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# Review of IOC Post-Event Assessment Process & Questionnaire Process

**Laura Kong, Director, ITIC**

TOWS WG TT-TWO, TT-DMP, 4-6 March 2026  
Online

# Post-Event Assessment for significant tsunamis

IOC-XXVIII (June 2015). The IOC Assembly approved TOWS-WG-VIII (2015) Recommendation 3 on Post-Event Performance Surveys covering the criteria for the triggering of an assessment and the questionnaire to be used.

Recommendation 3 to TOWS-WG on Post-Event Performance Surveys:

*The Task Team on Tsunami Watch Operations and the Task Team on Disaster Management and Preparedness recommend that the TOWS-WG adopt the proposed post-event assessment questionnaire as detailed in APPENDIX V.*

*The Task Teams further recommend that the trigger for implementing an assessment should be a tsunami threat of >1m amplitude forecast in 1 or more countries in a region. Over and above this trigger level, the final decision to implement a survey should be decided by the regional Tsunami Information Centre (TIC) in consultation with the ICG Steering Group and Secretariat taking into consideration whether the tsunami resulted in a national response in one or more countries.*

## TOWS WG-XVIII (2025)

**Recommends** the review of the IOC Tsunami Post-Event Assessment process and questionnaire (TOWS 2015, PAE) considering its use in the past decade, and consideration of other post-event processes undertaken for smaller events that did not meet the PEA threshold.

# Past PAEs

6 post-2015 (1 IO, 3 PTWS, 2 CARIBE-EWS), 4 pre-2015  
 All regional impact only, except 29 Jul 2025 Kamchatka



**Intergovernmental Oceanographic Commission Technical Series**

92

27 February 2010 Chile Earthquake and Tsunami Event

Post-Event Assessment of PTWS Performance

UNESCO

Online

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90

12 January 2010 Haiti Earthquake and Tsunami Event

Post-Event Assessment of CARIBE EWS Performance

UNESCO

Online

**Intergovernmental Oceanographic Commission Technical Series**

2003

IOC Circular Letter No 2003

Chile 16 Sep 2016

UNESCO

Online

**Intergovernmental Oceanographic Commission Technical Series**

90

Introduction

Honduras 19 Jan 2018

UNESCO

Online

**Intergovernmental Oceanographic Commission Technical Series**

77

IOC Circular Letter No 2002

Kamchatka 29 Jul 2025

UNESCO 2008

Online

**Intergovernmental Oceanographic Commission Technical Series**

132

2nd March 2016 Southwest of Sumatra Earthquake and Tsunami Event

Post-Event Assessment of the Performance of the Indian Ocean Tsunami Warning and Mitigation System

UNESCO

Online

**Intergovernmental Oceanographic Commission Technical Series**

104

Seísmo y tsunamis del 27 de agosto de 2012 en la costa del Pacífico frente a El Salvador y seísmo del 5 de septiembre de 2012 en la costa del Pacífico frente a Costa Rica

Evaluación subsiguiente sobre el funcionamiento del PTWS

UNESCO

Online

**Intergovernmental Oceanographic Commission Technical Series**

104

SW Cayman/NE Honduras 8 Feb 2025

UNESCO

Online

**Intergovernmental Oceanographic Commission Technical Series**

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Dear TNCs of Bahamas, Belize, Colombia, Costa Rica, Cuba, Caicos) and United States of America (Puerto Rico, US Virgin Islands)

An earthquake of magnitude 7.6 occurred at 23:23:14 UTC on 8 February 2025. A hot-wash of the event was conducted on 12 February 2025. You are hereby asked to coordinate with the Tsunami Warning Centre (CTIC) consulted sub-Number 1 in accordance with the guidance of IOC/TOWS-WG. You are hereby asked to coordinate with the Tsunami Warning Centre (CTIC) consulted sub-Number 1 in accordance with the guidance of IOC/TOWS-WG. You are hereby asked to coordinate with the Tsunami Warning Centre (CTIC) consulted sub-Number 1 in accordance with the guidance of IOC/TOWS-WG.

With kindest regards,

Alison Brome  
 Programme Officer for Tsunamis and Other Coastal Hazards  
 Intergovernmental Oceanographic Commission of UNESCO, and the Caribbean Tsunami Information Centre (CTIC)  
 c/o Coastal Zone Management Unit

Kamchatka 29 Jul 2025

Sumatra 2 Mar 2016

SW Cayman/NE Honduras 8 Feb 2025

# Review Considerations

## 1. Is the Trigger Criteria OK?

- *tsunami threat of >1m amplitude forecast in 1 or more countries in a region)*

## 2. Is the Final Decision Process OK?

- *decided by regional Tsunami Information Centre (TIC) in consultation with ICG Steering Group and Secretariat*

## 3. Is the Collection Process OK?

- *Circular Letter, Questionnaire (fillable PDF and/or online ‘Survey Monkey’)*
- *1 submission/county, which often requires obtaining inputs from different organisations, including down to local levels (same as for Wave evals)*

