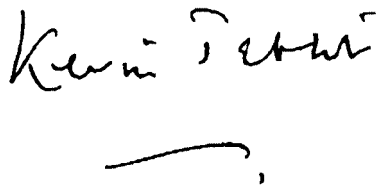
DEFENCE NUCLEAR ACCIDENT RESPONSE

JSP 471

BY COMMAND OF THE DEFENCE COUNCIL



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INTRODUCTION

It is a precept of all legislation relating to nuclear safety that planning for accident response is not a substitute for accident prevention measures: both are required. The MOD aims to prevent accidents by rigorous attention to engineering design (including the application of appropriate technical standards), management structures, project planning, operations, maintenance and disposal.

POLICY REQUIREMENT

UK statutory regulations include, *inter alia*, the requirement to have arrangements to respond in the event of an accident/incident (as defined) involving nuclear materials. The Ministry of Defence has no explicit or implied exemption from statutory regulations relating to nuclear accident response arrangements, other than where the Secretary of State grants such exemptions in the interests of national security. Where statutory regulations do not apply, for whatever reason, it is MOD policy that standards and arrangements will, in so far as is reasonably practicable, be at least as good as those required by the legislation.

Planning for nuclear accident response is undertaken in varying detail depending on the assessed probability of an accident occurring and of its resulting in a public health hazard. In addition to having a proper concern for public safety the MOD, as a Department of State, has to consider the sensitive and sometimes unique nature of its operations, the consequences of a defence nuclear accident for national defence policy and the public expectations of a Government Department. Emergency preparedness for accidents which may affect members of the public involves many external organisations, such as local authorities, other Government Departments and emergency services, some of whom have specific statutory responsibilities. Accordingly, it is essential that planning for nuclear accident response is conducted in an open manner and in conjunction with the appropriate authorities both to meet the Department's legal obligations, to provide information and for external authorities to gain confidence in the efficacy of the arrangements. This document states the MOD policy for the Nuclear Accident Response (NAR) capability.

AIM OF MOD NUCLEAR ACCIDENT RESPONSE ORGANISATION (NARO)

The aim of the MOD NARO is to ensure, in conjunction with the appropriate civil agencies, an effective response to an accident or incident, including those arising as the result of terrorist acts, involving defence nuclear assets. The key objective is to protect public health and safety.

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CHAPTER 1

DEFINITION, LANGUAGE AND RESOURCING

DEFINITION

0101. A MOD NARO, or elements of it would be generated, in accordance with the appropriate plan, in the event of a defence nuclear accident or incident. The scale or extent of the NARO will depend on the nature of the accident or incident, and will comprise both pre-designated and additional resources that may be required. The term NARO is used in this document to indicate those elements that are designated to respond to a specific event. The definitions of a defence nuclear accident or incident and the codewords to be used are at Annex 1A.

LANGUAGE

0102. A MOD NARO may comprise military personnel, MOD police, MOD civilians and defence contractors, hereafter referred to as MOD personnel. External agencies (e.g. police, fire, ambulance, local authorities and members of the public etc) will have the descriptor “civilian” where this aids identification.

0103. Within this document the term “is to” or “are to” implies a mandatory policy requirement.

RESOURCES AND FUNDING

0104. The funding, staff and equipment needed to maintain and implement nuclear accident response plans and arrangements (including cost recovery for off-site plans to meet statutory and MOD policy requirements) are to be provided by relevant duty holders and/or allocated forces as appropriate.

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CHAPTER 1 ANNEX A

DEFINITIONS AND CODEWORDS FOR DEFENCE NUCLEAR INCIDENTS AND ACCIDENTS

Ser (a)	Occurrence (b)	Definition (c)	Codeword (d)	Exercise Codeword (e)	Remarks (f)
1	Nuclear Reactor Incident	An abnormal occurrence which poses a potential threat to, or causes serious concern for, reactor plant safety, but where reasonable grounds exist for concluding that a reactor accident is not likely to occur.			Event may occur on a RN SSN, SSBN or visiting NPW or the Vulcan NRTE.
2	Nuclear Reactor Accident	An unexpected event which is likely to lead to, or has resulted in, a release of fission products external to the fuel. Reactor accidents are sub-divided into three categories of accident: (1) Category 1. An event which is likely to lead to, or has resulted in, the release of fission products from the fuel. (2) Category 2. An event which has led to a radiation hazard as the result of the release of fission products from the fuel. (3) Category 3. An event which has led to the release of fission products from the fuel to the environment outside the pressure hull.			Event may occur on a RN SSN, SSBN or visiting NPW or the Vulcan NRTE.

Ser (a)	Occurrence (b)	Definition (c)	Codeword (d)	Exercise Codeword (e)	Remarks (f)
3	Defence Nuclear Material Incident	A nuclear material incident is defined as an unplanned occurrence involving defence nuclear material which does not constitute a nuclear material accident or security incident, but which needs to be reported in the interests of safety or because it is likely to come to the attention of the public or the media.			Includes UK and US nuclear weapons or weapon components, Cat 1 and 2 nuclear material, nuclear fuel and reactor core components outwith the reactor and radioloactive material on a defence nuclear site which warrants implementation of the site emergency arrangements.
4	Defence Nuclear Material Accident	An unplanned occurrence involving loss (other than by theft) or destruction of, or damage, or suspected damage to, defence nuclear material which has resulted in actual or potential hazard to life or property, or which may have impaired safety. There are two categories of defence nuclear material accident: (1) Category 1. There are grounds to believe no radioactive release has occurred. (2) Category 2. Radioactive contamination has been detected OR severity of the accident is such that the			Includes UK and US nuclear weapons or weapon components, Cat 1 and 2 nuclear material, and naval reactor core components outwith the reactor and radioactive material on a Defence nuclear site which warrants implementation of the site emergency arrangements.

Ser (a)	Occurrence (b)	Definition (c)	Codeword (d)	Exercise Codeword (e)	Remarks (f)
		possibility of a radioactive release cannot be excluded. There are two sub-categories: (a) <u>Provisional</u>. Where a radiological hazard has not yet been detected but is thought possible. (b) <u>Confirmed</u>. Where a radiological hazard has been detected.			

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CHAPTER 2

PRINCIPLES OF NUCLEAR ACCIDENT RESPONSE POLICY AND PLANNING

RESPONSIBILITIES FOR DETAILED POLICY AND PLANS

RESPONSIBILITIES

0201. The MOD is required to maintain a capability to respond to accidents or incidents involving the following defence nuclear assets:

a. Nuclear Reactors; to include all operational RN reactors and reactors of US or French nuclear powered warships when visiting the UK or within UK territorial waters or UK Overseas Territories.

b. Nuclear Weapons – UK nuclear weapons within the UK and worldwide and US weapons in the UK and territorial waters.

c. Reactor Fuel – New and used fuel for RN reactors.

d. Nuclear materials – Category I and II Special Nuclear Materials (SNM) and in specific circumstances other radioactive material.

0202. Defence Licensed Sites are under a contractual obligation to co-operate with MOD on accident arrangements and therefore must address overall MOD NAR policy, consistent with their obligations under Licence Condition 11 (LC 11). Equivalent NAR arrangements operate at MOD Authorised Sites under Authorisation Condition 11 (AC11) and at non-Authorised Naval Nuclear Propulsion Programme (NNPP) sites.

0203. This policy does not apply to all defence nuclear assets. Sealed sources, Category III and IV SNM (in general) and other small quantities of material (e.g. covered during transportation by the relevant RADSAFE Transport Plan) are excluded. Emergency planning arrangements for these assets are a matter for local decision. The Directorate of Safety and Claims will provide guidance on the regime to be adopted if required.

POLICY AND PLANS

0204. Approval of nuclear accident response arrangements and assessment of the performance of NAROs is the responsibility of the appropriate regulator. Subordinate documentation is a matter for the relevant duty holders; DS&C/AD NAR is to be provided with copies of all operators plans. Duty holders should provide DS&C/AD NAR with copies of relevant off-site plans.

0205. All MOD nuclear accident response plans are to draw on this policy document. The provision of policy direction does not override line management responsibilities for health and safety. Plans are to provide a clear exposition of force structures (especially the division between Immediate Response Forces (IRF) and Follow-on Forces (FoF)) and a statement of the interfaces with external agencies with reference to their statutory or other responsibilities.

0206. The hierarchy of policies and plans is shown diagrammatically in Annex 2A.

0207. Assessment of the Department's nuclear accident response plans is undertaken in accordance with LC11/AC11 and/or relevant statutory or policy requirements to give confidence in the adequacy, completeness and practicality of the plans having regard to the nature and diverse geographical distribution of MOD nuclear assets.

