naval bases, other sites under MoD control and within the nuclear submarine flotilla apart from enforcing the Health and Safety at Work etc Act 1974 (HSW 74) and its subordinate regulations. The MoD/HSE General Agreement identifies that "where MoD has been granted exemptions from specific regulations, it is the policy of the Secretary of State for Defence that health and safety standards and arrangements will be, so far as is reasonably practicable, at least as good as those required by statute". MoD has its own internal regulatory system for the defence nuclear programmes which covers the totality of activity ashore, afloat and overseas. CNNRP and NWR are empowered by the Secretary of State for Defence to set and enforce appropriate regulatory requirements, focussing on activities where statutory exemptions apply. They require duty holders to demonstrate compliance with Authorisation Conditions, which match the NII Standard Licence conditions, but are adapted to be appropriate for the particular defence environment.

Thus in summary NII and the MoD internal Regulators (CNNRP and NWR) each have unique responsibilities that cannot be passed on. NII has Statutory Powers and Responsibilities. CNNRP and NWR discharge some MoD responsibilities that are outside HSE's and hence NII's remit and they have an internal, assurance role where health and safety law applies. For commercial companies, CNNRP's and NWR's authority is imposed through the contracts between MoD and the company.

**Characteristics of the Defence Nuclear Programmes**

In identifying the reasonable practicability of applying statutory requirements to the Defence Nuclear Programmes, the different characteristics of the defence programmes are significant. Unlike the civil nuclear programmes where all nuclear plant remains at a fixed site throughout its life, most defence nuclear plant and weapons are mobile. Arrangements that have evolved for the management and regulation of fixed civil plant therefore need to be adapted. For example the responsibility for the control of a naval reactor plant or a nuclear weapon transfers a number of times through its life, and this must be supported by appropriate arrangements. Furthermore, in a military environment the constraints on space and weight are more severe, and the operating environment is more challenging, with requirements for the plant not only to be safe, but also to continue to operate, under severe external hazards. The overall safety of a submarine often depends upon the continued operation of the naval reactor plant: an irresponsibly tripped plant may cause a serious degradation in safety. Finally, the juxtaposition of explosives and radioactive material is fundamental to the design of a nuclear weapon.

**Development of Working Relationships**

To minimise the impact of "joint regulation", NII and CNNRP or NWR effectively control the activities of commercial companies in a similar manner. All operate a non-prescriptive regime that places reliance on self-regulation by the licensee/authorisee. The aim is to provide joined up regulation which is effective in discharging each organisations responsibilities with minimum duplication as far as the Licensee/Authorisees are concerned. The interaction between NII and CNNRP or NWR is governed by the 2002 revised general agreement between MoD and the HSE, and associated protocols.

Annex B to the 2002 General MoD/HSE Agreement formally recognises the uniqueness of the requirements of the submarine nuclear reactor plant and nuclear weapons and the difficulties that would arise if NII's Safety Assessment Principles were applied in an inflexible manner. It also establishes the framework for the interaction and interfaces between the MoD internal Regulators and NII, and has been supplemented by the agreement of "Letters of Understanding" (copies are provided at Annex 2). These set out the working arrangements to be adopted between NII and CNNRP or NWR staff in undertaking joined up regulation of activities in the Naval Nuclear Propulsion and Nuclear Weapons Programmes.

A key element of this working arrangement is the recognition that although NII has statutory powers and the associated responsibilities which cannot formally be shared with others, not least with a MoD internal Regulator without legal powers, NII regards CNNRP and NWR as "competent authorities" and respects the MoD/HSE Agreement whereby it undertakes not to seek to influence the naval reactor plant or nuclear weapon design. NII respects the MoD internal Regulators methods of regulation, expertise and insight into the submarine nuclear reactor or nuclear weapon, and exercises its discretion by seeking "letters of comfort" from CNNRP or NWR as the Competent Authority where appropriate.

Recognising the potential for duplicate and possibly conflicting requirements to be placed on commercial companies, since the formation of CNNRP in April 1999, NII and CNNRP have introduced and maintain a series of dialogues and exchanges to share information and monitor the ongoing activities of both organisations. These include regular meetings (usually monthly) at the respective site inspector and assessor levels, joint attendance at key stakeholder meetings, twice yearly review meetings chaired jointly by CNNRP and the NII Defence Division Deputy Chief Inspector, and annual meetings between the NII Chief Inspector and the Chairman of the Defence Nuclear Safety Board. At a working level, on matters of common interest and concern, inspections are jointly conducted and a single response given to the licensee/authorisee. In a similar manner, responses to safety cases submitted for assessment are carefully co-ordinated. These regular meetings and the structured joint NII and CNNRP management oversight of the activities has engendered a considerable degree of co-operation based on practices and procedures developed for the D154 project at Devonport. This joined up approach seeks to ensure that best use is being made of the complementary civil and naval nuclear regulatory regimes and is now applied across all MoD sites. A key element of this is the development of specific regulatory strategies for major projects, which will cover for example, communication framework, allocation of responsibilities, and standards.

