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Committee **CDEM Group**
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 Executive Group

Exercise Phoenix IV – Post-exercise Report

1. Purpose

To inform the Wellington Region Civil Defence Emergency Management (CDEM) Group about the outcome of Exercise Phoenix IV that took place on 25 November 2005.

2. Background

Project Phoenix originally began in 1998 as a joint project between Auckland and Wellington. Participants included:

- Regional councils
- Territorial authorities
- Emergency services
- Health providers; and
- Other response agencies

The main objective of the project was to determine how Auckland could assist Wellington logistically in the event of a large earthquake in order to help it recover from the aftermath.

Phase I of the Project (1999 and 2000) explored what resources Auckland had to offer to the Wellington Region. That culminated into Exercise Phoenix I, a tabletop exercise for organisations in Auckland.

Phase II (2001) was a needs analysis of Wellington's logistics requirements and the role of lifeline utility services. Exercise Phoenix II took place in October 2001 and tested the operational response of lifeline utility services.

Phase III (Exercise Phoenix III in July 2002) was an exercise to test the effectiveness of processes put into place as a result of planning conducted in Wellington and Auckland, but specifically, the management of urban search

and rescue, treatment and movement of the injured and the provision of potable water.

The information gathered from Exercise Phoenix III was used in the preparation of the CDEM Group Plan and also for the update of councils' Standard Operating Procedures (SOPs).

Phase IV of Project Phoenix was to test the functioning of the CDEM Group Plan. Exercise Phoenix IV took place on 25 November 2005 under the direction of the Group Controllers.

3. Exercise Aims and Objectives

It is important that we undertake regular exercises to be able to test the effectiveness of the CDEM Group Plan. The purpose of exercises is to identify shortcomings, so we can make improvements in the future. Phoenix IV was the first opportunity to exercise the CDEM Group Plan.

The aim of Exercise Phoenix IV was to exercise the Wellington Region Civil Defence Emergency Management Group Plan in a Level 4 event (CDEM Group response) under the direction of the Group Controllers.

More than one hundred organisations with roles and responsibilities in emergency management contributed to the preparation of the Group Plan and most of those organisations' operational responses were tested in the exercise.

3.1 Scope of the Exercise

The exercise was based on a major disaster caused by a shallow earthquake measuring 7.5 on the Richter scale along the Wellington Fault with its epicentre located at Petone. The initial earthquake and aftershocks had caused widespread damage.

A state of local emergency was declared by the Chairman of the CDEM Group on 23 November 2005.

The exercise setting was the commencement of the third day and it was of 12 hours duration.

The Wellington CDEM Group territorial authorities were expected to exercise their own emergency operations centres. They were required to make inputs to the Group Emergency Operations Centre (Group EOC) and respond to directives and requests. All participating emergency management services and agencies used the opportunity to exercise their own response facilities.

The Group EOC, under the Group Controllers, conducted operations in accordance with the CDEM Group Plan and standard operating procedures.

3.2 Limitations of the exercise

- 3.2.1 The Group EOC (Hoyt's Room and adjacent offices and meeting rooms on Level 4, Regional Council Centre) will never be used in a major event, e.g. the

'BIG' earthquake. An alternate location will then be used (such as the alternate Group EOC in Masterton, or an unaffected Group EOC, e.g. Palmerston North or Napier). However, the current Group EOC is operationally fit for 95-97% of all other emergencies.

- 3.2.2 For the purposes of the exercise the assumption was made that the Group EOC was still intact and that the Group Officers and volunteers could operate from there.
- 3.2.3 Phoenix IV was carried out to test the systems and processes applied in the Group EOC, rather than the physical working of the Group EOC.
- 3.2.4 The timeframes for the exercise were unrealistic, but necessary for the purposes of the exercise.
- 3.2.5 The exercise was confined to the response phase of post-disaster assistance and did not deal with the longer term recovery and reconstruction phase, apart from being the base for recovery planning considerations.

