Introduction and Background

ONLINE QUESTIONNAIRE AVAILABLE UNTIL 23 MARCH 2016.

Dear CARIBE WAVE 16 Participant,

Thank you for participating in Exercise CARIBE WAVE 16.

This evaluation form is open to all to provide feedback on the exercise.

Every officially designated National Contact or Tsunami Warning Focal Point for the Member States and Territories within the UNESCO ICG CARIBE EWS framework should complete this form.

The online survey also provides a shortened version for individuals and other organisations to submit their own evaluation.

This CARIBE WAVE 16 Evaluation Form should be submitted online using this URL no later than 23 March 2016.

If you have any questions or problems, please contact Exercise Chair!

Thank you for your participation,

Christa von Hillebrandt-Andrade, CTWP Manager (christa.vonh@noaa.gov)

Instructions and Member State/T	Ferritory Contact Information		
Tsunami National Contacts(TNC)/Tsunami Warning Focal Points(TWFP)/National Tsunami Warning Center(NTWC) are requested to: • Answer each statement with Yes, No, or Not Applicable by selecting the relevant box. • If needed, please add comments to explain/expand Yes, No, or Not Applicable answers.			
Contact Information.			
Member State/Territory			
-			
Agency			
Organisation			
-			
Name (First, Last)			
Position or Job Title Telephone			
Mobile			
Email address			
Did your Member State/Territory part	ticipate in CARIBE WAVE 16?		
Yes			
○ No			
Comments:			

Are you filling out this evaluation as the official government-designated Tsunami National Contact or
Tsunami Warning Focal Point?
Yes
No
Comments:

OBJECTIVE 1, SUB-OBJECTIVE 1A

OBJECTIVE 1:

To exercise and evaluate operations of the current Tsunami Warning System and in particular, the CARIBE EWS.

SUB OBJECTIVE 1A:

Validate the tsunami products evaluated by PTWC.

1A.1:

Do you understand that the information issued by the Tsunami Warning Centre was according to the CARIBE WAVE 16 Participant Handbook.

Yes

🔵 No

Comments:

1A.2:

The PTWC CARIBE WAVE 16 initial dummy message was sent to National Tsunami Warning Focal Points by several methods. Please check all methods through which the message was received by the TWFP/NTWC.

	Yes	No	Not Applicable
GTS			
NWWS			
AISR/AFTN			
EMWIN			
Fax			
Email			
RANET Heads-up SMS			
Social Media			

1A.3:

The PTWC CARIBE WAVE 16 initial dummy message was sent to National Tsunami Warning Focal Points by several methods. Please indicate the time at which the message was received by the TWFP/NTWC (UTC, Coordinated Universal Time).

	Hour	Minutes	Time Zone
GTS			
NWWS			
AISR/AFTN			
EMWIN			
Fax			
Email			
RANET Heads-up SMS			
Social Media			

OBJECTIVE 1, SUB-OBJECTIVE 1B

OBJECTIVE 1

To exercise and evaluate operations of the current Tsunami Warning System and in particular, the CARIBE EWS.

SUB OBJECTIVE 1B

Validate the receipt of tsunami advice by CARIBE EWS Tsunami Warning Focal Points (TWFP).

1B.1:

The PTWC CARIBE WAVE 16 initial Dummy (Start of Exercise) Message was received by your country's Tsunami Warning Focal Point.

\bigcirc	Yes
\bigcirc	No
\bigcirc	Not Applicable
Com	iments:

1B.2:

Were there any problems with the receipt of PTWC CARIBE WAVE 16 initial Dummy (Start of Exercise) Message(s)?

\bigcirc	Yes	
\bigcirc	No	

Not Applicable

Comments:

1B.3:

Is the national public-safety, decision-making and dissemination point in your country/territory different from the designated national Tsunami Warning Focal Point (TWFP)?

	Yes	
$\overline{)}$	No	

Not Applicable

1B.4:

Did you receive the information from the national public-safety, decision-making and dissemination point?

Yes

🔵 No

Not Applicable

1B.5:

Did your TWFP/NTWC receive from PTWC through email the exercise messages at the times specified in the Exercise Manual?