A key part of this joined up approach which builds on the lessons learned on the D154 project is early involvement of the Regulators in the concept phase which then gives the duty holder early confidence that the option they are developing is conceptually correct from a nuclear safety point of view. They will still have to demonstrate that the detailed design is ALARP. This approach should also result in a more cost effective design, with safety built into the project rather than bolted on.

The first NWR was appointed in May 2002, and was formally empowered across the nuclear weapons programme in November 2003. The NII relationship with the NWR

is still in its infancy but is evolving along similar lines to that already established with CNNRP.

The experience, culture and responsibilities of the two organisations (NII and MoD internal Regulators) complement each other. On their own, neither organisation has sufficient knowledge and background to enable informed judgements to be made on the balance of safety and military necessity across the full range of operational and contractorised activity.

Not with standing the close co-operation between NII and CNNRP/NWR outlined above, both hold bipartite meetings at various levels with licensee/authorisees to retain appropriate independence and in the case of NII to exercise their statutory responsibilities. These bipartite meetings will include separate annual review meetings between the Deputy Chief Inspector, NII Defence Division and Company Chief Executives and CNNRP/NWR and Company Chief Executives and with naval base commanders and other MoD operators.

**Conclusion**

NII and CNNRP/NWR have distinct but complementary roles. Considerable success has been achieved by NII and CNNRP/NWR in developing a joined up and effective working relationship to ensure that consistent requirements are placed on the duty holder, which avoid significant duplication. The experience gained at Devonport has been used to further develop our joined up working arrangements and these arrangements are now being applied across all MoD nuclear sites.

**ANNEX 1**

This is the 3 Acrobat files which are attached separately.

ANNEX 2

**Letters of Understanding between NII/CNNRP and NII/NWR respectively.**

**LETTER OF UNDERSTANDING**

**between**

**Her Majesty's Nuclear Installations Inspectorate**
**and**

**MoD's Chairman Naval Nuclear Regulatory Panel**

**on their**

**RESPECTIVE ROLES AND RESPONSIBILITIES IN THE NAVAL NUCLEAR PROPULSION PROGRAMME**

## SCOPE

1. This Letter of Understanding describes the principles of the working level relationship between HSE's Nuclear Installations Inspectorate (NII) and Chairman, Naval Nuclear Regulatory Panel (CNNRP). It should be read in conjunction with the General Agreement, in particular Annex B on the Additional Arrangements for Specified MoD and Defence-Related Nuclear Sites, which also applies to the arrangements covered here.

## INTRODUCTION

2. The Naval Nuclear Propulsion Programme (NNPP) encompasses all phases of the acquisition, operation, support and disposal of the nuclear reactors which power the Royal Navy's submarines. Safety of the reactors and supporting facilities is of paramount importance and the Secretary of State for Defence (SofS) is answerable to Parliament for the nuclear and radiological safety of the NNPP.

3. The legal situation relating to the safety of the NNPP is complex. On all Sites, the regulation of nuclear and radiological safety in accordance with the legislation identified in paragraph 2 of Annex B to the General Agreement is the duty of NII. Within NII a Deputy Chief Inspector has been appointed with specific responsibility for defence related nuclear activities.

4. However, in some cases this legislation does not apply to NNPP activities or exemptions may be provided. Where legislation does not apply, the SofS's policy is that MoD's standards and arrangements will be, so far as is reasonably practicable, at least as good as those required by legislation. Therefore, MOD has appointed CNNRP as its regulator for the NNPP, with responsibility for establishing and maintaining these standards and arrangements for the NNPP, and for providing advice and assurance to SofS that they are being adhered to.

5. A nuclear reactor comprised in a means of transport does not require a licence under the NIA. NII recognises CNNRP as the competent authority for the Naval Reactor Plant (NRP) and CNNRP will, on request, provide assurance and information, as appropriate, to the NII on issues related to the NRP.

