



SIAM-2, C-4 Component
Environmental, Risk and
Resource Management

**Disaster Management
Simulation Exercise
'Cyclone Pele'
7 December 2005**

December 2005

Prepared for
**Ministry of Natural Resources, Environment and
Meteorology**

by
BECA International Consultants Ltd.

BECA

BECA

▪ report

**Disaster Management
Simulation Exercise
'Cyclone Pele' 7th
December 2005**

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Prepared for

Ministry of Natural Resources, Environment
and Meteorology

By

Beca International Consultants Ltd

December 2005

Ministry of Natural Resources, Environment and Meteorology
Private Bag
Apia
SAMOA

7 December 2005
*Our Ref: 6060030/PFD
Disaster Management
Review Simulation Exercise 7
December 2005.DOC*

Attention: Vitaua Peleiupu Fuatai

Dear Sir

Disaster Management Simulation Exercise 'Cyclone Pele'

Please find enclosed a summary of the Simulation Exercise conducted on the 7th December 2005 for the Disaster Management workstream. This report contains a summary of key points from the simulation and includes the simulation documents, participant feedback and attendance list.

In terms of the reporting schedule (dated 30 November 2005), this report is reference number 11, and is additional to the list of reports required by the original contract.

Yours faithfully
Graeme Roberts
Manager, Planning

on behalf of

Beca International Consultants Ltd

Direct Dial: +64-9-300 9271

Email: graeme.roberts@beca.com

132 Vincent Street
PO Box 6345, Auckland, New Zealand
Telephone +64-9-300 9000
Fax +64-9-300 9300
www.beca.com

Revision History

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A	K Stephens	Report on Disaster Management Simulation Exercise 'Cyclone Pele' held on 7 th December 2005	19 December 2005

Document Acceptance

Action	Name	Signed	Date
Prepared by	Karen Stephens, Kestrel Group Ltd		19 December 2005
Reviewed by	Michele Daly, Kestrel Group Ltd		20 December 2005
Approved by	Graeme Roberts, Beca International		22 December 2005
on behalf of	Beca International Consultants Ltd		

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1 Introduction

1.1 Background

As part of the Disaster Management workstream of SIAM-2, component C4, an additional simulation exercise was conducted on Wednesday 7th December. The participants were members, or their representatives, of the Disaster Advisory Committee (DAC) and the staff of the National Disaster Management Office (NDMO). A full list of participants is included in Appendix A.

This additional simulation was granted following the request by the CEO to MNREM to change the scenario in the November simulation to avian flu. (Refer report - Disaster Management Simulation Exercise 'Bird Flu' 2 November 2005 and Future Simulation Programme). It was considered by the project team that the capability of Samoa to be ready for the current cyclone season could be compromised if the planned cyclone scenario was not conducted.

The scenario used was a follow on from the August simulation, where participants identified preparedness actions for the forecast landfall of a cyclone (Cyclone Pele). The December exercise simulated the response following the passing of Cyclone Pele. This sequence of simulations was developed to assist the DAC, NDMO and response agencies work through the process of preparation, response and recovery and to assist in the development of the National Disaster Management Plan and agency Service Continuity and Emergency Response Plans.



Objectives:

The objectives of the simulation were:

- To exercise response and recovery processes,
- To identify and strengthen communication linkages amongst the response agencies and NDC,
- To strengthen the role of the NDMO in coordinating the implementation of NDC and DAC decisions,
- To identify actions to be taken by the NDMO and the response agencies given that communication equipment is not available and that the EOC is not fully equipped with the necessary resources,
- To provide an opportunity for NDMO personnel to develop skills in simulation planning and delivery,
- To test components of the proposed management structure.

This report contains a brief summary of the simulation and key feedback. Attendance list, simulation documents and participant feedback are included in the Appendices.

1.2 Definitions

The following definitions and abbreviations are used in this report:

CEO	Chief Executive Officer
DAC	Disaster Advisory Committee
NDC	National Disaster Council
NDMO	National Disaster Management Office (part of MNREM)
EOC	Emergency Operations Centre
NDMP	National Disaster Management Plan
MAF	Ministry of Agriculture & Fisheries
MNREM	Ministry of Natural Resources, Environment and Meteorology
MoH	Ministry of Health
MWCSD	Ministry of Women, Community & Social Development
MWTI	Ministry of Works, Transport and Infrastructure
SIAM-2	Samoa Infrastructure Asset Management Project Phase 2
SOPAC	South Pacific Applied Geoscience Commission
UNDP	United Nations Development Programme
SBC	Samoa Broadcasting Corporation Limited
SPA	Samoa Ports Authority
SWA	Samoa Water Authority
JICA	Japan International Co-operation Association
SPREP	South Pacific Regional Environmental Program

2 Simulation Overview

2.1 Inputs

The scenario was designed to meet the objectives mentioned in 1.1 and to take into account other elements of the project:

- National Disaster Management Plan Review,
- Agency Response Plans,
- NDMO Communication needs,
- Disaster Management Structure (part of the NDMP review).

Output from the simulation exercise held in August was also incorporated into the design.

