



EXERCISE PACIFIC WAVE 2018 (PacWave18) Evaluation Form

INTRODUCTION

Thank you for participating in UNESCO/IOC's EXERCISE PACIFIC WAVE 2018!

Please take the time to thoughtfully complete the EXERCISE PACIFIC WAVE 2018 Evaluation Questionnaire.

Your feedback is essential.

EXERCISE PACIFIC WAVE 2018 (PacWave18) Evaluation Form

INSTRUCTIONS

Prior to completing this Online Survey, please read these instructions carefully.

Exercise evaluation forms are to be completed by each participating agency and forwarded to the country EXERCISE PACIFIC WAVE 2018 National Contact, or the country Tsunami National Contact (TNC). The PacWave18 National Contact, TNC, or Tsunami Warning Focal Point (TWFP) should compile sub-jurisdiction evaluations into one country evaluation to submit.

The PacWave18 National Contact will complete the country Evaluation Form and submit this online no later than 21 December 2018.

Note: **Only ONE (1) on-line evaluation form is to be completed per country.**

If you have difficulty submitting your evaluation online, you may submit your Country Evaluation Form by email to EXERCISE PACIFIC WAVE 2018 Task Team Chairs:

- Laura Kong (email: laura.kong@noaa.gov), or
- Jo Guard (email: jo.guard@dpmc.govt.nz)

EXERCISE PACIFIC WAVE 2018 Instructions on how to Complete this Online Evaluation Form		
STEP	WHO COMPLETES THIS STEP?	DESCRIPTION
1	Each participating Agency/Country	<ul style="list-style-type: none"> • Answer each statement with either Y (Yes), N (No). • Comments should be used to explain/expand upon your Yes or No answer.
2	PacWave18 National Contact	<p>PacWave18 National Contact should complete and submit the PacWave18 Evaluation Form by 21 December 2018. (https://www.surveymonkey.com/r/pacwave18_eval).</p> <p>If there are problems or questions, please contact the PacWave18 Task Team co-Chairs:</p> <p>Laura Kong, laura.kong@noaa.gov; or</p> <p>Jo Guard, jo.guard@dpmc.govt.nz</p>



EXERCISE PACIFIC WAVE 2018 (PacWave18) Evaluation Form

CONTACT DETAILS

*** Agency**

*** Country**

*** Contact Name**

*** Contact Position**

*** Contact Phone**

*** Contact Mobile**

*** Contact E-mail**

EXERCISE PACIFIC WAVE 2018 (PacWave18) Evaluation Form

COUNTRY EXERCISE SCENARIO

*** Scenario Used:**

Tick Scenario used during PacWave18:

- ☐ 2009 Tonga Trench (M 8.1)
- ☐ 2010 Peru-Chile Trench (M 8.8)
- ☐ 2011 Japan Trench (M 9.1)
- ☐ 2013 South Solomon Trench (M 8.0)
- ☐ Manila Trench (M 8.8)
- ☐ South Solomon Trench (M 9.0)
- ☐ Tonga Trench (M 9.0)

*** Reason Scenario Chosen:**

Tick the primary reason:

- ☐ Exercise Local / Regional Tsunami – rapid response
- ☐ Exercise Distant Tsunami – long response
- ☐ Exercise Destructive Tsunami
- ☐ Exercise Non-Destructive Tsunami
- ☐ Exercise Real Event
- ☐ Other (please specify)



EXERCISE PACIFIC WAVE 2018 (PacWave18) Evaluation Form

OBJECTIVE 1

Test communications from the PTWC, NWPTAC, and/or SCSTAC Tsunami Service Providers to Member States/Countries.

