



Evaluation Report Exercise Marconi June 2007

Auckland Engineering Lifelines Group

in association with the

Auckland Civil Defence Emergency Management Group

Prepared for:
Auckland Engineering Lifelines Group

Prepared by:
Steve McDowell, Director
Emergency Planning Limited (EPL)

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List of Acronyms

ACDEMG	Auckland Civil Defence Emergency Management Group
AELG	Auckland Engineering Lifelines Group
CDEM	Civil Defence Emergency Management
EOC	Emergency Operations Centre
GEOC	Group Emergency Operations Centre
LUC	Lifelines Utility Coordination
LUCC	Lifelines Utility Coordination Coordinator
NLC	National Lifelines Coordinator
MCDEM	Ministry of Civil Defence Emergency Management

1 Executive Summary

Exercise Marconi was designed to test the lifeline utility coordination (LUC) processes in the Group Emergency Operations Centre (GEOC) through escalating levels of emergency (culminating in a Group Declaration) and to assess the lifeline utility interface with the GEOC.

Specifically, the focus was on communications and information transfer between lifeline utilities and the ACDEMG (Auckland Civil Defence Emergency Management Group) GEOC, and processing within the GEOC during the response phase of a regional-scale emergency.

The exercise scenario was based on a major impact cyclone hitting Auckland with widespread damage resulting from it.

The ACDEMG GEOC was activated as part of the exercise and a significant range of Utilities participated from their own sites (refer Appendix A for the list of participating agencies). The key focus of the exercise was the operation of the LUC process within the GEOC.

Participants at the cold debrief on 13 June 2007 made reference to the overall theme of the exercise and noted that the exercise overall was an excellent opportunity to test systems, processes and communication. It was well planned, participants demonstrated a high level of energy and activity, and provided very constructive feedback.

The overall evaluation conclusion is that the exercise aim and objectives were achieved as described in the report.

Key observations included the following:

- The exercise was well planned and managed
- The key documents (Priority Infrastructure Sites and Routes/Lifeline Utility Response and Recovery Protocols) were very useful although some changes are proposed
- Methods of communicating are well understood but there are gaps that need to be reviewed
- Decision-making by the Lifeline Utility Coordination Coordinator (LUCC) and Utilities was clear, with a strategic focus and generally well thought through.

The key recommendations of the evaluation report relate to:

- The need for ongoing development of the sector through workshops and exercises
- Improvements to communication methodology and systems
- Improved tracking and monitoring of data including support for an integrated electronic information management system
- Review the manner in which Lifeline Utilities are coordinated in terms of sector representatives within the LUC team
- Review of aspects of the Priority Infrastructure Sites and Routes/Lifeline Utility Response and Recovery Protocols
- Suggestions relating to the set up of the new GEOC to facilitate the operation of the LUC Team with the Planning and Intelligence Team

- A review of media management processes with and between the Utilities and the Group Public Information Manager

Finally, the AELG in conducting Exercise Marconi in conjunction with the ACDEMG has undertaken one of the very few exercises for evolving the LUC model which will assist other regions in their development, and indeed nationally.

2 Introduction and Evaluation Methodology

2.1 Introduction

During 2006, lifeline utility co-ordination procedures within the ACDEMG were developed.

The learnings from recent Group EOC exercises including Exercise Jaffa, Exercise Pacific Wave, and Exercise Capital Quake have helped in the development of the LUC protocols and the GEOC operation.

The purpose of staging Exercise Marconi was to review the LUC processes in Auckland. The exercise scenario to test these processes was based on a severe cyclone event occurring in Auckland in the early hours of Friday 8 June 2007 causing a widespread and prolonged power outage with uncertain times for service restoration.

The details of the exercise scenario are set out in **APPENDIX TWO**.

This was a distributed exercise held on Friday 8 June 2007 with each of the participating organisations operated from their premises. The focal point for the exercise was the ACDEMG GEOC based in the first floor of the Bledisloe Building.

The staging of the exercise was a joint initiative between the ACDEMG and the Auckland Engineering Lifelines Group (AELG).