As part of the NDMO development Filomena Nelson (Senior Disaster Management Officer) developed the majority of input into this simulation and scenario with the project team providing advice, guidance and facilitation on the day of the simulation.

Scenario

The scenario was the aftermath of a cyclone (Cyclone Pele) which had hit the north western side of Upolu. Realistic damage and other impacts were developed for use in the simulation and these are attached in Appendix B. Participants were provided background on the sequence of events that had already occurred; this included the two situation reports that were produced during the August simulation.

Photos of scenario damage were given to participants (from Cyclone Ofa damage)



Exercise Structure

The exercise was conducted in three phases.

Phase 1 The participants were provided with a briefing by the NDMO on the damage and other impacts which had occurred during Cyclone Pele (see Appendix B). The Chair of the DAC instructed participants to identify the specific impacts and consequences for their own organisations and to then produce a situation report (see Appendix C) identifying their actions and priorities.



As for the October workshops and the November exercise, participants were placed in 'sector' groups (First Responders, Utilities, Ministries, Community Focussed Organisations - see Appendix D). This allowed the agencies who would naturally work together in an emergency to plan together. The groups were encouraged to use the Function Table which will form part of the National Disaster Management Plan (see Appendix E) to ensure that actions identified included linkages to supporting agencies and that the identified agency was taking the lead role.

Phase 2 The sector groups presented their situation report to the DAC. The DAC then discussed the overall impact on Samoa in order to deliver a situation report and a recommendation on the declaration of a national emergency to the NDC.



Phase 3 The final phase of the exercise was to gather feedback. A form was distributed to participants (see Appendix F). Key points are included in the next section and full detail of the feedback is attached as Appendix G.

2.2 Participant Feedback – Key Points

The following are summaries of the key learning points as stated by participants, broken into specific headings relevant to the overall project:

1. *What was one thing you learned today?*

- Importance of co-ordination of public messages among different agencies.
- The overall situation and damage that is involved in a disaster.
- NDMO is well equipped / resourced with relevant expertise and assistance when disaster strikes and all parties need to incorporate this assistance link.
- For response to be successful we must know and understand plans from other utility companies.
- The complexity of making a decision to declare a state of emergency and what issues must be taken into account when making that decision / recommendation.

2. *What went well?*

- The group discussions. Our group's active dialogue ensured that we are all more aware of each other's needs and how we could streamline inter-coordination. Furthermore specific representatives from these agencies should be the same ones attending all the time – there is a lack of continuity.
- The groupings of utilities, first responders, ministries and community focussed organisations worked well. This is good because we need to rely on and help each other during disasters.
- Smooth collaboration and interaction between participants and resource personnel.

3. *What could be improved?*

- Strengthening of the linkages between the groups.
- The divisions of MWTI should receive direct invitations (Road Asset, Building Asset, Maritime, Aviation and PUMA) as all should be involved.

4. *Did you use your agency Service Continuity & Emergency Response plan YES/NO (please circle)? If YES how useful was it today.*

- 13 of 21 respondents stated that they used their plan.
- Not very useful, needs more practical details.
- No, all in the head.
- Yes. It guided and prioritised my actions on what exactly the agency needed to do.
- Yes, very good but some amendments / improvements needed.
- Sort of. Priority for us is communications to the greater Apia area. Once emergency / weather has improved, work will proceed to restoration of communications outside.

5. *What are priority tasks for you to complete at your agency to be more prepared for the current cyclone season?*
- Revise emergency and disaster management plan. Disseminate and train staff.
 - Awareness programme and getting the membership (hotels) to take ownership of and to implement the proposed emergency plans.
 - Undergo submain and main inspection. Establish supply plans for water. (SWA)
 - Meeting with Pulenu'u and explain what to do and how to communicate in times of disaster.
 - Back up resources to maintain services.
 - To form groups in Catholic churches as contact persons to assess the immediate needs and channel help.
6. *Practicality of Matautu NDMO office as EOC for the current cyclone season?*
- No. It is low lying and likely not to function after a cyclone. Either (a) washed away, damaged severely or (b), access cut off. I'd have suggested that \$\$\$ be put in to building one next to or as part of the Red Cross building in Motootua.
 - Vulnerable to storm surges etc. Prefer somewhere higher / further inland (not sure about equipment, facilities etc).
 - Vulnerable to the strong waves (surge etc). Inconvenient for others in terms of accessibility during cyclones due to likely road blocks, fallen trees, debris etc.
 - No. High risk of damage from high waves and wind. Build a centre that is cyclone proof and more inland.
 - Too close to the sea and the building is old.
 - Of 21 respondents a total of 9 felt the location was not suitable, 10 considered it suitable and 2 did not answer the question.

2.3 Facilitator Observations

The following details the facilitators' observations where they differ from or are additional to those of the participants:

- The Matautu offices of the NDMO as the primary EOC **for the current cyclone season** requires additional resourcing. There are insufficient tables and chairs, no stored water or drinking cups and poor sanitation.

In a real event it is possible that people will be working from this facility 24 hrs for as long as the emergency is in place. A plan should be developed to support those people as it is likely there will be no power, water or easily accessible food for at least 3 days. In addition MWTI Buildings should assess the best method of preparing the building for the current (and future) cyclone season (strapping down the roof, window shutters etc) to reduce the potential impact.

