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ONR GUIDE			
EMERGENCY PREPAREDNESS AND RESPONSE			
Document Type:	Nuclear Security Technical Inspection Guide		
Unique Document ID and Revision No:	CNS-INSP-GD-10.0 Revision 0		
Date Issued:	January 2018	Review Date:	January 2021
Approved by:	Dan Hasted	Superintending Inspector	
Record Reference:	TRIM 4.4.2.20789. (2017/456653)		
Revision commentary:	New document issued		

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OFFICIAL**1 INTRODUCTION**

- 1.1 The Nuclear Industries Security Regulations (NISR) 2003 contains requirements for responsible persons to make certain arrangements including standards and procedures to ensure the security of the nuclear premises, Nuclear Material (NM) or Other Radioactive Material (ORM) stored on the premises, Sensitive Nuclear Information (SNI) and standards and procedures for the transportation of Category I - III NM.
- 1.2 Regulation 4 of NISR requires there to be an approved security plan for each nuclear premises¹ which details those arrangements for the protection of NM/ORM and SNI, including contingency plans. Regulation 7 places the requirement for the dutyholder to maintain arrangements in accordance with the approved plan. Similarly, transporters of Category I-III quantities of NM are required to detail their security arrangements in an approved Transport Security Statement in accordance with Regulation 16 and Regulation 17 requires them to maintain those arrangements. For the purposes of this guide, the term security plan will be used to refer to both approved documents.
- 1.3 The Office for Nuclear Regulation (ONR) has established a set of outcome focused Security Assessment Principles (SyAPs) which provide a framework for it to assess security arrangements defined in security plans and make consistent regulatory judgements on the adequacy of those arrangements. The Fundamental Security Principles (FSyPs) and their underpinning Security Delivery Principles (SyDPs) are goal-setting and do not describe what the dutyholder's arrangements should contain; this is the responsibility of the dutyholders who remain responsible for security.
- 1.4 To assist inspectors, ONR produces a suite of guides to assist them in making regulatory judgements and decisions in relation to the adequacy of compliance. This inspection guide is one of the suite of documents provided by ONR for this purpose.

2 PURPOSE AND SCOPE

- 2.1 Security plans should be structured in a format consisting of high-level claims, supported by arguments substantiated by evidence. Where the dutyholder is required to have an approved security plan, the purpose of this guide is to facilitate a consistent and effective approach to inspecting compliance with the arrangements described in the plan and detailed in the underpinning documentation concerning FSyP 10 – Emergency Preparedness and Response Arrangements.
- 2.2 The judgements made by the inspector will primarily relate to the efficacy of the implementation of arrangements described in evidence that supports the security plan to ensure that associated arguments are fully substantiated. However, ONR takes a sampling approach to regulation and it is possible that elements of evidence within the plan or underpinning the plan were not subject to assessment as part of the approval process. Therefore, when reviewing or inspecting evidence as part of the intervention, the judgement may relate to the adequacy of the arrangements which support the approved plan. The inspector may also provide advice and guidance in the interests of encouraging dutyholders to seek continuous improvement.
- 2.3 The guidance should not be regarded as either comprehensive or mandatory, but provides a framework for inspectors on which to base their judgements and discretion during such inspections. This guidance considers arrangements across levels 3-5 of the Five Levels of Security Defence in Depth (KSyPP4). This guidance will consider the

¹ As defined by Regulation 2 of NISR 2003.

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effectiveness of the dutyholder's implementation of arrangements to deliver the required effects to successfully deliver the three phases of response, these being; Immediate Response, Incident Management and Consequence Management to a Nuclear Security Event (NSE). This guide lays the foundation for all inspection activities carried out by inspectors.

- 2.4 This guidance does not indicate when, or to what extent, these compliance inspections should be made. These matters are covered in the integrated intervention strategy and individual inspectors' inspection plans.
- 2.5 The guidance can be used to make a judgement against FSyP10 as a whole or a single SyDP, depending on the aim of the particular intervention. Inspectors should however, confirm that relevant aspects of arrangements exist and are implemented effectively.
- 2.6 This Technical Inspection Guide (TIG) is supported by the following Technical Assessment Guides:
- CNS-TAST-GD-10.1 - Counter Terrorism Measures, Emergency Preparedness and Response Planning.
 - CNS-TAST-GD-10.2 - Testing and Exercising the Security Response.
 - CNS-TAST-GD-10.3 - Clarity of Command, Control and Communications During and Post a Nuclear Security Event
- 2.7 Relevant aspects from the full range of CNS TIG's should be considered and used in support of an inspection.
- 2.8 The guidance in the document is consistent with:
- The International Atomic Energy Agency (IAEA) Nuclear Security Fundamentals NSS 20 of February 2013 – Objective and Essential Elements of a States' Nuclear Security Regime.
 - IAEA Nuclear Security Series No.13 and Nuclear Security recommendations on Physical Protection of Nuclear material and Nuclear Facilities (INFCIRC/225/Revision5) dated January 2011.
- 2.9 SyAPs transposes these international recommendations within the UK and this guidance considers the relevant aspects of FSyP 10 – Emergency Preparedness and Response.

3 SUMMARY OF FUNDAMENTAL SECURITY PRINCIPLE 10: EMERGENCY PREPAREDNESS AND RESPONSE

- 3.1 **FSyP 10 – Emergency Preparedness and Response.** Dutyholders must implement and maintain effective security emergency preparedness and response arrangements which are integrated with the wider safety arrangements.
- 3.2 The supporting SyDPs are the key components to delivering an effective and integrated response. The guidance is split into 3 parts as follows:
- **SyDP 10.1 – Counter Terrorism Measures, Emergency Preparedness and Response Planning.** Dutyholders should have in place incremental counter terrorism measures that can be implemented in response to changes in threat; and emergency preparedness and response arrangements to deal with any NSE arising and the potential effects.

