

**OFFICE FOR CIVIL NUCLEAR SECURITY**

**The State of Security in the Civil Nuclear Industry**

**and**

**The Effectiveness of Security Regulation**

**April 2006 to March 2007**

A Report to the Minister of State for Energy,

Department for Business, Enterprise and Regulatory Reform

by

The Director of Civil Nuclear Security

## INTRODUCTION

1. The Office for Civil Nuclear Security (OCNS) is HMG's regulator for security in the civil nuclear industry and is responsible for ensuring that the industry complies with the requirements of the Nuclear Industries Security Regulations 2003 (NISR 03)<sup>1</sup>. NISR 03 is a modern and exacting regulatory system which reflects best practice and which meets the United Kingdom's international commitments and obligations with regard to the security of civil nuclear facilities, nuclear material and sensitive nuclear information.
2. The Director Civil Nuclear Security (DCNS) provides an Annual Report on the state of security in the civil nuclear industry and the effectiveness of regulation to the Minister of State for Energy at the Department for Business, Enterprise and Regulatory Reform (formerly the Department of Trade and Industry). This provides the basis of the means of providing assurances in this area to Parliament. This is DCNS' latest Annual Report and it covers the period 1 April 2006 to 31 March 2007. There have been five previous reports and all are available on the link shown below<sup>2</sup>.
3. During this reporting period, OCNS' operational priorities have been to develop further the already high standards of security practice and awareness in the industry, to support the Nuclear Decommissioning Authority (NDA) as the momentum builds behind its decommissioning programmes, to contribute to the development of the Government's energy policy and to support international initiatives designed to promote best practice in nuclear security. Bearing in mind the changes now occurring within the industry and the need for regulatory provision to keep in touch with them, I have actively sought the transfer of OCNS from the DTI to the Health and Safety Executive to form, with the Nuclear Installations Inspectorate and the United Kingdom's Safeguards Office, the Nuclear Directorate (ND). The ND was formed on 1 April 2007 and will provide the platform from which to deliver greater regulatory coherence and consistency.
4. This major realignment has also allowed OCNS to reassess its structure and how it delivers its regulatory services. We have embarked on a major internal reorganisation which, without increasing OCNS' staffing numbers, will enable us to provide a more focused approach to those whom we regulate, and better service the interests of the UK public.
5. OCNS recovers the costs of its regulatory activity from industry. In this reporting period, OCNS' costs were kept within budget and 97% was recovered from industry. The balance of 3% was funded by the DTI for non-regulatory work. This has been the first full financial year that the Nuclear Industries Security (Fees) Regulations 2005 have been in force and we have continued the priority established when they were introduced in September 2005 to promote timely and accurate forecasting and invoicing.
6. I am satisfied that there has been no occasion during this reporting period when nuclear material held by the civil nuclear industry has not been sufficiently protected

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<sup>1</sup> <http://www.opsi.gov.uk/si/si2003/20030403.htm>

<sup>2</sup> <http://www.hse.gov.uk/nuclear/ocns/publications.htm>

against theft or sabotage. I am also satisfied that the current regulatory system is effective. However, knowing the Department has proposed an Energy Bill for the 3<sup>rd</sup> legislative session, I have requested changes to the legislation to remove certain unnecessary and outdated provisions.

## **THE STATE OF SECURITY IN THE CIVIL NUCLEAR INDUSTRY**

### **PROTECTIVE SECURITY**

7. The International Atomic Energy Agency (IAEA) has published guidance entitled 'The Physical Protection of Nuclear Material and Nuclear Facilities' known as INF/CIRC/225 /Rev.4. This document provides a comprehensive basis for guiding states in designing, implementing and regulating a system of physical protection for nuclear sites and the different categories of nuclear material. Subject matter experts from OCNS have been closely involved in the development of this guidance and the United Kingdom's national standards and procedures follow it closely.

8. In previous reports, I have explained that OCNS regulates security in the civil nuclear industry in four distinct, yet inter-related areas of competence known collectively as Protective Security. Individually, the areas of competence are Site Security, Transport Security, Information Security and Personnel Security. NISR 03 describes the obligations placed upon all those involved in the civil nuclear industry in order to ensure compliance.

### **SITE SECURITY**

#### **SITE SECURITY PLANS**

9. Regulation 4 of NISR 03 requires every licensed nuclear site and every tenant on a licensed nuclear site to have a Site Security Plan (SSP). SSPs must include, in writing, the standards, procedures and arrangements which are to be kept in place to ensure the security of the nuclear premises, nuclear material and sensitive nuclear information. SSPs are protectively marked documents and must be approved by OCNS before they are adopted. Once adopted, SSPs are regarded as 'live' documents and remain subject to constant review, scrutiny and amendment as necessary. All extant SSPs were reviewed and reissued following the introduction of NISR 03 in 2003. I am confident that these important documents remain both current and comprehensive, and that there is an effective system in place to accommodate variations in their provisions when required.

10. There are currently 48 approved SSPs in the civil nuclear industry. In August 2006, a further tenant on a licensed nuclear site came under regulation whilst at the Harwell licensed nuclear site, another tenant ceased to be subject to regulation in November 2006. Overall therefore, OCNS regulates 32 licensed nuclear sites, 14 tenants on six of these 32 licensed nuclear sites and two other nuclear premises.

11. Looking to the future, when the Nuclear Decommissioning Authority (NDA) lets a contract for a licensed nuclear site, I have made it clear that in order to maintain the integrity of existing security arrangements, I shall expect the extant SSP to be carried forward in its entirety. If the new operators wish thereafter to review the SSP, then I

shall encourage them to do so, but no changes to the SSP will be permitted until they have been submitted to OCNS for approval. Whilst I will not compromise on security measures which I believe to be necessary, I remain receptive to fresh thinking and innovative solutions.

## **INSPECTORS**

12. There has been no change in either the numbers or the experience of OCNS Site Inspectors. Two Principal Site Inspectors provide leadership and direction to the five Senior Site Inspectors and one Site Inspector whose individual loadings of site responsibilities continue to be allocated on the basis of location and complexity.

13. In October 2006, I detached one Senior Site Inspector permanently to the Sellafield licensed nuclear site. I took this decision in recognition both of the complexity of the site and the need to provide timely security advice to complement the NDA's initiatives to promote the decommissioning agenda. The OCNS Senior Inspector at Sellafield has a full programme of work which goes beyond routine inspections to include an important advisory function. When we come to review the lessons of his permanent detachment to the site, I expect that a case may emerge to place further OCNS resources at Sellafield. In the meantime, the Senior Inspector is being assisted by the one Site Inspector we have, a junior member of staff who will both benefit from the experience and help with routine tasks.

## **INSPECTIONS**

14. OCNS Inspectors continue to regulate security arrangements on civil nuclear sites against SSPs by carrying out programmed and no-notice security inspections. During this reporting period, a total of 185 site inspections were conducted covering various aspects of the SSPs. This total included 23 no-notice inspections to ensure compliance.

