



AWE OFF SITE EMERGENCY PLAN LEVEL 3 EMERGENCY EXERCISE

ALDEX 2016 –7 November 2016

POST EXERCISE REPORT

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1. ACKNOWLEDGEMENTS

Exercise ALDEX 2016 was planned by a sub-committee of the Off Site Plan Working Group (chaired by West Berkshire Council). This post exercise report was produced on their behalf by West Berkshire Council.

The cooperation, help and enthusiasm of the planning team, the multi-agency exercise participants, the observers and the support by all the agencies who provided time, resources and facilities, in particular Thames Valley Police who made available to the exercise a large part of their headquarters, is gratefully acknowledged.

2. SUMMARY

The Atomic Weapons Establishments (AWE) at Aldermaston and Burghfield, include Sites Licensed under the Nuclear Installations Act and as such are required to have off-site response plans which are tested. Aldex 16 was such a test which aimed to exercise the wider involvement of central government in any response to an incident at an AWE site, this test was successfully held on 7 November 2016.

The focus of the exercises was the AWE Aldermaston site with the scenario being based on an incident in a radioactive materials handling facility at the Aldermaston site. The exercise aimed to build on the lessons learned from previous ALDEX exercises and other incidents/exercises.

The exercise involved simulation of an incident at AWE Aldermaston. Command and control arrangements were put in place at national and local levels with over 395 participants from 32 agencies taking part.

The feedback through the debrief process was extensive with over 635 comments made. This is in itself positive showing the engagement of the agencies and individuals to register suggestions for improvement. In addition to the improvements suggested however there was a significant percentage (approx 45%) of feedback related to positive outcomes which should not be lost. Significantly 98% of those responding to the online survey confirmed that the aim of the exercise was met in full (80%) or partially (17%).

The feedback has now been collated, considered and discussed by their representatives at the Off Site Plan Working Group with recommendations for improvement agreed.

The full details of recommendations are contained within this report however the highlight areas of improvement include:

- a. the management and coordination of communications;
- b. the management and coordination of the STAC/Countermeasure process;
- c. the information sharing process between agencies;
- d. the command and control structure;
- e. the function and facilities of the SCC at Kidlington

Whilst there are recommendations to improvement to the AWE Off-Site Plan they were not major in relation to the overall wider recommendations to improve the response. Instead they relate to fine tuning and clarity of the AWE Off-Site Plan

3. INTRODUCTION

- a. The Atomic Weapons Establishments (AWE) at Aldermaston and Burghfield, are both licensed sites under the Nuclear Installations Act.
- b. Due to the geographical situation of the AWE Aldermaston and AWE Burghfield sites (both within West Berkshire Council area), the nature of the radiological hazard at each site and as a result and the common response by the agencies involved in any response there is one Off Site Emergency Plan covering the 2 sites. The plan is published by West Berkshire Council as the local authority for the AWE sites. The local authority is also required by the Radiation Emergency (Preparedness and Public Information) Regulations (REPPPIR) to test the plan at least every three years involving a 'radiation emergency' at an AWE site to test the Off-site Emergency Plan.
- c. The plans for the site are tested under the following categories¹

Level 1 exercises are held at each nuclear site generally once a year and concentrate primarily on the operator's actions on and off the site.
Level 2 exercises are usually held triennially and are aimed primarily at demonstrating the adequacy of the arrangements made by the local authority to deal with the off-site aspects of the emergency.
Level 3 exercises are held annually by at least 1 nuclear site in the UK to rehearse the wider involvement of central government.

- d. ALDEX 16 was the first Level 3 exercise to be held relating to an AWE sites since 1997 when the AWE sites became Nuclear Licensed Sites.
- e. ALDEX 16 was observed by a number of observers from the exercise planning group and was independently observed by representatives from the Office for Nuclear Regulation and Elected Representatives of the local communities.
- f. The focus of the ALDEX 16 was the AWE Aldermaston site. The scenario was based on an incident in a radioactive materials handling facility at the Aldermaston site. A resulting breach of containment allowed the airborne release of radioactive material into the public domain.
- g. The exercise planning built on the lessons identified from previous ALDEX Level 2 exercises and other incidents/exercises, in order to confirm lessons previously identified had been learned and to identify opportunities for further improvements to existing arrangements.
- h. At the end of the exercise feedback was collated from the 'hot debrief' on conclusion of the exercise, several individual agency cold debriefs, a multi-agency cold debrief and an online survey to allow for individual feedback.

¹ [ONR - A guide to nuclear regulation in the uk](#)

- i. The feedback received has been analysed and used to identify areas where participants believed improvements might be made. These have been agreed by the AWE Off-Site Planning Group and are tabled in this report as an action plan not only for the Off-Site Planning Group but the wider civil contingencies environment via the respective Local Resilience Fora.

