

ter Relie

# National Emergency Telecommunication Operation Plan

SAMOA

Office of the Regulator



# NATIONAL EMERGENCY TELECOMMUNICATION OPERATIONAL PLAN (NETOP) – Samoa (FINAL)

Prepared by the Office of the Regulator Original NETP prepared 28<sup>th</sup> October 2009 This NETOP prepared May 2019 All rights reserved. This book or parts thereof may not be reproduced in any form, stored in any retrieval system, or transmitted in any form by any means—electronic, mechanical, photocopy, recording, or otherwise—without prior written permission of the publisher, except as provided by Government of Samoa copyright law. For permission requests, write to the Office of the Regulator, Samoa, at "Attention: Permissions Regulator," at the address below.

Regulator Private Mail Bag Mulinuu Samoa

#### 1. Executive Summary

Every village and community around Samoa is exposed to incidents such as cyclones, floods and tsunamis of different scales and magnitudes on a regular basis. The ability of emergency response personnel to warn communities of approaching incidents and respond in real time is essential in reducing the likelihood of harm, establishing command and control at the scene of an emergency or disaster, maintaining event situational awareness, and operating effectively in respect of a broad range of incidents.

Recognising the need for an overarching strategy to help coordinate and guide such efforts, the Office of the Regulator has worked with the International Telecommunications Union (ITU) and all sectors involved in Disaster Management (Government Ministries, Service Providers of Telecommunication Services and private organisations) to develop this National Emergency Telecommunications Operational Plan (NETOP) to describe how the current telecommunications facilities are used before, during and after an incident to prevent, mitigate and respond to the effects of such incidents.

A separate, future-focused document, the Samoa National Emergency Telecommunication Plan (NETOP) has also been put in place. It is a strategic plan that provides recommended initiatives for improving emergency telecommunication capabilities and how they are used. There is no simple solution for the improvement of communications during times of natural disasters and emergencies - hence the Office of the Regulator's approach to the NETOP and NETP involves making improvements in coordination, planning, training, exercises and the application of technology. This would be done at all levels of government. The NETOP will be used, along with Standard Operating Procedures (SOPs) to guide how telecommunications and ICT services are used in the response to disasters. As required by the provisions of the Telecommunications Act 2005, the two plans will be a dynamically evolving documents subject to review by the OOTR in coordination with the stakeholders at regular intervals. To ensure that the plans are implemented appropriately, it is proposed that a new National Emergency Telecommunications, Disaster Management, and related sectors.

# **Table of Contents**

1.	Exect	tive Summary
2.	The F	Purpose and Scope of this NETOP7
3.	Gene	ral7
3	.1.	The Phases of a Disaster
3	.2.	The Role of Telecom/ICT in Disaster Management
3	.3.	Penetration of Telecom/ICT Facilities
	3.3.1	Public Telecom/ICT Services
	3.3.2	Private Telecom/ICT Services
	3.3.3	Disaster Management Telecom/ICT Services
3	.4.	International Telecom/ICT Support
3	.5.	Language
4.	The N	Aitigation and Preparedness Phases
4	.1.	General
4	.2.	Telecom/ICT in the Mitigation and Preparedness Phase
	4.2.1	Telecom/ICT for Cyclone preparation
	4.2.2	Telecom/ICT for Tsunami preparation
5.	Durir	g the Event
5	.1.	General
5	.2.	Telecom/ICT during the Event
	5.2.1	Sending Information to the Population14
	5.2.2	
6.	The F	Response Phase
6	.1.	General
6	.2.	Telecom/ICT in the Response Phase
	6.2.1	Data Gathering
	6.2.2	Data Analysis
	6.2.3	Managing Safe Delivery of Assistance
7.	The F	Recovery Phase
7	.1.	General
7	.2.	Telecom/ICT in the Recovery Phase
App	oendixe	
A	ppend	ix 1: Frequencies used for Broadcasting Disaster-related Information
A	Append	ix 2: Private Communications Services