As a minimum chairs, tables, basic stationery, bottled water, plastic cups and dry biscuits should be acquired immediately and stored for the cyclone season, or it should be ensured that when a cyclone warning is received that the resources are immediately acquired.

Toilets are in poor working order and priority should be given to replacing or repairing them. Consideration should also be given to acquiring portable toilets as it is possible that toilets may not be able to be used following a cyclone due to water problems.

An alternate location should also be identified in the event that the Matautu office is affected by cyclone impacts. This location should be advised to DAC members as soon as possible.

It is understood that many of these issues will be addressed with the implementation of the NDMO fitout due for 2006, but these changes will not be in place in time if a cyclone were to hit this summer.

- It was evident from the situation reports that there is still low understanding of the roles and responsibilities of each of the agencies and the functions they will take during an emergency, even though each group was provided with the Function Table (Appendix E). This could be as a result of inconsistency of representatives from some of the agencies both in attending DAC meetings and previous simulations / workshops.
- It was encouraging to see a number of agencies were using response plans. A concern during the simulation was that there was little interaction across agencies to ensure there was no conflict between plans and that the right agencies were conducting the right tasks. When draft plans have been received from those agencies who have a response requirement (under the NDMP), an exercise should take place to ensure there is clear integration of the plans across the agencies.
- During the discussion around a recommendation to the NDC regarding the declaration of a state of emergency, it was clear there needed to be some indicators which could be used to enable the decision to have some objectivity around the decision and process. The proposed content of draft legislation is likely to assist this.

In addition, understanding of the delineation of the governance role of the NDC compared to the operational management to be undertaken by the DAC needs further strengthening.

- The simulation was well attended by a range of agencies, including some who had not previously been engaged.

2.4 Recommendations

As a result of the simulation the following are recommendations which will need to be addressed to improve Samoa's disaster management capability. Most of these are outside the scope of the current project and will need to be addressed as part of the ongoing NDMO work programme.

- Acquiring resources for the EOC for the current cyclone season (see above).
- Identification of alternate EOC.
- Nomination of an agency responsible for co-ordination of key public messages to ensure accuracy and efficient distribution of these messages prior to, during and following emergencies. This recommendation was included in the August report and was raised again by participants during this simulation. SBC will distribute messages but there is a need for someone to be nominated to co-ordinate and develop those messages. Public Information is one of the most important tasks prior to, during and following disasters.
- A letter to be sent to all response agency CEO's to provide an update on the progress of Agency Response Plans and to request nomination of the DAC representative and the person within their agency who is responsible for Agency Response Planning (they may be the same).
- Following the receipt by the NDMO of the draft Agency Response Plans an exercise should be conducted to ensure there are clear links between the plans to ensure agencies are working together to complete actions.
- Develop indicators to be used to objectively assess the need for a declaration of state of emergency, these could include:
 - Percentage of population affected e.g. greater than ??
 - Number of deaths e.g. greater than ??
 - Potential number of deaths (e.g. disease outbreak situation)
 - Economic impact
 - Infrastructure affected (water, power) - restoration time greater than ???
 - Resources available within Samoa to manage impact Yes / No
 - Downstream consequences (e.g. disease outbreak, major contamination)

2.5 Next Steps

- Letter to CEO's of response agencies requesting nomination of person responsible for Response Planning, by end December 2006.
- Draft Agency Response Plans to be completed by end March 2006.
- Sector workshops to be held between January and March 2006.
- Sector workshop to review draft Agency Response Plans - April 2006.
- Final Agency Response Plans and implementation of resources - September 2006

- Appendix A
**Simulation Attendance
Lists**

Simulation Exercise 'Cyclone Pele' 25th August 2005

Name	Organisation	Email
Nynette Sass	Samoa Hotels Association	nsass@samo-hotels.ws
Paulo Stowers	SamoaTel	paulo.stowers@samoatel.ws
Alex Abraham	SamoaTel	alex.abraham@samoatel.ws
Vaaelua Rimoni Vaaelua	Ministry of Police	
Elwyn I. Ale	MWTI	elwyna@mow.gov.ws
Sooalo A Peters	Ministry of Agriculture	apeters@lesamoa.net
Va'asiliega. I	SBC	vaasiliega@yahoo.com
Alefosio Matulino	Samoa Airports Association	matulino@lesamoa.net
Filemoni Crawley	Ministry of Prime Minister & Cabinet	filemonic@yahoo.com
Faafetai Taraga	MWTI	taraga@lesamoa.com
Talamoni Simi	MWTI	talamoni@yahoo.com
Vaaua Wilson	MNREM	viwilson@meteorology.gov.ws
Sunny K Seuseu	MWTI	sunny@mow.gov.ws
Tod Cooper	NZ High Commission	tod.cooper@mfat.govt.nz
Sione S'a'u Faitala	MWTI	sionesqu@yahoo.com
Fr James Adayedil	CARITAS	chancellor_archdiocese@samoa.ws
Lautua Faafo	SWA	l.faafo@swa.gov.ws
Malama Masina-Hadley	SPREP	melama@sprep.org
Marcus McKibbin	Australian High Commission	marcus.mckibbin@dfat.gov.au
Dr Siniva Sinclair	Ministry of Health	sinivas@health.gov.ws
Faaagaina Belfour	Ministry of Health	
Tala Mauala	Red Cross	
Toalepai W Fatu Lefale	Telecom Samoa	Waikato.fatu@tuzi.com
Leilua Tavas Leota	JICA	
Paul Brennan	Police ISP	brennan@samoa.ws
Karen Stephens	Project team	ks@kestrel.co.nz
Debbie Cunningham	Project team	dc@kestrel.co.nz

