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Health and Safety Executive

The State of Security in the civil nuclear industry and the effectiveness of security regulation April 2008 to March 2009

A Report to the Minister of State for Energy, Department of Energy and Climate Change by The Director of Civil Nuclear Security

Health and Safety Executive
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Introduction

1. The Office for Civil Nuclear Security (OCNS) regulates security at the 31 civil licensed nuclear sites in the United Kingdom in keeping both with the UK's obligations under the Convention on the Physical Protection of Nuclear Material (CPPNM) and taking account of the recommendations made by the International Atomic Energy Agency (IAEA) in its publication *The Physical Protection of Nuclear Material and Nuclear Facilities* (INFCIRC/225/Rev4)[1]. OCNS is the UK's 'designated competent authority' and as such, complies with the IAEA's recommendations in that it is independent, it has the legal authority to regulate security in the industry, it has access to the UK's intelligence services and has close links with the United Kingdom's Safeguards Office (UKSO).

2. In October 2008, the Department of Energy and Climate Change was formed from the Department for Business, Enterprise and Regulatory Reform. The Director of Civil Nuclear Security (DCNS) acts on behalf of the Secretary of State for Energy and Climate Change and is required to submit a written report each year to the Minister of State on the 'State of Security in the Civil Nuclear Industry and the Effectiveness of Security Regulation'. This report covers the period from the 1 April 2008 to 31 March 2009.

3. OCNS has contributed to the major developments in the civil nuclear industry which have occurred during this reporting period, most notably the Nuclear Decommissioning Authority's (NDA) competition to appoint a new management company for Sellafield and the Nuclear Directorate of the Health and Safety Executive's (ND HSE) Generic Design Assessment (GDA) of candidate designs for a new generation of Nuclear Power Plants (NPP). At the same time, OCNS has maintained its focus of regulating security at existing sites to ensure that security remains both effective and proportionate. In 2008, OCNS reviewed security at those civil licensed nuclear sites with inventories of high hazard material as part of a wider, national reassessment of protective security in the hazardous industries conducted by the Office for Security and Counter Terrorism (OSCT). At the same time, OCNS completed its response to the Cabinet Office's Vetting Transformation Programme.

4. Within OCNS, significant progress has been made in concentrating efforts on front line inspection. A Northern Office was established in ND HSE headquarters in Bootle in September 2008, thereby reducing travelling to civil licensed nuclear sites in the North West and increasing the opportunities for routine interaction with Nuclear Safety Inspectors. Additional inspector posts have been authorised and recruited to the Northern Office and all existing shortfalls have been made good. Administrative staff posts made surplus by the Vetting Transformation Programme and OCNS integration into ND HSE's administrative procedures, have all been removed from headcount through voluntary retirement. The OCNS headcount is less today than at its merger with the Nuclear Safety Directorate of the HSE and the UK Safeguards Office

in April 2007, but it is nevertheless delivering a more focused regulatory service than was the case before merger.

The State of Security in the Civil Nuclear Industry

Protective Security

5. Protective Security is the collective term for four distinct, yet inter-related areas of competence referred to individually as Site Security, Transport Security, Information Security and Personnel Security (Vetting). OCNS' regulatory responsibilities and the obligations placed upon the civil nuclear industry are laid down in the Nuclear Industries Security Regulations 2003[2] (NISR 03).

Site Security

Site Security Plans

6. Site Security Plans (SSPs) are protectively marked documents which detail the standards, procedures and arrangements that are to be kept in place to ensure the security of a nuclear premises, nuclear material or sensitive nuclear information. SSPs are drawn up by the Operators and are approved by OCNS. They are 'live' documents, subject to an annual review and are amended as appropriate in response to any change in the security arrangements at a site.

7. It is a requirement of NISR 03 that every civil licensed nuclear site and all those who use or store Category I – III nuclear material at other premises have a SSP. If there is a tenant on a civil licensed nuclear site, whose activities include the use or storage of nuclear or other radioactive material (including radioactive sources), then the tenant is also required to have a SSP. OCNS inspect civil nuclear sites on both a routine and a no-notice basis to ensure compliance with the site's SSP. There are currently 46 extant SSPs comprising 31 civil licensed nuclear sites, 14 tenants and one other premises. Until October 2008, the Scottish Universities Environmental Research Centre (SUERC) had been required to maintain an SSP but on 2 October 2008, SUERC were 'de-licensed' and were taken out of regulation under NISR 03.

8. In my last report, I described how security would be maintained at civil licensed nuclear sites owned by the Nuclear Decommissioning Authority (NDA) when, following a competition to let a new contract for a site, the management of the site changes. In November 2008, the ownership of the Site Licensee Company at Sellafield changed following a demanding competitive process. I can report that the SSP required under NISR 03 was not compromised during this process and that the new Parent Body Organisation (PBO) accepted the extant SSP on share transfer and has maintained the security profile at the site. OCNS has established an effective

and constructive relationship with the new management team who are committed to maintaining a process of continuous improvement with regard to security.

Inspectors

9. During this reporting period, OCNS has reorganised the delivery of front line regulation to the civil nuclear industry. An Approvals and Compliance Unit (ACU) has been formed and authority has been granted to recruit nine additional Security Inspectors. At the time of writing, all but one of these new starters has joined the ACU – the remaining Nuclear Security Inspector will arrive in August when he completes his career with a Home Office Police Force. The Assistant Director OCNS leads the ACU, which operates predominantly from the OCNS Northern Office in Bootle where 11 of the 17 members of the unit are based. The ACU is responsible for Site, Transport and Information security regulation for the civil nuclear industry and the additional resources represent a significant improvement in capability. In every area of regulatory activity, OCNS is providing a more focused, consistent and timely response.

10. In my last report, I said that a Nuclear Security Inspector had been detached to the Sellafield civil licensed nuclear site, but that I expected to review this arrangement once the OCNS' Northern Office had been established at Bootle in September 2008. Three Nuclear Security Inspectors from the ACU and based with the Northern Office, now have responsibility for Sellafield and I have been able to end the detachment without loss of regulatory effort at the site. With the new management team at Sellafield since November 2008, it has been important that OCNS should be in position both to ensure the integrity of current security arrangements and to be able to respond to initiatives from the new management team.

Inspections

11. During this reporting period, OCNS' Nuclear Security Inspectors carried out 159 routine site inspections and a further 14 no-notice inspections to ensure compliance against the NISR 03 and the SSP. Significant regulatory effort is also allocated to the approval of Temporary Security Plans (TSPs), which are required under Regulation 8 of NISR 03 when security arrangements detailed in a SSP might have to be varied or changed in response to construction work, for example. In their TSPs, site security staffs have to describe the compensatory measures which will be adopted to maintain the integrity of the site's security profile whilst the need exists, and these TSPs have to be approved by OCNS before work commences. A total of 133 TSPs were approved during the reporting period.

