# **EXERCISE SHORT SERMON 2004**

# **ALL AGENCY REPORT**



Ministry of Defence



Exercise Short Sermon 2004

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# **EXERCISE SHORT SERMON 2004**

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Exercise Short Sermon 2004

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#### ALL AGENCY REPORT

#### **PREFACE**

#### Introduction

- 1 The UK Ministry of Defence (MoD) regularly conducts exercises to test the effectiveness of its nuclear accident response arrangements in close cooperation with other government departments, local authorities and emergency services, to meet UK Statutory and departmental health and safety policy requirements. The exercises programme also gives Local Authorities the opportunity to test their Offsite emergency and remediation plans and their arrangements with the MoD and other government departments.
- 2 Exercise SHORT SERMON 2004 was a Grade A Nuclear Accident Response Exercise, in which the response to an accident involving the reactor of a Nuclear Powered Warship (NPW) in Devonport Naval Base was tested. The exercise took place on 24 and 25 November 2004, in Plymouth and Whitehall, London, with support from a number of other locations. Approximately 800 personnel from both the MoD and civil authorities were involved. This exercise was the first Grade A Exercise to be conducted in Devonport since the coming into effect of the Radiation Emergency and Preparedness and Public Information Regulations 2001 (REPPIR 2001).

#### Aims

- 3 The primary aims of the exercise were:
  - a) The MoD to test the Operator's On-site emergency plan ('Devonport Nuclear Safety Orders DEVNUSAFE'), its input to the Local Authority Off-site response plan, and its national strategic co-ordination role, as designated lead government department.
  - b) the Local Authorities in Devon and Cornwall, Local Emergency Services and other government agencies to test their respective public safety and environmental protection arrangements for which they are responsible under Plymouth City Council's 'Devonport Public Safety Off-site Plan (DEVPUBSAFE)'.
  - c) The MoD to test its lead government department arrangements for responding to a defence nuclear accident.

#### Principals of the Response

Throughout the exercise co-ordination was implemented from the three local response sites. In ascending order these are: Operational (BRONZE), Tactical (SILVER) and Strategic (GOLD). For defence nuclear accidents the MoD is designated as the Lead Government Department (LGD) and at national strategic level this is discharged through the Headquarters Nuclear Accident Response Organisation (HQ NARO) and the Nuclear Accident Information and Advisory Group (NAIAG) in MoD Main Building, Whitehall, London.

#### Scenario

The scenario involved a Trafalgar Class nuclear powered Attack Submarine (SSN) that was berthed in HMNB Devonport. A series of highly unlikely system and procedural failures, culminated in a nuclear reactor accident with a release of radioactive material to atmosphere. This accident simulated a number of conventional, irradiated and contaminated casualties, some requiring hospital treatment. The accident scenario involved a simulated release of radioactive material that had an impact on the local community.

#### Constraints

In order to achieve key exercise objectives including the handover of the chairmanship of the Strategic Co-ordinating Group from the Assistant Chief Constable Devon and Cornwall Constabulary to the Chief Executive of Plymouth City Council, significant time compression of events was employed. This imposed a number of constraints upon the players and necessitated pre-positioning of responding forces. A remediation day was held at the Plymouth City Council House on 25 November to consider the long-term consequences and management aspects of the accident.

#### **Participation**

7 All agencies both at the local and national level, that would respond to Defence Nuclear Materials Accident at Devonport were invited to participate. This All Agency Report provides a summary of participation in the exercise.

#### Follow-Up Action

8 Lessons identified from this exercise will be taken forward in a number of ways. Each participating agency should address any lessons identified through their own procedures. Lessons with national implications should be reported to national representative bodies for further action.

#### Acknowledgement

9 The MoD was grateful to all participants for the time and effort spent in planning and exercising the response to a Defence Nuclear Materials accident at Her Majesty's Naval Base Devonport, Plymouth.

#### UNITED KINGDOM MINISTRY OF DEFENCE

#### Aims

- 10 The aims of Exercise SHORT SERMON 04 for the MoD Nuclear Accident Response Organisation (NARO) were:
  - a) To test the Operator's Emergency Plan for a nuclear powered submarine reactor accident at HMNB Devonport (DEVNUSAFE).
  - b) To test the MoD input into the Plymouth City Council's Off-site public safety plan. (The MoD support to Local Authorities and the Emergency Services).
  - c) To test the efficacy of the MoD Lead Government Department arrangements and the interface with other Government Departments and Agencies at the national strategic level.

#### **Participation**

11 The following MoD organisations participated.

#### Headquarters Nuclear Accident Response Organisation (HQ NARO)

12 HQ NARO was manned in MoD Main Building and comprised of 4 cells: an Operations Cell, Secretariat Cell, Safety Cell and a Health Cell. Other Government Departments and Agencies attended HQ NARO and were represented on the Nuclear Accident Information and Advisory Group (NAIAG).

#### **HM Naval Base Devonport**

The full Devonport NARO, led by the Naval Base Commander (NBC) participated in the exercise. The NBC assumed the role of Military Coordinating Authority (MCA), the principal MoD representative at the local Strategic level, who led the local Devonport response and provided the Police Commanders with a single high level contact to support their operations. An integral part of the onsite response was provided by DML in accordance with DEVNUSAFE. Support was also provided by 42 Engineering Survey Regiment (GEO). DSTL Defence Radiological Protection Service (DRPS) fielded a Local Emergency Monitoring Team (LEMT) and provided additional health physics support at local strategic.

#### Wider MoD and Defence Contractors

14 Support also came from the Institute of Naval Medicine (INM). Technical input came from MoD Abbey Wood Bristol by staff of the Nuclear Propulsion Integrated Project Team, assisted by Rolls Royce Marine at Derby and Serco Assurance (Submarine Reactor Division).

#### **Good Points**

- 15 The MoD reactor safety regulator (Chairman Naval Nuclear Regulatory Panel CNNRP) assessed the Exercise to be an adequate test of the Operator's On-Site emergency plan and of the MoD input into the Off-site plan. Credit was given for the level of planning and commitment to all those involved.
- 16 The MoD's Nuclear Accident Response Information Management System (NARIMS) performed exceptionally well throughout the Exercise. The equipment proved reliable, access to the network was consistent and information flow was dependable and met the expectations and demands of the users.
- 17 The exercise planning, management and control was sound. This led to a realistic but challenging exercise that allowed responders to fully demonstrate their capabilities.
- 18 Local knowledge of the area is invaluable to that end it was extremely beneficial to have a member of Devon & Cornwall Constabulary based at National Strategic (HQ NARO) in London.
- 19 The greater flexibility and effectiveness of the new MoD IT infrastructure (DII system) compared with the previous Chots system was demonstrated within the HQNARO. Users were provided with improved shared electronic file space, clarity in transferring phone calls and improved access to the internet
- 20 The evacuation of non-essential personnel from the immediate Exclusion Zone around the submarine and the Automatic Countermeasures Zone (ACMZ) was timely and controlled. (ACMZ goes out around half a km from the submarine berths).
- 21 The liaison between the Naval Base medical organisation and West Country Ambulance Service Trust, showed that significant work had been carried out and highlighted a willingness for both organisations to work successfully together.

