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EXERCISE SENATOR 2011 (LANARKSHIRE) - ALL AGENCIES REPORT

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PREFACE

Introduction

Exercise SENATOR 2011 was a Grade A¹ Nuclear Emergency Response Exercise, to test the multi-agency response to a series of catastrophic, highly improbable events involving a UK nuclear weapon convoy travelling southbound on the M74 motorway near junction 5, south of Glasgow, resulting in the simulated release of radioactive material.

Aim

The aim of the exercise was to test the multi-agency arrangements for responding to a nuclear emergency arising during the road transport of nuclear weapons conducted principally in the Strathclyde region over three days 13-15 September 2011.

Principals of Response

The exercise was conducted in two parts; a Field Training Exercise (FTX) which took place at HMS GANNET, in Ayrshire, over the period 13-15 September and a Command Post Exercise (CPX) which took place at the Strategic Coordinating Centre (SCC), located in the Strathclyde Police Force Training and Recruitment Centre (FTRC), Jackton, East Kilbride over the period 13-14 September.

For a Defence nuclear emergency the MOD is designated as the Lead Government Department (LGD) and at the national strategic level this is discharged through the Headquarters Nuclear Emergency Response Organisation (HQ DNEO) in MOD Main Building, Whitehall, London.

Scenario

The scenario involved Nuclear Weapons convoy including 3 Truck Cargo Heavy Duty (TCHD) vehicles, travelling southbound on the M74 in Scotland (nr Jn 5). A large Goods Vehicle travelling Northbound suffered a tyre blowout and crashed through the central reservation into the second TCHD where the specific accident mechanics lead to a fuel fire and spread of radioactive contamination. The third TCHD was also involved in an accident due to the emergency action taken to avoid the other vehicles (did not involve a release of radioactive material).

Constraints

In order to achieve key exercise objectives, the following constraints/limitations were employed:

- Real time grid references for the M74 were used, although the accident was be simulated at a Greenfield site near HMS GANNET. A simcell silver was operated to ensure that information on locations did not become confused.

- Fire trays, debris and smoke generators were in use at the HMS GANNET accident

¹ Grade A Exercise – A demonstration of all phases of the response in which live play and the participation of MOD and all relevant external agencies is maximised at the national and local strategic, tactical and operational levels.

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simulation site.

- Pre-deployment took place due to time constraints and to avoid Civil Emergency Services (CES) 'blue light' deployment to the incident.
- All monitoring activities took place within the boundary of HMS GANNET 'Greenfield site'.
- Simulated de-contamination of both civilian and military players took place.
- No fire-fighting foam was used.

Participation

In total over 1000 personnel participated in the exercise across the key locations including military, category 1 and 2 responders, Scottish and National Government, and the following agencies at Strategic level:

- Strathclyde Emergency Coordination Group (SECG);
- Strathclyde Police;
- Strathclyde Fire and Rescue Service;
- Scottish Ambulance Service;
- Scottish Environment Protection Agency (SEPA);
- Food Standards Agency;
- North and South Lanarkshire Council;
- Lanarkshire NHS;
- Metrological Office;
- Scottish Government;
- Scottish Police Support Agency;
- Health Protection Scotland;
- Health Protection Agency;
- Ministry of Defence;
- Defence Science And Technology Laboratory (DSTL);
- Atomic Weapons Establishment;
- Procurator Fiscal Service;
- Police National CBRN Centre;
- Joint Regional Military Liaison Officer;
- Scottish Water;
- Transport Scotland;

Follow Up Action

Lessons Identified from this exercise should be taken forward by each participating agency through their own procedures. Lessons with national implications will be taken forward by MOD, as Lead Government Department for Defence nuclear emergencies, in consultation with national representative bodies.

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Acknowledgement

The MOD gratefully acknowledges the significant contribution of all the agencies involved in planning for, and participating in Exercise SENATOR 11.

