



Tsunami Alerts and Warning Procedure

Procedure: Issuing Urgent Tsunami Alerts and Tsunami Warnings

Purpose: To issue Tsunami Alerts and Warnings for Tonga

Owner: Tonga Meteorological Service, MINISTRY FOR TRANSPORT

Description:

The Tonga Meteorological Service (TMS) is the focal point in Tonga responsible for issuing tsunami advisories, alerts and warnings for Tonga in collaboration with the Pacific Tsunami Warning Centre (PTWC) in Honolulu, Hawaii, USA.

1. The Tonga Meteorological Service receives two types tsunami bulletins from PTWC as follows:
 - **Tsunami Information Bulletin (TIB)** - When an earthquake of magnitude 6.7 or greater has occurred in the Pacific Basin and it has not been verified if a tsunami has been generated.
 - **Tsunami Warning Bulletin (TWB)** - When a tsunami wave has been detected and a warning is in force.
2. Once a TIB is received from PTWC either via EWMIN, FAX or phone, the Duty Officer is to respond immediately to acknowledge receipt of the bulletin and receive a briefing on the nature of the event from PTWC. The contact details are as stipulated in the contact list:

PTWC Phone: 001-808-689-8207

PTWC Alternate: 001-808-689-6655

PTWC Fax: 001-808-689-4543

The Duty Officer is to then notify the Director, NEMO and TCC only as soon as it is possible via telephone or any other practical means and remain on standby for further TIB's, upgrade to TWB or Cancellation.

3. Upon receipt of a TWB from PTWC, Duty Officer shall format the TWB into the local format as stipulated in Annex (a) (English and Tongan) notify and verify with all agencies (starting with TCC and NEMO) listed in the tsunami warning distribution list in Annex (b) via fax, phone or any other means of communication and remain on standby for further TWB's or Cancellation. Annex (c) shows the channels of communication that should be followed.

4. In the event that a significant earthquake of magnitude 6.7 or greater is reported or directly observed (whereby one would fall down and have difficulty standing up), an Urgent Tsunami Alert may be issued immediately without verification from PTWC as a tsunami wave may reach the coast in a matter of minutes. In such cases, the Bulletin will be deemed as being issued from the TMS and will be treated in the same manner as a TWB.

In such an event, the warning issued from the TMS will be as follows:

English

The National Weather Centre at Fua'amotu has issued an Urgent Tsunami Alert for Tonga. A significant earthquake has occurred in the vicinity of Tonga and a tsunami could affect coastal areas within minutes. All persons residing in low lying coastal areas are advised to immediately move inland or to higher ground. Please keep away from low lying coastal areas until you are advised to do so. Stay tuned to Radio Tonga for further updates and advice.....I repeat.....

Tongan

'Oku 'oatu heni 'a e fakatokanga fakavavevave ki he kakai kotoa 'o Tonga ni ke mou tokateu ki ha Peau Kula. Kuo hoko ha mofuike lahi 'aupito 'I he potu tahi 'o Tonga ni. 'I he malohi ko'eni 'e malava pe ke hoko ha Peau Kula 'o ne uesia 'a e ngaahi matafanga ' o Tonga ni 'I ha lau miniti pe. 'Oku 'oatu 'a e kole heni ki he kakai 'o e fonua kemou 'unu leva ki lotofonua pe koha feitu'u ma'olunga telia na'a hoko mai ha fakatamaki. Kataki kamou fakafanongo mai ki he Letio Tonga 'e oatu ai 'ai 'a e ngaahi fakatokanga.

Annex (a)

English

Tsunami Warning Bulletin No. 1 issued from Fua'amotu at XXXXXX local time.

A tsunami Warning is now in force for all of Tonga

An earthquake has occurred with these preliminary parameters

Time of Occurrence: XXXXLT 16 May 2006

Coordinates: 30S, 72W or 10400km East of Tonga

Location: Off the Coast of Central Chile

Magnitude: 8.2

Preliminary analysis of data received from various observation networks suggest that a tsunami may have been generated.

All persons in coastal and low lying areas all over Tonga are here advised to pay special attention to A3Z radio/TV for directions and instructions. It is essential to take precautions now and wait for further notice while the tsunami warning centres are investigating the event to determine the level of danger.

Bulletins will be issued as new information is received. Until then, a tsunami warning is in force for the whole of the Tonga Islands.

Please advise receipt of this bulletin to the Tonga Meteorological Office at phone number 35 355 or 35 123

(Repeat)

Tongan

Fakatokanga Peau Kula hono 'Ulu'aki ma'a Tonga 'I hono tuku atu mei 'Ofisi Vakai Matangi mei Fua'amotu 'I he taimi XXXXLT 16 May 2006.

'Oku 'iai ha fakatokanga ke tokateu ki ha Peau Kula ki he 'Otu Tonga Kotoa.

Na'e lulu'I 'eha mofuike 'a e matafanga 'o Chile 'I 'Amelika Tonga fakafuofua ki he taimi 8am pongipongi 'o e 'aho ni. Na'e fe'unga 'o e uhouhonga 'o e mofuike ni mo e latitude 30 fakatonga longitute 72 fakahihifo pe maile nai 'e 5600 ki he hahake 'o Tonga ni. Ko e malohi 'o mofuike ni 'oku fakafuofua ne ofi 'I he 8.2 'I he me'afua mofuike.

Mei he ngaahi fakamatala kuo lava 'o tanaki mei he ngaahi me'afua mofuike he feitu'uni 'oku 'iai 'a e tui kuo 'iai ha peau kula kuo fa'u 'I he feitu'u ni pea 'e malava ke ne uesia 'a e ngaahi fonua 'o e Pasiki {kau ai a Tonga ni} 'I ha ngaahi lau houa.