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- **SyDP 10.2 – Testing and Exercising the Security Response.** Dutyholders should implement a regime of exercising to train personnel and test the efficacy of the nuclear security contingency plans.
- **SyDP 10.3 – Clarity of Command, Control and Communications Arrangements during and Post a Nuclear Security Event.** Dutyholders should implement structures and processes to ensure effective command, control and communications (C3) arrangements during and post nuclear security events.

4 PURPOSE OF FUNDAMENTAL SECURITY PRINCIPLE 10

4.1 The regulatory expectation placed on the dutyholder is that there is adequate oversight of the Emergency Preparedness and Response tactical and operational arrangements, which are fully integrated across the Site Emergency Organisation (SEO)² in order to deliver the required effects to mitigate against a NSE, including any potential safety implications. In summary, the dutyholder should demonstrate this through:

- **Counter Terrorism Measures, Emergency Preparedness and Response Planning.** Dutyholders should maintain arrangements to deliver an effective response to any changes in threat to the site or any NSE, including theft of materials. The arrangements will define the SEO at both operational and tactical levels as defined within the Security Contingency Plan (SCP), and maintain interoperability with off-site emergency first responders (SyDP 10.1.refers).
- **Testing and Exercising the Security Response.** Dutyholders should ensure that there is an effective training and exercise programme in place that confirms members of the SEO remain SQEP in their roles and responsibilities to deliver the effects of the SCP. The SEO is to be integrated and interoperable with external stakeholders. It is a regulatory expectation that dutyholders will regularly demonstrate their capability to deliver the effects of the SCP at an ONR observed Security Contingency Exercise (SCX) (SyDP 10.2 refers).
- **Clarity of C3 Arrangements during and post a Nuclear Security Event.** Dutyholders should ensure that their C3 capability is maintained to support the delivery of the required effects to mitigate against a NSE (SyDP 10.3 refers).

5 GUIDANCE ON INSPECTION OF ARRANGEMENTS FOR FUNDAMENTAL SECURITY PRINCIPLE 10- GENERAL CONSIDERATIONS

5.1 The inspector should consider how the arrangements in support of the plan are designed and implemented to deliver the required outcome. Inspectors should confirm that the dutyholders arrangements are implemented to:

- Ensure the SEO can deliver an effective and timely response to a NSE across the three phases of response; Immediate Response, Event Management and Consequence Management, in concert with Levels 3-5 of the Five Levels of Security Defence in Depth (KSyPP4).
- Deliver a continuous training and exercising programme that ensures all members of the SEO are trained and competent in delivering their roles and responsibilities (operational and tactical) required under the SCP.

² SEO includes the Civil Nuclear Constabulary (where deployed).

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- Enable off-site emergency first responders to take part in the SEO training and exercise programme and undertake any reasonable familiarisation of the site to ensure and integrate an effective response to a NSE.
- Implement a continuous assurance regime to ensure performance of the SEO is adequately assessed to maintain the competency to deliver the required effects of the SCP across all training and exercising activity, both at an individual and collective level.
- Demonstrate to ONR on a regular basis, by way of an observed Security Contingency Exercise (SCX), that the SEO can deliver the required effects of the SCP to a NSE, or any other time where there is a regulatory need to do so.
- Ensure that C3 infrastructure and arrangements can effectively support the SEO and are integrated with off-site emergency first-responders, in order to deliver the required response to a NSE at all times.

6 GUIDANCE ON INSPECTION OF EMERGENCY PREPAREDNESS AND RESPONSE ARRANGEMENTS

- 6.1 **Planning.** The inspector should be clear as to the purpose of the proposed intervention and why is it being considered; is it regulatory intelligence, divisional strategy, routine compliance or another reason that is driving the requirement? Once these initial considerations are understood the inspector should be in a position to define and agree the outcomes and outputs of the intervention.
- 6.2 Once the outcomes and outputs of the intervention are defined the inspector will be in a position to identify the inputs required to deliver outputs; this is likely to be ONR resource and support may be required from outside of the security specialism. For further guidance see:
- Compliance Inspection Guide – ONR-INSP-GD-059.
 - General Inspection Guide – ONR-INSP-GD-064.
- 6.3 **Preparation.** It may be appropriate for the inspector to obtain evidence and information in advance to consider in detail prior to arrival at site. This consideration in advance may influence the focus and delivery of the intervention. It is recommended that the requirements during the delivery phase are clearly identified to the dutyholder in good time for them to prepare effectively. Inspectors should also make them aware of the staff and stakeholders that will be required to contribute as part of the intervention.
- 6.4 Considerations specific to emergency preparedness and response. The emergency preparedness and response business area is complex. To assist inspectors in their preparation, the following should be considered:
- **Previous Reporting.** Preparation includes a review of the inspection history for the dutyholder. Previous intervention records and the Regulatory Issues Database (RID) should be reviewed to identify if there are any legacy concerns or outstanding issues which are relevant to the planned inspection.
 - **Current Regulatory Picture.** Preparation should include a discussion with the nominated inspectors to understand and take into account the current regulatory situation on the site. This context could include: current and recent issues;

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enforcement activity; inspection history; regulatory topics and themes that are relevant to the planned inspection.