#### **Lessons Learnt**

- 22 Exercise play at the National Strategic level highlighted a need for further co-ordination between the Nuclear Accident Information Advisory Group (NAIAG) and the Civil Contingencies Committee (CCC).
- 23 NARIMS More training for operators on the use of the system is required. It was felt that the discrimination of data needed to be improved, in order to avoid the main accident management log, the 'Operations Log', being inundated with less relevant information. The system does provide a number of separate databases that could be used more fully to present the full spectrum of data more effectively.
- A full time NAIAG secretary provided by DSTL DRPS, separate to the HQNARO Secretariat team was an effective use of resources. It freed up NAR Sec team from the full time commitment of NAIAG duties to work on other business and provided the NAIAG with a secretary familiar with the issues.

- 25 The speed of the email connection between the MoD DII network and the systems of Other Government Departments and Agencies was found to be slow. This aspect of the IT performance will be examined.
- 26 It was recognised that greater amounts of monitoring data should have been available, this issue is being addressed by the MoD.
- There was a delay in the deployment of the teams for the issue of Potassium Iodate tablets in the downwind Pre Planned Countermeasures Zone (PPCMZ goes out to 2km from the submarine berths). However the actual distribution process, once the teams were on the ground, was carried out successfully. A full review of the tablet distribution process has been carried out in order to resolve the issues which led to the delay
- 28 Casualty rescue, handling and transfer was slow, though the liaison with Westcountry Ambulance Services Trust (WAST) was much improved. Communications difficulties between the responding medical personnel at the Devonport Accident Control Centre (DACC) and at the Exclusion Zone Reception Centre (EZRC) and Forward Control Point (FCP) led to some confusion on identification and clarification of potential hazards to WAST personnel, with a resulting delay in the casualty handling process.

## CABINET OFFICE - CIVIL CONTINGENCIES SECRETARIAT (CCS)

- 29 Officials from the CCS Assessments Team were present in the HQNARO facility in London for the duration of SHORT SERMON 04 and participated in meetings of the NAIAG in order to provide a wider cross-Whitehall context to the discussions.
- 30 It was noted during the exercise that an incident of this type would be likely to generate significant political and media interest, which may result in a requirement for some co-ordination through the COBR mechanism (i.e.: a CCC/CCC(O) Strategy Group). These factors, along with the recently agreed Central Government Arrangements for Responding to an Emergency Concept of Operations (ConOps) Paper, point towards a need to revisit some elements of the response to nuclear accidents, both civil and military, which will be taken forward by CCS in close partnership with officials from both MoD and DTI.

#### **DEVON AND CORNWALL CONSTABULARY**

#### Aims

31 The overall aim of the involvement of the Devon and Cornwall Constabulary was to demonstrate its ability to fulfil the roles and responsibilities of the Force as detailed in 'Devonport Public Safety Off-site Plan (DEVPUBSAFE)'.

#### Participation

32 The Force was involved at the Local Strategic level and had representation at the National Strategic level. At Local Strategic, the Force has the responsibility to co-ordinate the Off-Site response, so it opened the Police Cell within the Major Incident Headquarters at the Council Chambers in Plymouth (MIHQ). The Gold Commander was Assistant Chief Constable Richard Stowe, with his Chief of Staff being Chief Superintendent Pennington. Eleven Police Officers and Police Staff were employed in the Police Cell. Two Police Officers, one being Superintendent Joanna Tennant, were deployed to the MoD Main Building in London to advise National Strategic. Four Police Officers were utilised as Directing Staff or Umpires, and four were employed as part of the Security Team at MIHQ.

#### **Good Points**

Overall, the Force was pleased with the outcomes of the exercise at MIHQ. The view was formed that the Force has demonstrated its ability to co-ordinate a Major Incident such as the one exercised. The Strategic Co-ordinating Group functioned well, as the meetings were focused on the key strategic issues of policy, which is the remit of the Gold Commander. The Police Cell functioned very effectively, proving the systems and procedures used by the Force to manage Major Incidents. Liaison between the Cells was generally sound.

#### **Lessons Learnt**

34 The key lesson was to look seriously with our partners at the arrangements required to 'cold start' the Strategic Co-ordinating Group in the event of a spontaneous incident. The Force has facilities for this purpose at its Headquarters at Middlemoor, Exeter, which could be used in the early stages of an incident.

#### **DEVON FIRE AND RESCUE SERVICE**

#### Aims

- 35 The Aims were:
  - To test the command and control procedures, working with all agencies, in the event of a nuclear accident.
  - b) To test the cascade callout system.
  - c) To test the decontamination and medical support for personnel attending a nuclear accident.

#### **Participation**

#### Gold Level

Major Incident Headquarters (MIHQ)
 Chief Fire Officer Young.
 Assistant Divisional Officer Taylor.

#### Silver Level

- Devonport Accident Control Centre (DACC)
   Assistant Divisional Officer Grantham.
- Emergency Monitoring Headquarters (EMHQ).
   Station Officer Riley.

# **Good Points**

- 36 Fire Service officers at the Devonport Accident Control Centre found the NARIMS computer system and the CCTV to be very good. Our recommendation is that all Fire Service officers likely to attend are given training on the computer system.
- 37 Communications within the Devonport Accident Control Centre, and between the Emergency Monitoring Headquarters and the Major Incident Headquarters were very good. All phone lines satisfactory.
- 38 Although the facilities at the Major Incident Headquarters were not to the same standard as those of the Devonport Accident Control Centre, the inter-agency liaison and communication worked well.

#### **Lessons Learnt**

- 39 Exercise timings: Fire Control were not informed of the initial nuclear incident notification code word until 0830 hours and the escalatory nuclear accident code word until 0930 hours. Other representatives in the Devonport Accident Control Centre were under the impression that the Fire Service were mobilised at 0900 hours. Has the cascade mobilising system worked effectively? For the Fire Service, the exercise started half an hour late, but when Major Incident Headquarters was set up, it reverted to normal pre-planned exercise time. This change in timings prevented the Aerial Appliance from being used by Fire and Rescue Service personnel on one of the early categories of the incident.
- 40 Once the exercise was up and running the initial plan was the deployment of the aerial platform and pumping appliance from the Emergency Monitoring Headquarters to the submarine, this being effected at about 1000 hours. However, it does take time to process crews at the Emergency Monitoring Headquarters, by which time readings alongside the submarine indicated radiation levels of 21 sieverts per hour. Crews were then withdrawn. Consideration should be given to developing a procedure whereby the initial Fire Service appliances proceed directly to the submarine on declaration of Category 1 nuclear accident. Fire crews could then set up the water tower in preparation for use if necessary but would then withdraw to EMHQ to monitor the situation.
- 41 It is important that all agencies have a clear and agreed view on how evacuation of an area should be carried out. Clarity is important, as the Fire Service needs to know whether or not provisions should be made for decontamination of those people being evacuated.

#### WESTCOUNTRY AMBULANCE SERVICES - NHS TRUST EMERGENCY PLANNING DEPARTMENT

#### Aims

- 42 The Aims were:
  - a) To assess how a nuclear accident would impact on the Westcountry Ambulance Services normal provision of service to the general public.
  - b) To evaluate the resilience of existing major incident plans, in responding to a nuclear incident at HM Naval Base, Devonport Plymouth.

