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Knowledge management in HSE: an update

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Cleared by Dave Bench on 20 October 2011

Issue

1. Updates SMT on developments and seeks clarification of SMT's appetite for managing knowledge.

Timing

2. Routine. For your meeting on 2 November.

Recommendation

3. SMT is asked to:
 - a) assess whether the nature of the problem and need for action outlined in Patrick McDonald's 2009 review of knowledge management (KM) has changed, and if so, how?
 - b) note the work at HSL, which will deliver guides to good practice for a number of KM techniques and management tools to HSE; and
 - c) consider their general appetite for KM, what they want it to look like in HSE and how to take this view forward. (Options are included within the paper)

Background

4. In November 2009, SMT considered its approach to managing knowledge¹. It discussed the review conducted by Patrick McDonald which had concluded that:
 - HSE needs to improve knowledge management;
 - multiple and targeted approaches would have more success than a single approach;
 - a toolkit of practices and techniques should be developed for units to use; and
 - senior managers' attention should be principally on improving people's behaviour and managers' leadership skills.

¹ *Knowledge management in HSE* SMT/09/129. An extract containing the report of the review is in Annex 1

5. In accepting the conclusions of the review, SMT agreed that individual members were accountable for management of knowledge (or know-how) in their directorates. SMT also agreed it would be helpful to consider how a knowledge council of senior managers could assist them with changing the culture in HSE and asked for options to be developed. SMT considered draft terms of reference when approving the new information and information systems strategy in 2010.²
6. Patrick McDonald's review also outlined the scope of work commissioned by HSE from HSL to build knowledge management (KM) capability in HSL which could be used by HSE.
7. While there has been progress in a number of areas, Internal Audit has recently recommended:
 - that lead responsibility and senior level sponsorship for knowledge management, and governance for the HSL KM project be formalised, and
 - an up-to-date strategic approach to, and underpinning plans for taking forward the deliverables of the project, be developed and agreed by SMT
8. The Audit Committee has recently discussed this audit and wishes to be informed on progress. In addition, some HSE Board members are interested in the contribution of knowledge harvesting tools used during the Voluntary Exit Scheme in 2011.

Argument

9. Patrick McDonald's review identified that there are business risks with an undefined approach to managing knowledge, especially risks to business continuity and reputation. It also identified that there is uncertainty about which issues to tackle first to have most impact. (see annex 1)

Has the nature of the problem and need for action outlined in Patrick McDonald's 2009 review of knowledge management changed and if so, how?
10. In recent years, across central government, a Knowledge and Information Management function has been established, focussing on library and information management, records management, access to information (Fol etc.) and information security and assurance. By contrast, limited attention has been given to developing collaborative arrangements between people for sharing their knowledge and know-how, and these are the focus of work in HSL.
11. For example, knowledge harvesting techniques were developed by HSL to support managers capture the knowledge of staff whose were leaving HSE. The techniques were initially used for some of the HQ functions that transferred to Redgrave Court in the How & Where We Work programme, and later in NSD and CSD, and a toolkit was developed. This was tested

² A New information and information systems strategy for HSE SMT/10/46. the draft Terms of Reference are in Annex 2

during the Voluntary Exit Scheme. A streamlined version of the toolkit will be available in HSE by July 2012.

12. HSL have been developing their KM capability, focussing on leadership, management and behaviours. They have developed a number of guides and techniques for HSE to use. These can be used for the whole time staff work in HSE, not just during the six months before they leave.
 - demonstrating the return on investment of KM – if it can be done
 - understanding and managing the climate for sharing knowledge
 - knowledge capture techniques
 - techniques for managing communities and collaboration
 - case-based retrieval from HSE's information systems
 - techniques for motivating staff to share knowledge
 - lessons learned techniques – before, during and after work activities
 - developing good practice case studies
 - disseminating the tools and techniques
13. The project is running to cost and is entering its final year. The focus is on completing and delivering these techniques for HSE and HSL to use. The intention is to host information about these within the intranet for people to use: directors and senior managers will be able to choose which to use.