- Appendix B

Simulation Documents

Surveillance Report: Impacts of Cyclone Pele on selected locations

First Responders:

1. Faleolo International Airport

- Gas leaked from the two small planes covered up to 10 meters of the area in which the planes have been parked
- Nearby villagers have entered the property and helped themselves taking iron roofs and other airport properties

2. Fasito'o-tai Village

- 2 people drowned (both dead) and 10 injured from flying objects
- a fishing boat from the village is still missing and haven't heard from the crew of 5 since the cyclone strikes
- The gas station on the reclaimed land have been struck by storm surges of 24 feet

3. Mulinuu Peninsula

- Origin Energy received extensive damages to storage tanks, gas leakage is suspected to have been occurring at the time the tanks were damaged up to now
- SBC studios and offices including their satellite have received major damages, broadcasting coverage is within 100 meter radius from Apia

Utility Providers:

4. Faleolo International Airport

- Extensive damage to the runway due to storm surges, planes cannot land or depart
- Two small planes that travels between Upolu and Savaii as well as between Samoa and American Samoa have received major damages
- Debris have been washed into the arrival lounge and very strong winds have thrown roof irons to the windows of the lounge
- Tower has received extensive damages due to very strong winds
- Telecommunication tower near the airport has been completely destroyed
- About 5 transformers along the Faleolo Airport have been destroyed

5. Fasito'o-tai Village

- Road has been extensively damaged due to washed off debris, sand and rocks and strong wave activities; access to the other side is highly impossible
- Inland access roads from Lefaga and Leulumoega are also closed due to fallen trees and power posts
- Most underground communication cables have been flooded and most telephone wires have been cut due to fallen trees and power posts; communication with villages is impossible
- the village water main has been completely destroyed by fallen trees and washed off rocks and debris; dirt filled the pipelines

6. Mulinuu Peninsula

- Access to the other side is impossible due to fallen power posts and the very high risk of a fire occurring at the Origin Energy compound located 10 meters from the road reserve

Ministries and Government Agencies:

7. Faleolo International Airport

- Nearby villagers have entered the property and helped themselves taking iron roofs and other airport properties

8. Fasito'o tai Village

- Village mayors cannot be reached due to communication breakdown throughout the village
- Ten houses on the coastal edge of the village have been fully blown down, affected families are housed in the church building
- The village medical centre have been completely destroyed
- The village only school have received major damages to most of its classrooms and storage room where school material and other resources are kept

9. Mulinuu Peninsula

- Roof tops of most Meteorology Office buildings have completely blown off; most equipments (computers, automated data collection equipment, etc.) were soaked by heavy downpours
- SBC satellite damaged, not know whether transmission possible

Community-focused Organizations:

10. Fasito'o tai Village

- families whose houses got blown down urgently need clothing and food supply as these items were destroyed during the cyclone
- there's no clean drinking water available
- about 90% of the families in the village do not have water tanks
- school materials and other resources of the one and only school in the village have been soaked in the heavy downpours
- Aggie Grays new resort badly damaged with water inundation. 57 guests sheltering in partly built golf centre - need evacuation.

Actions by 3 Groups

1. Identify priority response actions

- Identify location that your agency would give first priority.
- Identify critical services and facilities that need to be taken care of first.
- Identify the actions required to get those critical facilities or services back to normal.
- Consider other consequences and potential future impacts eg pollution, public health

2. Identify resources required and where to get them from

3. Key issues

- What are some of the key issues that might obstruct or set back the implementation of these response actions?

Situation Report Template

SITUATION REPORT	
AGENCY:	DATE:
LOCATION:	
CONTACT DETAILS:	TIME:
Actions undertaken or planned: <ul style="list-style-type: none">• Assets (e.g. deployment/protection)• Staff availability	
Public messages What do you want to tell the public now?	
Assistance or Resources Required Note any help you need from the NDMO or other agencies	
Predicted development of incident What are the likely impacts that may develop	
Issues Note any issues which may affect your agency's ability to respond	

- Appendix C
**Sector Group Situation
Reports**

SITUATION REPORT

Group: First Responders

DATE: 7 December 2005

LOCATION: EOC, Matuatu

CONTACT DETAILS:

TIME: 11.30am

Actions undertaken or planned:

SBC - Relocate outside broadcast van to emergency centre (before cyclone hits) - maintain radio coverage

Police - evacuate people from areas affected by storm surge and gas leaks

- Looters later priority
- Co-ordinate with MTWI and Search and Rescue (once weather conditions safe) to find missing boat

MWTI - Search and rescue

- contractors responsible for affected areas to be called to clear roads

Health & Red Cross - Communication, advise on water supply and first aid. Red Cross has 7 satellite phones and can assist tracing people.

