## **ANNEX M (ANNEX B)**

# ADDITIONAL ARRANGEMENTS FOR SPECIFIED MOD AND DEFENCE-RELATED NUCLEAR SITES

#### **GENERAL**

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:
  - a. Health and Safety at Work etc Act 1974 HSWA;
  - b. the Nuclear Installations Act 1965 (as amended) NIA;
  - c. the Ionising Radiations Regulations 1999 IRR;
  - d. the Radiation (Emergency Preparedness and Public Information) Regulations 2001 REPPIR;
  - e. the Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations 1999 (as amended) NR(EIAD)R;
  - f. 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 carried out by HSE's Nuclear Directorate (ND). Within ND a Deputy Chief Inspector has been appointed with specific responsibility for defence-related nuclear activities. Other HSE inspectors may be required to conduct other inspections or investigations on such sites in accordance with Annex A. In these cases the inspectors will seek advice from HSE's ND
- 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. In accordance with the Secretary of State (SofS) for Defence's Safety, Health, Environmental Protection and Sustainable Development Policy Statement departmental arrangements have been introduced which include the appointment of a MOD regulator for nuclear and radiological safety in the naval nuclear propulsion and nuclear weapons programmes<sup>1</sup>. The working level relationship between ND and MOD regulators may be further clarified by letters of understanding.

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<sup>&</sup>lt;sup>1</sup> The Defence Nuclear Safety Regulator is empowered by the Secretary of State for Defence though the Second Permanent Undersecretary and the Chairman of the Defence Nuclear Environment and Safety Board.

#### **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 ND 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).
  - a. <u>Nuclear Weapons.</u> 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<sup>2</sup>, or any other device (other than a nuclear reactor) intended to simulate<sup>3</sup> 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.
  - b. <u>Submarine Reactors.</u> 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<sup>4</sup> operating or under commissioning in a submarine. For such activities HSWA, IRR and REPPIR apply as detailed in this annex.
  - c. <u>Bulk Storage of Depleted Uranium.</u> 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.
  - d. <u>Emergency Arrangements.</u> Where a licensee is reliant upon assistance from MOD in its emergency arrangements, ND accepts that the licensee can take due account of such arrangements in meeting the requirement of licence conditions provided ND is satisfied with the adequacy of MOD assistance.
  - e. <u>Licences, Approvals, Consents, Agreement, etc.</u> MOD recognises the right of ND to issue Licences, and any Approvals, Consents, Directions, Agreements, Notification and Specifications under nuclear site licences to licensees without reference to MOD. The ND and the responsible MOD operations officer<sup>5</sup> shall liaise in respect of MOD contractual approvals of licensees operations and the implications of issuing of Licences, Approvals, etc. If MOD notifies ND that it has concerns about a proposed regulatory activity, then ND undertakes to inform

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<sup>&</sup>lt;sup>2</sup> The term nuclear 'device' is taken to mean all those devices whose design intent is to be able to produce an uncontrolled nuclear reaction.

<sup>&</sup>lt;sup>3</sup> 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.

<sup>&</sup>lt;sup>4</sup> A nuclear reactor is "complete" when it is in compliance with its safety case for its commissioning or normal operation.

<sup>&</sup>lt;sup>5</sup> 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.

MOD<sup>6</sup> 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

- 8. IRR and REPPIR apply to all relevant activities on the Sites.
  - a. <u>Exemption from IRR or REPPIR</u>. Where MOD proposes to seek a Secretary of State for Defence exemption<sup>7</sup> 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:
    - notify HSE of the proposal and its circumstances and any alternative arrangements;
    - ii. give HSE the opportunity to comment before a decision is reached;
    - iii. notify HSE of the decision on the proposal, its period of applicability and any other conditions attached to the decision; and
    - iv. notify HSE when the decision is rescinded;
- 9. 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

- 10. NR(EIAD)R (the regulations) apply when a dismantling or decommissioning project is carried out to a nuclear power station or a nuclear reactor where that dismantling or decommissioning project began after the regulations came into force. Where there are changes or extensions to a dismantling or decommissioning project which began before the regulations came into force but which changes or extensions take effect after the coming into force of the regulations then they may apply to that project as changed or extended if the changes or extensions are capable of having significant adverse effects on the environment. They do not apply to defuelling, removal of neutron absorption cartridges or control rods, where this is in accordance with normal operational procedures).<sup>8</sup>
  - a. <u>Exemption from NR(EIAD)R</u> Regulation 3(3) of the regulations, as amended in 2006, exempts projects "serving national defence purposes where the Secretary of State is of the opinion that application of these Regulations would have an adverse effect on the defence purposes of the project". MOD will follow the procedure set out in paragraph 14 above when it proposes to seek a SofS exemption under this Regulation. Notwithstanding any such exemption, and in accordance with the SofS for Defence's Safety, Health, Environmental Protection and Sustainable Development Policy Statement, MOD expects to apply the processes called for in the regulations where appropriate to any exempted project. The MOD regulator will conduct the consultation process (Regulation 8 etc.). The ND agrees to provide formal comment, as a consultation body, where appropriate.