SMT are asked to note the work at HSL, which will deliver KM techniques and management tools to HSE over the next year.
14. The internal audit expressed concern that the governance of this work would have been assisted greatly either by a knowledge council, or by a steering group. While HSE colleagues have helped the project by reviewing proposals and testing outputs, most who were involved have now left HSE. Delivery and wider use of these techniques will be assisted by clearer direction from senior managers.
15. HSL's research indicates and confirms that effective KM initiatives depend in part on the perception that senior managers and leaders support them.

SMT are asked to consider their general appetite for KM and what they want it to look like in HSE. The matters to consider include

 - ***establishing a knowledge council chaired by Dave Bench to give coordinated leadership to KM generally and to the completion of the KM project (as outlined in annex 2)***
 - ***managing local initiatives within directorates, using the techniques developed by HSL and others (see para. 12)***
 - ***including KM in HSE's corporate risk management arrangements***

Consultation

16. DCEO/BSD, CSEAD, HSL

Financial/Resource implications for HSE

17. Directors to decide how much resource to use to apply the techniques. The funding allocated to complete work at HSL is to be met from CSEAD's research budget.

Action

18. SMT is asked to:
 - a) assess whether the nature of the problem and need for action outlined in Patrick McDonald's review has changed and if so, how (para. 9 and annex 1 apply)
 - b) note the work at HSL, which will deliver KM techniques and management tools to HSE (paras 11-13 apply)
 - c) consider their general appetite for KM and what they want it to look like in HSE (paras. 14-15 and annex 2 apply)
19. It is proposed that Dave Bench will take the agreed actions forward.

Extract from *Knowledge management in HSE (SMT/09/129)*: summary of review by Patrick McDonald

8. There was broad consensus on definition. Knowledge Management was described as accessing the right knowledge and know-how from the right people at the right time. Doing it well requires much more than having technology and procedures: it requires people making the right connections with each other at the right time.

9. By managing and sharing knowledge better, HSE staff would be (for example):

- codifying information for the future, including what has been done up to now and what's been achieved. A good example of this is stress management policy
- developing a supportive lessons-learned culture where staff share learning before, during and after projects
- searching out and talking to people with know-how and memory of past events
- having more objective conversations with each other based on evidence, rather than rejecting evidence when its inconvenient

10. Recent examples of effective Knowledge Management in HSE include:

- compiling the narrative of HSE's policy work going back to the early 90's by accessing records and people's recollections, on topics including workplace temperatures and violence at work
- identifying who has critical knowledge in process safety leadership and land use planning, for 'harvesting' their knowledge before they retire

11. HSE was less effective when:

- Routinely identifying people with the right knowledge or know-how was urgent
- sharing knowledge between teams within and beyond directorates
- demonstrating our systems worked as designed to the courts or to the Information Commissioner
- a central or specific imperative is missing in HSE
- individuals don't feel motivated or sense they lack permission to share knowledge

12. A single, universal approach in HSE would not work. How staff share knowledge - and how they are motivated to share it - varies. Staff donate knowledge more readily when they can clearly see the benefits of doing so to themselves and/or immediate colleagues. Whilst obvious, this is not often made explicit. Some frontline staff are not primarily gathering new knowledge, but they are applying existing knowledge which has been codified into their procedures. Here, it is important to motivate staff to keep the right data in COIN by demonstrating its value to later events. By contrast, HSL staff generate and apply new knowledge which is a strong motivator for staff to share knowledge.

13. There are business risks with the current undefined approach, especially risks to business continuity and reputation. Examples included:

- Where staff don't perceive that they have a knowledge role and don't make a connection between what they observe in inspections and investigations and a broader need for others to know;

- where experienced staff leave HSE without managers assuring themselves that knowledge had been captured and shared beforehand;
- serious consequences for HSE in the courts when similar information was not systematically or consistently handled in approvals' casework; or
- where HSE fails to use existing evidence to make or support its negotiation position.

14. HSE has some way to go to embed ways of managing data and information including: organising and retrieving content from increasing volumes of information; the reliability of important content which can degrade unless they are kept current; the inelegance of systems where procedures are not fixed and where staff can chose what they do and don't do.

15. There is uncertainty about which issues to tackle first to have most impact. There is no sense that things are out of control, and equally, no sense of how mature HSE is at managing knowledge. SMT members recognised that they are responsible for motivating their staff to manage and share knowledge, including establishing the culture in which their staff thrive, and that this can't be delegated to one senior manager alone.