The Kestrel Group provided the overall exercise development and control.

The aim and objectives for the exercise were:

Aim

The aim of the exercise was to focus on **communications** and **information** transfer between lifeline utilities and the ACDEM Group EOC, and **processing** within the GEOC during the response phase of a regional-scale emergency event.

Objectives

1. To review LUC processes in the GEOC through escalating levels of emergency (culminating in a Group Declaration)
2. To assess the lifeline utility interface with the GEOC

The exercise was designed to evaluate:

- The type of information being provided in and out of the GEOC,
- The method of communicating information
- The approach to prioritising utility restoration

The exercise was also intended to provide an opportunity for:

- Utilities to test their own Emergency Response Procedures during an escalating emergency resulting in a Group Declaration.

- The GEOC to test how the LUC role fits in with, and is supported by, the overall GEOC structure.

The exercise was managed at three levels being:

- The GEOC processes
- The GEOC to Lifeline Utility Interface and LUC procedures.
- Lifeline Utility Emergency Response Procedures.

The commencement of the exercise was based on a 'warm' start with the Lifeline Utility Co-ordination function already established in the GEOC. Initial notification and activation of GEOC were not exercised.

The role/teams that were functional within the GEOC during the exercise were:

- Group Controller
- Operations Team
- Lifelines Utility Coordination
- Planning and Intelligence Team

All other GEOC Teams were represented by Team Managers which were:

- Welfare
- Recovery
- Public Information
- Finance
- Liaison

The reference documents for the exercise were:

- ACDEMG LUC Response and Recovery Protocols
- GEOC operating procedures.
- AELG Priority Infrastructure Sites and Routes Version 3
- Previous exercise reports – Jaffa, Pacific Wave, and Capital Quake

2.2 Methodology

The methodology to develop the evaluation report included the following elements:

- Review of the pre-exercising briefing materials and attendance at the pre-exercise briefing on Thursday 31 May 2007
- Review of the coordinating instructions
- Attendance at the GEOC on the day of the exercise and observation and evaluation of the GEOC operation
- Use of consolidated evaluation form that provided evaluation on general processes in the GEOC and other EOCs; lifeline utility coordination; lifeline utility interface; overview of the LUC function and the Response and Recovery Protocols; decision-making
- Facilitation of the "hot debrief" at the conclusion of the exercise and review of participant feedback forms from both the GEOC and Utilities operating from their own sites
- Facilitation of the "cold debrief" on Wednesday 13 June 2007 and review of the materials gained from that debrief

The draft evaluation report was reviewed with the Project Manager following which the report was presented to the Project Committee to receive feedback leading to the finalisation of the report.

This report is the final version of the evaluation report.

3 Exercise Evaluation

3.1 Introduction

Overall the exercise aim and objectives were met, a range of processes confirmed, and a range of important learnings were gained from the exercise.

The context of the evaluation report recommendations are set against an introductory comment at the formal debrief meeting on 13 June 2007 from the Chair of the AELG, Kevin Loasby, in relation to the outcomes of the exercise which were:

- “Would we be able to do the things we said we would do?”
- “Would we be where we said we would be?”

The range of opportunities for participants to contribute thinking via the hot and cold debriefs, the participant feedback forms, and through individual Utility debriefs resulted in a comprehensive amount of data for post-exercise evaluation purposes.

One quote from the debrief process was that the exercise was “very good to broaden the lifeline experiences”.

The exercise has enabled Utilities to test their own response plans and take key learnings into future planning. Individual utilities benefited from a learning experience for their crises teams on what to expect in a CDEM event.

The evaluation report discusses areas of achievement and provides recommendations in relation to areas for further consideration.

The overarching themes identified from the evaluation process is set out as follows:

Theme One - type of information being provided in and out of the GEOC

Utilities understand the importance of accurate information based on the key requirements contained in the Lifeline Utility Response and Recovery Protocols and the Priority Infrastructure Sites and Routes document.

Future workshops and exercises could be considered to enhance the capability of LUC, Utilities and the GEOC to improve the understanding of information requirements between each other.