RISK ASSESSMENTS

0208. Risk Assessments are to be conducted for each premises or transport operation involving defence nuclear assets. The scope and content of the assessments is to be sufficient to meet any relevant legal requirements, including the foreseeability or likelihood of a radiation accident or radiation emergency at the premises or during relevant transport operations. Probabilistic risk assessment techniques are to be used where possible, but other scientifically approved approaches may be used. Reports of assessment, when required, compiled in accordance with REPPIR are a source of public information and may, subject to certain security caveats, be made public through placing them in town halls or libraries.

0209. Whilst statutory regulations vary in their contingency planning requirements, there is a general requirement if the risk of a radiation emergency or accident is assessed to be "reasonably foreseeable" for the relevant duty holder to prepare appropriate contingency plans. In circumstances where the risk is assessed as "not reasonably foreseeable" it may be legally acceptable to conduct contingency planning in outline only. However, in such circumstances it is necessary to consider other factors including civil practice and the standards and duty of care expected of a Government department together with the public perception of defence nuclear assets and wider MOD policy. Any proposal by duty holders to limit planning to outline only is to be referred to DS&C/AD NAR and the relevant MOD Regulator.

0210. In addition to the MOD duty holders' responsibilities, local authorities in whose area are situated premises with an operator's emergency plan may be required, in accordance with the relevant statutory regulations, to prepare an off-site emergency plan. Where an off-site plan is required, the HSE will determine the extent of the emergency planning and public information zone. MOD duty holders should have arrangements to advise local authorities on the possible consequences of any radiation emergency, so that they can plan for such and provide additional information relevant to the preparation of the off-site emergency plan.

0211. All risk assessments are to be documented appropriately and are to be referenced at suitable points in planning documentation.

DEFENCE NUCLEAR ACCIDENT RESPONSE PLAN: CO-ORDINATION, COMMAND, CONTROL AND COMMUNICATIONS

0212. It is MOD policy to adhere to the national guidelines for response to an emergency enunciated in the Cabinet Office publication "Dealing with Disaster" and/or the Scottish Executive publication "Dealing with Disasters Together".

0213. MOD's command and control arrangements are to be flexible to ensure optimum interaction with the co-ordination arrangements and the responsibilities of the police and other agencies involved in the response. A Director of the MOD response in the incident area is to be identified at nominally 1* level; he is to be called the Military (or MOD if civilian) Co-ordinating Authority (MCA). The MCA is to be the MOD's principal representative at the local Strategic level for all defence nuclear accidents. The Terms of Reference for the MCA are given in Annex 2B. The MCA is responsible for the direction of MOD activities in the incident area. When military forces are deployed, control of these is vested in the Chief of the Defence Staff (CDS) through the Director of Operations in the HQ NARO to the MCA. The principle method of information management and communication for the MOD NARO is to be via the NAR Information Management System (NARIMS). Further details of co-ordination, command, control and communications requirements are given in Annex 2C. The standard defence nuclear accident and incident alerting signal message is to be used to alert all appropriate authorities in the event of a defence nuclear accident. The format of the signal message is shown at Annex 2H. An example of an alerting signal is shown at Annex 2I.

OBJECTIVES

0214. The principle objectives of MOD nuclear accident response plans are to:

- Quickly alert emergency responders.

- Minimise the risk to those involved in the accident/incident, emergency responders and members of the public.
- Bring the nuclear accident/incident under control and bring the premises or location to a safe condition.
- Ensure that all relevant organisations/agencies are linked and are working to authoritatively based information.
- Ensure that Government, the media, the public and the wider community are provided with timely and accurate information at all times; and
- Ensure that the arrangements reflect the possibility of an extended response being necessary.

0215. MOD NAR response plans should recognise these objectives and should adequately describe the arrangements for dealing with an accident or radiation emergency and its effects.

TECHNICAL ADVICE, CONTAINMENT, SECURITY AND RECOVERY

0216. Expert technical advice on the system or asset affected by the accident is to be readily available at relevant levels of co-ordination. Appropriate arrangements are to be in place to mitigate, in so far as is possible, enhanced radiation levels or the dispersal of radioactive material. Engineering and transport assets are to be made available to effect these measures. Personnel and resources are to be available to ensure the security of MOD assets affected by the accident in accordance with MOD policy (JSP 440). Where the accident occurs outside MOD property, security arrangements are to be integrated with those of the civilian police. Plans are to describe the processes by which the affected system will be made safe and how it is to be recovered to an appropriate MOD facility. The role of HQ NARO in approving recovery operations is to be clearly stated.

INFORMATION FOR PARLIAMENT AND THE MEDIA

0217. MOD NAR response plans should recognise these objectives and should adequately describe the arrangements for dealing with an accident or radiation emergency and its effects.

0218. Significant media coverage of a defence nuclear accident is to be expected. Co-ordination of the media strategy in the incident area is the responsibility of the civil police. MOD plans for the provision of information to the media are to be co-ordinated with those of the police. The MCA is to be the principal MOD spokesperson to the media in the incident area on the accident circumstances and the response by MOD. Another senior officer is to be available to provide continuous briefing for the media on the background to MOD nuclear operations and accident response. Full details of the requirements for providing information to the public, Parliament and the media are at Annex 2D.

REMEDIATION

0219. National guidelines for consideration of activities during remediation are provided by NRPB; it is MOD policy to adhere to these. Plans are to include the provision of medium and long-term support to the affected community and arrangements to direct any MOD resources provided to conduct remediation measures.

CLAIMS PROCEDURES

0220. MOD will generally be liable to meet personal injury or property damage claims from claimants who could demonstrate their injury or loss in the event of a release of radioactive material from MOD owned nuclear assets. Arrangements for dealing with claims arising from a defence nuclear accident are detailed at Annex 2G.

POST ACCIDENT INVESTIGATIONS

0221. There will be a number of different post-accident investigations and inquiries following a defence nuclear accident or incident, which will be conducted by various authorities. These may range from a Ships Investigation to a Service Board of Inquiry or through police investigations to a full Public Enquiry depending on the circumstances of the accident or incident. HQ NARO will provide advice on the precedence of such inquiries at the appropriate time. MOD personnel are to co-operate fully with investigating officers from within and outside the Department.

PRESERVATION OF RECORDS

0222. MOD personnel are to preserve all records of their actions and decisions during the response in order to assist subsequent investigations. All correspondence, which will have been generated throughout the incident/accident, must be retained for any type of follow-up enquiry. This includes flip over charts, faxes, and electronic data. NARIMS is the main communications medium throughout the MOD and it is not possible to erase events/records once they have been annotated, this applies to all the fields. The System Manager will be required to archive all data on the NARIMS server associated with the event. Site administrators are not authorised to carry out this procedure. A log should be kept at all sites that clearly shows which NARIMS stations were in use, the name of the operators, the period of time they were at the machine and the user name that was used (all times in local).

PLANNING, POLICY AND PERFORMANCE REQUIREMENTS OF MOD NUCLEAR ACCIDENT RESPONSE ORGANISATION

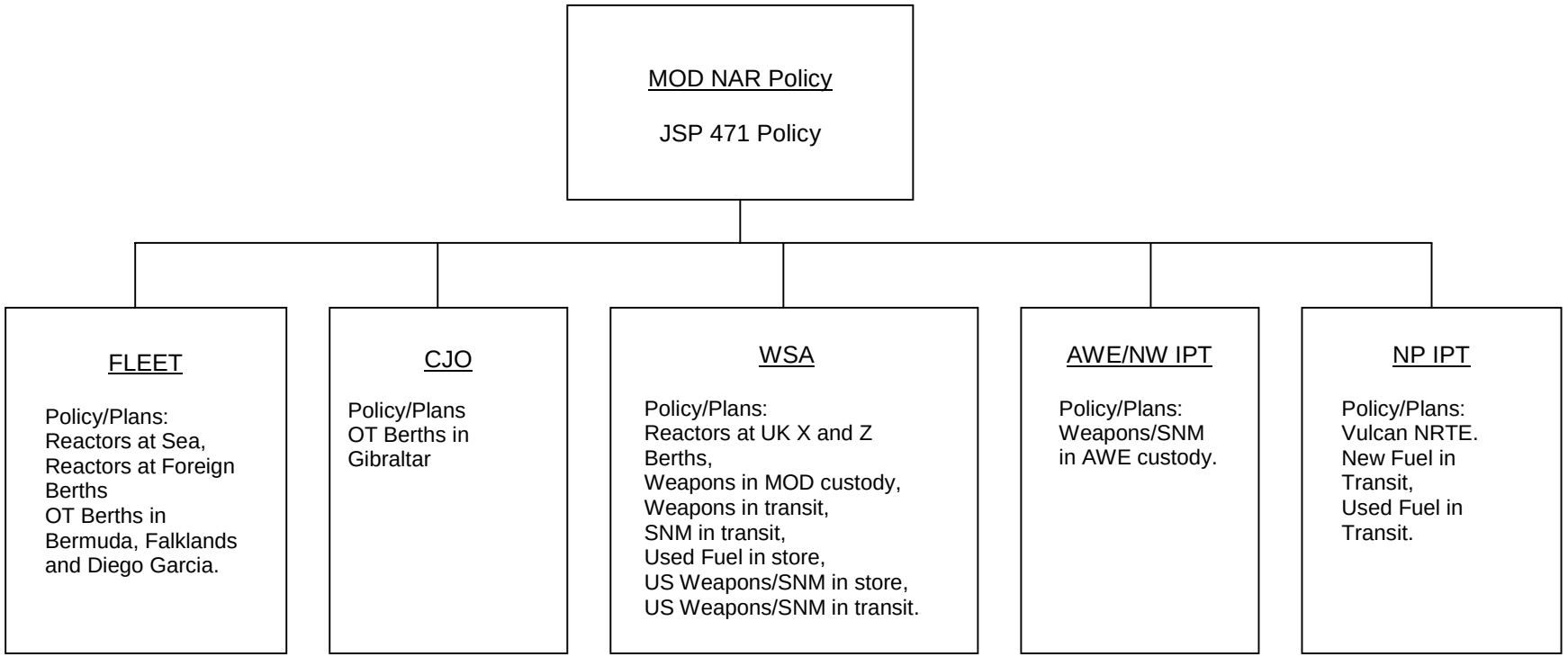
0223. Planning and policy requirement, as stated at Annex 2E, provide a Top Level policy framework against which individual duty holders should develop specific local site/operational performance requirements. NAR plans are to state the relevant policy requirements/performance standards. NARO-assigned elements are to be at appropriate states of readiness to meet these standards. Relevant transport assets are to be identified and specifically tasked in NAR plans. MOD regulators also provide guidance on nuclear accident response and response planning; operators should take note of this guidance.

