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Committee CDEM Group
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Audit of the CDEM Group's Emergency Operations Centres

1. Purpose

To inform the Group about the audits on the civil defence emergency management emergency operations centres in the Region.

2. Co-ordinating Executive Group (CEG)

This report was considered at the meeting of the CEG held on 6 April 2009. It did not include the audit report for Upper Hutt Emergency Operations Centre (EOC) as the audit had not yet been carried out. The audit has now been completed and the audit report updated accordingly.

At the CEG meeting it was resolved, that the CEG:

“Recommends to the CEOs Shared Service Group on Emergency Management that it considers the recommendations and conclusions contained in the report, and attend to issues raised.”

3. Background

Section 17 of the Civil Defence Emergency Management Act 2002 broadly outlines the roles and functions of Civil Defence Emergency Management Groups. One of these functions is to be able to manage events through the establishment of an Emergency Operation Centres (EOC).

In March 2007 the Ministry of Civil Defence and Emergency Management began development of a draft guideline for EOCs. As the Wellington CDEM Group Plan specified an audit of the Group's EOCs in 2007/08, in May 2008 the Ministry was requested to carry out such an audit.

The Wellington CDEM Group and the Ministry of CDEM worked together to design a template for the audit. The template is attached as *Attachment 1*.

Audits of EOCs in the Region were carried out as follows:

- 13/06/2008 Greater Wellington Regional Council
- 30/06/2008 Porirua City Council
- 26/08/2008 Masterton District
- 26/08/2008 Greater Wellington Regional Council (Alternate Masterton)
- 29/08/2008 Wellington City Council (Wellington Emergency Management Office)
- 03/09/2008 Kapiti Coast District Council
- 24/10/2008 Lower Hutt City Council
- 26/11/2008 Carterton District Council
- 26/11/2008 South Wairarapa District Council.
- 20/04/2009 Upper Hutt City Council.

4. Audit results and issues

The Ministry of CDEM prepared a report of the audit and distributed the relevant sections to each local authority. The sections are included below.

4.1 Group Emergency Operations Centre, Hoyts Room, Level 4, Regional Council Centre

The audit of the Greater Wellington Regional Council EOC revealed that the building is not purpose built as an EOC, but one modified to meet the need.

The building is situated in a high risk area, on land subject to liquefaction and on main arterial routes. When considering the natural hazards Wellington faces, it is considered highly probable that the building would not be operational after a medium to large magnitude event. The internal construction of the building could make it hazardous to its occupants, increasing the likelihood of injury to them.

In an event, access to the GWRC building due to its location will be an issue.

The capability of the GWRC EOC is excellent and will meet the demands of most events. Cooperation and understanding between all agencies involved in the EOC is excellent. Back up systems for communications, water, power and catering are excellent. Roles and functions are clearly outlined, understood and staff are well trained.

The ability for the building to function on a stand alone basis is questionable. A constant supply of power is available to the building, but food, potable water and a sewerage holding tank have not been catered for. In a major event it is estimated that the EOC could function for two days, before coming under extreme pressure.

The operating area of the EOC is sufficient for a small to medium event but in a large scale event it would come under intense pressure. There is an ability to use the rest of the Council building and resources should the need arise, which may ease this problem.

Issues

- The unsuitability of the building to be a Group EOC
- The inability to function as a stand alone unit
- The EOC operating area is very tight in a full activation.

4.2 Group Emergency Operations Centre (alternate), Greater Wellington's Masterton Office

The audit of the Greater Wellington Regional Council Office in Masterton revealed that the building is not purpose built, but one modified to meet the need of its occupants.

The EOC is not a dedicated EOC. When activated the EOC takes over the first floor meeting room and is set up on the day of the event. This is a basic set up. It would take some time to get in place due to resources for the EOC being obtained from other work areas within the building. Access to the EOC is via a stairwell which may cause access problems.

Radio communications for the EOC is located in the corner of a communal office. This is a very tight and uncomfortable arrangement. There is no ability for communications from support agencies to be set up or installed. This would prove difficult due to the lack of room in the area selected to house the communications equipment.