# Objectives

- 43 The Objectives were:
  - a) To test the communication between the Central Ambulance Control and the designated cascade recipients, on receipt of the Kismet command from Devon & Cornwall Constabulary, as per DEVPUBSAFE and DEVNUSAFE.
  - b) To evaluate the communication and interoperability between Westcountry Ambulance Services Trust (WAST), MoD medical personnel and Derriford Hospital staff concerning the handover of [simulated] patients and clinical accountability.
  - c) To evaluate the effectiveness of WAST medical provision with appropriate consideration for personal safety, through apposite decontamination and personal protective equipment, on both receipt and dispatch of a casualty.
  - To test effective communication between WAST and other participating agencies, both on and off site

# Participation

Role	Function	Location
Gold Commander	Strategic Command & interagency liaison	MIHQ Plymouth Civic Centre
Observer/Support to Gold Commander	Collate feedback on performance/process. Provide advice and assistance where necessary	MIHQ Plymouth Civic Centre
Administration Support to Gold Command	Record keeping, log maintenance and communication support.	MIHQ Plymouth Civic Centre
Silver Commander	Tactical Command & interagency liaison	Devonport Accident Centre Devonport Dockyard
Observer/Support to Silver Commander	Collate feedback on performance/process. Provide advice and assistance where necessary	Devonport Accident Centre Devonport Dockyard
Medical Commander	Tactical Command & interagency liaison	Devonport Accident Centre Devonport Dockyard
Central Ambulance Control EMD	To facilitate the KISMET cascade alerting call, activation of relevant officers to required locations, coordination of ambulance vehicle requests and movements. (KISMET - Devonport Call out system).	Central Ambulance Control Exeter Major Incident Room
Communications Personnel x 2	Coordinate radio communications from site and maintain a log of messages received and sent.	Emergency Monitoring Headquarters Devonpor Dockyard
Bronze Forward Commander	Operational Command & interagency liaison, overseeing the application of correct casualty triage/decontamination/handover from Royal Navy Sick Quarters (RNSQ) staff, and coordinating ambulance movement on site	Emergency Monitoring Headquarters Devonpor Dockyard
Observer/Support to Bronze Commander	Collate feedback on performance/process. Provide advice and assistance where necessary.	Emergency Monitoring Headquarters Devonpor Dockyard
Casualty management observer	To collate feedback on tracking the progress of a Life threatened (P1) contaminated casualty from site to Derriford Hospital, ensuring all adequate handover and safety procedures have been followed by RNSQ/WAST staff.  Providing advice and assistance where necessary	Emergency Monitoring Headquarters Devonport Dockyard
Ambulance Crew x 4	To provide transportation of Life threatened casualties (P1s) and urgent casualties (P2s) to Derriford Hospital. Wear appropriate Personal Protective Equipment (PPE), conduct appropriate simulated casualty management, and where necessary, decontaminate vehicle /	Emergency Monitoring Headquarters Devonpor Dockyard  Derriford Hospital
Media Liaison x 2	themselves after casualty handover. To co-ordinate WAST media.	Media cell Plymouth

#### **Good Points**

- 44 Communications in Silver Command (Devonport Accident Centre) were excellent between the Ambulance Commander, the Medical Commander and the Principal RN Medical Commander (PMO). Collaboration was conducted in a professional and productive manner. Information was exchanged regularly and agreement was easily reached when making tactical decisions. This was particularly evident in the difficult times of patient tracking throughout the scenario.
- 45 Early notification was given to the Derriford Hospital Major Incident Coordination Team that contaminated patients were en route with an appropriate estimated time of arrival.
- 46 WAST deployment of staff was monitored and recorded using the new Major Incident armband numbering system and a log was maintained with personnel presence by the MCU.
- 47 The Bronze Commander adhered to the agreed handover procedure making the relevant checks prior to receipt of conventional and contaminated casualties.
- 48 Triage 'sieve' and 'sort' was correctly applied to avoid artificially high numbers of contaminated P1 casualties.
- 49 Appropriate briefings were given to ambulance crews on safety aspects of carrying contaminated casualties and checks were made on the appropriate donning of the requested PPE levels, as well as the correct packaging arrangements for stretcher patients.
- 50 The dynamic within the Health group working in the Strategic Command Group was of a high standard.
- 51 The information obtained from CAC was provided to Gold Command in a frequent and understandable format; the whole dialogic experience between Gold and CAC was particularly good.
- 52 The support offered by the Support Officer was of an exceptionally high standard and the Gold Commander felt that it enabled his decision making to be based on sound judgment and common sense.

#### Learning Points

- Review of the Kismet cascade call terminology is needed. Instead of using code words applicable to the MoD, when the message is passed to a civilian organisation it should adopt accepted standardised terminology of either 'Major Incident Standby' or 'Major Incident Declared'. This would avoid confusion by the call taker.
- 54 It would be very useful to have a map of the base at hand. Possibly in the Ambulance Commander / vehicle Major Incident packs with a photocopy for PLIMS Docs as well. Consideration could also be given for maps to be handed out by Security on the entrance gates.
- 55 The Devonport site would benefit from more visual sign posting giving directions to key locations.
- If RN medical teams deployed an equivalent Bronze Commander to operate alongside the Ambulance Bronze Commander, this would have the benefit of immediate liaison with WAST and have WAST Bronze access to information being exchanged on the RN radio net (with advanced warning on patient transfers from the Exclusion Zone Reception Centre, EZRC). This may have speeded up patient handover issues.
- 57 The patient handover area could have been made safer by the deployment of signs / cordon tape to demarcate clean and dirty areas.
- 58 Further familiarity /training with the procedure and appreciation of WAST safety requirements is needed by WAST and RN staff.

- 59 Advanced warning of contamination levels could have been made from EZRC to Silver Command for confirmation of safe thresholds for ambulance staff. This could have been completed whilst patient was en route to the Ambulance handover point.
- Revision of the threshold level and scale of measurement needs to be amended within the handover algorithm. As contamination levels are measured in counts per second (CPS), a safe converted level in CPS is needed to ensure that monitoring terminology is congruent with confirming safe exposure levels to WAST staff. This would then avoid confusion with the irradiation dose levels received by the patient (measured in milliSieverts) and would speed up the patient handover procedure.
- 61 It was noted that the decontamination facilities at EMHQ would not facilitate the accommodation of stretchered patients. Any non ambulatory supine patients would have had difficulty in being decontaminated. DML / MoD should consider the improvement of facilities for future use if EMHQ is to be used in future incidents.
- There were limited RN medical facilities at EMHQ and the presentation of P2 and P3 casualties who had self presented or by-passed the Exclusion Zone Reception Centre would have had limited interventions prior to decontamination and handover. DML / MoD should consider the mobilization of enhanced medical facilities to EMHQ.
- 63 The traffic flow outside of EMHQ (Bronze ambulance handover) was heavy and sometimes congested. It was noted that this posed a significant risk to the safety of staff operating in this area. Where possible, the Police need to provide traffic regulation/control at this point in future.
- There was limited interaction between the blue-light agencies. The WAST location in the command centre left them ensconced between the Fire Service and the Strategic Health Authority. It was appropriate to have this link with the Fire Service and a good relationship was cemented, however the lack of interaction with the Police on a regular basis was, in the opinion of the Ambulance Gold Commander, a detriment to the overall functioning of the Health response. Relocation all of the Blue-light Services within the same location in MIHQ would assist in interagency communication.
- The Ambulance Gold Commander was also concerned that WAST as an agency, appeared to have the least amount of staff present. It was apparent that to function at this level, the overall Gold Commander needed to have sources of information emanating from differing sub-cells in the command centre, and unfortunately a lot of these groups met at the same time. It was believed that as a bare minimum, it would be important to have one representative who liaises with the Blue-Light agencies, one representative who will sit in JHAC (probably the most important source of information) and one person who liaises with CAC and Silver. All of these people could then feed the Gold Commander in preparation for the SCG meetings. The JHAC Chair was critical of WAST as an agency for not having representation at the JHAC table, as often they were discussing things pertinent to our staff and service delivery, without any input or challenge from WAST.
- A review of the Strategic Command Group organisation and training given to senior responding WAST Officers are recommended. Guidance on SCG objectives and subsequent roles and responsibilities would assist in their overall awareness of their purpose. Also, WAST should review the number of representatives sent to SCG. Where traditionally only one senior Officer is dispatched, the current command demands dictate that a 'team' of Officers is necessary to fulfil the roles of liaison, communication and representation, along with suitable administration support. This may then alleviate the multiplicitous strain of responsibilities for one person alone.