DECONFLICTION

0224. Deconfliction of nuclear transportation tasks is required to avoid over-commitment of MOD response forces and meet the requirements of civil emergency services. Policy for this is stated in Annex 2F.

CHAPTER 2 ANNEX A

HIERARCHY OF NAR POLICIES AND PLANS



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CHAPTER 2 ANNEX B

TERMS OF REFERENCE FOR MILITARY/MOD CO-ORDINATING AUTHORITY (MCA)

IN PREPARATION FOR ACCIDENT RESPONSE

1. In order to satisfactorily fulfil the role the MCA is to:

   a. Be a senior officer (or official) of nominally 1-Star level.

   b. Ensure that the accident response organisation has effective plans appropriate to the accident scenario and is resourced and trained to meet the requirements of the plan.

   c. Have a working understanding of the response plan and the defence assets at his disposal to respond to a defence nuclear accident.

   d. Understand the roles and responsibilities of other responding agencies.

   e. (Where appropriate) maintain liaison with relevant nuclear site licensees or Authorisees to ensure that they have a clear understanding of the role of the MCA and the assistance the MOD will provide in the event of a nuclear accident at the licensed site.

   f. Maintain currency in the role by appropriate training and exercising.

   g. Establish and maintain effective liaison with all relevant agencies and organisations involved in the relevant response plans.

IN THE EVENT OF AN ACCIDENT

2. The MCA is the senior representative of the Ministry of Defence in the incident area. He is to discharge this role as part of the overall response to a defence nuclear accident. In so doing he is to:

   a. Provide authoritative and timely advice to the police and local health authorities, other emergency services and local authorities on:

   b. The course of the accident, the hazardous materials involved and any immediate implications for public health and safety.

   c. The early public protection countermeasures, consistent with the provisions of the off-site plan in the case of a fixed site, recognising the role of the National Radiological Protection Board etc once they are in a position to take over this responsibility, and

   d. The end of the on-site emergency.

   e. Provide information to the responding agencies about the accident, and the actions being taken to stabilise the affected defence assets.

   f. Direct the actions of all MOD responders (including, where appropriate, contractors) at the accident area, taking note of the priorities agreed in the co-ordinating process.

   g. Be the MOD's principal spokesman to the media in the incident area.

   h. Act on strategic direction from the HQ NARO/Lead Department, providing HQ NARO with regular and authoritative information on the accident and the response to it and make requests for additional defence resources (over and above assigned forces) to HQ NARO if required.

3. It is expected that the MCA would collocate with the senior police officer at the Strategic Co-ordination Centre and attend meetings of the Strategic Co-ordinating Group.

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CHAPTER 2 ANNEX C

CO-ORDINATION, COMMAND, CONTROL AND COMMUNICATIONS IN A DEFENCE NUCLEAR ACCIDENT

1 Co-ordination, command and control, and communications arrangements for nuclear accident response are to be established both nationally and locally. They are to reflect the principles of Command and Control defined in “Dealing with Disaster” and “Dealing with Disasters Together”, and are to respect the joint civilian/MOD nature of nuclear accident response and the different civilian and MOD command and control structures inherent within that response.

2 Each agency will remain subject to its own command and control arrangements. These separate arrangements will be drawn together under common co-ordination principles and procedures. Co-ordination is to be established nationally and locally.

MOD HQ NARO AND CENTRAL GOVERNMENT CO-ORDINATION

3 In the event of a defence nuclear accident, the MOD would establish the HQ NARO in the MOD in Whitehall to command the MOD response. When activated HQ NARO is part of the Defence Crisis Management Organisation (DCMO).

4 HQ NARO discharges its MOD specific responsibilities as an integral part of the DCMO in accordance with the procedures laid down in the Ministry of Defence Crisis Management Organisation Standard Operating Procedures.

5 The HQ NARO has the following responsibilities:

a. Executive.

i. To command the military response to the accident and interpret policy decisions into clear unambiguous direction to the MCA.

ii. To establish the desired end-state and strategic objectives for the MOD response.

iii. To provide advice on military involvement to CDS.

b. Political and Parliamentary. To co-ordinate the strategic level advice from within the MOD and Other Government Departments (OGDs) as a basis for providing sound and timely political advice to Ministers.

c. Public and media information. To co-ordinate the MOD’s public and media information strategy in response to the accident.

MOD - LEAD GOVERNMENT DEPARTMENT

6 In addition to its responsibilities as owner/operator of the nuclear assets, the MOD is appointed as the Lead Government Department for co-ordination of the Central Government response in the event of a defence nuclear accident.

7 It is MOD policy to adhere to national guidelines for response to an emergency. As Lead Government Department the MOD will:

a. Co-ordinate the activities of the central government departments in the response to the nuclear accident, providing a framework within which individual departments can discharge their specific responsibilities and ensure that the necessary links are established with the local response.

b. Co-ordinate the collection of information on the accident and its effects for the purpose of:

i. Briefing Ministers.

ii. Informing Parliament.

iii. Providing information to the public and the media at national level.

c. Act as the focal point for communication between the local Strategic Co-ordinating Group(s) and central government.

8 The MOD discharges its Lead Government Department role through the Headquarters organisation and the formation of the Nuclear Accident Information and Advisory Group (NAIAG).

9 In the event of a Defence Nuclear Accident (DNA) in Scotland, MOD retains this lead but Scottish Ministers are responsible for the off-site consequence management aspects. It is a general principle that both administrations would work closely together on the speedy resolution of any incident. Scottish Ministers will be represented in the HQ NARO. Lead officials in both administrations will maintain regular contact throughout on the practical steps being taken to manage the consequences of a DNA and to keep each other informed in sufficient time for media announcements or statements to respective parliaments.

LOCAL CO-ORDINATION

10 The response to a defence nuclear accident will be guided by the principles underlying the response to any major incident. In accordance with these principles the police response will include the co-ordination of the emergency services and other responding organisations and the provision of a Gold (Strategic) Commander at the off-site facility to co-ordinate the response at the strategic level. The MOD response, and the personnel deployed under the control of the MCA to implement it, are to integrate with the civilian authorities' response throughout the co-ordination structure under the overall direction of the senior civilian police officer. The three levels of local co-ordination, and their characteristics, are described below.

STRATEGIC

11 A defence nuclear accident would invariably cause the senior civilian police officer to invoke the local strategic level of co-ordination, command and control, and to establish a Strategic Co-ordination Group (SCG) at a suitable pre-existing facility configured for the purpose: the Strategic Co-ordination Centre (SCC). The SCG, under the direction of the police, will exercise overall co-ordination and strategic direction of the local accident response at all three levels until public safety can be assured. Thereafter, and by agreement, the local strategic co-ordination responsibility may pass to the Chief Executive of the relevant Local Authority, who will also assume chairmanship of the SCG. Direction of the MOD response at all three local levels is vested in the MCA, who is to be a member of the SCG.