Reports made under Regulation 10

12. Regulation 10 of NISR 03 places a duty on Operators to report a broad range of events and occurrences which may be of interest from a security point of view. OCNS encourages the Operators to be conscientious in their

reporting and I welcome the fact that they do so. Although one of the results is that the majority of the reporting has no impact on security, it is important that the instinct is to report rather than to ignore. As in previous years, there have been no reports made under Regulation 10 during this reporting period which constitute what could be regarded as a serious security event, but five reports were made which warranted further investigation and subsequent follow up action. I am satisfied that the appropriate follow up action was taken in response to each report and that the integrity of the SSP was not compromised.

Counter Terrorist exercises

13. It is a regulatory requirement that civil licensed nuclear sites should hold an annual Counter Terrorism (CT) exercise. A total of 28 CT exercises were held during this reporting period. Each year, these CT exercises improve in terms both of the scenarios against which they are held, and of the number of staff and contractors at civil licensed nuclear sites who are involved, either directly or indirectly. CT exercises disrupt the normal business of the UK's civil nuclear plants and I wish to acknowledge the commitment of the industry to this essential activity. Along with Nuclear Safety Inspectors in the Nuclear Directorate, OCNS is working towards holding joint safety and security exercises: we have made a start by holding safety exercises which include a Counter Terrorist phase, but more could be achieved. This remains a priority for future exercise plans.

Senior Managers' (Nuclear) Security Briefing

14. OCNS, with assistance from the Centre for the Protection of National Infrastructure (CPNI), run two security briefings each year for senior managers in the civil nuclear industry. The briefings are invariably oversubscribed and well received by those who attend them. OCNS has introduced a number of changes during this reporting period in order to meet the sustained demand for the briefing and to make it easier for busy senior managers to attend. In November 2008, the briefing was moved from the Defence Science and Technology Laboratory (DSTL) at Porton Down, to the Health and Safety Laboratory at Buxton. I wish to record my thanks to DSTL for their support for the briefing over a number of years and to say that the decision to move to Buxton was not prompted by any disappointment at the facilities and support at Porton Down. Rather, there was a pressing need to reduce travelling time for those attending from the civil nuclear industry's major sites and there were business advantages in making use of the in-house facilities of the HSE, following OCNS' move to ND in April 2007. Facilities at Buxton allow more senior managers to attend each briefing.

15. Two briefings have been run at Buxton, one in November 2008 during this reporting period and the other in May 2009. The briefing was also taken to Sellafield as a 'roadshow' in April 2009. Taken together, 88 senior managers from 25 different sites and organisations have attended these three briefings.

Vital Area Reviews

16. A Vital Area (VA) is defined as *'An area containing nuclear material or other radioactive material (including radioactive sources), equipment, systems, (structures) or devices, the sabotage or failure of which, alone or in combination, through malevolent acts could directly or indirectly result in unacceptable radiological consequences'*. OCNS regard it as a major priority that VAs are effectively protected. I have mentioned in all previous reports that OCNS, along with Nuclear Safety Inspectors and the Operators' security and technical experts, maintain a programme to review all VAs and to agree security improvements as appropriate.

17. In my last report, I said that, given the importance of VAs, I had invited the CPNI to conduct a peer review of OCNS' Vital Area Review methodology. CPNI has had access to OCNS' files and OCNS staff, civil licensed nuclear sites where Vital Areas occur, Nuclear Safety Inspectors and to the operators' security staff as appropriate. They will be submitting a report to me on their findings before the end of 2009.

Vulnerability Assessments

18. In my last report, I explained that OCNS had been assisting the Office for Security and Counter Terrorism (OSCT) in a national review of protective security in hazardous industries which had begun in August 2007, and which included the civil nuclear industry. I said at the time that there had been early recognition of the fact that the civil nuclear industry, with its demanding regulatory oversight of security, already had a level of protective security, which was both proportionate and effective. OSCT noted that OCNS had concurrently ordered a review of the planning assumptions, against which security profiles at civil licensed nuclear sites would be set, and asked that the outcome of this work could be made available to their own review.

19. In June 2008, OCNS issued a protectively marked document entitled the *Nuclear Industries Malicious Capabilities Planning Assumptions* or *NIMCA*. The *NIMCA* is a planning tool informed by intelligence reporting which describes the types of attack a civil licensed nuclear site's security measures should be capable of defeating. Following the issue of the *NIMCA*, the security staff at civil licensed nuclear sites, along with the Civil Nuclear Constabulary and OCNS, conducted Vulnerability Assessments reviewing the capability of existing security provision to defeat the malicious capabilities outlined in the *NIMCA*. The Vulnerability Assessments were completed in November 2008 and the data gathered is being used to inform the process of continuous improvement, which underpins security at all civil licensed nuclear sites. OCNS welcomed the findings of the Vulnerability Assessments as confirmation that the process of continuous improvement had been concentrating on the correct areas.

Generic Design Assessment[3]

20. In conjunction with the Environment Agency, Division 6 of the Nuclear Directorate is currently conducting a Generic Design Assessment (GDA) of candidate designs for new nuclear power plants to be built in the UK. During this reporting period, this process has become sufficiently developed for the OCNS to contribute to the assessment and two Nuclear Security Inspectors and a project manager have formed an OCNS GDA team to lead in this work, calling in expertise from elsewhere in the organisation as required. OCNS wishes to see security as part of the design for new build nuclear power plants to prevent the need for 'retrofitting' and has welcomed the opportunity for early involvement in this process. OCNS is currently working towards sensible Information Security arrangements which will allow the GDA to be as open and transparent as possible, without compromising sensitive nuclear information. The guidance offered in the OCNS publication *Finding a Balance*[4] underpins this aspiration and from a practical point of view, policy relating to the protective marking of documents has been sensibly modified to allow greater flexibility. In July 2009, OCNS completed Part 7 of the Technical Requirements Document, a protectively marked document which lays down the model security standards for new build nuclear power stations.

21. Related to GDA, OCNS has also contributed to the development of policy within the Department of Energy and Climate Change (DECC) on Strategic Siting Assessments for potential sites for new build nuclear power stations.

Civil Nuclear Constabulary

22. The Civil Nuclear Constabulary (CNC) exists to provide a dedicated armed response capability at designated civil licensed nuclear sites and for designated transports of nuclear material. The CNC operates under the direction of the Civil Nuclear Police Authority (CNPA), a non-departmental public body (NDPB) responsible to the Secretary of State for Energy and Climate Change for 'maintaining an efficient and effective constabulary'. The CNC is funded entirely by those Operators of civil licensed nuclear sites to which CNC officers are deployed.

