

Health and Safety Executive Board Paper

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HEALTH AND SAFETY EXECUTIVE

MANAGING INFORMATION AND KNOWLEDGE IN HSE A Paper by John Ewins and Brian Fullam Advisor: Brian Fullam

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Issue

1. Leadership and co-ordination of the management of information and knowledge in HSE.

Timing

2. Immediate, if we are to maximise the benefits (see Para.18) of more efficient and effective information and knowledge management in the delivery of the HSC/Es Strategy and achievement of the PSA targets.

Recommendations

3. That:
 - a. HSE takes a more integrated approach to maintaining and managing its knowledge base, seeking to embed the principles of good knowledge management in the culture of the organisation;
 - b. a small team is established to develop proposals for doing this, which it would bring back to the Board for their consideration. The proposals would include KM principles for HSE, potential benefits from their application and a realisation plan for those benefits.

Background

4. CoSAS when it was established took on responsibility for some aspects of knowledge management, with a very small team (0.6 of a Band 2 and 0.5 of a Band 6) charged with developing principles for knowledge management and using these to develop arrangements for managing scientific knowledge. The team proved to be too small, well below critical mass, and as a result was unable to devote sufficient time and provide the continuity of approach needed. Little of substance was achieved.
5. The Statistics and Information Programme Board recently considered a paper on a framework for managing knowledge and intelligence. In discussion concerns were expressed that the principles and processes

relating to knowledge management had not been established and that there was no clear line of responsibility for coordinating and overseeing their application.

6. To address these deficiencies, the Board agreed that a small group should revisit the earlier decisions on the organisation of knowledge management and make recommendations for locating and resourcing the function. This paper is the outcome of the work of that group.

Argument

7. HSE is a complex organisation with a large number of groups each with their own specialist areas of knowledge. The sharing knowledge between and to a lesser extent within these groups is ineffective and inefficient. Also, identifying the “expert” who is the best source of knowledge can be difficult. These difficulties with obtaining information in a useable form have slowed down the development and delivery of some strategic programmes and had a day-to-day impact on the efficiency and effectiveness of front line operations..
8. Good management of information and knowledge in HSE is essential for the delivery of HSC/Es strategic priorities. Managers of strategic programmes need to be able to identify the best source of knowledge and support for their programme, wherever it lies in HSE. Similarly, programme teams need to be able to obtain easily the information they require to develop the evidence base and deliver the programme. At present finding the best source of information and advice is heavily dependent on informal networking and a person’s experience of HSE; “who you know” is what is important. Palliative action is being taken to overcome these deficiencies e.g. seconding scientific generalists into Strategic Programme teams to help programme managers locate appropriate sources of knowledge and help but this unlikely to provide a sustainable long term solution.
9. HSE’s systems and culture do not promote better information and knowledge management, though some elements are improving. Access to corporate information has developed substantially over the last 5 years through the introduction of the Intranet and will improve further with the introduction of:
 - an electronic document and records management system (EDRM) with its promise of a corporate repository for working documents and records, accessible to all;
 - COIN.
 - planned changes to the electronic directory which should greatly improve the signposting of sources of knowledge;
 - group communications software facilitating the operation of communities of practice and interest. (See Annex 2 for a

more complete list of projects with a knowledge management impact.)

10. However, take-up of the information available on the Intranet has been patchy. Evidence, largely anecdotal, points to staff finding the interface into the Intranet not user friendly and therefore finding it difficult to extract the information they need. For example, field staff complain of the time it takes to find the guidance and information they require before making an inspection.

Overcoming the Barriers

11. There are four major barriers to better information and knowledge management in HSE:
 - culture
 - accessing sources of knowledge
 - access to information
 - maintaining the knowledge base
12. The largest of the barriers is cultural, but overcoming it is essential if we are to make progress with the others. We do not have a culture that drives and rewards the open sharing of knowledge. Instead, knowledge is often seen as an asset to be traded and a source of status. Groups with strong often inward looking identities and a pay structure that rewards the possession of specialist knowledge do not help. Cultural change is the most difficult to achieve, there are no easy technical fixes, but the Change in HSE Programme and the behaviours underpinning the Core Framework provide a strong foundation. What is needed now is sustained effort to apply these behaviours to improve knowledge management in support of HSE's business priorities. This should not require a new separate project. Instead the initiative should look to bring these changes about by working through existing business efficiency and improvement projects e.g. the workforce strategy, improving performance management and implementing the S&T Resources Review.
13. If we make progress with embedding knowledge management within the organisation's culture, making progress with the next two areas, accessing sources of knowledge and information will be challenging but relatively straightforward. We can learn much from organisations who have successfully tackled knowledge management and from our own experience in operating systems such as Infoline. Maintaining the knowledge base in the face of losses of 10% of all staff over the next three years and 20% or more of our specialists in five years will be more difficult, with less external experience to draw on.