4. OVERVIEW OF AIM & OBJECTIVES

- 4.1 The aim and the objectives to the exercise are detailed in [Annex 1](#).

5. EXERCISE SCENARIO

- a. The exercise scenario is detailed in [Annex 2](#).

6. PARTICIPATING ORGANISATIONS AND PLAYER LOCATIONS

- a. Over 395 personnel from 32 agencies took part, the details of which are in [Annex 3](#).

7. COMMAND & CONTROL

- a. The exercise involved the full command and control arrangements from national level, hosted in the MoD Defence Crisis Management Centre to the local level at the Aldermaston Control Point at AWE (A).
- b. The exercise laydown is shown pictorially in [Annex 4](#).
- c. The Strategic Coordination Centre (SCC) comprised of a fully functioning Strategic Coordinating Group (SCG), a Scientific and Technical Advisory Cell (STAC), a Recovery Coordinating Group (RCG), a Media Advisory Cell (MAC) and a Multi-Agency Cell and an Information Cell (MAIC).
- d. Exercise Control was at the SCC with the main emergency responders being in situ to add to the scenario as required.
- e. The Aldermaston Command Post (ACP) at AWE Aldermaston acted as a simcell simulating the on-site response, reporting on incident progress to external agencies and responding to requests for information from other exercise locations.
- f. The Strategic Coordinating Group (SCG) was chaired by the Thames Valley Police Gold Commander who demonstrated enthusiasm for the exercise whilst managing the group in a way that facilitated learning for those new to the SCG environment.
- g. The Scientific and Technical Advisory Cell (STAC) operated again on this exercise, was chaired by Public Health England.
- h. The Recovery Coordinating Group (RCG) was chaired by Basingstoke and Dean Borough Council following initial discussions about the cross border impact and who should lead.
- i. A Media Advisory Cell (MAC) operated at the SCC and was led by TVP. This cell was responsible for providing authoritative information to the media. For a number

of players involved in the cell, this was the first time they had fulfilled that particular role and it involved the testing of the Communications Plan for the first time.

- j. A Media Briefing Centre was set up at a local hotel as detailed in the AWE Off-Site Plan. This was the first time this had been tested in the Thames Valley following the redrafting of the communications plan.
- k. A number of agencies set up their own incident rooms in support of the exercise. This assisted in maintaining the realism of the exercise, providing a test of communications between these locations and the Strategic and Tactical multi-agency centres and allowing the individual agencies to exercise their own plans.

8. EXERCISE ARTIFICIALITY

- a. It was recognised in the planning process that there is always a degree of artificiality when running exercises. Whilst every effort was taken to reduce this effect whilst balancing benefit and costs, there were some elements which could not be overcome including:
 - a. At STARTEX everyone at the correct location at the same time;
 - b. Real time public and media pressure;
 - c. Extended periods of working over more than a 7 hour period;
 - d. Prior reading of the plan just before the 'incident'.
- b. Some of these points were borne out in the feedback and acknowledged by the planning team.

9. DEBRIEF PROCESS

- a. A full and comprehensive debrief process has been undertaken which included:
 - a. Immediately following the end of the exercise, 'hot' debriefs were undertaken at all locations. This involved each agency providing feedback to the Directing Staff with their key points;
 - b. An online survey was undertaken over a 4 week period (8 Nov 16 – 2 Dec 16);
 - c. Structured cold debriefs were undertaken by individual agencies. Additionally a multi-agency debrief was undertaken on 15 December 16. Thanks are expressed SCAS who facilitated these debriefs.
- b. This report focuses on the multi-agency and AWE Off-Site Plan lessons and not individual agencies learning. These are the responsibility of those agencies.
- c. Where there were additional exercises being run in conjunction with the exercise, in particular the Royal Berkshire Hospital and Hampshire Hospitals NHS Foundation Trusts individual debrief reports have been written for those agencies.

10. ANALYSIS OF DEBRIEF DATA

10.1 The analysis of the debrief data was complex due to the different formats of the information and indeed the volume of feedback provided. Set out below is the process undertaken.

a. Online Survey Feedback.

The purpose of this process was to allow individuals who took part in the exercise to feedback outside the formal process, and anonymously if required, so as to get honest feedback.