1.1 Did your country Tsunami Warning Focal Point receive the PTWS, NWPTAC, and/or SCSTAC information/threat message?

☐ Yes

☐ No

Comments

1.2 If yes, please select which Tsunami Service Provider you received the information/threat message from:

☐ PTWC

☐ NWPTAC

☐ SCSTAC

Comments

1.3 If you received an information/threat message, when did you receive the message(s)? Please state the time in UTC:

PTWC

NWPTAC

SCSTAC

1.4 How did you receive the message(s)? Please tick methods.

☐ GTS

☐ Fax

☐ AFTN

☐ Email

☐ EMWIN

☐ RANET Heads-up SMS

☐ Other (Please specify):

Objective 1 Comments

EXERCISE PACIFIC WAVE 2018 (PacWave18) Evaluation Form

OBJECTIVE 2a

To test national communication and cooperation within the country.

2.1 The warning was disseminated to:

- | | |
|---|--|
| <input type="checkbox"/> Emergency services | <input type="checkbox"/> Local government: provincial/regional level |
| <input type="checkbox"/> Other national government agencies | <input type="checkbox"/> Local government: city/district level |
| <input type="checkbox"/> Science agencies/universities involved in assessment | <input type="checkbox"/> Public |

Please list number of destinations:

2.2 What time was warning sent to the agency or agencies or Public listed in Q2.1? Please note the date and time using 24-hour clock and UTC, e.g., 5 Nov, 14:35 UTC.

2.3 How did you send the warning to emergency, national, science, and local government agencies in Q2.1? Tick all that apply.

- | | |
|--|--|
| <input type="checkbox"/> Landline Telephone | <input type="checkbox"/> Chatty Beetle |
| <input type="checkbox"/> Satellite Telephone | <input type="checkbox"/> TV |
| <input type="checkbox"/> Cell or Mobile Phone | <input type="checkbox"/> Website |
| <input type="checkbox"/> Fax | <input type="checkbox"/> Twitter |
| <input type="checkbox"/> Email | <input type="checkbox"/> Facebook |
| <input type="checkbox"/> SMS | <input type="checkbox"/> RSS |
| <input type="checkbox"/> Radio (UHF, VHF, Amateur) | |
| <input type="checkbox"/> Other (Please specify) | |

2.4 How did you send the warning to the Public? Tick all that apply.

- | | |
|--|---|
| <input type="checkbox"/> Landline Telephone | <input type="checkbox"/> Twitter |
| <input type="checkbox"/> Satellite Telephone | <input type="checkbox"/> Facebook |
| <input type="checkbox"/> Cell or Mobile Phone | <input type="checkbox"/> RSS |
| <input type="checkbox"/> Fax | <input type="checkbox"/> Sirens |
| <input type="checkbox"/> Email | <input type="checkbox"/> Public Announcement Systems (voice speakers) |
| <input type="checkbox"/> SMS | <input type="checkbox"/> Emergency cell / mobile phone broadcast |
| <input type="checkbox"/> Radio (UHF, VHF, Amateur) | <input type="checkbox"/> Police |
| <input type="checkbox"/> Chatty Beetle | <input type="checkbox"/> Door-to-door announcements |
| <input type="checkbox"/> TV | <input type="checkbox"/> Electronic billboards |
| <input type="checkbox"/> Website | |
| <input type="checkbox"/> Other (Please specify) | |

2.5 Based on feedback from agencies, were the communication methods timely and appropriate?

- ☐ Yes
- ☐ No

2.6 Based on feedback from agencies, were the message(s) disseminated from the NTWC/NDMO accurate and clear?

- ☐ Yes
- ☐ No

2.7 Did the national disaster management organisation (or equivalent) maintain communication with the National Tsunami Warning Centre throughout the event?

- ☐ Yes
- ☐ No

Comments

2.8 If you answered yes to Q2.7, what was the nature of the communication between the national disaster management organisation (or equivalent) with the national tsunami warning centre throughout the event?

Objective 2a Comments

EXERCISE PACIFIC WAVE 2018 (PacWave18) Evaluation Form

OBJECTIVE 2b

To test national readiness within the country.