23. The main priority of the CNC, in my view, is to recruit, train and deploy Authorised Firearms Officers (AFOs) to civil licensed nuclear sites where the nature of the hazard demands the permanent presence of an armed response, and then to maintain the levels of individual firearms, tactical and judgemental skills that such a demanding role requires. In previous reports, I have commented that training is the key to remaining effective. I am pleased to note that in 2008, the Force began a major overhaul of its training structures and programmes and that the CNPA has approved the resources for this important work.

24. **Liaison with an Garda Siochana.** Since March 2005, an agreement has been in place between the UK and Ireland whereby a Superintendent from an Garda Siochana, the police service of the Republic of Ireland, fills a

liaison role with the CNC. Apart from routine liaison, the Garda Superintendent may visit the CNC's Operational Unit at Sellafield in order to provide him with opportunities to promote Irish confidence in, and understanding of, security measures at Sellafield. Whilst there are sensitivities about UK protectively marked material, every effort is made to encourage the success of this liaison. During this reporting period, the Garda Superintendent made two visits to Sellafield.

Transport Security

Overview

25. OCNS regulates the movement of civil nuclear material by road and rail throughout the United Kingdom and worldwide when carried on UK-flagged vessels. Between 1 April 2008 and 31 March 2009, 1540 separate movements of civil nuclear material were pre-notified to OCNS in accordance with Regulations 19 and 20 of the NISR 03. These figures include a Category I shipment to France and a Category I shipment to Japan, both of which were carried on UK-flagged vessels. In comparison to the 704 notifications made during the 2007/08 reporting period, 819 notifications were made in 2008/09 for the movement of spent nuclear fuel within the UK. This figure comprised 390 notifications for rail transport and 429 notifications of transport by road from Nuclear Power Stations to the associated railheads or direct to Sellafield. 282 of these movements of spent nuclear fuel were subsequently cancelled owing to operational reasons. Also included in the overall total are 109 movements of Category III nuclear material that transited through UK ports on foreign-flagged vessels. Imports and exports of Category III nuclear material occurred between the UK and Canada, France, Germany, Japan, The Netherlands, the Russian Federation, South Korea, Spain, Sweden and the USA.

Approved Carriers

26. Nuclear material may only be transported by Approved Carriers: a Class A Approved Carrier is authorised to transport all categories of nuclear material, while a Class B Approved Carrier may only move Category III nuclear material. The number of both Class A and Class B Approved Carriers now stands at 22, an increase of four from the previous reporting period. Sellafield Ltd has achieved Class B Approved Carrier status and Magnox has opted to operate under site specific, rather than corporate approvals.

Reports made under Regulation 18

27. There were no instances of theft or sabotage of nuclear material in transport during this reporting period and no reports were made under Regulation 18 of NISR 03.

Category I shipment to France

28. One shipment of Category I nuclear material was made from Sellafield to France by sea in a UK-flagged vessel during the reporting period. As the competent national authority, OCNS co-ordinated this move taking into account international recommendations for the transport of Category I nuclear material. The preparation for the move included liaising with the French authorities about the UK vessel's arrival in French territorial waters and the subsequent transfer of responsibility for the security of the shipment to the French authorities. The nuclear material was transported from Sellafield to the port of departure within a High Security Vehicle and moved by sea to Cherbourg. As a Category I shipment, and in compliance with OCNS' requirements and international recommendations, AFOs of the CNC escorted the consignment from Sellafield until security responsibility could be passed to the French authorities. OCNS Nuclear Transport Security Inspectors ensured that the vessel was in compliance with the agreed security plan and security procedures were tested prior to departure. The shipment was completed without security incident.

Mixed Oxide Fuel (MOX) from France to Japan

29. Shipments of MOX fuel from Europe to Japan resumed during this reporting period and this is in line with Japan's policy of repatriating plutonium, derived from reprocessing spent nuclear fuel, in the form of MOX for electricity generation in Japanese nuclear power plants. A single consignment of Category I MOX fuel was made from France to Japan, by sea, in a UK-flagged vessel, the Pacific Heron, with a second vessel, the Pacific Pintail, acting as escort. Both vessels are operated by Pacific Nuclear Transport Ltd (PNTL) and were accompanied by AFOs from the CNC. The ships' course was planned to avoid areas of instability and known threat, and there were no scheduled stops en route.

30. The planning for such movements is thorough and requires significant levels of co-ordination and co-operation between and among a number of stakeholders from governments, security organisations and commercial interests. Again, as the competent national authority, OCNS Transport Security Inspectors ensured that inter-governmental agreements with France and Japan were satisfactorily concluded, and that the UK's obligations under the Convention on the Physical Protection of Nuclear Material were met before formal approval for the move was given. The consignment was delivered without security incident in May 2009.

Inspections

31. During the reporting period, OCNS Transport Security Inspectors carried out eight compliance inspections. These remain an important and effective enforcement tool, which inform operational policy and help to ensure that all Approved Carriers maintain robust and appropriate levels of security when transporting nuclear material. OCNS Transport Security Inspectors

confirmed that the Approved Carriers, subject to inspection, were compliant with their approved Transport Security Statements.

Import Licensing

32. Since March 2007, OCNS has been responsible for issuing licences for the import into the UK, from outside of the European Community, of nuclear materials, which are proscribed for import under the Open General Import Licence (OGIL). Previously, this activity had been carried out by the former Department for Business, Enterprise and Regulatory Reform. In order to allow the UK to meet its international obligations, import licenses are generally not granted for nuclear materials coming from a state that is not party to the Convention on the Physical Protection of Nuclear Material (CPPNM). Seven such licences were issued during this reporting period.

Information Security

Overview

33. Sensitive Nuclear Information (SNI), which includes any information relating to national security or nuclear proliferation, must be protected against the threats of theft or compromise. Civil nuclear operators must comply with the Government's protective marking system for sensitive information, which must be stored, in whatever media, to a level of protection appropriate for its protective marking. OCNS is the civil nuclear industry's accreditation authority for IT systems that store protectively marked material and Information Security Inspectors apply nationally approved criteria to inform their judgements.