Appendix 3: Disaster Management Communications Services – Map	. 18
Appendix 4: Arrangements with Television Broadcasters	. 19
Appendix 5: Arrangements with Radio Broadcasters	. 20
Appendix 6: Arrangements with Cellular Providers	. 21
Appendix 7: Alternative Communications Arrangements.	. 22
Appendix 8: Siren Systems- Map	. 23
Appendix 9: International Telecom/ICT Support	. 24
International Telecommunication Union (ITU)	. 24
Appendix 10: Mechanisms for Data Gathering, Transfer and Analysis	. 25
Appendix 10, Attachment 1: Household Needs Questionnaire Example	26

# 2. The Purpose and Scope of this NETOP

This National Emergency Telecommunications Operational Plan (NETOP) describes how Telecommunications and Information and Communications Technology (Telecom/ICT) services will be used to help Samoa prepare for and respond to disasters.

It complements the National Telecommunications Emergency Plan (NETP) and the National Disaster Management Plan 2017 - 2020 and covers <u>all</u> (private, commercial and Government) Telecom/ICT services that are likely be used in disaster management.

This NETOP was put in place 2019 and will be reviewed and updated on an annual basis. A complete revision of the NETOP will be completed, and a new version published, by 2024.

#### 3. General

#### 3.1. The Phases of a Disaster

This report looks at how Telecom/ICT services can assist in each of the four phases of any emergency or disaster:

- i) Mitigation: Minimizing the adverse impacts of hazardous events.
- ii) **Preparedness**: Capacity building to efficiently manage all types of emergencies and achieve to deliver prompt response activities.

#### **Disaster occurs**

- iii) Response: Activities needed to provide timely help to affected population.
- iv) **Recovery**: Action aimed at restoring or improving livelihoods and health, as well as economic, physical, social, cultural and environmental assets, systems and activities.

In the Response phase, for example, there are several activities (see below) that typically



Some examples of how Telecom/ICT can assist in carrying out each of these activities are given in the table below:

Activity	Examples of the use of Telecom/ICT			
Gather Data• Computer-based questionnaires to gather structured data				
	Communications to get data back to base			
Data Analysis	• Data-mining tools to convert this data into information suitable for decision making			
Decide	Decision support tools to assist in allocating resources			
Response				
Deliver Relief	Communications and database tools for managing logistics			
	Communications tools for disaster relief teams			

#### 3.2. The Role of Telecom/ICT in Disaster Management

The role of Telecom/ICT in emergency and disaster management is to assist those preparing and responding to the disaster at all phases of Disaster Management [preparedness, warning, during and post recovery] to:

- Gather the information they need to manage the situation <u>from the population;</u>
- Provide appropriate information on what is happening to the population; and
- Manage the response to the disaster.

#### 3.3. Penetration of Telecom/ICT Facilities

#### **3.3.1.** Public Telecom/ICT Services

In Samoa the following communications services are normally available to the population:

- Public Cellular
  - Blue Sky and Digicel provides 2G cellular facilities in the capital and in most areas of Upolu and Savai'i
  - 3G and 4G facilities available from these suppliers.
- Broadcasting. The current analogue services are intended to move to a new platform utilizing the Digital Terrestrial Television Project that is currently in progress and is expected for television to be in operation by the end of 2019 and others to follow.
  - Television:
    - TV1: Samoa Quality Broadcasting. Established in 1993 as a public service broadcaster, privatised in 2008 as a commercial broadcaster, analogue VHF, free to air in Upolu and Savaii, Funded from advertising and sponsorship. Geographically, covers approximately 70 per cent of Samoa.
    - CCTV: China Central Television, China-based, analogue UHF, distributed free to air by TV1 at Mt Vaea. TV1 hold a commercial broadcasting licence.
    - TV3: Apia Broadcasting Limited. Second major free to air service, operating in both Upolu and Savaii on VHF and UHF channels. Commercial broadcaster funded from advertising and sponsorship. Geographically, covers approximately 50 per cent of Samoa.
    - BYU TV: BYU television. American-based, analogue UHF, distributed free to air by TV3 at Mt Vaea. Funded by Brigham Young University (BYU). TV3 hold a commercial broadcasting licence.