Yes

🔵 No

Not Applicable

Comments:

1B.6:

Did the Tsunami Warning Focal Point receive any message from an organisation other than the PTWC? If yes, please use the comment box to list agencies that issued products during the exercise.

Yes

) No

OBJECTIVE 2, SUB-OBJECTIVE 2A

2A.1:

Was the information provided in the following PTWC products understood by the TWFP/NTWC?

	Yes	No
Text Message		
Polygons Map of Forecast Threat Levels		
Forecast Deep-Ocean Amplitudes		
Forecast Coastal Amplitudes		
KMZ File of Coastal Amplitudes		
Table of Statistics for Each Polygon		
Comments:		

2A.2:

The information provided in the PTWC exercise products assisted with decision making, e.g., tsunami threats, earthquake parameters, estimated arrival times, forecast wave heights, etc.

Yes			
O No			
Not Applicable			
Comments:			

2A.3:

Rate each product on its usefulness in decision making from 1 (less) to 5 (most).

	1	2	3	4	5
Text Message	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Polygons Map of Forecast Threat Levels	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Forecast Deep-Ocean Amplitudes	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Forecast Coastal Amplitudes	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
KMZ File of Coastal Amplitudes	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Table of Statistics for Each Polygon	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

2A.4:

Content: The forecast locations in the text messages are appropriate? If not, please suggest better locations.

)	Yes

No

Not Applicable

Comments:

2A.5:

Existing in-country event information/local (local seismic network, oceanographic instance, etc.) data were utilized to complement the PTWC exercise messages.

Yes

) No

Not Applicable

2A.6: Additional in-country local/regional expert consultation was utilized for analyzing the PTWC exercise messages?
Yes
◯ No
Not Applicable
Comments:

OBJECTIVE 2, SUB-OBJECTIVE 2B

Provide further feedback on the national procedures for implementation of the enhanced products.

2B.1:

Currently only the text messages are available to the public. Indicate which of the others PTWC enhanced products that are currently sent via email to only TWFP/NTWC should be made available to the general public (fro example: through PTWC, web, media and etc.).

	Yes	No
Text Message		
Polygons Map of Forecast Threat Levels		
Forecast Deep-Ocean Amplitudes		
Forecast Coastal Amplitudes		
KMZ File of Coastal Amplitudes		
Table of Statistics for Each Polygon		

2B.2:

Do you required additional training on PTWC enhanced products.

Yes
No
Not applicable

2B.3:		
What type of training?		
In person		
Webinars		
Online Course		
Other (please specify)		

OBJECTIVE 3, SUB-OBJECTIVE 3A

OBJECTIVE 3

To validate the readiness of Member States and Territories to respond to a tsunami.

SUB OBJECTIVE 3A

Validate the operational readiness of the Tsunami Warning Focal Point (TWFP, or like function) and/or the National Disaster Management Office (NDMO).

3A.1:

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

Yes
No
Not Applicable
Comments:
3A.2:
The TWFP/NDMO has, prior to the exercise, engaged in tsunami response planning.
Yes
No
Not Applicable
Comments:
Comments.
3A.3:
3A.3: The TWFP/NDMO has undertaken activity to increase its capacity and capability to support a national
3A.3:
3A.3: The TWFP/NDMO has undertaken activity to increase its capacity and capability to support a national
3A.3: The TWFP/NDMO has undertaken activity to increase its capacity and capability to support a national tsunami response (e.g. training, exercise, etc). Note activities in Comments section.
3A.3: The TWFP/NDMO has undertaken activity to increase its capacity and capability to support a national tsunami response (e.g. training, exercise, etc). Note activities in Comments section. Yes
3A.3: The TWFP/NDMO has undertaken activity to increase its capacity and capability to support a national tsunami response (e.g. training, exercise, etc). Note activities in Comments section. Yes No
3A.3: The TWFP/NDMO has undertaken activity to increase its capacity and capability to support a national tsunami response (e.g. training, exercise, etc). Note activities in Comments section. Yes No Not Applicable

3A.4:
The TWFP/NDMO has an appropriate management structure identified and documented to support
tsunami response.
Yes
No
Not Applicable
Comments:
3A.5:
The TWFP/NDMO has a tsunami mass coastal evacuation plan.
Yes
No
Not Applicable
Comments:

OBJECTIVE 3, SUB-OBJECTIVE 3B

OBJECTIVE

To validate the readiness of Member States and Territories to respond to a tsunami.