Inspections

34. The Information Security branch of OCNS has had to be reorganised and reinforced during this reporting period. It began the year fully staffed with a Band 2 Nuclear Security Inspector and a Band 3 Nuclear Security Inspector, but the nature and volume of their work changed significantly in the autumn of 2008 and action had to be taken in response to this. In October 2008, OCNS was invited to second a Band 2 Nuclear Security Inspector to the Joint Terrorism Analysis Centre (JTAC) in London. This secondment was taken up by the Band 2 Nuclear Security Inspector (Information Security) and it has provided the opportunity to consolidate an important conduit for OCNS with regard to access to intelligence held by the national agencies. Security in the civil nuclear industry must be both effective and proportionate and this access allows informed judgements to be made about where to set the level of security in the civil nuclear industry. The post has now been re-titled as the 'Band 2 Nuclear Security Inspector (Threat Assessment)' and is no longer part of Information Security branch.

35. Concurrent with this development, routine activity within the information security area of protective security began to increase in response both to the

GDA of candidate designs for new nuclear build and to the changes in the UK's civil nuclear industry. It was clear that more Information Security resources would be needed. Authority was granted to recruit an additional Band 2 and Band 3 Nuclear Security Inspector (Information Security); both these posts were filled in March 2008 and the Information Security branch is now fully staffed to its revised establishment with one Band 2 Nuclear Security Inspector (Information Security) and two Band 3. All members of OCNS' Information Security branch are located in the OCNS' Northern Office in Bootle.

36. Information Security Inspectors inspect electronic filing systems, paper filing and recording arrangements, handling procedures, and the 'security furniture' in which sensitive nuclear information is kept. They advise Operators with regard to the security of sensitive nuclear information held on civil licensed nuclear sites and at offices which are not located on civil licensed nuclear sites, but which nevertheless hold sensitive nuclear information. This year has seen an increase in the number of accreditations of IT systems storing protectively marked material. Two large, wide area networks and twenty smaller IT systems have been approved by OCNS' Information Security Inspectors – most of the latter were owned by Technical Support Contractors (TSCs), supporting the GDA process.

37. In addition to this routine advisory work, 12 formal Information Security inspections have taken place. These inspections have revealed a high level of compliance and such observations which were made related to relatively minor corrections in procedures.

Support to the Generic Design Assessment

38. The OCNS' Information Security Inspectors have become increasingly involved in the GDA of candidate designs for new build nuclear power stations in the UK. Their activity has included advice to Requesting Parties (RPs) and Potential Operators (POs) on all aspects of Information Security and the inspection of premises and the accreditation of IT systems used by RPs, POs, consultants and the Nuclear Directorate's TSCs. OCNS has also provided advice on maintaining the integrity of protectively marked material (PMM) which has had to be passed between parties in different jurisdictions. This latter activity has been greatly helped by international agreements between the United Kingdom and foreign governments whose purpose is to promote the controlled, secure and sensible exchange of PMM to protect the national interests of both parties. For example, 'The agreement between the government of the United Kingdom and Northern Ireland and the government of the French Republic concerning the Mutual Protection of Classified Information[5]' has underpinned the exchange of security information with regard to the UK EPR design.

Nuclear Decommissioning Authority

39. As well as providing routine information security support to the NDA, OCNS Information Security Inspectors have been collaborating with the

National Skills Academy for Nuclear (NSAN) to accredit a secure hosting and integration system for the proposed National Nuclear Skills database.

Contracts

40. Some contracts, which are let by the civil nuclear industry, require the contracting companies to hold protectively marked information or protectively marked assets on their own premises and these contracts are known as 'classified contracts'. The award of a classified contract and its subsequent management must follow stringent rules to prevent the risk of compromise or the unauthorised disclosure of the protectively marked information and assets associated with the contract. The contracting companies are subject to the provisions of NISR 03 and Information Security Inspectors work closely with the civil nuclear industry to ensure that all companies accepting classified contracts comply with the regulations.

Reports made under Regulation 22

41. Regulation 22 of NISR 03 requires Operators to report on matters that may affect the security of either sensitive nuclear information or uranium enrichment equipment or software. There were no reports made under Regulation 22 relating to a serious breach of information security but, as in other areas of security reporting, I welcome the fact that Operators informed the OCNS' Information Security Branch on a number of minor occurrences, all of which were investigated and the appropriate action taken.

Counter Proliferation

42. In previous Annual Reports, I have said that OCNS is the designated National Authority in accordance with the Treaty of Almelo, the international agreement between Germany, The Netherlands and the UK (The Troika) governing the development and use of uranium enrichment technology. I also reported that in separate, subsequent agreements, these original three signatories have agreed to export uranium enrichment technology to France and to the United States of America where uranium enrichment plants are being built. Putting in place measures to protect proliferation-sensitive technology associated with these projects has been a major priority for OCNS and our counterparts in the Troika.

43. As in previous years, the emphasis for this work has been on protecting IT systems, ensuring Personnel Security (Vetting) clearances remain appropriate and recognised in the countries party to the agreements, securing the movement of essential components within and between states, and maintaining the currency of classification policy for the technology involved.

Support to the IAEA

44. Support has been provided to the IAEA by OCNS' Information Security Inspectors on two occasions during this reporting period. On the first

occasion, OCNS attended a Technical Meeting, the purpose of which was to discuss the protection of the confidentiality of nuclear security information. On the second, an Information Security Inspector took part in a Consultancy Meeting to develop the framework for a computer security assessment service in nuclear facilities.

Personnel Security

Overview

45. The OCNS' Personnel Security Team is responsible for providing a security vetting service to the civil nuclear industry. All permanent employees and all contractors must be vetted to a level of clearance consistent with their access to sensitive nuclear information or nuclear material. In processing applications and granting clearances, OCNS complies with the same nationally agreed standards and procedures that apply to National Security Vetting (NSV) procedures. Clearances are revalidated at agreed intervals. OCNS has an appeals process for applicants whose requests for clearance are denied. If an applicant's appeal for an NSV level clearance at either Developed Vetting (DV), Security Check (SC) or Counter Terrorist Check (CTC) is denied, that person is entitled to take their appeal to the highest adjudicating authority, the Security Vetting Appeals Panel in the Cabinet Office.

46. During this reporting period, the Personnel Security Team has responded effectively to another high level of demand for security vetting from the civil nuclear industry. A total of 14 929 clearances were issued in 2008/09. This is 2220 fewer clearances than 2007/08. This figure should be seen in the context that the backlog of DV clearances I have remarked upon in earlier reports has been eliminated and that from 1 October 2008, I have been incrementally devolving decision making for straightforward, Baseline Standard applications to the civil nuclear operators. I discuss the thinking behind this development in paragraphs 52 and 53 below. Finally, three of the Personnel Security Team staff, one at administrative officer level and two at executive officer level, have left OCNS in response to the changes prompted by the Vetting Transformation Programme, but the smaller team has maintained the high productivity levels which have characterised recent years.