Public messages

- Move away from low lying areas
- Port closed - ships tied up
- Water - collect rain, boil
- Weather conditions / forecasts
- Health facilities available
- First aid measures
- Pulenuu, authorities to check on families
- Avoid crossing rivers, stay away from coast
- Report deaths to police / hospital
- Anyone found stealing / vandalising property will be prosecuted
- Sanitation

Assistance or Resources Required

- Red Cross International on standby
- Vehicles, backup generators, chain saws
- Search and rescue (NZRAF)
- Fixing or replacing satellite (SBC)

Predicted development of incident

- Possible fires from gas leaks
- Disease outbreaks
- Disruption of services, schools etc
- Relocation of people
- Extended communication breakdown
- Damage to property assets

- Economy

Issues

- Lack of preparedness
- Lack of resources
- Damage to infrastructure, communication
- Flow of information / co-ordination with other agencies

SITUATION REPORT

Group

Ministries

Date: 7 December 2005

LOCATION: EOC, Matuatu

CONTACT DETAILS:

TIME: 11.30am

Actions undertaken or planned:

- Enforce the National Building Code
- Make sure to record all equipment affected to claim the insurance
- Assess environmental impact
- Close all public and commercial buildings. Ensure all building structures are still strong
- Ensure all back up data stored in a strong room
- Support and develop networking between villages on information transfer / sharing
- Exempt important recovery work from Development consent or Building code

Public messages

- Contact numbers of core Ministries and other organisations
- Discuss safety issues – boil water etc.

Assistance or Resources Required

- Financial support – NPF, WSLAC
- First aid
- Food and clothing and may be temporary shelter
- Tools
- Alternative water supply

Predicted development of incident

- Disease
- Unlawful actions by some individuals
- Short supply of food
- Inflation

Issues

- Staff not attending work
- Disruption of transportation
- No resources available
- Destruction of office buildings
- Disruption in communication / lack of communication

SITUATION REPORT

Group: Community Focussed Organisations

DATE: 7 December 2005

LOCATION: EOC, Matautu

CONTACT DETAILS:

TIME: 11.30am

Actions undertaken or planned:

- To find out how to get messages to the hotel to advise that efforts are being made
- How to evacuate those stuck at the hotel
- Recommend to start the process to activate request for international relief and reconnaissance
- Relief aid requires the airport to be operational asap
- Relief agencies to co-ordinate with Govt regarding what assistance is needed

Public messages

- Consulates / SHA / DAC wish to reassure all visitors that we are aware you are out there and that all efforts are being made to evacuate
- Next of kin will be contacts

Assistance or Resources Required

- Funding agencies need to be kept informed on status of infrastructure to determine priority needs

Predicted development of incident

- Health and hygiene, shelter (short term)
- Welfare of guests
- Determine medical requests
- Report of daily briefings of status reports
- Media - use of international media
- Identifying spokesperson to deal with the international media

Issues

- Ensure that Govt is aware that they need to ask for assistance
- The request from Govt for relief should be in place maybe the 2nd day latest as it will take time to get the request activated
- Should there be an appointed spokesperson to deal with the overseas media?
- Co-ordination of press releases

SITUATION REPORT

Group: Utilities

DATE: 7 December 2005

LOCATION: EOC, Matautu

CONTACT DETAILS:

TIME: 11.30am

Actions undertaken or planned:

- Airport will be closed
- Telephone links to all main response agencies will be prioritised (SamoaTel)
- Organise road access via Aleisa and power supply to critical areas
- Try and get team out to Fasito'o-tai to assess and repair damaged water main
- Make staff available to SBC

Public messages

- Message that water near Fasito'o-tai will be disrupted for at least 3 days
- Message that road closed to airport because of Fasito'o-tai problems. However Leulumoega road access will be cleared in 3 hrs
- Loss of communication close to the airport
- Airport closed until further notice

Assistance or Resources Required

- Engineers to confirm status of runway
- MWTI for clearing roads
- EPC to restore electricity
- SamoaTel
- Local contractors for road clearing
- Red Cross, shelter, food etc
- SWA staff

Predicted development of incident

- No safe access to critical area
- Possible shortage of staff
- No electricity to hospital
- Staff fatigue
- Poor water quality

Issues

- Availability of staff
- Access road clearance and road flooding
- Weather condition
- Key supplies

- Appendix D
- ## **Sector Groups**

First Responders	Ministries
Fire Ministry of Agriculture MWTI - Maritime Police Ministry of Health Red Cross Samoa Broadcasting Corporation	Attorney Generals Office Ministry of Communications & Information Technology Ministry of Education, Sports & Culture Ministry of Foreign Affairs & Trade Ministry of Prime Minister & Cabinet Ministry of Women, Community & Social Development MNREM - Meteorology MWTI - Infrastructure Asset - Building MWTI - PUMA
Utilities	Community Focussed Agencies
Electric Power Corporation MWTI - Infrastructure Asset - Roads Origin Energy Samoa Samoa Ports Authority Samoa Shipping Corporation Samoa Airport Authority Samoa Water Authority SamoaTel Telecom Samoa Cellular	Ausaid / Australian High Commission Caritas Pacific Islands (CARITAS) European Union NZ High Commission Samoa Umbrella of Non Government Organisations (SUNGO) UNDP - Samoa US Embassy World Health Organisation Samoa Hotels Association Japan International Co-Operation Agency (JICA)