## 4. Is the Report OK? Useful, Missing

- *Should findings / recommendations be included? 2025 Kamchatka did not incl*

## 5. Is the Questionnaire OK? Content Appropriate, Missing

- *Contact info, Tsunami Service Provider, National Actions, National Response, Monitoring & Modelling, Community Preparedness, Capacity Development*



APPENDIX V  
POST-EVENT ASSESSMENT  
QUESTIONNAIRE

Contact info

[EVENT NAME]  
POST-EVENT ASSESSMENT QUESTIONNAIRE

COUNTRY: \_\_\_\_\_

**Contact Details**

Contact Name:	
Name of Organisation	
Address	
Phone	Fax:
Email	
Name of National Tsunami Warning Centre (NTWC)	
NTWC Contact Email	
Name of National Disaster Management Office or equivalent (NDMO)	
NDMO Contact Email	

**Instructions**

This is an electronic form which can be filled out in several ways:

- If you use Microsoft Word software you can fill out the form electronically. To tick checkboxes (yes/no answers), you can either use the tab button or the mouse to move to the required answer. Written answers can be typed in the grey area next to the question.
- If the form question.
- Please give
- Please include enough room for separate documents.
- Where multiple answers are possible, you may also print back to us.

We may need to contact you by phone number when necessary.

SECTION A – TSUNAMI SERVICE PROVIDER (to be completed by NTWC)

- How (through what information source) and at what time (UTC) that a big earthquake had taken place?  
How (Information Source): \_\_\_\_\_ Time (UTC): \_\_\_\_\_
- Did you receive the first notification message from TSP 1 (0000 UTC), or TSP 3 (0000 UTC)?  
Yes  No   
If YES to either or all, at what time was the message received (UTC)?  
TSP 1a: \_\_\_\_\_ TSP 2: \_\_\_\_\_ TSP 3: \_\_\_\_\_
- If yes, how did you receive the messages (cross more than one box if appropriate)?  
Email  Fax  GTS   
Phone  SMS  Other
- Were subsequent messages received from TSP 1, 2 and 3?  
Yes  No   
If YES, please complete the tables on the following pages (all times in UTC please).

Tsunami Service Provider

National Actions

SECTION B – NATIONAL ACTIONS  
The purpose of this section is to find out what actions were taken by National Tsunami Warning Centres, including independent analysis of the event, notification of relevant organisations, issuing and cancellation of warnings.

- Were any earthquake parameters calculated at the national level?  
Yes  No   
If YES, please specify:

	Origin Time (UTC)	Location (Lat and Long)	Depth	Magnitude	Type of Mag.	Time UTC
1st estimate						
2nd estimate						

- Was any action taken BEFORE receiving the TSP messages?  
Yes  No   
If YES, please give details:

- What action was taken AFTER receiving the first message? Please list times (UTC) as well as actions. Include details of organisations or government agencies contacted.

Action Taken	Time (UTC)

- Did your National Tsunami Warning Centre issue a related information to other agencies and/or the public?  
Yes  No   
If NO, then please go to Section C  
If YES, please specify:

National Response

SECTION C – NATIONAL RESPONSE  
The purpose of this section is to find out what the national and local response was to the event after the tsunami warning had been issued by the National Tsunami Warning Centre.

- Do you have a formal national Standard Operating Procedure (SOP) or plan for tsunami response?  
Yes:  No:
- Were any actions taken by the National Disaster Management Organisation (or equivalent national response organisation)?  
Yes:  No:   
If YES, provide details:

Action taken by National Disaster Management Organisation	Time (UTC)

- Did the National Disaster Management Organisation (or equivalent) maintain communication with the National Tsunami Warning Centre throughout the event?  
Yes:  No:   
If YES, provide details:

- Did the National Disaster Management Organisation (or equivalent) maintain communication with local/regional disaster management organisations (or equivalent)?  
Yes:  No:   
If YES, provide details:

- Were any actions taken by the local/regional disaster management organisations (or equivalent)?  
Yes:  No:   
If YES, provide details:

SECTION D – MONITORING AND MODELLING

- Were sea level data monitored during the event?  
Yes  No   
If YES, which stations were monitored and how where they monitored?