- EFKS TV: EFKS TV (TV2). Analogue VHF free to air commercial broadcaster, religious and non- religious programming, operating in Upolu. Geographically, covers approximately 30 per cent of Samoa.
- Kingdom TV: Analogue VHF free to air commercial broadcaster, religious programming, operating in Upolu from Mt Vaea and Mt Fiamoe. Geographically, covers approximately 30 per cent of Samoa.
- Radio Services (AM & FM)
- Commercial Radio Broadcasting
  - Radio Polynesia Limited FM Radio Talofa FM, K-Lite, Magic FM, Star FM, Malo FM.
  - Samoa Quality Broadcasting FM Radio My FM, ABC Australia, Chinese International Radio FM
  - TV2 Network (EFKS TV) FM Radio EFKS FM
  - Catholic Media Communication FM Radio Aiga Fesilafai Radio
  - Worship Centre FM Radio Shower of Blessing
  - Power FM Radio FM Radio Power FM
  - Talamua Media FM Radio FM Radio
  - Ministry of Communication & IT AM Radio 2AP National Radio
- o Non-Commercial Radio Broadcasting
  - Good News Trust FM Radio Hope
  - Youth for Christ FM Radio Laufou ole Talalelei
  - R & M Meredith Family Trust FM Radio FM Radio
  - Catholic Radio FM Radio Aiga Fesilafai
  - Salafai Radio FM Radio Salafai FM
- o Community Radio
  - National University of Samoa FM Radio NUS FM
- HF Radio
  - Maritime and shipping services Most of the HF frequencies are used by the ships in Samoa.



For the purposes of this NETOP, we have used the following terms to classify the services available to the general population:

- High level of communications:
  - Cellular with voice and data capability
  - Television FM and AM broadcasting
- Moderate level of communications:
  - Cellular with voice and text
  - AM broadcasting only
  - Low level of communications:
    - No cellular
    - o No Broadcasting

#### **3.3.2.** Private Telecom/ICT Services

In addition to these public facilities, the following private communications services<sup>1</sup> are in place:

- Radio Facilities
  - The DMO operates a VHF radio network covering the capital and most areas of Upolu and Savai'i. While this network was designed for disaster response activities, is also used by a number of organisations (e.g. Police, NHS, Red Cross, etc) for day-to-day operations.
  - The Electric Power Corporation has a microwave and (overhead and buried) fibre network carrying both SCADA and voice traffic to its sub-stations.
  - o ...
- HF Communications
  - The Armateur Radio Operators fall under this private Telecom/ICT service where there is only one person in Samoa operating a armature radio. He is Atsuo Sakuma a Japanese/Samoan living at Malololelei.
- Satellite Communications
  - The Meteorological Office has a number of cyclone-hardened satellite systems for gathering weather data.
  - The following is a list of satellite user;
    - Bluesky Samoa Limited Satellites communciations such as dish and earth stations
    - Digicel Samoa Limited– Satellites communciations such as dish and earth stations
    - MNRE Satellite phones with DMO and Met Office
    - Samoa Quality Broadcasting Limited (TV1) Satellites communciations such as dish and earth stations
    - ANZ Satellites communciations such as dish and earth stations
    - BSP– Satellites communciations such as dish and earth stations
    - USP Satellites communciations such as dish and earth stations
    - LDS– Satellites communciations such as dish and earth stations
    - Apia Broadcasting Limited (TV3) Satellites communciations such as dish and earth stations
    - NetVo- Satellites communciations such as dish and earth stations

<sup>&</sup>lt;sup>1</sup> See Appendix PVT

#### 3.3.3. Disaster Management Telecom/ICT Services

In addition to these "business as usual" services, the following services<sup>2</sup> have been put in place specifically to support disaster management:

- As noted above, the DMO operates a disaster response VHF radio network covering the capital and most areas of Upolu and Savai'i which is also used by a number of organisations for day-to-day operations.
- The Red Cross have a small number of VHF handheld radios and two portable repeaters which are used primarily for disaster response activities.
- Satellite Communications
  - The DMO has satellite telephones that that are intended to be used for communications in a disaster. ??
  - The Red Cross has 2 satellite telephones that that are intended to be used for communications in a disaster.
  - Other organisation who have access to satellite phones included, Ministry of Communications and IT, UNDP and Samoa Shipping Corporation.
- Sirens<sup>3</sup>
  - The DMO has established a network of 23 mechanical sirens along the south coast of Upolu for warning the population of tsunamis.