TACTICAL

12 The Tactical level response will be established close to the accident site at locations determined by the responding agencies. The MCA will appoint an Incident Commander/Director of Operations to direct MOD personnel at Tactical and Operational levels. Collocation of agencies may be beneficial particularly if the accident has taken place in a publicly accessible area. MOD personnel are to be guided in this respect by the senior police officer deployed close to the accident site to co-ordinate the Tactical response.

OPERATIONAL

13 The Operational level is that at which activities at the accident site are conducted, and at which initial accident response actions are concentrated. The Operational level activity (e.g. traffic control) may also be conducted by other agencies at other locations. The senior MOD officer present is to assume overall responsibility for immediate response actions and control of all MOD personnel.

COMMUNICATIONS

14 MOD's NARO is to be equipped with adequate communications facilities to ensure the efficient, effective, and rapid relay of information throughout the command and control structure. In the initial stages of accident response, the speed and accuracy of information flow is to take priority over detail. Equipment and communications procedures are to interface with civil communications networks to the maximum possible extent. Communications networks are to provide the required privacy and security protection.

ACCIDENTS INVOLVING US NUCLEAR WEAPONS

15 Policy for dealing with an accident involving a US nuclear weapon in the UK is specified in the Third Tier Arrangement drawn up between the UK and US Governments. Policy interpretation and the integration of US response forces are defined in the Implementing Joint Operational Plans (IJOPs). Detailed joint operating procedures are detailed in subsidiary operational plans.

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CHAPTER 2 ANNEX D

INFORMATION FOR THE PUBLIC, PARLIAMENT AND THE MEDIA

1 MOD duty holders must ensure that any identifiable population group who are in an area in which, in the opinion of the Executive, they are likely to be affected by a radiation emergency, are supplied, in an appropriate manner, without them having to request it, the information specified in REPPIR, Schedule 9. This applies to all members of the public within the Detailed Emergency Planning Zones (DEPZ) at all NPW X and Z berths.

2 Following a Defence Nuclear Accident (DNA) which has caused, or is likely to result in, a public safety hazard, the MOD has a duty of care to provide timely and accurate public safety information to the relevant authorities. In addition the MOD, as a Lead Department of State, must have a clear PR and media strategy to ensure the effective and efficient management of the Departmental and Central Government PR and media aspects of such an accident.

3 The MOD NARO is responsible for ensuring that information for the public, parliament and the media is accurate, consistent, as open as possible and issued promptly. The need for public safety and reassurance is to take precedence over security in the event of a defence nuclear accident occurring, although there would be no automatic relaxation of security requirements. In the event of a nuclear weapon accident, where there are public safety concerns, the normal policy of Neither Confirming Nor Denying (NCND) the presence of nuclear weapons may be set aside by the senior officer responding to the accident, who is to ensure that the MCA and HQ NARO are informed that this has been done.

PREPARATION OF INFORMATION

4 In so far as is possible, the information to be provided is to have been prepared in advance. Press statements are to be prepared covering the immediate phase of the response. Such statements are to allow for the inclusion of details specific to the accident (e.g. location, casualties). Background material is to be prepared covering topics likely to be required to be briefed in depth to the media (e.g. the operation being conducted, details of the nuclear asset, radiation and radioactive materials, medical aspects). Such material is to be available for all media (e.g. printed for the press and internet with still photographs or video for broadcasters). Where practical during the planning process, pre-prepared information is to be agreed with relevant civilian agencies such as the police and local authorities. Appropriate information is to be included in the Implementing Joint Operational Plans (IJOPs) for US nuclear assets.

USE OF THE INTERNET

5 The Internet offers an unprecedented opportunity for the MOD to communicate information to the public. The volume of public requests for timely information about a nuclear accident will make the establishment of NARO pages on the Internet one of the most effective ways of disseminating key information.

6 Given the power of the Internet to reach a world-wide audience, it is essential that the dissemination of information is co-ordinated for content, accuracy and security. For this reason defence related information about the accident will only be posted on the MOD web site. HQ NARO will be responsible for liasing with MOD's web-site master in establishing NARO pages and for ensuring the propriety of information to be used. It is possible that the local authorities, emergency services or other Government Departments may wish to utilise their own web sites to disseminate information. Any defence sourced information that is to be offered to these agencies for inclusion on their own web pages is first to be cleared with HQ NARO.

RESPONSIBILITIES FOR DISSEMINATING INFORMATION

7 The Central Government response to a defence nuclear accident will be sent out electronically from the Defence News (D News) Press Office via the Government News Network to all media, and separately to all defence correspondents via e-mail. After the immediate phase of the response further information would come from either the D News Press Office in London or the Media Briefing Centre at the incident site. HQ NARO will prepare information for the D News Press Office together with any Ministerial Statements, or additional briefing material, co-ordinating this as necessary with Other Government Departments. The MCA's Public Relations (PR) personnel are to prepare information for the MCA for use at the Media Briefing Centre, in consultation as necessary with civilian agencies. PR staff and HQ NARO are to ensure that they keep each other fully informed of the all the information disseminated, together with details of the reaction of the media at any briefings and the content of printed articles and broadcasts. In order to ensure consistency it is the MOD's aim to disseminate information from as few sources as possible.

CONTENT OF INFORMATION

8 The MCA's PR staff and the HQ NARO are to ensure that the information disseminated at local strategic and London or elsewhere is consistent, both in content and timing. The MCA's PR staff should concentrate on the cause and circumstances of the accident together with the MOD response in the incident area, especially in the immediate phase and medium term. Overall, the following points are likely to be addressed and MOD may be required to provide a lead or support:

a. What has happened and where the accident is.

b. Need for public in specified areas to take action and what that action is.

c. Nature of the actual/potential hazard.

d. Extent of the area actually/potentially affected.

e. What is being done to address the problem.

f. The status of any MOD personnel killed or injured.

g. How further guidance will be issued.

If there is any doubt whether the information to be supplied concerns policy issues (see below) PR staff should clear statements with HQ NARO.

9 HQ NARO and the D News Press Office will address issues of a longer term nature, the need for and precedence of formal inquiries and matters of defence policy.

TRAINING OF MOD PERSONNEL

10 MOD NARO personnel who are required to present information to the media are to be given appropriate training as determined by D News. MOD PR personnel are to advise the MCA on the selection of suitable personnel to provide briefings to the media.

ASSESSMENT AND TESTING OF MOD PR AND MEDIA ARRANGEMENTS

11 All aspects of the MOD NAR PR and Media strategy and arrangements are to be tested, as appropriate, during defence nuclear accident response exercises. Only those aspects of the MOD NAR PR and Media strategy, which relate to the provision of public safety information are to be formally assessed by the NWR or CNNRP as appropriate. Reputation management aspects of the MOD NAR PR strategy may be assessed under separate arrangements.

CHAPTER 2 ANNEX E

POLICY REQUIREMENTS FOR DEFENCE NUCLEAR ACCIDENT RESPONSE

All times measured from accident/declaration of Cat 1 unless otherwise stated.

PLANNING/TRAINING

Function Id.	Function Description	Policy Requirement	Comments
1	Create/maintain Duty Holders contingency plans, to include both the initial and follow-on response, and the arrangements for obtaining support from Follow-on-Forces.	Reviewed and up-to-date, to include corrective actions from NAR regulatory assessments.	
2	Maintain records of all personnel nominated for NAR duties.	Records complete and up-to-date.	
3	All NARO personnel to have been provided with appropriate information, instruction and training, including continuation training.	All NARO personnel trained in accordance with documented standards.	To cover formal training courses, local training, continuing/refresher training as appropriate.
4	Contingency plans to be exercised.	As detailed in Annex 3A.	May be modified by agreement with regulators.

ALERTING AND NOTIFICATION OF AUTOMATIC COUNTERMEASURES

Function Id.	Function Description	Policy Requirement	Comments
5	Alerting - Initial report of accident conveyed to: IC/MCA/CIVPOL/MOD HQ.	Initial report within 10 minutes #.	All four of these key agencies to be alerted within the specified time. Initial report to CIVPOL to include initial public protection advice in accordance with local arrgts. # For 'at sea' scenarios, alerting to IC/MCA/MOD HQ only required within 30 minutes.
6	MCA and support staff arrive at CIVPOL Gold/Strategic HQ or other agreed location.	Within 1 hour # or agreed timescale for fixed-sites.	MCA to be represented by Liaison Officer where policy requirement cannot be met. #2 hours for transport scenario.
7	MCA and support staff brief and deploy from base.	Within 4 hours of being alerted.	In the case of a remote MCA only. To include AWE and HAG Advance Parties in the case of NW/SNM scenario.