Koia ai 'oku 'oatu ai heni 'a e fakatokanga ki he kakai 'o e fonua kemou mou mateuteu mo fakafanongo mai ki he letio Tonga. 'E 'oatu ai 'a e ngaahi fakatokanga kotoa pe 'i hono ma'u mai pe 'a e ngaahi fakamatala fakaikiiki ki he tukunga 'oku 'iai 'a e peau kula.

Kataki 'o fakapapau'I mai 'oku ma'u 'a e fakatokanga ni ki he 'Ofisi Vakai Matangi 'aki hao telefoni ki he fika 35 355 or 35 123.

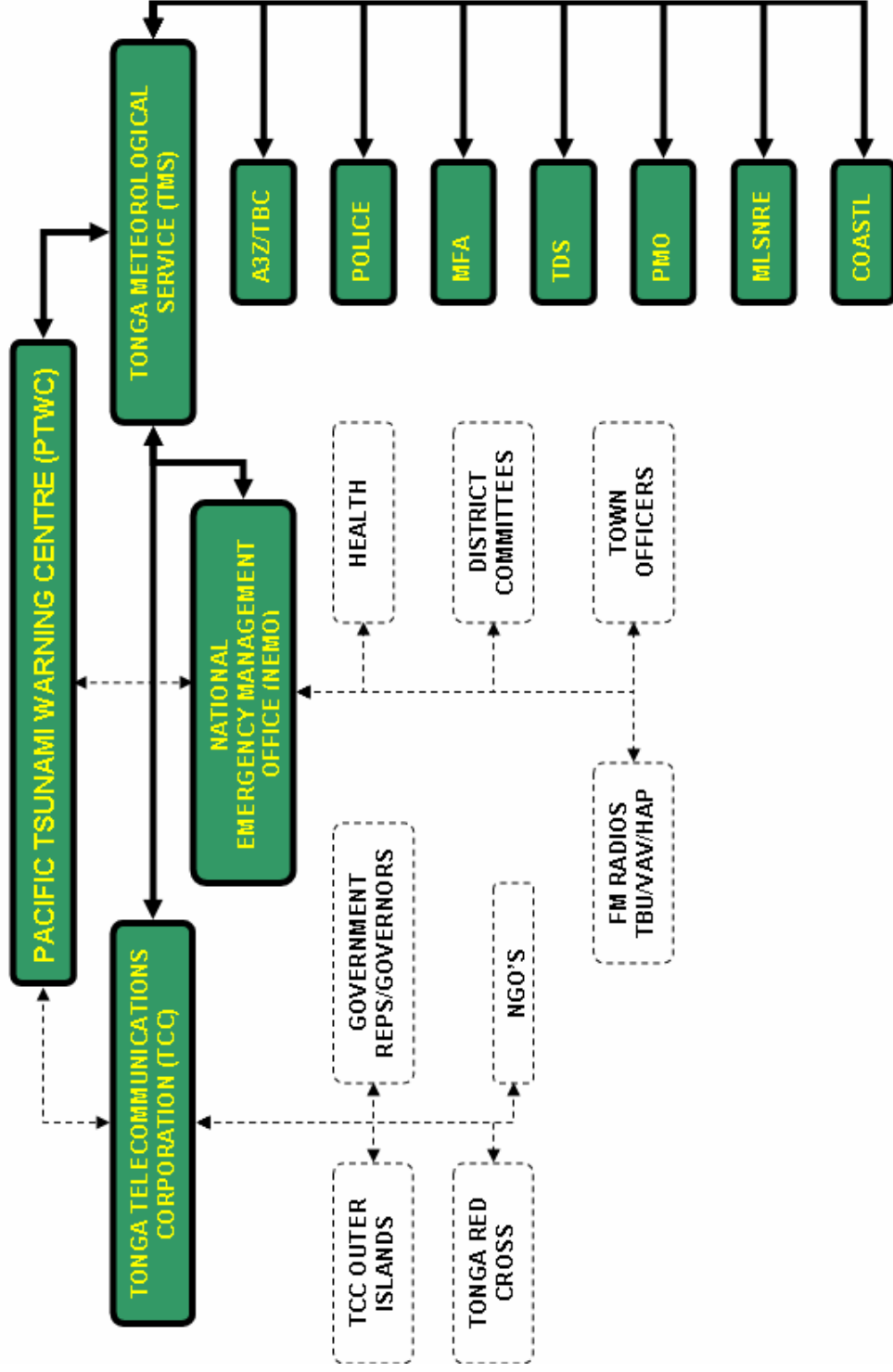
Annex (b)

Tsunami Warning Distribution List

Bulletin disseminated to	24 hour telephone contact	Mobile or after hours contact	24 hour Fax
TCC	911		24 789
NEMO	28 215 or 26 340		28 220
Director	878 2834	878 2834	N/A
Minster for Transport	28 026 or 29884	878 1657	28 032
Police Station RFS	999		23 036
Tonga Defence Services	23 099		23 934
A3Z Radio and TV	25 556 or 23 863		
Coastal Watch	23 350	65 314 or 24 080	24 987
Prime Minister's Office	24 644		23 888
Foreign Affairs	58 717		26 971 or 23 360
MLSNRE	54 024 or 25 508		23 216

Annex (c)

Channel of Communication for Tsunami Warnings



** Each individual agency is expected to maintain and activate their respective tsunami emergency plans. Agencies directly affiliated with the Tonga Meteorological Service in the warning system is highlighted and shaded in green.