#### 3.4. International Telecom/ICT Support

Telecom/ICT support from the international humanitarian community will be requested from the *Office of the Regulator* to the *Regional ETC Office* based in (*Suva, Fiji*). The Regional ETC has access to the Global ETC network which is made up of a number of international partners who offer support in times of need when local capacities are overwhelmed. For details of the services available, see Appendix INT.

While Samoa is not a signatory to the Tampere Convention, we have decided that the following principles from the convention will apply when a disaster is declared:

- Normal restrictions on the importation of Telecom/ICT equipment will be waived for equipment being brought in by International humanitarian organizations responding to the disaster;
- Simplified radio licensing procedures will be put in place that enable rapid response while minimizing the possibility of interference.

#### 3.5. Language

Messages for the general population are to be sent in both Samoan and English.

All messages are to be written so that they are understandable by the general population Where messages are being carried on Television, a sign language option should be considered.

<sup>&</sup>lt;sup>2</sup> See Appendix DMS

<sup>&</sup>lt;sup>3</sup> See Appendix SIR

# 4. The Mitigation and Preparedness Phases

#### 4.1. General

Samoa is exposed to a number of hazards, some of which are seasonal, such as tropical cyclones, floods and droughts, whilst other present an ever present threat, such as earthquakes, volcanic eruption, and tsunamis.

With Samoa being on the Alerts, information will be issued by the DMO based on warnings received from the Samoa Meteorological Office for the following events:

- Cyclones: The Fiji Meteorological Service; and
- Tsunamis: The Pacific Tsunami Warning Centre.
- Volcanoes: The Pacific Tsunami Warning Centre.

The aim of this phase is that:

- The general population is prepared as well as possible for all likely disasters;
- The responsible authorities (DMO, others) have all the authority, information, and tools they need to manage these disasters;
- Procedures are put in place to ensure the right information gets to the right persons at the right time; and
- International support and points of contact are well understood

For cyclones, preparation activities include encouraging the population to:

- Strengthen their buildings (especially roofs) so they are able to withstand strong winds;
- Put in place water collection and storage systems that will survive a cyclone;
- Have systems for receiving cyclone warning information;
- Develop drills and exercises to test the Telecom/ICT networks;

For tsunamis, preparation activities include encouraging the population to:

- Locate their homes away from beaches and other areas likely to be affected by a tsunami;
- Develop tsunami evacuation routes and make sure people know about them;
- Have systems for receiving tsunami warning information;
- Develop drills and exercises to test the Telecom/ICT networks;

The DMO based on the advice from the Meteorology Office will evaluate the risk to Samoa associated with the warnings and compose appropriate messages (taking into account differing literacy levels) in Samoan and English to be sent out to the population.

#### 4.2. <u>Telecom/ICT in the Mitigation and Preparedness Phase</u>

The following systems and arrangements have been put in place to alert the population to potential disasters:

- Sirens (on the south coast of Upolu);
- Television, radio and cellular systems; and
- The Ministry of Women, Community and Social Development's system for updating village representatives.

The sections below describe how these are used to warn the population about Cyclones and Tsunamis.

#### 4.2.1. Telecom/ICT for Cyclone preparation

Telecom/ICT services will be used for the following purposes when preparing the population for cyclones:

- Television and radio advertisements<sup>4</sup> will be used to remind the population of the need to:
  - prepare their houses for the coming cyclone season;
  - put in place water collection and storage systems that will survive a cyclone;
  - be alert for warnings of cyclones arriving;
- In areas where television and radio are not available, alternative arrangements<sup>5</sup> DMO have already established awareness and capacity buildings in these areas. This is where the Community is self-sustained and to use available resources for their preparations and recovery. The use of traditional methods such as Church Bells, Lali, Foafoa and other traditional means are used for this coordination. One such area in Samoa is Fagaloa where the DMO have covered and assisted these isolated communities to use these methods and technologies for their disaster management.
- Arrangements will be put in place to send out cyclone warnings using:
  - Television, radio and cellular providers
  - A database system will be used by the DMO to assist them in keeping track of:
    - Cyclone preparation status;
    - People who are involved in the preparation effort;
    - The systems that will be used for cyclone warning;