- Appendix E

Function Table

Ref	Response Functions	Functional Lead Agency	Role	Support Agencies	Role
	Health & Medical				
1	First aid	Red Cross	Provide first aid training and first aid services to injured people	Fire Police Ministry of Health	Provide first aid services
2	Transport and movement of casualties	Ministry of Health	Co-ordinate ambulance services	Red Cross WHO	Provide ambulance and transport services if available.
3	Medical treatment	Ministry of Health	Co-ordinate health sector response. Ensure hospital and health services are running	Hospitals/ Medical Centres WHO	Provide Hospital and health services
4	Public Health	Ministry of Health	Co-ordinate public health response. Control spread of communicable diseases Provide public health advice	Red Cross Hospitals/ Medical Centres WHO	Assist community based public health activities Provide resources and facilities as requested
5	Management of deceased victims	Police	Manage the identification, handling, and transportation of deceased victims including personal effects reconciliation, and notifying next of kin.	Health Coroner Funeral directors	Provider personnel, facilities and equipment as requested
6	Mortuary services	Coroner (Ministry of Justice)	Provide mortuary services		
7	Counselling & support	Ministry of Health	Provide psychological support services to those affected by the emergency	Red Cross Aid agencies SUNGO WHO	Assist with Counselling and support as requested.

Ref	Response Functions	Functional Lead Agency	Role	Support Agencies	Role
	Search and Rescue				
8	Land search	Police	Co-ordinate search activities for people missing on land	Fire Service	Provide personnel and equipment as required
9	Land rescue (e.g. structural collapse, accidents)	Fire	Co-ordinate rescue of people Provide resources for rescue	Samoa Airport Authority Police	Provide personnel and equipment for rescue (as per Airport emergency plans)
10	Maritime search and rescue (e.g. vessels, aircraft in the sea)	MWTI (Maritime)	Provide "On Scene Commander" Co-ordinate maritime rescue activities	Harbourmaster (Samoa Port Authority) Fire Service Police (Maritime) Overseas navy personnel Samoa Airport Authority	Provide personnel and resources (e.g. vessels, communications etc) for rescue
	Evacuation				
11	Evacuation of people	Police, Village Pulenu'u'	Evacuate areas required for public safety	Fire service	Assist with personnel for evacuations
				Foreign Government Reps	Assist with evacuation from Samoa of foreign nationals
				SBC, Media NDMO	Utilise communications networks to assist with evacuations

Ref	Response Functions	Functional Lead Agency	Role	Support Agencies	Role
	Community welfare				
12	Registration of evacuees	Red Cross	Identify and record information about people affected by the emergency	Hospitals, Caritas/CCJD Aid agencies SUNGO Council of Churches Village Councils	Provide personnel and information as requested
13	Temporary shelter	Red Cross	Establish shelters for evacuees	Caritas/CCJD Aid agencies SUNGO Council of Churches Village Councils	Provide resources and facilities to support evacuees
14	Emergency food	Red Cross	Provide emergency food supplies to affected people Distribute food in accordance with the National Food and Nutrition Policy (PK(96)76).	Caritas/CCJD Aid agencies SUNGO Council of Churches Village Councils	Provide support for food provision
15	Emergency clothing	Red Cross	Provide emergency clothing supplies to affected people	Caritas/CCJD Aid agencies SUNGO Council of Churches Village Councils	Provide support for clothing provision

Ref	Response Functions	Functional Lead Agency	Role	Support Agencies	Role
16	Animal Welfare	Animal Protection Society	Provide facilities and supplies to ensure the wellbeing of animals affected by an emergency	MAF (Quarantine) Vets	Provide staff, facilities or services as available
17	Emergency Finances	Ministry for Finance	Co-ordinate the collection, allocation and provision of monetary aid to people affected by an emergency.	Aid Agencies Donors MFAT	Secure monetary aid
	Logistics supply				
18	Incoming resources	Lead Response Agency (emergency) NDC (declared emergency)	Co-ordinate and prioritise resources (human and physical) to respond to emergency event. Co-ordinate procurement, payment, access, staging, distribution and return of resources if necessary	Red Cross Aid Agencies NDMO	Provide personnel and facilities to assist with delivery of resources to response agencies to manage the emergency.
				Foreign Government Representatives	Access resources from home countries available for emergency response
				SPA, SAA	Provide facilities for incoming resources
	Information management				
19	Public information	Lead Response Agency (emergency) NDC (declared emergency)	Provide information to the public regarding the emergency and the actions they should take. Disseminate warnings as provided by alerting and monitoring agencies Appoint spokespeople for the emergency event. Co-ordinate the provision of information to media agencies (local and international)	SBC, Radio stations, Media	Disseminate information to the public using communications equipment and personnel
				All response agencies	Communicate with users of own service as to how the emergency will affect their ability to use the service