Theme Two - method of communicating information

Methods of communicating information are well understood but there are a range of areas that need further development and testing including:

- Technical communication mechanisms (e.g. radio telephones, emails systems etc)
- Situation report templates and processes
- Clearer protocols for Utility-to-Utility communication

Theme Three - Approach to prioritising utility restoration

The Priority Infrastructure Sites and Routes document provides a sound basis for utility restoration management. The LUC function within the GEOC provides a very important role in assisting overall priority management and coordination with other CDEM sectors for integration of resource management leading to response decisions.

3.2 Exercise Arrangements

Positive feedback was received in relation to the exercise development, management, briefings and control in the lead up to and during the exercise.

The pre-circulation of various iterations of the exercise coordinating instructions, participant lists and contact data indicated some level of confusion with the various versions released. It is important that participants are able to provide input into each new version of these documents as well as being able to use them for individual Utility briefing processes. However a significant number of respondents indicated satisfaction with the content and process of the information.

The exercise would have benefited from Police participation although it is acknowledged that Police participation was not considered to keep the GEOC staffing to the minimum. Future utility-based exercises should consider the inclusion of the Police to participate in exercises.

In terms of the flow of information/injects during the exercise the level of information and complexity of information was appropriate for the exercise. One more inject at about 1100 hours could have assisted the exercise to keep momentum going from a Utility perspective. The LUC function had more than enough information/injects and analysis requirements to keep momentum so this point is not a significant issue.

A participant comment was that the “team felt it was a great use of their time” which assists in confirming the quality of the exercise arrangements.

3.3 LUC Procedures and Structure

The exercise has confirmed the important role that lifeline coordination plays in the GEOC (reference section 1.2 Auckland Lifeline Utility Response and Recovery Protocols 05/06/07) and in particular disruption and response analysis, information distribution, and advocacy for utilities, and decision-making support within the GEOC particularly to the Group Controller.

The following matters relate to the operation of the LUC in the GEOC during the period of the exercise, and the way in which the LUC functions are structured.

Procedures

Information management procedures used by the LUCC during the exercise highlighted a number of process matters that should be reviewed for improvement as follows:

Email

Email is the first method of communication for reporting (Section 2.4 – Auckland Lifeline Utility Response and Recovery Protocols 05/06/07). It is noted that all Utilities received the first email message from the LUCC but that as the exercise proceeded there was insufficient time within the LUC to check that all emails were received by each Utility.

There were a number of examples during the exercise where emails were sent but not received, which caused confusion, delays and time wasting. Options for ensuring email management should be reviewed to ensure that this channel of communication is effective including issues for administrative resourcing to manage the email process.

Declaration

The release of the declaration of a state of emergency information from the LUCC to Utilities did not occur until 30 minutes after it was made because the LUCC was in a Group Controllers meeting. This information is critical to all parties and the release of a Group Declaration needs to be streamlined so that it does not require individual releases by various parties in the GEOC.

Situation Reports (SITREPs)

The SITREP template based on that contained in the Lifeline Utility Response and Recovery Protocols made SITREP reporting from and to Utilities standard, easy to read and Utilities knew what to report on.

All participants in the exercise had some difficulty in identifying new from old information in the SITREPs as they were developed during the exercise. Reviewing the LUC SITREP form to improve new issue identification and new requests for support will improve the process.

In addition SITREPS need to be clearer on service impact descriptions. This could be built in to planning for the next exercise involving Lifeline Utilities.

The LUC function within the GEOC at times was overwhelmed with information to analyse for SITREPs and under time pressure to produce impact assessments and SITREPs. It is acknowledged that the exercise required the production of 2 SITREPs within 2 hours of each other. The recent Northland floods have demonstrated the use of Conference Calls every 2 hours to support the formal SITREP process. Use of conference calls (Lifeline Utility bridges) is addressed in the report recommendations.

The key point to emerge from the SITREP process was the need to have one person dedicated to receiving, collating and distributing information to those that needed to action various matters – the integration of this support is addressed in the recommendations in relation to the Planning and Intelligence Team functions within the GEOC.

