

Health and Safety Executive Board		HSE/ 12 / 92	
Meeting Date:	5 December 2012	FOI Status:	Open
Type of Paper:	Above the line	Exemptions:	
TRIM Reference:	2012/466642		

Conventional Health and Safety Regulatory Approach for Nuclear Sites

Purpose of the paper

1. This paper reports on the good progress and key achievements made to date in developing proposals for delivering ONR regulation of conventional health and safety at nuclear sites. The proposals recognise that HSE and ONR (as a statutory corporation) will operate as “sister” organisations and are designed to assist this. The Board is asked to note this interim report, which was agreed by the ONR Board on 28 November. The report is the first in a series which will be provided to the HSE Board approximately every six months through until the planned ONR vesting date of April 2014.

Background

2. The HSE Board meeting (27 June 2012) noted Board paper HSE/12/42 which included an ONR Board paper (12-04-05b) and which set out, following extensive consultation with HSE colleagues, how ONR's intended new legal responsibilities for conventional health and safety might best be discharged. The HSE Board asked for regular updates on progress to be provided.
3. The paper described an approach which the ONR Board agreed would ensure efficient and effective arrangements recognising the need for and benefits of:
 - a “transformational” period of joint HSE & ONR working prior to formation of the Statutory Corporation
 - delivery of general conventional health & safety regulation at nuclear sites (excluding construction and asbestos licensing work) through an ONR in-house capability.
 - integrated working within ONR's operational programmatic approach to regulation. This includes collaborative working on construction to allow ONR to benefit from HSE's world class experience and to ensure a consistent approach to regulating the nuclear sector's major construction projects and the wider construction industry.
 - A cradle to grave approach for regulating nuclear construction which recognises that regulation covers the project from initial design concept through the construction phase to eventual decommissioning.
 - Collection of meaningful data on conventional health & safety performance in the nuclear sector to inform intervention strategies.

Argument

4. ONR/HSE Collaboration

Annex 1 sets out a plan, agreed with HSE, for delivering ONR regulation of conventional health and safety at nuclear sites when vested as a statutory corporation. A concordat between HSE and ONR to that end is one of the 15 workstreams brought together under the ONR “Essentials for Vesting” project. The plan covers the practical arrangements for ONR’s proposed role (including staffing), as well as developing metrics for assessing the performance of the nuclear industry on conventional health and safety to inform regulatory strategy.

In managing risks to delivery, particular emphasis is placed upon continuing, closest possible co-operation and collaboration between ONR and HSE working as sister organisations, particularly on construction work and is seen as crucial to the success of the “transformation period” prior to ONR vesting day.

The key achievements over the reporting period are summarised here and shown in more detail at section 5.

- (i) agreement on ONR's resourcing needs for regulating general conventional health & safety at nuclear sites;
- (ii) the putting in place of arrangements to ensure that that HSE's proven approach to regulating construction safety is inculcated into ONR and capitalised upon in construction projects now and in the future
- (iii) the commencement of work with the nuclear industry on conventional health and safety performance at nuclear sites to develop meaningful baselines which will inform future regulatory strategy.
- (iv) the establishment of solid working relationships between ONR and HSE resulting in agreement on a 10-point implementation plan, which is well underway.

5. Key Achievements

As agreed in the previous Board Paper (HSE/12/42) conventional health and safety inspection resources will be seconded from HSE to ONR to cover non construction activities. This allows for an integrated regulatory approach within ONR’s Programme Structure together with developmental opportunities for inspectors.

(i) Conventional Health and Safety Inspection Resources

Discussions have progressed well with FOD and agreement reached on the principles for recruitment of initially, two experienced Band 3 inspectors. It was also agreed that this work is appropriate for Band 3 inspectors based on current FOD work activity. They will form a small ONR team under the line management of the existing Band 2 HSE grade Inspector currently on secondment to ONR Unit 2C, to undertake the inspection of conventional health and safety activities (excluding construction and asbestos licensing work). The inspectors will be on secondment for approximately 3 years. A job specification has been agreed and this will form the basis upon which the posts will be

advertised. The initial cadre of two, agreed in principle between ONR and FOD Senior Management, will be subject to review. The discussions have emphasised the continuing need for ONR and HSE to work closely together, particularly in the event of a major conventional incident which may impact adversely on ONR's limited resources; in these circumstances HSE will, wherever possible, provide contingency support. Arrangements are also to be made for specialist and HSL support to ONR.

(ii) Construction Design & Management Regulations (CDM) - Briefings for ONR Senior Management

Philip White, Chief Inspector of Construction Division (CD) has agreed to brief ONR senior managers about CDM, CD's approach to programme working and the factors used to manage major construction projects, utilising an ONR leadership or similar event, targeting top and senior managers. This was initially scheduled for November 2012 but may now be carried forward early into the new year. At the working level, a one day event organised by ONR was held in November including HSE and several external providers from the industry to brief nuclear inspectors on CDM and its application in the nuclear industry. This approach is an integral part of the work to enable ONR to build up its competence and confidence in the application of CDM to the nuclear industry.