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<sup>&</sup>lt;sup>6</sup> The responsible MOD operations officer and the MOD regulator.

<sup>&</sup>lt;sup>7</sup> Such proposals would be in the interest of national security or because suitable alternative arrangements have been agreed.

<sup>&</sup>lt;sup>8</sup> NR(EIAD)R do not apply to the removal of fuel elements, neutron absorption cartridges or control rods carried out in accordance with normal operating procedures, see paragraph 5 of HSE's guidance on NR(EIAD)R (www.hse.gov.uk/nuclear/index.htm)

#### **FUTURE LEGISLATION**

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

#### **ACCESS TO SITES**

- 12. 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.
- 13. MOD undertakes to ensure that ND 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.
- 14. Any difficulties in relation to access should be referred through normal command and management chains for resolution.

#### **ACCESS TO INFORMATION**

- 15. Information<sup>9</sup> is required by the NII:
  - a. 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.
  - b. 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 0):
  - from other employers whose employees may be working with ionising radiation on the Sites.
- 16. 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.
- 17. 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 ND, to enable the licensee to comply with the nuclear site licence conditions, IRR and REPPIR in respect of activities:
  - a. on the nuclear license site; or
  - b. which are off the licensed site but which could impinge upon its safety.
- 18. ND 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).
- 19. ND 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

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<sup>&</sup>lt;sup>9</sup> "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.

Agreement and/or Polaris Sales Agreement<sup>10</sup>). 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.

20. However, in gaining access to such information ND will not seek to influence the design of nuclear submarine reactors<sup>11</sup>, nuclear devices<sup>12</sup> or Strategic Weapon Systems provided through the Polaris Sales Agreement. ND will neither seek to influence the operational deployment of such items nor activities<sup>13</sup> associated with their operational deployment. Amplification of this understanding in respect of nuclear devices is provided in Appendix 2 to this Annex.

#### REPORTING OF INCIDENTS

21. The NII shall be informed of safety related incidents<sup>14</sup> that occur on the Sites in accordance with the requirements of the appropriate legislation. ND shall consult with MOD before passing any information concerning such an incident outside of ND 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<sup>15</sup>.

#### **DEFENCE NUCLEAR ACCIDENT RESPONSE**

- 22. This section provides information on the role of ND in the response to a defence nuclear accident wherever it may occur in Great Britain.
- 23. At licensed Sites, MOD undertakes (see para d) to provide elements of the accident response organisation including an 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.
- 24. 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 ND and MOD to ensure that information about the accident, its circumstances and the response is shared. In addition, the ND's statutory responsibilities give it the right to receive certain information needed in order to fulfil its functions:
  - a to ensure that appropriate health and safety legislative requirements are being adhered to;

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<sup>&</sup>lt;sup>10</sup> 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 1963".

<sup>&</sup>lt;sup>11</sup> The term nuclear submarine reactor is taken to be the same as that covered by nuclear steam raising plant.

plant.

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

<sup>&</sup>lt;sup>13</sup> In relation to the power range testing of nuclear submarine reactors this means that ND 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.

<sup>&</sup>lt;sup>14</sup> 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.

<sup>&</sup>lt;sup>15</sup> This is not intended to curtail or restrain ND inspectors from carrying out investigation, reporting on their findings, etc in accordance with their powers under the HSWA.

- b. to inform any subsequent investigations or legal actions;
- c. to provide independent information / advice (to senior managers in HSE, relevant authorities and the Government).
- 25. The sharing and provision of information may take place at several levels.
- 26. 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.
- 27. 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 Co-ordinating 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 ND would take up a seat at the SCG. In addition to acquiring information ND 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 ND would be able to provide additional advice to the SCG about the conduct of the licensee.
- 28. In accordance with HSE's responsibilities under the HSWA, the ND 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**

29. An annual meeting will be held, co-chaired by the Chief Inspector of Nuclear Installations and the Chairman of the Defence Nuclear Environment and 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 ND DCI with responsibility for defence related sites, the Defence Nuclear Safety Regulator and the Safety, Sustainable Development and Continuity Division. A representative of HSE's policy function may also attend if appropriate.

#### **Regulatory Liaison**

30. At least annually a meeting will be held between the ND DCI for defence related sites and the Defence Nuclear Safety 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**

31. An annual meeting will be held, co-chaired by the Chief Inspector of Nuclear Installations and the Director General, Submarines to liaise on operational issues, including the application of this annex, and to resolve any outstanding issues. This meeting will be attended by the ND DCI for defence, other relevant MOD operations officers and by the Defence Nuclear Safety Regulator.

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# **Operational Liaison**

32. On a frequency and at a level, to be agreed by the parties involved, operational liaison meetings will be held between the ND and relevant MOD operations officers. Such meetings, which will normally be attended by Defence Nuclear Safety 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 ND Inspector and MOD's operations officers.

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