Sea Level station	Monitoring method
	GTS <input type="checkbox"/> Tide Tool <input type="checkbox"/> IOC Sea Level Station Monitoring Facility <input type="checkbox"/> Other <input type="checkbox"/>
	GTS <input type="checkbox"/> Tide Tool <input type="checkbox"/> IOC Sea Level Station Monitoring Facility <input type="checkbox"/> Other <input type="checkbox"/>
	GTS <input type="checkbox"/> Tide Tool <input type="checkbox"/> IOC Sea Level Station Monitoring Facility <input type="checkbox"/> Other <input type="checkbox"/>
	GTS <input type="checkbox"/> Tide Tool <input type="checkbox"/> IOC Sea Level Station Monitoring Facility <input type="checkbox"/> Other <input type="checkbox"/>
	GTS <input type="checkbox"/> Tide Tool <input type="checkbox"/> IOC Sea Level Station Monitoring Facility <input type="checkbox"/> Other <input type="checkbox"/>

If "Other" please specify:

- If the answer to question 30 is NO, does your National Tsunami Warning Centre know how to access sea level data over the GTS, on the IOC Sea Level Station Monitoring Facility, Tide Tool, or other sources?  
GTS: Yes  No   
IOC Sea Level Facility: Yes  No   
Tide Tool: Yes  No   
Other: Yes  No

- Did your National Tsunami Warning Centre use any numerical model tsunami scenarios during the event (deep-ocean propagation and/or coastal inundation models)?  
Yes:  No:   
If "Yes" please specify:

Capacity Development

SECTION F – CAPACITY DEVELOPMENT REQUIREMENTS

Capacity development is a fundamental component of all IOC UNESCO programmes. To assist us to prioritise and plan our future training activities within our limited resources, please indicate the training needs you consider to be high priority for your country.

- What sort of training events or other assistance from IOC would be useful for your NTWC, NDMO and other response organisations in the next 12 months?  
Seismic training   
Sea Level training   
Risk Assessment training   
Standard Operating Procedures training   
Inundation modelling training   
Media awareness training   
Community awareness and preparedness training   
Exercises and drills training   
Other – please specify: \_\_\_\_\_

SECTION G – OTHER INFORMATION

Please feel free to provide any further information you would like to be included in the report. This could include comments which you can type below, or attachments such as photographs, or any other documents you consider relevant. We would particularly welcome copies of any national post-event assessment reports that are available.

Community Preparedness

SECTION E – COMMUNITY PREPAREDNESS

- From 0 (none) to 4 (very high) please rank the scientifically assessed level of tsunami hazard, the level of community awareness of that hazard, and the level of pre-existing community tsunami preparedness in 5 of the main communities affected by this event

Scientifically known tsunami hazard (please write the name of the community):

Community	0	1	2	3	4
No 1:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No 2:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No 3:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No 4:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No 5:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Level of community awareness of the known tsunami hazard for the same communities:

Community	0	1	2	3	4
No 1:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No 2:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No 3:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No 4:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No 5:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Level of tsunami preparedness before the event (for the same communities above):

Community	0	1	2	3	4
No 1:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No 2:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No 3:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No 4:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No 5:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- Have there been any community preparedness activities prior to the event?  
Yes:  No:

# Other Surveys – Capacity Assessment (IOTWMS 2024, PTWS 2025)

The survey has six (6) parts – 100+ questions

Each part requires inputs from responsible stakeholders of TWMS

## Topics

Part	Topic of the Survey	Stakeholder Inputs
I	<b>Basic Information:</b> TNC/NTWC/TWFP contact details	Tsunami National Contact
II	<b>Risk Assessment &amp; Reduction:</b> Hazard assessment, Risk Assessment, Policies, Plans, Guidelines	Inputs to be obtained from the Disaster Management Office and/or any other agency responsible for Hazard/Risk Assessment in the Country
III	<b>Detection, Warning and Dissemination</b>	Inputs to be obtained from the National Tsunami Warning Centre and/or other agency responsible for generation and dissemination of tsunami early warnings within the country.
IV	<b>Public Awareness, Preparedness &amp; Response:</b> SOPs, Evacuation, Tsunami exercises, Public Awareness	Inputs to be obtained from the Disaster Management Office and/or other agencies responsible for public awareness, preparedness, and response in the country
V	<b>Tsunami Ready Recognition Programme (TRRP)</b>	Inputs to be obtained from the Tsunami National Contact, Tsunami Ready Focal Point (TRFP), if identified, and/or other agencies responsible for the TRRP or any other similar initiative in the country.
VI	<b>Narrative:</b> Important recent developments and summary of future plans.	Tsunami National Contact

Stakeholders:

Science, DMO

NTWC, TWFP

DMO, NTWC,  
Science, NGO

Tsunami Ready  
focal points

# Recommendation (PEA)

The TT-TWO and TT-DMP reviewed the PEA process and questionnaire, and recommended

1. The PEA Trigger Criteria and Final Decision Process should **(remain unchanged)**
2. The PEA should be requested to Member States through a IOC Circular Letter, attaching the Questionnaire to be returned electronically.
3. The Questionnaire should request information on the *Tsunami Service Provider products, National Actions, National Response, National Monitoring & Modelling capacities, Community Preparedness levels, including with respect to Tsunami Ready indicators, and Capacity Development requirements.*

*The TT-DMP requested the TICs to review the Questionnaire and propose any adjustments, especially for Tsunami Ready, for final approval at the next TOWS WG meeting (this year, next?) – or next TT-TWO/TT-DMP (next year)?*

4. The PAE Summary Report should compile responses, and also include preliminary findings and recommendations



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