Cyclone warning messages generated by the Meteorology Office at Mulinuu will be sent out using the following systems:

• For areas covered by television, radio and cellular networks using the procedures described in Appendices 4, 5 and 6

#### 4.2.2. Telecom/ICT for Tsunami preparation

Telecom/ICT services will be used for the following purposes when preparing the population for tsunamis:

- Television and radio advertisements will be used to remind the population of the need to:
  - Locate their homes away from beaches and other areas likely to be affected by a tsunami;
  - Develop tsunami evacuation routes and make sure people know about them;
  - Be alert for warnings of tsunamis arriving;
- In areas where television and radio are not available, alternative arrangements such as the *DMO radio network* will be used to communicate messages to these preparation messages;
- Arrangements will be put in place to send out tsunami warnings using:
  - Sirens<sup>6</sup> south coast of Upolu;
  - Television, radio and cellular providers

Tsunami warning messages generated by the Meteorology Office will be sent out using the systems and procedures described in Appendices 4, 5 and 6.

<sup>&</sup>lt;sup>4</sup> See Appendices 4, 5 and 6.

<sup>&</sup>lt;sup>5</sup> See Appendix 7.

<sup>&</sup>lt;sup>6</sup> See Appendix 8.

In addition, the Tsunami warning sirens will be activated using the network described in Appendix 8. IT Division of the MNRE understand how this system works.

## 5. During the Event

#### 5.1. General

During an emergency, the Meteorology Office expects to continue to send out alerts containing the following information:

- Cyclones: updates on the path and strength of the cyclone; and
- Tsunamis: expected times of arrival at different locations.

The DMO will compose appropriate messages (taking into account differing literacy levels and any disabilities) in Samoan and English to be sent out to the population.

The DMO would also like to receive reports during the event, to the extent that it is practical, of the progress of the event and its effects on the country.

#### 5.2. Telecom/ICT during the Event

#### **5.2.1.** Sending Information to the Population

During the event, the DMO will continue to use sirens, television, radio and cellular systems (to the extent that they are still operating) to update the population on the on the path, strength and progress of the event.

In addition, the DMO will make use of *ERN* to update and to get messages population who cannot be reached by normal means.

#### 5.2.2. Receiving Information from the Population

During the event, the DMO will use *social media apps and mobile phones* to receive reports during the event, of the progress of the event and its effects on the country. This information will be used to update warnings and assist in the initial planning for the response to the event.

# 6. The Response Phase

#### 6.1. <u>General</u>

The DMO's aim during the response phase is to address the immediate needs of the population following a disaster or emergency. This includes attending to medical emergencies, providing food and shelter and preventing the outbreak of disease.

To achieve this, the DMO needs to be able to:

- Gather data on immediate needs and where these needs are greatest;
- Analyse this (typically incomplete) information to decide how to make the best use of the (typically limited) resources available; and
- Manage the safe delivery of the response.

#### 6.2. <u>Telecom/ICT in the Response Phase</u>

#### 6.2.1. Data Gathering

Smartphone and tablet-based questionnaires will be used to gather information in a structured form on the effects of the disaster at household level. These devices will send data back to

the DMO using Wi-Fi, cellular VHF or HF, or, where these are not available, by satellite. Details of the mechanisms used for data gathering and transfer will be found in Appendix 10. Drones are also used to collect data from the aerial view. There are 2 drones from the DMO office and also the NETCC can contact the Skyeye Company or the National University of Samoa for assistance during the recovery. Google earth can also be used as well as shots from aircraft coming in to assist can take photos of the areas to inspect damages to infrastructure.

#### 6.2.2. Data Analysis

The data received from the field will be stored in a database at the DMO. Summary reports will be prepared using pre-prepared queries by DMO staff.

The DMO is also making use of *Statistic GIS or the EPC GIS* geographic information system (GIS) to visualise, question, analyse, and interpret the received data to understand how best to respond.