## PRINCIPLES OF THE RELATIONSHIP

6. The NII and CNNRP agree, by means of this Letter of Understanding, that they will through consultation operate a system which ensures complete and seamless oversight of all NNPP activities. They agree:

   i. that they will share information provided to them by operators (MoD and commercial organisations);

   ii. that every endeavour will be made to jointly determine and agree any action to be taken as a consequence of the information provided, and thereby minimise the impact of "dual regulation" on the sites;

   iii. to take all reasonable steps in deciding which organisation should take any action based on the powers available to each.

7. A representative, but not necessarily complete, list of interface areas and typical working arrangements is at Annex A. In the event that issues arise outside these areas, the principles enunciated above will apply, and CNNRP and NII's Deputy Chief Inspector (Defence Related Nuclear Activities) will agree a course of action.

## REVIEW ARRANGEMENTS

Signed

B. J. Furness

Mr J Furness
DCI, Defence Related Nuclear Activities

Date 6/3/03

Signed

P. Hurford.

P G Hurford OBE
Commodore Royal Navy
Chairman, Naval Nuclear Regulatory Panel

Date 3 March 03

**ANNEX A to Letter of Understanding between NII and CNNRP on their Respective Roles and Responsibilities in the NNPP**

## INTERFACE AREAS AND TYPICAL WORKING ARRANGEMENTS

| INTERFACE AREA | WORKING ARRANGEMENTS |
|---|---|
| Inspection Plans | NII and CNNRP agree to share information on inspection programmes. The intent is to provide the most effective coverage and to ensure that areas of significant risk are targeted. |
| Assessment | NII and CNNRP agree to share information on safety documentation assessment plans. The intent is to provide the most effective assessment coverage and to ensure that areas of significant risk are targeted. |
| Joint Visits | Where appropriate and beneficial NII and CNNRP agree to conduct joint site visits where there is a shared and mutual interest. |
| Inspection Findings | NII and CNNRP agree to share information on the outcome of inspections, regardless of lead. |
| Assessment Findings | NII and CNNRP agree to share information from the assessment of safety documentation. |
| Events/Incidents | NII and CNNRP agree to share information on incident notifications and outcomes that occur as a result of any relevant nuclear or radiological incident/event on an NNPP site or vessel. |
| Review and Testing of Emergency Plans | NII and CNNRP agree to share information on the reviews of operators emergency plans. CNNRP will consult with NII on proposed dates, scope and scale of scenarios for the testing of emergency plans.<br>The lead on feedback to an operator following the assessment of testing of an on-site emergency plan will be NII for licensed sites and CNNRP for other sites. CNNRP and NII will support the lead organisation, as appropriate.<br>It is agreed that assessment comments by both parties will be included in the overall evaluation and formal report of the operator's performance.<br>NII will lead in all cases for the assessment of Local Authority testing of off-site emergency plans. |
| Modifications, Organisational and Material Changes | NII and CNNRP agree to share information on applications and progress relating to significant modifications and organisational changes. Such changes will typically come within the scope of Licence Conditions, Authorisation Conditions and Regulation 5 of REPPIR. |
| Local Liaison Committee (LLC) | NII and CNNRP agree to provide each other with draft copies of the Site Inspector's quarterly LLC report for comment prior to publication. |
| Enforcement Action | NII agree to keep CNNRP informed of any relevant proposed enforcement action at any NNPP site. CNNRP agree to keep NII informed of any relevant sanctions to be imposed on any NNPP site or vessel. |

This list is representative and is not necessarily complete.

**LETTER OF UNDERSTANDING**

**between**

**Her Majesty's Nuclear Installations Inspectorate, Division 3**

**and**

**MoD's Nuclear Weapon Regulator**

**on their**

# RESPECTIVE ROLES AND RESPONSIBILITIES IN THE NUCLEAR WEAPONS PROGRAMME

## SCOPE

1. This Letter of Understanding describes the principles of the working level relationship between HSE's Nuclear Installations Inspectorate (NII) and MoD's Nuclear Weapon Regulator (NWR). It should be read in conjunction with the General Agreement, in particular Annex B on the Additional Arrangements for Specified MoD and Defence-Related Nuclear Sites, which also applies to the arrangements covered here.

## INTRODUCTION

2. The Nuclear Weapon Programme (NWP) encompasses all phases of the acquisition, operation, support and disposal of the United Kingdom's nuclear weapons. Safety of the weapons and supporting facilities is of paramount importance and the Secretary of State for Defence (SofS) is answerable to Parliament for the nuclear and radiological safety of the NWP.

