

Introduction and Background

ONLINE QUESTIONNAIRE AVAILABLE UNTIL 29 March 2019.

Dear CARIBE WAVE 19 Participant,

Every officially designated National Contact or Tsunami Warning Focal Point for the Member States and Territories within the UNESCO ICG CARIBE EWS framework is kindly requested to complete this form, even if you participated in just the PTWC-TWFP/NTWC communications test component.

This CARIBE WAVE 19 Evaluation Form should be submitted online using this URL no later than end of business, 29 March 2019. Only one questionnaire should be completed for each MS/Territory.

If you have any questions or problems, please contact the Exercise Chair or CTWP Manager.

Thank you for your participation,

Elizabeth Vanacore, PRSN, CARIBE WAVE 19 Exercise Chair (elizabeth.vanacore@upr.edu)

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

Instructions and Member State/Territory 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.**

* 1. Contact Information.

Member State/Territory

* 2. -

Agency

Organization

* 3. -

Name (First, Last)

Position or Job Title

Telephone

Mobile

Email address

OBJECTIVE 1, SUB-OBJECTIVE 1B

OBJECTIVE 1

Exercise and evaluate communications between Regional Tsunami Service Provider (PTWC) and Members States/Territories.

SUB OBJECTIVE 1B

Validate the receipt of tsunami products by CARIBE EWS Tsunami Warning Focal Points (TWFPs) and/or National Tsunami Warning Centers (NTWCs).

4. 1B.1:

Did your country's Tsunami Warning Focal Points/National Tsunami Warning Center receive the PTWC Caribe Wave 19 initial **Dummy (Start of Exercise) Message**?

Yes

No

Comments:

5. 1B.2:

The PTWC issued the CARIBE WAVE 19 initial **Dummy Message** by several methods. Please check all methods through which the message was received by the TWFP/NTWC.

	Yes	No	Not Applicable
WMO Information Process (e.g., GTS, WIS)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NWWS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AISR/AFTN	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EMWIN	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
GEONETCast	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fax	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Email from PTWC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social Media	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (please specify)

6. 1B.3:

The PTWC issued the CARIBE WAVE 19 initial **Dummy Message** by several methods. Please indicate the time at which the message was received by the TWFP/NTWC in the different systems.

	Hour	Minutes	Time Zone
WMO Information Process (e.g., GTS, WIS)	<input type="text"/>	<input type="text"/>	<input type="text"/>
AISR/AFTN	<input type="text"/>	<input type="text"/>	<input type="text"/>
EMWIN	<input type="text"/>	<input type="text"/>	<input type="text"/>
GEONETCast	<input type="text"/>	<input type="text"/>	<input type="text"/>
Fax	<input type="text"/>	<input type="text"/>	<input type="text"/>
Email from PTWC	<input type="text"/>	<input type="text"/>	<input type="text"/>
Social Media	<input type="text"/>	<input type="text"/>	<input type="text"/>

7. 1B.4:

Were there any problems with the receipt of PTWC CARIBE WAVE 19 initial **Dummy (Start of Exercise) Message?**

- Yes
- No
- Not Applicable

Comments:

8. 1B.5:

Did your TWFP/NTWC receive by email from PTWC the **simulated exercise messages** (Kick 'em Jenny or Panama scenario) at the times specified in the Exercise Manual?

- Yes
- No
- Not Applicable

Comments:

OBJECTIVE 2, SUB-OBJECTIVE 2A

OBJECTIVE 2

To evaluate the tsunami procedures and programs within Members States/Territories.

SUB OBJECTIVE 2A

Validate readiness to respond to a tsunami.

9. 2A.1:

Were any areas evacuated as part of the CARIBE WAVE 19 Exercise?

Yes

No

Comments:

OBJECTIVE 2, SUB-OBJECTIVE 2A

10. 2A.2:

Overall, how timely before Estimated Time of Arrival (ETA) was the evacuation completed from 1 (after ETA) to 5 (well before ETA)?

1	2	3	4	5
<input type="radio"/>				

11. 2A.3:

Rate the overall preparedness of participants (e.g. had emergency backpack/supplies, knowledge of evacuation route, orderly) from 1 (poor) to 5 (excellent).

1	2	3	4	5
<input type="radio"/>				

OBJECTIVE 2, SUB-OBJECTIVE 2B

OBJECTIVE 2

To evaluate the tsunami procedures and programs within Members State/Territories.

SUB OBJECTIVE 2B

Validate the operational readiness of the TWFPs/NTWCs and/or the National Disaster Management Office (NDMO).