Participants commented very positively overall that the flow of information from LUCC to Utilities was generally timely and of value. For example the Incident action plan produced by LUCC was very useful to Utilities.

Tracking incoming requests

Requests to the LUCC for information were not all completed and responded to (e.g. Telecom, Vodafone). Chevron specifically commented on the confusion within LUC team on the delivery of tanker fuel from Whangarei, which resulted in confusion.

This process needs to be reviewed and a system to catch and monitor requests put in place. The development and implementation of an integrated (cross sector) electronic information management system would significantly improve this matter and has been included in previous exercise recommendations for further consideration.

A number of participants sought clarification on the role of the National Lifelines Coordinator (NLC) and the process that the NLC takes in an event when a Group is dealing with an event.

This point has been clarified in that the NLC has no operational role. It is a position that covers the reduction and readiness phase. It would be useful to clarify who is the national point of contact for the co-ordination of Lifeline Utilities at a national level (agency and individual), and what are the triggers for their activation.

It would be helpful to include this information in the Auckland Lifeline Utility Response and Recovery Protocols.

Structure

The positioning of a representative from the Water Sector Group within the LUC team in the GEOC provided an important direct link to that sector as well as an important resource for the LUCC to draw on.

As part of the debriefing process a suggestion has been promoted for further discussion that Sector representatives within the LUC team be appointed for telecommunications, energy and transport.

If this were to occur the concept of the LUCC role should be reviewed, as the intent of the LUC role is to represent all utilities (and sectors) with out drawing on additional staff from Utilities (see section 1.3 Auckland Lifeline Utility Response and Recovery Protocols). This matter needs further consideration by the AELG.

3.4 LUC and GEOC Integration and Support

Overall the lifeline utility interface with CDEM via the GEOC received very positive feedback from the debrief process and as evidenced by observation during the exercise on the collaborative approach within the GEOC environment by the LUCC and all GEOC staff.

The Auckland Lifeline Utility Response and Recovery Protocols specifically address the support in information management that the GEOC via the Planning and Intelligence team can provide to the LUCC (see section 1.3 Auckland Lifeline Utility Response and Recovery Protocols).

The resources to be provided to the LUCC in the GEOC include dedicated phone line, dedicated email address, GIS facility with staff support, hard copies of AELG – 5 AELG Priority Infrastructure Sites and Routes and utility maps, and administrative support for the LUC (principally via the Planning and Intelligence team).

The cooperation and collaboration between the LUCC and the Planning and Intelligence team during the exercise was excellent. It needs to be recognised that the manager of the Planning and Intelligence team was the only role activated for that team on the day so was not able to provide the “full” resource to the LUCC.

The LUCC and the Planning and Intelligence Manager should review the range of support to be provided to the LUCC (as set out above) to confirm that it is appropriate and can be achieved.

More integration of analysis activities between the LUCC and the Planning and Intelligence team could improve efficiency and effectiveness. Both teams were dealing with the same data and information on a number of occasions during the exercise. Streamlining information analysis between the two teams could result in better analysis and more effective use of extremely limited time.

Producing SITREPs by the LUCC requires a high level of resource. This process can divert the LUCC and other staff from analysing information and advising the Group Controller and other managers in GEOC on Lifelines related intelligence, issues, priorities and options. Collaboration on developing SITREPs between the LUCC and the Planning and Intelligence Team could streamline this process.

The final point in this section relates to the capacity of the LUC function to be able to operate the role over an extended event for a period of days. The method of coverage for an extended period of days within the GEOC environment should be specifically reviewed in terms of the coverage set out in section 1.3 of the Auckland Lifeline Utility Response and Recovery Protocols (principal alternate LUC, additional backup, and national pool of LUCs) and whether this will be sufficient coverage.

3.5 Information processing

Information and transfer were specifically identified in the aim of the exercise for measurement.

As referenced in other parts of this section, the LUCC (and indeed the GEOC and individual Utilities) came under heavy pressure to process and analyse information. Overall, the level of information processing was appropriate subject to a number of suggestions contained in section 3.3 above and as detailed in this section.