The feedback gained from this process can be split in 2:

- i. **Statistical feedback** on meeting the aims and objectives. The statistical feedback results, analysis and considerations are provided in [Annex 5](#). A [summary](#) of the statistics are in the conclusions and recommendations to that Annex.
- ii. **Subjective feedback** by way of comments. These comments totalled 268 in total. On reviewing this feedback:
 1. 110 referred to positive outcomes (41%);
 2. 41 referred to the good learning experience and thanks to the organisers (15%);
 3. 117 people responded with suggested areas of improvement (44%).

The suggested areas of improvement have been analysed the result and the results detailed in this report.

b. Hot and Cold Debriefs Feedback.

The hot and cold debrief data from all agencies and locations have been amalgamated into one document. This document has a total of 370 comments.

1. 142 comments referred to positive outcomes, (38%).
2. 204 comments related to improvements (55%)
3. 24 comments were neutral (6%).

The suggested areas of improvement have been analysed the result so which are detailed below in **30**.

11. Feedback Comment Analysis.

11.1 At total of 638 comments were analysed from the online subjective (268), hot and cold debriefs (370) responses. The analysis provided the following results:

1. It can be very easy to focus on the areas of improvement from any incident or exercise however 40% of the feedback was positive. The key points drawn out from this positive feedback included:
 - a. Good process for registration and briefings;
 - b. Positive collocation of several responding agencies;
 - c. Good liaison with other agencies;

- d. Excellent support from units we don't exercise with regularly including BT and 42 Engr Regt (Geo);
 - e. Good detailed exercise planning
 - f. Good management of the SCG –staying strategic and chaired well;
 - g. Good Off-Site plan with lots of useful detail;
 - h. Good use of Resilience Direct;
 - i. Excellent support from 'background' officers in relation to ICT and facilities at all locations.
2. There were however 321 individual comments made relating to improvements which could be made in relation to the response as a whole. These comments have been reviewed and analysed. The table below (Table1) sets out the key themes from the feedback, split into 2 feedback methods.

Theme	No. of comments - Hot and cold debriefs	No. of comments- on line feedback
Comms/Media	64	20
STAC	33	25
SCC	21	3
C&C & LRF MAP	16	6
Info Management & Info Sharing	16	27
Resilience Direct	10	10
TCG	9	4
Countermeasures	9	0
ICT	8	2
Incident rooms	6	8
Tactical Plans	4	0
Facilities	2	2
MoD	2	0
ACP	1	2
H&S	1	0
Recovery	1	1
Rest Centre	1	1
AWE Plan	0	5
Tactical Advisors	0	1
Total	204	117

Table 1. Issue themes detailing number of comments made.

- 11.2 Table 1 above shows that whilst there numbers and order of the top 5 issues may vary the top 2 issues were the same for both methods of feedback.

- 11.3 The 2 sets of feedback were amalgamated to provide totals for the issue themes. The results are set out in the table below. (Table 2)

Serial	Theme	No of Comments
1	Comms/Media	84
2	STAC	58
3	Info Management & Info Sharing	43
4	SCC	24
5	C&C & LRF MAP	22
6	Resilience Direct	20
7	Incident rooms	14
8	TCG	13
9	ICT	10
10	Countermeasures	9
11	AWE Plan	5
12	Tactical Plans	4
13	Facilities	4
14	ACP	3
15	MoD	2
16	Recovery	2
17	Rest Centre	2
18	H&S	1
19	Tactical Advisors	1
	TOTAL	321

Table 2: Issue Themes with total No of comments made.

- 11.4 Analysis of table 2 above clearly shows the areas requiring most attention relate to
- Comms/Media,
 - STAC and
 - Information Sharing and Management.
- 11.5 Whilst this 'weighting' based purely on numbers could, and perhaps should, indicate where the greatest efforts should be made this may not be the case in relation to the AWE Off-Site Plan which was being tested.
- 11.6 Deeper analysis of the results shows that the top 9 themes relate to improvements which would improve a response to any incident response. In contrast some of the themes (Serials 10,11,14,15 & 18) relate to the AWE response specifically.
- 11.7 The recommendations relating to the lessons identified are owned by a number of different agencies and groups including individual agencies, the Off-Site Planning Group, Thames Valley and Hampshire & Isle of Wight Local Resilience Fora. Some recommendations have been highlighted as outside the scope of local responders and have been highlighted as requiring National influence and action.

11.8 The analysis of all the comments has resulted in 51 recommendations.

12 WAY FORWARD

12.1 This report highlights a number of recommendations which if actioned will enable a more effective response to any incident requiring a multi-agency response and not just an AWE emergency.