15. Under Regulation 8 of NISR 03, Temporary Security Plans (TSPs) are required when the integrity of the SSP is undermined by construction work on site. TSPs detail compensatory security measures in such instances and OCNS Inspectors must approve the TSP before it is adopted. A total of 158 TSPs were approved during the reporting period.

16. In my previous Reports, I highlighted the importance I attach to the 'Schedule of Improvement' which has become an important supplement to every SSP. These Schedules detail the required security improvements OCNS expects to see introduced at each site in the course of a financial cycle and by prioritising the timing of their introduction, Site Licensees have been able to make sensible provision for them. As part of the SSPs, the Schedules themselves are 'living' documents and keeping them current represents a significant part of an OCNS Inspector's core workload. In this respect, OCNS Inspectors have become fully engaged with the NDA and other stakeholders in busy programmes designed to deliver NDA-funded activity in both the short and the long term at the 20 designated sites they own.

## **TECHNICAL REQUIREMENTS**

17. The Technical Requirements Document (TRD) is a protectively marked document which was drawn up to support NISR 03. It amplifies the regulations by setting out model security standards without denying civil nuclear operators the flexibility to propose alternative solutions to the security challenges they face. The TRD itself is subject to regular review and following consultation with the civil nuclear operators, the TRD was amended to take account, *inter alia*, of the changes in the national system for threat warning. A revised TRD was reissued in May 2007.

## **COUNTER-TERRORIST EXERCISES**

18. A total of 30 Counter-Terrorist Response Exercises have been held during this reporting period. These exercises require extensive planning to ensure that scenarios are both relevant and testing and that a meaningful proportion of the workforce on each site can benefit from them. The exercises test command and control arrangements, the interfaces between security agencies, and the interaction between safety and security. Lessons identified by the exercises are documented and reflected in revised counter-terrorist contingency planning.

19. These exercises represent a significant commitment by the operators. Apart from the monetary cost of the exercises themselves, plants are subject to disruption and managers and staff are tested. I am convinced of the need for this clear demonstration of corporate commitment to this important security initiative. Looking to the future, these exercises will continue and I wish to develop them further so that the best possible value accrues from them.

## **VITAL AREA IDENTIFICATION**

20. Vital Areas (VAs) can be areas containing equipment, systems or devices, the failure of which could have serious consequences for the safe operation of a nuclear site. Ensuring that VAs are adequately protected remains a high priority. This demands a significant commitment not just from the operators of the site, but also from OCNS Inspectors and Nuclear Safety Inspectors from the Health and Safety Executive (HSE).

21. Almost all major sites have completed reviews and have initiated steps to implement recommendations. The VA reviews have produced many valuable lessons and have raised security and safety standards across the industry.

## **SECURITY OF RADIOACTIVE WASTE**

22. On a number of occasions during this reporting period, I have been asked for my view on the security of radioactive waste held in interim storage facilities on licensed nuclear sites. For the record, I believe that the best place for radioactive waste is in a long term repository, having first been properly conditioned in line with the best research and technology available at the time to ensure that it is in a passive state. Until that aspiration can be realised, there is no option but to store radioactive waste on licensed nuclear sites. All such sites though, are strictly regulated in accordance with the demanding requirements of the NISR 03. I require appropriate standards of

security, commensurate with the category of nuclear material and the activity level, for all radioactive waste, held on each site. Without this, an SSP for a licensed nuclear site holding radioactive waste would not be approved. OCNS Inspectors include radioactive waste stores in their programme of inspections to ensure compliance.

## **SECURITY OF RADIOACTIVE SOURCES**

23. OCNS regulates the security of radioactive sources on licensed nuclear sites. Inventories of radioactive sources are attached to each SSP and OCNS Inspectors examine the security arrangements at the stores in which they are kept as a routine inspection requirement. In this reporting period, 97 Source Stores have been inspected.

24. The Security Regulators Liaison Group (SLRG) was formed in 2006 in response to the High Active Sealed Sources and Orphan Sources Regulations 2005<sup>3</sup>, made under the Radioactive Substances Act 1993. The aim of the SLRG is to develop better regulation of premises holding radioactive sources by sharing best practice and to ensure consistency of approach across the regulatory regimes. SRLG membership includes representatives from the Industrial Pollution and Radiochemical Inspectorate (IPRI), the Environment Agency (EA), the Scottish Environmental Protection Agency (SEPA), the Nuclear Directorate (including OCNS) of the HSE, the Department for Transport (DfT), and the National Counter Terrorist Security Office (NaCTSO). The Group has met in October 2006 and March 2007.

## **RESEARCH AND DEVELOPMENT**

25. OCNS continues to be represented on several Whitehall research and development working groups. OCNS Inspectors offer their practical knowledge and experience to other Government Departments in working with technologies relating to areas of security interest such as barriers, access control, detection/vision systems, lighting and explosive/ballistic protection. These working groups also allow OCNS Inspectors opportunities to request research into technologies of particular interest to the civil nuclear industry. I welcome this interaction and will continue to encourage it.

## **SENIOR MANAGERS' (NUCLEAR) SECURITY BRIEFING**

26. The success and popularity of this 2½ day Security Briefing for Senior Nuclear Managers continue to grow. Two briefings were provided at Dstl Porton Down during this reporting period. With a great deal of assistance from Dstl staff at Porton Down and subject matter experts from the national intelligence services, OCNS has provided a solid platform for 24 senior managers on each briefing to develop a greater understanding of the threat to the industry from terrorism. The briefings are a vital component in raising awareness and will continue.

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<sup>3</sup> <http://www.opsi.gov.uk/si/si2005/20052686.htm>

## **REPORTS MADE UNDER REGULATION 10**

27. Regulation 10 of NISR 03 places a duty upon operators to report a broad range of events and occurrences which may have a security interest. I welcome the fact that operators are conscientious in their reporting under this Regulation and even though the vast majority of items reported are of limited interest, I accept it as further evidence of the corporate commitment to security.

28. During this reporting period, there were 10 reports which warranted further investigation. None deserves the label 'incident' but where appropriate, follow up measures were implemented.

## **THE CIVIL NUCLEAR CONSTABULARY**

29. It has long been HMG's policy to provide a dedicated armed response at designated nuclear sites. This capability is provided by the Civil Nuclear Constabulary (CNC). The CNC operates under the direction of the Civil Nuclear Police Authority (CNPA), a Non Departmental Public Body (NDPB) answerable to the Secretary of State for Business, Enterprise and Regulatory Reform and charged with maintaining 'an efficient and effective constabulary'. It is a 'stand alone' Force which was formed on 1 April 2005 from the United Kingdom Atomic Energy Authority Constabulary (UKAEAC) and is wholly funded by the civil nuclear industry. As the Regulator for security in the civil nuclear industry, I designate the sites to which the CNC are deployed and specify the tasks I require the civil nuclear operators to fund at each of those designated sites. The Chief Constable retains operational autonomy over the tactical deployment of his Officers.