3. The legal situation relating to the safety of the NWP is complex. On all Sites, the regulation of nuclear and radiological safety in accordance with the legislation identified in paragraph 2 of Annex B to the General Agreement is the duty of HSE - NII. Within NII a Deputy Chief Inspector has been appointed with specific responsibility for defence related nuclear activities.

4. However, in some cases this legislation does not apply to NWP activities or is disapplied or exemptions may be provided. Where legislation does not apply, the SofS's policy is that MoD's standards and arrangements will be, so far as is reasonably practicable, at least as good as those required by legislation. MoD has appointed NWR as its regulator for the NWP, with responsibility for establishing and maintaining these standards and arrangements for the NWP, and for providing advice and assurance to SofS that they are being adhered to.

5. In accordance with the AWE Act 1991 and Amendment Order 1997, the conditions attaching to a licence under the NIA do not apply in as far as they affect the design of a nuclear device. NII recognises NWR as the competent authority for nuclear devices

and NWR will, on request, provide assurance and information, as appropriate, to the NII on issues related to nuclear devices.

**PRINCIPLES OF THE RELATIONSHIP**

6. The NII and NWR agree, by means of this Letter of Understanding, that they will operate a system of joint regulation of NWP activities. Joint regulation means that a duty-holder produces information once only on a given topic and receives one response from one regulator, which incorporates the judgement of the other as appropriate. For each component of the activity to be regulated it will be clear to the duty-holder which is the lead regulator. In order to achieve this, they agree:

i) that they will encourage and expect duty-holders (MoD and commercial organisations) to provide common information simultaneously;

ii) that they will endeavour to jointly determine any action to be taken as a consequence of the information provided, or indicate that it may be determined solely by the other;

iii) that they will decide which regulator should lead in any matter and that the other will provide judgements in his area of competence to be incorporated in any response to the duty-holder;

iv) NII agree to keep NWR informed of any relevant proposed enforcement action at any NWP site. NWR agree to keep NII informed of any relevant sanctions to be imposed on any NWP site or vessel.

7. A representative, but not necessarily complete, list of interface areas include Inspection Plans; Assessment; Joint Visits; Inspection and Assessment Findings; Events/Incidents; Review and Testing of Emergency Plans; Modifications,

8. Organisational and Material Changes and Local Liaison Committee. Associated working arrangements will be agreed as necessary during the ongoing development of the relationship. In the event that issues arise outside these areas, the principles enunciated above will apply, and NWR and NII's Deputy Chief Inspector (Defence Related Nuclear Activities) will agree a course of action.

**REVIEW ARRANGEMENTS**

8. This Letter of Understanding has been agreed by NII and NWR who will jointly review it according to need.

| | |
|---|---|
| Signed | Signed |
| Mr J Furness<br>DCI, Defence Related Nuclear Activities | Mr A G Moore<br>Nuclear Weapon Regulator |
| Date December 2003 | Date December 2003 |

**CHAPTER 8-1 ANNEX B**
**INTERFACE BETWEEN ENFORCING AUTHORITIES THE MOD AND OTHER ORGANISATIONS**
**CONTENTS**



**ADDITIONAL ARRANGEMENTS FOR SPECIFIED MOD AND MOD RELATED NUCLEAR SITES SCOPE**

1 This Annex covers defence related nuclear activities undertaken on the sites listed in Appendix 1
(hereafter called Site(s)). It should be read in conjunction with the General Agreement, which also
applies to the activities covered here.

**INTRODUCTION**

2 This annex sets down the arrangements additional to the MOD/HSE Agreement for HSE activities including inspection, assessment and audit (hereafter called "inspection") in relation to nuclear and radiological hazards against the requirements of the:

2.1 Health and Safety at Work etc Act 1974 – HSWA;
2.2 The Nuclear Installations Act 1965 (as amended) – NIA;
2.3 The Ionising Radiations Regulations 1999 – IRR;
2.4 The Radiation (Emergency Preparedness and Public Information) Regulations 2001 – REPPIR;

2.5 The Nuclear Reactors (Environmental Impact Assessment of Decommissioning) Regulations 1999 – NR(EIAD)R;

2.6 The Atomic Weapons Establishment Act 1991 & Amendment Order 1396/1997 – AWE Act

3 The Secretary of State for Defence is answerable to Parliament for the nuclear and radiological safety of all defence related nuclear activities.

4 On all Sites, the regulation of nuclear and radiological safety in accordance with the legislation identified in paragraph 2 is the duty of HSE's Nuclear Installation Inspectorate (NII). Within NII a Deputy Chief Inspector has been appointed with specific responsibility for defence related nuclear activities.