Security Clearances

47. From 1 April 2008 to 31 March 2009, OCNS issued a total of 14 929 security vetting clearances, of which 11 587 (see Table 1) were new clearances and 3342 (see Table 2) were revalidations. A full breakdown of figures, with the previous three years for comparison, are provided in table 1 and table 2.

Table 1 Security clearances

Clearance levels	**New cases**				**Reviews**
	2008/09	**2007/08**	**2006/07**	**2005/06**	**2008/09**
Developed Vetting (DV)	385	375	617	500	395
Security Checks (SC)	1565	1081	1434	1285	326
Counter Terrorist Checks (CTC)	37	40	2	14	1
Baseline Standard and Enhanced Baseline Standard (BS/EBS)	9551*	12 040	14 092	15 518	2620
Foreign clearances	49	82	150	0	-0
Total	**11 587**	**13 618**	**16 295**	**17 317**	**3342**

* includes 1326 Grandfather Rights cases

As at 31 March 2009, there were 628 outstanding Initial and Review NSV applications with the Defence Vetting Agency (DVA).

Table 2 Revalidations

Clearance levels	**2008/2009**	**2007/2008**	**2006/2007**	**2005/2006**
Developed Vetting	395	1065	322	217
Security Checks	326	262	432	187
Counter Terrorist Checks	1	3	0	0
Baseline Standard and Enhanced Baseline Standard	2620	2201	570	255
Total	**3342**	**3531**	**1324**	**659**

Denials and Appeals

48. No National Security Vetting clearances were denied or withdrawn during this reporting period. Four applications for Enhanced Baseline Standard/Baseline Standard (EBS/BS) were denied and of these, one applicant appealed but was unsuccessful.

Cabinet Office Vetting Transformation

49. Last year, I reported that OCNS had transferred the processing of its DV casework to the (DVA) and that in 2008/09 I intended to transfer the processing of SC and CTC casework to the DVA as part of the Cabinet Office's Vetting Transformation Programme. This transfer of investigative casework to the DVA took effect for all new SC/CTC applications that were received after 30 September 2008. OCNS has retained the responsibility to decide whether or not a clearance should be issued and does so on the basis of individual applications prepared by the DVA.

50. Initially, the DVA casework turnaround times were slower than expected but throughout the reporting period 2008/09, there has been a sustained improvement in the DVA turnaround times for DV casework. There is more to be done with regard to turnaround times for SC and CTC casework, but with backlogs cleared, I am satisfied that all is in place to achieve the necessary improvement. An important part of this welcomed development has been the adoption of 'scannable' NSV questionnaires by employees and contractors in the civil nuclear industry and I want to acknowledge the co-operation of the civil nuclear operators during the introduction of this important labour-saving tool for the DVA.

51. OCNS has a contractual arrangement with the DVA with regard to charging for investigative casework, and in 2008/09, the value of the contract was £665 000. This cost, along with an OCNS administrative charge for each new NSV application or revalidation, was recovered from the civil nuclear industry on the basis that each company meets the costs of vetting its own employees and contractors. Finally, OCNS continues to be represented on the DVA's Customer Advisory Group, which usually meets quarterly.

Baseline Standard

52. On 1 October 2008, the government replaced the Enhanced Baseline Standard (EBS) with the more robust Baseline Standard (BS). Neither the BS (nor the EBS before it) is (was) a formal security clearance in the sense that an NSV clearance is, but the BS constitutes a pre-employment check designed to provide an appropriate level of assurance with regard to trustworthiness, integrity and probable reliability of prospective employees and contractors. The BS checks involve a process to verify an individual's identity, employment history, nationality, immigration record (if appropriate), and criminal record.

53. The more robust BS was introduced on 1 October 2008 in favour of the EBS because in all BS cases, there is now a mandatory check with Disclosure Scotland of an individual's unspent criminal convictions. Disclosure Scotland is an agency of the Scottish government which provides a UK-wide facility to manage and operate the disclosure service required by the Police Act 1997. For the majority of individuals applying for a BS level of clearance, the process is straightforward and, as I indicated in last year's report, between 1 October 2008 and 31 March 2009 I devolved responsibility, within strict guidelines, to the civil nuclear operators to form a judgement as to whether potential Baseline Standard holders required further investigation by OCNS. This was a fundamental change in approach and OCNS prepared Operators for it through holding two briefing days for the civil nuclear industry, attended by Disclosure Scotland, who were able to explain their processes. Once the change was implemented, Disclosure Scotland experienced IT and workload volume problems that slowed their response times, but, at the time of writing, these problems appear to have been overcome and applications are being processed within agreed target times. I understand that the Criminal Records Bureau (CRB), which is the Home Office equivalent to Disclosure Scotland, is developing a similar service to that offered by Disclosure Scotland.

Grandfather Rights

54. In my previous reports, I have explained that the need to revalidate the equivalent of Baseline Standard clearances dating from the late 1990s. I can now report that the processing of all Grandfather Rights cases was completed on 31 August 2008 with OCNS processing 1326 applications in 2008/09. I wish to acknowledge the wholehearted support of HR and IR staff of the nuclear power generating companies and of the Trade Unions representing the employees of the same companies in completing this important project.

Awareness and Aftercare

55. Over the last two years, the Personnel Security Team has been developing a number of initiatives to raise the level of awareness of vetting issues within the civil nuclear industry. The civil nuclear industry takes vetting seriously but I would like to see all employees, and not just corporate security organisations and HR staff, develop an awareness of how they can help identify and provide support for individuals holding a vetting clearance who may become vulnerable, for example, as a result of a change in personal circumstances. Early preventative action can only occur if unusual behaviour is both noticed and prompts a response. Immediate colleagues in the workplace are likely to notice such behaviour first. To help this process, the Personal Security Team held Civil Nuclear Industry briefing days in 2008/09 which were well-received. OCNS' Head of Vetting addressed the biennial Senior Managers' (Nuclear) Security Briefings, whose target audience comprise individuals in key positions in the industry. Protectively marked guidance documents have also been revised and reissued. I intend to develop these initiatives further.

56. The Vetting Transformation Programme has released resource within the Personnel Security Team, which has enabled OCNS to improve aftercare. From 1 April 2008, OCNS extended the 'clearance letter' system currently in place for holders of a NSV DV clearance to holders of SC and CTC clearances. This system regularises the notification of relevant events such as a change in partner, new co-habitees, and travel overseas. With regard to the latter, while the aim primarily is to prevent the compromise of sensitive nuclear information abroad, there is also a 'duty of care' to discharge in alerting civil nuclear industry employees to the possibility that they might become the target of an attempt to gather intelligence while they are abroad and to prepare them for such contingencies. OCNS has also implemented a much stronger line on the use by civil nuclear employees and contractors of unlawful drugs. Quite apart from the dangers to an individual's health posed by the misuse of drugs and the possible consequences in the workplace, the use of unlawful substances can make individuals subject to financial inducement or lead them to exercise misjudgement. Most civil nuclear operators operate random drug testing programmes on their sites and this initiative is designed to complement these existing, rigorous programmes.