The key positive points include:

- Good levels of questioning how information was being analysed was evident
- “Hot team” meetings called of key staff within the GEOC to undertake quick evaluation of issues
- Good examples of concentrating on strategic impacts and future impact issues e.g. “Managing for four days” was evident

Areas for review include the following matters:

SITREPs – Utilities to ensure they clearly identify themselves on the SITREP form

Local versus regional priorities were not always clear in reports of damage or requests for support. This includes the separation of local and regional issues at sector level.

Information provided by Utilities to the LUC – the exercise demonstrated the need to clarify what information Utilities should be sending to the LUC – the expectation is for all utility information to be provided to the LUC, which can result in minor information of little value/interest to the LUC taking valuable time for processing.

Local roading information particularly that was being processed by local authorities needs to be incorporated in to the LUC overall roading information system. The Planning and Intelligence team, LUC and the transport sector needs to review the level of local roading information needed and how that information should be provided through the GEOC/LUC to Utilities.

3.6 Documentation

Lifeline Utility Response and Recovery Protocols

A number of references in other section of this report have addressed the Lifeline Response and Recovery Protocol which overall provided a clear and appropriate process for response. It is noted that the recovery section was out of scope for the exercise.

Including the activation of the Emergency Services in conjunction with Utilities to coordinate response actions within the protocols was proposed at the debrief and is supported for further consideration

AELG Priority Infrastructure Sites and Routes

The LUC team frequently referred to this document during the exercise, and with sectors/individual Utilities. Overall it is considered that the document provided quality priorities and direction during the exercise. The use of the document for example by Vector to prioritise power allocation demonstrated the documents value.

However, the document could have been referred to earlier in the exercise by a number of participants (in fact as soon as data was being received). The point at which the document should be activated (levels of triggers) could be incorporated in to it.

The accessibility to Appendix A – Critical Community and Lifeline Utility sites – was and is difficult and the method in which this information is displayed needs to be reviewed.

A number of operational matters were identified during the exercise and are noted here:

Fuel – If the exercise went much longer, fuel would have been the major issue to be confronted by all participants and in particular the fuel sector in terms of rationing and distribution.

Traffic light data from Traffic Control (in relation to what was working and what wasn't) and information from inner city CCTV to identify traffic impacts was needed. This could be developed in to a protocol for traffic intelligence in relation to supporting the use of priority routes.

A question that arose in the debrief process was whether there is any protocol for "policing and enforcing" priority routes – this matter should be referred to the transport sector group for review.

The addition of key welfare sites to the list of critical community and lifeline sites in the AELG Priority Infrastructure Sites and Routes should be considered as part of the overall welfare requirements that will need power, for example.

3.7 Communication Processes

Overall communication processes were clearly set out but a number of technical matters impacted negatively on the exercise. Those technical matters are set out in section 3.8.

There were a number of general communication matters that were raised in the exercise and these are addressed as follows:

Communication from utility to utility does not need to go via the LUC for every detailed piece of information. A clearer understanding needs to be developed on information that should be sent to the LUC. Existing arrangements should be reviewed for when utilities should contact each other direct for operational matters and confirm the protocol when LUC needs to be utilised.

The Lifeline telecommunications audio bridge was a success and should be developed in to a protocol for other sectors (energy, water and transport) to use.

Including the LUC Team on any audio bridge would streamline information sharing and understanding.

Improvements to the audio bridge concept include the management of process for the audio bridge with an identified chair and set agenda, and each speaker to identify who they are prior to speaking.

One key issue that emerged was the breakdown in email contact for example Vector was not receiving emails. Where Utilities are not receiving information for whatever reason, it is important that they contact the LUC or the GEOC to confirm that information "has dried up" or to confirm contact details.

If the email system is not working utilities should seek alternate communications channels. This point should be incorporated in any communication protocol that is developed.

An excellent example of innovative alternate communications demonstrated during the exercise involved Transit who sent a runner as an alternate communications mechanism.

3.8 Communication – Technical Matters

The communications check for radiotelephone and satellite phone operation was not successful. It is proposed that a full test of the radiotelephone and satellite phone operation be undertaken outside of an exercise situation before another exercise is held.