- **Supporting Guidance.** Preparation for an Emergency Preparedness and Response (EP&R) inspection should include a review of guidance that the inspector considers to be relevant to the planned inspection. Inspectors should use this in conjunction with their knowledge and experience of relevant good practice to develop a clear understanding of the compliance standards that are expected. The scope of the inspection should be clearly defined and articulated through preparation of an appropriate question set. Inspectors should ensure that they (and others supporting them) understand the guidance they have to review and are competent to apply it.
- **Specific Site Contact.** It is important that the inspection is organised with the dutyholder at the right level of responsibility. Inspectors should ensure an appropriate specific point of contact (SPOC) has been nominated by the dutyholder to coordinate the inspection. Depending on the site concerned and the scope of the intervention, this could be any or all of the following; Security Manager, Emergency Planning Officer, Duty Authorised Person (i.e. Shift Team Leader, Emergency Controller), CNC representative, Civilian Guard Force Manager, Security Team Leader, internal regulator, or regulatory liaison.
- **Inspection Programme.** An agenda for the inspection should be developed by the inspector and sent to the dutyholder SPOC. Early issue of the proposed agenda allows the dutyholder to ensure the appropriate staff and resources are available to support inspection activity. The agenda should be agreed before the delivery phase.
- **Information Requirements.** For inspections announced in advance, it is good practice to furnish the dutyholder with as much information about the scope and nature of the inspection as is practicable. This ensures that the dutyholder is given every opportunity to provide a true and accurate demonstration of arrangements. In some cases it may be advantageous to seek certain documents from the dutyholder in order to study in advance. If this is not practicable, or for no-notice interventions, inspectors should ensure the required documentation is made available at the start of the intervention and the inspection agenda should feature an initial 'reading phase' to allow the inspector appropriate familiarisation before commencing the inspection. An example of suggested documents for EP&R inspections is below:

Inspection	Documents
SyDP 10.1. CT Measures, Emergency Preparedness and Response Planning	<ul style="list-style-type: none"> • Security plans • SCP • Op SHIELDING minutes • Memoranda of Understanding with off-site emergency first responders • Minutes or associated records of reviews, working groups or other activity concerning the maintenance of the SCP.
SyDP 10.2. Testing and Exercising the Security Response	<ul style="list-style-type: none"> • SCP • Individual training records • Collective records • Training/lesson plans and supporting documentation • SEO annual training plan • SEO exercise instructions and supporting documentation

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	<ul style="list-style-type: none"> • INA reports
SyDP 10.3 Clarity of C3 during and post a Nuclear Security Event	<ul style="list-style-type: none"> • SCP • Operational Requirement(s) for command nodes • C3 Policy document (or similar)

6.5 **Delivery.** The inspector will need to be clear as to their expectations of how the intervention will be implemented, examples to be considered, areas that require sampling, and the evidence required to be seen/obtained to support outputs and outcomes. A review of daily intervention activity is always recommended to re-calibrate if necessary; ensure that expectations for the following day are understood; and, to confirm any changes to the planned programme.

7 CT MEASURES, EMERGENCY PREPAREDNESS AND RESPONSE PLANNING

7.1 The following paragraphs indicate possible areas against which inspectors should consider confirming there is adequate evidence that dutyholders have effectively implemented CT measures, emergency preparedness planning arrangements.

7.1.1 **Review.** There is evidence that the SCP is reviewed in line with the annual security plan review process.

7.1.2 Stakeholder Engagement.

- There is evidence of engagement with all key stakeholders³ in order to ensure the SCP informs decision-makers on delivering an integrated response across all three phases of response at all times.
- There is an expectation that the dutyholder maintains liaison with Counter Terrorism Security Advisers under the Op SHIELDING initiative.

7.1.3 **Command, Control and Communications.** There is an expectation that each command node within the SCP is adequately resourced by SEO personnel to deliver the required outcomes of the C3 policy.

7.1.4 **Contingencies.** There is evidence that contingencies have been theoretically and practically developed by all stakeholders so that a feasible, fully integrated response can be delivered to a NSE.

7.1.5 **Application of NIMCA and other threats.** There is an expectation that the SCP will include:

- Specific contingencies against the relevant Nuclear Industries Malicious Capabilities Planning Assumptions (NIMCA) threat profile for the site. All contingencies will deliver the required security outcome for the site (SyAPs Annexes C-D) against relevant threats. All contingencies cover the three NSE phases of; Immediate Response, Event Management and Consequence Management.
- Contingencies for other relevant generic terrorist or domestic extremist threats to mainland Great Britain are reflected in the SCP.

³ Key stakeholders are considered to be: the CNC (where deployed) and/or Home Office Police/Police Scotland, Explosive Ordnance Disposal, Civilian Guard Force / In-house Guard Force, site safety functions and other off-site emergency first responders such as Fire and Rescue Service and Ambulance Service.

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- Contingencies for dealing with an unacceptable disruption or loss of elements of the Physical Protection System (PPS) that are critical 'force enablers' or 'force multipliers' in delivering a response, such as communications and Security Management Systems.
- Arrangements to deliver an immediate response to an individual refusing entry/exit search to prevent the theft of nuclear material or sensitive nuclear information and the sabotage of NM/ORM or facilities.
- Where applicable, arrangements to enable Operation TEMPERER to be activated on the site.

7.1.6 **Information Assurance.** There is evidence that the distributed copies of the SCP are adequately controlled and accounted for.

7.1.7 **Declaration of Understanding.** There is evidence that members of the SEO have read and understood the SCP.

8 TESTING AND EXERCISING THE SECURITY RESPONSE

8.1 The following paragraphs indicate possible areas against which inspectors should consider confirming there is adequate evidence that dutyholders have effectively implemented arrangements to test and exercise the security response.

