

NUCLEAR EMERGENCY PLANNING & LIAISON GROUP (NEPLG)

LESSONS LEARNED SUB-GROUP

LESSONS LEARNED REPORT 2010-11

1. Introduction

1.1. Consideration was given at the NEPLG Lessons Learned Sub-Group in November 2010 of the content and structure of the annual Lessons Learned Report. It was agreed that an analytical approach to the review may be a more effective way to identify national lessons from Level 2 and 3 exercises. ONR employed an HSE Statistician to analyse the Exercise Reports received during 2010-11 in support of this Lessons Learned Report 2010-11, the output¹ of which is an Appendix to this report.

1.2. National actions arising from Level 2 and 3 exercises are collated in the NEPLG Action Tracking Paper. This report aims to identify recurring national issues and common local issues that collectively may require NEPLG attention.

1.3. In addition, a programme of reviews of Off-Site Emergency Plans for nuclear emergencies has been carried out by ONR. The findings and recommendations from these reviews have been presented and discussed with Local Authorities responsible for the plans, however, during these reviews some issues that are causing national difficulty were identified. These are also presented in this report for consideration by NEPLG.

2. Level 2 and 3 Exercise Review Process

2.1. In the course of preparing this review, comments were gathered from 14 exercises conducted between February 2010 and March 2011, details of which are given in Table 1 below. Four exercises were 'modular' exercises, which took account of other level 2 exercises on adjacent sites where the same SCC was tested. These are also indicated in Table 1.

¹ NEPLG Exercise Review: 2010-11, Kerry Horgan, Health and Safety Executive

Sandra Little

ONR Emergency Arrangements Team

4.10.3.103.

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Table 1: Emergency Exercises considered in the 2010-11 review

Name	Date	Site
ARDENNE (Modular)	18/02/2010	Sizewell A
BERGERAC (Modular)	24/02/2010	Hinkley Point A
PLATA	19/05/2010	Hartlepool
INDIGO	13/07/2010	Barrow
LONESTAR	05/08/2010	Vulcan
THORNBURY	08/09/2010	Oldbury
DELTA 46	22/09/2010	Dounreay
STOUR	29/09/2010	Hunterston B
SHORT SERMON	12/10/2010	HM Naval Base Devonport
ALDEX	10/11/2010	Aldermaston
FOXGLOVE (Modular)	09/12/2010	Harwell
KILMORY (Modular)	15/12/2010	Hunterston A
TITAN	19/01/2011	Wylfa
KEER	09/02/2011	Heysham 2

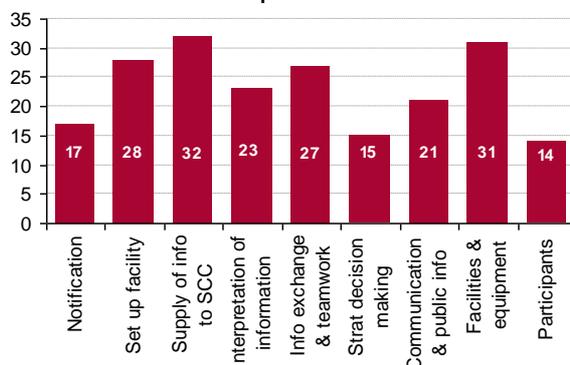
2.2. The charts below summarise the findings in relation to the actions recorded in 11 of these exercise reports, where detailed feedback was given. Comments from exercise FOXGLOVE and SHORT SERMON are not included in the charts as comments were gathered in a slightly different way, and LONESTAR because only brief notes were available at the time of review. However any important findings from these exercises are referred to where appropriate in each section.

2.3. This report focuses on the actions reported after these exercises, as variable approaches were taken in the recording of positive comments, and also the actions represent the recommendations following problems encountered as well as general suggestions for improvements. The graph below presents the number of actions per NEPLG reporting section, providing an indication of the areas where most improvements were needed.

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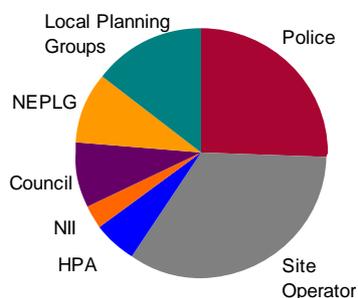
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Overall number of actions per section

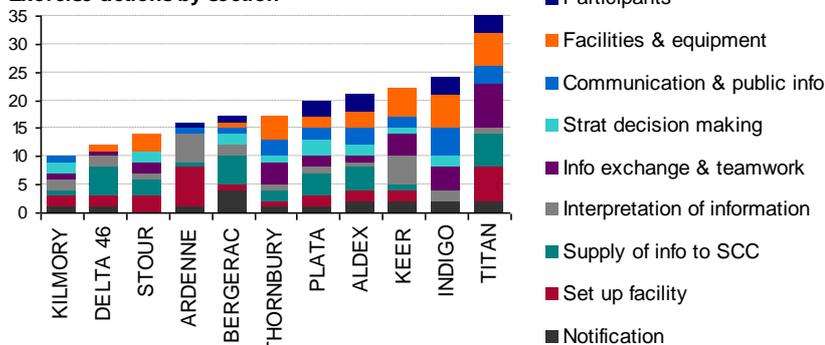


2.4. The sections with the most actions recorded were 'Supply of Information to SCC', 'Facilities & Equipment' and 'Set-up Facility'. The actions under each section were analysed more fully in specific sections of the report.

Overall actions by lead organisation



Exercise actions by section



3. Summary of Lessons Identified During Exercise Review

3.1. Notification

3.1.1. General comments received indicated that the notification process was felt to have gone well in several exercises. These exercises reported timely and accurate

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notification relaying sufficient information. Cascade within agencies was also successful, with prompt responses to site.

3.1.2. However, there were some problems identified in other exercises, with one exercise experiencing several problems in notification, and minor problems were experienced across others. There were issues with technical equipment and automated messaging malfunctioning, and also errors arising from out of date contact lists. Participants from one exercise are investigating the possibility of developing an electronic system to contain key notification actions.

3.1.3. The cascade to multi-agencies differs around the country and there may be scope to harmonise the cascade nationally. In some regions the initial 999 call is routed to an operator in a different area where they may not know of, or have access to, the Off Site Emergency Plan. There also appears to be variability in the frequency of notification exercises and the content of the initial notification.

Recommendation: NEAF to carry out a questionnaire on cascade arrangement and practices to enable extent and variability to be assessed and scope for harmonization to be considered.

3.2. Set-up of Facility

3.2.1. Comments received regarding set-up were variable, reflecting the different facilities used across exercises, although generally the reception processes were felt to be satisfactory, with facilities increasingly becoming operational within reasonable timeframes. Good quality information and briefings were available across several exercises, which along with previous SCC familiarization days and photographs of equipment set-up, were found to be of great use. Agencies appreciated access to their own IT networks where available.

3.2.2. The main need identified was for clear, up to date information to be available on arrival, whether this was in the form of a situation board or a briefing officer.

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Participants needed layout information to enable them to find their workspaces and that of other agencies. Identification of agencies and their individual participants was also raised as a point for improvement in several exercises.

3.2.3. This is a recurring issue from 2009-10 and was discussed at the LLSG meeting in November 2010. S Little, ONR, advised that she had raised this recommendation at the National Police Nuclear Meeting in 2010 and that it had agreed to take action to resolve this. It was recognised that NEPLG could provide the relevant recommendations within the nuclear context, but cognisance of the wider application of a Strategic Co-ordination Centre (SCC) user guide is required.

Recommendation: NEPLG LLSG to develop exercise assessment criteria/checklist for SCC facilities/activities to provide qualitative measures for performance, to include initial briefing and 'setting to work' arrangements.

3.3. Supply of Information to SCC

3.3.1. Across most exercises positive comments were made regarding the supply of information to the SCC. Many participants felt that information received was good quality, readily available and met requirements. Information was given in an easily digestible format on the whole, with a good flow of data, detailed explanations and good answers to any supplementary questions.

3.3.2. There were some technical improvements identified relating to the supply of information, and some suggestions that processes relating to briefing and off-site countermeasure advice could be clarified.

3.3.3. With regard to the supply of information, for instance between CTA, STAC and SCG, there is an action on the Action Tracking Paper to develop a paper system to record decisions with respect to countermeasures etc. that will enable key decisions to pass

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between meetings and will form an auditable trail of countermeasure decisions. This action is being progressed by HPA and there are no additional actions recommended.

3.4. Interpretation of Information

- 3.4.1. Most exercises reported good use and interpretation of technical information, particularly concerning radiological and other monitoring data. Information was analysed to provide consistent and timely answers to questions from Strategic Commanders and various agencies, in a format that enabled the necessary actions to be understood.
- 3.4.2. Some participants however, identified areas where clarity was needed to help them interpret information, in particular technical language used and terminology relating to radiation doses. Whilst it is recognised that some participants do not understand technical terminology, there is no evidence to suggest that this has hindered decision making during the emergency phase.
- 3.4.3. Following one exercise, HPA were asked to provide a Frequently Asked Questions (FAQ) sheet, and HPA have also provided a FAQ sheet in support of the work being done to develop NHS Direct advice and protocol. Once this work is finalised the FAQ sheet(s) will be made available and could, for example, be included in Off Site Emergency Plans.
- 3.4.4. In one exercise the STAC met for very long periods which delayed the dissemination of technical data and its impacts. It was suggested that the STAC meeting format would benefit from being more action focused, mirroring the approach used by SCG, and that NEPLG should review this in line with other exercise reports to ascertain if this is a wider issue. This review has not highlighted this as being a common issue across a number of exercises and it is considered that the performance of STAC in nuclear emergency exercises is maturing. The performance of STAC is one of the key areas assessed during exercises, however there is scope to identify clear exercise

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objectives for STAC performance to improve the assessment and lessons learned process.

Recommendation: NEPLG LLSG to develop exercise assessment criteria/checklist for STAC performance to enable a consistent assessment across all exercises.

3.4.5. It is also noted that the Cabinet Office guidance on STAC is due for review and revision, presenting an opportunity for NEPLG to provide lessons learned from nuclear emergency exercises into the STAC Guidance review.

Recommendation: NEPLG to provide Cabinet Office feedback on STAC lessons learned during nuclear emergency exercise for consideration in the review of national STAC Guidance.

3.4.6. One exercise asked for clarity on implementing and lifting of countermeasures. The NEPLG Recovery Sub-Group is making significant progress in this area, and the recent events at Fukushima will undoubtedly identify issues in relation to the lifting of countermeasures and transition from the emergency phase to the recovery phase. A Recovery tabletop exercise has been run in support of the development of the Recovery Chapter of NEPLG Consolidated Guidance, and it is envisaged that there will be an annual Recovery Exercise. The work of the Recovery Sub-Group is considered to be sufficient in addressing these issues and there are no additional recommendations.

3.5. Information Exchanges & Team Working

3.5.1. Most exercises noted good teamwork both within and between agencies. Information was generally well managed, with clear board marking and display on screens of current information. In most exercises it was felt that the levels of information sharing contributed to the ability to make well-timed decisions and identify appropriate actions, including moving towards the recovery phase.

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3.5.2. Improvements suggested in this section centred on reviewing the information management systems, both in terms of the IT infrastructure and also the processes for information transfer between agencies. Most Police Forces are currently reviewing their information management systems in use at SCCs including whether or not to invest in the National Resilience Extranet (NRE). The type of system implemented needs to be suitable and sufficient for all emergencies, not only nuclear, and so it is considered appropriate for each Police Force to review and implement the most appropriate information management system for their purposes. As these systems are implemented, the IT infrastructure and process for information transfer between agencies should improve.