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INDIVIDUAL ORGANISATIONS

SCOTTISH GOVERNMENT

Feedback points

- Once again, the exercise proved the value and key role of Scottish Government Liaison Officers (SGLOs). One key lesson for us is ensuring that deployed SGLOs have sufficient support (perhaps a Deputy); particularly at the seat of local command as the battle rhythm of meetings was overwhelming.
- Possible learning is that SGLO might need a technical Liaison Officer alongside to attend the Scientific and Technical Advisory Cell (STAC), as SGLOs unlikely to contribute much (this would need to be subject to further discussion within the Scottish Government (SG) however).
- The positioning of SGLOs in Cabinet Office briefing Room (COBR) and at the local SCG is correct.
- There should have been better reporting from SCG into Scottish Government Resilience Room (SGORR) direct and into COBR.
- The information flow was poor (this was perhaps exacerbated by the SGLO being too busy, and MOD rep at Gold turning up late, but this aside there should have been much quicker transfer of information direct from SCG rather than through liaison)
- We are comfortable that the Scientific Advisory Group for Emergencies (SAGE) construct within COBR (in respect of an incident in Scotland) is much improved, provided that there is an automatic recognition of a need for a VTC/TC link with Scottish scientific and technical leads. This should include: CMO, CSA, HPS, SEPA and NHS Resilience and SG Animal Health (both from within SG) and possibly others on an incident-dependent basis.
- We were comfortable that SAGE participants and the MOD all recognised the nature of devolution, and acceded to this in providing advice on the response. All UK contacts had been in touch with their Scottish equivalents. COBR SGLO played a role in facilitating this.
- Fixed agenda for SAGE does not work for Scottish Government, but we were given the opportunity to amend it in a way that suited our purposes. It is suggested that this proforma is the used as the default, as it allows for thematic discussion between Scottish and UK interests rather than one following the other.
- It was pleasing that the SAGE was able to focus on presentation of information in simple and readily understandable format for Ministers and officials.
- The Cabinet Office (CCS) have a wealth of knowledge of this type of scenario borne from Japan, that could be tapped by Scottish Government in the event of a nuclear incident.

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- The SG are about to commence a consultation on Scottish STAC guidance. In particular, in light of exercise experience, we may wish to look more closely at the dynamic between STAC and SAGE. Any exercise learning from elsewhere (MOD, CCS) that could contribute to this consultation is welcomed.
- Again need to prioritise VTC linkages and communications between UK and SG as this is consistently an area of disproportionate impact if it fails.
- Need to work to finalise cross-Government agreement around this type of incident (some “Concept of Operations (CONOPS)” work has been done but not completed) so it is built into protocols. To note, SGORR is likely to work up a generic response document with specialist annexes, one of which could relate to a defence nuclear incident.

Lessons Identified

- Scottish Government needs to secure better participation from across its Directorates for any similar exercises.
- A COBR run alongside the SAGE would have created a more realistic dynamic. Thankfully, the SGLO and Cabinet Office CCS were able to replicate the type of questions Ministers and officials might ask of SAGE.
- The need to undertake communications testing at all stages throughout an exercise.
- Exercise instructions were sent out too late by MOD, and arrangements were finalised too late. This impacted on the level of play SG were able to secure. This said, we welcome MOD’s open frame of mind to the exercise and their proactive engagement with SG once our interest was recognised.
- There were incongruent levels of play from areas of UK and Scottish Government that caused a bit of tension. Arrangement in advance of an exercise will ensure that we are clear about expectations from both ends.

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**DEPARTMENT FOR COMMUNITIES AND LOCAL GOVERNMENT (DCLG),
RESILIENCE AND EMERGENCIES DIVISION (RED)**

Aims and objectives

- DCLG RED was an observer at Exercise SENATOR 11 due to the exercise taking place in Scotland. DCLG RED only covers England but will work with the devolved administrations where the emergency response crosses or impacts borders. The aim was to pull out lessons learned for DCLG RED to apply if the emergency had taken place in England.

Participation

- DCLG RED would have provided an assistant Government Liaison Officer (GLO) role to the MOD Co-ordinating Authority (MCA) if emergency had taken place in England.

Good Points

- The exercise was an excellent opportunity to gain insight into a potential Defence nuclear emergency and the national response.
- There was clear understanding of the processes for working with our counterparts in the devolved administrations in Scotland (and also, how this would apply to Northern Ireland and Wales).
- Following the incident at Fukushima, Cabinet Office CCS were very clear on what ministers would want in this scenario. Lessons from Fukushima were successfully transposed onto the MOD exercise and helped to portray realistic Ministerial expectations.

Lessons Identified

- It was unfortunate that Exercise play was affected by the Scottish Government responding for real to severe weather in Scotland.
- Little information was initially fed into SAGE by STAC or the local SCG, due to the delayed arrival of the MCA. If the incident had occurred in England, DCLG RED would support the MCA as assistant GLO and as part of the Government Liaison Team, as well as being the Consequence Management Liaison Officer. It is possible DCLG RED may arrive at the local SCG before the MCA.
- For security purposes, all mobile phones were removed from exercise players at MOD Headquarters Defence Nuclear Emergency Organisation (HQ DNEO). Reliance on fixed IT and telephony highlighted the need to ensure that contact details are correctly promulgated.
- DCLG will feedback the experience gained during this exercise to assess the impact for RED regarding extendibility into England, liaising with the devolved

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administration as appropriate. Further consideration is required for the impact on DCLG with regards to consequence management.