Training Programme

8.1.1 **Quality of training.**

- There is evidence that the trainer is competent and suitably SQEP in the delivered subject matter.
- Training should be evidenced by training/lesson plans and associated supporting documentation befitting the dutyholder's organisational learning processes.
- There is evidence that the training is delivered against defined success criteria tailored to delivering each contingency effects.
- There is evidence that any learning outcomes are appropriately addressed.

8.1.2 **Individual Training.** There is evidence the training adequately reflects the individual roles and responsibilities of members of the SEO and covers all actions required to deliver each contingency effect across all three phases of response.

8.1.3 **Collective Training.** There is evidence that collective training includes operational and tactical command nodes where relevant.

8.1.4 **Continual Training and Assessment.** There is an expectation that the frequency of continuation training and assessment adequately maintains the competencies of the SEO, and is aligned with the review process of the SCP.

Exercise Programme.

8.1.5 **Scope.**

- There is an expectation that the exercise programme covers all relevant NIMCA threat scenarios, and other relevant current generic terrorist or domestic extremist threats to mainland Great Britain.

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- There is evidence that exercises demonstrate the SEO arrangements across all three phases of response.
- There is evidence that the exercise programme is maintained at regular intervals throughout the year with an appropriate combination of 'live' and 'table top' activity.
- There is an expectation that other key stakeholders in the SCP take part or provide a meaningful contribution to exercises.

8.2 **Internal Assurance.** There is evidence that exercises are observed by the dutyholder's internal assurance function.

8.2.1 Audit.

- There is evidence of exercise instructions (or similar) that capture the scenario, objectives and success criteria for each exercise.
- There is evidence of post-exercise reports (or similar) that account for learning outcomes and how they are addressed in concert with the dutyholder's internal assurance function.
- There is an expectation that OPEX will be produced and disseminated across the SEO. Where findings require remedial actions, this activity should be reflected in the SEO training strategy.
- There is an expectation that any elements of OPEX good practice are considered for sharing at the Industry Exercise Governance Group forum.

8.2.2 **Stakeholder Engagement.** There is an expectation that:

- Internal site stakeholders are invited to participate in exercises.
- The exercising of the reception, staging and onward integration of off-site emergency first responders is informed by either these stakeholder's participation in exercises or by way of informed close liaison.

ONR Observed Demonstration SCX.

8.3 **Planning.** The inspector would have been party to inspecting the complete planning process before observing a SCX. This aspect is covered in detail in the CNS-TAST-GD-10.2: Testing and Exercising the Security Response.

Why Inspect a Demonstration SCX?

8.4 Dutyholders should have robust internal audit processes in place that have identified and acted on areas for improvement in their arrangements. The strength of this internal audit and the actions taken will influence an inspector's judgement on the efficacy of the SCP arrangements at a site. However, such systems are primarily designed to meet a dutyholder's assurance requirements. A separate regulatory evaluation of the adequacy of the arrangements, and relevant personnel's knowledge of their part in them, is important.

8.5 An ONR-observed demonstration SCX is a single snapshot of the performance of one of the dutyholder's response teams. The exercise will typically deal with a single scenario, possibly in only one of several facilities, on a particular day. It is important, therefore, for site inspectors to form a view on the overall effectiveness of a dutyholder's arrangements in the context of continued readiness and their ability to respond to a real

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event at any time. An intense training period prior to a demonstration SCX is not the preferred approach.

- 8.6 The site inspector will, and the site internal audit function should, be keeping a watching brief on the dutyholder's Emergency Preparedness and Response training programme. Taking a team to site enables ONR to subject the SCX to an in-depth inspection. The team can, simultaneously, cover all elements of the response and the interactions between them. However, while the team needs to be large enough to effectively evaluate the exercise, it should do so efficiently. Thus the size of the team is to be proportionate in respect of the priority attached to the intervention, based upon a targeted programme and the graded approach.

What Does the Inspector(s) Have To Do?

- 8.7 Before the exercise the ONR nominated security inspector will have agreed the objectives and scenario. The inspector should pass the exercise instruction, including the objectives and scenario, to the inspection team as soon as it is finalised to ensure the scenario, objectives and success criteria are fully understood.
- 8.8 To carry out an effective evaluation of the dutyholder's arrangements and the demonstration SCX, members of the ONR team should be suitably qualified and experienced. They should have completed the command and control (C2) "foundation" and "exercise evaluation" training courses provided by the ONR EP&R team.
- 8.9 The team will decide in advance of the exercise which location(s) and/or aspects of the exercise each individual will observe. Typically the senior member of the team, usually a principal inspector, will be placed in either the Central Control Centre (CCR) or Emergency Control Centre (ECC) (or equivalents) with the security site inspector and any others observing the live play armed response (if appropriate), the actions of the Civilian Guard Force (CGF) in the gatehouse and Site Security Control Room (SSCR) (or equivalents), Reception, Staging and Onward Integration (RSOI) of off-site emergency responders and the effectiveness of the lockdown. The team should remain flexible in response to live play, observing and evaluating whatever happens. For more detail see Annex 1: Aide Memoire for Inspectors for Demonstration Exercises.
- 8.10 Immediately prior to most exercises, there will be a briefing and familiarisation visit. The ONR nominated security inspector is to liaise with the site and inform the team of these requirements. This should also allow members of the team less familiar with the site to conduct a tour of the relevant areas. It may be necessary to attend a specific briefing or complete training prior to entering certain areas, particularly if an inspector is unescorted. Consolidating team members' information allows an overall picture to be drawn, e.g. the time between a site incursion occurring and a lockdown being called.
- 8.11 Exercises should normally be run until the dutyholder's exercise objectives have been fulfilled and the ONR team is satisfied it has seen enough to make a judgement about all relevant aspects. There will typically be a conversation between the exercise director and the senior member of the ONR team to agree an appropriate point at which to end the exercise. However, dutyholders should bear in mind the fatigue load on those taking part, and given the fact they will have to immediately respond if a real event occurs soon thereafter, 4 hours is about the maximum.