30 In the past, other ways of providing an armed response at nuclear sites have been considered, but studies looking at these alternative solutions have always come back to the critical question of how to guarantee a dedicated on-site armed response at designated nuclear sites. The consistent answer has been to have a specialist police organisation as an integral part of the designated licensed nuclear site's security arrangements to concentrate solely on filling this role. I agree with this analysis and I welcome the concept of a highly-trained, highly-motivated and totally focussed organisation being entrusted with this task. The CNC, with its expertise in police firearms skills, is a specialist Force and is arguably a national authority on the provision of high-profile, armed policing at large industrial plants.

31. In the three years that I have been Director Civil Nuclear Security (DCNS), I have both directed and encouraged the CNC (and the United Kingdom Atomic Energy Authority Constabulary before it) to develop their unique expertise in the provision of armed on-site response forces at designated sites. I have authorised and supported a significant expansion of the Force to allow the permanent deployment of CNC Support Units (SUs) to each of the nine nuclear generating sites in Great Britain. A major milestone in this process was passed on 31 March 2007 when the last of the nine SUs deployed to Hinkley Point, thereby completing the initial recruitment, training and deployment of the CNC to all these nuclear generating sites within the ambitious timelines I set in November 2004. This has been a major success for the CNC and I wish to record my appreciation of the CNC's achievement in this respect. I also want to acknowledge the strong sense of corporate responsibility and the

significant and sustained financial commitment on the part of the operators (British Energy and Magnox Electric Limited) in facilitating and funding this important initiative.

32. These deployments to the nuclear generating stations have established a security model which comprises a mixed guard force of CNC Authorised Firearms Officers (AFOs) and the nuclear operators' unarmed civilian guards. The AFOs of the CNC are permanently attached to the site but have no responsibility for fixed points. They conduct high profile deterrent patrols and provide an armed response in and around the sites leaving the unarmed civilian guards employed by the operators to carry out static duties such as searching visitors, checking passes and monitoring alarms. The two components complement each other and each plays to its strengths. I intend to encourage this model at all those sites where the Category of nuclear material held requires an on-site armed response so that the resource which exists in the CNC and which is uniquely imposed on this industry by regulation is deployed in what I consider to be the most cost-effective manner. This, along with ever more sophisticated and demanding training, should in my view constitute the future priorities for the CNC.

33. The civil nuclear industry is undergoing a period of profound change as the initiatives of the Nuclear Decommissioning Authority (NDA) gather momentum and older sites change role or become redundant. These changes will inevitably affect the CNC as much as anybody else working in the industry. For example, when the last of the Plutonium Contaminated Material is removed from the Low Level Waste Repository in July 2007, the site will become a Category IV licensed nuclear site and there will be no requirement for an on-site armed response. Similarly, with the Magnox Reactors at the Chapelcross site now shut down and being prepared for decommissioning, there is a diminishing requirement for the CNC at the site. Similar changes will occur elsewhere although these reductions must be seen in the context of the CNC's new commitment to the nine nuclear generating sites and the certain requirement for the capabilities possessed by the CNC during the operation of the proposed long term repository for nuclear waste. The CNC and its forbears have an excellent track record in adapting to change in the industry and I am confident that they will continue to do so.

34. In October 2006, Mr Bill Pryke retired as Chief Constable of the CNC after almost 8 years in post. During his tenure, he achieved much. He supervised the move of the UKAEA from being an integral part of the United Kingdom Atomic Energy Authority to become a 'stand alone' Force under the CNPA. He introduced important operational capabilities, including the Maritime Escort Group, which remains unique to the CNC, and he was the driving force in shaping the deployment of the UKAEA and subsequently the CNC to the nuclear generating sites. I wish to acknowledge these achievements and wish him well.

35. Finally, the CNC continues to facilitate visits from a senior liaison officer from An Garda Síochána, the police force of the Republic of Ireland, as part of a confidence-building exercise with regard to security in the civil nuclear industry in the UK. During this reporting period, a Garda Superintendent has made 2 visits to Sellafield.

## TRANSPORT SECURITY

### RESPONSIBILITIES

36. The Convention on the Physical Protection of Nuclear Material (CPPNM), *inter alia*, sets the requirements to be followed by the international community with regard to securing nuclear material when transported between states. Countries party to the CPPNM are to meet defined standards of physical protection for the transport of nuclear material and to cooperate in the recovery and protection of any stolen nuclear material. CPPNM also promotes international co-operation in the exchange of information relating to security arrangements for nuclear material when it is transported across national boundaries.

37. In recognition of the UK's obligations under the CPPNM, OCNS regulates the movement of all civil nuclear material by road and rail throughout the United Kingdom and worldwide when carried on UK-flagged vessels. I am required to ensure that appropriate measures are taken to prevent the theft or sabotage of nuclear material when in transit. Any public order incidents associated with the movement of nuclear material would be policed by local police forces.

### MOVEMENTS

38. Almost 2000 movements were notified to OCNS during this reporting period. This is a slight reduction compared to the 2005/2006 reporting period and reflects the fact that all movements of spent nuclear fuel from the Bradwell Nuclear Power Station have been completed ahead of the site being decommissioned, and there have been fewer movements from other operational power stations as a result of periods when the reactors have been shut down. I expect this trend towards fewer movements to continue as other Nuclear Power Stations decommission and when all Category III<sup>4</sup> nuclear material is removed from the Low Level Waste Repository at Drigg. Additionally, of the notifications received, just under 300 were cancelled due to operational reasons.

39. Included in this overall total were three Category I movements of MOX fuel assemblies to Switzerland (see Paragraph 42 below). UK-flagged vessels were also contracted on five occasions to transport Category III nuclear material between foreign states and each of these was subject to UK regulation. Within the UK, there were 1185 notifications of the movement of spent nuclear fuel comprising 557 notifications for rail transport and 628 notifications of road transport from nuclear generating sites to the associated railheads. Category III nuclear material was moved through UK ports on 87 occasions during this reporting period, and imports and exports were made either from or to Canada, China, France, Germany, Japan, the Netherlands, the Russian Federation, South Korea, Spain, Sweden and the USA.

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<sup>4</sup> Categories of Nuclear Material are laid out in The Schedule attached to the Nuclear Industries Security Regulations 2003.

## **APPROVED CARRIERS**

40. No further carriers were granted Class A or B<sup>5</sup> Approved Carrier Status, but, in accordance with Regulation 15(1) of the NISR 03, BNG Sellafield requested that their Class B Approved Carrier Status be withdrawn, because they were no longer transporting nuclear material. This request was approved. There is currently a total of 16 Approved Carriers in both Classes. At the time of writing, OCNS has received applications from two carriers, one European and one UK-based, for Class B Approved Carrier status and these are being assessed.

## **REPORTS MADE UNDER REGULATION 18**

41. There have been no instances of theft or sabotage of nuclear material during this reporting period. One incident involving a reporter from the Daily Mirror was reported in accordance with Regulation 18, NISR 03 and I have commented on this at Paragraphs 44 to 46 below.