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DEFENCE SCIENCE AND TECHNOLOGY LABORATORY (DSTL)

Aims/Objectives:

- To test the effectiveness of DSTL's arrangements for providing Ministers and Senior Staff with expert scientific advice in the event of an emergency involving Defence nuclear materials. This includes the testing of communications between Bronze, Silver, & Gold locations to the DSTL Representative at MOD HQ DNEO, and transfer of relevant Radiological Protection information relating to the exercise to inform the MOD view.
- To allow DSTL staff to gain experience in providing and presenting scientific information relevant to issues of Parliamentary, media and public interest.
- To test the effectiveness of the SAGE Secretary role and appropriate communications with the STAC.
- To provide experience of cross-government working and take advantage of the opportunity to form personal relationships that will facilitate operation of national bodies such as SAGE and COBR.
- To provide scientists with experience of working to unusually tight deadlines and with incomplete or contradictory information.

Participation

- Health Physics Adviser to HQ DNEO response cell
- Health Physics assistant to HPA and Radiation Incident Monitoring Network (RIMNET)/Nuclear Emergency Response Information Management System (NERIMS) liaison
- SAGE Secretary
- The Health Physics Adviser to HQ DNEO played in the MOD cell but was also asked to attend SAGE meetings and liaise with all OGD members during the exercise.

Good Points

- The SAGE requirements discussion centring on monitoring and modelling requirements was very useful and follow up work will allow the COBR and SAGE requirements to be communicated and understood by all and eventually lead to an improved response plan (also HPA).
- COBR representation at the SAGE meetings provided a clear insight into what COBR requirements would be in such situations. It was useful to understand the type and level of information that they require. The wider political/presentational issues associated with this were also useful (also DCLG).

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- The MOD crisis account and intranet system (SharePoint based) which was used for sharing information between SAGE members proved to be an effective tool for collating minutes of SAGE meetings and disseminating information provided to the SAGE secretary.

DSTL specific:

- DSTL staff learnt how to transfer data from NERIMS to the DII system at the DCMC so that printing of information posted on NERIMS was possible. This will be written into DSTL procedures for future reference but will be aided if a dedicated encrypted USB memory stick is made available for DSTL use in future.
- Communications between DSTL colleagues at Gold, Silver and Bronze locations were good and worked well.
- The opportunity to co-operate closely in an operational situation with the RIMNET System Manager allowed DSTL to discuss relevant operating issues associated with the RIMNET capability changing to a web based access system.
- The opportunity to gain experience in the SAGE secretary role was appreciated and will prove useful in preparation for future exercises or response requirements.

Lessons Identified

- The structure of the exercise had a big impact on the experience and benefits to players in London and the SAGE. For the first 24 hrs very little information was available to London or SAGE players. Much more could have been gained if the exercise had been organised differently without the staggered start and end times that were used at different locations.
- If monitoring information had been added to NERIMS over the first night when all play stopped then SAGE would have been able to progress the exercise on the second morning, rather than finding a situation that had not changed since the day before.
- Owing to the exercise constraints there was no opportunity to develop a 'battle rhythm' where-by SAGE and STAC meetings were aligned to meet one after the other. This restricted the opportunity to fully exercise the primary role of the SAGE secretary of obtaining key outputs from the STAC to inform the SAGE and therefore did not adequately reflect the pressure that would have been applied to SAGE members in a real incident.
- Although simulated questions were generated by COBR for SAGE to answer, little progress was made on addressing them. Whilst it is appreciated that only the 'concept of SAGE' was being exercised, future exercises could also focus much more on the strategic issues which SAGE has to address, which will be to the benefit of all exercise participants.
- At the hot wash up it was suggested that some education / training may be required for the MCA team to enable them to support HQ DNEO more effectively. However,

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because the MOD Gold play commenced a significant time after London started playing, this had an impact on the quality of information being passed to HQ DNEO. This needs to be taken into account if discussed with MOD Defence Equipment and Support (DE&S).

- The current draft DNEO Standard Operating procedures (SOPs) should be updated to reflect the agreed DSTL role.
- It was noted that UK resilience training is possibly available for supporting the Common Recognised Information Picture (CRIP) to the COBR, which may be useful to MOD staff and the MOD cell support. This training opportunity should be assessed to determine its usefulness to MOD staff, including DSTL staff, who support the HQ DNEO cell.
- Some particular issues about RIMNET and transfer of NERIMS data arose during the exercise. RIMNET cannot currently plot Sieverts, or a 45 degree arc (data and presentational information that the SAGE would find useful). This should be investigated to see how easy the necessary changes would be.