16. Knowledge Management maturity models identify leadership as a success factor. Leadership skills are required both to lead and support changes in systems and procedures, and to transform the environment where staff work together. Guidance for leaders to develop their approach in knowledge management is limited. While it's unclear how far leadership can be systematised for managing knowledge, it should be possible to develop ideas and approaches based on leadership training. These would principally address behaviours like breaking the silo mentality and having more objective debate.

17. Previous decisions of senior managers had unplanned consequences for sharing knowledge. For example, refocusing our efforts on core operational tasks and outputs in recent years may have given staff a wider impression of senior managers toughening up. A consequence is that there are fewer topic-based meetings and conferences, although senior managers recognise the value of these events in sharing knowledge and have shown they are willing to accept proposals to hold them.

18. Senior managers have a responsibility for and a role in developing excellence in all parts of their business. Senior managers can emphasise and demonstrate the value they place on knowledge by developing a work climate where staff understand what knowledge management can do for them.

19. There is a list of tools and techniques at Annex 1.2 that can enable improved performance during the knowledge lifecycle. Reviewing this list suggested HSE has adequate technology and processes in place. Attention needs to be given to all stages of organisational activity (including behaviours) and to the sharing and re-use of information and knowledge. In particular, HSE should work on sharing knowledge at conferences and away days, supporting new teams with people with complementary knowledge and skills, storytelling, buddying, fairs, formal and informal networking, improvement teams, and action inquiry groups. A better understanding of the use of evidence in HSE would be needed.

20. Whichever tools are used, knowledge skills sets for senior managers and staff are required, and staff need to know which tools they are encouraged or required to use.

21. The discussions concluded that:

- HSE needs to improve knowledge management
- multiple and targeted approaches would have more success than a single approach
- a toolkit of practices and techniques should be developed for units to use
- senior managers' attention should principally be on improving people's behaviours and managers' leadership skills

22. What other government departments are doing helps place this in context. The Knowledge Council was established in 2007 to improve knowledge and information management in government. Its membership mainly includes Heads of Knowledge and Information Management and Chief Information Officers.

23. So far, it has focussed on issues like information rights, records policy, digital continuity, information security, information skills, professional development, collaboration etc. The emphasis is on transactional work, rather than on supporting staff to manage and share knowledge better.

24. Only a few are progressing beyond this, giving equal emphasis to the behavioural issues included in the CSA's discussions. For example, GCHQ has a programme to support managers deliver improvements in learning and sharing lessons before, during and after doing important work.

25. An approach that is being used in BIS is the creation of their own knowledge council. Senior staff from business units and across disciplines are responsible for establishing and implementing their own knowledge management priorities, but use the council as a means of sharing ideas and learning from each other, and agreeing corporate approaches when they are required.

**Extract from *A New information and information systems strategy for HSE*
(SMT/10/46)**

Draft Terms of Reference for a Proposed HSE Knowledge Council

Background

Good information and expertise is important to the way HSE conducts operational work, develops policy, conducts research and manages communications, both internally and with the wider health and safety community. Using the right information and expertise in good time enables staff to work more effectively and protect HSE's reputation.

The HSE Knowledge Council brings together senior managers who can see the wider opportunities and find practical means of achieving this in their part of HSE.

Objectives

Collectively, to advise and support the knowledge management dimension of corporate programmes, such as EASE.

To share experience of the ways Council members have used to ensure knowledge sharing behaviours and processes are developed, understood and embedded in their part of HSE.

Membership

- Senior managers from each part of HSE - accountable through their director to the CE for developing HSE staff's capability for sharing and exploiting knowledge.
- Additional members including the CKIO/CIO (?) and/or external adviser.

The council will meet 4 (?) times / year and report annually to SMT.

Indicative Initial tasks

These include:

- Developing a clear vision for knowledge sharing in HSE
- Agreeing the current level of maturity and identifying what needs addressing across HSE
- Identifying change approaches to apply in their part of HSE: e.g. organisational / behavioural, process or technology
- Commissioning work to learn lessons from elsewhere
- Exchanging lessons learned with each other
- Celebrating and communicating success
- Give steer to HSE knowledge management programme delivered by HSL
- Establish relationship with I&S Governance Board