Ref	Response Functions	Functional Lead Agency	Role	Support Agencies	Role
20	Enquiries about affected people	Red Cross	Provide information about affected people using Tracing programme.	Foreign Government Representatives	Collect and provide information to overseas countries about people affected by the emergency
				Samoa Hotel Association	Collect information from Hotels for provision to foreign government representatives.
21	Communications between response agencies	Lead Response Agency (emergency) NDC (declared emergency)	Ensure physical communications systems are in place for agencies to communicate with each other. Establish communications protocols and reporting processes.	All response agencies	Report on progress with emergency functions to the Lead Agency (emergency) or NDC (declared emergency).
				Samoa Tel Telecom Samoa Cellular Radio communications providers	Take all effort to restore communications systems. Make available emergency communications systems
	Impact assessment				
22	Reconnaissance and needs assessment	Lead Response Agency (emergency) NDC (declared emergency)	Co-ordinate reconnaissance of affected areas and disseminate information to response agencies.	Response agencies Utility operators	Provide information on impacted areas Provide information on how utility operators have been affected by the emergency.
				Village Pulenu'u'	Assess damage to village and report to MWCS D.
				Ministry of WCSD	Collect disaster impact information from villages and report to the DAC

Ref	Response Functions	Functional Lead Agency	Role	Support Agencies	Role
				Ministry of ECS	Collect disaster impact information from schools and report to the DAC.
				Aid agencies, SUNGO	Provide overseas teams for impact assessment as required.
23	Building Safety Evaluations	MWTI	Co-ordinate assessment of damaged structures to determine if they can be fixed or not. Co-ordinate assessment of structures to ensure they are safe to be re-occupied	Consulting Engineers	Carry out engineering assessments of damaged structures.
24	Building health assessment	Ministry of Health	Co-ordinate assessment of structures to ensure they will not cause health problems if they are re-occupied	WHO	Support public health assessments as required.
25	Utility Services impacts	Utility operators	Determine damage to utility services and take action to restore services as soon as possible		
26	Access impacts – roads	MWTI	Determine damage to road networks and restore roads and transportation networks as soon as possible	Police	Manage disruption to traffic flows caused by access disruptions
27	Access restoration – air	SAA	Determine damage to air transport networks and restore airport facilities and services as soon as possible		
28	Access restoration – Marine	MWTI	Determine damage to marine transportation networks and ensure facilities and services are restored as soon as possible to allow marine transport to resume	Port	Restore facilities and services as soon as possible
29	Environmental impact	MNREM	Determine impacts to the environment including air, coastal, land and water resources.	MWTI –Maritime SPA	Respond to contain and clean up oil pollution in waterways

- Appendix F

Feedback Form

December Simulation: Cyclone Pele
7 December 2005
Feedback Form

Name	Agency
What was one thing you learned today?	
What went well?	
What could be improved?	
Did you use your agency Service Continuity & Emergency Response plan YES / NO (please circle)? If YES how useful was it today.	
What are priority tasks for you to complete at your agency to be more prepared for the current cyclone season?	
Is the Matautu NDMO office as primary EOC for the current cyclone season practical? YES/NO? If NO why and what are your suggestions?	

If you have any other comments please write them on the reverse of this sheet.

- Appendix G

Participant Feedback

What was the one thing you learned today?

- That the Catholic Church has instructed all churches and parishes to be freed up to house and assist people with no home etc.
- Importance of co-ordination of public messages among different agencies.
- Situation, damage etc that is involved in a disaster.
- NDMO is well equipped, personnel with relevant expertise and assistance when disaster strikes and all parties need to incorporate how this assistance links.
- There needs to be better co-ordination between the relevant agencies and that some of the agencies do not have a full understanding of their responsibilities.
- Linkage of stakeholders thru DM plan for preparation of any disaster.
- The need to open communications with like minded organisations and to develop adequate messages for dissemination.
- For a disaster plan to work, we must know plans from other utility companies.
- Discussion between group members about the exercise.
- How to decide when to declare a state of emergency and what issues must be taken into account of how to make that decision.
- Considered factors into declaration of emergencies.
- Response plan.
- How to be aware of natural disaster.
- Learn how to be prepared when disaster strikes.
- Understand about when the cyclone coming.
- Well organisation of ideas and experience.
- People to contact in times of disaster. Ideas obtained from group.
- Need to work more on creating triggers of when to activate certain processes and procedures.
- Filling the impact assessment report.
- Assemble, discussion, awareness.

What went well?

- The specific group discussions were very good, giving focussed views which could be well shared.
- Discussion between first responders and use of maps.
- Assessing actions to be done to respond to the situation of cyclone.
- Discussions and materials.
- The group sessions – our group’s active dialogue ensured that we are all more aware of each others needs and how we could streamline inter-coordination. Furthermore specific representatives from these agencies should be the same ones attending all the time – lack of continuity.
- Group discussion plus the whole session.
- Liaison with the NZ High Commission and Samoa Hotels Association.
- For the group work for the cyclone simulation. They group together in terms of utilities, donor agencies, ministries. This is good because we need to rely on each other and help each other during this time.