12.2 The progression of the recommendations can be split into:

- a. lessons identified which will directly influence the AWE Off-Site Emergency Plan and can be enabled by the Off-Site Planning group will be taken forward as an action plan and implemented;
- b. lessons identified which cannot be directly controlled by the AWE Off-Site Planning Group. This report will be forwarded to the respective agencies and Local Resilience Forums (LRFs) to take forward. These will normally form part of a lessons learnt action plan which is monitored by the Executives of these LRF's.
- c. lessons identified which have national implications and/or cannot be resolved at local level. These recommendations will therefore be shared with the regulators, DCLG Resilience & Emergencies Division representatives and through the JESIP Joint Organisation Learning Portal to be taken forward nationally.

12.3 The chair of the AWE Off-Site Planning Group will maintain a watching brief for the group in relation to progress outside their control and feedback as appropriate.

13 CONCLUSION & RECOMMENDATIONS

13.1 Aldex 16 was a successful exercise and demonstration of the AWE Off-Site Emergency Plan. In particular it was noted:

- a. Whilst it is 'easy' to highlight the lessons identified it cannot be ignored that there was significant engagement across a large number of agencies and staff within these agencies.
- b. The debrief process has allowed all participants to consider the response and feedback accordingly resulting in a large response.
- c. The percentage of positive feedback from those feeding back was not insignificant.
- d. The issues relating specifically to the AWE Off-Site Emergency Plan were only 6.5% of the wider recommendations for improvement in response.

13.2 The exercise has however highlighted a number of areas of improvement not only for the AWE Off-Site Emergency Plan but more specifically in relation to the wider working together of agencies in an emergency. Particular concern is raised in relation to:

- a. Comms/media and the integration into the wider emergency response;
- b. The operation of the STAC and the integration into the wider response;
- c. Information Management and Sharing in emergencies

- d. The Strategic Coordinating Centre as a suitable operating base for large scale responses;
- e. Command and Control by way of understanding how it works in a multi-agency response.

13.3 It is recommended that:

- a. Further specific training and exercising is undertaken to test the objectives which were not met to such a high level as others as highlighted in the [Survey summary](#) to [Annex 5](#).
- b. The Thames Valley LRF is nominated the custodian of the recommendations, monitoring and reporting on progress accordingly to the executive.
- c. The chair of the AWE Off-Site Planning Group will maintain a watching brief for the group in relation to progress outside their control and feedback as appropriate.

DISTRIBUTION

AWE Off-site Planning Group members;
Agencies identified in the AWE off-Site Plan;
Thames Valley & Hampshire & IoW Local Resilience Fora;
Office for Nuclear Regulation;
Public Version on West Berkshire Council website.

ANNEX 1 ALDEX 16 AIMS AND OBJECTIVES

1.1 AIM: The aim of the exercise is to test & evaluate elements of the AWE Off Site Emergency Plan for a radiation emergency on site affecting the off-site area, as required under REPPiR.

1.2 OBJECTIVES:

1. To test:
 - a. the coordination at National, Strategic and Local levels;
 - b. the communication routes (including email/Airwave radios/Resilience Direct(RD)/GIS & Situation Reports & Commonly Recognised Information Pictures (CRIP)) between the site at AWE (A) and the Command and Control Centres and others supporting incident rooms as appropriate;
 - c. the flow of advice and information between the Operator (at the AWE ACP) and command and control centres operating in response to the incident;
 - d. cross border arrangements;
 - e. the Scientific & Technical Advisory Cell (STAC) arrangements;
 - f. the joint organisational media handling procedures including a Media Briefing Centre;
 - g. the countermeasure options (particularly evacuation and shelter);
 - h. the health & welfare provisions (particularly for vulnerable people);
 - i. the post incident recovery considerations using the AWE Off-Site Plan and the Thames Valley Local Resilience Forum (TV LRF) Recovery Plan.
2. To test the integration of a number of individual and multi-agency plans, as necessary. This may include:
 - a. Evacuation Plans
 - b. Rest Centre Plans
 - c. Vulnerable People Plans
 - d. Information Sharing Protocols
 - e. Radiation Monitoring Units
3. To demonstrate the Joint Emergency Services Interoperability Programme [JESIP](#);
4. To provide responders under the Off Site Plan with an opportunity to verify their own plans to a Radiation Emergency at AWE Aldermaston (these to be an adjunct to the main exercise and not in conflict with it);
5. To facilitate a number of opportunities for agencies to train and work together to ensure good working knowledge of each other's roles and ensure an integration response (individual agency objectives are at [Annex A](#));
6. To produce a post exercise report with recommendations for action. The actions to be acceptable, achievable and within the control of the agencies involved in the exercise.

ANNEX 2 ALDEX SCENARIO 2016**Background**

It is a normal operational day at AWE Aldermaston with the site operating fully.

Approximately 4800 staff are on site during the day.