The ability for the building to function on a stand alone basis is questionable. A constant supply of power is available to the building, but food, potable water and a sewerage holding tank have not been catered for.

IT support and in house knowledge of IT services is limited, as support comes from Wellington. The computer functions within the building work on the GWRC network, based in Wellington, and if this link is cut, there could be a severe impact on functions. The emergency backup system for the EOC in this case is one laptop that can work remotely via an air-card.

The ability of the EOC to function at full capacity is restricted due to the limited number of trained staff available, partly due to this being a regional office. The actual training of EOC staff is problematic due the distant location of the Council itself, individual workload and the location of the Regional Council civil defence trainer in Wellington.

Issues

- The unsuitability of the building to be a Group EOC backup
- A lack of EOC resources

- A poorly sighted radio communications room
- The inability to function as a stand alone unit
- The need for local training.

4.3 Porirua City Council

The audit of the Porirua City Council EOC in Mungavin Avenue revealed that the building is not purpose built, but one modified to meet the need of its occupants. This is a shared building owned by another organisation.

The building is located in a very high hazard risk area (old slip path) and more than likely would not be operational after a large magnitude event. The external construction of the building (sited on poles) makes it unlikely to survive such an event. The building has not been weather proofed with damp seeping in through the external wall that is set into a cliff face.

The working area for the EOC would meet the demands of a small event. A bigger event would create space issues for all staff. Access to the EOC is problematic, due to the building being alarmed but only five key holders (all contracted to the second organisation) knowing the alarm codes and systems. The setting up of the EOC is a problem due to the size of the room and the lack of resources available to do this. Many functions within the EOC would have to be sited elsewhere.

The ability of the EOC to function during an event is questionable. Communications and IT services are minimal for the EOC. There is no uninterrupted power supply for IT services or telephones. They are dependant on the generator starting as quickly as possible. Catering for EOC staff will meet the needs of one shift but not for a long-term event.

The EOC is self contained for sewerage and potable water.

The ability of the EOC to function at full capacity is questionable. Communications and IT services are minimal for the EOC. There is no uninterrupted power supply for IT services or telephones. They are dependant on the generator starting as quickly as possible. Catering for EOC staff will meet the needs of one shift but not for a long term event.

The EOC is self contained for sewerage and potable water.

The ability of the EOC to function at full capacity is restricted due to the limited number of trained staff available. There is presently only enough staff to fill these positions for one shift per day. The positional roles and functions within the EOC require further clarity.

Issues

- The unsuitability of the building to be an EOC
- The operating area is too small to handle any event other than a small one

- Unsuitable area for radio communications
- The inability to function as a stand alone unit
- The need for local training.

4.4 Masterton District Council

The audit of the Masterton District Council EOC revealed that the building is not purpose built, but one modified to meet the need of its occupants. Structural work was done to reinforce the building housing the EOC.

The EOC is a dedicated part of the Council building; set up at all times. The actual area of the EOC is small (limited room for expansion) and not able to accommodate a large number of people during an event. In a large event a prefabricated building would be sited in the car park outside the EOC door. The Council building and resources are available during an event, should the need arise.

Backup services (IT and Communications) are good for the EOC.

The ability for the building to function on a stand alone basis is questionable. A constant supply of power is available to the building, but food, potable water and a sewerage holding tank have not been catered for.

EOC staff roles and functions are clearly outlined and staff are regularly trained to meet this need. Masterton District Council has sufficient staff trained to be able to run two shifts a day for 3 to 4 days during an event.

Issues

- The EOC is able to handle only small events
- The inability to function as a stand alone unit
- The need for local training to increase staff levels.

4.5 Wellington City Council (WEMO)

This is a purpose built EOC. A risk analysis was carried out prior to the positioning of the EOC. As a result of this, structural work was done to reinforce the building. The building is a dedicated EOC and permanently set up. The building itself is able to be locked down and secured to withstand a major destructive wind event. The air-conditioning system is self filtering and able to maintain a clean air supply to all areas of the EOC.