12. 2B.1:

Does the TWFP/NTWC/NDMO have standard operating procedures in place for the receipt and dissemination of tsunami products?

Yes

No

Comments:

13. 2B.2:

Has TWFP/NTWC/NDMO undertaken activity to increase its capacity and capability to receive and disseminate tsunami products (e.g. training, exercise, etc.)? Note activities in comments section.

Yes

No

Comments:

14. 2B.3:

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

Yes

No

Comments:

15. 2B.4:

Did the Tsunami Warning Focal Point / National Tsunami Warning Center receive any message from an organization other than the PTWC (e.g., SRC, Volcano Observatory)? If yes, please use the comment box to indicate the agencies you received messages from.

Yes

No

Comments:

16. 2B.5:

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
National/State tsunami experts	<input type="radio"/>	<input type="radio"/>
National/State tsunami coordination committee	<input type="radio"/>	<input type="radio"/>
National/State tsunami historical database	<input type="radio"/>	<input type="radio"/>
NOAA NGDC/WDS-Global tsunami historical database (web)	<input type="radio"/>	<input type="radio"/>
TsuDig historical database GIS tool (NGDC/ITIC offline)	<input type="radio"/>	<input type="radio"/>
National/State pre-computed tsunami scenarios	<input type="radio"/>	<input type="radio"/>
National/State tsunami forecasts	<input type="radio"/>	<input type="radio"/>
International tsunami forecasts. Note source of forecasts (PTWC, NTWC) in Comments.	<input type="radio"/>	<input type="radio"/>
Communication with outside sources (such as CTWP, CITIC, media, other)	<input type="radio"/>	<input type="radio"/>
Review sea level data availability (IOC Sea Level Monitoring Facility, Tide Tool, etc.)	<input type="radio"/>	<input type="radio"/>
Review seismic data availability (IRIS, PRSN, etc.)	<input type="radio"/>	<input type="radio"/>

Yes

No

Review seismic
information tools
(USGS, CISN, PRSN,
SRC)

Engage with social
media (Facebook,
Twitter, Google Chat,
etc.)

Comments:

OBJECTIVE 2, SUB-OBJECTIVE 2C

OBJECTIVE 2

To evaluate the tsunami procedures and programs within Members States/Territories.

SUB OBJECTIVE 2C

Improve operational readiness. Ensure appropriate tools and response plan(s) have been developed, including public education materials.

17. 2C.1:

Does the country have a tsunami emergency response plan for tele/regional/local tsunami events?

	Yes	No
Local (less 1 hour arrival time)	<input type="radio"/>	<input type="radio"/>
Regional (1-3 hours estimated arrival time)	<input type="radio"/>	<input type="radio"/>
Distant (Greater than 3 hours)	<input type="radio"/>	<input type="radio"/>

Comments:

18. 2C.2:

Are tsunami inundation maps available for your Country/Territory? Select from the following list.

	Yes	No
Local Scenario	<input type="radio"/>	<input type="radio"/>
Regional Scenario	<input type="radio"/>	<input type="radio"/>
Distant Scenario	<input type="radio"/>	<input type="radio"/>

Comments:

19. 2C.3:

Are tsunami evacuation maps available for your Country/Territory? Select from the following list.

	Yes	No
Local Scenario	<input type="radio"/>	<input type="radio"/>
Regional Scenario	<input type="radio"/>	<input type="radio"/>
Distant Scenario	<input type="radio"/>	<input type="radio"/>

Comments:

20. 2C.4:

Does the country have a tsunami mass coastal evacuation plan?

Yes

No

Comments:

21. 2C.5:

Does the response plan includes processes to issue Safe-to-Return (All-Clear) notices?

Yes

No

Comments:

22. 2C.6:

Have public education materials been developed and/or disseminated?

Printed Brochures

Social Media

TV Spots

Videos

Other:

23. 2C.7:

Are tsunami-related curriculum programmes in place for different levels of education?

Preschool

Elementary

Intermediate/High School

University

Comments:

24. 2C.8:

Are there other preparedness/education tools and products utilized in your country/territory? Please list in comments section.

Yes

No

Comments:

OBJECTIVE 2, SUB-OBJECTIVE 2D

OBJECTIVE 2

To evaluate the tsunami procedures and programs within Members States/Territories.

SUB OBJECTIVE 2D

Validate that dissemination of warnings and information/advice by TWFP/NTWCs, to relevant in-country agencies and the public is accurate timely.

25. 2D.1:

Was the response activation process followed when the simulated products from PTWC for Caribe Wave 19 Exercise were received?

- Yes
- No
- Not Applicable

Comments:

26. 2D.2:

Did the TWFP/NTWC prepare and issue messages to relevant in-country agencies for CARIBE WAVE 19?