3.5.3. A number of exercises identified the need for participants to have increased familiarity with GIS systems and it was suggested at one exercise that GIS should be used at all emergency exercises. It is therefore advised that the use of GIS should be encouraged during all emergency exercises.

3.6. Strategic Decision Making

3.6.1. There were many positive comments relating to strategic decision making across most exercises. Participants appreciated good quality information supplied to the Strategic Commander and Site Operators, which enabled informed decision-making. Strategic meetings were felt to be well run overall, with necessary distinction made between strategic and tactical information.

3.6.2. More than one exercise noted issues around Recovery Working Group – most acknowledged that it should be set up early and run in parallel with the SCG, some wanted clarification on criteria for handover to recovery, and others would like the handover proforma included in the Off Site Emergency Plan. The work of the NEPLG Recovery Sub-Group discussed in paragraph 3.4.5 is considered appropriate in addressing these issues and there are no further recommendations.

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- 3.6.3. The 'battle rhythm' of STAC and SCG meetings has been noted as an area for improvement several times, with participants concerned about meeting discipline. All recognise the advantages of strong chairing, leading to concise meetings and clear actions, including the use of an action/decision log.
- 3.6.4. Establishing good discipline and 'battle rhythm' during an emergency should be encouraged through regular training and exercising, and will also be relevant to non-nuclear emergencies. It is therefore recommended that this area is monitored through the exercise assessment regime, but that no NEPLG consideration for additional guidance or action is required at this time.
- 3.6.5. The revised appointment procedure for the Government Technical Adviser (GTA), introduced in 2010, which enables the GTA to provide advice en-route has not been widely utilised. For most exercises the GTA has only taken up the post on arrival at the SCC and communications between GTA, CTA and Gold Commander en-route have been minimal. The testing of the revised appointment procedure and in particular the communications between the relevant parties before the GTA arrives at the SCC is now an ONR objective on all emergency exercises. ONR will continue to test and monitor the implementation of the revised arrangements to ensure they become more effective.
- 3.6.6. It was noted that at one exercise the HPA CRCE team were requested to provide occupational protection advice to emergency services, however emergency services should refer to their own Radiation Protection Advisers for this advice. The work of the NEPLG Emergency Responders Sub-Group has identified the need for emergency services RPAs to provide this advice, both in the planning stages and during a nuclear emergency, and are developing guidance that will incorporate this requirement.

3.7. Communications and Public Information

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3.7.1. Across most exercises it was thought that the use of the SMAC was beneficial, with a good interaction between press officers from different agencies when present. Most exercises felt that there was good liaison between SCG, STAC and SMAC to ensure press briefings were delivered promptly.

3.7.2. Delays in information flows to the media were common, although one exercise had the opposite problem of an early, unauthorised release being made. Participants would like to see better co-ordination of press briefings as well as pre-prepared initial releases to combat these issues. Increased familiarity with the offsite plan would improve the quality of the information available and the process by which it is released. Other improvements suggested were increasing the challenge from psuedo-media and considering Welsh language provision for exercises in Wales.

3.7.3. The feedback from exercise participants in relation to communications and public information will be provided to the NEPLG Media Sub-Group for consideration. There are no specific recommendations.

3.8. Facilities and Equipment

3.8.1. Useful feedback from participants was received from a variety of exercises that could assist in developing the list of SCC facilities that would be required for nuclear emergencies. These include the clear layout and identification of meeting areas, internal and external communications with an appropriate range of options (phone, fax, internet), the ability to connect own agency laptops and good use of status boards.

3.8.2. Similarly, participants advocated co-location of similar agencies and felt that physical separation of agencies, whilst sometimes necessary, generally hindered communication. Noise levels and poor mobile phone signal were also cited as obstacles to communication in more than one exercise.

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3.8.3. Again, a number of issues in relation the electronic messaging systems and development and use of NRE were identified but these have already been discussed in Section 3.5.

3.8.4. The National Police Nuclear Meeting has been reviewing SCC facilities with the aim of harmonising facilities where possible. This information will be provided to them to assist.

3.9. Participants

3.9.1. Generally participants across exercises were felt to be competent, professional and have the relevant authority. Comments were made following several exercises praising the ability of those involved to consider wider strategic issues, and a good understanding of roles and responsibilities.

3.9.2. Agency representation was flagged up following several exercises with FSA mentioned most often, but also NDA, CNC, OCNS and Met Office. If key agencies are not able to take part, consideration should be given to remote support. ONR is in discussions with FSA to secure their participation in Level 2 and 3 exercises, and whilst they have supported some exercises remotely in 2010-11, their involvement has been limited due to other participants not being aware of their remote availability.

3.9.3. The importance of keeping responders up to date has been highlighted, as well as adequate provision and training of support staff. In support of this the need for local familiarisation days has been widely acknowledged and participants should be encouraged to familiarise themselves with the Off Site Emergency Plan and other relevant documentation. This applies to all potential responders in agencies, not just emergency planning leads.

4. Lessons Identified During REPIR Off Site Emergency Plan Reviews

4.1. As expected during the review of the local authority REPIR Off Site Emergency Plan reviews a number of areas of good practice were noted and in turn, lessons identified

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were acknowledged. A report of the findings will be produced by ONR so that a formal record of the process and findings are noted.

4.2. To aid clarity of understanding, a number of discussions have been initiated between ONR and Local Authorities. During such discussions, the majority of the lessons identified are able to be resolved at the local level by the relevant local authority and this is being progressed well across the UK.

4.3. However, there were three key lessons identified that need to be discussed at a national level in order to seek resolution. These are discussed below.

4.4. Provision and delivery of radiation monitoring units.

4.4.1. Arrangements for the provision and delivery of radiation monitoring units were limited across many Off Site Emergency Plans. Draft HPA guidance entitled 'Radiation Monitoring Units: Planning and Operational Guidance' has been developed and Exercise Challenge (Lancashire Resilience Forum led) is to be held in a few months with the aim of exploring and validating the draft guidance. The final report of the findings will need to be shared within various organisations and forums including HPA, DoH and NEPLG (including relevant sub groups) and the guidance will then be issued. The development of this guidance and the work being done to test and validate the content is considered to be sufficient in addressing this national issue and there are no further recommendations.

4.5. Full integration of emergency services into both on site and off site plans.

4.5.1. A number of issues in relation to the integration of emergency services into on and off site emergency plans were identified including; emergency exposures, disapplication of dose limits within the Ionising Radiations Regulations 1999, dosimetry, PPE and RPE for emergency services, Memoranda of Understanding between the emergency services and nuclear site operators, and the provision of radiation protection advice.

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4.5.2. These issues have previously been identified as recurring issues from emergency exercises and the NEPLG Emergency Responders Sub-Group was established to address them. The Emergency Responders Sub-Group has made significant progress, and guidance is currently being developed to address all of the issues discussed above. This is considered to be sufficient in addressing this national issue and there are no further recommendations.

4.6. Extendibility

4.6.1. Chapter 9 of NEPLG Consolidated Guidance provides rationale for the principle of extendibility, requirements for extendibility planning, and the requirements for testing extendibility. However, variable application of the principles of extendibility has been observed during the off site plan review process. In addition, during emergency exercises, variability in arrangements has also been recognised. For instance, in some areas potassium iodate tablets are distributed wider than the DEPZ, in particular to schools and other vulnerable groups.

4.6.2. For some sites it is considered that the extendibility zones for sheltering (15km) and evacuation (4km) are not proportionate to the hazards posed by the site, and that development of more site-specific extendibility zones should be undertaken.

4.6.3. Similarly, in aiming to test extendibility there have been unclear expectations on what aspects of the plan should be tested. This topic needs NEPLG consideration.

Recommendation: NEPLG to establish an Extendibility Sub-Group to revise Chapter 9 of NEPLG Consolidated Guidance to take account of the lessons learned from emergency exercises, Off Site Emergency Plan reviews and Fukushima.

5. Conclusions

5.1. Considerable progress has been made in addressing recurring national issues particularly with respect to the development of HPA guidance on Radiation Monitoring Units,

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Recovery guidance and testing, and integration of Emergency Responders within emergency plans.

5.2. There are a number of areas where good practice should be noted and implemented wherever possible, and all agencies should be encouraged to establish clear exercise objectives and success criteria during exercise planning to continually improve the effectiveness and efficiency of the lessons learned process.

5.3. To enable the UK nuclear emergency preparedness and response arrangements to continuously improve, NEPLG seeks to learn from emergency exercises and other relevant reviews and events. The recommendations made, and summarized in Section 6, are aimed at addressing national issues that are not currently being fully addressed in the work of NEPLG.

6. Summary of Recommendations

6.1. The following recommendations are made following the 2010-11 review of Level 2 and 3 emergency exercises and the Off Site Emergency Plan reviews:

Recommendation 1: NEPLG LLSG to carry out a questionnaire on cascade arrangement and practices to enable to extent of variability to be assessed and the scope for harmonization to be considered.

Recommendation 2: NEPLG LLSG to develop exercise assessment criteria/checklist for SCC facilities/activities to provide qualitative measures for performance, to include initial briefing and 'setting to work' arrangements.

Recommendation 3: NEPLG LLSG to develop exercise assessment criteria/checklist for STAC performance to enable a consistent assessment across all exercises.

Recommendation: NEPLG to provide Cabinet Office feedback on STAC lessons learned during nuclear emergency exercise for consideration in the review of national STAC Guidance.

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Recommendation 4: NEPLG to establish an Extendibility Sub-Group to revise Chapter 9 of NEPLG Consolidated Guidance to take account of the lessons learned from both emergency exercises and the Off Site Emergency Plan reviews.

APPENDIX

NEPLG EXERCISE REVIEW: 2010-11

Author: Kerry Horgan, Health and Safety Executive

1.1 Introduction

In the course of preparing this review, comments were gathered from 14 exercises conducted between February 2010 and March 2011, details of which are given in the table below.

Name	Date	Site
ARDENNE	18/02/2010	Sizewell A
BERGERAC	24/02/2010	Hinkley Point A
PLATA	19/05/2010	Hartlepool
INDIGO	13/07/2010	Barrow
LONESTAR	05/08/2010	Vulcan
THORNBURY	08/09/2010	Oldbury
DELTA 46	22/09/2010	Dounreay
STOUR	29/09/2010	Hunterston B
SHORT SERMON	12/10/2010	HM Naval Base Devonport
ALDEX	10/11/2010	Aldermaston
FOXGLOVE	09/12/2010	Harwell
KILMORY	15/12/2010	Hunterston A
TITAN	19/01/2011	Wylfa
KEER	09/02/2011	Heysham 2

The charts below summarise the findings in relation to the actions recorded in 11 of these exercise reports, where detailed feedback was given. Comments from exercise FOXGLOVE and SHORT SERMON are not included in the charts as comments were gathered in a slightly different way, and LONESTAR because only brief notes were available at the time of review. However any important findings from these exercises are referred to where appropriate in each section.