3.3 Assessment process

The control staff appointed comprised an exercise director, an exercise co-ordinator and six umpires from the Wellington Region CDEM Group, Manawatu-Wanganui CDEM Group, Hawke's Bay CDEM Group, Marlborough CDEM Group, and the Ministry of CDEM. The Group EOC also accommodated about 30 observers from different organisations, such as the National Transport Cluster, Department of Corrections, Transit, Lifelines utility services, consultancy agencies, etc.

The work of the control staff principally evolved around the control of the exercise. They specifically ensured that it was conducted within the parameters of the objectives, the scenario and the master sequence schedule. Their task was to evaluate the effectiveness of the exercise and to identify any management and organisational issues for future corrective action.

So that the CDEM Group could learn from the exercise, it was important that critical issues were recorded. The following forms and logs were used during the exercise and retained for later analysis:

- Exercise Report – was completed by each Control staff member commenting on meeting the aim of the exercise and how the objectives were practiced.
- Group EOC Observation Sheet – a summary sheet relating to the organisational layout and systems within the Group EOC, was completed by control staff during each shift.
- Key Event Response forms – were used to monitor key messages listed in the master sequence schedule or designated by the Exercise Co-ordinator. Details of the event and response actions were noted.

- Problem Logs - were used by Group EOC staff including life lines co-ordination, and liaison staff, to identify problems in exercise responses as they occurred.
- Exercise Survey form – a personal form completed by all exercise players at the end of their shift. Its purpose was to provide those personnel not attending the formal debrief or those unwilling to contribute to group discussions, an opportunity to identify problems they observed during the exercise.

3.4 Assessment areas

The exercise objectives were aimed at assessing the following CDEM activity areas:

- The co-ordination of regional civil defence welfare.
- The co-ordination of Lifelines restoration – based on the Protocols for Lifelines Response.
- Information and media management.
- Resource management (logistics, external supply, etc).
- The interrelationship between the Group Emergency Operations Centre (Group EOC) and local emergency operations centres (EOCs), the Ministry of Civil Defence Emergency Management (MCDEM) and the role of the Emergency Services and other emergency organisations in a Level 4 emergency.
- The operating procedures of all participating organisations.

4. Key findings of the exercise

The exercise highlighted a number of strong points but also revealed a few important ‘weak-spots’. Examples of both are highlighted below:

4.1 What went well

- Participation in the exercise far exceeded expectations. All the territorial authorities, the emergency services (Police, Fire, Health, Regional Public Health, Ambulance), government departments (Transfund, Department of Prime Minister and Cabinet, Department of Corrections, Ministry of CDEM, etc.), Transit, other CDEM Groups, lifeline utility services, welfare organisations, the media (radio, print and TV), consultancy agencies and others (e.g. Wellington International Airport) took part in the exercise. Some of these organisations exercised for two full days and then joined in on day 3 of Exercise Phoenix IV.
- The exercise was designed to bring some realism to the fore. The Institute of Geological and Nuclear Sciences verified the scene setter as very

realistic and something that we could expect in a real event. The realism enabled the Group Office to identify a number of areas for improvement

- The volunteer staff were commended for their excellent role playing ability. Umpires and observers (and the media) were impressed with how the staff brought reality into play.
- The umpires and observers collectively pointed out that the exercise was a very productive and well-run event – some classed it as an ‘excellent’ exercise.
- The Group Office achieved the objective of the exercise – identifying gaps and areas for improvement.
- The exercise successfully covered all six assessment areas.
- The application of the Co-ordinated Incident Management System (CIMS) worked well.
- Measures for reception of staff, visitors, etc. and security were assessed as very good.
- The co-ordination of Lifelines restoration was the most successful area in the Group EOC. The Group Lifelines Co-ordinator was in a position to provide direction in managing the co-ordination of information regarding lifelines services. This desk also had adequately trained staff.