Personnel Security Inspections

57. OCNS' Personnel Security Inspectors have also been able to build upon the Personnel Security Inspection programme re-introduced last year. The clearance of the historic backlog of DV cases has allowed the OCNS Vetting Office to broaden its advisory and support role to the civil nuclear industry, and during this reporting period, 18 inspections were carried out compared to four in 2007/08. The programme will continue to expand in 2009/10. Inspections allow OCNS' Personnel Security Inspectors to ensure compliance with personnel security procedures, promote consistency across the civil nuclear industry, provide advice and allow discussion of individual cases as appropriate.

Interaction with Government

58. I would like to report that the Senior Inspector (Personnel Security) has been invited to sit on the Cabinet Office Committee considering the National Security Vetting Database and the review of the National Security Vetting Scannable Questionnaires. The Personnel Security Team also works closely with the Identity and Passport Service on the introduction of national Identity Cards. In May 2008, the National Policing Improvement Agency conducted an audit of our use of the Police National Computer (PNC). There was no evidence of abuse arising from this audit. Since the audit, OCNS use of the PNC has reduced significantly following the transfer of NSV processing work to DVA York and the introduction of Basic Disclosure certificates in lieu of PNC checks for Baseline Standard (formerly Enhanced Baseline Standard) clearances.

Overseas Clearances

59. OCNS' foreign desk processes were reviewed and rationalised in 2008 to promote greater consistency on the level of checks carried out. During the reporting period, and in the absence of internationally agreed reciprocal agreements, OCNS stopped accepting clearances from overseas companies who had staff cleared through their respective national agency and required these companies to deal directly with the UK Civil Nuclear Operators as opposed to OCNS. The UK operators then put these overseas nationals through the same level of checks that would be performed on any other individual working in the UK Civil Nuclear Industry.

The Effectiveness of Security Regulation

60. OCNS regulates security in the civil nuclear industry on behalf of the Secretary of State for Energy and Climate Change and in accordance with the NISR 03. NISR 03 had their provenance in the Anti-terrorism, Crime and Security Act 2001 and came into force on 22 March 2003. I am satisfied that these Regulations provide an effective and proportionate means to regulate security in the civil nuclear industry.

61. In my last report, I said that OCNS and nuclear security policy officials (previously in the Department for Business, Enterprise and Regulatory Reform but now transferred to the recently formed Department of Energy and Climate Change) were discussing security in the context of building a new generation of nuclear power stations. There is a particular need to ensure that construction sites for such plants have an appropriate level of security. During this reporting period, an amendment to NISR 03 has been drafted whose effect would be to require that an approved security plan be put in place immediately following the grant of a nuclear site licence. OCNS will be pressing to have this incorporated into the Nuclear Industries Security Regulations 2003 as a priority.

International commitments and support to government

Overview

62. The UK has international treaty obligations with regard to civil nuclear security and also takes into account the International Atomic Energy Agency's recommendations and guidance on the security of nuclear material and nuclear facilities. OCNS has much to contribute in developing civil nuclear security policy at international gatherings convened for such purposes, and I have continued to respond to requests for support from the IAEA for subject matter experts. I continue to receive more requests than I have the resources to meet, but I am satisfied that we have achieved a reasonable balance. I am confident that the restructuring of OCNS described in paragraphs 75 and 76

below will allow me to provide more support, not just for these important programmes in the future, but also to promote the UK's experience with regard to best practice in civil nuclear security.

International Atomic Energy Agency (IAEA)

63. OCNS' support to the IAEA has been spearheaded by the Deputy Director who is widely respected for his technical knowledge of nuclear security matters, his contribution to workshops, seminars and conferences, and his expertise and ability in leading IAEA International Physical Protection Advisory Service (IPPAS) missions. The Deputy Director has continued to serve on the Director General's Advisory Group on Nuclear Security (AdSec) and has contributed to a joint working group comprising representatives from AdSec and the IAEA's International Nuclear Safety Group (INSAG) to develop a common approach to the interface between security and safety in the civil nuclear industry. Although the UK is not unique in merging the regulatory authorities for safety and security, it would seem that we are among the most recent to have done so and we are able to bring this experience to bear in providing advice on the INSAG paper.

64. The Deputy Director was selected to lead an IPPAS mission to Finland early in 2009. He attended a preparatory meeting in Helsinki in March 2009 and then led the IPPAS mission to Finland in late June 2009. In March 2009, OCNS nominated a Nuclear Security Inspector for another IPPAS mission, this time to The Netherlands, which took place in July 2009.

65. The IAEA has embarked upon a major review of its security guidance documents and OCNS has been asked to provide subject matter experts to join various working groups of international security specialists to support these important projects. The Deputy Director has chaired a working group to draft Revision 5 of INFCIRC/225, the IAEA's *The Physical Protection of Nuclear Material and Nuclear Materials*. He has also attended IAEA Reference Group meetings, which have been convened to ensure consistency of INFCIRC/225/Rev 5 with other top tier Nuclear Security series documents being produced concurrently. One of the latter is concerned with the security of other radioactive material when such material is being transported and for this work, the Principal Transport Security Inspector has represented the UK and made a significant contribution to this work. In a related area of support, the Principal Transport Security Inspector assisted IAEA staff at a regional training course, in Ukraine, in November 2008, designed to raise awareness of the need for, and promote best practice in, the security of radioactive material transport.

66. Finally, the Deputy Director participated in the Programme Committee for the International Symposium on Nuclear Security held in Vienna in March/April 2009 and was asked to act as rapporteur for the session dealing with the interface between security, safety and safeguards. It will be clear from these paragraphs on the IAEA that the Deputy Director makes a major contribution to the work of the IAEA and, although he is some way from the

time when he might be expected to retire, succession planning for him is a major HR priority for me.

European Nuclear Security Regulators Association

67. The European Nuclear Security Regulators Association (ENSRA) comprises representatives of the civil nuclear security regulatory authorities of Belgium, the Czech Republic, Finland, France, Germany, The Netherlands, Slovenia, Spain, Sweden, Switzerland and the United Kingdom. In July 2009, Hungary and the Slovak Republic accepted an invitation to join ENSRA when the association held its 2009 annual meeting in the Netherlands. The last occasion that ENSRA met was in March 2008.