The Way Forward

14. As mentioned above, information and knowledge management are everyone's responsibility. They are not functions that can be discharged

by one group. Nor are we talking about a new global IT driven initiative. Rather it is a way of working and thinking for all staff, with elements of the functions distributed to different groups within HSE who have a particular expertise or lead a segment of the business. It does, however, require all to work in line with the behaviours and values set out in the core framework, particularly for 'innovating and learning' and 'applying and developing job related expertise'. They need to apply common principles within an agreed architecture. Success requires cultural change across the organisation and this should be championed at Board level. Developing the principles and architecture and helping the Board champion lead the necessary cultural change will in require a dedicated group. Most Government Departments/Agencies of a similar size to HSE have established KM groups.

15. The group, given its coordinating, support and advisory role need not be large but must have critical mass. Leading the group will be a challenging task requiring good representational and leadership skills and a "one HSE" focus. The group's corporate role suggests it should be located in a Directorate with a strong corporate focus with responsibilities for providing and developing systems in support of the use of information. There are four D/Ds that meet this test:

- SD with its focus on use and management of intelligence;
- CoSAS which is responsible for developing corporate systems to support the use of science and provides major elements of corporate information
- RPD with its overarching support role and responsibility for managing and delivering information systems and business improvements.
- OPSD as the provider of data and information to the operational directorates.

16. Of these four groups, SD is possibly now the least comfortable fit with its increasing focus on strategy development rather than intelligence management. The arguments are more evenly balanced for the others. RPD is responsible for developing all the corporate systems supporting knowledge management and has a strong role in the management of information through its Information Services Group. CoSAS has corporate oversight of the development and use of science and the science community in HSE, a major source and user of knowledge, and is responsible for developing science policy and coordinating its application across the organisation. OPSD manages operational guidance and information for HSE and will act as OG's intelligent customer within this area of work.

17. CoSAS is prepared to take on this enhanced corporate function providing a suitable level of resource is agreed. The workload, especially in the first 18 months to 2 years, will be high, but possibly falling off with the development of an agreed programme of improvements and as knowledge management becomes embedded. We estimated that initially the team

should consist of a Band 2 and two Band 3/4s, with some Band 6 support. In the steady state resource levels would be lower. Ideally the team members should be drawn from across HSE to provide a balance of experience and skills

18. Most areas of work should see benefits from better and quicker access to the right knowledge and information. Facilitating the exchange of information through networks and communities of practice can break down barriers between functional silos, help create partnerships and sustain and spread knowledge. The development and delivery of strategic programmes should improve, as should senior management access to information on progress in the programmes and the delivery of PSA targets. However, quantifying those benefits has proved challenging for many organisations. Even those seen as leaders in the application of knowledge management, such as Schlumberger, find it difficult to put a financial value on the benefits they have accrued and generally express them in terms of improvements in the quality of service provided leading to increased business.

Consultation

19. Groups with existing information and knowledge management roles, SID and BEU have been consulted, as have the FOD Sectors who are both knowledge users and managers.

Presentation

20. There is considerable interest amongst staff in improving information and knowledge management within HSE. It is proposed that the decisions of the Resources and Delivery Group (RDG) are cascaded to staff using the recently established cascade briefing arrangements.

Financial Costs and Benefits

21. One of the first tasks of the proposed team would be to map out the potential benefits from a coordinated approach to exchanging and managing knowledge and information and develop a plan for their realisation. Possible benefits include:
- time saved by frontline staff accessing information to support their interventions/inspections (converted to f/t staff equivalents, additional contacts or cash equivalents)
 - Reduced need for meetings to exchange information.
 - Avoiding duplication of work.
22. Staff costs: through re-prioritisation CoSAS can fund a B2 post and 0.5 B3 post for this initiative. Funding for the other resources will need to come from re-prioritisation across HSE.

Action

23. That members consider the proposals for adopting a coordinated approach to knowledge management in HSE, establishing a small team to work up proposals for taking forward knowledge management in HSE. If in agreement the Board should decide in which directorate the team should be located and level of resource that should be committed.