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HEALTH PROTECTION AGENCY (HPA)

Overall Aims and Objectives

- To contribute the multi-agency and HPA response to an MOD Nuclear Emergency.
- To exercise the provision of HPA Centre for Radiation, Chemical and Environmental Hazards (CRCE) specialist advisory team to the Strategic Coordination Centre.
- To exercise communication with the media and public via the provision of a media spokesperson and support team to the Media Briefing Centre.
- To test the use of NERIMS and RIMNET in relation to the exercise.
- To test communications with, and support, the deployed teams from HPA CRCE.
- To exercise the HPA CRCE Emergency Response Plan and the HPA Chilton Emergency Operations Centre.
- To exercise HPA CRCE's role in relation to monitoring co-ordination in cooperation with the Ministry of Defence.
- To contribute to any discussions on remediation.

Central Government Specific Objectives:

- To exercise the provision of an expert advisor to the SAGE.
- To exercise communications between the HPA and Scottish Government.
- To exercise coordination of HPA advice between the SAGE, Strategic Coordination Centre, MBC and the HPA Emergency Operations Centre.

Participation

- National Strategic/SAGE x1
- Local Strategic (SCC) x3
- MBC x2
- HPA Emergency Operations Centre – (Fully staffed)

Good Points

- Interaction between organisations at the HQ DNEO during the exercise was effective. In particular, the contribution from Cabinet Office greatly improved the understanding of the COBR/SAGE mechanism for a Defence related nuclear emergency.
- The meeting held at HQ DNEO during the exercise to discuss the mapping and modelling information required to brief COBR and support SAGE was a very useful output of the exercise (also DSTL).

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- NERIMS provided useful information throughout.
- E-mail communications with the SCC and London were well provided for and maintained throughout. This is vital and helps information flow.

Lessons Identified

- Final exercise instructions were not sent out until the day before the exercise. A longer lead time is required in order for participating organisations to make appropriate and timely arrangements.
- During the exercise, a mock newspaper front page was circulated, describing the events of the exercise in sensationalised terms. It was very effective in emphasising the problems which could occur in relation to media coverage of such events. However, the document was not clearly annotated with any indication that it was produced as part of an exercise.
- An initial set of monitoring results were reported by MOD on NERIMS early in the exercise. Additional monitoring results were not added for over 24 hours. This was considered to be unrealistic given the nature of the scenario and should be factored into future exercise planning.
- Training is needed for players attending STAC.
- Communications were poor at the MBC as no players had adequate mobile coverage or laptop connectivity. This resulted in a fragmenting of the response to the exercise and should be factored into decisions for locating the MBC in the future.

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MOD DEFENCE NUCLEAR SAFETY REGULATOR (DNSR)

Aims

- Participate in the HQ DNEO response to SENATOR 11, forming the Safety Cell to support and provide input to the SAGE as required and to prompt actions and information from the MCA at GOLD;
- Gain a general appreciation of the HQ DNEO expectations of the Safety Cell;
- Test communications between HQ DNEO/Safety Cell and the SENATOR site – DNSR rep at BRONZE and MCA, etc at GOLD; and
- Update the DNSR Local Work Instruction for emergency response callout iaw findings/observations made and information gained.

Participation

- 1 member – Safety Cell lead/sole member

Good Points

- Excellent reminder of responsibilities and activities of the Safety Cell and the DNSR HQ DNEO role.
- Improved range of IT systems available in HQ DNEO (including DII(S), onto which the paper DNSR data packs currently available will be migrated into electronic format).
- Useful information, etc gleaned for update of DNSR Local Working Instructions.

Lessons Identified

- During exercises, the MOD (MCA, AWE) are, for security reasons, not able to provide quantity/isotope details for source term to facilitate plotting of plume
- MOD representation at GOLD needs to have better arrangements for responding to HQ DNEO requests for information via NERIMS.
- Early checks should be made that each IT system likely to be used is connected to a working printers
- Any future exercise should better test the Safety Cell, for which it should be staffed more than one deep.

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CABINET OFFICE – CIVIL CONTINGENCIES SECRETARIAT (CCS)

Comments

- Cabinet Office CCS feel that there is a requirement for a source term as an essential element underpinning any discussion at SAGE. In exercise delivery terms, there is a slightly separate point around ensuring that exercise data and the background scenario provides this essential scientific information to inform discussions at both STAC and SAGE. (If there are security issues, an agreed exercise work around needs to be developed to provide an exercise data set to inform play).
- It was useful to identify possible information flow issues from local strategic, but as SAGE was not able to play (in a full role) we were unable to test interaction fully.