#### GOVERNMENT OFFICE FOR THE SOUTH WEST - REGIONAL RESILIENCE TEAM

#### Aims

- 67 The Aims were:
  - a) Establish the principles for determining when the regional tier should become involved.
  - b) Define what support local responders want from the regional tier and what can be provided?

- c) Understand how Government Departments should involve the regions in response arrangements and consequence management?
- d) Decide how an RCCC would be activated. Identify what its membership would be. How it will operate. Who will support it? What will be its method of communication with GOLD? Where will it be located?
- e) Identify what arrangements must be put in place to ensure effective communications between the national, regional and local levels.

#### **Participation**

68 The exercise was played as if the Civil Contingencies Act was in force. Two members of the Regional Resilience Team (1 G7, 1 HEO) attended the Plymouth Emergency Centre to take part in the exercise.

#### **Good Points**

- 69 Administration of the exercise was excellent, this includes planning of the exercise and associated documentation.
- 70 SCG was run in a clear, businesslike fashion concentrating on strategic issues.
- 71 Security and access control to the LEC was good.

#### **Lessons Learnt**

- 72 Facilities (Warspite Room) were inadequate, insufficient room (2 players only 1 seat), only 1 phone line and too crowded resulting in a lot of background noise;
- 73 Status board was not kept up to date and therefore information on it was inaccurate.
- 74 Communication between groups was poor with hardly any information passing between them.

#### PLYMOUTH CITY COUNCIL

#### Introduction

- 75 This was the first MoD Grade A exercise to take place in Plymouth since the introduction of REPPIR 2001 and the consequent devolvement of statutory off-site responsibilities to Plymouth City Council. In essence many of these responsibilities were already undertaken by the local authority prior to the adoption of new regulations, since the Devonport Public Safety Off-site Plan (DEVPUBSAFE) has been in existence for the past twenty years or more. REPPIR however provided a much more prescriptive focus for the Council and indeed, for all the supporting agencies.
- The implications of staging this exercise over a 12 hour duration, as opposed to the 72 hours of exercise play in 1999 were that the Council were unable to demonstrate the sustainability of the off-site plan over a prolonged period, and that because of the compacted nature of the exercise, it was not possible to fully test the plan criteria for the handover of responsibility from the police to the local authority: that said, the Council was provided with an excellent opportunity to exercise the remediation process the day after in conjunction with all the participating agencies that took part during the response phase. A separate follow-up report will be produced in due course that will incorporate many of the detailed problems and possible solutions that might apply over a nine month period of remediation.

# **Exercise Planning**

- Planning for the exercise began some twelve months beforehand: in terms of the off-site planning required, the Council considers this to be an excessive lead-up period for a 12 hour exercise and mechanisms will need to be evolved in the future between on / off-site operators to facilitate local authority and supporting agency exercise preparation at a much later stage.
- 78 The Council was extremely grateful for the excellent spirit of cooperation that existed between the emergency services, neighbouring local authorities and supporting agencies throughout the planning process for both phases of the exercise. It is felt however that there is further scope for improvement in relation to future dialogue and pre-exercise planning between PCC and HMNB. It is also considered that REPPIR sometimes exacerbated tensions in respect of each operator trying, on occasions, to apply the most convenient interpretation and application of the regulations to support their respective interests.

#### **Participation**

79 The exercise necessitated the participation of some seventy members of staff who were spread between the MIHQ at the Council House, a SILVER control at Windsor House and a telephone enquiry service. In total the Council catered for around 250 exercise participants and a significant workload was placed upon the authority in respect of the preparation and equipping of the committee rooms for the supporting agency cells.

#### Aims and Achievements

80 The Council was satisfied that their aims and objectives were met. The many lessons learnt from both day one and day two play will enable the planned review and amendment of the plan to go ahead sometime during 2005 / 6. The Council was particularly pleased with the commitment and enthusiasm demonstrated by all members of staff throughout the duration of the exercise.

#### **Good Points**

# **CICERO**

- 81 This is a computerised incident management system that was deployed as a communications tool to co-ordinate the Council's response between the local authority cell within the MIHQ and PCC SILVER control at Windsor House. Projection onto screens in both locations ensured that visitors to the cells were able to update themselves with all current entries. All press releases issued by PCC were entered onto the system which enabled every user access to the latest public information being disseminated, thereby eliminating 'mixed messages'. PCC and other media players were able to keep themselves abreast of current local authority issues by viewing a projected copy of the incident log: from comments received this was regarded as a most useful information tool.
- 82 The use of CICERO on this exercise was considered to be highly successful and was seen as pivotal to the smooth running of the local authority cell. A future recommendation would be to deploy the system within all MIHQ cells, to facilitate a composite storyboard that incorporates all agencies` actions and considerations. This would negate the need for information boards in the concourse area to be continually updated and would provide an audit trail for post-exercise identification of joint learning / training requirements.

# Mapping

83 The Council's GeoGraphic Processor (GGP) mapping system was utilised very effectively both within the local authority cell and in support of the Strategic Co-ordinating Group (SCG) briefings. Once the wind direction had been established, the operator was able to plot and depict a 30 degree directional plume onto an overlay within 30 minutes: PCC was the first agency to have this computerised information available.

84 Post-exercise, there is work to be completed on both the Potassium Iodate Tablets (PIT) distribution zone overlay, subject to confirmation from MoD on specific areas for formulating the database to run with the overlays. Detailed information will include such features as doctors' surgeries, health centres, schools and nurseries to assist the local authority with any dynamic information required for either exercise or 'live' incidents.

#### Press / Media

- 85 CICERO was perceived to be a very useful information source within the PR Cell.
- 86 Exercise websites were used effectively.
- 87 PROs from different agencies worked well together and in comparison to Short Sermon 1999 there was more of an attempt to create a 'joint' cell with the result that there was much-improved information sharing.
- 88 The Chief Executive / senior PCC officers were far more accessible than on previous exercises with good media cell liaison being maintained throughout the exercise.
- 89 PCC PR staff in the media cell and Guildhall media centre communicated well with each other through mobile phones and worked closely with the MoD and Health Authority.

#### **Lessons Learnt**

#### Information Flow

90 The information flow between cells was slow and fragmented. There is no doubt that had CICERO been available to all agencies, the ability to monitor and to subsequently action message serials would have radically enhanced the information flow between cells: it was suggested at the start of the planning process to incorporate a computer terminal and CICERO operator with each cell in order to facilitate a multi-agency storyboard. This option was declined by MoD as the deployment of the system was not contained within the off-site plan.