## **EUROMOX**

42. Three shipments of Category I MOX fuel were made from Sellafield to Switzerland via France during the reporting period. These three moves complied with the requirements of the NISR 03 and its associated TRD which themselves embody the obligations of the CPPNM and take full account of international recommendations for the secure transport of this material. On each occasion, the nuclear material was transported within a High Security Vehicle from Sellafield and moved by sea aboard a UK-flagged vessel in accordance with a detailed Transport Security Plan approved under NISR 03. The movements remained subject to UK regulation until the vessel entered French territorial waters, when the consignment became subject to French jurisdiction. AFOs of the CNC escorted the consignment throughout the move until the shipment was accepted by the French authorities. The vessel used for the maritime component of the movement met or exceeded International standards for such ships. Transport Security Inspectors from OCNS ensured that the vessel was inspected and security procedures tested before departure. All security measures were coordinated with the French authorities. There were no security incidents during any of the moves.

## **INSPECTIONS**

43. During this reporting period Transport Security Inspectors carried out 14 inspections. These remain an important and effective enforcement tool which inform policy change and help to ensure that all Approved Carriers are maintaining robust, yet appropriate levels of security when transporting nuclear material. OCNS Transport Inspectors confirmed that Approved Carriers were compliant with their approved Transport Security Statements.

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<sup>5</sup> A Class A Approved Carrier is authorised to transport all categories of nuclear material; a Class B Approved Carrier may only move Category III nuclear material.

## **DAILY MIRROR ARTICLE ALLEGING SECURITY LAPSES AT WILLESDEN BRENT SIDINGS**

44. On 21 July 2006, the Daily Mirror published an article alleging that lapses in security at Willesden Brent Sidings had allowed a journalist to approach a train operated by Direct Rail Services (DRS) carrying irradiated (or spent) nuclear fuel and then hold a simulated, hand-held, explosive device against one of the wagons forming the train. DRS is a Class A Approved Carrier. OCNS investigated these serious allegations. Willesden Brent Sidings, part of the Willesden Freight Marshalling Yard, were inspected and all related security policies and procedures were reviewed. All the train crew members and security wardens involved in the movement were interviewed and the DRS management were questioned over compliance with NISR 03 through DRS' approved Transport Security Statement (TSS). DRS' TSS was also reviewed by OCNS.

45. The detailed investigation confirmed that DRS and its staff were in full compliance with their TSS. The spent nuclear fuel was being transported on the train in robust, massively-constructed flasks which comply with IAEA safety standards. DRS is a user of the rail network and is not responsible for overall security arrangements at the Willesden Brent Sidings. The national rail network is an open network and is widely vulnerable to trespass. It is not for me to comment over whether a prosecution for trespass on the network should have been brought on this occasion.

46. OCNS' investigation report is exempt from the Freedom of Information Act in accordance with Section 31(1)(a), since the information it contains could be of use to those with a malicious agenda and disclosure would be likely to prejudice the prevention of crime.

### **OTHER WORK**

47. Transport Security Inspectors have been involved in a wide range of work in support of Government throughout this reporting period. This activity has included extensive inter-departmental liaison and co-operation and contributed to the development of emergency preparedness planning and training. They have also conducted joint inspections with other Government departments, relevant to the mode of transport, where appropriate. In this latter respect, OCNS has a close working relationship with the Transport Security and Contingencies Directorate of the Department for Transport. OCNS has also taken part in international work to enhance the security of radioactive materials on behalf of the IAEA.

48. Import Licensing of Nuclear Material. On 1 April 2007, OCNS assumed responsibility from the Import Licensing Branch of the (then) Department of Trade and Industry to issue import licences for specified nuclear material from countries outside of the European Community. This responsibility has been assumed by the Transport Inspectorate arm of OCNS.

## INFORMATION SECURITY

### OVERVIEW

49. In April 2005, OCNS published guidance on what constitutes sensitive nuclear information and how this affects our approach to requests for disclosure of information relating to security in the civil nuclear industry. The paper was entitled 'Finding a Balance' and it is available on the net<sup>6</sup>. 'Finding a Balance' was written in the context of the obligations laid upon us by the Freedom of Information Act, and attempts to be as helpful as possible with regard to disclosure. It has subsequently served a wider purpose in explaining why I regard certain information as sensitive, and why in the national interest all must be careful about disclosing information which would be of value to terrorists and others with a malicious agenda. The paper is regularly reviewed and I commend it as guidance on promoting understanding of this complicated area.

50. OCNS has an obligation under the NISR 03 to ensure the security of sensitive nuclear information against the threats of theft or compromise. Sensitive nuclear information includes any information relating to National Security and Nuclear Proliferation and the standards applied conform to those prescribed by Government. OCNS requires nuclear operating companies and contractors to apply the Government's protective marking system to all sensitive nuclear information and to store such information, in whatever media it is held, to a level of protection commensurate with its sensitivity. OCNS is the accreditation authority with regard to information held on IT systems.

51. OCNS Information Security Inspectors provide advice to operators and conduct inspections of all locations within the civil nuclear industry holding sensitive nuclear information, including IT systems, paper filing and recording arrangements, handling procedures, buildings where such information is stored and the 'security furniture' in which it is kept. Clearly, the robustness of all these arrangements increases in line with the sensitivity of the nuclear information they are designed to protect. There is also a close correlation between the various levels of personnel security and access to sensitive nuclear information: the most highly classified material is only available to those with the appropriate level of clearance.

### INSPECTORS

52. OCNS has two Information Security Inspectors. They continue to monitor the implications for IT security in the context of the NDA priority to increase the pace and scope of the clean up of the nuclear legacy. At present, there are relatively few IT networks within the industry reflecting the small number of civil nuclear operators. If the number of networks was to increase in line with a growing number of operators, then this could become a major source of new work both to accredit these additional systems and to ensure that they remained compliant.

53. OCNS monitors opinion and discusses best practice at 'Infosec' Forums: two have been held and they have attracted growing numbers of representatives from all

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<sup>6</sup> <http://www.hse.gov.uk/nuclear/ocns/publications.htm>

the current civil nuclear operators and the NDA. OCNS particularly welcomes the NDA's vision of 'shared IT services' across the industry because of its obvious security advantages.

54. This year, OCNS Inspectors have reviewed and reissued the Classification Working Party/G8, a classified document which gives guidance on the classification which should be applied to documents. It is not publicly available. The classification policy takes the thinking in 'Finding a Balance' a stage further by giving greater definition to what I consider should be protected. The review, which included a consultation exercise with the industry and Government Departments with an interest in the industry, was designed to keep the policy current. An Engineering Supplement will be produced shortly to complete the logical scope of the document.

55. A recurring theme for 'Infosec' Inspectors remains the working of classified contracts. OCNS recognises the importance of facilitating civil nuclear operators' requests to buy in expertise to assist them in particular projects and will approve these contracts provided they protect sensitive nuclear information. I welcome companies' commitment to ensure that this essential outsourcing is conducted sensibly and securely. Increasing globalisation will remain a challenge to this work and I expect to mention this again in the future.