STABILISATION AND CONTAINMENT

Function Id.	Function Description	Policy Requirement	Comments
8	Integrate with and provide advice on hazards, initial public protection and handling of casualties to civilian emergency services at scene.	Within 10 minutes or immediately following civil emergency services' arrival if later #.	# Immediately on arrival of SNT Advance Party in the case of air transport scenario.
9	WEAPON/SNM Initial assessment of weapon or load state.	Within 1 hour #.	# Timed from the arrival of the AWE Advance Party.
10	TRANSPORT Produce outline plan for weapon/load render safe and removal from site.	Within 48 hours.	
11	TRANSPORT Provide security advice to CIVPOL.	Within 15 minutes #.	Protection of load and control of accident site. # For air transport, advice timed from arrival of the SNT Advance Party/SSSE, deployment from arrival of the Main Party.
	Deploy security force.	Within 30 minutes #.	
12	AIR TRANSPORT ONLY Arrival of SNT Advance Party at accident site.	Within 1 hour.	Helicopter to be held at "immediate readiness" to meet these timings.
13	AIR TRANSPORT ONLY Arrival of SNT Main Party at accident site.	Within 2 hours.	

MONITORING AND DISCRETIONARY COUNTERMEASURES

Function Id.	Function Description	Policy Requirement	Comments
14	REACTORS Quantify gamma reading using installed equipment.	Within 10 minutes.	
15	REACTORS Initiate downwind air sampling.	Within 30 minutes of declaration of Cat 1 or Category 2 if it occurs immediately.	
16	WEAPON/SNM Initiate monitoring to detect release of radioactive material.	Within 30 minutes #.	Assumes it is safe to approach, and that a release is readily detectable. # From the arrival of the SNT Advance Party for air transport.
17	WEAPON/SNM Complete downwind deposition monitoring of 9 standard monitoring points to 5km*.	Within 2 hours #.	# From the arrival of the SNT Advance Party for air transport. *For uranium SNM, monitoring required to 3km within 1 hour. No downwind monitoring for tritium.
18	WEAPON/SNM Receipt of AWE hazard prediction based on monitoring information and report of weapon state.	Within 2 hours #.	# From completion of FI 17.
19	REACTOR Receipt of NAME model hazard prediction from Met Office	Within 2 hours.	

20	Provide monitoring support and radiation medicine advice to hospitals /Reception Centres as required.	Within 2 hours #.	# 4 hours for transport scenarios.

REMEDIATION

Function Id.	Function Description	Policy Requirement	Comments
21	Provide MOD support to RWG.	Within 12 hours.	At the Strategic level.
22	Provide MOD resources to meet agreed remediation strategy.	To meet agreed resource requirements.	

PUBLIC INFORMATION.

Function Id.	Function Description	Policy Requirement	Comments
23	In conjunction with civil police issue pre-prepared statements and handouts.	Within 1 hour #.	Physical presence of an informed MOD nominee to brief and take questions based on pre-prepared statements, handouts and Q&A. Requires prior consultation with Police spokesman. # From the arrival of the SNT Advance Party for air transport.
24	Provide initial briefing for Ministers.	Within 3 hours.	HQ NARO. May be via Resident Clerk.
25	Provide specific information to the MOD Press Office and public enquiry desk.	Within 4 hours.	HQ NARO. May be via duty officer.
26	In conjunction with Police and other agencies, establish full PR programme (regular press briefings, press notices, specialist briefing, dissemination of pre-scripted material, photo opportunities, media monitoring).	Within 6 hours.	

COMMUNICATIONS

Function Id.	Function Description	Policy Requirement	Comments
27	Provision of effective communications.	Initial facilities to be sufficient for essential requirements. Full communications requirements to be met within 24 hours.	Highwayman and Access Overload Control (ACCOLC) for Cellular Radio Systems.
28	Effective use of NARIMS.	Full functionality of NARIMS utilised.	

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CHAPTER 2 ANNEX F

DECONFLICTION OF TRANSPORT OF DEFENCE NUCLEAR MATERIALS

1 The policy for deconfliction applies to Defence Nuclear Material (DNM) movements (i.e. Nuclear Weapons, Category I and II SNM, specific instances and quantities of other radioactive materials and Reactor Fuel). Constituted, but unloaded, nuclear weapons convoys are included within this policy. Planning of movements to achieve this policy is delegated to the staff of CE/WSA.

2 There is to be only one road or rail movement in or air movement over the same or adjacent Constabulary areas at any one time. Provided this condition is met:

a. Nuclear weapon and SNM road convoys may be carried out concurrently.

b. Rail and road movements may be carried out concurrently.

c. Road and rail movements may be carried out concurrently with air moves provided that there is only one DNM flight (RAF or USAF) in UK airspace at any one time.

3 Exercises

a. There are to be no DNM movements during Grade A exercises.

b. Movements during all other Grades of exercise will be decided on a case-by-case basis by DS&C.

4 Priorities

a. Any movements directly in support of the Trident nuclear weapons programme.

b. SNM flights.

c. SNM convoys.

d. Reactor fuel moves.

e. USAF flights.

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CHAPTER 2 ANNEX G

CLAIMS

1 There would, broadly speaking, be an absolute liability on the Department to meet any subsequent personal injury or property damage claims from civilians where it can be demonstrated that their injury/loss was attributable to a defence nuclear incident or accident.

2 In the event of a nuclear weapon accident or accidental release of radiation from MOD owned facilities or an incident involving a United States nuclear weapon within the United Kingdom and its territorial waters (Third Tier Arrangement of 9 October 1997), Directorate of Safety & Claims (DS&C) would be responsible for:

a. On site claims work as needed from the time of the initial alert.

b. Membership of MOD HQ NARO to handle all claims issues and to provide advice and assistance to NAIAG when required.

c. Provision of registration forms for those in the area at the time of the incident.

3 Further details are contained in Annex B of Volume One, Section 4 of the DS&C Claims Manual, which may be obtained from the MOD Senior Claims Officer.

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CHAPTER 2 ANNEX H

STANDARD DEFENCE NUCLEAR ACCIDENT AND INCIDENT ALERTING SIGNAL MESSAGE

CLASSIFICATION:
1. All messages should be classified in accordance with the content, but kept at the lowest practical level.
2. Weapon/SNM messages outside the UK are to be classified SECRET.
3. Reactor messages in foreign ports and territorial waters are to be classified CONFIDENTIAL with UK EYES caveat if appropriate.

SUBJECT INDICATOR CODE: IEL and other SIC's as deemed appropriate

PRECEDENCE: Initial reports are to be made by VOICE (except when at sea or overseas) to CDSDO by the fastest possible means, to be followed by a signal report to the full address list.
Initial and Follow-up signal reports are to be given FLASH precedence for both ACTION and INFORMATION addressees.

ALERTING SIGNAL MESSAGE ADDRESSEES

1. For all signal messages the CDSDO and ADNAR must be informed.
2. The action addressee must be the originator's MCA
3. All other MCA's should be information addressees.
4. A suggested list of other information addressees is shown. It is incumbent on the originator to ensure that the appropriate authorities are kept informed.
5. An example of a draft nuclear accident alerting signal message is shown after the signal message format.

ACTION: (MCA)	INFORMATION: (NON-MCA)	Other Suggested Information Addressees
MODUK (Mandatory) fao CDSDO & AD NAR	MODUK	CINCFLEET PORTSMOUTH
MODUK DPA	MODUK DPA	HQ STC HIGH WYCOMBE
NBC CLYDE	NBC CLYDE	CCMDP WETHERSFIELD
NBC DEVONPORT	NBC DEVONPORT	CTF311
NBC PORTSMOUTH	NBC PORTSMOUTH	CTF345
CINCFLEET	CINCFLEET PORTSMOUTH	BRITMILREP WASHINGTON
CBF GIBRALTAR	CBF GIBRALTAR	AWE ALDERMASTON
DLO BATH	DLO BATH	DRPS ALVERSTOKE
VULCAN NRTE	PARENT WATERFRONT ORGANISATION	

SIGNAL MESSAGE FORMAT

Serial No	Information Required	Initial Alert	Incident		Accident			
					Initial		Follow-up	
			Reactor	Weapon / SNM	Reactor	Weapon / SNM	Reactor	Weapon / SNM
(a)	**(b)**	(c)	(d)	(e)	(f)	(g)	(h)	(i)
A	**Message Identifier/Codeword**	X	X	X	X	X	X	X
B	Category				X	X	X	X
C	Date/Time (Z) of accident/incident	X	X	X	X	X	X	X
D	Nuclear powered vessel/Flight Number/Convoy Number/Train Number	X	X	X	X	X	X	X
E	Location/Position (Lat/Long, Berth, Grid)	X	X	X	X	X	X	X
F	IC/MCA and how they may be contacted		X	X	X	X	X	X
G	Description of accident/incident	X	X	X	X	X	X	X
H	**Casualties Assessment**				X	X		
	MOD Personnel Killed		X	X				
	MOD Personnel Injured		X	X				
	Civilian Killed		X	X				
	Civilian Injured		X	X				
	MOD Personnel - Killed contaminated						X	X
	MOD Personnel - Killed uncontaminated						X	X
	MOD Personnel - Injured contaminated						X	X
	MOD Personnel - Injured uncontaminated						X	X
	MOD Personnel - Uninjured but contaminated						X	X
	Civilian - Killed contaminated						X	X
	Civilian - Killed uncontaminated						X	X
	Civilian - Injured contaminated						X	X
	Civilian - Injured uncontaminated						X	X
	Civilian - Uninjured but contaminated						X	X
I	Weather conditions, wind speed and direction				X	X	X	X
J	Pasquill Weather Category						X	