68. ENSRA was formed in 2004 in response to a wish to promote a common European position on nuclear security in the aftermath of the terrorist attacks, in the USA, in September 2001, and to facilitate confidential exchanges among Regulators on common nuclear security challenges. ENSRA continues to meet in each calendar year and its relevance remains undiminished. The original membership of eight countries has expanded to 13 and although this requires careful management of the agenda, it also brings a wider pool of experience for all to share.

The World Institute of Nuclear Security

69. OCNS has welcomed the launch, in September 2008, of the The World Institute of Nuclear Security (WINS) whose purpose is to encourage the adoption of best practice globally with regard to the physical protection and security of nuclear and radioactive materials and facilities. While it is important for the IAEA to remain as the focus for international standard setting with regard to nuclear security, WINS has the potential to share and promote the implementation of best security practice and has been endorsed by the IAEA. I attended WINS' inaugural meeting, which was held in May 2009, in Cumbria, and I look forward to WINS developing its programme and momentum this year.

Bilateral Exchanges

70. OCNS routinely meets with officials from overseas nuclear security regulatory authorities. Many of these meetings occur in the margins of IAEA sponsored gatherings, ENSRA and most recently, WINS. GDA has prompted a series of international meetings, particularly with the French over the UK EPR while the collaboration over the export of uranium enrichment technology has involved frequent meetings with the German, Dutch, French and US regulators.

71. In December 2008, I attended a briefing for an Australian Parliamentarian in London seeking assurances on the security and end-use of Uranium mined in Australia and subsequently exported. In February 2009, OCNS hosted a visit from the Japan Atomic Energy Agency whose physical

protection officials were interested to know more about the UK's regulatory structure for security in the civil nuclear industry.

Support to Government

72. Throughout this reporting period, OCNS has provided support to various Whitehall departments, developing policy with a civil nuclear security connotation. This support has included advice to the Department for Business, Enterprise and Regulatory Reform (BERR) (and thereafter DECC from October 2008) and the Home Office in drafting a response to, and attending a meeting in Brussels on, the draft directive on the European Programme on Critical Infrastructure Protection; help to the same departments in answering a questionnaire on CBRN preparedness and attending a CBRN Task Force meeting in Brussels; contributing to a workshop in the USA on the implementation of UN Security Council Resolution 1540 (preventing the proliferation of weapons of mass destruction); providing briefing material for BERR and the Department for Energy and Climate Change (DECC) in advance of the IAEA's Board of Governors meetings; and supporting DECC at the IAEA's General Conference, including representing UK at the annual meeting of subscribers to the Plutonium Management guidelines. OCNS has also continued to maintain routine contact with Ministry of Defence policy officials responsible for the security of defence nuclear material and we have contributed to work led by the Foreign and Commonwealth Office designed to improve the security of nuclear material abroad.

Administration

Integration with the Nuclear Directorate

73. In my last Annual Report, I said that I expected to establish an OCNS Northern Office in the HSE's premises in Bootle during this reporting period. This occurred in September 2008 and there are now thirteen members of staff located there. This development has reduced travelling time to sites and has allowed routine interaction with Nuclear Safety Inspectors in the other divisions of the Nuclear Directorate to occur. This has delivered considerable operational advantages.

74. At the time of writing, DECC is conducting a consultation exercise with regard to ND becoming a Nuclear Statutory Corporation (NSC). Should this proposal be endorsed, OCNS will remain within the NSC and shall seek to promote further integration in both operational delivery and administrative support within the new framework.

OCNS staffing

75. During this reporting period, OCNS has continued to restructure with the aims of focussing resources on front line inspection activities, relocating staff to reduce travelling times to civil licensed nuclear sites and continuing to

take advantage of opportunities to improve cost effectiveness through further integration with the Nuclear Directorate. At the time of writing, OCNS has 35 Full Time Equivalent (FTE) staff and one FTE vacancy. These are shown on the organisation chart in Annex A. Of these, 30 FTEs are directly involved in front line delivery of security regulation to the civil nuclear industry. Thirteen FTEs are located at the OCNS Northern Office in Bootle comprising four who transferred voluntarily from Harwell, eight who were recruited during this reporting period to be Bootle-based and one who transferred to OCNS as an internal move within the Nuclear Directorate. The remainder are located at Harwell.

76. In late 2008, OCNS was given authority to fill existing vacancies and to recruit additional Nuclear Security Inspectors to support nuclear new build. A successful recruiting campaign took place in 2008/09 and all vacancies were filled. Having achieved this important milestone, my priority in 2009/10 is to put in place succession planning measures both to maintain numbers and to retain corporate knowledge. I am also currently considering the implications of the government's paper *The Road to 2010: Addressing the Nuclear Question in the Twenty First Century*[6] with a view to establishing the extent to which OCNS might be called upon to support the government's aims and whether OCNS has the resource to meet expectations.

OCNS budget

77. OCNS' expenditure in 2008/09 comprised £3 444 000 (this figure and all others in this paragraph rounded up or down to the nearest £1000) of which 94% was recovered from the Operators as a charge for OCNS' regulatory services under the Nuclear Industries Security (Fees) Regulations 2005[7]. The balance of 6%, or £196 000 was met by the Department of Energy and Climate Change (and its predecessor, the Department for Business, Enterprise and Regulatory Reform) in recognition that work carried out by OCNS on behalf of government could not be charged to the civil nuclear industry.

78. A chart showing the percentage of charges recovered by Operators is included at Annex B.

Statement of Assurance

79. The purpose of this Annual Report is to give an assurance to the Minister of State for Energy at the Department for Energy and Climate Change, with regard to the state of security in the civil nuclear industry and the effectiveness of security regulation. I can report that in the period 1 April 2008 to 31 March 2009, security in the civil nuclear industry was effective and proportionate. The industry continues to acknowledge and follow the principles of the Graded Approach, Defence in Depth and Continuous Improvement, and I can confirm that there is no evidence of complacency within the civil nuclear industry with regard to security.