- Yes
- No

Comments:

OBJECTIVE 2, SUB-OBJECTIVE 2D

27. 2D.3:

CARIBE WAVE 19 messages were issued to the following in-country agencies:

	Yes	No	Not Applicable
Emergency services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other national/state government agencies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local government: provincial/regional level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local government: city/district level.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Science agencies/universities involved in assessment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

28. 2D.4:

What methods were used by the TWFP/NTWC/NDMO to disseminate the CARIBE WAVE 19 messages to in-country agencies?

	Yes	No	Not Applicable
EMWIN	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
FAX	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Email	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SMS	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Telephone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Website	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social Media	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Amateur Radio	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
RSS	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
EAS	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NOAA or Other Emergency Alert Radio	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sirens	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other

29. 2D.5:

How soon after start of exercise were the CARIBE WAVE 19 messages sent from TWFP/NTWC to the corresponding agency or agencies (listed above)?

- 1-5 minutes
- 6-10 minutes
- 11-15 minutes
- > 15 minutes

Comments:

30. 2D.6:

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

Yes

No

Comments:

31. 2D.7:

Based on feedback from agencies was the message(s) disseminated from TWFP/NTWC/NDMO accurate and clear?

Yes

No

Comments:

32. 2D.8:

Was your Country's/Territory's Emergency Operations Center activated during the exercise?

Yes

No

Comments:

33. 2D.9:

Did the National Disaster Management Organization (or equivalent) maintain communication with the TWFP/NTWC throughout the exercise?

Yes

No

Comments:

34. 2D.10:

Did the National Disaster Management Organization (or equivalent) maintain communication with local/regional disaster management organizations (or equivalent)?

Yes

No

Comments:

35. 2D.11:

Was a tsunami warning and/or information **issued to the public** as part of the CARIBE WAVE 19 Exercise?

Yes

No

Comments:

OBJECTIVE 2, SUB-OBJECTIVE 2D

36. 2D.12:

How was the warning/information communicated to the public?

Please check all that apply:

- | | | |
|--|--|---|
| <input type="checkbox"/> Telephone | <input type="checkbox"/> Twitter | <input type="checkbox"/> Police |
| <input type="checkbox"/> SMS | <input type="checkbox"/> Facebook | <input type="checkbox"/> Public Call Centre |
| <input type="checkbox"/> Cell/mobile phone broadcast | <input type="checkbox"/> RSS | <input type="checkbox"/> Door-to-door announcements |
| <input type="checkbox"/> Radio | <input type="checkbox"/> Websites | <input type="checkbox"/> Electronic billboards |
| <input type="checkbox"/> TV | <input type="checkbox"/> Sirens | <input type="checkbox"/> WhatsApp |
| <input type="checkbox"/> Email | <input type="checkbox"/> Public Announcement Systems | <input type="checkbox"/> Other |

Other Methods:

37. 2D.13:

How fast was the tsunami warning and/or information issued to the public?

- 1-5 minutes
- 6-10 minutes
- 11-15 minutes
- >15 minutes

Comments:

38. 2D.14:

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

- Yes
- No

Comments:

OBJECTIVE 2, SUB-OBJECTIVE 2E

OBJECTIVE 2

To evaluate the tsunami procedures and programs within Members State/Territories.

SUB OBJECTIVE 2E

Evaluate the status of the implementation of the pilot CARIBE EWS Tsunami Ready recognition program.

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) for US Territories only, the US NWS/UNESCO pilot project or CARIBE EWS Tsunami Ready recognition.

As of 2019, 53 CARIBE EWS communities have received TsunamiReady® or UNESCO/IOC Tsunami Ready recognition.

* 39. 2E.1:

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

Yes

No

Comments:

OBJECTIVE 2. SUB-OBJECTIVE 2E

40. 2E.2:

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

Yes

No

Comments:

OBJECTIVE 2, SUB-OBJECTIVE 2E

* 41. 2E.3:

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

Communities

42. 2E.4:

What is the target number of Tsunami Ready communities (including communities which have been recognized) in your country/territory are targeted for TsunamiReady® or Tsunami Ready recognition?

Communities

OBJECTIVE 3

OBJECTIVE 3

To evaluate volcanic products.

As part of CARIBE WAVE 19, the PTWC with relevant stakeholders and the CARIBE EWS Task Team on Tsunami Procedures for Volcanic Crises developed a suite of experimental volcanic products. The questions in this section are to receive feedback from countries which used the Kick 'em Jenny scenario on the simulated messages issued as part of CARIBE WAVE 19.