Making the Judgement

- 8.12 When observing the exercise play, all inspectors should bear in mind they will be asked to provide a judgement on the standard of the sections they observed. All observations

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should be captured in ONR notebooks. Comparison of performance and behaviours observed with the detail contained at Annex 1 is one method of making a judgement. However, inspectors should not be overly fettered by checklists and personal experience should also be brought to bear.

- 8.13 Immediately after the exercise the ONR team will conduct a hot debrief among the members, not including site personnel. They will discuss their judgements and determine when different C2 nodes became aware of key events. By comparing individual notes the team can draw an overall picture and this may help individual inspectors place their own observations in context.
- 8.14 The team will then make an overall judgement on whether the dutyholder has shown it could effectively deal with a real event and whether its arrangements were shown to be adequate. It is necessary to allow for the unreality (if any) of the scenario and inevitable exercise constraints and role-playing. The result will either be an adequate or inadequate demonstration of the arrangements.
- 8.15 It is the ability to operate effectively and not the method by which individuals choose to operate, that is important. Personal styles, especially in C2 roles, should not affect the judgement. The key consideration in reaching an overall judgment is whether the arrangements are sufficient that the dutyholder, in conjunction with supporting agencies, would cope with a real event.
- 8.16 As part of the evaluation process, inspectors should determine whether exercising staff, including responders and those in C2 positions, are familiar with the SCP and their responsibilities within it. Thus the effectiveness of their implementation of training arrangements, which should themselves be described in the SCP, can be inspected practically. Pre or post-exercise examination of training records and internal assurance reports on SCP training and exercising may assist in this regard. Inspectors should also be alert to performance during an exercise which indicates an area for improvement in the SCP. For example if there is inappropriate or insufficient guidance for role holders on expected decisions or actions.
- 8.17 Having reached an overall judgement, the team members should then each generate an evidence-based list of good practices and areas for improvement from their observations. The team leader will consolidate these lists in preparation for the joint ONR-site debrief. The team members should forward those lists in writing to the ONR nominated security inspector for inclusion, where appropriate, in the intervention record. An aide memoir that can be used to concisely capture all individual inspectors' evidence of an observed SCX is included at Annex 2: Aide Memoire: SCX Debrief.
- 8.18 The joint ONR/site debrief provides an opportunity for the dutyholder and supporting organisations to self-critique; and for the ONR team leader to provide feedback and make a judgement(s) on the adequacy of the arrangements demonstrated. By allowing dutyholders to take the lead in these briefings, ONR inspectors will be able to make a determination on the effectiveness of their ability to review, learn and improve. Any significant shortfalls noted by the ONR team which were not identified by the dutyholder, should be raised by the team leader.
- 8.19 It is neither necessary nor beneficial to emphasise an area for improvement which the dutyholder has clearly identified. In the case of a poor performance it is preferable for the dutyholder to suggest a redemonstration of certain aspects and invite ONR to observe, rather than ONR requiring the site to hold another demonstration SCX.

If the Overall Performance is Judged Inadequate**OFFICIAL**

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- 8.20 In the case of an inadequate demonstration, before the debrief, the ONR team must decide whether a full or partial re-demonstration is required after the dutyholder has addressed the issues. If a full demonstration is required the team should decide whether this is because of an inadequate SCP, or elements thereof, or poor performance by the team on the day in delivering the required effects of the SCP. If the former then the SCP may need to be amended. If the latter then the adequacy of training may need to be examined further, and it should not be limited to the exercising team.
- 8.21 Partial redemonstrations are typically appropriate where performance as a whole has been adequate. However some particular aspect or aspects of the exercise, which in the judgment of the inspectors is important enough to need to seek practical evidence of improvement, may have been inadequate.

Exercise Intervention Record

- 8.22 ONR security inspectors are to write the intervention record and send it to site in accordance with the process in HOW2. This exercise report should include relevant observations made by the inspection team and any regulatory issues raised against the site, with supporting evidence. It should include a timeline for sites to respond to the issues raised. These issues are to be recorded on the ONR regulatory issues database and tracked by security inspectors. They may also be reflected in the security plan improvement schedule.
- 8.23 ONR expects dutyholders to respond in writing within 30 days of receiving the report. The response should include the dutyholder's own findings, including identified good practices and areas for improvement, of the exercise. It should also include an action plan to address deficiencies or vulnerabilities identified in both the ONR intervention record and its own report.

9 CLARITY OF COMMAND, CONTROL AND COMMUNICATIONS ARRANGEMENTS DURING AND POST A NUCLEAR SECURITY EVENT

- 9.1 The following paragraphs indicate possible areas against which inspectors should consider confirming there is adequate evidence that dutyholders have effectively implemented arrangements to ensure clarity of C3 during and post a NSE. C

Command Policy

- 9.1.1 **Resilience.** There is an expectation that:

- The SEO command policy can be adequately maintained in the event of any loss or interruption of a command node(s) function across all three phases of response.
- Procedures are in place to ensure command nodes remain effective through any protracted phase of response in respect to real life support or provision of relief-in-place by other SQEP personnel.
- Any alternative and/or off-site command node (wherever required) is swiftly activated by SQEP personnel to deliver a seamless transition of command.

- 9.1.2 **Communications.** There is an expectation that:

- All elements of the SEO have a means to communicate effectively at all times.