5 In some cases the legislation in paragraph 2 does not apply to defence related nuclear activities or it may be otherwise disapplied or exemptions may be provided. Therefore, MOD has appointed internal regulators for the naval nuclear propulsion and nuclear weapons programmes[1]. The working level relationship between NII and the MOD regulators may be further clarified by letters of understanding.

**APPLICATION OF STATUTORY REQUIREMENTS TO DEFENCE ACTIVITIES**

**Health and Safety at Work etc Act**

6 The HSWA applies to all employers including MOD. Inspectors from HSE's NII are appointed under section 19(1) of the HSWA and as such have all the powers of HM Inspectors of Health and Safety provided by the HSWA. In the use of these powers on the Sites that they inspect, they will follow the requirements of the General Agreement, and other annexes unless modified or otherwise covered by
this annex.

**Nuclear Installations Act**

7 Where the MOD, a Crown Department, is in direct control of relevant nuclear activities, the NIA 1965 does not apply. However, the NIA does apply where a commercial organisation, under contract to MOD, is in control of relevant nuclear activities even if working with MOD-owned assets, unless a further legal exemption exists (see below).

8 **Nuclear Weapons** The AWE Sites are subject to the requirements of the NIA by virtue of the AWE Act. However, the licence conditions attached to the Site licence shall not apply to the extent that such conditions affect the design of a nuclear device[2], or any other device (other than a nuclear reactor) intended to simulate[3] the properties of a nuclear device (see Appendix 2 to this Annex). Nuclear devices are also exempt from licensing requirements when they are at other Sites. For such activities the HSWA, IRR and REPPIR apply as detailed in this annex.

9 **Submarine Reactors** The licensing requirements of the NIA do not apply to the use of a site for activities involving nuclear reactors "comprised in a means of transport" (see Section 1(1)(a) of the NIA). This is interpreted as exempting from licensing requirements only activities involving "completed" nuclear reactors[4] operating or under commissioning in a submarine. For such activities HSWA, IRR and REPPIR apply as detailed in this annex.

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10 **Bulk Storage of Depleted Uranium** Bulk storage of natural uranium is exempt from the requirements of the NIA – see the definition of "excepted matter" in Section 26(1) of the NIA. For the purposes of this annex it is agreed that bulk storage of "depleted uranium metal and alloys" shall be treated similarly where its total radioactivity and fissile material content is no greater than those of an equivalent mass of natural uranium. For such activities HSWA, IRR and REPPIR apply as detailed in this annex.

11 **Emergency Arrangements** Where a licensee is reliant upon assistance from MOD in its emergency arrangements, NII accepts that the licensee can take due account of such arrangements in meeting the requirement of licence conditions provided NII is satisfied with the adequacy of MOD assistance.

12 **Licences, Approvals, Consents, Agreement, etc** MOD recognises the right of NII to issue Licences, and any Approvals, Consents, Directions, Agreements, Notification and Specifications under nuclear site licences to licensees without reference to MOD. The NII and the responsible MOD operations officer[5] shall liaise in respect of MOD contractual approvals of licensees operations and the implications of issuing of Licences, Approvals, etc. If MOD notifies NII that it has concerns about a proposed regulatory activity, then NII undertakes to inform MOD[6] before issuing any such Licence, Approvals, etc in adequate time to allow a response unless any delay involved would be detrimental to the regulatory process.

**Ionising Radiations Regulations and Radiation (Emergency Preparedness & Public Information) Regulations**

13 IRR and REPPIR apply to all relevant activities on the Sites.

14 **Exemption from IRR or REPPIR** Where MOD proposes to seek a Secretary of State for Defence exemption[7] from aspects of the IRR or REPPIR as is allowed by Regulations 40(2) and 40(5) of IRR or Regulations 18(2) and 18(3) of REPPIR, MOD will:

14.1 Notify HSE of the proposal and its circumstances and any alternative arrangements;

14.2 Give HSE the opportunity to comment before a decision is reached;

14.3 Notify HSE of the decision on the proposal, its period of applicability and any other conditions attached to the decision; and

14.4 Notify HSE when the decision is rescinded;

15 Where urgent and vital defence operations are concerned, the above requirements should be followed as far as is reasonable given the circumstances prevailing.

**Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations**

16 Regulation 3(3) of NR(EIAD)R exempts projects "serving national defence purposes". Notwithstanding this, and in accordance with the Secretary of State for Defence's Policy Statement (see main Agreement), MOD expects to apply the processes called for in NR(EIAD)R where appropriate. The relevant MOD regulator will conduct the consultation process (Regulation 8 etc.). The NII agrees to provide formal comment, as a consultation body, where appropriate.