2.9 The NTWC/NDMO has an activation and response process (standard operating procedures) in place for the receipt of tsunami warnings?

- ☐ Yes
- ☐ No

2.10 The NTWC/NDMO knows its specific response role in the event of a tsunami?

- ☐ Yes
- ☐ No

2.11 The NTWC/NDMO has, prior to the exercise, engaged in tsunami response planning?

- ☐ Yes
- ☐ No

**2.12 The NTWC/NDMO has undertaken activities to increase its capacity and capability to support a national tsunami response?
(for example, training, exercise, etc.)**

- ☐ Yes
- ☐ No

If yes, List activities

2.13 The NTWC/NDMO has an appropriate management structure identified and documented to support tsunami response?

- ☐ Yes
- ☐ No

2.14 The NTWC/NDMO has a national tsunami mass coastal evacuation plan?

- ☐ Yes
- ☐ No

2.15 Arrangements to assemble the in-country disaster management group relevant to decision-making on tsunami warning and response were in place before the exercise?

- ☐ Yes
- ☐ No

2.16 A country tsunami emergency response plan (standard operating procedures) for tsunamis exists? Tick all that apply.

- ☐ Local (less than 1 hour arrival time)
- ☐ Regional (1-3 hours arrival time)
- ☐ Distant (greater than 3 hours)

2.17 The response plan includes processes to issue Safe-to-Return (All-Clear) notices?

- ☐ Yes
- ☐ No

2.18 Tsunami exercises are routinely conducted in-country?

- ☐ Yes
- ☐ No

Please list last exercise, and type of exercise scenario (local, regional, distant).

2.19 Tsunami-related public education and awareness materials have been developed and disseminated?

- ☐ Yes
- ☐ No

2.20 Tsunami-related curriculum programmes are in place for all levels (pre, primary, secondary, post-secondary) of education?

☐ Yes

☐ No

If No, please list which levels have programmes.

2.21 All tsunami-vulnerable communities have tsunami evacuation maps, signage, and assembly points for evacuation?

☐ Yes

☐ No

If No, please list number of communities with maps and signage, gaps, and future plans to fill gaps.

2.22 What type of exercise did you conduct?

☐ Orientation

☐ Drill

☐ Tabletop

☐ Functional

☐ Full Scale

☐ Other (please specify)

2.23 Did you conduct community evacuation?

☐ Yes

☐ No

If Yes, what type?

- ☐ Schools
- ☐ Businesses
- ☐ Community
- ☐ Other (please specify)

2.24 If you answered yes to Q2.23, approximately how many people were evacuated in total?

Objective 2b Comments

EXERCISE PACIFIC WAVE 2018 (PacWave18) Evaluation Form

PacWave evaluation form regarding Tsunami Ready:

Under the auspices of UNESCO IOC and facilitated by the IOC's Tsunami Information Centres (TICs), Tsunami Ready is an international Community Performance-based Tsunami Recognition Pilot that motivates communities to be prepared. Tsunami Ready seeks to save lives and livelihoods through better community planning, active education and awareness, and stronger emergency operations. Recent tsunamis in Samoa (2009), Chile (2010), and Japan (2011) attest to the importance of readiness - when a tsunami arrives and communities are ready to respond, lives are saved and fewer die.

In 2015, the Intergovernmental Coordination Group for Tsunamis and other Coastal Hazards for the Caribbean and Adjacent Regions (ICG/CARIBE EWS) approved 10 guidelines for Tsunami Ready recognition by UNESCO IOC. In 2017, the IOC, on the recommendation of its Working Group on Tsunamis and Other Hazards Related to Sea-Level Warning and Mitigation Systems (TOWS-WG-X), instructed Member States to consider piloting the CARIBE EWS Tsunami Ready guidelines and provide feedback on their applicability with a view toward developing a set of harmonized consistent global guidelines. To date in the PTWS, Tsunami Ready pilots have been conducted in Honduras, Costa Rica, and Samoa, with interest expressed from Central America, South America, and Pacific Island Countries.