4.2 What did not go so well

During the assessment of the exercise objectives several gaps and areas for improvement were identified.

4.2.1 Group EOC staff.

Normal staff turnover is a core problem when using volunteer staff and this was demonstrated in the inadequate number of staff available for the exercise.

A good training programme is in place for Group EOC volunteer and other staff, but staff turnover caused those present for the exercise to be at different levels in knowledge and skills in emergency management. The majority of the staff has never been involved in an exercise of this magnitude.

It was difficult for some staff to familiarise themselves with their respective roles and responsibilities and also to understand the emergency management environment in which they had to play their roles. Experience and knowledge of the processes and activities that would be used in an actual event are critical for an effective response.

It must be appreciated that tabletop exercises are notoriously difficult for volunteer staff because there is a reliance on the individual to adopt the realism that the scenario provides.

Mostly inexperienced staff started the exercise. They were bombarded with information, and as they established some grip on their roles, they had to leave due to a rostered shift change.

4.2.2 The co-ordination of regional civil defence welfare.

There was uncertainty about this role and only one staff member per shift was allocated to the role. Welfare is normally delivered at the local level; this was the first time that welfare has been addressed at a Group level. Welfare information was obtained from the Territorial Authorities (TAs) and displayed on the white boards in the Group EOC.

4.2.3 The co-ordination of Lifelines restoration – based on the Protocols for Lifelines Response

The high volume of information flow (messages) contributed to situation reports not being prepared on time, thus delaying dissemination of information to the other role-players and hampering the process for the preparation of media releases.

4.2.4 Information and media management

Expectations were set too high for the management of media releases (an hour after each shift change), media interviews (an hour after each shift change) and publication and updating of information on the Group website (hourly).

The Public Information Management Office was also cramped which caused disruption to the management of information (media planning, website management, etc). The infrequent release of situation reports containing inadequate information caused a backlog from which the information and media management desk could never really recover.

4.2.5 Resource management (logistics, external supply)

Some staff were overwhelmed with work, for example, the logistics desk.

Only one person per shift could be made available for logistics. This desk tried in vain to get a system up and running, using displays on the white boards, trying to keeping track of financial expenditure and trying to obtain the required equipment, material and other resources as they were requested by the TAs.

4.2.6 The interrelationship between the Group EOC and local emergency operations centres, the Ministry of CDEM and the role of the emergency services and other emergency organisations in a Level 4 emergency.

Although all of these organisations participated in the exercise, difficulties were experienced in communicating to them. Without fax and internet services (email) on the day the Group EOC could not operate a positive information flow (with information coming from them to the Group EOC and vice versa). Only two radio telephones were in use which put immense pressure on the operators. The taking of unnecessary information further clogged the system.

4.2.7 The operating procedures of all participating organisations.

All emergency management agencies have their own standard operating procedures. These procedures were put into play during the exercise.

At the Group EOC level there was some difficulty in applying standard operating procedures, especially in the field of welfare.

The Group EOC also struggled to get situation reports out on time which led to delays in other areas (lifelines co-ordination, information and media management, and communication of information to other role-players). They also lacked in the area of strategic planning that should be prevalent at the Group level.

A paper-based system for managing this event was used (no electricity, phones, fax, internet, etc.). A paper-based system is slow, it is difficult to keep track of messages and mistakes can occur very easily. In a major event this may be the only system that can be used, so it was necessary to exercise the paper-based system.

4.2.8 The Group EOC facility

The Group EOC was too small for the number of people in the room and Police, Fire Service and Health staff were not able to be accommodated in the main room.

The liaison room was too small to accommodate the emergency services (Police, Fire, and Health) and it lacked essential communications facilities such as radio antenna connections for Police and Fire Service, and an insufficient number of external phone jacks and data connections.

The 'Group EOC complex' (offices and facilities) restricted the efficient flow and link-up between the different role-players and the emergency operations centre.