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**Future Legislation**

17 MOD and HSE will form a working group to review this annex in the light of any relevant new legislation that is made.

**GENERAL**

**Access to Sites**

18 General access to Sites shall follow the procedures in Annexes A and C. If access is required to a submarine, the Head of the Establishment shall arrange any necessary agreement from the Commanding Officer of the submarine.

19 MOD undertakes to ensure that NII inspectors are provided with personnel safety information,particularly doses incurred while on a MOD-controlled Site, in a form and at a time that does not impede their access or egress from the Site.

20 Any difficulties in relation to access should be referred through normal command and management chains for resolution.

**Access to Information**

21 Information is required by the NII:

21.1 From the licensee of a licensed Site to justify the safety of the operation on the licensed Site to demonstrate compliance with the requirements of the conditions attached to the Site licence, the HSWA and other appropriate legislation such as IRR and REPPIR.

21.2 From MOD associated with its duties under the HSWA, IRR and REPPIR and in circumstances where the MOD considers it appropriate to adopt the procedures laid down in the NR(EIAD)R (see Para 16):

21.3 From other employers whose employees may be working with ionising radiation on the Sites.

22 MOD undertakes to facilitate the ability of the licensee and other employers on the sites covered by this agreement to fulfil their duties by providing them with adequate and timely information.

23 In particular, MOD will provide, cause or allow to be provided, sufficient technical and other safety related information to the licensee or other employer, which may then be made available to HSE, to enable the licensee to comply with the nuclear site licence conditions, IRR and REPPIR in respect of activities:

23.1 On the nuclear license site; or

23.2 Which are off the licensed site but which could impinge upon its safety.

24 HSE will ensure that appropriate arrangements are in place to handle information classified under the Official Secrets Acts. All such information will be excepted from public availability under the terms of REPPIR regulation 16(6).

25 HSE's NII inspectors have the right to obtain clarification of the information provided (except where MOD itself may be constrained in obtaining US-sourced information under the terms of the 1958 Agreement and/or Polaris Sales Agreement[9]). Where this relates to information on reactor plant or nuclear device design or operation or other matters out with the control of the licensee, then clarification shall be obtained from the operator, facilitated where necessary by the MOD Regulator, keeping the licensee suitably informed of the request.

26 However, in gaining access to such information NII will not seek to influence the design of nuclear submarine reactors[10], nuclear devices[11] or Strategic Weapon Systems provided through the Polaris Sales Agreement. NII will neither seek to influence the operational deployment of such items nor activities[12] associated with their operational deployment. Amplification of this understanding in respect of nuclear devices is provided in Appendix 2 to this Annex. When using such information in making technical assessments, NII acknowledge that their Safety Assessment Principles for Nuclear Plants may not apply. MOD has Safety Principles and Safety Criteria that it applies to the naval nuclear propulsion and nuclear weapons programmes.

**Reporting of Incidents**

27 The NII shall be informed of safety related incidents[13] that occur on the Sites in accordance with the requirements of the appropriate legislation. NII shall consult with MOD before passing any information concerning such an incident outside of NII and only provide detailed information on the circumstances surrounding the incident with MOD's agreement. MOD Ministers shall discharge their responsibilities by reporting to Parliament incidents affecting the Sites[14].

**Defence Nuclear Accident Response**

28 This section provides information on the role of NII in the response to a defence nuclear accident wherever it may occur in Great Britain.

29 At licensed Sites, MOD undertakes (see Para 11) to provide elements of the accident response organisation including a Military or MOD Co-ordinating Authority (MCA). MOD is the Lead Government Department (as defined in the national guidelines "Dealing with Disaster") for all defence nuclear accidents.

30 In the event of a defence nuclear accident it may be anticipated that the public, pressure groups, the media and Parliament might question the HSE. They would be looking for opinion and comment from the health and safety regulator. It is, therefore, in the interests of both NII and MOD to ensure that information about the accident, its circumstances and the response is shared. In addition, the NII's statutory responsibilities give it the right to receive certain information needed in order to fulfil its functions:

30.1 To ensure that appropriate health and safety legislative requirements are being adhered to;

30.2 To inform any subsequent investigations or legal actions;

30.3 To provide independent information / advice (to senior managers in HSE, relevant authorities and the Government).

31 The sharing and provision of information may take place at several levels.

32 As the Lead Government Department, MOD is responsible for co-ordinating the central Government response. This is achieved primarily through the Nuclear Accident Information and Advisory Group (NAIAG). As the Government's principal source of independent health and safety information/advice, the NII would be invited to be a member of the NAIAG.