STRATHCLYDE EMERGENCIES CO-ORDINATION GROUP (SECG): INDIVIDUAL AGENCY AIMS AND OBJECTIVES

SECG

Aims and Objectives

- To effectively activate the SECG to meet as appropriate and provide strategic direction to the category 1 & 2 organisations responding to the incident.
- To allow SECG members to appreciate the process involved in responding to a NERO incident.
- To engage effectively at a strategic level with MOD staff to mitigate the effects of such an incident.
- To establish the STAC, Care for People Group, Recovery Working Group, to assist with decision making.
- To implement the media strategy, providing opportunities for members to practice press interaction.
- To identify and evaluate lessons, and develop methods to improve performance.
- To work collectively to ensure an effective response to and recovery from the exercise scenario.
- To provide briefings for transmissions to strategic members via the tactical control cell.
- To allow organisations to appreciate the processes involved in responding to a NERO incident.
- To evaluate the effectiveness of multi agency lessons, and develop methods to improve performance.

STRATHCLYDE POLICE

Aims and Objectives

- To exercise the Strategic Coordinating Centre at Jackton Force Training and Recruitment Centre.
- To exercise the Police Command, Control and Coordination capability in response to a Nuclear convoy accident
- Exercise the effective management of the media through the Public Information Coordination Group

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- To test the integration of Police emergency management procedures with those of local and national responders.
- To minimise disruption of the exercise and local community by Anti-Nuclear Protesters.
- To demonstrate multi agency response and capability across the 9 key tasks in support of the Strathclyde Chemical, Biological, Radiological and Nuclear (CBRN) planning arrangements to facilitate validation under the ARGON program.

51 (SCOTTISH) BRIGADE

Aims and Objectives

- To act in support of the NERO organisation where required.

NHS LANARKSHIRE

Aims and Objectives

- Exercise NHS Lanarkshire staff and staff from NHS Ayrshire and NHS Greater Glasgow and Clyde in managing an emergency involving nuclear weapons and the release of radiation.
- To test various aspects of communication within NHS Lanarkshire and with external agencies
- To test access to specialist medical advice on the treatment of casualties.
- To exercise Strategic representatives participation in multi-agency Strategic Coordination Group
- To exercise Director of Public Health/ Consultants in Public Health Medicine/ Specialist Registrars in chairing and participating in STAC including preparation of recommendations for Strategic Group
- To provide admin staff with experience of participation in support of STAC
- To exercise a medical incident officer and site medical team in a major incident involving multiple agencies. To coordinate the triage and treatment of casualties in conjunction with the Scottish Ambulance Service.
- To provide a Medical Incident Officer and Site Medical Team with experience of working with second site medical team
- To exercise the use of Airwave in a Major Incident Situation

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- To exercise decontamination and treatment procedures for a small number contaminated including injured casualties at Monklands Hospital.
- To exercise decontamination arrangements at Glasgow Royal Infirmary from uninjured possibly contaminated casualties

SOUTH LANARKSHIRE COUNCIL

Aims and Objectives

- To test the Council's role within multi agency arrangements for responding to a nuclear weapons transport accident involving contamination of people and the environment.
- To test multi agency arrangements for responding to a nuclear weapons transport accident
- Liaison across strategic, tactical and operational levels, including communication links between the incident site and co-ordination centres.
- Care for People arrangements.
- Liaison with other agencies, in the provision of a co-ordinated media response (Warning and Informing).
- Liaison with other agencies, for responding to the immediate and longer-term health and environmental implications of a contamination incident.
- To test the Council's role in leading the "return to normality" via the Recovery Working Group.
- Provide experience of participation in a major live-play exercise to Council staff.

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NORTH LANARKSHIRE COUNCIL

Aims and objectives

- To test the Council's role within multi agency arrangements for responding to a nuclear weapons transport accident involving contamination of people and the environment.
- To test multi agency arrangements for responding to a nuclear weapons transport accident
- Liaison across strategic, tactical and operational levels, including communication links between the incident site and co-ordination centres.
- Care for People arrangements.
- Liaison with other agencies, in the provision of a co-ordinated media response (Warning and Informing).
- Liaison with other agencies, for responding to the immediate and longer-term health and environmental implications of a contamination incident.
- To test the Council's role in leading the "return to normality" via the Recovery Working Group.
- Provide experience of participation in a major live-play exercise to Council staff.

STRATHCLYDE FIRE AND RESCUE SERVICE

Aims and Objectives

- Public Safety.
- FF Safety.
- Protect Property.
- Protect Environment.
- Aid recovery and return to normality.
- To promote Inter agency liaison and cooperation.
- To test Airwave interoperability.
- To identify opportunities to develop and enhance existing procedures.