SUB OBJECTIVE 3B

To improve operational readiness. Before the exercise, ensure appropriate tools and response plan(s) have been developed, including public education material(s).

3B.1:

Arrangements to assemble the in-country disaster management group (Emergency Operations Center) relevant to decision-making on tsunami warning and response exist.

Yes

No

Not Applicable

Comments:

3B.2:

A country tsunami emergency response plan (standard operating procedures) for tele/regional/local tsunamis exists.

	Yes	No	Not Applicable
Local (less 1 hour arrival time)	\bigcirc	\bigcirc	\bigcirc
Regional (1-3 hours estimated arrival time)	\bigcirc	\bigcirc	\bigcirc
Distant (Greater than 3 hours)	\bigcirc	\bigcirc	\bigcirc
Comments:			

3B.3:	
The response plan includes processes to issue Safe-to-Return (All-Clear) notices.	
Yes	
No	
Not Applicable	
Comments:	
3B.4:	
Public education materials have been developed and disseminated.	
○ Yes	
No	
Not Applicable	
Comments:	
Are tsunami exercises routinely conducted in your country/territory? Note date of most recent exercises (before CARIBE WAVE 16) in Comments section. Yes No No No Not Applicable Comments:	se
3B.6: Tsunami-related curriculum programmes are in place for different levels of education. Note which levels of education.	els in
Yes	
No	
Not Applicable	
Comments:	

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OBJECTIVE 3, SUB-OBJECTIVE 3C

OBJECTIVE

To validate the readiness of Member States and Territories to respond to a tsunami.

SUB OBJECTIVE 3C

Validate that dissemination of warnings and information/advice by Tsunami Warning Focal Point to relevant in-country agencies and the public is accurate and timely.

3C.1:

The response activation process was followed when the start message of PTWC CARIBE WAVE 16 scenario exercise was received.

)	Y	'es	

🔿 No

Not Applicable

Comments:

3C.2:

The alert was disseminated to:

	Yes	No	Not Applicable
Emergency services	\bigcirc	\bigcirc	\bigcirc
Other national/state government agencies	\bigcirc	\bigcirc	\bigcirc
Local government: provincial/regional level	\bigcirc	\bigcirc	\bigcirc
Local government: city/district level.	\bigcirc	\bigcirc	\bigcirc
Science agencies/universities involved in assessment	\bigcirc	\bigcirc	\bigcirc
Public	\bigcirc	\bigcirc	\bigcirc
Other	\bigcirc	\bigcirc	\bigcirc
Comments:			

3C.3: Did the TWFP send the PTWC CARIBE WAVE 16 initial Dummy (Start of Exercise) Message agency or agencies listed before?	es to the
Yes	
No	
Not Applicable	
Comments:	
3C.4: How fast were PTWC CARIBE WAVE 16 exercise messages sent from TWFP to the corresp or agencies (listed before)?	oonding agency
1-3 minutes	
4-6 minutes	
7-10 minutes	
> 10 minutes	
Comments:	

3C.5:

What methods were used by the TWFP to disseminate the warning/information products to the NDMO or like agency?

	Yes	No	Not Applicable
EMWIN	\bigcirc	\bigcirc	\bigcirc
FAX	\bigcirc	\bigcirc	\bigcirc
Email	\bigcirc	\bigcirc	\bigcirc
SMS	\bigcirc	\bigcirc	\bigcirc
Website	\bigcirc	\bigcirc	\bigcirc
Social Media	\bigcirc	\bigcirc	\bigcirc
Amateur Radio KP4	\bigcirc	\bigcirc	\bigcirc
RSS	\bigcirc	\bigcirc	\bigcirc
EAS	\bigcirc	\bigcirc	\bigcirc
NOAA or Other Emergency Alert Radio	\bigcirc	\bigcirc	\bigcirc
Sirens	\bigcirc	\bigcirc	\bigcirc
Other			

3C.6:

Based on the agencies feedback, was sufficient (timely, clear, accurate) the method(s) of communication from your public-safety, national/state decision-making and dissemination point to support decision-making.