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- There is a capability to ensure off-site emergency first responders can integrate with the SEO communications network.
- Where CNC are deployed, their communication system is capable of supporting all tactical and operational activity throughout the three phases of response.

9.1.3 **Security.** There is an expectation that:

- The PPS provides adequate mitigation against relevant NIMCA threat actors to ensure the SEO command function can be delivered at all times.
- Any alternative and/or off-site command nodes are afforded similar protection as routine command nodes.
- Any security classified information or apparatus that features within the SEO C3 arrangements is adequately controlled and protected.

9.1.4 **Ergonomics.** There is an expectation that each command node will have the appropriate facilities and apparatus to enable a sustained function across all three phases of response?

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OFFICIAL**10 ANNEX 1: AID MEMOIRE FOR INSPECTORS FOR DEMONSTRATION SCXs****Introduction**

A1.1 This aide memoire provides inspectors with more detailed guidance on evaluating specific areas of a demonstration SCX. The information is neither exclusive nor exhaustive and will be subject to review in light of operational experience. It is not a 'tick list', but rather a framework for evaluation. It does not prevent inspectors from bringing their own experience to bear and evaluating and commenting on other relevant matters. It does, however, provide a range of aspects that can be examined during the course of a demonstration SCX.

A1.2 Under each area there are anticipated performance statements. Some of these could be viewed as essential, ie the absence of an aspect means the demonstration was inadequate, whereas others might be seen as desirable, repeatable good practice. However, it is for the inspection team to decide which, taking account of the characteristics of the site, the challenge presented by the exercise scenario etc.

A2 Aspects to be observed and evaluated

A2.1 The following locations, personnel and activities are covered:

- Armed response and interoperability with site
- Gatehouse / security lodge
- SSCR
- CGF
- CCR
- ECC
- C2
- Communications
- Lockdown
- Cordon
- Integration of safety and security response
- Accounting for personnel
- Casualties
- Interoperability with off-site emergency first responders
- Crime scene and witness management
- Exercise management

A2.2.1 Armed response and interoperability with site

- AFOs neutralise armed adversaries before they accessed NM or VA
- CNC act in accordance with concept of operations, joint security response plan and local operating procedures
- Effective, accurate and timely passage of information between CNC, site, and local Home Office/Police Scotland
- CNC and CGF responsibilities were delineated and actions complementary
- CNC integrated into, and advised ECC decision making
- If radioactivity has been released, then protection of CNC responders (permitted dose rates etc) was duly considered

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OFFICIAL**A2.2.2 Gatehouse / security lodge**

- Lockdown procedures conducted promptly, securing entry and exit points etc where appropriate
- Prompt briefing and deployment of CGF
- Concise and timely briefs to SSCR
- Carried out procedures effectively and in line with SCP
- Maintained an accurate and contemporaneous event / decision log
- Conducted dynamic risk assessments regarding safety of personnel
- Maintained accurate situational awareness
- Acted within delegated responsibilities, observing the chain of command
- Equipment was ergonomic and fit for purpose
- Effectively used situation and focus boards, operational mapping
- Used C2 principles outlined at A2.2.7 below and communications principles at A2.2.8.

A2.2.3 SSCR / PCR

- Swift and accurate identification of threat and other relevant information, and onwards reporting of the same
- Provided timely intelligence to responders
- Utilised CCTV system and other equipment to maintain accurate situational awareness
- Carried out procedures effectively and in line with SCP / response plan
- Prioritised effectively, made sound and timely decisions based on available information
- Maintained an accurate and contemporaneous event / decision log
- Initiated lockdown in a timely manner (where appropriate)
- Delivered concise and timely briefs to other C3 nodes and first responders
- Effectively used focus boards, operational mapping
- Effective use of all technical equipment (AACS, CCTV recording etc)
- Equipment was ergonomic and fit for purpose
- Used C2 principles outlined at A2.2.7 below and communications principles at A2.2.8.

A2.2.4 CGF

- Acquainted with their part in the SCP and assignment instructions, carrying out procedures effectively in line with both
- Deployed swiftly on task with relevant equipment and correct PPE
- Familiar with operation of all equipment relevant to role
- Maintained situational and personal safety awareness
- Communicated effectively
- Maintained a personal event / decision log (pocketbook)
- Acted within delegated responsibilities, observing the chain of command
- Aware of and acted taking account of crime scene management considerations

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OFFICIAL**A2.2.5 CCR**

- Used C2 principles outlined at A2.2.7 below and communications principles at A2.2.8.
- SM and others familiar with the SCP and followed it as appropriate
- Timely and accurate communication between SM and FIM
- Maintained accurate situational awareness
- Made timely prioritised decisions using available information
- Accurate and effective use of situation, focus and action boards, and actively managing actions to completion
- Actions were SMART, were allocated a responsible person and time for completion
- Accurate, timely and succinct flow of information within the CCR, with other C3 nodes and with external responders
- Suitable delegation of tasks within the CCR and to other personnel on site
- Anticipated future requirements, taking account of likely and worst case scenarios
- Controller led the team and controlled the incident while maintaining a strategic focus
- Equipment was ergonomic and fit for purpose
- Maintained an accurate and contemporaneous log (possibly by simply printing the situation and actions boards before information was overwritten)

A2.2.6 ECC

- Used C2 principles outlined at A2.2.7 below and communications principles at A2.2.8.
- EC and others familiar with the SCP and followed it as appropriate
- Timely and accurate communication between EC and FIM
- Maintained accurate situational awareness and interpreted information appropriately
- Made timely decisions using available information, setting suitable priorities
- Accurate and effective use of situation, focus and action boards, updating frequently and actively managing actions to completion
- Actions were SMART were allocated a responsible person and time for completion
- Accurate, timely and succinct flow of information within the ECC, with other C3 nodes and with external responders
- Suitable delegation of tasks within the ECC and to other personnel on site
- Anticipated future requirements, taking account of likely and worst case scenarios, creating actions to deal with former and assigning resources / developing contingency plans to cater for the latter
- Controller led the team and controlled the incident while maintaining a strategic focus
- Equipment was ergonomic and fit for purpose

