSI) was reviewing science in HSE and work was continuing on the internal Fundamental Review of Science. The Making Best Use of Science (MBUS) project took forward recommendations from these reviews, and these are now being implemented.

#### Progress with the 2005 – 2008 Science Strategy

5. The Strategy has three key themes:
  - supporting delivery of HSC's strategy and public safety agreement targets;
  - supporting frontline regulatory functions; and
  - looking ahead to identify and meet future challenges.

6. The science planning arrangements ensure that agreed work is commissioned by the science coordinators within each of the four HSE programmes: Health & Safety – Conventional (formerly FIT3), Health & Safety - Major Hazards, Justice and Corporate. HSL is the provider of choice for all commissioned work, but HSE continues to invest in extramural research.
7. These arrangements cover the first two themes: researching the evidence for the programmes and commissioning support for investigative and other operational work. Evaluation arrangements have been developed to demonstrate the value and contribution of science effort to meeting targets.
8. There is a fifth programme: the partnership between HSE and Local Authorities with £5m allocated for 4 years 2005 – 2009. The funding is almost fully committed to March 2009 and arrangements are being made to ensure commissioned work is delivered. This has provided support for individual councils and LACORs, in matters such as care services, leisure facilities, beauty industry and events management. The work has generally been evaluated as being valuable to the work of local authorities.
9. HSE has developed its Horizon Scanning Work to incorporate the results into strategic business planning. It covers:
  - topics that may need regulatory intervention in the future such as the hydrogen fuel economy, nanotechnology etc.
  - emerging scientific developments that could introduce new hazards into the workplace, and
  - scenarios of how society might develop in the UK over the next 10-15 years, how attitudes to health and safety at work might change, and what this means for HSC/HSE.

## **Reviews of HSE's Science**

10. OSI completed its review of HSE/s science in May 2007, making recommendations that HSE:
  - engages more widely and earlier with external stakeholders in the development of its plans, learning from other government departments how this might be done;
  - assures itself that it has the systems in place to collate, critically appraise and update emerging scientific evidence;
  - has clear governance and procurement arrangements in place, with the expertise to manage projects and evaluate work;
  - provides guidance so that peer review activities are applied consistently throughout;
  - provide guidance to help staff identify and use scientific experts;
  - ensure it captures knowledge in a formal, ongoing way;
  - share lessons learned about communicating knowledge outside HSE with other health and safety organisations;
  - assures itself that the demands placed on external members of its advisory bodies are reasonable - to ensure it can find experts to sit on them; and
  - considers the career development of scientists, develop succession plans and explore innovative ways to access specialist capability.

11. Many of these were in the process of implementation at the time or were developed in the MBUS project. The three main aims of MBUS were to ensure that:
  - HSE's science & technology (S&T) capability is focused on identifying and delivering HSC/E's current and future business priorities;
  - The S&T community has the flexibility to adapt to changing business needs; and
  - S&T staff have straightforward and effective management arrangements which provide strong professional leadership and good career management and opportunities
12. Recommendations were made and agreed in July 2007 by the HSE Board, and implementation has started in a number of areas:
  - planning and governance;
  - restructuring of the FOD specialist group
  - the creation of a Science and Technology Group (STG);
  - development of the Chief Scientific Adviser's Group (CSAG);
  - the appointment of Senior Scientific Advisers;
  - and new knowledge and information systems.

### **Preparation of the next Science Strategy and Science Plan**

13. Work has started to develop the next Science Strategy which will cover 2009/11. The MBUS project board agreed that it would be impractical to develop the new strategy for implementation from April 2008: work on the next HSC business strategy is only in its early stages, and we would be unable to engage external stakeholders as OSI proposed in time. The science plan for 2008/09 will continue the 2005 - 2008 science strategy.
14. Work has started on the 2009/11 science strategy and plan in line with the OSI recommendations. A method recommended by DEFRA has been piloted with the Health & Safety (Conventional) Programme, which engaged with HSE and external specialists, local authorities and HSE Strategic Planning Unit. The method surfaces gaps in scientific evidence against business objectives so that resource can be directed to researchable questions about topics where it is most required rather than to less strategic work or where the evidence is unchanged.
15. Arrangements will be made to ensure that local authorities can continue to access and use science from April 2009.
16. The development of the science plan – and delivery against it – is being overseen by the Chief Scientific Adviser and the Science Sub Group of the HSE Board. The sub group includes three external experts.

### **Delivering the recommendations of OSI and MBUS**

17. New governance arrangements are being developed so that budgets will be delegated to programme directors who will be responsible for delivering the science plan. A dual control with the Chief Scientific Adviser will be in place during 2008/09 to assure him and the HSE Board that the arrangements are working to deliver the Science Plan, and that we get better value from the science spend.

18. Improvements have been made to the commissioning and managing research and reactive support, including a stage and gate approach to improve the definition of requirements. More work is needed to improve the scheduling of research projects, so that they start earlier in the year to avoid capacity management problems for HSL and other providers. Information systems to improve the procurement and management of projects are being developed. Improved peer review arrangements are in place.
19. The STG was established in October 2007. It initially comprised the Health and Safety Laboratory (HSL), the Corporate Health Sciences Division, some of the Corporate Topic Groups (CTGs) and scarce disciplines (Radiation, Noise & Vibration and Ergonomics). The HSE Board (advised by the Science Sub-Group) has oversight of the composition of the STG, which will evolve to meet changing business needs.
20. It is a flexible, visible and accessible corporate S&T resource, providing
  - A consultancy function which supports delivery by HSE's operational and policy business areas,
  - Technical service delivery – administering the regulatory schemes for chemicals, and biocides/pesticides plus primary inspection in key specialist areas (e.g. non-nuclear radiation),
  - Corporate S&T activities of horizon scanning, knowledge management and the delivery of cross-cutting initiatives in response to demands from the Chief Scientific Adviser.
21. The HSE Board has already established a Science Sub-Group to oversee the HSE's S&T and provide direction. As chair of the SSG the Chief Scientific Adviser has a crucial role in assuring the quality of HSE's S&T and how it is planned and used. The Chief Scientific Adviser's Group will provide our CSA with the support he needs to fulfil this role. The Senior Science Advisers (one in HSE and one in HSL) will provide him with the means to judge the health of the S&T community, to ensure the consistency and quality of S&T and to deal with unresolved issues of capacity and capability.

## **Action**

22. HSC are asked to note
  - the delivery of the current science strategy;
  - the work to implement recommendations of the reviews of HSE's science; and
  - the arrangements for developing the next science plans and science strategy.