The duty Group Controller was stationed in the office of the Manager Emergency Management. This office proved too small to accommodate all the desk managers and liaison officers (up to 12 people at a time) when in a meeting with the Group Controller.

The communications room (because of its location) was used as a thoroughfare between the Operations Centre and the Group Controller Office, the Public Information Management Office, the Lifelines Co-ordination Room, and the Liaison Officers Room. This created immense disruption to the operators with the additional noise and made it an extremely difficult working environment in an area where concentration and listening are vital.

The information that was displayed on the white boards and maps did not contribute to an overall understanding of what was happening across the Region. It was difficult to gather a "big" picture from the displays.

The technical equipment used by Emergency Management, such as radios, fax machines, photocopier, and other equipment are all nearing their 'use-by' dates. Although still in working condition at the start, during the course of the exercise both fax machines and the photocopier broke down.

In the formal debriefings and in some of the consequent activity reports, participants (internal and external) identified the limitations of existing alternate communications, particularly when the fax machines were not operational.

4.3 Opportunities for improvement

Overall the exercise achieved its objectives. The majority of the 'weak' spots that were identified can be rectified relatively easily. However, the following areas need more work:

4.3.1 Training

Problem: All emergency management staff (including volunteer staff) needs better and more specialised training.

Response: A Professional Development programme has been adopted which includes mandatory minimum levels of training for council staff volunteers, controllers, recovery managers and other emergency management staff as well as addressing recruitment and retention issues of Group EOC staff.

Volunteers and other staff are already attending CIMS courses and specialised training in Group EOC functions (including getting the volunteer staff familiarised with our standard operating procedures).

4.3.2 The Group EOC

Problem: Communication and information management systems currently in use are ineffective and are difficult to apply during the management of emergencies. These systems need improving.

Response: The facilities, resources and arrangements of the Group EOC need to be reviewed to meet the required standards for Emergency Operations Centres as set out in the Wellington Region CDEM Group Plan. The CDEM Group Plan makes provision for an audit of all emergency operations centres to be carried out in the 2007/8 financial year.

Greater Wellington is in the process of considering the implementation of an electronic information management system for the Group EOC, the implementation of an alternate communications system (handheld satellite phones), and the installation of an additional radio repeater to cover the area from Otaki to Wellington.

4.3.3 The Group EOC standard operating procedures

Problem: During the exercise there was uncertainty about the Group's role in the welfare function while we also experienced some difficulties with information and media management.

Response: The draft CDEM Group Welfare Plan has just been adopted by the Welfare Advisory Group which will bring more clarity to the welfare role.

Issues with information and media management are being addressed in the CDEM Group Information and Media Management Plan which is currently under development.

The Group EOC standard operating procedures are updated on a regular basis to ensure the smooth functioning of the EOC.

5. Conclusion

The exercise was valuable because it identified shortcomings. There is no doubt that not having a dedicated Group EOC is a problem and is something that the Group may want to give attention to in the long term.

Events such as the major earthquake, major flooding event and a major tsunami may require an alternate location to operate from. To address this issue an alternate Group EOC is being established in Greater Wellington's Masterton office. The Group EOC could also function from another Group EOC (e.g. Palmerston North, Napier, etc.). Memoranda of Understanding with such EOCs are already in place.

It was discussed at the CEG meeting that a structural review of the Wellington Region CDEM Group is timely (*refer to Report 06.145*).

Core levels of understanding and knowledge of CDEM to fulfil the regional co-ordination function are currently not at a satisfactory level, but this is presently being addressed through a robust and effective training programme.

Greater Wellington is considering several technological advances that would render the Group EOC much more effective and efficient. The capability and capacity of the Group EOC is of utmost importance.

However, there were also huge spin-offs from this exercise. For months prior to the exercise, participating organisations were working together in their exercise planning and the updating of operating procedures and response capabilities. Valuable relationships were either built or strengthened during this process.

6. Recommendation

That the CDEM Group:

1. ***Receive the report; and***
2. ***Note the contents.***

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