#### Staffing

91 A requirement was identified within the local authority cell for an additional officer to liaise with neighbouring cells in order to improve the compatibility and interchange of information. Similarly, at each SCG it was necessary for the staff officer to accompany the Chief Executive (CE) in order that he was in a position to brief the local authority cell at the conclusion of each SCG meeting whilst the CE was attending the subsequent press conference. This meant that the cell was managed on an ad hoc basis during this process which has highlighted a possible requirement for a deputy cell commander to be identified within the off-site plan. Alternatively, a requirement for another LA officer to front-up local authority issues at press briefings and conferences, was also considered, to facilitate the CE remaining in the LA cell and keeping abreast of the off-site situation.

# MIHQ Set-up / Exercise Planning and Preparation

92 Whilst the Council was pleased with the way that the facilities worked within the MIHQ, the time taken to set it up was a considerable exercise artificiality as, in reality, it would take between 5 and 6 hours to establish even the most basic of facilities. The point should be also made that that the Council's elected members found the frequency of Short Sermon usage of the committee rooms both immediately before and during the exercise, disruptive, in terms of being able to conduct everyday Council committee business processes. The exercise has therefore highlighted the requirement for future discussion regarding the viability of continued use of the Council House as a suitable off-site facility (OSF) and a possible requirement to look at the feasibility of a purpose-built / adapted MoD -controlled OSF, similar to the Clyde Off-site Centre (COSC) provided for HM Naval Base Clyde.

#### Local Authority Off-site Validation

93 The Council was extremely fortunate in being able to recruit the services of both the Emergency Planning Manager for Argyll and Bute and the County Emergency Planning Officer for Bedfordshire (an ex-SONART) for both the response and remediation phases of the exercise. Their respective independent assessments of the local authority performance will prove to be invaluable in the context of the future review and re-structure of the off-site plan.

# CORNWALL COUNTY COUNCIL - EMERGENCY PLANNING (COVERING CARADON DISTRICT COUNCIL)

#### Aims

94 To activate the DEVPUSAFE Off-Site plan and test the hand over on Day 2 of the exercise to the Local Authorities for the 'recovery phase'.

# **Participation**

95 Participants were:

Geoff Tate – Day 1 –Local / Strategic Steve Winston – Day 1 – Local / Strategic and staff officer to above John James – Day 1 – Directing staff Linda Blight – Day 1 – Local Admin Support

Remediation phase: Richard Fedorowicz – Day 2 Martin Rawling – Day 2 Simon Rouen – Day 2

#### **Good Points**

- 96 Impressed with the CICERO system, found it very useful and we are interested in receiving feedback on its future development.
- 97 As a large scale participation exercise, we were impressed with the administrative organisation that was required to 'put' the exercise together.
- 98 On the two days in question, face to face inter-action with other organisations/colleagues always proves to be invaluable.
- 99 We jointly highlighted the benefit to Plymouth City Council regarding cross-border use of resources, particularly Cornwall's manual workforce.

#### **Lessons Learnt**

- 100 We felt that the SCG and the RWG meetings could have been more structured, and may have benefited from following a pre-circulated Agenda.
- 101 We felt the membership of the Remediation Working Group/RLG too large to be totally effective. Suggestion for the future there may be some benefit in dividing into working sub-groups, with each chair forming the membership of the RWG/SCG.
- 102 A strategy is required to resolve the dichotomy of one particular piece of advice given to Plymouth Schools, and, necessarily different advice given to schools in Cornwall.

#### DEPARTMENT OF HEALTH

#### Aims

#### 103 Aims were:

- a) to test communication between DH headquarters and local NHS organisations;
- b) to test internal communications within DH headquarters;
- c) to test communications with the DH representative at NAIAG;
- d) To provide appropriate and timely briefings.

## **Participation**

- 104 The Department was represented by a senior civil servant at the NAIAG.
- 105 The Department of Health's Emergency Planning and Co-ordination Unit participated in the exercise and the Department's Emergency Briefing Room was activated.
- 106 DH Radiation Unit provided scientific advice on radiation matters and was supported by a representative from the NRPB.

#### **Good Points**

- 107 Communications within DH headquarters and between the NAIAG representative and headquarters worked well.
- 108 Communication links between DH headquarters and local NHS organisations worked well.

#### **Lessons Learnt**

- 109 NAIAG rep couldn't use ROIS as it is not set up to have the flexibility to dial (0) through the MOD switchboard. Emails via MoD system took quite a while.
- 110 NAIAG communication with Gold needs improvement.

# SOUTH WEST PENINSULA STRATEGIC HEALTH AUTHORITY (HEALTH AND PUBLIC HEALTH PROTECTION)

#### Aims

#### 111 The Aims were:

- a) To assess how a nuclear accident would impact on the Health Services and Public Health normal provision of service to the general public.
- b) To evaluate the resilience of existing major incident plans, in responding to a nuclear incident at HM Naval Base, Devonport Plymouth.
- c) To test the communication between the Central Ambulance Control and the designated cascade recipients, on receipt of the nuclear accident notification command from Devon & Cornwall Constabulary, as per DEVPUBSAFE and DEVNUSAFE.
- d) To evaluate the communications between Major Incident Headquarters (MIHQ) and the health services both local and at national level.
- e) To evaluate the effectiveness of the Radiation Health Cell (JHAC) and its communications with both the Gold Command and the NHS participants.

- f) To test local arrangements for the provision of a multi agency public health response.
- g) To test effectiveness of the media health cell and its communications with the Health Service and Health Protection Agency (HPA) both locally and nationally.
- h) To evaluate the communication between health and other participating agencies.

# **Participation**

112 The following health organisations/Trusts that took part in this exercise were:

- Westcountry Ambulance Services NHS Trust (BRONZE, SILVER & GOLD).
- Plymouth Hospitals NHS Trust (BRONZE).
- Plymouth Teaching PCT (BRONZE & GOLD).
- North and East Cornwall PCT (BRONZE & GOLD).
- Torbay PCT (GOLD).
- South Hams and West Devon PCT (GOLD).
- South West Peninsula Strategic Health Authority (GOLD).
- South West Peninsula Health Protection Unit, Devon & Cornwall Teams (GOLD).
- Department of Health (GOLD, NATIONAL).

#### **Good Points**

- 113 This exercise provided the 'health and public health community' with an excellent opportunity to test communications across health and public health organisations.
- 114 Operational control centres were set up at Trust level and the communications between them and Gold worked extremely well. The exercise also provided the opportunity to expose staff to a situation not normally experienced and the training thereof was unique. Information flow from the Strategic Health Authority to the Department of Health also functioned well.
- 115 Multi Agency working at Gold level worked well although a runner between the various cells would have been advantageous.
- 116 The JHAC cell functioned excellently, with all organisations under the clear leadership of the Chair, pulling together to resolve the questions the scenario posed. The accommodation was better than previous, although a completely separate room for JHAC meetings would have been beneficial.
- 117 The media health cell worked well, albeit the multi agency press releases were a little slow. The Consultant in Communicable Disease Control and NRPB were able to field questions at the press conferences in a timely matter. There was evidence of a need to agree press releases via the JHAC before issue, in order to reduce any anomalies in what was a fast flowing exercise.
- 118 The facilities at Plymouth Council House generally worked well but more telephone lines for IT equipment is essential. Congratulations must go the Plymouth Emergency Planning Team for their excellent preparation and planning for this exercise and the training opportunity it provided for the Health Service to test its response.