For guidelines and more information, visit www.tsunamiready-international.org or contact
ITIC Director, Dr. Laura Kong (laura.kong@noaa.gov)
IOC ICG/PTWS Technical Secretary, Bernardo Aliaga (b.aliaga@unesco.org)

2.25 Is your country planning to implement a Community Performance-based Tsunami Recognition Pilot (Tick one)?

- ☐ Yes. Have already conducted UNESCO IOC Tsunami Ready Pilot(s) in 2017-2018.
- ☐ Yes. Have already implemented through a different programme (not Tsunami Ready) in 2017-2018.
Please provide further details on programme in Comments.
- ☐ Yes. Plan to start conducting UNESCO IOC Tsunami Ready Pilot(s) in 2019.
- ☐ Yes. Plan to start implementing a different programme (not Tsunami Ready) in 2019.
Please provide further details on programme in Comments.
- ☐ Yes. Plan to conduct UNESCO IOC Tsunami Ready Pilot(s) or implement a different programme in the future (2020 or later).
if it is not Tsunami Ready, please provide details on the programme in Comments.
- ☐ No. Currently no plans.

Comments.

2.26. If you answered 'Yes' to question (2.25), please give

a. Number of communities recognized (2017-2018);

b. Number of communities planning recognition (2019-2021);

b. Name of each community, and recognition date (2017-2018) or planned date (2019-2021).

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EXERCISE PACIFIC WAVE 2018 (PacWave18) Evaluation Form

OBJECTIVE 3

To test regional communication and cooperation.

3.1 Did your country engage in communication and cooperation with other countries in the region for PacWave18?

☐ Yes

☐ No

If yes, please list countries.

3.2 What types of cooperation were conducted?

☐ Data sharing (seismic, sea level, etc.)

☐ Event information sharing

☐ Alert coordination (levels, dissemination)

☐ Joint PacWave18 exercise

☐ Other (Please specify)

3.3 Did the National Tsunami Warning Center communicate with other countries during the event?

☐ Yes

☐ No

If Yes, please list countries.

3.4 Did the National Disaster Management Agency communicate with other countries during the event?

- ☐ Yes
- ☐ No

If Yes, please list countries.

3.5 Was national information shared with other countries during the event?

- ☐ Yes
- ☐ No

If Yes, please list.

3.6 What type of national information did you share? Tick all that apply.

- | | |
|--|---|
| <input type="checkbox"/> Seismic phase arrival times | <input type="checkbox"/> Tsunami Observations |
| <input type="checkbox"/> Earthquake hypocentre and/or magnitude | <input type="checkbox"/> Tsunami Evacuation |
| <input type="checkbox"/> Tsunami Alert Level (such as Warning, Cancellation, etc.) | <input type="checkbox"/> Tsunami Impact |
| <input type="checkbox"/> Tsunami Forecast | |
| <input type="checkbox"/> Other (Please specify) | |

3.7 How did you communicate the information?

- | | |
|--|--|
| <input type="checkbox"/> Radio (UHF, VHF, Amateur) | <input type="checkbox"/> Fax |
| <input type="checkbox"/> Landline Telephone | <input type="checkbox"/> Email |
| <input type="checkbox"/> Satellite Telephone | <input type="checkbox"/> SMS |
| <input type="checkbox"/> Cell or Mobile Phone | <input type="checkbox"/> Chatty Beetle |
| <input type="checkbox"/> Other (Please specify) | |

Objective 3 Comments

EXERCISE PACIFIC WAVE 2018 (PacWave18) Evaluation Form

OBJECTIVE 4

Test whether the PTWS PTWC/NWPTAC/SCSTAC Tsunami Service Provider (TSP) products are interpreted by Member States accurately and in a timely manner.

4.1 Information provided by the relevant Tsunami Service Provider (TSP) products was understood by the National Tsunami Warning Centre (NTWC) / National Disaster Management Office (NDMO)?