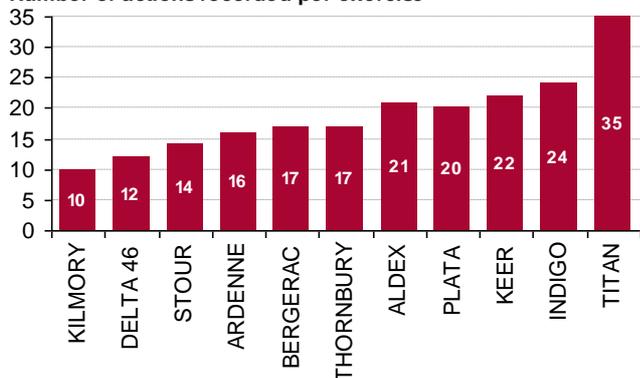
This report will focus on the actions reported after these exercises, as variable approaches were taken in the recording of positive comments, and also the actions represent the recommendations following problems encountered as well as general suggestions for improvements. The number of actions recorded in each exercise varied from 10 in exercise KILMORY to 35 in exercise TITAN, however as mentioned above, the actions recorded were a mixture of solutions to problems that

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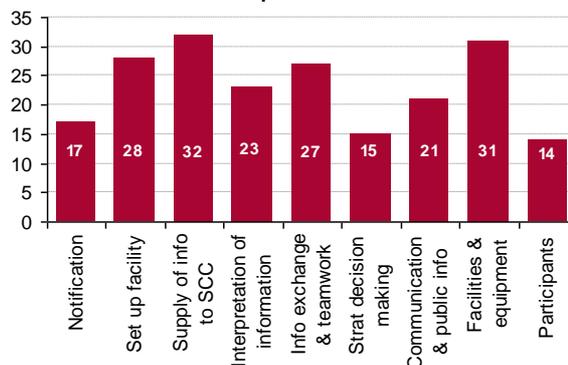
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arose, and also suggestions for future refinements, so cannot be used as a measure of success of the exercises.

Number of actions recorded per exercise

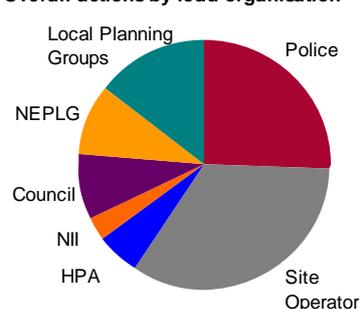


Overall number of actions per section

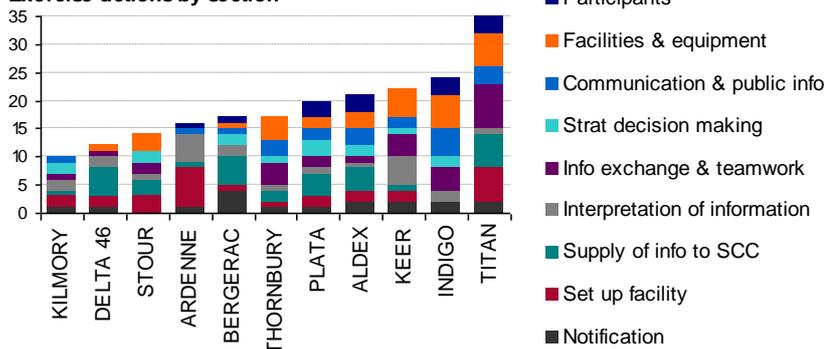


The sections with the most actions recorded were ‘Supply of Information to SCC’, ‘Facilities & equipment’ and ‘Set-up facility’. Although the number of actions cannot strictly be used as a measure of success for individual exercises, the overall pattern can be used as an indicator of where the most work is required. The actions under each section will be analysed more fully in specific sections of this report.

Overall actions by lead organisation



Exercise actions by section



The pie chart shows the main agencies which were assigned actions, those with small numbers of actions across all exercises are excluded for simplicity. The largest proportion of actions identified was assigned to the Site Operators, and the next largest proportion to the Police, mainly in their Sandra Little

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capacity as controllers of SCC locations. A significant number of actions were also attributed to local multi-agency planning groups such as CEPU (Cleveland Emergency Planning Unit), CPLG (Contingency Planning Liaison Group), SECG (Strathclyde Emergencies Co-ordinating Group) and LRF (Local Resilience Forum).

Comments were received across all 9 sections in most exercises, although the patterns vary considerably. For example, all exercises apart from STOUR identified an action under Notification, whereas only 6 out of the 11 exercises included in this analysis identified an action relating to Participants.

1.2 Summary of Findings

The table below summarises the main learning points from each section, further detail can be found in each section of the report, as numbered.

1.2.1 Notification

One exercise experienced several problems in notification, and minor problems were experienced across others. There were issues with technical equipment and automated messaging malfunctioning, and also errors arising from out of date contact lists. Participants from one exercise are investigating the possibility of developing an electronic system to contain key notification actions.

1.2.2 Set-up of Facility

The main need identified was for clear, up to date information to be available on arrival, whether this was in the form of a situation board or a briefing officer. Participants needed layout information to enable them to find their workspaces and that of other agencies. Identification of agencies and their individual participants was also raised as a point for improvement in several exercises.

1.2.3 Supply of Information to SCC

Consistent interpretation of technical information was emphasised in this section, as well as keeping good discipline and 'battle rhythm' in STAC and SCG meetings. There were some technical improvements identified relating to the supply of information, and some suggestions that processes relating to briefing and off-site countermeasure advice could be clarified.

1.2.4 Interpretation of Information

Participants identified areas where clarity was needed to help them interpret information, as well as areas where additional training would be of benefit.

Participants also felt that improvements in meeting discipline would aid understanding and interpretation of technical data, and suggested some amendments to the off-site plan to include standard information.

1.2.5 Information Exchanges & Team Working

Improvements suggested in this section centred on reviewing the information management systems, both in terms of the IT infrastructure and also the processes for information transfer between agencies. Meeting discipline was another area where improvements were suggested, with attendance, membership and remit requiring review in some cases. Some training issues around GIS systems and radiation data were identified.

1.2.6 Strategic Decision Making

The main actions arising in this section related to early set up of Recovery Working Group, meeting discipline and 'battle rhythm' and inclusion of further countermeasure information in the offsite plan. One exercise formed a tactical group which helped define the strategic and tactical roles, which had been an issue in other exercises.

1.2.7 Communication & Public Information

Delays in information flows to the media were common, although one exercise had the opposite problem of an early, unauthorised release being made. Participants would like to see better co-ordination of press briefings as well as pre-prepared initial releases to combat these issues. Increased familiarity with the offsite plan would improve the quality of the information available and the process by which it is released. Other improvements suggested were increasing the challenge from pseudo-media and considering Welsh language provision for exercises in Wales.

1.2.8 Facilities & Equipment

Considerable problems with space and layout were noted in several exercises, with participants advocating co-location of similar agencies. Out of date technology was a problem during exercise PLATA, while wider use and familiarity of NRE and RIMNET was recommended in others. Again, development of an electronic messaging system was mentioned, as well as an electronic decision log.

1.2.9 Participants

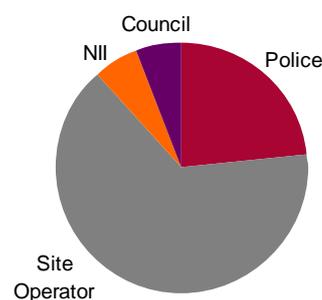
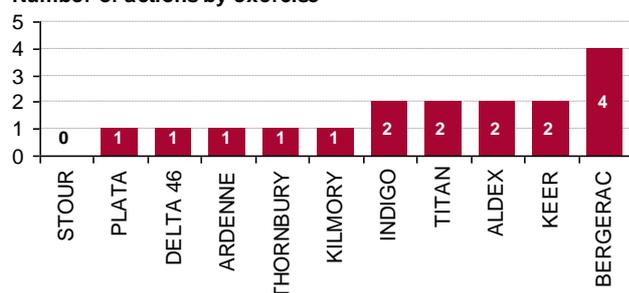
Agency representation was flagged up following several exercises with FSA mentioned most often, but also NDA, CNC, OCNS and Met Office. If key agencies are not able to take part, consideration should be given to remote support. The importance of keeping responders up to date was highlighted, as well as adequate provision and training of support staff.

2 Detail of Findings

This part of the report breaks down the findings by section, with summaries of positive comments and details of recommended actions for improvements. Full details of the comments gathered can be found in Appendix A.

2.1 Notification

Number of actions by exercise



The largest number of actions recorded in this section came from exercise BERGERAC, although all exercises apart from STOUR recorded at least one point for improvement. The resulting actions were largely the responsibility of Site Operators, with the Police receiving almost a quarter, and NII and local councils picking up just one action each.

2.1.1 Summary of positive comments

General comments received indicated that the notification process was felt to have gone well in several exercises, including PLATA and STOUR. These exercises reported timely and accurate notification relaying sufficient information. Cascade within agencies was also successful, with prompt responses to site. There were however some problems identified in the other exercises, as detailed in the actions recorded below.

2.1.2 Summary of actions recorded

- Although no problems were identified during exercise PLATA, the participants felt that an electronic system with pre-loaded planned actions eg agency notification would improve

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the process and ensure that important actions were undertaken. The Police will assess the benefits of developing Police 'standard actions' or a handbook for electronic use.

- Similarly, no issues were identified during exercise DELTA 46, but NII were asked to raise the multi-agency cascade process at NEPLG to identify whether other sites experienced problems with the cascade process.
- During exercise ARDENNE the SERS message was not received by RIMNET (on behalf of DEFRA) despite confirmation that the SERS message was cascaded to the numbers for RIMNET recorded in SERS, and numbers also confirmed as correct. The Site Operator will be investigating this problem.
- Exercise THORNBURY experienced a problem when the initial 999 call was routed to an operator in a different area. The Police are investigating to ensure a timely and correct response from operators.
- A minor problem was experienced during exercise KILMORY as the incorrect telephone number was held for SEPA, this has now been rectified by the Site Operator.
- Cumbria Fire & Rescue service reported a 23 minute delay during exercise INDIGO between the site siren being sounded and information being received at the control room. The Site Operator will investigate and correct the fault. Cumbria Police reported insufficient information received, they will clarify what key information was omitted and amend the initial reporting proforma.
- Problems experienced in notification during exercise TITAN were based around a delay in initiation of the company notification system. The operator will prioritise SERS notifications in future. Participants from WAG reported that they did not receive notification, the Site Operator is now verifying name and contact numbers.
- Notification cascade was also slow during exercise ALDEX, to avoid delays in future the council will ensure that at least 2 calldex cascade exercises are undertaken each year. The Site Operator will review the alerting process to ensure it is robust and incorporates a failsafe mechanism, and will also review the content of initial notification to ensure information is disseminated in the most appropriate way.

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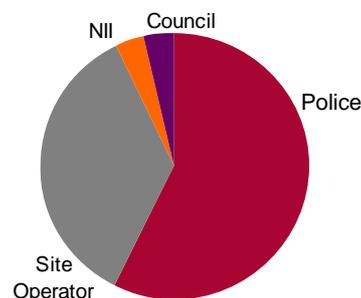
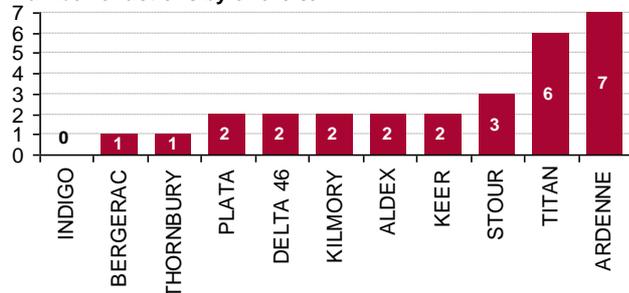
- Following exercise KEER the Site Operator will update in and out of hours contact details for key agencies, and include an annual test in the exercise programme to ensure the robustness of off-site notification chain.
- As with exercise ARDENNE, a problem with contacting DEFRA through RIMNET occurred during exercise BERGERAC, where considerable problems were experienced during notification.
- In addition, the notification of the HSE Duty Officer was problematic, as the Duty Officer could not access the message left without a mailbox number. It then appears that the process of leaving the message blocked the Duty Officer's line somehow, leaving it unable to receive incoming calls. The Site Operator is investigating both this and the problem with RIMNET.
- There were additional, non-technical problems with notification during exercise BERGERAC, as Government Office South West and NHS Somerset both failed to receive notification, and Somerset County Council failed to receive cascade from Somerset Fire & Rescue Service. There was further confusion, as the contact number in the Police plan for Hinckley Point A was incorrect. The Police have now ensured that the correct number is included in their plan, and the Site Operator has taken responsibility to repeat the whole notification exercise.
- Difficulties were experienced during exercise LONESTAR when notification had to pass through MoD switchboard, a direct line will be obtained for future use.
- An alert cascade to other health professionals was tested during SHORT SERMON, which revealed lessons about the content and reliability of the alerting process.
- There were several notification problems noted during exercise FOXGLOVE; the Police operator receiving the call was new in post and unsure what to do, the ambulance service failed to answer the first call and local councils were not alerted in any way. The FSA contact for REPPIR was on holiday, and the NII Operator had thought the site was closed down. HPA were not alerted by HSE NII but did receive notification from elsewhere.

