

**NDRMO & TMS & TGS Tsunami Alert Action Plan**

<b>LOCAL SOURCE EVENT:</b>			
<b>A tsunami from a nearby source within 300km from any coastline of Tonga or less than 1 hour's tsunami travel time from its source.</b>			
<b>Tsunami Bulletin</b>	<b>TMS</b>	<b>NRD</b>	<b>Discussions/Way Forward for SOP</b>
<b>Urgent Tsunami Warning</b>	<p>1. <b>Ensure criteria(s) is met:</b></p> <ul style="list-style-type: none"> <li>• <i>Earthquake <math>7.1 \leq M</math> and <math>&lt; 100\text{km}</math> deep detected within 300km in any of Tonga's Coastline</i></li> <li>• <i>To be issued when a Long or strong Local earthquake is felt (observed) where strong shaking lasts for 30sec or more, but no tsunami wave has been recorded on tide gauges and no official earthquake parameters has been received from earthquake monitoring stations.</i></li> </ul>	<ul style="list-style-type: none"> <li>- <b>Magnitude and Depth parameters are important for NRD</b></li> </ul>	<ul style="list-style-type: none"> <li>- NRD to provide more detailed and confirmed information on the seismotectonic provinces of Tonga in terms of model simulation, historical events and studies etc.</li> <li>- To sub-divide (partition) further the seismotectonic provinces and to establish key Magnitude for each zone that may trigger a tsunami (further research is needed on this NRD)</li> <li>- We need to provide references for all our SOPs</li> <li>- Look into after hours procedures for NRD to TMS</li> <li>- Remove advisory status from NRD event report</li> </ul>

			<ul style="list-style-type: none"> <li>- Colour coded warning/templates</li> <li>- <b>Workshop agrees to use TMS criteria for Local Source events</b></li> </ul>
<b>Significant Earthquake Advisory</b>  <b>(Tsunami Information Statement)</b>	<p>1. <b>Ensure criteria(s) is met:</b></p> <ul style="list-style-type: none"> <li>• <i>Earthquake <math>6.5 \leq M &lt; 7.1</math> and <math>&lt; 100\text{km}</math> deep has been detected anywhere in the Pacific Ocean</i></li> <li>• <i>To be issued when earthquake <math>6.5 \leq M &lt; 7.1</math> and <math>&lt; 100\text{km}</math> (Shallow depth) and/or has been felt in our area or anywhere in the Pacific Basin and assessments has been made and there is no tsunami threat</i></li> <li>• <i>To be issued when earthquake <math>6.5 \leq M &lt; 7.1</math> and <math>&gt; 100\text{km}</math> (Deep depth) and/or has been felt in our area or anywhere in the Pacific Basin and assessments has been made and there is no tsunami threat</i></li> </ul>	<p>Magnitude <math>4.7 &lt; 6.9</math> Felt (<math>&lt; 70\text{KM}</math> depth)</p> <p>When an event is shallower than <math>70\text{km}</math> deep, between <math>4.7</math> and <math>6.9</math> magnitudes within <math>200</math> Nautical Miles of Tonga Islands (Annex 1) proceed with issuing the Bulletin to TMS, NEMO and subscribed recipients.</p> <p>No further works is to be taken. [Go to Phase 5].</p>	
	Activate Tsunami Siren & RAR System immediately		
	Provide Live Radio Interview/Briefings		
	Issue Urgent Tsunami Warning (Template) via email thru the approved distribution list		

**Commented [I1]:** These conditions here for the TIS is believed to be sufficient to be used for all felt events that poses no threat. Hence it is believed that there is no need for a Tsunami No Threat or Tsunami Minimum Threat Advisory Template (i.e. to delete these templates from the SOP).



Tsunami Marine Warning			
Tsunami Alert (TA)			
Tsunami Warning (TW)			