SCOTTISH AMBULANCE SERVICE (SAS)

Aims and Objectives

- Strategic Command of the Service
- Business Continuity Management in relation to the incident.
- Effective relationships between NHS and multi agency partners.
- Assess the effectiveness of the overall response
- Assess the strategic consequences and implications for the service
- Command and Control (at Strategic, tactical and operational levels)
- Scene Management
- Communications (including multi agency interface)
- Inner Cordon Working
- Decontamination of seriously traumatised contaminated casualties. (SAS should identify the extent of injuries prior to the exercise).
- Interface between NHS & SAS in relation to transportation of seriously traumatised contaminated casualties.
- Radiation monitoring in reception centres working with NHS, HPS, Military and other agencies to test SAS Radiation Protection Supervisor (RPS) trained advisors.

SCOTTISH WATER

Aims and Objectives

- To test the response to notification of a road traffic incident involving vehicles transporting cargo with a radiation hazard.
- To ensure Scottish Water can fulfil its role and responsibilities in the provision of water services within the context of the exercise scenario.
- To take the opportunity to introduce key Scottish Water personnel to working as part of a multi agency response.
- To test Scottish Water's response to requests for assistance from other agencies at the Strategic Command Centre.

SCOTTISH ENVIRONMENT PROTECTION AGENCY (SEPA)

Aims and Objectives

- To test SEPA's Strategic role within multi-agency arrangements, for responding to a nuclear weapons transport accident, involving contamination of people, wildlife and the environment.
- To Exercise and test SEPA staff, at both a Strategic and Tactical level.
- To Exercise and test communications between SEPA and its partner organisations, at both a Strategic and Tactical level.
- To Exercise and test the provision of advice and guidance by SEPA to partner agencies, as well as the Nuclear Operator, on matters of environmental contamination and the disposal of waste and water.
- To Exercise and test the participation of SEPA, in the Scientific Technical Advisory Cell (STAC) and Recovery Working Group as appropriate.
- To Exercise and test communications between SEPA staff at different locations, being the SECG, STAC, and remote Technical hub.
- To Exercise and test the provision of technical advice from the remote Technical hub to SEPA staff at the STAC and SECG.

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COMBINED SECG/INDIVIDUAL AGENCY FEEDBACK

PLANNING

Initial planning meetings commenced with the MOD in November 2010 with Strathclyde Police and the SECG. In order to progress planning a number of sub groups were established, logistics, communications, SECG Multi Agency and Security. Strathclyde representation was identified for each group and Strathclyde Police Emergency Planning led and chaired the multi agency SECG group. This main group met formally on 3 occasions on the lead up to the exercise.

The initial membership of the SECG group was agreed through the Tactical members and had its first meeting on the 11th January 2011. To progress work and limit the size of the meetings a number of sub groups were established to cover the areas of work for the Public Communications, Recovery and Care for People, Scientific and Technical Advice Cell (STAC) and the operational elements, Tactical exercise Control and the arrangements for the establishment of the SCC.

As part of the planning process and following Exercise Fortress (See below) an SCC activation planning group was established at the FTRC which greatly assisted in the strategic element of the planning process.

In preparation for the exercise several training days and exercises were organised.

- Exercise Fortress 20th June provided a multi agency no notice test of the activation arrangements for the SCC at Jackton.
- Exercise SENATOR Table top on 1st September involved over 200 participants and included front loading information and scenario based learning based on key themes around Exercise SENATOR.
- Joint training for the Police Incident Officer and support team was undertaken at the Ministry of Department Police Escort Division HQ in Weathersfield, Essex
- 2 familiarisation days were held at the FTRC for multi agency partners and SCC staff.
- Familiarisation days for the operational CBRN responders were organised at HMS GANNET.
- In addition each agency conducted a series of internal briefings and meetings for their key staff for both the operational and Strategic players.
- Familiarisation visit to AWE Aldermaston by representatives of the planning team.

Planning - Strengths

- An early agreement on a meeting schedule worked well and ensured that the functional leads were available and able to report back on progress and seek support of the group at an early stage if required.

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- Regular meetings enabled all the members to get a common picture of where we were in the planning cycle and identify priorities at an early stage.
- The structure ensured that the workload and responsibility to ensure timescales were met was distributed among all the members and the group provided governance and an incentive not to allow those deadlines to slip.
- The FTRC SCC Activation Planning group established following Exercise FORTRESS was extremely beneficial in preparing for Exercise SENATOR and addressed a lot of the issues and recommendations identified at Fortress.