#### **Lessons Learnt**

119 The nuclear accident alert cascade requires to be looked at in its entirety, to ensure that organisations receive early notification. Standardisation on national alerting terminology for the cascade mechanism needs to be explored, as this led to confusion.

- 120 Consideration needs to be given to raising ongoing awareness for other agencies about the organisation and complexity of health and public health structures and functions. Other agencies can expect a large number of individual statutory agencies to function as though they were one single organisation. The JHAC chair and the Police Gold Commander are in discussion about ways to take this forward.
- 121 Media statements were very slow in being produced in the initial stages. Pre-planned statements need to be drawn up in advance and agreed to resolve this issue.
- 122 Clarity needs to be sought with the Royal Navy around how robust their arrangements are for PITS distribution. There was a lack of clarity on this issue and supporting documentation.
- 123 The exercise on day 1 was truncated early, which prevented the exercising of an evacuation plan, shift changes and the opportunity for some players to contribute. It was generally felt day 2 (recovery) tried to achieve too much and would have been better served by cells meeting with a list of posed questions to be resolved. The recovery working group could have then been called periodically throughout the day.
- 124 In order for this exercise to meet its objectives there was an element of artificiality built in. The JHAC functioned well but consideration needs to be given to 'cold' testing in a future exercise. In a real scenario not all of the players would necessarily be in the city. Future testing would need to include being able to more easily access regional or national advice whilst key individuals were in transit e.g. NRPB Cold testing would also enable proper assessment of how long it would take to set up both Gold Command and effective communications.
- 125 Following this exercise there is, as expected, a necessity to re-write the health chapter for DEVPUBSAFE in order to reflect the lessons learnt and to reflect present NHS and Public Health structural response.

#### PLYMOUTH HOSPITALS NHS TRUST (PHT)

#### Aim

# 126 The Aims were:

- a) To assess the resilience of PHT's major incident plans, in response to an incident at HM Naval Base, Devonport, Plymouth.
- b) To evaluate PHT's response to receiving radiation contaminated casualties with life-threatening injuries.
- To test communication and liaison between on and off-site agencies involved in the treatment of casualties.
- d) To provide an opportunity to monitor and decontaminate casualties and ambulance crews at Derriford Hospital.
- e) To consider the impact such an incident would have on capacity within Derriford Hospital.

#### **Participation**

- 127 Departments involved in this exercise included:
  - Hospital Co-ordination Team established in Derriford Hospital's control centre to provide an
    executive lead during exercise response.
  - Press and communications -support to Hospital Co-ordination Team and media liaison.
  - Accident & Emergency decontamination of casualties.

- Medical Physics and Nuclear Medicine provision of monitoring service and radiation professional advice.
- Plym Day Case Unit reception of radiation contaminated casualties with life-threatening injuries.

#### **Good Points**

- 128 Good communications channels with the Medical Commander and Ambulance Commander at DACC (Silver) were established at an early stage. Regular contact was also maintained with the Strategic Health Authority and agencies located at MIHQ in the Civic Centre and other locations around Plymouth. There was a significant improvement in communicating with all agencies, when compared with the 1999 exercise response.
- 129 PHT's plans for receiving radiation-contaminated casualties with life-threatening injuries were tested under controlled conditions and the hospital would have coped well with the casualties that presented for treatment (without compromising inpatient and elective activity on the day). Plans for A&E and Medical Physics/Nuclear Medicine have recently been revised and this exercise demonstrated that individual roles and responsibilities were understood and staff worked well as a team.
- 130 The control centre operated from the proposed new location within the hospital. This new location not only reduced the impact on clinical activity during incidents/exercises, but also facilitated communications between the responding teams during the incident response.

#### **Learning Points**

- 131 Use of the MoD Nuclear accident notification codeword message caused confusion and delays at the outset. Nationally emergency services and others respond to "Major incident declared activate plan" (followed by details of the incident). It is recommended that the MOD /LA consider bringing the DEVPUBSAFE and DEVNUSAFE terminology in line with nationally recognised major incident alerting messages.
- 132 During the exercise planning stage of this exercise, it became apparent that the health chapter of DEVPUBSAFE does not reflect current organisational arrangements and roles and responsibilities have changed.
- 133 With a clear health response plan, casualties would also be handed-over and transported by Westcountry Ambulance Service and communications maintained in line with normal major incident arrangements. It is therefore suggested that during the next revision of the plan, the health chapter is totally re-written.
- 134 Only 5 contamination monitors were available at Derriford Hospital, for use on the day 2 of which are for  $\gamma$  radiation use only. An additional 2 RN monitors were unable to be used as PHT have not received instructions on their use and staff are not familiar with the monitors supplied.
- 135 Consideration should be given to the supply of additional monitors (together with instructions) being issued to the hospital. One of which should be suitable for  $\alpha$  monitoring. This would enable full monitoring of casualties to be undertaken, without compromising the treatment of other patients within the hospital.
- 136 It was disappointing that PHT's media team were not tested during the exercise through simulated media enquiries, despite agreeing to this during the planning stages. This would have proved a real opportunity to test our media response, especially as in an actual incident, the hospital would be overwhelmed with media enquiries.

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137 It became apparent on the day of the exercise that PHT had not been issued with the latest (version 4) of the Operators Exercise Instructions. Changes had been made to the casualties previously agreed and the timings. As a result, the second contaminated casualty was not processed, as they did not arrive at the hospital until after the team had been stood down. Throughout the planning stages it was highlighted that the hospital would need to return to normal clinical work at 1400hrs.

138 It also appears that during exercise planning, consideration was not given to MoD hospital staff working the previous night – who would normally return to HMS Drake to sleep during the day of the exercise. Alternative arrangements should be made in order that personnel working nights and not involved in the exercise are able to sleep.

# DEPARTMENT FOR ENVIRONMENT FOOD AND RURAL AFFAIRS (DEFRA) AND GOVERNMENT DECONTAMINATION SERVICE (GDS)

#### Aims

#### 139 The Aims were:

- To investigate the relationship with Gold, in particular, the need for DEFRA liaison/representation.
- b) Assess relationship and role of Government Decontamination Service (GDS) at Gold.
- c) Test lines of communication between DEFRA HQ and the DEFRA representative at the NAIAG.
- d) Test lines of communication between DEFRA HQ and the Environment Agency.

#### **Participation**

140 On Day 1 of the exercise, DEFRA 'play' was at DEFRA HQ and the NAIAG. On Day 2, the Government Decontamination Service (GDS) attended, as observers, meetings of the recovery Strategic Co-ordinating Group (SCG).

#### **Good Points**

141 Initial contact with DEFRA HQ was made by the DEFRA representative at the NAIAG quite early on in the exercise. The Information flow was good in both directions via telephone, fax and e-mail. The DEFRA representative at NAIAG received regular updates from DEFRA HQ including running of the Food Vulnerability Model. These updates were timely and reported at meetings of the NAIAG.

142 Good lines of communication were established between DEFRA HQ and Gold via the Environment Agency and the Government Office-SW at the incident. DEFRA HQ initiated contact early in the exercise to ensure that DEFRA was informed of any relevant issues raised at Gold. The flow of information worked well. GOSW was able to pass on information about the incident to DEFRA HQ, and to seek guidance and advice from DEFRA HQ on animal welfare issues. The DEFRA representative at the NAIAG also used the local EA contact at Gold to obtain situation reports, and to confirm that the information reaching the NAIAG about the safety of public water supplies was correct.