- Sharing of views according new ideas.
- The discussions between the groups.
- The whole exercise.
- View and points raised by each group.
- Issues and comments by other groups.
- Discussion in groups when we have disasters.
- The smooth collaboration and interaction between players and resource personnel.
- Intergroup discussion.
- Discussion on the activities required to restore / fix up services.
- Collective inputs by all the ministries.
- Discussion, thoughts of actions.

What could be improved?

- More time for rebuttal discussion.
- Plan for ½ day workshop as ended up that way anyway
- Communications with NDMO and Samoan Government
- Real life assessment reports and what assistance is available now to the community for preparatory measures.
- Better co-ordination between the agencies.
- Follow up of plan by the DM Committee for each ministry.
- Getting messages to the public via radio.
- The link between these groups needs to be strengthened.
- Must improve disaster awareness program.
- The invitation for all 'key' divisions of MWTI to participate in all disaster workshops. The following divisions of MWTI should always be involved – Road Asset, Building Asset, Maritime, Aviation and Puma.
- Working co-ordination amongst this group (DAC).
- Response plan from each agency.
- More workshops.
- Communications.
- When the cyclone came you are aware about things and prepare during the cyclone.
- Increase inter-relations between groups and agencies. Key contacts, set up office in time of disaster.
- Information / assistance on the process.
- Communications between all the agencies.

Did you use your agency Service Continuity & Emergency Response Plan. If Yes how useful was it today?

- Yes (NZ High Commission)
- Yes, not very useful, needs more practical details.
- No (JICA)
- No (SPREP)

- No, all in the head.
- Not very meaningful. Needs followup.
- Yes, added extra information and updated older information
- Yes, it guided and prioritised my actions on what exactly the agency needed to do.
- Yes, most concentrated.
- Yes, very good but a few areas to be amended.
- Yes, some amendments are needed to add to the plan for further development into a more realistic plan.
- Yes, our plan works.
- Yes, we've discussed many important issues to be prepared when cyclone comes.
- To know exactly who to contact in case of emergency.
- No (MWTI)
- Yes, all procedures stated were in place
- Yes, very useful but still need improvements.
- Sort of. Priority for us is communications to the greater Apia area. Once emergency / weather is better work will proceed to restoration of communications outside.
- Yes (Samoa Airports Association)
- Yes (MWTI - Civil Aviation)
- Yes (CCJD, Caritas)

What are the priority tasks for you to complete at your agency to be more prepared for the current cyclone season?

- We're good to go, very well organised. (NZ High Commission)
- Revise emergency and disaster management plan. Disseminate and train staff. (MoH)
- Clarify office emergency plan (JICSA).
- Update my organisations plan and ensure staff are aware and prepared. (SPREP)
- Awareness programme and getting the membership to take ownership of the proposed emergency plans implementation. (SHA)
- Communication, resources, staff, agency support.
- Get out general message in papers, trial business continuity plan, service generator and chain saw. (Australian High Commission)
- Undergo sub main and main inspection. Establish supply plans for water. (SWA)
- Preparation for safety equipment and vessels. (SPA)
- All the tasks that we have put forward in previous workshops and this meeting. (MWTI - PUMA)
- Keep the contact with our partners in the Community (village, church etc). Consider looking at negotiating another disaster centre for operations when needed. (Samoa Red Cross)
- Public warning notices. (MWTI)
- Meeting with Pulenu'u and explain what to do and how to communicate in times of disaster. (MWCSO)
- House or building, food, lights (MWTI)
- Complete the emergency plan (MAF)

- Back up resources to maintain service and secure assets. (SamoaTel)
- Contact details, priority areas, backup communication system international (SamoaTel)
- Safety of airport runway, facilities and staff. (SAA)
- Planning, storage, readiness, safeguard assets. (MWTI – Civil Aviation)
- To form groups in catholic parishes as contact persons to assess the immediate needs and channel help. (Caritas)

Is the Matautu NDMO office as primary EOC for the current cyclone season practical. If NO why and what are your suggestions?

- No, it is low lying and likely not to function after a cyclone either (a) washed away, damaged severely, or (b) access cut off. I'd have suggested that \$\$\$ was put in to building one next to or as part of the Red Cross building in Motootua.
- Vulnerable to storm surges etc. Prefer somewhere higher (further inland). Not sure about equipment, full facilities etc.
- Yes and no due to the limited awareness of public.
- No. Too vulnerable to storm surges – very doubtful as to the integrity of the building. Suggest use of the Police Station, secure building, or Red Cross.
- Fair.
- No. Vulnerable to the strong waves (surges etc). Inconvenient to others in terms of accessibility during cyclones due to likely road blocks, fallen trees and debris etc.
- No. High water and strong winds hit easily. Build a centre that is cyclone proof and more inland.
- No, it may be affected by sea surge.
- No. Too close to the sea and the building is old.
- Eight participants felt the location was suitable.

Other comments

- Should have an exercise once a year and a drill twice a year.
- Make sure all people in country understand when cyclone is coming.
- SamoaTel and Telecom Samoa should help us to have mobile phones which can be used to contact persons both on the islands of Savaii and Upolu.