Serial No	Information Required	Initial Alert	Incident		Accident			
					Initial		Follow-up	
			Reactor	Weapon / SNM	Reactor	Weapon / SNM	Reactor	Weapon / SNM
K	Forecast changes in weather conditions and wind speed						X	
L	Advice given to local authority				X	X	X	X
M	Date/Time (Z) Automatic Countermeasures completed/Cordon established						X	X
N	Emergency Countermeasures implemented outside Automatic Countermeasure Zone						X	
O	**Public/Media Interest**		X	X			X	X
P	**Details of press releases made (if any)**		X	X	X	X	X	X
Q	Type/Serial nos of damaged weapons or nature/packaging of material involved					X		X
R	**Plant Conditions**							
R1	Plant and containment state of nuclear vessel prior to accident		X				X	
R2	Reactor critical?		X				X	
R3	Reactor shutdown – auto protection? (If yes state trip parameter(s))		X				X	
R4	Reactor shutdown – manual scram?		X				X	
R5	Current plant temperature? (Tav – X degrees, rising/steady/falling)		X				X	
R6	Current plant pressure? (Nom – X bar/psi, rising/steady/falling)		X				X	
R7	Pressuriser level? (Nom – X cm/inches, rising/steady/falling)		X				X	
R8	Any significant related repair, test or ripout procedures in force at the time of the accident?		X				X	
R9	Is the core being cooled?		X				X	
S	Emergency cooling/ HPDHR information							
S1	Has emergency cooling/HPDHR been initiated correctly?		X				X	
S2	Is emergency cooling/HPDHR proving effective?		X				X	
S3	Are cooling water supplies available to the hard/soft tank?		X				X	
S4	Has emergency cooling/HPDHR been isolated?		X				X	
T	Isolation Valves/Relief Valves/MCP information							
T1	What is the state of MIVs?		X				X	

Serial No	Information Required	Initial Alert	Incident		Accident			
					Initial		Follow-up	
			Reactor	Weapon / SNM	Reactor	Weapon / SNM	Reactor	Weapon / SNM
T2	What is the state of ECIVs?		X				X	
T3	What is the state of SLIV?		X				X	
T4	What is the state of MCPs?		X				X	
T5	Has any PRV lifted/repeated lifted?						X	
T6	If PRV has lifted, has it reseated?						X	
T7	Has any PRV been isolated?						X	
U	Primary coolant leak/make up information							
U1	Has there been a leak of primary coolant?						X	
U2	From where?						X	
U3	How much?						X	
U4	Has there been any release of primary coolant to/outside the submarine?						X	
U5	Has it now been isolated?						X	
U6	What sources of primary make up are available?						X	
U7	Are both HPMU pumps available?						X	
V	Containment information							
V1	Is the primary circuit sealed/breached?						X	
V2	Has automatic containment initiated/been initiated? (state which)						X	
V3	Has primary containment been secured iaw SOPs? (if not state exceptions)						X	
V4	Is the primary containment boundary intact? (if not state breaches)						X	
V5	Has there been any damage to through RC systems?						X	
V6	What is the pressure and temperature in the primary containment boundary?						X	
V7	Is the tunnel pressurised?						X	
V8	What is the status of Phase I*/Phase I and Phase II ultimate containment valves?						X	
V9	Has secondary containment been secured iaw SOPs? (if not state exceptions)						X	
V10	Is the secondary containment boundary intact? (if not state breaches)						X	

Serial No	Information Required	Initial Alert	Incident		Accident			
					Initial		Follow-up	
			Reactor	Weapon / SNM	Reactor	Weapon / SNM	Reactor	Weapon / SNM
V11	What is the ventilation system line up						X	
W	Radiological/decay heat information							
W1	What is the reactor operating history?						X	
W2	Has a primary coolant sample been obtained?						X	
W3	If a primary coolant sample has been taken, what are the results of the analysis?						X	
W4	What dose rates have been recorded and where? (internally and externally)						X	
X	Propulsion/Electrical Supplies information							
X1	What propulsion is available?						X	
X2	What electrical supplies are available? (ACSS/DCSS/TGs/MGs/DGs)						X	
X3	What is the state of electrical supply breakers						X	
X4	What primary instrumentation is available						X	
Y	Present course and speed						X[1]	
Z	Is the release continuing? (Reactor)/Is the fire out? (NW and SNM)						X	X
AA	Requests for assistance (report in clear) e.g. Medical, transport, monitoring teams, health physics facilities, milk sample collection, etc.						X	X
AB	**Civil Authority Involvement**						X	X
AC	**Assessment and intended course of action**		X	X			X	X
AD	**General Remarks**		X	X	X	X	X	X

[1] For Submarines at sea

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CHAPTER 2 ANNEX I

EXAMPLE OF STANDARD DEFENCE NUCLEAR ACCIDENT AND INCIDENT ALERTING SIGNAL MESSAGE

IMMEDIATE

ACTION:
MODUK
CINCFLEET PORTSMOUTH

INFO:
MODUK DPA
NBC CLYDE
DLO BATH
CINCFLEET
COMDEVFLOT
NBC DEVONPORT
IEL/W5F/EUA
A. [CODEWORD]
B. TWO
C. 181200ZSEP02
D. HMS TROUBLE
E. 0515N 11003W, INDIAN OCEAN.
F. IC 07881 145678 MCA 93832 8765
G. ENGINE ROOM FIRE AND STBD MG FAILURE RESULTED IN CLOF (PORT MG DOWN FOR MAINTENANCE). EMERGENCY COOLING INITIATED IN AUTO BUT INEFFECTIVE DUE TO SUSPECTED BLOCKAGE IN ESW 601 COMBINED HULL VALVE OUTLET. PORT MG RESTORED TO ALLOW 1S/1S AND CONTROLLED COOLDOWN TO PSB.
H6. TWO (CPOMEA JONES, LMEA PARKER).
H8. ONE (CCMEA PHILLIPS).
I. 202230ZSEP02. CLEAR, WIND 090 AT 25 KNOTS.
M. PIT ISSUED TO SS 202200ZSEP02.
R1. PSA (HALF POWER STATE)/CS3 .
R3. YES - CLOF.
R4. NO.
R5. TAV MINUS 130(4), FALLING IN CONTROLLED MANNER.
R6. PNOM MINUS 90(9), FALLING IN CONTROLLED MANNER.
R7. NOM, STEADY.
R8. NO.
R9. DUMP STEAM.
S1. NO. SUSPECT ESW 601 COMBINED HULL VALVE BLOCKED.
S2. NO.
S3. NO.
S4. NO.
T1. OPEN.
T2. OPEN.
T3. OPEN.
T4. 1S/1S (ALL AVAILABLE).
T5. R2 LIFTED ON DEMAND.
T6. R2 HAS RESEATED.
T7. NO.
U1. YES.
U2. RELIEF SYSTEM.
U3. 200 LITRES (EST).
U4. YES. TO ENVIRONMENT.
U5. YES. R2 HAS RESEATED.
U6. RWST/VOWFS/SHIPS TANKS.

U7. YES.
V1. SEALED.
V2. NO
V3. NO. AUTOMATIC CONTAINMENT VALVES OPEN FOR VENT STATE BLUE 2.
V4. YES
V5. NO.
V6. ZERO BAR. 60 DEGREES CENTIGRADE
V7. NO.
V8. PHASE 1 (STARRED) ALL SHUT. PHASE 1 NSGLU. PHASE 2 NSGLU.
V9.NO
V10.YES
V11. BLUE 2
W1. 0.50,0.50,0.60,0.60,1.20,3.50,3.60,14.20,24.50,89.20,400.20. (35.4%).
W2. NO. THE SAMPLING SINK STAY TIMES PRECLUDE TAKING A SAMPLE.
W4. MAN ROOM 6(6) MICROSV PER HOUR, DG ROOM 200(2) MICROSV PER HOUR, SAMPLING SINK 200 (2) MICROSV PER HOUR.
X1. EPM.
X2. SINGLE MG TO STBD SUPPORTED BY DIESEL GENERATORS.
X3. MG2 MADE. MG1 OPEN.TG1 AND TG2 OPEN. BC1,2,3 AND 4 MADE. ALL LOAD CENTRE BREAKERS MADE. SCRAM LOAD REDUCTIONS COMPLETE.
X4. ALL PRIMARY INSTRUMENTATION IS AVAILABLE.
Y. SURFACE, 095 4 KNOTS.
Z. NO. FISSION PRODUCTES CONTAINED WITHIN PRIMARY CIRCUIT. FIRE IS OUT.
AA. SURFACE VESSEL TO PROVIDE MEDICAL ASSISTANCE.
AB. NIL.
AC. CONTINUE CURRENT COURSE TO NEAREST AVAILABLE NAVAL BASE. CONTINUE TO PSB. ATTEMPTING TO RE-INSTATE EMERGENCY COOLING.
AD. ESW601 STUCK IN SHUT POSITION.VALVE SPINDLE SHEARED.