A2.2.7 Command and Control

- The strategic intent / focus was clear and known
- A calm operating environment was evident in C3 nodes
- Situational awareness throughout was accurate
- Reasonable decisions were made in a timely manner based on available information to hand; important decisions were not delayed for the want of perfect information
- Individual's roles within C3 node teams were well-defined
- People were free to anticipate and act within the intent of the controller's focus but were not extensively 'self-tasking'

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- SEO Commanders at all levels stepped back to take account of the bigger picture
- Handover between CCR and ECC was neither too soon, the ECC was ready and in possession of enough facts, nor too late, the CCR was not overwhelmed.
- Clearly delineated responsibilities between armed responders, external responders and site, always clear who is the supporting and who is the supported commander
- Protocol briefings were timely, accurate and disciplined, providing accurate situation updates, restating the focus and prioritising outstanding actions

A2.2.8 Communications

- Timely notifications to internal responders, other site personnel and off-site emergency first responders , in accordance with relevant plans
- Effective use of 3-way communications for passage of important information
- Concise and timely briefings to off-site responders arriving on site
- Accurate handover briefing(s) between CCR and ECC
- Timely site tannoy messages were pertinent, clear and concise to all relevant personnel
- Tannoys or other communications did not divulge useful information to adversaries
- Radio procedures were effective, enabling accurate and timely passage of important information
- Signal for radio coverage was adequate and enabled effective communications

A2.2.9 Lockdown

- The decision to lockdown was made promptly and by somebody duly authorised
- All personnel on site were promptly informed of the need to lockdown
- All personnel on site were aware of the meaning of lockdown, as it applies to the site
- Lockdown was achieved in a timely manner and accurately confirmed as complete
- All relevant buildings were locked and, where necessary, entrances staffed
- Any movement necessary after lockdown was subject to appropriate permissions and properly coordinated
- Lockdown did not unduly hinder the actions of emergency responders
- Lockdown was lifted in a timely manner

A2.2.10 Cordon⁴

- The threat (IED etc) and the position were accurately identified and confirmed
- The correct minimum distance area was cleared of personnel

⁴ The 'CORDON' effect is now considered pertinent only to police and there are no 'any person' legal powers pertaining to managing and protecting cordon areas. Where CNC are deployed, the response is known as the 5Cs, whereas where there are non-police first responders the response is known as the 4Cs. The breakdown is shown below:

5Cs (CNC/Home Office Police/Police Scotland)	4Cs (non-police responders-CGFs)
CONFIRM – H.O.T. principles/Description/Location	CONFIRM - H.O.T. principles/Description/Location
CLEAR – Clear area/Keep away to required minimum distance for threat	CLEAR – Clear area/Keep away to required minimum distance for threat
CORDON – Appropriate distances	COMMUNICATE – Inform supervisors/Call 999
CONTROL – Access/Liaise with other services	CONTROL – Keep area clear/Retain witnesses
CHECK – For secondary devices	

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- The cordon was clearly delineated, accurately sited at the correct distance from the threat, managed and staffed where necessary to prevent re-entry
- Entry to the cordon was only permitted to people duly authorised
- All aspects of the cordon were verified as correctly implemented and working
- There were enough police to manage the cordon effectively
- Secondary hazards within the cordon area were identified and, where necessary, further cordons were established around them with further evacuation etc.
- Personnel were evacuated/invacuated using safe routes, the routes and muster points having been confirmed clear beforehand
- Personnel were briefed accurately prior to evacuation/invacuation and accounted for at the muster point
- An incident control point (ICP) was established with controlled access to nominated individuals (e.g. EOD)

A2.2.11 Integration of safety and security response

- The SCP was complementary to the emergency plan and handbook and arrangements within either one did not interfere with those in another
- Site was able to staff the ECC while at lockdown
- Site was able to account for people, where necessary, while at lockdown
- Dynamic risk assessments were conducted in relation to emergency responders (site or external) carrying out remedial actions, taking due cognisance of the threat
- Responders were able to move safely and securely around site, at lockdown if necessary
- Appropriate, risk-based decisions were made in relation to shutting down certain plant at risk from malicious acts. Such decisions took account of the potential direct impact on plants and the indirect impact of secondary hazards
- All relevant personnel were familiar with the SCP and their part in it
- Where deployed, CNC commanders (e.g. FIM and OUC) were full and proper members of site C3 nodes, they were practised in that role and staff in those nodes knew how best to employ them
- The views of local police commanders were duly considered in site C3 nodes
- Safety control points including facility control centre, incident/access/forward control point etc. were checked for malicious activity before use and subsequently protected in the case of an enduring threat

A2.2.12 Accounting for personnel

- Site was able to account for any personnel in a cordon area to confirm it was clear or make an informed decision about tolerating the risk to people in buildings within the cordon as more acceptable than the risk of evacuating
- Site could account for personnel who were affected by the malicious act and/or involved in the response to it
- Any staff evacuated from a cordon area were accounted for after evacuating
- Any physical muster points or other evacuation points are checked for secondary devices / malicious activity before use
- Site could account for personnel when at lockdown
- Personnel accounting processes took account of and could identify unauthorised persons

A2.2.13 Casualties

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- Casualty locations and numbers were promptly identified and confirmed
- Casualty status was quickly determined, confirmed and accurately reported
- Appropriate equipment was available to the right people to treat casualties
- Casualties were treated effectively at the scene by SQEP personnel when safe to do so and removed from further danger where necessary
- Casualties were evacuated from site in the most timely manner possible and in any event inside the golden hour
- Site could deal appropriately with contaminated casualties and weapons etc.