The EOC's communications systems are in place and well developed. The EOC IT system is in house, self sustainable, with an IT technician on the staff. There is in place a plan to develop a secondary back up hard drive recording system.

Back up systems for water, power and sewerage were installed. The EOC has the ability to function on a stand alone basis at any level required.

The EOC is able to function 24 hours a day for as long as required.

The ability of the EOC to function at full capacity requires a large pool of trained staff. Any reduction in this will restrict the EOC operational capability. The failure of staff to take part in exercises or training days means there are a limited number of trained staff available to run the EOC for any length of time. The inability of the emergency management officers to take part increases this vulnerability. A training schedule exists through the group. There is a need to back this training up with in-house training in WEMO.

Issue

- The need for local training.

4.6 Kapiti Coast District Council

In 2006 this EOC was purpose built to withstand a Magnitude 8 earthquake. A risk analysis was carried out prior to the positioning of the EOC. The building is a dedicated EOC and permanently set up. The EOC has a separate ventilation and purification system and able to maintain a clean air supply to all areas of the EOC.

The EOC's communications systems are in place and well developed. The EOC IT system is in house, self sustainable, with an IT technician either on site or able to be called in at short notice. Main server is located off site.

Back up systems for water and power (solar and generator) installed. There are no sewerage holding tanks due to the location of the EOC next to council settling tanks. The EOC has a small kitchen for tea and coffee to be made on site but all food requirements are brought in on the day. This could be an issue in a big event. Generally the EOC has the ability to function on a stand alone basis at any level required.

The EOC is able to function 24 hours a day for as long as required.

The EOC has the ability to expand and meet any event. There is a pool of well trained staff to meet this need. A well developed training schedule exists.

Issue

- The inability to function as a stand alone unit.

4.7 Hutt City Council

In 1988 this EOC was purpose built to withstand a Magnitude 7.6 earthquake. A risk analysis was carried out prior to the positioning and building of the EOC. The building is a dedicated EOC and permanently set up.

The EOC has a separate air ventilation and purification system, power generator that supplies the EOC with the overflow supplying the Council

Buildings, food to feed 30 people for three days, on site water with a grey water recycling system and sewerage holding tank.

The EOC's communications systems are in place and well developed. The EOC IT system is in house, self sustainable, with an IT technician either on site or able to be called in at short notice. Main server is located on site.

The EOC is able to function 24 hours a day for as long as required.

The EOC has the ability to expand and meet any event. There is a pool of well trained staff to meet this need. A well developed training schedule exists.

4.8 South Wairarapa District Council

The audit of the South Wairarapa District Council EOC, Martinborough revealed that the building is not purpose built, but one modified to meet the need of its occupants.

The EOC is part of the Council building, is not a dedicated EOC and when activated takes over the District Council Chambers. The EOC is set up on the day of the event. This is a basic set up. It would take some time to get in place due to resources for the EOC being obtained from other work areas within the building.

The actual area of the EOC is small (limited room for expansion) and not able to accommodate a large number of people during an event. The Council building and resources are available during an event, should the need arise but this is a small council with very limited resources and room.

Radio communications for the EOC is located in a cabinet in the Council Chamber. The radio communication system in operation is excellent. There is no ability for communications from support agencies to be set up or installed. This would prove difficult due to the lack of room in the area selected to house the communications equipment.

The ability for the building to function on a stand alone basis is questionable in anything but a small event. A constant supply of power is available to the section of the building that houses the EOC, but food, potable water and a sewerage holding tank have not been catered for.

IT support is available from an outside resource which provides an excellent service. There is some in house knowledge of IT services. The computer functions and redundancy measures within the building are excellent. The resources within the EOC are minimal consisting of two computers and one laptop. The provision of more electronic equipment for the EOC needs to be considered.