For detailed information on Data Analysis, please see Appendix 10. Priority should be given to a system that will analyse these data for DMO.

#### 6.2.3. Managing Safe Delivery of Assistance

A mix of techniques will be used to communicate with teams in the field:

- The Emergency Radio Network where it is still working or where temporary/portable systems have been installed;
- Satellite phones and other alternatives where these have failed; There are resources with DMO and in an event these are not located, ETC Regional Office outside of Samoa.
- Geospatial information on the disaster event;

Details of these systems will be found in the various appendices.

### 7. The Recovery Phase

#### 7.1. General

The DMO's aim during the recovery phase is in many ways similar to the response phase but there are some significant differences:

- The focus has shifted from the short-term relief to long term rebuilding and improvement of facilities; and,
- Telecommunications and other infrastructure that failed during the event has been (partially or fully) restored.

#### 7.2. <u>Telecom/ICT in the Recovery Phase</u>

In general, the Telecom/ICT systems used during the recovery phase will be a mix of those that were in use prior to the and those established for the initial response remaining in place and contributing to the future infrastructure of the country.

# Appendixes

Company	Station Name	Location of	Areas Covered	Frequency
		Transmitter		
Samoa	My FM Radio	Mt Fiamoe	Urban / Rural	89.1 MHz
Broadcasting		Siumu	Rural	95.5 MHz
Communication		Fagaloa Pass	Rural	93.9 MHz
Limited		Mt Olomanu	Rural	93.9 MHz
		Lepiu Tai	Rural	93.8 MHz
Ministry of	2AP AM	Mulinuu	All of Samoa	540 kHz
Communication				
& Technology				
Radio Polynesia	Talofa FM	Mt Fiamoe	Urban / Rural	88.5 MHz
Limited	Magik FM	Mt Fiamoe	Urban / Rural	98.1 MHz
	K-Lite FM	Mt Fiamoe	Urban / Rural	101.1 MHz
	Star FM	Mt Fiamoe	Urban / Rural	96.1 MHz
	Malo FM	Mt Fiamoe	Urban / Rural	105.3 MHz
	Talofa FM	Savalalo	Urban	99.9 MHz
	Magik-FM	Savalalo	Urban	89.5 MHz
	Talofa FM	Lotofaga	Rural	91.5 MHz
		Vavau		
	Talofa FM	Lalomanu	Rural	99.9 MHz
	Talofa FM	Mt Olomanu	Rural	91.5 MHz
	Talofa FM	Lepiu Tai	Rural	99.9 MHz
Worship Centre	Showers of Blessing	Mt Fiamoe	Urban / Rural	89.9 MHz
	Showers of Blessing	Siumu	Rural	88.1 MHz
Youth for Christ	Laufou ole Talalelei	Afiamalu	Urban / Rural	103.1 MHz
	Laufou ole Talalelei	Mulinuu	Urban	95.1 MHz
Catholic Media Communication	Radio FM	Mt Fiamoe	Urban / Rural	90.5 MHz

The following radio	stations have ag	reed to broadcast	t disaster related	l information:
	· · · · · · · · · · · · · · · · · · ·	,		

#### Appendix 2: Private Communications Services

Names and owners of the systems	Site locations	Frequencies used	Coverage	Modes of operation	Arrangements for the use of the systems	Where the system can be accessed from
BlueSky Samoa	Maluafou	N/A	90% Populated Areas	Mobile Network	Contact for the main people from BlueSky	Apia and Remote areas
Digicel Samoa	NPF Plaza	N/A	90% Popluated Areas	Mobile Network	Contact for the main people from Digicel	Apia and Remote areas
NetVo	Co Star Building	N/A	Some of the Apia Town Area	WIFI Network	Contact for the NetVo	Some of Apia Area
Computer Services Limited	SLAC Building	N/A	Apia, Some areas of Savaii	WiMax & WIFI Hot Spots	Contact for CSL	Some of Apia Area and Salelologa Savaii
Lesa Telehone Services	Opposite John William Building	N/A	Apia, Some areas of Savaii	N/A	Contact fof LTS	Some areas of Apia

#### All the Describe private networks should be made available to the DMO for disastermanagement communications.

#### Appendix 3: Disaster Management Communications Services – Map

Locations for all the ERN sites in Upolu and Savaii

#### Appendix 4: Arrangements with Television Broadcasters

SOP from Meteorology Division, MNRE for Cyclones and Earthquakes

#### **Appendix 5:** Arrangements with Radio Broadcasters

Radio 2AP is the main DAC voice to the nation when there is a disaster which will relay all the updates during the emergency and also awareness.