2.1.3 Key lessons learned

- It has been suggested that a pre-loaded electronic system be developed to ensure essential notifications are undertaken, this is currently being investigated.
- Problems were experienced with existing technology, including faults in notification through RIMNET, and with recorded message left for HSE Duty Officer. The results of investigations into these faults are awaited.
- There were problems that could be categorised as 'human error', mainly concerning incorrect telephone numbers and delay or failure in completing the cascade process. It is important that contact and notification lists are kept up to date in some way.
- Problems arising from the above issues could be avoided with regularly updated contact lists and thorough testing of notification systems and processes.

2.2 Set-up of Facility

Number of actions by exercise



Most exercises recorded an action against Set-up of Facility, with the exception of exercise INDIGO. Exercises ARDENNE and TITAN recorded the most actions in this section, more than twice as many as other exercises. The majority of the actions recorded across all exercises were attributed to the Police, with Site Operators taking responsibility for a large proportion of the remainder, and NII and local councils assigned one action each.

2.2.1 Summary of positive comments

Comments received regarding set-up were variable, reflecting the different facilities used across exercises, although generally the reception processes were felt to be satisfactory, with facilities becoming operational within reasonable timeframes. Good quality information and briefings were available across several exercises, which along with previous SCC familiarisation days and photographs of equipment set-up, were found to be of great use. Agencies appreciated access to their own IT networks, where available.

2.2.2 Summary of actions recorded

- In exercise BERGERAC the situation board at the entrance to SCC was not in use, participants would like to consider using this even in modular exercises to enable participants to get up to speed quickly on arrival.
- There were several areas for improvement identified in exercise THORNBURY; no user guides were available, physical location of agencies within SCC was not clear, maps of the

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area would have been useful and STAC should be set up as a meeting room. A working group will be established to address these issues.

- Participants in exercise PLATA requested that any significant information received relating to the release should be readily available on arrival and prominently displayed in the SCC. This aspect should be included in the SCC familiarisation day. These participants would also like to see improved desk signage, particularly for non-uniformed agencies.
- The pre-appointment of GTA during DELTA 46 provided a quicker response to the SCC by the NII team. However, the appointment wasn't formally recorded in the SCC: Northern Constabulary to ensure that the GTA appointment is recorded in the event log in future. They were also asked to review the layout of the multi agency room to ensure that there is adequate space for all agencies.
- Following exercise KILMORY the Site Operator will remind participants that reception process will not be tested in future exercises, and also provide a plan of SCC layout at entrance to help participants find their allocated workspaces.
- Following exercise ALDEX, the Police will be updating Gold and Silver packs with information on layout of Tactical Command, and the Council will be updating the multi-agency plans to include a scheme to identify responding agencies at key locations.
- Participants in exercise KEER recommended that the Police update the SCC user guide to include a permanent role for Briefing Officer, and on a more practical level include parking arrangements.
- The reception process at STOUR is under review to agree best practice in manning and control of reception area. This will include role of support staff, how this will be resourced and the availability of security passes. The results of the review will be included in the Off Site plan.
- Participants at exercise TITAN had been told to expect designated parking, which wasn't the case. This caused some initial delays, and parking arrangements will now be reviewed by the Police.

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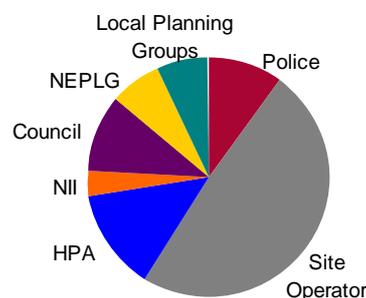
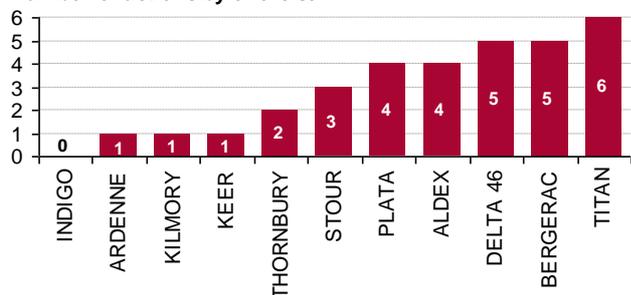
- Other practical issues arose during TITAN, in identifying the locations of key agencies, and also identifying participants when separated from agency locations. The Police will review the admin info and location plan, and consider tabards or name tags for participants.
- The Police are also asked to consider the effectiveness of their briefing officer during exercise TITAN, as some participants felt the process proved cumbersome and several representatives missed being briefed. Despite this they acknowledged that it was easy to miss the screen displayed on arrival supplied for 'self-briefing'. NII were asked separately to consider a method to brief the GTA en-route to the SCC to prepare for encountering media groups prior to entry to the building.
- Exercise ARDENNE encountered some basic organisational problems – the Police are to review exercise parking and produce a plan to organise parking for real events, and the Site Operator will email all agencies to remind responding staff that they will require photographic ID to access the SCC in the event of a real emergency.
- Further actions from exercise ARDENNE related to the company team; a review of the workspace allocated to see if this could be increased, and a review of the instructions provided to them in setting up the company equipment – a slideshow or video has been suggested to replace photographs currently in use. It has also been suggested that company team training is reviewed to encompass removing all equipment from storage in Gold room as an initial action. The Site Operator will also confirm a fax number to allow information to be sent to SCC ahead of CTA team arrival, and look at other communication routes going forward.
- It was also suggested at ARDENNE that the company team had to attend a Gold brief before the team was operational, an opportunity for the team to be briefed by CESC may have made the first Gold Brief more efficient. The Site Operator is to review training and information flow for Company in this regard.

2.2.3 Key lessons learned

- Basic arrival procedures seemed to run smoothly in most places, although parking was problematic in several locations, and use/availability of security passes in two others.
- Several exercises identified a need for better information on layout of SCC in regard to identifying which areas are designated for which agencies. Related to this, some exercises found it hard to identify non-uniformed participants when not with their agencies.
- Availability of information on arrival was mentioned as a potential improvement area in several exercises - use of a clearly visible, up to date situation board has been requested. In TITAN and KEER a police briefing officer was used, with mixed results; participants at KEER thought it was a positive development and should be included as a permanent role, whereas those in TITAN were unsure of the benefits.
- There were further issues with briefing on arrival, with the company team at ARDENNE having to attend a meeting before they were operational, and **there was a need during exercise TITAN for the GTA to be briefed en route before contact with media on arrival.**
- Space allocations, equipment instructions and room layouts were also mentioned under this section, but are discussed further in section 2.8.

2.3 Supply of Information to SCC

Number of actions by exercise



The largest number of actions was recorded in this section, 32 in total across all exercises. Exercise TITAN reported the most with 6, DELTA 46 and BERGERAC reported five actions each, and all exercises apart from INDIGO reported at least one. The majority of the actions were again for the Site Operator to undertake, although a range of other agencies also had actions attributed.

2.3.1 Summary of positive comments

Across most exercises positive comments were made regarding the supply of information to the SCC. Many participants felt that information received was good quality, readily available and met requirements. Information was given in easily digestible format on the whole, with a good flow of data, detailed explanations and good answers to any supplementary questions. Areas identified for improvement are detailed in section 2.3.2 below.

2.3.2 Summary of actions recorded

- Participants in exercise ARDENNE experienced problems with STAC timing, due to the modular approach to this exercise the STAC was not run in its usual format. Normally STAC is run as a continuous process with the Chair representing the combined advice to the SCG (as per current national guidance). STAC should be fluid with individuals free to leave as necessary to gather information, which was not the case in this exercise. The Site Operator agreed to raise the 'battle rhythm' of STAC interface at NEPLG and Local Government Nuclear Seminar.

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- Following exercise ARDENNE the Site Operator will review the process of supplying information to the CTA and SCC ahead of CTA arrival to speed up information flow. They will also ensure that exercise-driving cells are adequately briefed on weather conditions, and NEPLG will review how weather information is provided.
- Following exercise KILMORY the Site Operator will identify a process for confirming correct information when dealing with conflicting reports.
- Following exercise KEER the council are considering amendments to the off-site plan to develop a permanent role for LCC GIS in the agency room, and urge participants to discuss the information with the source provider to avoid misinterpretation.
- Exercise THORNBURY experienced some problems with information passed to SCG without STAC approval, and have requested that a working group ensure that all technical information is checked with the operator, and that information management systems include up to date information and action lists.
- Participants in exercise STOUR wanted to agree an initial police contact and check the numbers held. Site Operator was also tasked to ensure that responding support staff are aware of the importance of utilising available data on TiiMs to proactively brief STAC/SCG etc. Handbook actions are to be updated to reflect this.
- Participants at exercise PLATA felt that the Site Operator should develop a flow chart for the process of provision of off-site countermeasure advice, to be covered in all SCC training and the off-site plan.
- Participants at PLATA also noted that provision of advice by the operator should be by 1 standard form (E1), and The layout / usage of the revised countermeasure advice form should also be acknowledged at the NEPLG for UK replication.
- Following exercise PLATA the HPA were asked to clarify the functions of the two colour charts, the use of the TiiMs resource and make clear the requirement of communicating significant information to central Government. The Off Site Plan and SCC training are to be updated accordingly.

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- During exercise ALDEX a number of different communication systems were in use during the exercise and not all locations and agencies had access to them all, creating an inconsistent picture. Similar issues existed with various GIS systems in use. The council will look at simplifying the systems, including use of NRE and ensuring that agencies are familiar with processes.
- Participants in exercise DELTA 46 felt that the Nuclear Incident Briefing form could be revised to provide clearer casualty information: NII will provide a copy of the form used by reactor sites to assist the Site Operator with updating their form. There were further issues identified in the supply of radiological data to NII and HPA, and the Site Operator is to identify how they will provide raw monitoring data to HPA and NII.
- The CoD participation in the first SCG meeting during DELTA 46, via telephone conference, was problematic: The Site Operator to identify how the CoD will participate in the first SCG meeting.
- SCG meetings ran for too long during DELTA 46 and on occasion ran into time that was allocated e.g. for STAC: Northern Constabulary to review the duration and agenda of the SCG meetings.
- Following exercise DELTA 46 the Site Operator will discuss monitoring of Site personnel at reception centres with Highland Council and amend the off-site plan as appropriate.
- Participants in exercise BERGERAC thought that photographs of the event scene would have been useful, and have asked that the Site Operator investigate this. They would also like to stress the importance of timely information to SCC in annual training due to a slow supply of radiological information.
- Information was delayed in TITAN due to the firewall in SCC blocking attached documents from external locations. The Police will review this.
- There was some confusion over technical issues during exercise TITAN. There is a need for improved radiological prediction data from Welsh Water and the Met Office, and it is being investigated whether RIMNET data can be provided effectively to the SCC. The Site Operator is investigating whether confusion over reactor pressure was possibly due to

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exercise artificiality, and also working on notification to the SCC when the public alert system is used. HPA have agreed to work with Public Health Wales to refine the procedure for deploying Radiation Monitoring Units.