80. I am also satisfied that security regulation achieves its purpose and that the civil nuclear industry is compliant.

Roger Brunt
Director, Civil Nuclear Security
Bootle *August 2009*

Annexes:

A. OCNS organisation August 2009
B. Percentage of charges recovered by Operator

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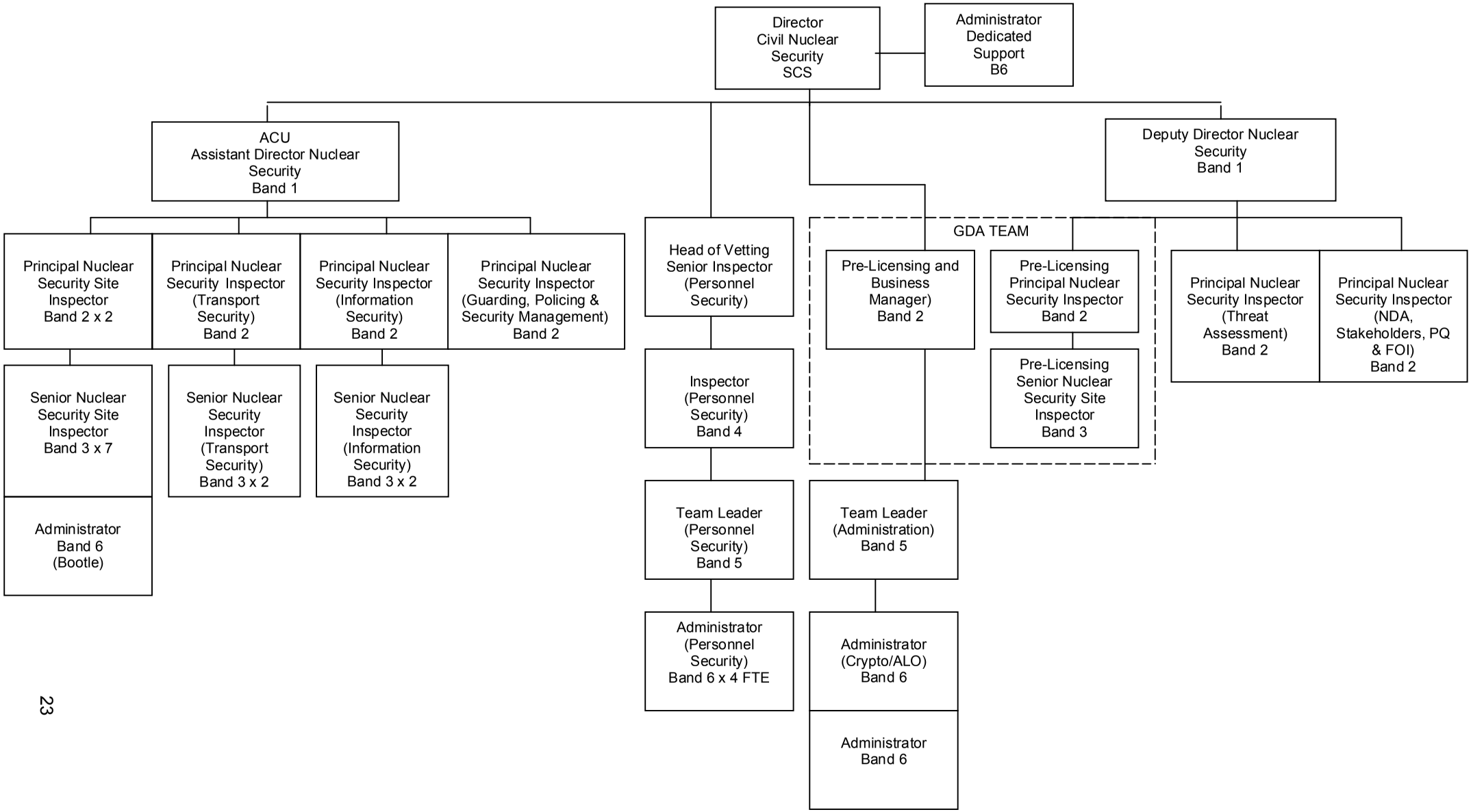
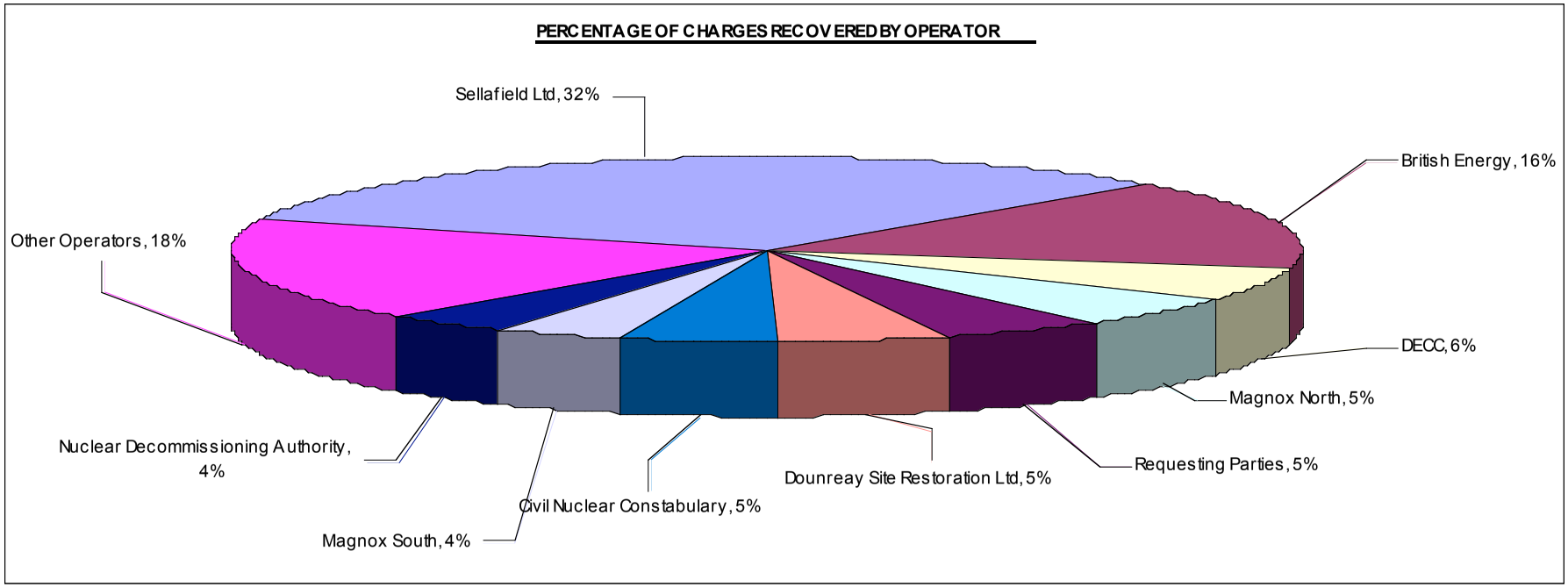
Annex A - HSE Nuclear Directorate
Office for Civil Nuclear Security organisation chart



Annex B – Percentage of charges recovered by Operator



HSE

Health and Safety Executive

The State of Security in the civil nuclear industry and the effectiveness of security regulation April 2008 to March 2009