(iii) Nuclear Industry Conventional Health and Safety Performance

Discussions have taken place with two major players in the nuclear industry, EDF and Magnox, the outcome of which is summarised in Appendix 1. Whilst initial indications show that performance is mixed, albeit significantly better than the all industry average, comparison and benchmarking across the industry is hampered by a lack of consistency in both indicators and internal reporting. In the meantime, work has commenced to develop a meaningful baseline of performance, which will inform future regulatory strategy and also form the basis of further discussions with the industry.

(iv) Current industrial environment and continuing collaborative working on construction projects

ONR continues to work closely with FOD and CD in particular, although site based Nuclear New Build is effectively on hold awaiting a Final Investment Decision by EDF Energy for the proposed new nuclear power station at Hinkley Point C. More recently the announcement of the purchase of Horizon by Hitachi opens up the prospect of additional new build coming on stream at Oldbury and Wylfa post-Statutory Corporation. Discussions with EDF/NNB Genco on Conventional Safety, CDM and General Fire Precautions continue as part of the ONR programmes of work and CD is an integral part of and an important player in the discussions. As we move forward it is intended that CD's work and approach will be integrated within ONR's programmes of work, although the delivery of CDM will remain with CD as part of the transformational approach to this work.

Other work streams involving decommissioning in particular continue to strengthen the collaborative approach that all parties are developing for the regulation of CDM. Examples are outlined at Appendix 2.

6. Policy Liaison.

Work has continued in conjunction with ONR's Policy team, helping to develop an agreed way forward with HSE for the practical implementation of arrangements for site inspection, post-statutory corporation.

7. Financial Implications

A full analysis of the cost implications of the above proposals will be provided in the next update paper to the HSE Board. For illustration, the cost of the additional two dedicated ONR posts covering conventional health and safety (non-construction) is £0.15m pa. The analysis will also cover estimates of the charges ONR will pay to HSE for specialist assistance received in discharging ONR's conventional health and safety responsibilities at nuclear sites. All costs incurred by ONR in this area will be recovered from charges to the nuclear industry.

8. Collaboration

As part of the collaborative working arrangements it is essential that we share our experiences of regulation with HSE, and vice versa to influence future policy and approaches recognising that HSE will have the policy lead for conventional health and safety. To meet business needs, and where appropriate, ONR will utilise further specialist inspector secondment opportunities from CD to support and update its knowledge of developments in CDM.

There will be close collaboration between ONR and HSE in developing the Health & Safety performance data for the nuclear sector (App 1). This joint working will ensure that, when put in place, the nuclear sector metrics are compatible for comparison with wider Industry and Power sector performance as recorded and analysed by HSE.

9. Consultation

The ONR Board considered and approved this paper on 28 November.

While consultation, so far, has been concentrated on HSE Field Operations Directorate (from whom the function of regulating conventional health and safety at nuclear sites will transfer to ONR) and HID, we have now opened up wider consultation across HSE to ensure all relevant interests are catered for in the hardening of the proposals for ONR's post vesting. To that end SMT members, who may have an interest, have had prior sight of the proposed HSE Board Paper to ensure all SMT interests have been closed out and the responses received were positive/supportive.

10. Action

To note the progress made to date and the level of commitment to continued collaborative working between ONR and HSE during the "transformational" period and beyond.

11. Paper clearance

John Jenkins

Conventional Health and Safety Performance in the Nuclear Industry

Work has begun to assess the nuclear industry sector performance on conventional health and safety to establish a baseline. Traditional reporting measures used by HSE, such as the annual statistics and RIDDOR reporting, use Standard Industrial Classifications (SICs) that do not differentiate between the nuclear industry and other methods of power generation. This has made it difficult to properly assess how the industry is performing in comparison with other, similar industries. To address this we are working with, in the first instance, EDF and Magnox.

Our initial findings show that performance is mixed, with some areas addressed well and others less so. Both companies have performance indicators and internal reporting systems but there is a lack of consistency in both the indicators used and the methods of reporting against them. This makes comparison and benchmarking difficult, both within the industry and with other industries. The indicators used are generally reactive, with little use made of proactive indicators such as near miss reports. Both organisations showed a tendency to focus on hazard rather than risk: effort tended to be focussed on areas where there is a high incident frequency, even where consequences are often minor, with less focus on low-frequency, high-consequence incidents.

We were not convinced that conventional health and safety management is fully integrated in the organisations' management systems or that there was full reporting within the organisations. We found that when incidents do occur there was a tendency to blame individuals, frequently citing failure to follow systems of work and training as the cause, with a failure to look beyond immediate causes to determine root causes and identify any failures of management systems.

However, overall we believe that performance is probably significantly better than the all-industry average and that the work done so far provides a good base to work from. We were encouraged by the fact that both companies had recognised many of these issues and are aware of the need for them to be addressed. We will continue to work with EDF and Magnox to develop useful, consistent measuring and reporting criteria to assist us and them, in assessing and benchmarking their performance. Our intention is to roll this work out across the wider industry through the Conventional Health and Safety sub- group of the Safety Directors Forum.