#### Appendix 6: Arrangements with Cellular Providers

- All Mobile Operators are part of the DAC and they will provide services when needed.
- NETCC need to update this part for the NETOP.

#### Appendix 7: Alternative Communications Arrangements.

DMO and MWCSD to promote awareness with these isolated communities using traditional communication means

- Foafoa
- Church Bell
- Lali
- First Aid responders training

#### Appendix 8: Siren Systems- Map

Only Upolu have these installed



#### **Appendix 9: International Telecom/ICT Support**

#### **International Telecommunication Union (ITU)**

Arrangements have been made, through the *Fiji Regional* ETC office of the World Food Programme, for the ITU to provide satellite phones and BGANs for use during a disaster. This equipment is requested in the following manner:

- OOTR to request this equipment and the contacts are; Hlekiwe KACHALI ETC Coordinator | UNWFP Pacific Office |2<sup>nd</sup> Level, Kadavu House, 414 Victoria Parade, Suva, Fiji.
- Using email below pacific.etc@wfp.org.

#### Appendix 10: Mechanisms for Data Gathering, Transfer and Analysis

All these activities are done manually.

- Some during recovery uses mobile apps such as
  - Watsapp
  - Messenger
  - o Facebook
  - o Instagram
- NETCC needs to improve on this data collection

Appendix 10, Attachment 1: Household Needs Questionnaire Example

#### 1. PACIFIC INITIAL DAMAGE ASSESSMENT FORM

#### 2.Disaster Event Name

**3.**Name of Community (village, settlement, ward, location etc.)

4.Name of District/Island

**5.Name of Province (if applicable)** 

6.Name of Person Conducting Assessment

7.Date

**8.Name of Household Head - Can be either male or female whichever is the surviving head/** 

#### 9. What is the Household's Main Source of Income

Choose one response

- Business Owner If this response, jump to 11
- Permanent Worker If this response, jump to 11
- Casual Worker If this response, jump to 11
- Farmer If this response, jump to 11
- Fisherman If this response, jump to 11

- Other

**10.Please describe OTHER OCCUPATION** 

11. How many MALE ADULTS in the household (16 years and above)

12. How many FEMALE ADULTS in the household (16 years and above)

13. How many MALE CHILDREN in the household (6 to 15 years)

14. How many FEMALE CHILDREN in the household (6 to 15 years)

**15.How many MALE BABIES in the household (0 to 5 years)** 

**16.How many FEMALE BABIES in the household (0 to 5 years)** 

17. How many people with SPECIAL NEEDS (infants, disabled, etc.) in the household

18. How many members of the household are INJURED

19. How many members of the household are DEAD

#### 20. How many members of the household are MISSING

#### 21. How much DAMAGE to the DWELLING HOUSE

Choose one response

- OK House can be lived in
- Partly Damaged house can be made fit to live in with tools and materials
- Destroyed house cannot be lived in

#### 22.Please check Your GPS is on

#### 23.What is the status of the WATER SUPPLY for the household

Choose one response

- OK - can be used

- Damaged – cannot be used

#### 24.List any DAMAGED HOUSEHOLD ITEMS (furniture, bedding, utensils, etc.)

#### 25.What is the status of the TOILETS for the household

Choose one response

- OK - can be used

- Damaged - cannot be used

#### 26.What is the status of the LIGHTING for the household

Choose one response

- OK - can be used

- Damaged - cannot be used

#### 27.What is the status of the KITCHEN for the household

Choose one response

- OK – can be used

- Damaged – cannot be used

#### 28.Do you have any COMMENTS ABOUT THIS HOUSEHOLD

#### 29. THANK YOU - Please move to the next household

Appendix DATA, Attachment 2: Data Storage and Analysis Tools