Weather conditions are as is, bar the wind which is blowing from the North East at approximately 5 meters per second.

A high hazard process (Process AWE X007-380) is occurring within Building X007 and is being supervised by 2 SQEP staff in an adjoining control room

Incident

A failure of the equipment in Building X007 has resulted in an uncontrolled level of heating to occur within the equipment. This heating it has caused the equipment to become over pressurised, above its safe operating envelope. This failure mode has resulted in the equipment suffering a worst case release. The equipment has experienced a high pressure explosion.

The explosion has caused:

- the contents to be released directly to atmosphere in a hot liquid form
- the released material which is molten liquid is sprayed to the atmosphere, to the damaged plant and equipment and to the surrounding surfaces within the area.
- significant damage to the room, the adjoining rooms and the plant located within the vicinity of the equipment.
- significant damage to the building ventilation system and has resulted in a number of small fires in the area within the building. One of these fires is having a significant impact upon the ventilation system which is causing the HEPA filters to begin to fail and has resulted in a release path directly to the outside environment.
- the 2 operators within the adjoining room suffer from injuries categorised as a P4 type as a result of the explosion.
- in excess of 20 contaminated personnel with a variety of injuries have evacuated with a number of personnel requiring rescuing from the building
- the building RA air alarm immediately activates in the affected area.
- the building fire alarm has also activated resulting in a full building evacuation, a consequence of this is the emergency exit doors are now open resulting in a direct pathway to the outside environment. One of the emergency exit doors has become slightly warped as a result of the explosion near-by and is no longer able to be closed. Smoke is emanating from the building as a result of the emergency.

Actions of AWE

AWE Aldermaston has declared a radiation off site emergency due to the explosion, release of Pu, direct pathway to atmosphere, observable signs of smoke being released from the building and confirmed contamination being released from the building via the evacuees.

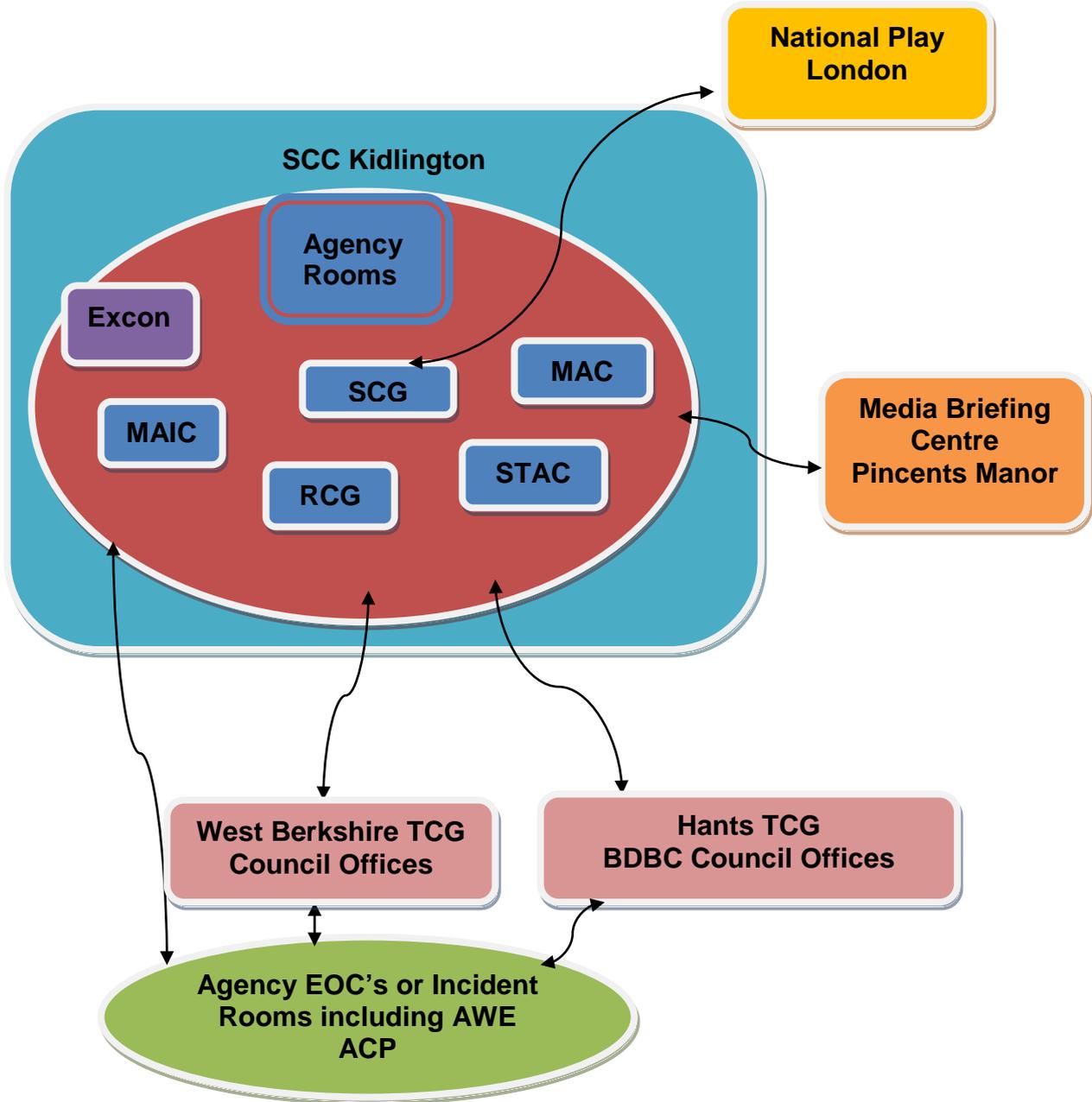
The potential mass of material released is between and