Planning - Weaknesses

- Lack of administration support, particularly as the exercise approached and the pace of meetings picked up, became a burden on the Police in trying, in addition to preparing for the exercise, to produce minutes, action logs, etc.
- Due to the scope of the exercise it would have been advantageous to have identified a dedicated planning team. However, the planners had to cope with the demands of this exercise in addition to their day to day workload.
- There was no funding stream available to the planning team and issue regarding costs had to be negotiated with the MOD ad hoc.
- Some key players in the planning process were omitted from the formal main group. This became a problem in planning with the Scottish Police Services Authority (SPSA) in relation to IT support with confusion over single points of contact across SPSA and ensuring that key people were aware of requirements.

Planning - Recommendations

- Dedicated administrative support should be identified at the early stage of planning.
- National exercises of this scope and size should where possible be planned by a multi agency dedicated planning team and not as part of day to day business. The format and terms of reference for that planning group should be agreed at an early stage and preferably before any decision on committing resources in support of the exercise is made.
- Early indications on likely costs should form part of the decision making process prior to agencies committing themselves to a national exercise with reference to any training cost benefits that maybe accrued.
- Early engagement and involvement of the SPSA Business Relationship Manager to ensure any IT issues are managed effectively.
- The role of the SCC Planning Group at the FTRC should become a standing group for the SCC. Membership should be expanded to include representatives from Emergency Planning and Force Planning.

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OPERATIONAL

The operational element of the exercise took place on the Greenfield site at HMS GANNET, Prestwick. This involved MOD, Strathclyde Police, Scottish Ambulance Service, Strathclyde Fire and Rescue, NHS Lanarkshire, NHS Ayrshire and Arran and North Lanarkshire Council.

The main elements to be tested were the initial actions and interoperability between the Strathclyde Police Incident Officer from the convoy escort and the Military Convoy Commander.

In addition the intention was that CBRN resources would be deployed and exercised to gain accreditation under the National CBRN Argon program for the Strathclyde CBRN response plan.

There was a multi agency operational exercise control to direct resources onto site as per an agreed timeline from a marshalling area that was managed by marshalling officers from each of the emergency services. Exercise control would be managed through the utilisation of an identified Exercise Airwave talk group.

Operational - Strengths

- All the key players made positive comment on the level of briefing they had received prior to the event.
- The opportunity for the operational officers to visit Weathersfield was invaluable as part of the preparation and the table top exercise was also very beneficial.
- The initial multi agency meetings ran well and the input from the Emergency Procedures Officer was advantageous at those meetings.
- There was good initial liaison between the PIO and the convoy commander.

Operational - Weaknesses

- The location of exercise control on site was not initially available and due to a delay in the start of the exercise, not all agencies were present. As a consequence there was no early coordination of resources onto the site in accordance with the agreed timeline.
- The marshalling officers although briefed did not coordinate the deployment of resources onto the scene.
- There were no safety staff or MOD briefing staff at the marshalling area.
- Feeding of officers at the marshalling area was not well managed and some staff received nothing.

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- MOD staff on site requested an airwave hailing channel and command band radios as part of their response then began to use the radios to by pass exercise control and cause further confusion.
- The role of the Police CBRN Commander requires clarification as the current NPIA CBRN guidance manual does not appear to recognise the PIO roles and responsibilities. Currently national PIO training at SPC does not include any awareness of current CBRN Bronze commander training which has the potential for confusion and a lack of clarity over command and control roles and responsibilities at a scene.
- Attempting to satisfy the requirements of ARGON Shield as part of this exercise was in hindsight too ambitious.
- The marshalling area was opened by MOD staff prior to the arrival of the Divisional marshalling officers. The result was that staff arriving in their own vehicles parked all over the area and not in accordance with the site plan which had allocated private parking.
- It is also worth noting that the operational element of the exercise was severely compromised by the weather which on the day was high winds and torrential rain. There is no doubt that many of the elements that contributed to the problems on the operational scene were exacerbated by the weather conditions.
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Operational - Recommendations

- Multi agency umpires and subject matter experts should be available at all the key locations to ensure that the exercise meets with all agencies expectations.
- Clarity around the role of the PIO and the CBRN Bronze Commander training is required.

STRATEGIC

The Strategic Coordination Centre was located within the Strathclyde Police FTRC, Jackton. This facility was live from lunchtime on the 13th of September through until mid afternoon on the 14th of September

The SCC was pre staged having previously been tested for a no notice activation at Exercise FORTRESS. The Police Strategic element of the exercise was played at live time with all notifications being directed through Tactical Exercise control which was also located in the SCC.