56. Many operators maintain internal IT systems to help them protect sensitive nuclear information by limiting access to such information. OCNS 'Infosec' Inspectors have made it a priority during the 06/07 reporting period to re-accredit these systems and have been impressed by the high standards which invariably have been found.

57. OCNS 'Infosec' Inspectors have continued to emphasise the importance of individual security awareness. As a generalisation, there is a high level of awareness in the industry but complacency must be guarded against and individuals, particularly those whose duties require them to carry sensitive nuclear information, must be constantly reminded of their obligations to protect such information.

## **REPORTS MADE UNDER REGULATION 22**

58. There was just one report made under Regulation 22 which required further investigation. It was established that no damage had occurred and procedures were changed to prevent a reoccurrence.

## **SUPPORT TO OTHER GOVERNMENT DEPARTMENTS**

59. OCNS continues to contribute to the Cabinet Office's review of the Manual of Protective Security (MPS), which constitutes the definitive official view on *inter alia*, information security policy. OCNS participation enables the civil nuclear industry's views to be heard in the review and thereby aids the delivery of the revision's intended aim.

60. The Principal Inspector has also continued as my representative at the Joint Terrorism Analysis Centre (JTAC), ensuring that our intelligence needs are given the

appropriate priority and that the industry, through OCNS, receives timely indications of changes in the threat to their sites and other interests.

## **PERSONNEL SECURITY**

### **OVERVIEW**

61. OCNS provides a security vetting service for all permanent employees and all contractors working in the civil nuclear industry. The service complies with, and is governed by the same nationally agreed standards and procedures which apply to National Security Vetting. The level of security clearance is determined by the level of access required by the applicant either to nuclear material or to sensitive nuclear information or both. Clearances are granted only after the applicant's request has been investigated and has satisfied the criteria appropriate to the level of access required. Clearances are revalidated at agreed intervals, again in line with nationally agreed practice. Should an application for a clearance be denied, OCNS will consider an appeal against its decision and when appropriate, will facilitate a further appeal by the applicant to the Security Vetting Appeals Panel in the Cabinet Office, the highest adjudicating authority.

62. During 2005/2006, the OCNS Vetting Branch returned a very strong performance and issued 17,976 clearances. This allowed OCNS both to deliver the turnaround times expected by industry and to ensure that no further backlogs of vetting applications accrued. In 2006/2007, the Vetting Branch has not only maintained this level of performance but also successfully managed the introduction of the new Baseline, and Enhanced Baseline Standard, which replaced the Basic and Enhanced Basic Check on 1 March 2007. The Vetting Office has kept pace with demand for Enhanced Baseline Standard (EBS), Security Clearance (SC) and new applications for Developed Vetting (DV) clearances. There remained a backlog of Reviews of existing Developed Vetting (DV(R)) and addressing this has been an important priority for the Vetting Office.

### **DEVELOPED VETTING AND DEVELOPED VETTING REVIEWS**

63. As the highest level of clearance, the investigations demanded for DVs and DV(R)s include interviews with the subject and her/his nominated referees. With only nine Vetting Officers (VOs) available to OCNS in-house to conduct these interviews, the Vetting Office simply did not have the capacity to meet the demand from industry. In my last report, I said that I had passed some DV(R) work to the Defence Vetting Agency (DVA). Both the Chief Executive of the DVA (CE DVA) and I had treated this as a pilot scheme to test whether this was a practical solution to meeting the work that OCNS did not have the capacity for. A cross section of cases representing most of the challenges common to the industry was passed to the DVA after the preliminary checks had been conducted. DVA VOs conducted the necessary interviews, wrote up the case notes and then returned the files to OCNS for the decision to be made whether or not to grant the clearance. The immediate success of this pilot scheme was such that I decided to contract all the DV and DV(R) investigative work to the DVA on this basis. This decision was put into effect on 1 March 2007. Eight of OCNS' nine VOs transferred to the DVA to continue with their work; the ninth retired for personal reasons immediately before the transfer occurred.

I wish to record my appreciation of their individual and collective contribution to OCNS and the industry over many years of service and to wish them well in the DVA.

## SECURITY CLEARANCES

64. In the year 1 April 2006 to 31 March 2007, OCNS issued a total of 17,619 security vetting clearances, of which 16,295 were new clearances and 1324 were revalidations. In comparison to the last reporting period, there were slightly fewer new clearances but about twice as many revalidations. The detail is shown in Table 1 below, which includes for interest the totals for 2003/2004, 2004/2005 and 2005/2006:

	New Cases				Reviews
	2006/2007	2005/2006	2004/2005	2003/2004	2006/2007
Developed Vetting (DV)	617	500	471	435	322
Security Clearances (SC)	1434	1285	863	921	432
Counter terrorist Checks (CTC)	2	14	1	23	0
Basic Check and Enhanced Basic Check (BC/BC+) Note 1	14092	15518	10112	7742	570
Other Foreign National Note 2	150				
<b>Totals</b>	<b>16295</b>	<b>17317</b>	<b>11447</b>	<b>9121</b>	<b>1324</b>

**Table 1: Security Clearances**

Notes:

1. From 1 March 2007, the Baseline Standard (BS) and Enhanced Baseline Standard (EBS).
2. A new recorded category of clearance from 2006/2007.

## REVALIDATIONS

65. The detailed breakdown of revalidation work is shown at Table 2:

Clearance Levels	2006/2007	2005/2006	2004/2005	2003/2004
Developed Vetting	322	217	279	186
Security Clearances	432	187	47	101
Counter Terrorist Checks	0	0	0	0
Enhanced Basic Checks (Note 1 above)	570	255	814	3059
<b>Total</b>	<b>1324</b>	<b>659</b>	<b>1140</b>	<b>3346</b>

**Table 2: Revalidations**

66. The figures confirm that a record number of DV and DV(R) cases has been processed: 939 in total compared with 717 in 2005/2006, an increase of 23%. In spite of this significant improvement, there are 710 DV(R) cases awaiting action but with casework now being transferred to the DVA at York, I am confident that these arrears will be cleared by 31 March 2008. There are no backlogs in any other category.

### **GRANDFATHER RIGHTS**

67. Nine years ago, when greater levels of security were being introduced into the civil nuclear industry, a decision was made to the effect that those employed within the industry and who would normally require a level of clearance equating today to the Enhanced Baseline Standard (EBS) would be deemed to be vetted. This in part reflected the fact that several thousand employees were in this category and there simply was not the capacity in the Vetting Office at the time to conduct this number of checks. Those given this dispensation were deemed to have 'Grandfather Rights'.

68. EBS Clearances attract revalidation after 10 years. There are still some 4000 employees in the industry today with 'Grandfather Rights' whose 'EBS' Clearances will need to be revalidated in the next 12 months. OCNS has been in negotiation with the operators and the Trade Unions about how these checks will be conducted as the revalidation deadline approaches and a solution addressing the potential for procedural and presentational difficulties has been achieved. I wish to acknowledge the constructive contribution of all those parties involved in these negotiations. OCNS' Vetting Office will carry out this significant task in a programme of work which will begin in September 2007 and run for 40 weeks.