- ☐ Yes
- ☐ No

Comments

4.2 How did your country assess the tsunami threat during the exercise?

Please tick as many as apply:

- | | |
|--|---|
| <input type="checkbox"/> National tsunami experts | <input type="checkbox"/> TsuCAT Tsunami Coastal Assessment Tool – pre-computed tsunami scenarios from NOAA Propagation Database (PMEL/ITIC offline) |
| <input type="checkbox"/> National tsunami coordination committee | <input type="checkbox"/> National pre-computed tsunami scenarios |
| <input type="checkbox"/> National tsunami historical database | <input type="checkbox"/> National tsunami forecasts |
| <input type="checkbox"/> NCEI/WDS tsunami historical database (web) | <input type="checkbox"/> Tsunami Service Provider forecasts. List source of forecasts (PTWC, NWPTAC, SCSTAC, US NTWC) in Comments. |
| <input type="checkbox"/> TsuDig historical database GIS tool (NCEI/ITIC offline) | <input type="checkbox"/> Communication with outside sources (such as ITIC, media, other) (Please specify in Comments) |

Comments

4.3 The information provided assisted with decision making, (e.g., warning levels, earthquake parameters, estimated arrival times, forecast wave heights, etc.)

☐ Yes

☐ No

Comments

4.4 The information issued by our country national Tsunami Warning Focal Point was according to standard operating procedures?

☐ Yes

☐ No

Comments

4.5 Do you require additional training on the use of the TSP products for national threat level decision-making? Tick TSP training requested.

	Yes	No
PTWC products	<input type="checkbox"/>	<input type="checkbox"/>
NWPTAC products	<input type="checkbox"/>	<input type="checkbox"/>
SCSTAC products	<input type="checkbox"/>	<input type="checkbox"/>

Objective 4 Comments

EXERCISE PACIFIC WAVE 2018 (PacWave18) Evaluation Form

OBJECTIVE 5

Validate the format and content of the Northwest Pacific Tsunami Advisory Center (NWPTAC) Enhanced Products (if applicable for your country).

5.1 Information provided in the Northwest Pacific Tsunami Advisory Center (NWPTAC) messages was understood by and useful to the National Tsunami Warning Centre (NTWC)/National Disaster Management Office (NDMO)?

- ☐ Yes
- ☐ No
- ☐ Not Applicable

Comments

5.2 Threat information in NWPTAC products was understood and useful.

	Yes	No	Not Applicable
Text products	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Graphical products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please comment as necessary.

5.3 Components of the NWPTAC product suite were understood and useful?

- ☐ Yes
- ☐ No
- ☐ Not Applicable

Please comment as necessary on product clarity or confusion.

5.4 The information provided assisted with decision making?

(e.g. warning levels, earthquake parameters, estimated arrival times, forecast wave heights, etc.)

- ☐ Yes
- ☐ No
- ☐ Not Applicable

Comments

Objective 5 Comments

EXERCISE PACIFIC WAVE 2018 (PacWave18) Evaluation Form

OBJECTIVE 6

Evaluate the format and content of the South China Sea Tsunami Advisory Centre (SCSTAC) Enhanced Products (if applicable for your country).

6.1 Information provided in the South China Sea Tsunami Advisory Centre (SCSTAC) messages was understood by and useful to the National Tsunami Warning Centre (NTWC)/National Disaster Management Office (NDMO)?

- ☐ Yes
- ☐ No
- ☐ Not Applicable

Comments

6.2 Threat information in SCSTAC products was understood and useful.

	Yes	No	Not Applicable
Text products	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Graphical products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please comment as necessary.

6.3 Components of the SCSTAC product suite were understood and useful?

- ☐ Yes
- ☐ No
- ☐ Not Applicable

Please comment as necessary on product clarity or confusion.