The ability of the EOC to function at full capacity is restricted due to the limited number of trained staff available, due to this being a small regional office. All staff are multi skilled and able to adapt to the meeting demand,

however this EOC would only be able to man one shift a day for a short period.

Training for this small council is problematic.

A heavy reliance on one (part time) person.

Issues

- The operating area of the EOC is too small. Can only handle small events
- A lack of EOC resources
- A poorly sighted radio communications room
- The inability to function as a stand alone unit
- The need for local training.

4.9 Carterton District Council

The audit of the Carterton District Council EOC revealed that the building is not purpose built, but one modified to meet the need of its occupants.

The EOC is part of the Council building, is not a dedicated EOC and when activated takes over the District Council Chambers. The EOC is set up on the day of the event. This is a basic set up. It would take some time to get in place due to resources for the EOC being obtained from other work areas within the building.

The actual area of the EOC is small (no room for expansion) and not able to accommodate a large number of people during an event. The Council building and resources are available during an event, should the need arise but this is a small council with very limited resources and room.

Radio communications for the EOC is located at the Council's front desk, manned by whoever is present. There is no ability for communications from support agencies to be set up or installed.

The ability for the building to function on a stand alone basis is questionable in any event.

The EOC has a small generator but it is untested on what power this would supply or run. I do not believe it would power anything in the EOC. A small supply of water is held within the Council building but this along with food and a sewerage holding tank would soon be an issue.

Finding suitable times for training and ensuring staff are able to attend is an issue. There is no established training program.

A heavy reliance on one (part-.time) person.

Issues

- The unsuitability of the building to be an EOC
- The operating EOC area is too small, only contains staff for a small event
- A lack of EOC resources
- Poorly sighted radio communications equipment/room
- The inability to function as a stand alone unit
- The need for local training.

4.10 Upper Hutt City Council

The Upper Hutt City Council building was built in 1968. The EOC was established a short time later and is not purpose built. The EOC is located on the bottom floor of the building, adjacent to the rear car park. The doorway is sited lower than the ground level car park. A sump with an electrical pump is used to clear the area of excess water should the need arise

The EOC is a dedicated facility but is not constantly set up; requiring very little time to establish on the day of the event.

The EOC's heating and air ventilation rely on the continuance of the main power supply. The EOC has a small power generator that supplies power to the EOC lights, radio and computer system. The generator is to be upgraded in the near future. The EOC has food and water on site to supply all staff for 3 days. There is no sewerage holding tank.

The EOC has an exposed natural gas pipe running through the ceiling of the communications room. An automatic shut off valve has been installed at the point of entry to the building to mitigate this risk. The EOC has a suspended ceiling with individual 20kg tiles installed.

The EOC's communications systems are in place and well developed. The EOC IT system is minimal but being looked at. The EOC uses a paper base system to record all incidents

The EOC is able to function 24/7 for as long as required due to the back up of staff from the Lower Hutt EOC.

The EOC has the ability to expand and meet any event. There is a small pool of local key, well trained staff to meet this need. A well developed training schedule exists.

Issues

- The inability of the generator to maintain a suitable supply of power to the EOC.
- The need to maintain a power supply to the pump of the water sump to prevent the flooding of the EOC.
- The unsuitable materials of the suspended EOC ceiling.

- The exposed natural gas pipeline through the EOC communications room. This is partly mitigated by the installation of a shut off valve.

4. Conclusion

The results from the audits paint a bleak picture of the CDEM Group's readiness for a major emergency event.

Apart from the three dedicated and purpose built EOCs (Wellington, Hutt and Kapiti), the other EOCs in the Region do not meet the required standards to operate effectively during an emergency.

5. Recommendations

That the CDEM Group:

1. ***Receives the report.***
2. ***Notes the content of the report.***
3. ***Makes the required improvements to the EOCs in question to further the capability and capacity of the Wellington CDEM Group and the respective Territorial Local Authorities to respond and recover from an emergency in their area, providing uniformity throughout the Wellington region.***

Report prepared by:

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Attachment 1: Audit template