It is noted that the Telecommunications industry is investigating restricting access for general consumers to email to enable utilities and essential services priority (national process). The report recommendations request a report back on progress of these investigations.

3.9 GEOC equipment and layout and processes

It has been clearly demonstrated in the past that staff within a GEOC situation dealing with a real event or in an exercise environment function effectively if the people involved know each other. The exercise produced clear evidence of good working relationships and knowledge of the personnel in the GEOC and within the LUC and utilities, which lead to quality decision-making.

Whilst the exercise did not test the current GEOC layout and equipment, it did nevertheless provide an opportunity to consider a number of matters in relation to the design and layout of the new GEOC in the basement of the Auckland Regional Council offices in Pitt Street.

The following matters are proposed for consideration in the design and layout of the new GEOC:

- The LUC and Planning and Intelligence Teams need to operate closely so should be co-located in the new GEOC.
- The Group Controller, Planning and Intelligence Team and the Public Information Manager need line of site to display boards, maps and other reference material such as utility status boards.

Other matters in relation to the GEOC operation include:

- Declaration – the new checklist developed since Capital Quake was used which improved the process leading to the declaration because the Group Controller addressed specific declaration requirements.
- Ensure that the log on for each computer in the GEOC is operational (the Public Information Manager's log on was not working). Note – each manager should be responsible for testing the equipment and ensuring that relevant materials, references and data are in place prior to any exercise. This could include a dummy-run the day before an exercise for example.
- The exercise has reinforced recommendations from previous Group exercises that support the development of an integrated electronic information management system to improve message and data handling, processing and analysis and reporting within the GEOC, and ideally across the sector.

3.10 Media Management

The process for managing media releases between individual Utilities and the Group Public Information Manager is that press releases copied to each other after they have been released. There is a potential for this process to lead to releases not being coordinated prior to their release. The result could be that differences between Utilities and/or the Public Information Manager are managed after releases are made rather than before they are issued, resulting in confusion and potential poor reputation impacts individually or across the sector.

It is recognised that individual Utilities want to and should have control of media management in relation to their sphere of responsibility. However in a disaster situation the need to coordinate media management across the entire CDEM and Utility sectors will be critical.

Accordingly it is proposed that a review be undertaken of media management for Utilities and the Public Information function of the GEOC, perhaps leading to the development of a formal protocol.

The final matter in relation to media management is whether the media should be invited to participate in future exercises to bring their perspectives out in relation to media and community information.

3.11 Future Training and Development

Two points that emerged during the debrief process included the need for ongoing training and development.

Utilities were encouraged at the formal debrief to continue to educate their staff on CDEM processes leading up to and responding to any event.

Secondly, ongoing training/workshops for staff who will be in the GEOC (LUC and other GEOC roles) should be developed outside of exercise conditions to improve capability during exercises – and in particular to build important working relationships.

3.12 Business Continuity

Whilst outside of the scope of the evaluation, the use of business continuity management principles and plans clearly needs to be in place to support each utility to respond to varying levels of emergency.

The exercise did provide the opportunity for Utilities to test their own Emergency Response Procedures during an escalating emergency resulting in the Group Declaration.

Reviewing and further refining business continuity plans by Utilities and Councils as a result of this exercise is considered good practice.

4 Recommendations

1. Exercise Achievement

That the success of Exercise Marconi be noted in relation to the effective communications, information transfer and information processing.

2. Exercise Arrangements

That the quality of the exercise arrangements be noted, and confirm the practice of pre—circulating each version of the coordinating instructions participant lists, and related materials to ensure accuracy and clarity of information for participants in the lead up to an exercise.

3. Exercise and Workshops

That further consideration be given to an ongoing programme of exercises and workshop for the LUC, Utilities and GEOC to foster collaboration, process understanding and relationship development.

4. Exercise-Specific Recommendations

That the following process, system and organisational matters be considered:

4.1 To ensure that the email delivery and receipt process is effective options for ensuring email management should be reviewed to ensure that this channel of communication is effective including issues for administrative resourcing to manage the email process.