- Further problems arose during exercise ALDEX when monitoring results were passed directly to agencies rather than disseminated through STAC, leading to multiple interpretations of the data. The HPA are to work on including STAC information flows and terms of reference in offsite plan, including links to NARIMS. The local PCTs agreed to update plans for Radiation Monitoring Units to include relevant agencies.
- Exercise FOXGLOVE identified some issues with information supply, concluding that SCG / TCG must ensure aims and objectives are disseminated up and down the command chain, and must track actions and decisions to ensure they are resolved quickly.
- Exercise SHORT SERMON identified that Gold were perhaps not using STAC as well as they could, and seemed to be making separate technical assessments. They also considered that Future exercises should test the supply of monitoring data to RIMNET from data supplier organisations such as HPA, and that DSTL could be better utilised in providing attendees with baseline technical advice/guidance - perhaps through a standard brief to be modified as the scenario develops.

2.3.3 Key lessons learned

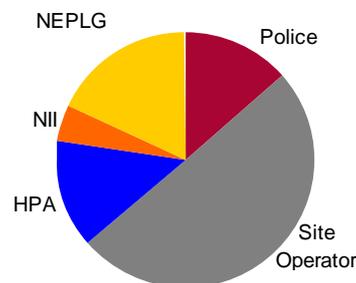
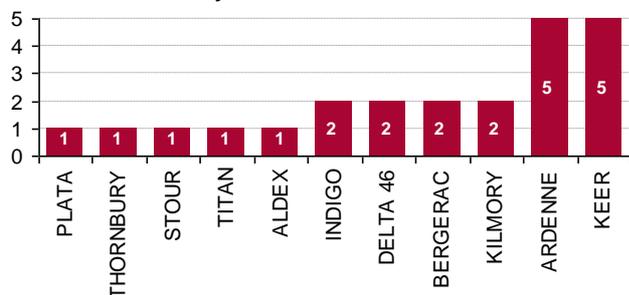
- Several exercises underlined the importance of consistent interpretation of technical information – either through proper use of STAC, or confirming data with the originator.
- Meeting discipline was identified as an issue in several exercises, both the ‘battle rhythm’ of STAC and the duration and agenda of SCG meetings. Participants also emphasised the importance of timely supply of data, with information transfer prior to company team arrival problematic in one exercise, and a review of provision of raw monitoring data and weather

information needed in others.

- Technical improvements suggested included removal of a firewall blocking external emails in exercise TITAN, provision of photographs of the event scene, effective and timely use of TiiMS and RIMNET data, and a permanent role for GIS in the agency room. During ALDEX differing communication and GIS systems were in use across locations which caused confusion.
- Two exercises identified actions around clarifying the deployment of radiation monitoring units, and participants at PLATA requested clarification over the process of providing off-site countermeasure advice, including revising the form. Other points of clarification were requested such as the Nuclear Incident Briefing Form being revised to provide clearer casualty information, and more detail on the functions of the two HPA colour charts.

2.4 Interpretation of Information

Number of actions by exercise



All exercises recorded at least one action in this section, with exercises ARDENNE and KEER recording the most. Around half of actions were again assigned to the Site Operator, with other agencies such as Police, HPA and NEPLG receiving roughly equal numbers of actions, and NII picking up one action.

2.4.1 Summary of positive comments

A wide range of positive comments was gathered on this topic. Most exercises reported good use and interpretation of technical information, particularly concerning radiological and other monitoring data. Information was analysed to provide consistent and timely answers to questions from Gold and various agencies, in a format that enabled the necessary actions to be understood. Where issues or potential improvements have been identified, these are detailed in section 2.4.2 below.

2.4.2 Summary of actions recorded

- It was observed that during exercise PLATA, information from STAC was not always delivered in a clear manner to the SCC and hence there was some confusion regarding what was the most appropriate counter measure advice. The operator / SCC interface with STAC should be reviewed by NEPLG.

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- In exercise THORNBURY some participants found terminology relating to radiation dosages were hard to quantify in a meaningful or comparable way. HPA have been asked to provide an FAQ sheet.
- The STAC met for very long periods during exercise STOUR, which delayed the dissemination of technical data and its impacts. The STAC meeting format would benefit from being more action focused, mirroring the approach used by SCG. This should be reviewed by NEPLG in line with other exercise reports to ascertain if it is a wider issue and requires inclusion in generic STAC training.
- Language used by the company team during exercise TITAN may have been confusing for external participants, the Site Operator will make their participants aware and seek to avoid potential confusion.
- The Site Operator is to review descriptors of planning zones following exercise ALDEX to minimise confusion between DEPZ using letters and zones of extendibility using numbers.
- It was identified in exercise INDIGO that participants need to develop greater familiarity with GIS Systems and NEPLG must ensure GIS is involved in all future exercises. Additionally, discussions will be held with HPA to determine whether dose estimates used to determine evacuation distances should be included in the plan.
- Participants at DELTA 46 felt that a short summary of the SCG meeting was beneficial, and the Northern Constabulary will provide a short verbal update to multi agency representatives after each SCG meeting.
- It is important that all agencies are aware of the specific aspects of the Off Site plan, as there was confusion during DELTA 46 over whether potassium iodate tablets were appropriate: The Site Operator will provide agencies with details of Section 2 of the Off-Site emergency plan.
- Following exercise BERGERAC a process has been put in place to practice using the telephone warning system on a weekly basis to ensure all operators have used the system and this will be tested in future level 2 exercises. The Police will also Consider having a

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telephone in the SCC connected to the warning system so messages to the public are heard in the SCC. This will be added to key events checklist.

- Following KILMORY, NII were to contact the FSA to discuss exercise support, and the SITE Operator agreed to clarify processes regarding Rest Centres with site staff, and update Onsite and Offsite plans accordingly.
- Following exercise ARDENNE the Police will Consider the best method for displaying the latest information from CESC so that it is accessible to all within SCC, as there is currently no official system for distributing the information received from TiiMs.
- Participants in ARDENNE have asked that the Site Operator take responsibility for actions surrounding the colour codes for the radiological survey data; specifically that the company team are trained in the benefit of use, and the colour codes and descriptions are sent to Council for inclusion on AIMS.
- The Site Operator at ARDENNE was also tasked with reviewing the distribution of initial countermeasure advice to include CESC and company team in SCC.
- Exercise KEER identified several areas for improvement in interpreting information; some participants failed to realise that initial gathering of off-site monitoring results takes time, and the Site Operator will update the familiarisation day training to manage expectations. There is a national review of the transparency of the countermeasure advice and associated activities discussed during STAC meetings, and NAME deposition products as it was thought they could cause some confusion due a lack of accurate interpretation. The Site Operator will feed back the results of national reviews as appropriate.
- Other actions identified in exercise KEER included internal familiarisation training for emergency services to ensure staff understand internal arrangements for access to KIO3 prophylaxis, and consideration of cross-agency pre-planning to develop a proportionate response to issues such as the potential for contamination of private water supplies for the period where data is only predictive.
- Exercise FOXGLOVE identified that monitoring data from the operator was felt to be slow, and agreed that expectations and capabilities of all agencies must be stated early on.

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Standardised advice from SCG could have reduced the number of queries, using information contained in the REPIR plan. Staff should be aware of this, and standard information from HPA / FSA should also be included with links to the relevant web pages. Radiation awareness training should be delivered to all organisational representatives that would be involved in STAC, and STAC must establish a meeting agenda that allows for new information introduction prior to decision making, including a robust system for action tracking.

- Conflicting actions arose during exercise SHORT SERMON with regards to interpreting technical information; some participants felt that technical staff should attend SCG meetings along with STAC representative to explain technical issues, while others felt that attendees from technical agencies would work better at their technical centres. Participants recommended that all agencies should review their use of the GOLD / SILVER / BRONZE terminology to ensure its use in the future is unambiguous.
- Some participants in SHORT SERMON found the initial countermeasure advice confusing, and would have liked more clarity on both implementing and lifting the countermeasures. Others felt that advice on countermeasure suitability must take into account real world conditions and monitoring which delineates the extent of the contamination rather than using arbitrary values.
- There were further issues in SHORT SERMON relating to traffic management and lack of recognition of the role of the Highways Agency, Indicative plumes (which were produced in response to an expected change of wind direction later in the day) need to be clearly labelled as such to avoid confusion among responders and the PACRAM form would benefit from a review as it does not provide any space for longer term weather forecast information.

2.4.3 Key lessons learned

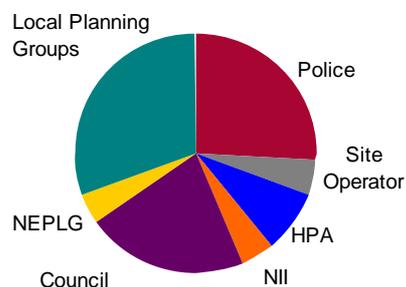
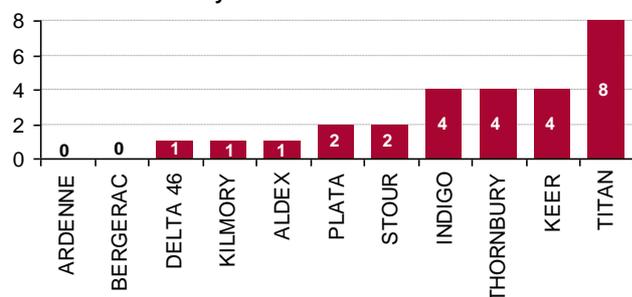
- Clarity was needed on several issues across exercises – chiefly implementing

and lifting countermeasures. Other areas included use of Gold, Silver and Bronze terminology, technical language used by the company team, as well as the colour codes for radiological data, terminology related to radiation doses, and the notation used for DEPZ and zones of extendability.

- Areas for improvement in meeting discipline were identified; meetings could be more concise, and the information provided to SCG from STAC could have been clearer in some exercises. There were conflicting feelings on whether technical staff should attend SCG meetings, or whether information should be translated for a non-technical audience. There were problems with distributing information from TiiMs in one exercise, and others found a verbal summary of SCG discussions beneficial for those not in attendance.
- Information flow would be improved if SCG could provide standardised advice – inclusion of dose estimates to determine evacuation distances and standard information from HPA/FSA in the off-site plan would aid this. One exercise felt that the PACRAM form should be redesigned to include long range weather information.
- Training needs identified included greater familiarity with GIS, practice using the telephone warning system, training for emergency services on accessing potassium iodide supplies, and radiation awareness training for STAC members.

2.5 Information Exchanges & Team Working

Number of actions by exercise



No actions were recorded in this section by exercises ARDENNE or BERGERAC, most others noted between 1 and 4 actions each, with exercise TITAN recording 8. In this section the largest proportion of actions were for Local Planning Groups to take forward, slightly smaller proportions of actions were assigned to the Police and Councils. NEPLG, NII and the Site Operators were assigned 1 action each, while the HPA was assigned 2.

2.5.1 Summary of positive comments

Most exercises noted good teamwork both within and between agencies. Information was generally well managed, with clear board marking and display on screens of current information. In most exercises it was felt that the levels of information sharing contributed to the ability to make well-timed decisions and identify appropriate actions, including moving towards recovery phase. Areas identified for improvement are described in section 2.5.2 below.