33 In accordance with "Dealing with Disaster", the response to any accident would be led locally by the emergency services and local authorities. It is anticipated that a significant defence nuclear accident (with the potential for the release of radioactive material) would require the convening of a Strategic Coordinating Group (SCG) by (initially) the Chief Constable of the police force local to the incident. MOD response at the SCG would be led by a MCA. It is expected that the NII would take up a seat at the SCG. In addition to acquiring information NII would be available to give independent advice on the protection of the public and workers and of the conduct of activities being undertaken at the accident site to control the accident. If the accident involved assets or sites controlled by a licensee, the NII would be able to provide additional advice to the SCG about the conduct of the licensee.

34 In accordance with HSE's responsibilities under the HSWA, the NII would require access to information and to the accident site both during the accident phase and in assisting the investigating authorities (of which they may be more than one) with any subsequent investigation. Arrangements for such access are to be made in accordance with this Annex.

**LIAISON AND RESOLUTION OF ISSUES**

**High Level Liaison**

35 An annual meeting will be held, co-chaired by the Chief Inspector of Nuclear Installations and the Chairman of the Defence Nuclear Safety Board (or by agreement their nominees), to liaise on relevant matters, including the workings of this Annex, and to resolve any outstanding issues. This meeting will be attended by the NII DCI with responsibility for defence related sites, the HSE SPD, the MOD internal regulators and the MOD Chief Environment & Safety Officer.

**Regulatory Liaison**

36 At least annually a meeting will be held between the NII DCI for defence related sites and the relevant MOD internal regulator (or by agreement their nominees). These meetings will consider regulatory liaison, and where appropriate, the detailed working of this Annex. The meeting will consider issues, which cannot be resolved by normal regulatory liaison means.

**Senior Operational Liaison**

37 An annual meeting will be held, co-chaired by the Chief Inspector of Nuclear Installations and the Chief Executive Warship Support Agency to liaise on operational issues, including the application of thisannex, and to resolve any outstanding issues. This meeting will be attended by the NII DCI for defence,other relevant MOD operations officers and by the MOD internal regulators.

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**Operational Liaison**

38 On a frequency and at a level, to be agreed by the parties involved, operational liaison meetings will be held between the NII and relevant MOD operations officers. Such meetings, which will normally be attended by the relevant MOD internal regulator, will review operational matters associated with the inspection and assessment of the activities covered by this annex including the resolution of issues that cannot be resolved by the appropriate NII Inspector and MOD's operations office.

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FOOTNOTE

1 The Chairman, Naval Nuclear Regulatory Panel (CNNRP) for the naval nuclear propulsion programme and the Nuclear Weapon Regulator (NWR) for the nuclear weapons programme. These regulators are empowered by the Secretary of State for Defence though the Chairman of the Defence Nuclear Safety Board.

2 The term nuclear 'device' is taken to mean all those devices whose design intent is to be able to produce an uncontrolled nuclear reaction.

3 The installation or operation of any nuclear reactor is a licensable activity and pulsing reactors may be used to simulate some properties of "completed" nuclear devices. It is intended that these will be treated as not being exempt.

4 A nuclear reactor is "complete" when it is in compliance with its safety case for its commissioning or normal operation.

5 The term "MOD operations officer" denotes the relevant duty holder (including, where appropriate, the person managing a contract) within MOD and distinguishes him/her from the MOD regulator.

6 The responsible MOD operations officer and the relevant MOD regulator.

7 Such proposals would be in the interest of national security or because suitable alternative arrangements have been agreed.

8 "Information" in this context means adequate information to define the hazard, justify the risks and demonstrate adequate management of the risks. Thus, it will include safety justifications, safety cases, and Hazard Identification & Risk Evaluation (HIREs) under REPPIR.

9 The "1958 Agreement" is the "Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the United States of America for co-operation on uses of atomic energy for mutual defence purposes". The "Polaris Sales Agreement" is the "Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government and the Government of the United States of America dated 6 April 963".

10 The term nuclear submarine reactor is taken to be the same as that covered by nuclear steam raising plant.

11 This includes activities, excluding nuclear reactor operation, intended to simulate the properties of nuclear devices.

12 In relation to the power range testing of nuclear submarine reactors this means that HSE inspectors will not seek to change the types of test necessary for ensuring their operability but may seek confirmation that adequate arrangements are in place to minimise the risk to the public and employees.