Hazard predication modelling is due to issue a plume plot imminently as an initial downwind assessment. The AWE Aldermaston Emergency Manager has recommended that the telephone alerting be activated in the following OEPA sectors J, K, L and M

ANNEX 3 PARTICIPATING ORGANISATIONS AND LOCATIONS

	Organisation	SCC-SCG	SCC-STAC	SCC-RCG	SCC-MAC	SCC-MAIC	TCC BERKS	TCC Hants	MBC	Own Control Room	Notes
1	AWE plc	Y	Y		Y				Y	Y	
2	Thames Valley Police	Y	Y	Y	Y	Y	Y	Y	Y	Y	
3	Hampshire Constabulary							Y			
4	Royal Berkshire Fire and Rescue Service	Y					Y				
5	Hampshire Fire & Rescue Service	Y						Y			
6	South Central Ambulance Service	Y					Y	Y			
7	West Berkshire Council	Y	Y	Y	Y	Y	Y	Y	Y	Y	
8	Hampshire County Council	Y		Y				Y	Y		
9	Basingstoke and Deane Borough Council	Y	Y	Y				Y	Y	Y	
10	Reading BC					Y					Mutual Aid
11	Bracknell Forest Council								Y		Mutual Aid
12	Bucks CC								Y		Mutual Aid
13	Ministry of Defence	Y	Y	Y	Y	Y	Y	Y	Y	Y	
14	11th Infantry Brigade & HQ South East	Y					Y	Y			
15	Office for Nuclear Regulation	Y									Regulators
16	DCLG RED	Y									
17	Met Office		Y								
18	Environment Agency	Y	Y	Y					Y	Y	
19	Food Standards Agency	Y	Y							Y	
20	NHS England	Y							Y	Y	
21	Berks LA Dir PH		Y								
22	Public Health England SE		Y						Y		
23	Public Health England CRCE		Y	Y							
24	Royal Berkshire Hospital									Y	
25	Hampshire Hospitals NHS Foundation Trust									Y	
26	NHS North Hants CCG									Y	
27	West Berks CCG									Y	
28	British Telecom	Y									
29	Highways England										Available on phone
30	42 Engineer Regiment (GEO)	Y									

ANNEX 4 PICTORIAL LAYDOWN OF COMMAND AND CONTROL STRUCTURE



ANNEX 5 ONLINE RESPONSE & ANALYSIS

1. **Online Survey Feedback** - The tables below detail the feedback from the online survey.

Which agency do you work for?	No of Response	Percent of total response	No of players in exercise taking part	% of players/agency responding	Notes
11th Infantry Brigade & HQ South East inc MLO's	1	.6	6	17	
42 Engineer Regiment (GEO)	1	.6	3	33	
AWE plc	13	7.6	42	31	
British Telecom	2	1.2	2	100	
Bucks CC	2	1.2	2	100	
DCLG RED	2	1.2	2	100	
Environment Agency	2	1.2	8	25	
Food Standards Agency	11	6.5	14	79	
Hampshire Constabulary	3	1.8	3	100	
Hampshire County Council	5	2.9	12	42	
Hampshire Fire & Rescue Service	2	1.2	5	40	
Hampshire Hospitals NHS Foundation Trust	1	.6	57	2	Linked to exercise remotely hence level of feedback
Met Office	1	.6	1	100	
Ministry of Defence	23	13.5	37	62	
NHS England	6	3.5	12	50	
NHS North Hants CCG	6	3.5	15	40	
Oxfordshire County Council	4	2.4	4	100	
Public Health England SE	5	2.9	11	45	
Reading BC	1	.6	1	100	
Royal Berkshire Fire and Rescue Service	2	1.2	11	18	
Royal Berkshire Hospital	2	1.2	21	1	Linked to exercise remotely hence level of feedback
South Central Ambulance Service	4	2.4	10	40	
Thames Valley Police	33	19.4	45	73	
West Berks CCG	2	1.2	2	100	
West Berkshire Council	33	19.4	43	77	
Other (please specify)	3	1.8	46	65	
Total	170	100.0	395		

Analysis & Considerations: 43% of participants overall responded. However if you remove the 2 hospital figures the feedback goes up to 50%. Over all a good response with all agencies providing feedback.