2.5.2 Summary of actions recorded

- In exercise DELTA 46 the Recovery Working Group was only set up once and this meeting didn't appear to be very well attended. It was noted by NII that this issue is a common problem across SLC's at Level 2 exercises and this will be included in the NEPLG Lessons Learned report.
- Following exercise KILMORY, Strathclyde Police are carrying out a review of the information management systems in place.

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- Exercise ALDEX identified the need for further work on return to normality, and advised that a separate recovery exercise be undertaken.
- Following exercise PLATA the Police were asked to identify a forward strategy for electronic messaging and frequency of time outs / PA messages. NEPLG were asked by participants in exercise PLATA to ensure that Agency STAC members are familiar with the concept and remit of STAC as covered within NEPLG Consolidated Guidance Chapter 11.
- Participants in exercise STOUR requested that CPLG produce guidance on format and content of information board, and review the location of the tactical cell in terms of being located separately from the SCC facility.
- In exercise INDIGO there were IT problems noted with NRE, impacting on information sharing as STAC minutes were produced through NRE. The Site Operator and Council will look into this. The HPA reported a lack of information on NARIMS, which is thought to be related to the communication difficulties.
- Further actions from exercise INDIGO were that Cumbria County Council should ensure adequate staffing to ensure multiple roles can be addressed. A briefing aide memoire should be prepared for STAC Chair to ensure key agencies are reminded to attend, that consensus is reached and that unilateral information is not passed to SCG.
- Participants in exercise THORNBURY felt that Information management systems in the SCC should be reviewed to address the needs of users. Training needs have been identified for a range of issues and a LRF training programme is now in place to address these areas.
- STAC meeting in continuous session in exercise THORNBURY should be reviewed against the need to output information from the group to agencies other than the SCG, and STAC membership should include representation from SMAC and Police.
- Following exercise KEER there were several comments regarding NRE, including standard use of the instant messaging system and the need for agencies to have their own accounts. Some participants reported an absence of population statistics, these are held in GIS systems and included in NRE document store. All of these issues will be included in future training. Participants also noted that it would be useful to consider inclusion of key issues

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associated with a nuclear event to be contained within STAC agenda, and that good practice should be shared with all STAC chairs and through STAC training.

- Exercise TITAN encountered several communication problems, initially some agencies created actions without informing Gold Office Manager, in future all participants are asked to ensure they are familiar with the communications protocol. The Welsh Assembly Government are to review the requirements in their SitRep to make it easier for agencies to complete, and exercise TITAN was the first test of the link between NEBR (Whitehall) and NEBR (Science & Technical) at Clerkenwell. Communications between the centres were poor and the link needs to be clarified, RIMNET are to review the links and consider nominated Liaison Officers at each end.
- There were further areas identified during TITAN where communications could be improved. It would be useful if ECCW action log was streamed into the partners room and not just in the main ECCW room, and the mechanism for liaison between BCU and WAG needs to be clarified. The role of WAG was not fully understood by all participants, leading to confusion over information given and communications links. The Off-Site plan will be amended to clarify their role.
- Participants at exercise TITAN also identified the need for an electronic system to direct questions to STAC to enable preparation before meetings and ensure responses are made, the Police are reviewing the IT infrastructure to see if this is feasible. Membership of STAC was not clear to all participants, and the virtual STAC teleconference was not tested. Participants also identified that formation and timing of the RWG needs to be agreed, as many of the same members are in both groups.
- There were issues with acronyms in exercise LONESTAR, and participants felt all should revert to plain speak during exercises.
- Participants in exercise FOXGLOVE felt that there should be formal processes for updating agencies up and down the command chain, and that SCG / TCG must establish battle rhythm, and methodology for SitReps on activation. They felt that the resources of the Operator were not used to full potential. Staff must be encouraged to ask for information,

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and SCG / TCG Chairs must establish information flows and clarify agencies' roles to avoid confusion.

- During exercise FOXGLOVE STAC was heavily dependent on HPA - a radiation training session would be of benefit so that STAC understands the advice available. Some STAC members also attended SCG which meant for a period STAC's resources were depleted. STAC Chair must ensure adequate resources and request if additional resources required.
- Information exchange was problematic during exercise SHORT SERMON; participants identified the need to outline roles and responsibilities early, and relevant information circulated promptly. Whilst staffing levels were improved at all command levels, there were times when SILVER were not communicating as well or as regularly as they should have been with either the ERC or SCG (GOLD). Support was provided to the off-site SILVER, but this will require further examination of how this can be developed to provide continuing effective support. There was also difficulty in communications due to the scheduling of GOLD and SILVER meetings, which were held alternating on each hour. As the SILVER meetings lasted for an hour, this meant there was no time to brief the GOLD rep before the GOLD meeting, and although a Recovery Co-ordinating Group chair was nominated no Recovery advice was provided to either SCG or TCG;
- Use of the National Resilience Extranet (NRE) during SHORT SERMON as a repository for exercise storyboard etc was of very limited value. Current management best practice includes the need for, and proper use of loggists, the plan should be updated to reflect this.
- Information from STAC provided to 'SILVERS', media and public was not clear or understandable, and there was also a lack of provision of timely and accurate critical information for Fire Service / Health. There were confusing messages over evacuation measures, and some data not given in a standard format leading to misinterpretation.
- The Command & Control system was not explicit enough for managing fire crews during exercise SHORT SERMON, and there was a breakdown in communication between attending crews and health physics when it was unclear who was in control. The quality of response was also impaired by difficulties obtaining information from the health co-

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ordination element of the Strategic Co-ordination Group. Participants felt that this element of the overall health response structure would benefit from a review. It was also suggested that clarification of disclosure requirements and Freedom of Information Act (FOIA) classifications when working on exercises is needed.

2.5.3 Key lessons learned

- Several problems were identified with information flow; in one exercise IT problems with NRE impacted on information sharing, in another guidance on content and format of information boards was requested, and general information management systems were to be reviewed following THORNBURY and KILMORY to make sure users' needs were met and sufficient staff were trained in information management processes. Participants would welcome development of electronic messaging systems, as well as formal processes for notifications up and down the command chain. Use of acronyms was felt to hinder communication,
- Meeting discipline and membership was problematic across exercises, with the concept and remit of STAC requiring clarification for some, and others noting that adequate staffing levels are needed to ensure all roles can be fulfilled. The STAC chair should ensure appropriate attendance at meetings as well as keeping meetings concise, providing clear information and establishing information flows. Formation and timing of the Recovery Working Group, and further work on return to normality, was also raised as an issue.
- Training issues such as increasing familiarity with GIS systems and the data they hold, radiation training to help participants understand the technical data. Some agency roles eg WAG require clarification.

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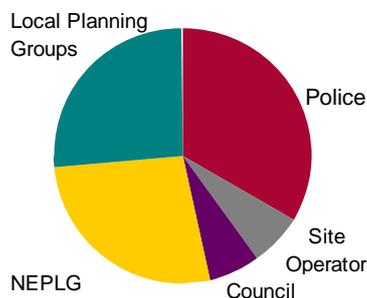
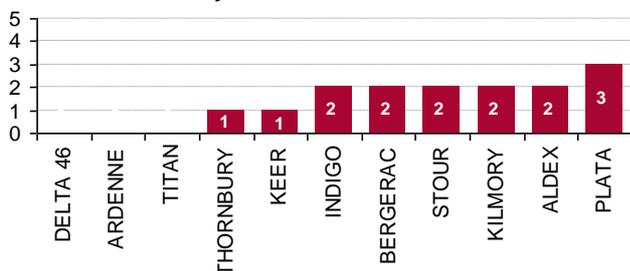
Sandra Little
ONR Emergency Arrangements Team
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2.6 Strategic Decision Making

Number of actions by exercise



Relatively low numbers of actions were recorded across all exercises in this section, and exercises DELTA 46, ARDENNE and TITAN did not record any. Most actions identified were for NEPLG, Local Planning Groups or the Police, with one each for Council and Site Operator.

2.6.1 Summary of positive comments

There were many positive comments relating to strategic decision making across most exercises. Participants appreciated good quality information supplied to Gold command by STAC and Site Operators, which enabled informed decision-making. Gold meetings were felt to be well run overall, with necessary distinction made between strategic and tactical information, aided in exercise KILMORY by the creation of a Tactical Co-ordination Group. Specific improvement issues identified are described in section 2.6.2 below.

2.6.2 Summary of actions recorded

- Participants in the THORNBURY exercise tasked the SCC Working Group to establish a single source for managing actions as they felt their exercise was missing a readily identifiable action/decision log.
- Exercise KEER reported that SCGs need to be shorter, sharper and more focused, and advised the use of “bird table” to keep meetings energised and focused. If necessary, SCG training should be implemented using the CCA Guidance as a reference.
- Exercise INDIGO noted that clarification of the roles of MCA and NII was needed, as the relationship was unclear. Also noted that the Recovery Working Group was not

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established - this should be done early in the emergency phase in order to consider emergency implications. NEPLG will pick up these issues and emphasise in future training.

- Following exercise BERGERAC the Police have been asked to review the plan and communication link between GTA and SCC while GTA is in transit. An incorrect telephone number had been given to the GTA, and the SCC did not initiate contact. The Police were also asked to review the awareness of staff regarding the process around press statements and emergency broadcast; this is covered in more detail in section 7.
- Exercise STOUR requested that NEPLG communicate that an estimated time to evacuation should be included in offsite plans as good practice. They also expect that NEPLG will take responsibility for clarifying guidance around the criteria for handover to recovery, and ensuring the exercise objectives state clearly what aspects of the plan are to be tested.
- Participants in exercise KILMORY found that forming a tactical group was beneficial, and that these meetings should be considered by Police for inclusion in SCC processes in future. They also requested that the Police make available the handover proforma for inclusion in the Off Site Plan.
- Exercise ALDEX found that meeting discipline was poor, and recommended updating the Thames Valley Multi-agency Plan and the Gold/Silver packs to include terms of reference and agenda for strategic meetings, along with supporting information for attendees to include timings, representation, resource support, protocols, preparation, actions and minutes. Also the role of Silver was not considered in sufficient detail during the exercise planning stage and a Multi-agency Tactical exercise should be run ahead of next Level Two ALDEX exercise.
- Participants in exercise PLATA felt that the Site Operator should develop the E1 form to include 'Threat Assessment' inputs. They also asked that CEPU should review the off site plan regarding delivery of potassium iodate tablets outside of the DEPZ, and with respect to COMAH sites, and amend as appropriate.
- Exercise FOXGLOVE experienced problems with 'battle rhythm' and noted that all agencies should be aware of timings of SitReps, further meetings and flow of information across the

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command chain, including actions. Participants thought that the Media cell should take a leadership role in facilitating interaction with all agencies. Additionally SCG Chairs should be selected for their skills and training must underpin this, Strong chairing of SCG ensures meetings are focussed, actions delegated and decisions made, although absence of a second DPH restricted decision making in this exercise. Participants also noted that although Recovery was the exercise end point, the RCG must be established alongside the SCG to ensure smooth transition and early recovery planning.