Following notification of the incident the SCC was declared open at 1100hrs with a briefing to all staff and the first of several Strategic meetings commenced at 1230hrs. In addition there were several meetings of the STAC and the Recovery Group over the 2 days. There was also a media cell within the SCC and that is commented on later in this report.

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In addition the multi agency Tactical simulation cell (Exercise control) was located within the FTRC.

Strategic - Strengths

- The facilities and organisation of the SCC were universally critically acclaimed by all the agencies who attended over the two days. In particular the MCA singled out the facility for praise based on other SCC's he had experienced.
- The college staff who performed the security role received praise for their commitment and the standard of security setting the tone within the SCC over the two days. There was also praise for the staff who provided centre and administrative support.
- Use of the Tannoy system to announce meetings worked well as did the initial briefings. The briefing pack and SCC guide was clear and easy to understand giving all the essential information.
- As part of the preparation IT heli-tele support is now available within the Strategic meeting room.
- Police staff welcomed the opportunity for them to become familiar with the role which they would provide in the police operations room in the event of the activation of the SCC. Strategic Commanders support teams gained experience of their roles and responsibilities.

Strategic - Weaknesses

- The paper messaging system in the SCC is not fit for purpose and exposes the Force and other agencies to criticism and potential reputation damage. The existing SCC mail system is not secure and the majority of agencies have no training in its use.
- The membership of the Strategic Group tends to become too large and as a result Strategic meetings overrun impacting on the ability of agencies to carry out tasks and timetable other group meetings appropriately.
- There were a number of IT issues identified that need to be taken forward by the SCC Planning Group and are being progressed accordingly.
- The general mobile phone coverage at the site can be poor.
- Replacing tactical command with a tactical simulation cell was not a complete success. Whilst the purpose was highlighted at the table top exercise a lot of agencies did not understand the role of the Tactical Simulation cell and just assumed any tactical matters could not be progressed. The reason for the Tactical Simulation cell was to address the fact that the military only provide liaison at tactical and no decision making authority is delegated to that officer. This disconnect with Civil Emergency Service Integrated Command and Control structure has been highlighted to the MOD for further consultation.

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- Advice from the STAC was at times divergent and appeared to be based on each organisations tolerance of risk.

Strategic - Recommendations

- As a priority an emergency planning electronic messaging system should be implemented for managing multi agency response to Major Incidents across the SECG.
- An executive decision and commitment be made to the FTRC being nominated SCC in the event of a major incident within the Police Force area necessitating a Strategic response.
- That the lessons learned in relation to the membership and of Strategic Group meetings be incorporated into Scottish Resilience Development Service (ScoRDS) Continuing Professional Development (CPD) training.

MEDIA

Media activity was simulated at the operational site, within the Strategic Public Communications Cell at Jackton and at the Media Briefing Centre, Assembly Hall, Pitt Street Glasgow.

Media - Strengths

- The identification of the role of a staff officer to assist the Police Information coordinator (PIC) was well received.
- Dedicated media talking heads who were not Strategic leaders allowed those individuals to attend the Strategic Coordination Group without distraction.

Media - Weaknesses

- Initial confusion over the location of officers at the MBC and the SCC meant that there was a delay in the establishment of the Public Communications Group and the provision of early coordinated press briefings and information.
- The Police talking head felt isolated at the Media Briefing Centre and lacked access to information.
- The PIC was engaged attending Strategic meetings which resulted in a lack of leadership and Co-ordination within the Media Cell in the morning of the 13th September. In effect the PIC was asked to perform too many functions and was consistently distracted by meetings that removed them from that core role of coordinating the press and media messages.

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Media - Recommendations

- A review of the role of the PIC should be undertaken within the SECG and Strathclyde Police. This should include a review of the current SECG Public Communications Plan.

SECG SUMMARY

Overall Exercise SENATOR:

- Provided the MOD and the Civil Emergency Services and other agencies the opportunity to examine and exercise their own arrangements, procedures and protocols in relation to the response to a major incident.
- Was an invaluable opportunity to test the interoperability of all those agencies when responding to an emergency at Operational and Strategic Command level.
- Allowed Strathclyde Police to test the effectiveness of the arrangements for the establishment of the Strategic Co ordination Centre at Jackton for the first time since Exercise CUTTY SARK in 2006.
- Was deemed by the MOD Safety Regulator (DNSR) to be a satisfactory test of the arrangements for responding to an incident involving a Nuclear Convoy within the Strathclyde Area.

All the agencies engaged in the exercise who responded as part of the de brief satisfied their own aims and objectives with the exception of the accreditation under Argon Shield which will be further exercised on the 1st April 2012 at Exercise SUB CULTURE.