A2.2.14 RSOI of Off-Site Emergency First responders

- Responders were, where necessary, allowed access to site in a timely manner, including while the site was at lockdown
- Responders were requested in a timely manner and briefed accurately when requested and on arrival, using appropriate maps and aids
- Arrival of responders was briefed (e.g. to the gatehouse) and anticipated
- Responders received a technical brief on the hazards posed by the site, the security hazards posed by the malicious event and safe routes
- Rendezvous point (RVP) for responders was identified and cleared, they were escorted to it where necessary
- SM and/or EC were aware of intent and actions of responders and felt able to challenge where it conflicted with their own intent
- ECC took account of emergency services resources and factored it into plans
- JESIP terminology was reflected in briefings for off-site responders

A2.2.15 Crime Scene and Witness Management

- Access to potential crime scenes, including the access point and routes taken by malicious actors, location of any firefight or IEDs etc., was appropriately secured in order to leave forensic evidence undisturbed.
- Site gave due consideration to and acted on relevant police force advice for securing the crime scene
- Site had given prior consideration to crime scene management (i.e. personnel were acting against a plan rather than learning it for the first time)
- Site had a plan to deal with continued (potentially days or weeks) restricted access to affected areas of site
- Timely identification of witnesses
- Witnesses segregated, reassured, welfare need cared for and kept away from C3 nodes
- Essential information taken from witnesses in a timely manner
- Police, and any other relevant off-site responder, afforded timely access to witnesses
- Crime scene management took account of on-going nuclear safety or security considerations

A2.2.16 Exercise management

- The exercise was planned in accordance with CNS-TAST-GD-10.2: Testing and Exercising the Security Response.
- The scenario was adequately controlled and participants were not aware of it
- The exercise initiation was a surprise to the participants and effective in that the requisite alarms were activated

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- Umpires and observers were well-managed, did not interfere with the scenario or achievement of exercise objectives
- The exercise did not emphasise training over demonstration of capability
- Exercise participants were not pre-deployed to make the response more effective, such as armed responders near an armed incursion or staff in the vicinity of the ECC to save moving around site at lockdown

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11 ANNEX 2: SCX HOT DEBRIEF AIDE MEMOIRE

OFFICIAL-SENSITIVE (WHEN COMPLETED)

SCX- HOT DEBRIEF SUMMARY					
DH	SCX	Date	Observer		
LOCATION / FUNCTION					

DELIVERY OF CONTINGENCY EFFECTS- THREE PHASES OF RESPONSE (✓)											
Immediate Response				Event management				Consequence Management			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			NA				NA				NA

FUNCTIONAL AREAS					
Area	Outcome(✓)				Remarks
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NA	
Protection of NM/ORM/SNI					
• Threat neutralised / objective(s) denied					
• Lockdown procedures					
• Accounting for material					
C3					
• Deployment / notifications					
• Briefing					
• Situational awareness					
• Secondary hazards / cause agnostic					
• 3 way communications					
• Requests for / passage of information					
• Command (maintaining / transfer of)					
• Security Contingency Plan used					
• Media considerations					
Protection of Personnel					
• PPE provided / used					
• Dynamic risk assessment (s)					
• Evacuation / invacuation / lockdown					
• Accounting for personnel					
Cordon / Clearance Activity					
• Delivery of 4Cs (CGF) / 5Cs (CNC/Police)					
• Management / effectiveness					
• Observed HOT/WARM/COLD discipline					
Logging					
• Decision logs / Focus boards					
• Accuracy / information capture					
Casualty Management					
• Dynamic assessments					
• Triage / First aid					
• Extraction					
Witness Management					
• Information gleaned					
• Welfare					
• Security					
Reception Onward Staging and Integration of Off-site Responders					
• Briefing / liaison through event					
• Escort / route management					
• RV/ICP management					
• Timeliness of process					
Consequence Management					
• Post incident recovery					
• Crime scene management					
Exercise Management					
• INA / Umpires conduct					
• Maintain play / dynamic injects					
• Realism-adversaries/ hazards / timings					

OFFICIAL-SENSITIVE (WHEN COMPLETED)

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OFFICIAL-SENSITIVE (WHEN COMPLETED)

OVERALL ASSESSMENT FOR LOCATION / FUNCTION (✓)



SUMMARY	
Good	AFIs

' FIRST SIGHT ' ASSESSMENT SCORE MATRIX										
1	2	3	4	5	6	7	8	9	10	
No effects delivered		Few effects delivered		Effects delivered						
<ul style="list-style-type: none"> Threat actor(s) objective(s) met Unacceptable risks to NM/ORM/SNI – plant and personnel Failure in delivering effects 		<ul style="list-style-type: none"> Significant shortfall in delivering effects across functional areas Significant weaknesses in delivering required effects 		<ul style="list-style-type: none"> Threat actor(s) neutralised Security of NM/ORM/SNI – plant and personnel maintained Minor weakness in delivering effects 			<ul style="list-style-type: none"> Cause agnostic approach maintained throughout Good practice noted across delivering some effects 			Exemplar performance across all functional areas
Critical AFIs		Substantial AFIs		AFIs require some further assurance			Reducing number of AFIs			Good practice throughout
Decision for full or partial redemonstration required										

OFFICIAL-SENSITIVE (WHEN COMPLETED)

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