What was your role in the exercise?	Frequency	Percent
Player	114	67.1
Directing staff	26	15.3
Not answered	6	3.5
Other (please specify)	24	14.1
Total	170	100.0

Analysis & Considerations: A good response in relation to roles people undertook. The majority of the 'other' roles related to regulator.

Where were you based during the exercise?	Frequency	Percent
COBR/SAGE' – London	1	.6
(SCC) Strategic Coordinating Group	37	21.8
(SCC) Recovery Working Group	5	2.9
(SCC) Multi-Agency Cells	16	9.4
(SCC) Media Advisory Cell	4	2.4
(SCC) Scientific and Technical Advisory Cell	13	7.6
Tactical Coordinating Group – West Berkshire	18	10.6
Tactical Coordinating Group – Basingstoke and Deane	7	4.1
Media Briefing Centre	15	8.8
Individual Agency Incident Room/EOC	43	25.3
Not answered	11	6.5
Total	170	100.0

Analysis & Considerations: Generally a good response in relation to locations people were based during the exercise. In relation to the number of people at each location there is a fair percentage of response with the exception of COBR/Sage- London. This was a disappointing response particularly since this exercise was Level 3.

The aim of the exercise was to test & evaluate elements of the AWE Off Site Emergency Plan for a radiation emergency on site affecting the off-site area, as required under REPIR. Do you think the aim of the exercise was met?	Frequency	Percent
Yes	108	63.5
No	2	1.2
Partially	23	13.5
Not answered	37	21.8
Total	170	100.0

Analysis & Considerations: 98% of those who answered this question confirmed that the aim was met fully or partially, 0.6% of those who responded did not believe it was met.

	Do you think the following objectives were met?	Yes	Partially	No	Don't know	Missing	Total
1	To facilitate a number of opportunities for agencies to train and work together to ensure good working knowledge of each other's roles and ensure an integration response	59.4	10.0	.6	3.5	26.5	100.0
2	To test the coordination at National, Strategic and Local levels	53.5	11.2	1.8	6.5	27.1	100.0
3	To provide responders under the Off Site Plan with an opportunity to verify their own plans to a Radiation Emergency at AWE Aldermaston (these to be an adjunct to the main exercise and not in conflict with it)	48.8	7.1	1.8	11.2	31.2	100.0
4	To test the communication routes (including email/Airwave radios/Resilience Direct (RD)/GIS & Situation Reports & Commonly Recognised Information Pictures (CRIP)) between the site at AWE (A) and the Command and Control Centres and others supporting incident	46.5	17.1	2.9	7.1	26.5	100.0
5	To test the flow of advice and information between the Operator (at the AWE ACP) and command and control centres operating in response to the incident	45.9	11.8	2.9	10.0	29.4	100.0
6	To test the Scientific & Technical Advisory Cell (STAC) arrangements	45.9	11.2	1.8	11.8	29.4	100.0
7	To demonstrate the Joint Emergency Services Interoperability Programme (JESIP)	45.3	5.9	.8	14.7	32.4	100.0
8	To test Cross border arrangements	44.1	8.2	2.9	14.7	30.0	100.0
9	To test the countermeasure options (particularly evacuation and shelter)	42.9	10.0	1.2	14.7	31.2	100.0
10	To test the integration of a number of individual and multi-agency plans, as necessary. This may include: Evacuation Plans, Rest Centre Plans, Vulnerable People Plans, Information Sharing Protocols, Radiation Monitoring Units	40.6	12.9	2.4	12.4	31.8	100.0
11	To test the health & welfare provisions (particularly for vulnerable people)	34.1	17.6	2.4	14.7	31.2	100.0
12	To test the post incident recovery considerations using the AWE Off-Site Plan and the Thames Valley Local Resilience Forum (TV LRF) Recovery Plan	27.1	14.1	3.5	19.4	35.9	100.0
13	To test the joint organisational media handling procedures including a Media Briefing Centre	36.5	14.7	2.4	14.1	32.4	100.0
14	To produce a post exercise report with recommendations for action. The actions to be acceptable, achievable and within the control of the agencies involved in the exercise	N/A	N/A	N/A	N/A	N/A	N/A

Analysis & Considerations: The feedback shows that the objectives were not met in all cases based on the yes & partially details alone. It was noted that there were a significant number of 'don't knows' and missing data where there was no response. It is considered that those that did not know or did not respond were not able to provide a yes/no, partially response. As a result the table has been amended to remove the don't knows' and missing data from the figures and only focus on those that confirmed that the objectives were met in full, not at all or partially. This is set out in the table below.