4.2 That the ACDEMG consider the establishment of one consolidated email list for the distribution of any declaration decision as soon as that decision is made to ensure that all agencies/utilities receive the declaration information as soon as possible.

4.3 That the Situation Report process be reviewed in terms providing within the form a clear means of identifying:

- New from old information
- New issue identification and new requests for support.
- Service impact descriptions

4.4 That a review of the process operated by the LUC Team in conjunction with the Planning and Intelligence Team for receiving and monitoring requests from the GEOC or Utilities to ensure they are tracked, actioned and responded to, be undertaken.

4.5 The previous exercise recommendations for the ACDEMG in relation to the development and implementation of an integrated (cross-sector) electronic information management system be supported.

4.6 That clarification be sought on who is the national point of contact for the co-ordination of Lifeline Utilities at a national level (agency and individual), and what are the triggers for their activation.

4.7 That the concept of sector representatives within the LUC team (such as provided for the water sector) be further explored for the telecommunications, energy and transport sectors, but noting that if this were to occur the concept of the LUCC role should be reviewed, as the intent of the LUCC role is to represent all utilities (and sectors) without drawing on additional staff from Utilities (see section 1.3 Auckland Lifeline Utility Response and Recovery Protocols). Given the acceptance of 4.4 that the LUC team is sized sufficiently to have sector coordinators for telecommunications, energy and transport (see p10 Structure paragraph 20) that those coordinators join the audio conferences identified in Recommendation 4.15.

4.8 That the LUCC and the Planning and Intelligence Manager review the range of support provided to the LUCC to confirm that it is appropriate and can be achieved.

4.9 That the method of coverage for the LUCC role for an extended period of days within the GEOC environment be specifically reviewed in terms of the coverage set out in section 1.3 of the Auckland Lifeline Utility Response and Recovery Protocols (principal alternate LUC, additional backup, and national pool of LUCCs) and whether this will provide sufficient coverage.

4.10 That a review of the information that should be provided by Utilities to the LUCC be undertaken to clarify what information Utilities should be sending to the LUCC – the expectation is for all utility information to be provided to the LUCC, which can result in minor information of little value/interest to the LUCC taking valuable time for processing.

4.11 That the Planning and Intelligence team, LUCC and the transport sector review the level of local roading information needed (particularly that being processed by local authorities) and how that information should be provided through the GEOC/LUC to Utilities.

4.12 That the Lifeline Utility Response and Recovery Protocols be reviewed in terms of incorporating the activation of the Emergency Services in conjunction with Utilities to coordinate response actions.

4.13 That the following matters be reviewed in terms of the AELG Priority Infrastructure Sites and Routes:

- Review when the document should be activated in terms of active use by Utilities and the GEOC when the response phase is underway and incorporate that activation process and timetable within the document.
- That the process to access Appendix A – Critical Community and Lifeline Utility sites (which was and is difficult) and the method in which this information is displayed be reviewed. The results of this exercise should be used as reason to expedite any regional project that examines the use of GIS in combining data about incident, utility and welfare priority sites and routes.
- That the availability of Traffic light data from Traffic Control (in relation to what was working and what wasn't) and information from inner city CCTV to identify traffic impacts be investigated for use by the LUC Team. That this information be considered for development in to a protocol for traffic intelligence in relation to supporting the use of priority routes.
- That the transport sector group review whether there is any protocol for "policing and enforcing" priority routes.

- That consideration be given to adding key welfare sites to the list of critical community and lifeline sites in the AELG Priority Infrastructure Sites and Routes as part of the overall welfare requirements that will need power.

4.14 That existing arrangements be reviewed for when utilities should contact each other directly for operational matters and confirm when the LUC needs to be used.

4.15 That the Lifeline telecommunications audio bridge, which was a success, be considered for development in to a protocol for other sectors (energy, water and transport) to use.

4.16 That a communications check for radiotelephone and satellite phone operation be fully tested (as a result of the failure of the testing during the exercise of the radiotelephone and satellite phone operation) outside of an exercise situation before another exercise is held.