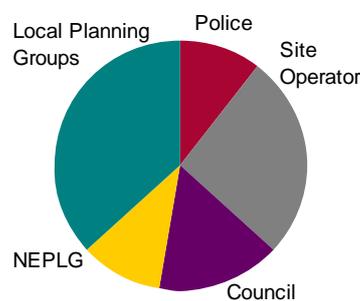
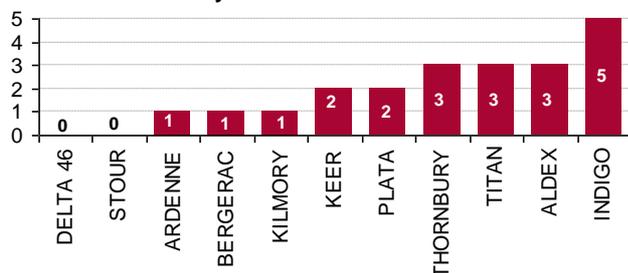
- Participants in exercise SHORT SERMON acknowledged that the membership of and attendance at SCG meetings proved again problematic, partner agencies have different views on who should attend. A “Battle Rhythm” needs to be established from the outset and Chairs reminded to keep meetings concise; It was felt that in the initial stages GOLD was not only setting the strategy but covering the possible tactics, increasing the length of the meeting and causing confusion within the chain of command. STAC also seemed to be getting involved in tactical decision making rather than forming strategic advice for GOLD - the CRCE team in STAC were requested to provide occupational protection advice to emergency services - a tactical issue which emergency services should refer to their own Occupational Health Radiation Protection Advisors. Where there is a plan in place participants felt that, all agencies should follow the plan; any deviation should be agreed by all agencies at the time. It is also necessary to develop of a Health GOLD Plan to sit with the SCC Plan.
- Participants felt it was unrealistic to have a handover to the recovery phase so quickly and it should be recognised that there will need to be a period where strategic and the recovery working group will be working in parallel. The lack of recovery play led to many unresolved issues at the end of the exercise and therefore failed to recreate the “pressure” of a real situation. Participants also noted that there is a need to look at BRONZE play in future exercises, the traffic management plan should be tested and with the recommendation of modular testing, that may be more easily achieved.

2.6.3 Key lessons learned

- More than one exercise noted issues around Recovery Working Group – most acknowledging that it should be set up early and run in parallel with SCG, some wanted clarification on criteria for handover to recovery, and others would like the handover proforma included in the off-site plan.
- The ‘battle rhythm’ has been noted as an area for improvement several times, with participants concerned about meeting discipline. All recognise the advantages of strong chairing, leading to concise meetings and clear actions, including the use of an action/decision log. Others felt that the media cell should take a lead role in co-ordinating information exchange, and others are concerned about membership and attendance at STAC.
- Participants in some exercises felt that lines between strategic and tactical discussions were sometimes blurred - exercise KILMORY found that forming a tactical group was beneficial and advised that SCC processes should be adapted to include this. One exercise asked that Bronze play be considered before the next exercise.
- One exercise asked that the E1 form be developed to include ‘Threat assessments’ and Offsite plans should contain further detail; regarding distribution of potassium iodate beyond DEPZ, any COMAH sites to be considered, and estimated time to evacuation. Clarification was needed around the roles of NII and MCA in another exercise.

2.7 Communications & Public Information

Number of actions by exercise



The number of actions recorded in this section differed across exercises, DELTA 46 and STOUR did not record any, whereas exercise INDIGO recorded 5 actions. The lead agencies were a mixture in this section, with Local Planning Groups, and Site Operators picking up large, roughly equal proportions, Councils slightly fewer, and Police and NEPLG assigned one each.

2.7.1 Summary of positive comments

Across most exercises it was thought that the use of SMAC was beneficial, with a good interaction between press officers from different agencies when present. Most exercises felt that there was good liaison between SCG, STAC and SMAC to ensure press briefings were delivered promptly. Areas for improvement were noted as in section 2.7.2 below.

2.7.2 Summary of actions recorded

- During exercise ARDENNE the Recovery Group only convened one meeting, but if this had been earlier the Company Team would not have had resource to attend and this would be better handled by a representative from the NDA. The Site Operator will include the NDA insurance process in company team training.
- In exercise BERGERAC the Police did not appear to issue either initial or holding press statements, which are pre-prepared and can be issued without strategic authority. The emergency broadcast message was not prepared either, and the Police are to investigate the initial press release process.
- Participants at exercise KILMORY advised a check and update of paperwork within HSCC.

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- Participants in exercise KEER noted that contact with Police was limited to hourly briefings, which led to agencies being less informed than they could have been, and communication issues were exacerbated by the lack of IT facilities, limited to NRE only. Participants also felt that MBC was not well co-ordinated, and difficult to locate. Concerns were raised about the quality, consistency and accuracy of reports made, as well as reports being considered too complex for the general public. The media plan is to be reviewed and all staff are to familiarise themselves with the contents.
- Participants in exercise PLATA felt that the flow of information was slow and should be reviewed by CEPU to ensure that SMAC is delivering the requirements of schedule 10 of REPPIR.
- The FAX system used in exercise PLATA is unique to Cleveland and needs to be used consistently by the operator. The Site Operator will re-enforce this in refresher training.
- Problems were experienced for SMAC during exercise THORNBURY, as the group was split across two rooms and the administrative processes were unclear leading to agencies issuing press statements not available to other members of SMAC. The SMAC team also identified the need for more email accounts. The SCC Working Group will review these issues.
- Exercise TITAN encountered some problems with Welsh language speakers – agencies should consider translators or Welsh speaking provision for public information roles in exercises in Wales as there was no back translation into English. Public health spokesperson, as well as having Welsh language capacity should also be available at SCC, and general Q&A for communicating to the public can be pre-prepared. A press release was made in exercise TITAN without reference to the Media Cell, this issue of early releases will be raised with NEPLG media sub-group.
- Communications between locations were sometimes slow during exercise ALDEX, and a review will be undertaken to build on best practice in information flow. There was a delay in sanctioning the initial press release, and an initial multi-agency release should be pre-prepared, and incorporated into planning arrangements. More information could be

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included in the plan to aid early communication of risk and advice on countermeasures in the early stages of an incident.

- Participants in exercise INDIGO advised that the Site Operator should check the detail of the Off-Site Plan to ensure adequacy and clarity of information regarding countermeasures, consider locations of facilities key to the response and means of access. The Council should also Consider PIT distribution to schools outside DEPZ with a regard to extendibility. They also asked the Council to consider that more variety was required in press “lines” and to incorporate into aide-memoire for Media Coordinator.
- Exercise FOXGLOVE identified that better co-ordination of media briefing, and ensuring all agencies were aware of timings would allow for better preparation and presentation. Establishing a clear ‘battle rhythm’ would aid flow of information and the Media Cell should facilitate these interactions. All media releases should be shared across agencies and tracked to ensure consistency of information to the public.
- Exercise SHORT SERMON found that there were delays in getting up to date information and getting press releases out, and there was a lack of co-ordination between national and local level, and lack of notification of participants before press briefings.
- Various participants in exercise SHORT SERMON identified that it may be of benefit for the media lead to be co-located with SILVER rather than at the SCC, taking appropriate strategic direction as required. Information flow to and from the media cell needs further work to enable updates and core messages to be passed on in a timely manner, and with appropriate comment and authorisation from agencies. It was felt that further staff would be required to allow all communication officers to perform their main function, rather than additional administration duties that developed, and that areas where actions deviated from the plans should be identified and resolved for the future. These aspects are under review.
- Other issues raised during SHORT SERMON were that the pseudo media were not challenging enough to fully test media trained players, and should consider enlisting Health Correspondents to ensure that taxing questions are asked. There is a need to agree on

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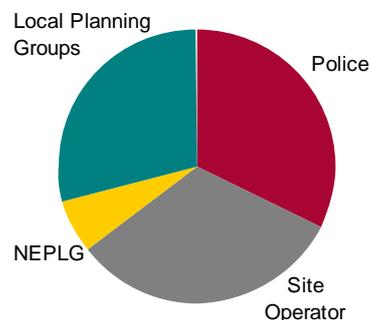
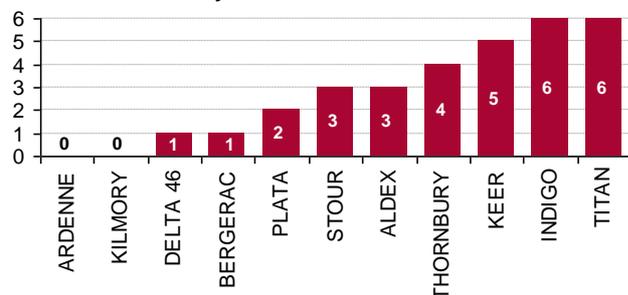
appropriate signage for the Highways Agency to use on their Variable Messaging Signing, approval of the VMS Policy Team is needed on what text can be displayed, and this could then be included in the Traffic Management Plan.

2.7.3 Key lessons learned

- Several exercises experienced problems with information flows and initial press releases – most experiencing delay, but one having an early release made without authorisation. Improvements suggested included pre-preparing the initial release, increasing the numbers of communication staff, and ensuring the media cell are located in one place. Increased familiarity with the offsite plan would improve the quality of the countermeasure information available.
- Other exercises experienced problems with the adequacy and clarity of reports made, and advised that increased familiarity with the media component of the off-site plan would improve performance. Participants also noted that better co-ordination of press briefings would improve preparation and presentation, and that more variety in the media lines may have been useful. Some participants felt the pseudo media were not challenging enough and would benefit from inclusion of trained health correspondents.
- Exercise TITAN identified problems with Welsh language speakers and advised that agencies consider Welsh staff or translators when attending exercises in Wales.

2.8 Facilities & Equipment

Number of actions by exercise



All exercises apart from ARDENNE and KILMORY recorded at least one action in this section, with INDIGO and TITAN recording the most. The majority of actions were split between the Police, Site Operator and Local Planning Groups, with NEPLG assigned one action.

2.8.1 Summary of positive comments

Participants in exercises DELTA 46, ARDENNE and KILMORY were generally satisfied with the facilities and equipment provided. Those involved in exercise ARDENNE thought that AIMS worked well, and that provision of the photographs was useful when setting up the company kit. Participants in exercise KILMORY appreciated the clear layout and identification of meeting areas, and specific team accommodation was felt to be sufficient for the numbers in attendance. Internal and external communications were felt to be good, with an appropriate range of options (phone, fax, internet). Despite the problems acknowledged in exercise PLATA (as detailed below in section 2.8.2), some positive aspects were recorded, the ability to connect own agency laptops was appreciated. The paper messaging system was felt to function adequately, and there was felt to be good use of the status boards.

2.8.2 Summary of actions recorded

- The Company Team at exercise DELTA 46 identified that it would be more appropriate to have available a 'flyaway box' to take en-route to the SCC as there may be additional items that they require, this is to be provided by the Site Operator.

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- Lack of space was problematic in exercise BERGERAC, where participants felt the SCC meeting room was crowded even with a limited number of agencies playing. Participants also identified the need to physically separate the STAC deliberations from those of the SCC and Gold.
- Some participants in exercise PLATA identified that the working environment in the Cleveland Police HQ company room was difficult, and have asked that the Police consider identifying a more appropriate venue for the STAC to meet.
- A lack of up to date technology was noted in exercise PLATA and have requested that the Police work towards the development of 'standard' SCC facility requirements, not only for a nuclear EP issue.
- Exercise INDIGO reported that further development of NRE was required, but NRE Support noted that many participants had not attended the training day leading to a lack of familiarity with the NRE, which contributed to early teething problems. It was felt that NRE must become part of everyday business, with attending agencies ensuring they have sufficient staff who have attended training days. The Site Operator agreed to promote the need for adequate numbers of trained staff. Aside from this the speed of NRE was problematic.
- Participants in exercise STOUR also identified a problem with space – and the Site Operator will review both the accommodation within the SCC and the location for local authority participants. Participants would also like the SECG to consider the development of an electronic messaging system within the SCC.
- Following exercise ALDEX participants recommended that communications capabilities were reviewed by the Site Operator to ensure adequate provision for liaison with external agencies. They also recommended the Police review the SCC layout to identify potential enhancements to its functionality, and the number of multi-agency representatives required to operate the centre with consideration given to maximising the role of reachback capability. Also STAC and the RCG facilities were located remote from the main strategic coordinating centre building which hindered interaction.