6.4 The information provided assisted with decision making?

(e.g. warning levels, earthquake parameters, estimated arrival times, forecast wave heights, etc.)

- ☐ Yes
- ☐ No
- ☐ Not Applicable

Comments

Objective 6 Comments



EXERCISE PACIFIC WAVE 2018 (PacWave18) Evaluation Form

GENERAL EXERCISE OBSERVATIONS

Provide feedback on the planning and conduct of PacWave18.

Please also provide information on your country's exercise.

- Include electronic links to Media Coverage in Comments section.
- Send summaries, photos and videos directly to the PTWS Technical Secretary (Bernardo Aliaga, b.aliaga@unesco.org) and PacWave18 Chairs (Laura Kong, laura.kong@noaa.gov, Jo Guard, jo.guard@dpmc.govt.nz)

Evaluation Statements / Questions. Indicate Yes or No.

Overall assessment

	Yes	No
Country stakeholder agencies have a better understanding of the goals, responsibilities and roles in tsunami emergencies.	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Gaps in capability and capacity have been identified.	<input type="radio"/>	<input type="radio"/>
Community have a better understanding of their tsunami risk and are better prepared for tsunami events.	<input checked="" type="radio"/>	<input checked="" type="radio"/>
News media participated and covered the exercise (Please provide electronic links if applicable in Comments).	<input type="radio"/>	<input type="radio"/>
How many people do you estimate participated in the exercise within your country/territory? Include both government and non-government agencies and public, if applicable.	<input checked="" type="radio"/>	<input checked="" type="radio"/>

Comments

Exercise planning (please make comment for each in the comments section)

	Yes	No
Overall, the exercise planning, conduct, format and style were satisfactory.	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Exercise planning at the international level went well.	<input type="radio"/>	<input type="radio"/>
Exercise planning at the national level went well.	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Exercise planning at the provincial/local level went well.	<input type="radio"/>	<input type="radio"/>
The PacWave18 exercise website pages were useful.	<input checked="" type="radio"/>	<input checked="" type="radio"/>
This evaluation form was easy to use.	<input type="radio"/>	<input type="radio"/>
PacWave18 Exercise Manual provided an appropriate level of detail.	<input checked="" type="radio"/>	<input checked="" type="radio"/>
IOC Manual & Guides 76: Plans and Procedures for Tsunami Warning and Emergency Management was useful.	<input type="radio"/>	<input type="radio"/>
IOC Manual & Guides 58: How to Plan, Conduct, and Evaluate IOC Tsunami Wave Exercises was useful.	<input checked="" type="radio"/>	<input checked="" type="radio"/>

Comments

EXERCISE PACIFIC WAVE 2018 (PacWave18) Evaluation Form

EXERCISE PACIFIC WAVE 2018 EXPERIENCE

Please provide a general statement on your EXERCISE PACIFIC WAVE 2018 experience.

Exercise Planning

Please provide a general statement about what went well.

Please provide a general statement about what did not go well.

Please provide a general statement about what could be improved.

Exercise Conduct

Please provide a general statement about what went well.

Please provide a general statement about what did not go well.

Please provide a general statement about what could be improved.

Exercise Debrief or Evaluation

Please provide a general statement about what went well.

Please provide a general statement about what did not go well.

Please provide a general statement about what could be improved.

Thank you for completing the EXERCISE PACIFIC WAVE 2018 Evaluation Form.

If you have further questions or need additional tsunami information, please do not hesitate to contact:

Bernardo Aliaga (b.aliaga@unesco.org), ICG/PTWS Technical Secretary

PacWave18 Chairs:

Laura Kong, ITIC Director (laura.kong@noaa.gov)

Jo Guard, NZ MCDEM (jo.guard@dpmc.govt.nz)





EXERCISE PACIFIC WAVE 2018 (PacWave18) Evaluation Form

Click "Done" to submit your EXERCISE PACIFIC WAVE 2018 (PacWave18) Exercise Evaluation