### **STAFF MOTIVATION**

69. For most of this reporting period, staff motivation and efficiency in the Vetting Office have been encouraged by a number of significant factors. Turnover has reduced and as a result, the levels of experience and expertise have improved and contributed to greater efficiency. OCNS has invested in more IT, allowing greater simultaneous access to systems supporting essential security vetting procedures. The Vetting Office has been able to devote greater effort to Aftercare and for 2007/2008, the Head of Vetting has published a programme of site visits to provide advice to the operators. Time is now available for staff to attend training courses to develop their

professional skills. Two years ago, many of these options were beyond reach as every effort was devoted to delivering the vetting service against a background of staff shortages and inexperience, rising demand and mounting backlogs.

## **DENIALS AND APPEALS**

70. There has been one denial of clearance, and one individual withdrew his application for clearance. Both of these cases were at the Enhanced Baseline Standard level.

## **THE EFFECTIVENESS OF SECURITY REGULATION**

### **THE NUCLEAR INDUSTRIES SECURITY REGULATIONS 2003**

71. I have already stressed the importance of the Nuclear Industries Security Regulations 2003 (NISR 03) in establishing the security framework for the civil nuclear industry. The Regulations had their provenance in the Anti-terrorism, Crime and Security Act 2001 and came into force on 22<sup>nd</sup> March 2003. When the regulations were laid, a commitment was made to conduct a formal review of the regulatory framework three years after its introduction. This review, which included consultation with industry, was conducted during this reporting period.

72. The consultation exercise was conducted by officials responsible for nuclear security policy at the former Department of Trade and Industry and involved the completion of a detailed questionnaire. Respondents were broadly content with the regulations and identified the main benefits to be the provision of a clear security framework; the application of common standards; a clearer understanding of responsibilities; the introduction of a mechanism to demonstrate to stakeholders that appropriate security measures have been taken; the provision of a single point of reference for security matters; and improved process for assessing the proposed standard of security for Category I and II nuclear material during transport.

73. DTI officials concluded that fundamental amendment of the regulations was not required although two other recommendations by respondents, one to define more precisely what is meant by 'sensitive nuclear information' and the other to extend the Regulations to include organisations such as the NDA, were adopted in the November 2006 amendment of the Regulations.

## **ASSESSMENT**

74. I am satisfied that, following the amendment of NISR 03 in November 2006 described in Paragraph 71 above, the civil nuclear industry is both effectively and proportionately regulated. At the time of writing, I have no requirement for further changes to the Regulations applicable to security in the industry but looking to the future, OCNS would need to regulate the security of new nuclear facilities that might be built, such as the long term waste repository or any interim waste storage, whilst they are being constructed.

## **INTERNATIONAL COMMITMENTS AND ACTIVITIES**

### **OVERVIEW**

75. OCNS possesses individual and collective expertise which I make available, when I can, for various international projects on request. It is in the United Kingdom's interest to promote the adoption of best practice in the security of nuclear material because it makes no sense to insist on the highest of standards in the civil nuclear industry at home if similar material elsewhere in the world is protected to a lesser standard. OCNS subject matter experts (SME) have a valuable role to play in promoting the need for common high standards of security and they remain in demand. Much of our international work is prompted by requests from the International Atomic Energy Agency (IAEA).

### **INTERNATIONAL ATOMIC ENERGY AGENCY**

76. The IAEA, as part of its Nuclear Security Programme, offers International Physical Protection Advisory Service (IPPAS) Missions to countries on request. IPPAS Missions review the state's physical protection regime including its nuclear facilities and offer comprehensive and confidential advice to the requesting country with regard to the state's regime and security of the nuclear plants and installations visited. In this reporting period, the Deputy Director OCNS led a follow up Mission to Kazakhstan in June 2006. No further contributions to IPPAS Missions were made in 2006/2007 but I am expecting requests for support in 2007/2008.

77. The UK has been a strong supporter of IAEA plans to develop a Nuclear Security suite of guidance documents to underpin its advisory and training activities. This work has gathered pace during the past year and OCNS SME have attended a number of Consultants' and Technical Meetings at the Agency to draft these documents for use by the international community. In particular, the Deputy Director has participated in several Consultants' meetings to help draft the top tier document in this series, the 'Nuclear Fundamentals'.

78. The Deputy Director, OCNS, continues to serve on the IAEA's Advisory Group on Nuclear Security (AdSec) which reports directly to the Director General (DG). Membership of AdSec is at the invitation of the DG and this represents important recognition of the Deputy's experience and international reputation.

### **THE G8 GLOBAL PARTNERSHIP**

79. The G8 Global Partnership is an international initiative which seeks to address the nuclear, chemical and biological legacies of the Former Soviet Union. OCNS has continued to support the Department of Trade and Industry's (now the Department for Business, Enterprise and Regulatory Reform) contribution to this important work, particularly with advice to improve security in Murmansk for Atomflot, the fleet of nuclear powered icebreakers. The Deputy Director presented a paper to the INMM Annual Meeting in July 2006 reporting the work of Sweden, Norway, the United States and the UK who comprise the donor nations to this area of the Russian Federation (The NW Donors) following up the conference I chaired in London in June 2005.

80. Following a review in October 2006, the Government established new governance arrangements for its Global Partnership programme which will allow the UK to address broader Weapons of Mass Destruction threat reduction priorities. These arrangements include a new official level Programme Oversight Board to support Ministers in providing overall strategic direction for UK threat reduction programmes. The work will include an increasing number of nuclear security projects in the Russian Federation and the UK is reviewing the potential for similar initiatives to be supported elsewhere in the Former Soviet Union. OCNS continues to provide advice on such projects and is represented on the Programme Board.

### **THE EUROPEAN NUCLEAR SECURITY REGULATORS' ASSOCIATION (ENSRA)**

81. The European Nuclear Security Regulators' Association (ENSRA) originally comprised senior representatives of the regulatory authorities from Belgium, Finland, France, Germany, Spain, Sweden, Switzerland and the United Kingdom who have responsibility for security in the civil nuclear industry. At the 10<sup>th</sup> meeting of ENSRA in Paris in November 2006, the Czech Republic and the Netherlands were invited to become members and their representatives accepted. ENSRA provides an opportunity for confidential exchanges between members allowing lessons and experiences to be shared with the aim of promoting and maintaining high standards of security broadly common to all member states.

82. ENSRA met twice during this reporting period; in Finland in April 2006 and in France in November 2006. The Finnish meeting included a visit to the nuclear power station under construction at Olkiluoto.

### **THE FRANCO-BRITISH NUCLEAR FORUM**

83. The Franco-British Nuclear Forum was announced in June 2006 following the meeting between the Prime Minister and the President of the French Republic. The aims of the Forum are 'to develop further existing relationships between French and British policy makers, regulators, industry and scientists; to develop collaboration on existing and new areas of mutual interest; and to draw more value from work being done in France and the UK both separately and collaboratively'. Two meetings of the Forum have been held in this reporting period, in Paris in November 2006 and in London in March 2007.