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- Participants in exercise ALDEX also recommended a review of the MBC as they felt a large number of agencies were over-reliant on the facilities provided rather than self-sufficient. The review should include representation, protocols, communications, and identification of attendees. The output from the review should be used to develop the next issue of the Thames Valley Media Plan.
- Limited space was felt to be problematic during exercise THORNBURY, especially in protracted incidents, and the LRF Training Group will be reviewing the staffing requirements and room layout. It was felt that layout would be improved by co-locating similar organisations.
- Other facilities related actions arising during exercise THORNBURY included a review of the IT management arrangements by the SCC Working Group to avoid confusing screen updates, and for the LRF Training Group to look at the arrangements for accessing refreshments in the SCC to avoid disruption and improve sustainability.
- Exercise KEER identified problems with use of fax, and would like the Site Operator to investigate electronic data transfer from TiiMS to NRE system. They would also like the SCC Working Group to consider projection of NRE on appropriate screens for viewing as TV monitors were difficult to read, and to be aware of the noise level introduced through using televisions to screen live news broadcasts.
- Other issues arising during exercise KEER include local access to printers within SCC Agency Room, STAC meeting room walkthroughs to Operator's room, and considering co-location of HPA (LaRS) and HPA (CRCE) staff to aid information exchange. The SCC user group will investigate these issues, including considering restricting operator room access to multi-agency room only.
- Participants in exercise INDIGO have agreed that the Site Operator will consider whether the Briefing Table could be better located, with GIS access, projector and screen to aid better use of briefing boards.
- Further problems were identified with the facilities at exercise INDIGO, with noise levels and poor mobile phone signal in agency rooms considered to hinder telephone

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conversations. There were also concerns over noise level in the STAC meeting area, along with insufficient space to display maps. The Site Operator is to investigate whether better locations can be found.

- Location of MBC during exercise INDIGO also needs consideration, not only in terms of the facilities available but location; the direct route to ECC was through the plume, and it was questioned whether this was too close to areas likely to be affected in a major incident.
- Participants at exercise TITAN suggested that the email system contain pre-set folders (for info, completed etc) and to consider inclusion of an electronic decision log. Participants identified that if they could leave the exercise with a log of emails and decisions it would be a useful learning tool. They also struggled with log-on details for computer system, would like to see facility for connecting laptops, both as part of MBC and otherwise, and identified that the general IT and telephony provided to MBC was insufficient. The Police are looking into these recommendations.
- There were serious problems with transfer of data from TiiMS to RIMNET during exercise TITAN, both at NEBR (W) and (S&T). RIMNET will liaise with the Site Operator to resolve the issue.
- There were problems with mobile phone signal during exercise LONESTAR, and lack of access to broadband in DECC, although the latter is now resolved.
- It was felt by some players that the separation of the mapping and safety cells during exercise SHORT SERMON, imposed by current arrangements, would at times hinder interaction, and that the introduction of a NARIMS terminal in the Mapping Cell would help expedite the transfer of data to RIMNET (the systems are currently air gapped). They also felt that there were opportunities for MOD and RIMNET to further develop the mapping arrangements in support of both HQ DNEO and COBR. Prior to the exercise efforts were made to provide the PWS Advisors with access to the RIMNET secure web pages, this was not possible in the time available but should be pursued. Information from RIMNET would also be welcomed by Met Office staff at STAC/GOLD - access to RIMNET secure web pages

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should make this available eventually, but in the meantime develop a short list of standard products that are available on RIMNET, to be emailed to Met Office at STAC/GOLD.

- Exercise SHORT SERMON also identified that more work is required to see if NRE is a suitable tool to communicate information during exercises / incidents, and to improve the process for users of generic accounts. Also that internet lines similar to DACC would be beneficial rather than using 3G, and the SCG Meeting Room would have benefited from maps showing the site and planning sectors within the DEPZ. The Major Incident Control Room concept worked well, but revealed issues of infrastructure reliability and compatibility, as well as an underlying training issue to enable staff to get the best from the capabilities of the major incident control room equipment.

2.8.3 Key lessons learned

- Lack of space was felt to be an issue in several exercises, with various agencies reporting insufficient space for staff and equipment. Participants across several exercises also advocated co-location of similar agencies and felt that physical separation of agencies, whilst sometimes necessary, generally hindered communication. Noise levels and poor mobile phone signal were also cited as obstacles to communication in more than one exercise.
- Equipment issues were identified in exercise PLATA, where participants felt the technology was out of date, and more general IT issues mentioned were lack of facilities to connect laptops, and variable access to printers. More specifically, development and use of NRE, along with increased staff awareness of the system was mentioned more than once, and wider use of RIMNET data by external agencies was recommended.
- Again, development of an electronic messaging system was mentioned (See section 2.1.3), but this time during exercise STOUR, and participants in a different exercise would like pre-set email folders, an electronic decision log, and the ability to take copies of both as a learning tool following the exercise.

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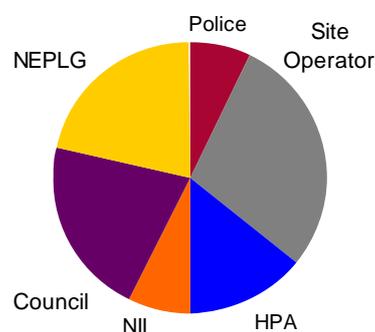
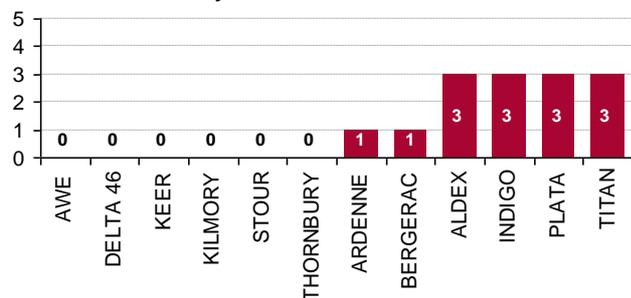
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2.9 Participants

Number of actions by exercise



Few actions were recorded in this section, with half of the exercises recording no actions at all, ARDENNE and BERGERAC recorded one each, and the others three. Where actions were recorded the agencies responsible were a mixture, with Site Operators, NEPLG, and local Councils having the majority attributed to them, HPA picked up two actions and Police and NII one each.

2.9.1 Summary of positive comments

Generally participants across exercises were felt to be competent, professional and have the relevant authority. Comments were made following several exercises praising the ability of those involved to consider wider strategic issues, and a good understanding of roles and responsibilities. Issues identified are detailed in section 2.9.2.

2.9.2 Summary of actions recorded

- During exercise ARDENNE the Recovery Group only convened one meeting, but if this had been earlier the Company Team would not have had resource to attend. As much of the discussion relates to support available from Site Licensee to clear up the effects of the release, this would be better handled by a representative from the NDA. The Site Operator will include the NDA insurance process in company team training. There were problems experienced with TiiMs access during exercise ARDENNE relating to numbers of attendees who were able to use it. The Site Operator is to review training to ensure their Company Team are all familiar with TiiMs.

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- Participants in exercise BERGERAC reported that more familiarity with the offsite plan is required, and the Council are to organise a briefing day for Emergency Responders via LRF, to be repeated as often as necessary.
- Absence of FSA was flagged up as a problem in ALDEX, which is acknowledged as a national issue. In terms of the participants who did attend, it was felt that an on-site specialist would be helpful as part of the MBC, and that observation of an internal exercise would help external agencies to better understand the off-site plan. The Site Operator is to review both of these recommendations.
- Exercise INDIGO reported that clarification was needed from the Police on opening the Casualty Bureau, and that further training was needed for local STAC attendees specific to nuclear incidents, this action, along with ensuring that all agencies had adequate support staff, was assigned to NEPLG.
- Another issue identified during exercise INDIGO was reference to the Cumbria Alert Website. This has been replaced by CCC and Police sites, clarity is needed from the Council as to which one will be used when, and necessary information should be on those sites.
- Participants in exercise PLATA felt the HPA should revise the SCC familiarisation day to include: Threat Assessments, Initial automatic countermeasures and press releases contained in the Off Site plan, and the role of NII. In addition, learning from P18 should be noted by the training sub group.
- Another action identified from exercise PLATA was that NEPLG should seek FSA commitment to future exercises. This was identified in exercise KILMORY also, but under a different section.
- Participants in exercise TITAN expressed concerns about lack of participation from Civil Nuclear Constabulary or Office for Civil Nuclear Security in the event of a security incident. NEPLG are taking this issue forward nationally. Exercise TITAN also identified that media releases could be prepared beforehand, which the Local Authority will progress. Feedback from media agency on individual players has been requested by Site Operator.

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- The tabletop approach taken in exercise FOXGLOVE worked well, but more breakout rooms were needed to realistically separate participants. There was good representation from agencies, but commitment to all exercises is critical to test plans. If agencies are not able to take part, consideration must be given to remote support. Again the absence of the Food Standards Agency hindered speed of requests and simulated play caused contradictory information.
- Lack of maps and information boards in exercise FOXGLOVE meant agencies were not fully briefed, and some agencies highlighted the absence of their key staff who were crucial to the response, particularly emergency planning leads that have all the knowledge of the plan. Information sharing is key, and all staff should be confident in their role and have access to resources on arrival.
- Exercise SHORT SERMON noted that the importance of properly trained government representatives was substantiated by the scenario, and advised that the RIMNET team at MoD and DECC review the Memorandum of Understanding (MoU) between their organisations for support during emergency exercises to ensure that the response is adequately scoped and resourced. Additionally they felt that FPC would have benefited from comprehensive written instructions to ensure all personnel were clear on the roles, responsibilities and lines of communication.
- SHORT SERMON flagged absence of FSA as a weakness, making STAC work unrealistic. There remains an issue to be resolved around the level of representation of the Met Office at SAGE, which may become clearer in an exercise where actual weather is employed and the full Met Office response is tested in real time, including involvement of the Atmospheric Dispersion Group.
- Participants in exercise SHORT SERMON also identified that the SILVER officer should consider additional admin support and scribe roles, and that local training and site visit initiatives should be maintained at least annually, to support the three yearly exercise agenda to keep the responders updated and current with their multi agency partner's role.

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It is important that all staff update themselves regularly (at least once a year) on the policies, plans and procedures that the trust has.

2.9.3 Key lessons learned

- In general participants were felt to be competent, professional and have the relevant authority, but the importance of keeping knowledge up to date was identified in several exercises; it was recommended that local familiarisation days were undertaken regularly and that participants should familiarise themselves with the off-site plan and other relevant documentation. This applied to all potential responders in agencies, not just emergency planning leads.
- Agency representation was an issue at a number of exercises, most notably absence of FSA staff. One exercise noted that a representative from the NDA would be beneficial during Recovery Working Group meetings, another that attendance from Civil Nuclear Constabulary or Office for Civil Nuclear Security may be necessary, and Met Office representation was also under review. If key agencies are not able to take part, consideration should perhaps be given to remote support.
- Adequate provision of support staff and their training in IT systems such as TiiMS is important for the exercises to run smoothly, and provision of support from RIMNET team was identified as important in one exercise. Other exercises identified that an on-site specialist would be helpful as part of MBC, and that media releases could be pre-prepared.