4.17 That the Telecommunications industry report back to the AELG on its investigations in to restricting access for general consumers to email to enable utilities and essential services priority (national process).

4.18 That the ACDEMG consider the following matters as part of the design of the new GEOC:

- The LUCC and Planning and Intelligence teams need to operate closely so should be co-located in the new GEOC.
- The Group Controller, Planning and Intelligence Team and the Public Information Manager need line of site to display boards, maps and other reference material such as utility status boards.

4.19 That a review be undertaken of media management for Utilities and the Public Information function of the GEOC, leading to the development of a formal protocol.

4.20 That consideration be given to including the media in future exercises to bring their perspectives out in relation to media and community information.

Appendix One – Principal Participant Organisations

Organisation	Key Contact
Auckland International Airport	Roy Robertson
Auckland City	Auckland City EOC
BP Oil	Nigel Tasker
Air BP – Auckland Airport	Michael Henderson
Chevron New Zealand	Paul McKay, Shiv Shayer, Bryan Dovey, Iain Hamilton
Kordia	Bruce Cochrane
Manukau City Council - EOC	Barry Wallace, Judy Fowler
North Shore City Council	David Keay
OnTrack	Carl Mills, Operations Manager
Papakura District Council CDEM	Kelvin McMinn
Ports of Auckland Ltd	Harbour Control
Shell	Phil Rees, Paul Benjamin
Shell Wynyard Wharf Terminal	Corin Douglas (Asset Manager), Justin Johnston (Manager)
Telecom Network Operations Centre	Service Centre
Telecom New Zealand	Brigitte Theuma, Jason Cullen, Derek Twort
Transit NZ	Terry Boyle, Kathryn Musgrave, Cyril Gunaratne
Vector	Stephen Howard
Vodafone	Alana Hoponoa, Gordon Woolston
Waitakere City Council – Principal Engineer - Operations & Renewals	Canute Chandrakumaran
Waitakere City Council – EOC	Brandon Guttery
Auckland Water Group	Peter Brooks
WOSL	Control Room

Appendix Two - Exercise Scenario

The scenario was based on a severe cyclone event that impacted on Auckland in the early hours of Friday 8 June 2007 causing a widespread and prolonged power outage with uncertain times for service restoration.

The following is a summary of the scenario:

Cyclone Marconi had been moving southeast from the tropics over the previous three days and had passed just northeast of Northland.

A weather warning issued at noon on Thursday 7 June 2007 by the Met Service reported that winds were expected to rise to gale force ahead of the front, with severe gale gusts likely in exposed parts of Auckland and Northland. These gusts were expected to continue over a period of time, and were likely to damage trees and roofs and make driving hazardous, particularly for high-sided vehicles and motorbikes.

On Friday 8 June, initially the wind gusts were as high as 74km/hr from the northeast, but with the change of wind direction to the east and then veering to the southeast gusts were reported up to 120 km/hr.

In the early hours of Friday 8 June the cyclone arrived over Auckland with significant impact. There were reports of winds gusts from the southwest as high as 170 km/hr.

300 millimetres of rain was forecast to fall in Auckland.

The exercise commenced on Friday 8 June 2007 with the following summary of a message to exercise participants (contained in a radio broadcast from the media), which contained important scenario information:

Although daylight has arrived, efforts to ascertain the full extent of the damage and disruption were being hampered by power outages and the continued heavy rain. There was no power on in Waitakere and the North Shore.

Intelligence indicated that all highways into and out of Auckland were blocked. There had been several accidents due to traffic signals not operating and nose to tail crashes from people driving into flooded areas. Trains and harbour ferries were not running.

It was likely that all schools in the Auckland region would be closed for the day, but that had not been confirmed.

North Shore hospital was functioning on emergency power. At Auckland Hospital, elective surgery had been deferred due to anticipated staff shortages and influx of A&E patients.

The Fire Service was busy assisting with flooded basements and houses in low-lying areas as priorities allowed. Police were understood to be coping, but were becoming more heavily involved in road closures and diversions. Civil Defence Emergency Operations Centres were fully activated throughout the region.