13 A "safety related incident" is taken to mean incidents, which may affect the safety of personnel on the Sites or the public or attract reasonable public concern. It does not include incidents that solely relate to the operability of the nuclear submarine or nuclear device.

14 This is not intended to curtail or restrain NII inspectors from carrying out investigation, reporting on their findings, etc in accordance with their powers under the HSWA.

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**CHAPTER 8-1 ANNEX B APPENDIX 1**
**ADDITIONAL ARRANGEMENTS FOR SPECIFIED MOD AND MOD RELATED NUCLEAR SITES**
**LIST OF SITES COVERED BY ANNEX B TO THE GENERAL AGREEMENT BETWEEN MOD AND**
**HSE**

- AWE Aldermaston *
- AWE Burghfield *
- HM Naval Base, Clyde (Faslane and Coulport)
- HM Naval Base, Devonport
- Vulcan Naval Reactor Test Establishment, Dounreay
- Devonport Royal Dockyard *
- Rosyth Royal Dockyard *
- BAE SYSTEMS Marine Limited, Barrow *
- Rolls Royce Marine Power Operations Limited, Derby *
- British Nuclear Fuels Limited, Sellafield * (in respect of MOD used fuel & SNM)
- Z-berths in Great Britain

* Sites licensed under the NI

**CHAPTER 8-1 ANNEX B APPENDIX 2**
**ADDITIONAL ARRANGEMENTS FOR SPECIFIED MOD AND MOD RELATED NUCLEAR SITES REGULATION OF OPERATIONS AT AWE SITES**

*A Letter of Understanding in respect of the Regulation of Operations at AWE Sites was signed by Chief Inspector NII and the then DG(Nuc) on 16 June 1997. This appendix contains the text of that letter,suitably updated, for organisational and legislative changes.*

1 The purpose of this letter is to establish a mutually agreed understanding and interpretation of the disapplication of the use of the conditions attached to the Nuclear Site Licence granted under the provisions of the NIA. It is in addition to Annex B of the General Agreement between MOD and HSE, which is amplified by this letter.

2 It is agreed that the intent of the wording of paragraph 6(1) of the Schedule to the AWE Act is to exclude HSE from consideration of the design of a nuclear device. The following points are agreed as an aid in identifying the operations where design issues may arise.

2.1 Operations involving a nuclear device when it incorporates fissile and explosive material. These specifically include all activities on a nuclear warhead from the point in the assembly process at which the explosive components are brought into proximity with the fissile components, until the point in disassembly at which the explosive components are separated from the fissile components, and removed from the assembly facility.

2.2 Operations intended to simulate the properties of nuclear devices. These specifically include all experiments in which fissile material and explosive material (or simulated explosive material) are incorporated in an experimental assembly. It also includes experiments where energy is applied to fissile materials in order to investigate processes, which occur in a nuclear device.

3 It is understood that, irrespective of the disapplication of the use of licence conditions where they affect the design of a nuclear device, AWE operations are legally subject to NII inspection in respect of the HSWA and regulations made under the Act.

4 In respect of NII's non consideration of nuclear device design issues, the following points of agreement apply:

4.1 MOD is implementing and will maintain an adequate oversight arrangement, which considers the adequacy of the safety assessment for nuclear device related activities. This includes design considerations and the standards set for process safety controls.

4.2 MOD undertakes to ensure that the nuclear site licensee considers carefully any comments given by NII that are intended to improve nuclear safety in areas of their interest but which may affect nuclear device design matters.

4.3 NII will liaise with the MOD's Nuclear Weapon Regulator to ensure the boundaries between MOD and NII assessments are defined and understood.

4.4 NII will not seek information on the design of nuclear weapons, which is not relevant to radiological safety.

4.5 NII undertakes not to challenge or seek changes in the design of nuclear weapons including materials used in their construction.

4.6 A HIRE based on the requirements of REPPIR will be produced to summarise the hazards, risks and consequences associated with possible accidents involving nuclear devices as an input to the assembly process safety case and the facility safety case.

4.7 Any such HIRE will not include detailed information on the design of nuclear devices nor will it provide a detailed analysis of the likelihood of events, which could lead to accidental initiation of explosives in the device. It will include, however, an identification and specification of the system and controls, which are required to avoid accidents/incidents, and identify the measures taken to mitigate the consequences of any accidents.

4.8 NII acknowledges that its published Safety Assessments Principles for Nuclear Plants may not be appropriate for certain matters consequent on the design of nuclear devices.

4.9 NII retains the right to investigate fully any accident/incident on AWE Sites.