84. I have attended both meetings and have been able to build on my existing relationships with the French authorities responsible for security in their civil nuclear industry.

### **BILATERAL EXCHANGES**

85. OCNS has again held meetings in the UK with the Australian and Japanese nuclear security regulators. In June 2006, I briefed the Chief of the Indian Industrial Police and an official from the Indian Ministry of Home Affairs about the British

approach to security in the civil nuclear industry. This meeting had been organised by the Department of Trade and Industry in London and was also attended by a member of staff from the British High Commission in New Delhi. In February 2007, the Deputy Director, OCNS, hosted a visit from the Chinese Atomic Energy Authority which included briefings in London and a visit to Sellafield.

## **COUNTER PROLIFERATION**

86. 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) on collaboration on the development and exploitation of uranium enrichment technology. This collaborative agreement has been extended to include the United States of America through the Louisiana Energy Services (LES) Agreement and France through the Treaty of Cardiff.

87. Within the original 'Troika', OCNS has continued to work with the German and Dutch National Authorities to discharge our counter proliferation responsibilities. For the UK, I have welcomed the introduction of the Uranium Enrichment Technology (Prohibition on Disclosure) Regulations 2004<sup>7</sup> which prohibit the disclosure of certain equipment, software and information relating to uranium enrichment technology. In our separate collaborations with the United States and France, work continues to enable the construction and operation of uranium enrichment plants in each country.

## **THE ENERGY DEBATE**

88. OCNS has been fully consulted on security issues should the Government, in the context of its review of the UK's future energy needs, endorse the construction and operation of a new generation of nuclear power plants. OCNS is permanently represented on the Nuclear Directorate of the Health and Safety Executive's Joint Programme Office (JPO), which is assessing design submissions for such reactors. I am a member of the Regulators Assessment Coordination Board which includes senior representatives of the safety, security and environmental regulatory organisations and which is tasked with overseeing the JPO's work.

89. OCNS' priority throughout this process is to ensure that sensitive nuclear information included in these design submissions is appropriately protected. I also wish to ensure that security measures are included in the designs *ab initio* to avoid the need for retrofitting and that a judgement can be made early with regard to establishing and then gradually increasing security provision at any construction sites should approval be given. A number of consortia offering designs for any future new build has approached OCNS for advice on the security requirements for their proposals. They have each received a similar brief reflecting the above.

90. On 19 June 2006, I was invited to give evidence about the regulation of security in the civil nuclear industry to the Trade and Industry Select Committee during the Committee's investigation into the construction and operation of new nuclear power plants. I was accompanied by OCNS' Principal Inspector for Transport.

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<sup>7</sup> <http://www.opsi.gov.uk/si/si2004/20041818.htm>

## **NUCLEAR DECOMMISSIONING AUTHORITY**

91. OCNS has continued to support the Nuclear Decommissioning Authority (NDA) in its important work in increasing the pace and scope of decommissioning the UK's nuclear legacy. I have attended, or been represented at, all the briefing days for industry when potential bidders have been given comprehensive overviews of sites and along with the other regulatory organisations, OCNS has explained the security requirement. In brief, I shall expect a new Site Licensee Company (SLC) to adopt the extant Site Security Plan (SSP) when a contract is awarded. If the SLC then wishes subsequently to alter the SSP, then the proposed amendments will be considered by OCNS. If they comply with the demanding requirements of NISR 03, then they will be approved and the SSP will be amended accordingly.

92. OCNS also provides support to the NDA on demand; this includes OCNS representation on various NDA sub groups, advice on information security and annual verbal reports to the NDA Board on security in the industry.

### **MERGER WITH THE HEALTH AND SAFETY EXECUTIVE (HSE)**

93. On 1 April 2007, OCNS and the United Kingdom Safeguards Office (UKSO) transferred from the Department of Trade and Industry to merge with the Health and Safety Executive's (HSE's) Nuclear Safety Directorate (NSD) to form the Nuclear Directorate (ND) of the HSE. OCNS is now Division 5 of ND. This transfer took account of Section 13 of the Health and Safety at Work etc Act and OCNS' responsibilities have been incorporated into a Memorandum of Understanding between the DTI/BERR and the HSE.

94. The merger had been prompted by a number of factors. Routine cooperation between OCNS and NSD over Vital Area surveys had emphasised the need for both the security and safety regulatory bodies to consult and inform each other. In terms of providing the civil nuclear industry with a consistent and coherent regulatory message, the case was growing for greater and closer cooperation between the safety and security regulators and with the changes in the industry prompted by the NDA and possibly by new build, these pressures could not be ignored. Merger has brought the UK's regulatory structures in the civil nuclear industry into line with those of our international partners and I am confident that this will promote international collaboration. Closer to home, the merger sits well with the Hampton Review recommending better regulation.

95. The policy lead for the nuclear industry remains at the Department for Business, Enterprise and Regulatory Reform, and I remain responsible to Ministers of this Department.

96. In January 2007, NSD, UKSO, OCNS and DTI held an industry briefing day at Harwell to explain the background to the merger. A further briefing day will be arranged in 2008 to allow ND to report on outcomes of the merger, identifying its advantages and disadvantages and inviting industry delegates to comment on their experience as companies subject to regulation.

## **OFFICE FOR CIVIL NUCLEAR SECURITY: ADMINISTRATION**

### **RESTRUCTURING**

97. The OCNS Organisation Diagram as at 28 February 2007 is shown at Annex A. The changes that have occurred in OCNS since then have led to a quarter of our 42 staff being redeployed elsewhere within the Civil Service without any compulsory redundancies. In the section above on Personnel Security, I mentioned that when the Developed Vetting investigative work was transferred to the Defence Vetting Agency (DVA) on 1 March 2007, 8.5 full time equivalent (FTE) OCNS Vetting Officers moved across to the DVA. Similarly, when OCNS merged with the NSD and the UKSO to form the Nuclear Directorate (ND) of the HSE, an Assistant Director (DTI Range 11) responsible for management services, including the OCNS budget, was released back to the Office of Government Commerce (OGC) upon completion of an inter-departmental loan agreement. Our financial and administrative systems have now been integrated into those of the HSE and the work of the Range 11 Assistant Director has been absorbed by this realignment.

98. These changes have created a unique opportunity for OCNS to re-examine the way it delivers security regulation to the civil nuclear industry. There are areas where we should be doing more. OCNS has a need now to provide dedicated staff to support the NDA in its drive to increase the pace and scope of decommissioning the UK's nuclear legacy. At the time of writing this Report, the Joint Project Office, responsible for assessing proposed designs for a new generation of nuclear power stations, has begun work. Even though there has been no decision to build, I am committed to providing full time support to the JPO. With the growing emphasis on countering the current terrorist threat, I need a dedicated Threat Assessment post to ensure that our service to the industry in disseminating warnings remains timely. Finally, whilst I remain confident in OCNS Inspectors' ability to carry out their duties effectively, there is more that could be done in order to maintain an appropriate level of reassurance. In this respect, an additional three Band 3 Inspectors in the Site, Transport and Information security areas are essential.