Yes

No

Not Applicable

3C.7: The method(s) of communication among your emergency response agencies was sufficient (at least two)
support national/state information requirements and decision-making.
Ver
Yes
No
Not Applicable
Comments:
3C.8:
Was this timely enough to facilitate good decision-making?
the and anoly chedgh to recimitate good decision making.
Yes
Νο
Not Applicable
Comments:
3C.9:
Was your Country's/Territory's Emergency Operations Center activated during the exercise?
() Yes
Yes
Ves No
No
No Not Applicable
No
No Not Applicable

OBJECTIVE 3, SUB-OBJECTIVE 3D

OBJECTIVE

To validate the readiness of Member States and Territories to respond to a tsunami.

SUB OBJECTIVE 3D

To validate the organisational decision-making process for public warnings and evacuations.

3D.1:

Did the National Disaster Management Organisation (or equivalent) maintain communication with the Tsunami Warning Focal Point throughout the event?

Yes
No
Not Applicable
Comments:
3D.2:
Did the National Disaster Management Organisation (or equivalent) maintain communication with local/regional disaster management organisations (or equivalent)?
Yes
No
No Applicable
Comments:
3D.3:
Were any areas evacuated as part of the CARIBE WAVE 16 Exercise?
Yes
No
Not Applicable
Comments:

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	·	

Are tsunami inundation maps available for your Country/Territory?			
	Yes	No	
Local Scenario	\bigcirc	\bigcirc	
Regional Scenario	\bigcirc	\bigcirc	
Distant Scenario	\bigcirc	\bigcirc	
Comments:			

3D.5:

Did your Tsunami Warning Focal Point run any tsunami numerical models during the exercise (e.g., deepocean propagation and/or coastal inundation models)?

) Ye	s
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No

Not Applicable

3D.6:

Did your Country/Territory consult any of the following resources in order to better assess the tsunami threat during the exercise? Select from the following list.

	Yes	No	Not Applicable
National/State tsunami experts	\bigcirc	\bigcirc	\bigcirc
National/State tsunami coordination committee	\bigcirc	\bigcirc	\bigcirc
National/State tsunami historical database	\bigcirc	\bigcirc	\bigcirc
NOAA NGDC/WDC- MGG tsunami historical database (web)	\bigcirc	\bigcirc	\bigcirc
TsuDig historical database GIS tool (NGDC/ITIC offline)	\bigcirc	\bigcirc	\bigcirc
National/State pre- computed tsunami scenarios	\bigcirc	\bigcirc	\bigcirc
National/State tsunami forecasts	\bigcirc	\bigcirc	\bigcirc
International tsunami forecasts. Note source of forecasts (PTWC, NTWC) in Comments.	\bigcirc	\bigcirc	\bigcirc
Communication with outside sources (such as ITIC, media, other)	\bigcirc	\bigcirc	\bigcirc
Review sea level data availability (IOC Sea Level Monitoring Facility, Tide Tool, etc.)	\bigcirc	\bigcirc	\bigcirc
Review seismic data availability (IRIS, PRSN, etc.)	\bigcirc	\bigcirc	\bigcirc
Review seismic information tools (USGS, CISN, PRSN)	\bigcirc	\bigcirc	\bigcirc
Engage with social media (Facebook, Twitter, Google Chat, etc.)	\bigcirc	\bigcirc	0
Comments:			

OBJECTIVE 3, SUB-OBJECTIVE 3E

OBJECTIVE 3

To validate the readiness of Member States and Territories to respond to a tsunami.

SUB OBJECTIVE 3E

To validate that the methods used to notify and instruct the public are accurate and timely.

3E.1:

Was a tsunami warning and/or information issued to the public as part of the CARIBE WAVE 16 Exercise?