CHAPTER 3

PERFORMANCE ASSESSMENT, EXERCISES AND TRAINING

PERFORMANCE ASSESSMENT

0301. The assessment of the NAR capability will be undertaken by the appropriate regulator, and will be reported in the regulator's annual report.

0302. High level policy requirements will be validated annually by DS&C/AD NAR to maintain their currency against the standards for planning and response specified in Chapter 2. This review will canvass, the views of NAR practitioners within the Department and take due account of the experience and findings from demonstration exercises.

DEMONSTRATION EXERCISES

0303. Assessment of demonstration exercises forms an important element in the overall assessment of the effectiveness of nuclear accident response arrangements. Definitions of the scale of such exercises are stated in Annex 3A. These represent minimum requirements for demonstration exercises; adaptations may be proposed to address specific issues. Scenarios are to be designed, commensurate with the grade of the exercise, to include the response to an actual or anticipated release of radioactive material.

0304. The different grades of exercise and the frequency at which they are to be held is stated in Annex 3A.

0305. All demonstration exercises are to be formally assessed by the relevant regulator. Duty holders should implement a self-assessment process. The assessment reports for all NAR demonstration exercises are to be copied to DS&C/AD/NAR.

TRAINING

0306. Relevant duty holders are to ensure that all MOD personnel who have roles and responsibilities within MOD NAROs receive information, instructions and training appropriate to their role. This may be organised at various levels from individual units upwards. Training for key NARO executives, including MCAs, should include the following topics as a minimum.

a. Introduction to defence nuclear accident response policy, planning and organisation, including statutory requirements.

b. The operation and nature of the relevant defence nuclear asset(s).

c. Measures taken to ensure safety.

d. Nature of hazards in the event of an accident and countermeasures planned.

e. The roles and responsibilities of civilian agencies.

f. Organisation and capabilities of the relevant MOD NARO.

g. Central government response.

h. A table-top exercise (or similar) to consolidate the briefings.

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CHAPTER 3 ANNEX A

EXERCISE DEFINITIONS

GRADE A

A demonstration of all phases of the response in which live play and the participation of MOD and all relevant external agencies is maximised at the national and local strategic, tactical and operational levels. [Duration guideline: Reactor, extended day. NW Transportation 2-3 days]

GRADE A*

Same as grade A. Overnight play will be contingent on civil agency support. [Duration guideline: Reactor 2-3 days. NW Transportation 3-5 days]

GRADE B

FIXED SITE

A demonstration of the operators and off-site response plans in which the immediate and medium term response, including the participation of the emergency services and external agencies, is tested at local strategic, tactical and operational levels. Some aspects of exercise play may be provided through Distaff inject to meet individual agency and overall exercise objectives. [Duration guideline: extended day]

NOTE

> Responsibility for testing off-site plans for fixed site nuclear facilities is a matter for individual local authorities. MOD cannot dictate how or when local authorities exercise their plans. Accordingly, the arrangements for MOD Grade B exercises will be dependent on negotiations between the MOD Duty Holders and the relevant local authorities.

GRADE C

A demonstration of the operators response plan, including the integration of the emergency services. [Duration guideline: 3-6 hours]

GRADE D

A demonstration exercise of the MOD response only. The level of play will be at levels appropriate to the exercise objectives and its duration. [Duration guideline: 3-6 hours*]

* Duration guideline for NW Stabilisation & Recovery – 1-2 days.

TESTING OF MOD NAR PLANS

NAR plans can be tested in a variety of ways. All aspects of the plan cannot necessarily be tested in one exercise. The objective of the MOD NAR exercise testing programme should therefore be to ensure that all relevant parts of the plans are tested over a period of time. To assist exercise planners on the extent of testing and monitoring activities, duty holders are encouraged to develop, in consultation with the relevant regulators, a matrix of activities for MOD NAR contingency plans to maximise flexibility within the testing arrangements. NAR demonstration exercise scenarios should be developed to provide for a range of possible accidents, including those with no, or limited, off-site consequences or limited escalation of exercise category.

NOTE

By agreement with DS&C, MOD Grade A exercises may be used to test the extendibility of the off-site plans as part of the UK national response arrangements.

NUCLEAR ACCIDENT RESPONSE (NAR) DEMONSTRATION EXERCISE REQUIREMENTS

MOD NAR exercises are to be carried out in accordance with the following policy requirements:

FIXED SITES

Grade A

One exercise per year over a three yearly cycle to include:

- HMNB Clyde (Reactor)
- HMNB Devonport

NOTES

(1) The three yearly cycle will include a NW transportation exercise.

(2) One Grade A exercise will be nominated Grade A* on a three yearly cycle.

Grade B

The following berths/sites on a three yearly cycle:

- Vulcan NRTE.
- Portsmouth.
- Gibraltar.
- Highlands: individual operator's plans for all Z berths (integrated as appropriate with relevant local authority off-site plans).
- Clyde area: individual operator's plans for all Z berths (integrated as appropriate with relevant local authority off-site plans).
- Liverpool.
- Southampton.
- Bermuda (to align with and be integrated into Bermuda emergencies exercise).
- BAE Systems Marine (Barrow).

NOTE

Grade B exercises are not required at Devonport or Clyde.

Grade C

One exercise at each fixed site each year:

- HMNB Clyde (Faslane) (Reactor)
- HMNB Clyde (Coulport) (alternating Reactor/Weapon)
- HMNB Devonport
- Vulcan NRTE
- HMNB Portsmouth
- HMNB Gibraltar
- BAE Systems (Barrow)

As part of preparation for a submarine visit or at least every three years:

- Falkland Islands Z Berth
- Diego Garcia Z Berth

NOTES

(1) Grade C exercises are not required in the same year as Grade A or B exercises (where the on-site/operational aspects of the plans have been tested during such exercises).

(2) Licensed Site Level 1 Exercises will be conducted each year at each defence licensed site.

Grade D

- Reactor at sea or within UK territorial waters: every year. Where practical this should be combined with submarine missing/sunk (SUBMISS/SUBSUNK) exercise.

TRANSPORT

Grade A

One exercise every three years:

- NW Transportation Exercise

NOTE

Once every 6 years the NW transportation exercise will be nominated as a US weapon exercise.

Grade C

Air Transport - Each Station NARO team every year as below:

- RAF Honington
- RAF Brize Norton
- RAF Lyneham

Land Transport

Each of the following scenarios on a two-yearly cycle:

Year 1

Weapon
Used Fuel

Year 2

SNM
New Fuel

NOTE

Grade C exercises not required in year of Grade A exercises (where the operational aspects of the plans have been tested during Grade A exercise).

Grade D

Stabilisation & Recovery

One exercise per year to cover one of UK Weapon, US Weapon, Special Nuclear Material, Used/New Fuel scenarios.

CHAPTER 3 ANNEX B

EXERCISE CO-ORDINATION, CONDUCT, PLANNING ASSESSMENT AND REPORTING

CONDUCT

1 Relevant duty holders are to plan and conduct NAR exercises in accordance with the overall MOD NAR exercise policy requirements. Duty holders may engage the services of exercise planning staff to assist in the planning and conduct of NAR exercises and are to employ suitably qualified and experienced directing staff and controllers.

CO-ORDINATION

2 For joint UK/US exercises, DS&C/AD NAR will co-chair the Exercise Executive Steering Committee.

PLANNING

3 Duty holders are to plan NAR exercises in sufficient detail to allow all elements of the operators/on-site/local authority response plans to be demonstrated, over a range of scenarios, to the satisfaction of the relevant regulator.

ASSESSMENT

4 Assessment of the MOD response in MOD NAR demonstration exercises is to be conducted by the relevant regulator. Where appropriate, duty holders are to undertake a self-assessment of their performance against their response plans. Copies of the regulator and duty holder self-assessments are to be provided to DS&C/AD NAR.

REPORTING

5 Regulators' reports of assessment for MOD NAR demonstration exercises are to be provided to the relevant duty holder.

6 For Grade A exercises, DS&C will co-ordinate the completion of an All Agency Report (AAR). This is separate from MOD assessments and reports. A copy of the AAR will be placed in the House of Commons Library. Contributors are to be made aware that the report will become a public document.