Collaborative working with Construction Division

Current examples of the collaborative working between ONR and HSE's Construction Division (CD) include:

- (i) a major cladding project for the decommissioned reactors at Bradwell has seen the successful application of a joint approach to the construction issues and this in turn has contributed to the assessment of the nuclear safety case; and
- (ii) the development of a joint approach for addressing challenging work presented by the decommissioning of a reactor at Winfrith in Dorset; in particular the removal of more than 50 tonnes of asbestos from primary containment, some of which is also radiologically contaminated. Protocols for the safe removal of contaminated materials will be jointly developed and agreed. This will involve both ONR and CD together with Occupational Hygiene expertise from HSE.
- (iii) the AWE Burghfield MENSA project which is a £750 million investment and the first Class 1 nuclear facility to be built in the UK for a considerable period. HSE and ONR inspectors are working closely on the regulation of construction with the project demonstrating high safety performance and attracting recognition to date as an exemplar within the high hazard and nuclear sectors.

The continuing development and use of complementary skills and HSE-wide resources, together with the collaborative approach adopted for this type of work, augurs well for the future.

Lessons learned from the Olympics are providing a platform for the development of New Build including the wider overall approach to both project management and security on site. In particular the use of management expertise developed by Olympic contractors is being harnessed by the client to ensure that the techniques and ideas developed are being successfully brought to bear. This initiative will be expanded to include experience from the ongoing 'Cross Rail' project where valuable learning opportunities have been identified by CD that will be applicable to the nuclear sector.

Annex 1

CONVENTIONAL HEALTH & SAFETY REGULATORY APPROACH FOR NUCLEAR SITES

The establishment of ONR in-house regulatory capability for general health & safety at nuclear sites and delivery of a transformational period of HSE/ONR collaborative working on construction: Outline Plan

	Milestones 2012/13
1. Recruit & induct Band 3 inspectors to form the nucleus of an ONR in-house Conventional health & safety team (excluding construction & asbestos licensing work):	Q3-Q4
<ul style="list-style-type: none">• RRP/CEB submissions for 2 Band 3 inspectors on approx 3 year secondments from HSE• Draft job specification for agreement with DCI• Arrange vacancy filling process/consultation with FOD and HR• Hold sift and interview panels and negotiate release dates• Arrange security clearance• Induction and orientation to ONR and ways of working	Q3-Q4 & beyond
2. Develop intervention strategy and operational plan:	Q3-Q4
<ul style="list-style-type: none">• Develop intervention strategy for conventional health and safety (excluding construction and asbestos licensing work) at nuclear sites.• Develop intervention plan and reporting/recoding arrangements for shadow Working from 2013-2014• Establish and confirm process and procedures for enforcement – in line with Current arrangements in ONR/HSE MoA	
3. Arrange briefings by CD for ONR senior management about CDM, CD's approach to programme working and the factors to manage major construction projects to coincide with a meeting of the ONR Regulatory Strategy group.	Q4
4. Collect and analyse nuclear industry conventional health and safety performance data and the benchmarking of performance.	Q2-Q4
5. Foster & co-ordinate collaborative arrangements for an integrated regulatory approach to major construction projects currently underway.	Q2-Q4 & beyond
6. Establish effective arrangements for liaison between ONR and HSE on conventional health and safety policy, operational policy and regulation in readiness for shadow working April 2013 and post statutory corporation	Q3-Q4
7. Initiate work on organisational resilience and the approach to supply chain issues (less CDM related – Nuclear Inspector lead?)	Q3-Q4
8. Initiate ONR Programme Director level senior management meeting with key players in the nuclear and nuclear construction industry covering e.g. quality and supply chain issues, security, design compliance etc.	Q3 & beyond
9. Develop an initial approach to the integration of HSE Construction Division's work into ONR programme working in readiness for shadow working April 2013	Q4

	Milestones 2013/14
10. Prior to vesting date, finalise formal working arrangements with HSE for the Regulation of specialist areas i.e. HID COMAH, Explosives and Diving, including arrangements for the integration of ONR within the Competent Authority for COMAH inspection and for becoming a signatory to the work-related deaths protocol. Where possible, mirror these arrangements in shadow working, clarifying enforcement responsibilities during transition.	Q2-Q3
11. Develop options for the regulation of nuclear construction work (drawing upon the experience of continuing CD/ONR collaborative working during the transformation period).	Q1-Q3

OUTPUTS / BOARD REPORTS

	<u>Delivery Date</u>
ONR Board. Update (on progress with Q2-Q3 milestones)	November 2012
HSE Board, Update (on progress with Q2-Q3 milestones)	December 2012
ONR Board. Update (prior to shadow working)	March 2013
ONR/HSE Board Review/Update (of one year of transformational working)	July 2013
ONR Board Final Report (including recommendations / options for Construction Regulation delivery)	October 2013
HSE Board Final Report (including recommendations / options for Construction Regulation delivery)	November 2013

(Reports will be subject to scrutiny where appropriate by ONR Regulatory Strategy Group before submission to ONR/HSE Boards)