) Yes

O No

Not Applicable

3E.2: Was the tsunami warning and/o	r information issued in a timely m	nanner to the public?
Yes		
No		
Not Applicable		
Comments:		
3E.3: How was the warning/informatic Please check all that apply:	n communicated to the public?	
Telephone	Twitter	Police
SMS	Facebook	Public Call Centre
Cell/mobile phone broadcast	RSS	Door-to-door announcements
Radio	Websites	Electronic billboards
TV	Sirens	Other methods (specify below
Email	Public Announcement System	ns
Other Methods:		

OBJECTIVE 3, SUB-OBJECTIVE 3F

OBJECTIVE

To validate the readiness of Member States and Territories to respond to a tsunami.

SUB OBJECTIVE 3F

To validate the elapsed time until the public is notified and instructed/advised.

3F.1:

The public was officially notified prior to the scenario wave arrival time.

) Yes

O No

Not Applicable

Comments:

3F.2:

In addition to the TWFP/NDMO, did other government and private sector groups participate? If yes, please list in comments section.

Yes

🔿 No

Not Applicable

GENERAL OBSERVATION

4.1:

Through participating in the CARIBE WAVE 16 Exercise, the agencies in the Country/Territory (TNC/TWFP/NDEMO) have a better understanding of their responsibilities and roles in tsunami emergencies.

Yes

No

Not Applicable

Comments:

4.2:

Gaps in capability and capacity have been identified.

()	Yes

) No

Not Applicable

Comments:

4.3:

The Country/Territory enhanced relationships with and among the Tsunami Warning System stakeholders as a result of the exercise.

Yes

No

Not Applicable

4.4:
News media participated and covered the exercise (please provide electronic links if applicable).
\bigcirc \checkmark
Yes
Νο
Not Applicable
Comments:

	tions:	
Questions for the General Pub sunami Warning Focal Point.	lic and Organisations other than t	he Tsunami National Contact or
.1:		
o you know what you or your o	rganisation is supposed to do during	a tsunami?
Yes		
No		
Not Applicable		
comment		
0.		
.2: (my) Organisation received the v	warning/information message.	
Yes	<u>.</u>	
No		
Not Applicable		
comments:		
.3:		
low did you receive the warning	/information?	
Please check all that apply:		
Telephone	RSS	Door-to-door announcements
SMS	Websites	NOAA Weather Radio or Like Systems
Cell/mobile phone broadcast	Email	Electronic Billboards
Radio	Sirens	Radio aficionados - KP4
TV	Public Announcement Systems	Other (please specify):
	Mobile Sirens	
Twitter		
Twitter Facebook	Public Call Centre	

5.4:
The warning/information was received in a timely fashion.
Yes
No
Not Applicable
Comments:
5.5: Overall, was the exercise planning and conduct by your organisation satisfactory?
Yes
No
Not Applicable
Comments:
5.6: I(my) Organisation is better prepared for a tsunami as a result of this exercise.
Yes
Not Applicable
Comments:

Questionnaire on the implementation of the PAE strategy
The Tsunami Public Awareness and Education Strategy focuses on building long-term education and awareness on how to prepare and respond to tsunamis for countries in the Caribbean and adjacent regions. It concentrates on planning and preparedness rather than providing guidelines to manage crisis communications during a disaster.
Have you found the PAE strategy framework useful?
Yes
No
Not Applicable
How?
The Strategy recommends that the Tsunami PAE framework be adapted to regional/national/local experiences. Has your country/agency prepared a Tsunami PAE Plan?
Yes
No
Not Applicable
What actions were included in this plan and what financial and human resources were assigned?
Do you believe that a specific training should be given to help prepare a Tsunami PAE plan?
Yes
No
Not Applicable
Who in your organisation would you like to participate in such a training?

The CARIBE-EWS Community Performance Based Tsunami Recognition Program, Tsunami Ready, seeks to save lives and livelihoods through better community planning, education and awareness and operations. In 2015 Tsunami Ready guidelines were recommended and approved by CARIBE EWS and UNESCO IOC. A copy of the requirements can be accessed at caribewave.info Some countries in the region have received TsunamiReady® recognition thru the US National Weather Service (NWS) or the US NWS/UNESCO pilot project.

Is your country already implementing the Community Performance Based Tsunami Recognition Program (TsunamiReady or Tsunami Ready)?