#### Lessons Learnt

- 143 There was a significant delay in the delivery of some e-mails, subsequently; urgent messages were communicated via telephone, and fax as well as e-mail.
- 144 From a GDS perspective, the exercise scenario and setting were somewhat unrealistic. For exercise purposes, the contamination was non-persistent but, had it been persistent, clear up would have remained the primary responsibility of MoD under the "cradle to grave" arrangements for defence nuclear material. GDS may not have been involved.

145 However, the exercise provided a useful opportunity to see a local authority-led Strategic Coordination Centre and Strategic Co-ordinating Group (SCC/SCG) in action, to understand the priorities that a local authority might apply to a contaminated scene (public perceptions of what was "safe" were a predominant factor in PCC's thinking) and to assess the need for and timing of a GDS presence at the SCC/SCG.

146 As a result of participation in SHORT SERMON, GDS has concluded that there is a clear requirement for it to attend meetings of SCG at an SCC. Further, GDS has concluded that the lead-time required to plan a decontamination strategy process, the time required to bring together and project the capability to a scene and the need for the establishment of early relationships with other stakeholders implies a need for a GDS presence at any recovery cell established under the aegis of a police SCC/SCG as soon as that is established. GDS should then continue to form part of the recovery cell under the local authority SCC/SCG for as long as decontamination remains a feature of the recovery and remediation phases.

147 The implications of these conclusions for the timing and speed of deployment of GDS's own assets will be considered in the development of alerting and call-out arrangements.

# DEFRA - RADIOACTIVE INCIDENT MONITORING NETWORK (RIMNET) TEAM

#### Aims

# 148 The Aims were:

- a) To test the activation of Departmental/RIMNET emergency response arrangements.
- b) To test the support mechanisms offered by the Department/RIMNET system to the emergency response activities of both the Ministry of Defence (NAIAG) and Westminster central departments as appropriate.
- c) To test the arrangements for transferring environmental sampling data to the RIMNET system.

#### **Good Points**

149 Activation of the RIMNET team was achieved successfully. Messages stating that Category 1 Nuclear Accident was declared at 0918 GMT were received at the RIMNET office. The team convened, organised and delivered support to the Ministry of Defence colleagues through the facilities within the RIMNET offices and a 'technical' representative at the Nuclear Accident Information and Advisory Group (NAIAG). DEFRA also provided a 'policy' representative to the NAIAG committee. Notification of the Category 2 Accident declaration was received at 1036 GMT and Category 3 at 1131 GMT.

150 Both Nuclear Accident Response Information Management System (NARIMS) laptops were activated within the RIMNET offices. Regular checks of the status of NARIMS were carried out throughout the exercise. These checks were performed within a period of 20 minutes and included ensuring that new messages or radiological data were made available to the RIMNET team members.

151 Contacts with local response and central Government representatives were established. Good communications were experienced with Dstl Defence Radiological Protection Service (DRPS), Government Office for the South West (GOSW) and CBRN Policy colleagues throughout.

# **Lessons Learnt**

152 Environmental sampling data did not appear on NARIMS with the frequency expected during the exercise. Indeed, a verbal report from DRPS at the end of exercise play suggested that a DISTAFF intervention at the early stages of play had led to only one in ten samples being processed and subsequently entered onto NARIMS. The RIMNET team would welcome any further advice regarding the data flow aspects during the exercise play.

153 Furthermore, the environmental sampling that did appear on NARIMS contained systematic errors and did not conform to the Quality Assurance standards expected for this data. In particular, many samples were entered as 'counts per second'. These data values cannot be interpreted without the specific technical specification for the survey instrument used for the sampling.

154 The weather data used for the exercise was simulated successfully by Meteorological Office colleagues. The RIMNET team co-ordinated requests from the NAIAG, FSA and DRPS for additional NAME Model runs using the latest source term estimates and the exercise weather during the play. The RIMNET team would wish to acknowledge and express their gratitude to Met. Office colleagues that kindly supported this impromptu play. A total of six separate NAME Model output were successfully made available in the RIMNET 2 exercise environment.

#### NATIONAL RADIOLOGICAL PROTECTION BOARD

#### Aims

155 The Aims were:

- a) To receive the initial alert Achieved.
- b) To exercise the provision of an advisory and support team to MIHQ, and NAIAIG Achieved.
- c) To exercise the use of NARIMS at NRPB Achieved.
- Test communications with, and support, the off site teams from NRPB HQ at Chilton Achieved.
- e) To exercise HPA RPD's role in relation to monitoring co-ordination Achieved.
- f) To contribute to any discussions on recovery Achieved.
- g) To contribute to discussions on Health (and participate in JHAC if required) Achieved.

# **Participation**

156 Participants were:

#### **DCMC**

Phil Tattersall

#### Plymouth MIHQ

Jill Meara Neil McColl Phil Kruse Anne Nisbett Gareth Roberts Kayvan Walker

#### **Good Points**

157 Very good IT and other support from MoD (uniformed staff) at DCMC. Excellent working relationship with Department of Health rep at NAIAG. NAIAG meetings were well run and effective.

158 Teamworking with agencies at MIHQ was very good, and MIHQ provided facilities that met our needs. Having JHAC in a separate room allowed work in Warspite room to continue and JHAC to be focussed.

- 159 NRPB templates for requesting and coordinating UK plc monitoring resources were implemented rapidly and processed through MIHQ.
- 160 Second day provided some useful new perspectives on non-radiological recovery issues.

#### **Lessons Learnt**

- 161 Exercise on day 1 was "accelerated" towards late afternoon. This was not expected, it interrupted our ongoing play and detracted significantly from it. While it illustrated the real need to get interim answers to problems (i.e. what will we do for tonight...), this took away about 1-2 hours of useful play.
- 162 Cycle time of JHAC and Gold meetings could be longer to aid effective communication. Could this be an exercise artefact?
- 163 Cycle time from monitoring result to operational mapping of results is very long too long for operational use when situation is fast moving. Should there be a "short-circuit solution that allows automatic display of monitoring data immediately after it is first recorded/validated? Maybe a development for NARIMS?
- 164 Many exercises leave an impression of "too little monitoring data, provided too slowly". Is this observed sufficiently often for it to be an indication that it is the expectation that can't be met with current resources/technology rather than repeated under-performance?
- 165 Exercise demonstrated well the potential clash between technical/numerical assessment of risk and wider perception of the presence of a radiation risk. This is a genuine problem. In an incident, this may be resolvable on longer timescale through dialogue but there seems to be an intermediate time when dialogue would be too lengthy. Also an issue of translating into operational activity.

#### Other Comments

166 It was unfortunate that the Transportable Whole Body Monitor could not be deployed due to that part of the exercise no longer being supported. NRPB did practice the deployment of the monitoring resource locally, however.

#### **ENVIRONMENT AGENCY**

#### Aims

167 The Aims were:

- a) To test notification and alert arrangements.
- b) To test RSR-Duty Tactical Manager role in assessing the scale of the incident.
- To test communications between Agency representatives at various emergency centres and between Agency and other organisations.
- d) Provide advice to the Government Technical Adviser and others on matters of environmental contamination and waste disposal.
- e) Exercise the Technical Assessment Team.
- f) Contribute to the provision of a common set of information to the local media, through police media management arrangements.
- g) Liaise with NRPB about the co-ordination of sampling and monitoring.
- h) Liaise with Health Advisory Group.