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CHAPTER 4

ROLE AND RESPONSIBILITIES OF THE DIRECTORATE OF SAFETY & CLAIMS

0401. Some of the responsibilities of DS&C have been mentioned in previous chapters in specific contexts. This chapter provides a comprehensive summary of the role and responsibilities of DS&C.

POLICY AND PLANS

0402. DS&C will maintain the central MOD policy for nuclear accident response and provide day-to-day interpretation of NAR policy matters. It is to be consulted about detailed policy and plans by those having responsibility for generating them; specifically any proposal to plan in outline only is to be referred for approval. DS&C is to be provided with copies of all NAR detailed policy documents and plans.

0403. DS&C will plan with Director United Kingdom (D UK) the MOD HQ response to a defence nuclear accident and the co-ordination of the Central Government response with the Cabinet Office, Civil Contingencies Secretariat and will provide appropriate documentation. DS&C will maintain the Department's Nuclear Accident Alerting Procedures. DGS&S/DS&C will be responsible for the Government-to-Government arrangements for the response to a US nuclear weapon accident in the UK as detailed in the Third Tier Arrangement and for policy interpretation of this. DS&C will maintain the public Local Authority and Emergency Service Information (LAESI) document describing the arrangements for nuclear weapon (and materials) transport accident response.

EXERCISES AND TRAINING

0404. DS&C will co-ordinate the planning of all joint UK/US exercises and contribute to planning Grade A and B exercises. DS&C will make submissions to ministers for political approval for NAR exercises and lead on the arrangements for real-time media handling of NAR exercises. DS&C is to be consulted on the content of training delivered to senior NARO personnel and civilian agencies.

STAFFING AND TRANSPORT OPERATIONS

0405. DS&C will maintain NAR staff at appropriate states of alert (as published in the HQ NARO SOPs). DS&C will be the HQ reporting point for all defence nuclear accidents and incidents and will lead in informing Ministers and the Press Office.

SERVICES FOR MOD NAROS

0406. DS&C will ensure common services for MOD NAROs as follows:

a. Funding of the Meteorological Office services (including PACRAM) and presenting MOD NAR requirements as member of Met Office Core Customer Group.

b. Sponsorship of AWE services for response to weapon and materials accidents (including hazard prediction).

c. Customer 2 and System Manager for NARIMS.

OTHER MOD OPERATIONS

0407. DS&C will represent NAR aspects in the planning for and support of other similar MOD Operations: specifically Counter Nuclear Terrorism in support of Military Aid to the Civil Power and operations involving low-level radiation threats to British Forces. DS&C is to be notified of any proposal to divert NAR elements or equipment to support such operations so that compensatory arrangements can be made if necessary.

LIAISON WITH OVERSEAS AND UK DEPENDENCY GOVERNMENTS

0408. DS&C will be the primary point of contact on nuclear accident response matters with overseas and UK overseas territories working through other MOD branches and the Foreign and Commonwealth Office as appropriate. In particular it will:

a. Foster contacts on weapon accident response with the US Department of Defense through the Defense Threat Reduction Agency and with the US Department of Energy through D Strat Tech under the 1958 agreement; this will include arrangements for the mutual observation of exercises.

b. Foster contacts with France through the joint Franco-British Nuclear Staff Talks; this will include arrangements for the mutual observation of exercises.

c. Take the lead on the political aspects of reactor accident response with UK overseas territories.

d. Take the lead in all aspects of reactor accident response with overseas governments (within the scope of the "Standard Statement" under which UK NPW visits are made).

LIAISON WITH OTHER GOVERNMENT DEPARTMENTS AND NATIONAL BODIES

0409. DS&C will be the primary point of contact with Other Government Departments, Government Agencies and National Bodies on defence nuclear accident response matters. In particular it will:

a. Represent the Department on the Nuclear Emergencies Planning Liaison Group (NEPLG).

b. Co-ordinate Departmental responses to legislation, regulation and guidance proposed elsewhere in Government.

c. Lead any discussions with national bodies (e.g. Association of Chief Police Officers, Chiefs and Assistant Chiefs, Fire Officers Association, National Health Service, Local Authority Associations, The Emergency Planning Society).

CHAPTER 5

SUPPORT TO THE CIVIL NUCLEAR INDUSTRY

0501. Arrangements for responding to an accident at a civil nuclear installation in the UK are overseen by the Nuclear Emergencies Planning Liaison Group (NEPLG). The NEPLG has approved a strategy for radiological monitoring, in particular in areas outside the responsibility of the operator of the installation, under the co-ordination of the NRPB. The MOD has agreed to make monitoring and mapping resources available on a mutual aid basis in the event of a civil nuclear accident.

0502. NAR monitoring resources, (including defence agency and external defence contractor staff) and mapping engineering resources are to respond to a civil nuclear accident when required by DS&C in accordance with the promulgated Operating Procedure.Policy and Plans

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GLOSSARY OF TERMS

ACCOLC	Access Overload Control
AD NAR	Assistant Director Nuclear Accident Response
AWE	Atomic Weapons Establishment
Bronze	Operational Command
BST	Base Support Team
CCC	Civil Contingencies Committee
CDS	Chief of Defence Staff
CE/WSA	Chief Executive/Warship Support Agency
CESO (MOD)	Chief Environment & Safety Officer (Ministry of Defence)
CIVPOL	Civilian Police
DS&C	Directorate of Safety and Claims
D Strat Tech	Director of Strategic Technologies
DCMC	Defence Crisis Management Centre
DCMO	Defence Crisis Management Organisation
DGCC	Director General Corporate Communications
DGS&S	Director General Security & Safety
DMO	Director(ate) of Military Operations
DNA	Defence Nuclear Accident
DNM	Defence Nuclear Material
DofOPs	Director of Operations
DTRA	Defense Threat Reduction Agency
FoF	Follow-on Forces
GNN	Government News Network
Gold	Strategic Command
HAG	Health Advisory Group
HCMF	Health Control Monitoring Force
HIRE	Hazard Identification and Risk Evaluation
HQ	Headquarters
HQ NARO	Headquarters Nuclear Accident Response Organisation
HSE	Health & Safety Executive
IC	Incident Commander
IJOP (Land)	Implementing Joint Operational Plan (Land)
IRF	Immediate Response Forces
JSP 440	Joint Service Publication 440 - Defence Manual of Security
LAESI	Local Authority & Emergency Service Information on Nuclear Weapon Transport Contingency Plans
LO	Liaison Officer
MCA	MOD or Military Co-ordinating Authority
MMU	Media Monitoring Unit
MOD	Ministry of Defence
NABUST	Nuclear Accident Back-up Support Team
NAIAG	Nuclear Accident Information & Advisory Group
NAME	Nuclear Accident Model (operated by the Met. Office)
NAR	Nuclear Accident Response
NARIMS	Nuclear Accident Response Information Management System
NARO	Nuclear Accident Response Organisation
NCND	Neither Confirm Nor Deny
NEPLG	Nuclear Emergencies Planning Liaison Group
NII	Nuclear Installations Inspectorate
NNRP	Naval Nuclear Regulatory Panel
NNPP	Naval Nuclear Propulsion Programme
NRPB	National Radiological Protection Board
NRTE	Naval Reactor Test Establishment
NW	Nuclear Weapon
NWR	Nuclear Weapon Regulator
OGDs	Other Government Departments
Operational	Lowest tier of co-ordination of response to an accident

OT	Overseas Territory
PACRAM	Procedures and Communications in the event of a release of Radioactive Materials
PR	Public Relations
RADSAFE	Nuclear Industry Road/Rail Emergency Response Plan; UK nuclear industry plan detailing the emergency response required for accidents involving radioactive material transported by road or rail
RRD	Rosyth Royal Dockyard
RWG	Remediation Working Group
SCG	Strategic Co-ordinating Group
Silver	Tactical Command
SNM	Special Nuclear Material
SNT	Station NARO Team
SofS	Secretary of State
SOPs	Standard Operating Procedures
SSC	Special Safety Cell
SSSE	Special Safety Support Element
Strategic	Highest tier of co-ordination of response to an accident
Tactical	Middle tier of co-ordination of response to an accident
US	United States
US EOD	United States Explosive Ordnance Disposal
USAF	United States Air Force

COMMENTS FORM

To: Directorate of Safety and Claims (DS&C)
Nuclear Accident Response Team
Floor 6 Zone C
Main Building
Whitehall
London
SW1A 2HB

From:

File:

Senders Reference:	**UIN / Customer Code:**	**Date:**
Chapter(s):	**Page(s)/Paragraph(s):**	
Comment(s):		

Name: **Telephone No.**

Signed: **Rank/Grade:** **Date:**

Thank you for commenting on JSP 471