Yes

No

The CARIBE-EWS Community Performance Based Tsunami Recognition Program, Tsunami Ready, seeks to save lives and livelihoods through better community planning, education and awareness and operations. In 2015 Tsunami Ready guidelines were recommended and approved by CARIBE EWS and UNESCO IOC. A copy of the requirements can be accessed at caribewave.info Some countries in the region have received TsunamiReady® recognition thru the US National Weather Service (NWS) or the US NWS/UNESCO pilot project.

How many communities in your country have already been designated as TsunamiReady® or Tsunami Ready ?

The CARIBE-EWS Community Performance Based Tsunami Recognition Program, Tsunami Ready, seeks to save lives and livelihoods through better community planning, education and awareness and operations. In 2015 Tsunami Ready guidelines were recommended and approved by CARIBE EWS and UNESCO IOC. A copy of the requirements can be accessed at caribewave.info Some countries in the region have received TsunamiReady® recognition thru the US National Weather Service (NWS) or the US NWS/UNESCO pilot project.

Is your country already interested in implementing the Community Performance Based Tsunami Recognition Program (TsunamiReady or Tsunami Ready)?



The CARIBE EWS defines a Tsunami Ready community as a national/territorial/local government entity that has the authority and ability to adopt the recognition guidelines within its jurisdiction. How many communities are targeted for designation depends on the Government and Emergency Management structure and infrastructure. For example, in Puerto Rico the designations have been done at the municipio level (44 coastal and 2 inland), in the case of the USVI it was done at the Island level (3 designations), while Anguilla and British Virgin Islands received one designation at the territory level. Currently St. Kitts and Nevis are pursing simultaneously separate recognitions for St. Kitts and Nevis. In the case of Country/Territory wide recognitions an ICG Regional Tsunami Ready board will evaluate the application, while a National/Territorial Board will evaluate communities within its jurisdictions.

Considering the statement above, do you know how many communities your country will target for Tsunami Ready recognition?

Yes

) No

How many communities do you expect will pursue Tsunami Ready recognition?

GENERAL OBSERVATIONS - EXERCISE PLANNING
Please make comments on the following page to all of the statements below.
Overall, the exercise planning, conduct, format and style were satisfactory.
Yes
No
Not Applicable
Comments:
Exercise planning at the international level went well.
Yes
No
Not Applicable
Comments:
Exercise planning at the national level went well.
Yes
 ○ No
Not Applicable
Comments:

No Not Applicable	
Comments:	
The CARIBE WAVE 16 Tsunami Exercise website pages (eg. caribewave.info, tsunamizone.org/carib were useful.	bear
Yes	
No	
Not Applicable	
Comments:	
No Not Applicable	
Comments:	
Comments:	
Comments:	
The CARIBE WAVE 16 Webinars were helpful in preparing for the exercise.	
The CARIBE WAVE 16 Webinars were helpful in preparing for the exercise.	
The CARIBE WAVE 16 Webinars were helpful in preparing for the exercise. Yes No	

Yes No NotFamiliar with the Guideline Comments: Yes No NotApplicable Comments:	_	noaa.gov/srh/ctwp) used in preparing for the exercise?	
Not Familiar with the Guideline Comments: This evaluation form is appropriate. Yes No Not Applicable	Yes		
Comments: This evaluation form is appropriate. Yes No Not Applicable	No		
This evaluation form is appropriate. Yes No No Not Applicable	Not Familiar w	ith the Guideline	
Yes No Not Applicable	Comments:		
Yes No Not Applicable			
No Not Applicable	This evaluation	form is appropriate.	
Not Applicable	Yes		
\sim	No		
Comments:	Not Applicable		
	Comments:		

GENERAL OBSERVATIONS - CARIBE WAVE 16 EXPERIENCE

Please provide a general statement on your CARIBE WAVE 16 Tsunami Exercise experience. You may comment about international, national, provincial and/or local level aspects. Also please share recommendations for the CARIBE WAVE 17 exercise, format, scenario, etc.

Please provide a general statement about what went well, what did not go well and what could be improved, in terms of both exercise planning and exercise conduct.