#### **Participation**

168 EA participation involved the technical assessment centre at Wallingford and players from the Environment Management function and Nuclear Regulatory Group. Two representatives were present in Plymouth at the Major Incident Headquarters (MIHQ)

#### **Good Points**

- 169 The use of the Council House in Plymouth as MIHQ for a nuclear emergency at Devonport is correct. Key players would risk being seen to be deserting Plymouth if the strategic group were to meet further away.
- 170 The strategic co-ordinating group and Joint Health Advisory Cell meetings were well chaired and conducted.
- 171 Communications within the MIHQ in Plymouth worked well with information passing easily between the various organisations.

#### **Lessons Learnt**

- 172 The recovery working group could operate more efficiently if it is split into sub-groups with each group being delegated to resolve particular issues.
- 173 Communications from the MIHQ to other locations was hindered by the lack of telephone and electrical infrastructure, which was insufficient to support the number of different people and agencies present who all require individual access to these services.

#### **FOOD STANDARDS AGENCY**

#### Aims

#### 174 The Aims were:

- a) To ensure food safety through the issue of timely advice to the public about which foods should be avoided, and over what areas this applies.
- b) To test notification arrangements.
- c) To test the operation of, and communications between, the FSA teams in London, FSA staff at the MIHQ and MBC, DCMC as appropriate.
- d) To test liaison with the GOSW team at the MIHQ. Please note that this is not a formal arrangement under the SLA for this exercise.
- e) To test arrangements for liaison with other organisations at a national level, e.g. NRPB and EA.
- f) To test the media briefing arrangements, including the issue of information in the early stages of response and the participation of a FSA scientist and press officer at the MBC.
- g) To prepare and issue a Food and Environment Protection Act Restriction Order.
- h) To test FSA input to the Recovery Working Group / Health Advisory Group.
- To identify any shortfalls in the current FSA emergency arrangements.

# **Participation**

175 FSA participation involved a full technical team at AVH, and players from the Agency's Incident Response Branch, Communication Division and Legal Division also fully participated in the exercise.

- 176 Two representatives were present in Plymouth at the Major Incident Headquarters (MIHQ) and one at the Media Briefing Centre (MBC), assisted by a designated FSA press officer.
- 177 One representative was present at the DCMC at MoD London.
- 178 The FSA was also supported by the Centre for Environment, Fisheries and Aquaculture Science (CEFAS), the Veterinary Laboratory Agency (VLA) and the Rural Payment Agency Inspectorate (RPAI).

#### **Good Points**

- 179 There was a good flow of information at the MIHQ between the FSA, EA, GO, NRPB and other organisations. In particular, the health physicists were proactive in getting information when it was available and were extremely helpful when asked for information, even though very little was available form the site during the exercise.
- 180 The facilities at the Media Briefing Centre were good, with some clear information on display and good working conditions. Regular press conferences were held.
- 181 The FSA's media message came across very clearly. The sound bite used by the press, reporting on the simulated media web-site, was that the Food Standards Agency said: "consumer health is our top priority." In addition, at all the early press conferences it was stressed that when the FSA put out Precautionary Advice the area would be greater that the sheltering area and the press was told why. A printed background note was circulated at the press conferences explaining the reasons behind our decisions. As a result, when the FSA countermeasure area was finally published it came as no surprise to the press and was accepted without any questions.
- 182 Communication with the DCMC was good and facilities were adequate. Players at the FSA incident room found the regular briefings and updates coming from the DCMC very useful: information was timely and to the point.

# **Lessons Learnt**

- 183 As far as the scenario is concerned, some players expressed some frustration at not being able to fully understand the details of the incident and there was the recurring issue of the lack of technical data on submarine reactors being made available such as primary core inventory and likely release.
- 184 The MIHQ on occasion released information that was incorrect, for example about the timing of the end of the release.
- 185 Facilities at the MIHQ were inadequate to operate in a suitable manner. There was little space available for work, not enough telephone lines or electrical outlets and no water was provided. Altogether, these shortcomings made for uncomfortable working conditions.
- 186 The Agency's input was limited by the fact that no Recovery Working Group was convened during the day.

#### **MET OFFICE**

#### **Aims**

- 187 The Aims were:
  - a) To test the running of Nuclear Accident Response Model (NAME) and its inclusion onto RIMNET.
  - b) To test the effectiveness of Met Office input into the MoD's NAIAG at Whitehall.
  - c) To exercise communications with other outside organisations.

#### Participation

188 The Environment Monitoring and Response Centre (EMARC) forecaster participated at Met Office HQ, Exeter, giving remote response at both the national and regional level. Additionally, a forecaster participated in national response at the NAIAG.

#### **Good Points**

189 Communications between the EMARC at Exeter and other interested parties appeared to work well.

#### **Lessons Learnt**

190 There would be considerable benefit to the Met Office (and possibly other involved organisations) if there were provision of 'Broadband' facilities within the NAIAG. This would greatly help the duty forecaster called up to the London emergency cell in speeding up access to latest forecasts and updates. These are currently accessed by using normal dial-up facilities via a laptop.

#### DEPARTMENT FOR TRANSPORT - RADIOACTIVE MATERIALS TRANSPORT DIVISION (RMTD)

#### Aims

#### 191 The Aims were:

- a) The scope of the exercise for Day 1 was such that the direct involvement of the DfT was minimal.
- b) The areas of responsibility of the Radioactive Materials Transport Division (RMTD) would be to ensure that all radioactive material (RAM) transported in the public domain was carried out in accordance with legislation relating to the transport of RAM by road, rail, sea or inland waterways. In this exercise such operations were not considered as part of Day 1 and hence the interfacing and communication between the various players and decision makers were not tested in this respect.

#### **Participation**

192 The DfT had a representative in MoD Main Building Whitehall, participating in the central government coordination meetings (NAIAG meetings) on Day 1. In the recovery/remediation phase on Day 2 at Devonport DfT representation was present.

#### **Good Points**

- 193 The arrangements and facilities provided at Whitehall were excellent and we experienced no problems with the computer and telephone links provided. The briefings and information provided throughout the day relating to the incident scene was clearly and concisely provided.
- 194 The briefing meetings held on the day were very informative and provided a focus and clarity to all players. They also demonstrated the effectiveness of all the organisations involved and their clear understanding of their respective responsibilities.
- 195 Day 2, the Recovery phase, was very well organised and well attended in Plymouth. The scope of issues addressed was extensive and therefore the level of detail on occasions was necessarily scant.

#### **Lessons Learnt**

196 The sentencing of any RAM and its subsequent movement would involve the NRPB, who have established links with the DfT and EA on such matters. The linkage between MoD and DfT RMTD is less defined and the issues arising from any intentions of MoD to move RAM in the public domain remain unexplored. This will be pursued separately in due course.

197 It was clear that the immediate response to the incident by the emergency services, MoD and other Government Departments is well defined and effective. It is recommended that the MoD processes for dealing with any contaminated waste arising from their sites would benefit from some exploration as a desktop exercise at some future date.

# DEPARTMENT FOR TRADE AND INDUSTRY

#### Aims

198 To attend HQ NARO to assist MoD with overseas notification arrangements.

#### **Participation**

199 Louise Robson of the Nuclear Emergency Planning unit attended HQ NARO.

# **Good Points**

200 Good organisation and equipment. NARIMS meetings were high quality information fora.

# **Lessons Learnt**

201 The email system was exceptionally slow, which could cause problems in terms of international notifications.