99. I expect to make progress against these requirements during the 2007/2008 reporting period.

### **OCNS BUDGET**

100. The OCNS budget for this reporting period was £2,745k of which £2,659k (97%) was recovered from industry as a charge for OCNS' regulatory services. The balance of £86k (3%) was met by DTI to fund OCNS work in support of Government. An analysis of OCNS costs by function and recovery is shown at Annex B.

101. During this reporting period, OCNS has consolidated the experience gained of conducting cost recovery through the Nuclear Industries Security (Fees) Regulations 2005. Fixed costs for individual vetting clearances were introduced and have been successful. OCNS is now introducing changes in the way it charges for transport regulation: I have consulted industry over this complicated area of cost recovery and I have welcomed their support.

102. Ultimately, I would expect the OCNS charges to be integrated with an ND-wide cost recovery mechanism to reduce overheads and regulatory duplication.

### **STATEMENT OF ASSURANCE**

103. The purpose of this Annual Report is to give the Minister of State for Energy at the Department for Business, Enterprise and Regulatory Reform an assurance with regard to the state of security in the civil nuclear industry and the effectiveness of regulation. I can report that in the 12 months from 1 April 2006 to 31 March 2007, I have been satisfied with the standards, procedures and commitment with regard to security within the civil nuclear industry.

104. I am also satisfied that regulation is effective and proportionate.

*Roger Brunt*  
*Director*  
*Office for Civil Nuclear Security*  
*Harwell*

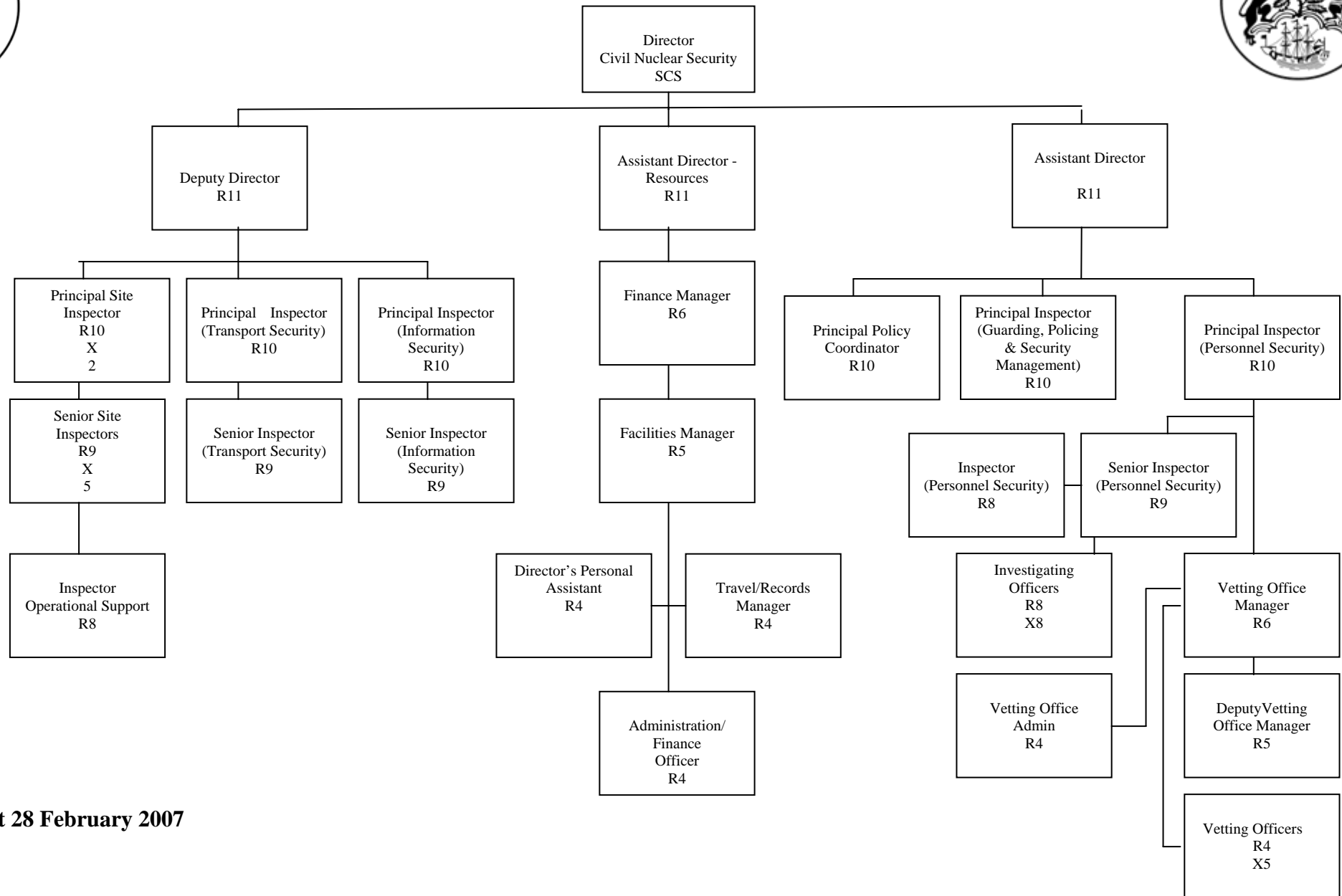
*July 2007*

### **Annexes**

- A. OCNS Organisation Diagram (as at 28 February 2007).
- B. OCNS Costs 2006–2007.

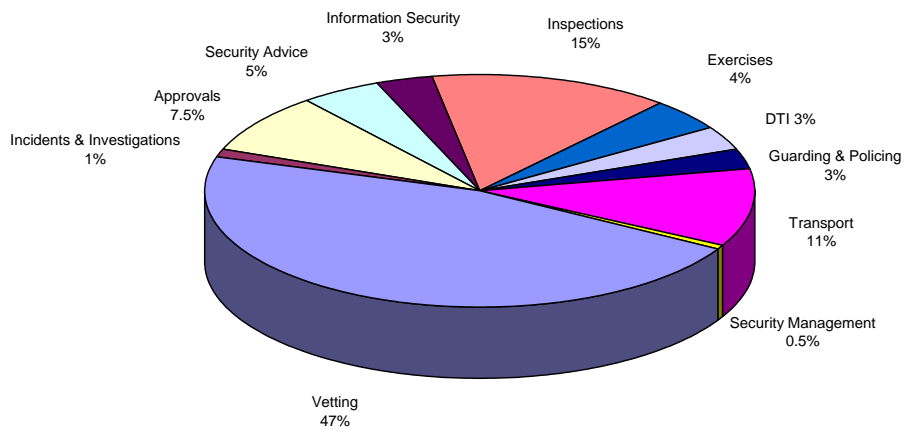


# Office for Civil Nuclear Security



As at 28 February 2007

**Cost Recovery by Function**



**OCNS Cost Recovery**