	Do you think the following objectives were met?	Yes	Partially	No	% fully met objectives	Combined % fully or partially met objectives	% not meeting objective
1	To facilitate a number of opportunities for agencies to train and work together to ensure good working knowledge of each other's roles and ensure an integration response	59.4	10.0	.6	85	99	1
2	To test the coordination at National, Strategic and Local levels	53.5	11.2	1.8	80	97	3
3	To provide responders under the Off Site Plan with an opportunity to verify their own plans to a Radiation Emergency at AWE Aldermaston (these to be an adjunct to the main exercise and not in conflict with it)	48.8	7.1	1.8	83	97	3
4	To test the communication routes (including email/Airwave radios/Resilience Direct (RD)/GIS & Situation Reports & Commonly Recognised Information Pictures (CRIP)) between the site at AWE (A) and the Command and Control Centres and others supporting incident	46.5	17.1	2.9	70	96	4
5	To test the flow of advice and information between the Operator (at the AWE ACP) and command and control centres operating in response to the incident	45.9	11.8	2.9	76	95	5
6	To test the Scientific & Technical Advisory Cell (STAC) arrangements	45.9	11.2	1.8	80	97	3
7	To demonstrate the Joint Emergency Services Interoperability Programme (JESIP)	45.3	5.9	.8	87	98	2
8	To test Cross border arrangements	44.1	8.2	2.9	80	95	5
9	To test the countermeasure options (particularly evacuation and shelter)	42.9	10.0	1.2	79	98	2
10	To test the integration of a number of individual and multi-agency plans, as necessary. This may include: Evacuation Plans, Rest Centre Plans, Vulnerable People Plans, Information Sharing Protocols, Radiation Monitoring Units	40.6	12.9	2.4	73	96	4
11	To test the health & welfare provisions (particularly for vulnerable people)	34.1	17.6	2.4	63	96	4
12	To test the post incident recovery considerations using the AWE Off-Site Plan and the Thames Valley Local Resilience Forum (TV LRF) Recovery Plan	27.1	14.1	3.5	66	92	6
13	To test the joint organisational media handling procedures including a Media Briefing Centre	36.5	14.7	2.4	68	96	4
14	To produce a post exercise report with recommendations for action. The actions to be acceptable, achievable and within the control of the agencies involved in the exercise	N/A	N/A	N/A		N/A	

Analysis & Considerations: The amended table above shows that following the removal of those who did not respond or didn't know the percentage of objectives met fully or partially improved.

The objectives which were not met fully the most were the **Media Briefing Centre**, the **recovery process** and **health and welfare** provisions.

When taking into account the objectives that were fully or partially met then the objectives which were met the least were: **recovery**, **information flow** and **cross border arrangements**.

Summary, Conclusion & Recommendations

The key points from the online response analysis and considerations are:

1. There was a good response to the survey by most agencies taking part in the exercise;
2. There was a good response to the survey by individuals with differing roles;
3. There was a good response to the survey by individuals from a wide range of exercise locations with the exception of the National participants;
4. 99% of responders considered the exercise aim was fully or partially met;
5. The majority of objectives were met in full or partially with percentage ranges from 92 – 99%.

The conclusion is that following this statistical information the exercise was a success.

It is however recommended where the objectives were less successful in being met then exercises should be undertaken to close the testing of the plan. The testing of these objectives could be either directly as a test of the AWE Off-Site Emergency Plan or as part of another exercise which would test that element in sufficient detail.

The objectives requiring further testing include:

- a. To test the joint organisational media handling procedures including a Media Briefing Centre
- b. To test the health & welfare provisions (particularly for vulnerable people)
- c. To test Cross border arrangements
- d. To test the flow of advice and information between the Operator (at the AWE ACP) and command and control centres operating in response to the incident
- e. To test the post incident recovery considerations using the AWE Off-Site Plan and the Thames Valley Local Resilience Forum (TV LRF) Recovery Plan

It should be noted that this was only from online feedback and does not include any testing/exercising requirements highlighted in other debrief processes