43. 3:

Did you use KemJ scenario for CARIBE WAVE 19 Exercise?

Yes

No

OBJECTIVE 3, SUB-OBJECTIVE 3A

OBJECTIVE 3

To evaluate volcanic products.

SUB OBJECTIVE 3A

Evaluate proposed PTWC CARIBE EWS products for volcanic events.

44. 3A.1:

Rate the text message issued by PTWC on its usefulness in decision making from 1 (poor) to 5 (excellent).

1	2	3	4	5
<input type="radio"/>				

45. 3A.2:

Did the test KemJ products contain all the information required for national/local decision making? Please provide comments and suggestions on how to improve.

Yes

No

Comments:

46. 3A.3:

Were regional in-country event information/data (seismic data, GPS, sea level, volcanic, etc.) utilized to complement the PTWC exercise messages?

Yes

No

Comments:

47. 3A.4:

Was additional in-country expert consultation utilized for analyzing the PTWC exercise messages?

Yes

No

Comments:

48. 3A.5:

What was the reaction of authorities/media and public to the KemJ exercise? If other, please specify in the comments.

- Interest
- Fear
- No reaction
- Other

Comments:

OBJECTIVE 3, SUB-OBJECTIVE 3B

OBJECTIVE 3

To evaluate volcanic products

SUB-OBJECTIVE 3B

Evaluate input from Seismic Research Center.

49. 3B.1

Did the Tsunami Warning Focal Point / National Tsunami Warning Center receive any message from an organization other than the PTWC (e.g., SRC, Volcano Observatory)? If yes, please use the comment box to indicate the agencies you received messages from.

Yes

No

Comments:

50. 3B.2

Were these products useful?

Yes

No

Not Applicable

Comments:

OBJECTIVE 3, SUB-OBJECTIVE 3C

OBJECTIVE 3

To evaluate volcanic products.

SUB-OBJECTIVE 3C

Evaluate MS and Territories response plans for tsunamis from volcanoes.

51. 3C.1:

Does your country have a tsunami response plan for volcanic events?

Yes

No

Comments:

52. 3C.2:

How effective is the plan from 1 (poor) to 5 (excellent)?

1

2

3

4

5

N/A

Comments:

GENERAL OBSERVATIONS

53. 4.1:

Through participating in the CARIBE WAVE 19 Exercise, is there a better understanding of the agencies in the Country/Territory (TNC/TWFP/NDMO) of their responsibilities and roles in tsunami emergencies?

Yes

No

Comments:

54. 4.2:

Have gaps in capability and capacity been identified? If yes, please specify in the comments.

Yes

No

Comments:

55. 4.3:

Have the Country/Territory relationships with and among the Tsunami Warning System stakeholders as a result of the exercise been enhanced?

Yes

No

Not Applicable

Comments:

56. 4.4:

Did news media participate and cover the exercise? (Please provide electronic links if applicable.)

Yes

No

Comments:

57. 4.5:

Indicate the satisfaction of Members State/Territory with the exercise on the following levels from 1 (poorly satisfied) to 5 (very satisfied).

1	2	3	4	5
<input type="radio"/>				

Comments:

58. 4.6:

Did the exercise planning at the international level meet your expectations?

- Yes
- No
- Not Applicable

Comments:

59. 4.7:

Did the exercise planning at the national level go well?

- Yes
- No
- Not Applicable

Comments:

60. 4.8:

Did the exercise planning at the state/local level go well?

- Yes
- No
- Not Applicable

Comments:

61. 4.9:

Were the Caribe Wave 19 Tsunami Exercise website pages (eg. caribewave.info, tsunamizone.org/Caribbean) useful?

- Yes
- No
- Not Applicable

Comments:

62. 4.10:

How many people do you estimate participated in the exercise within your country/territory (use own statistics or tsunami.zone registration system)?

63. 4.11:

Did the Caribe Wave 19 Participant Handbook provide an appropriate level of detail?

- Yes
- No

Comments:

64. 4.12:

Were the Caribe Wave 19 Webinars helpful in preparing for the exercise?

- Yes
- No
- Not Applicable

Comments:

65. 4.13:

Was the IOC How to Plan, Conduct, and Evaluate Tsunami Exercises guideline (<http://www.srh.noaa.gov/srh/ctwp>) used in preparing for the exercise?

- Yes
- No
- Not Familiar with the Guideline

Comments:

66. 4.14:

If used, indicate the usefulness of this document for the conduct exercises on the following levels from 1 (poor) to 5 (excellent).

1	2	3	4	5
<input type="radio"/>				

Comments:

67. 4.15:

Did your country use the methodological guidelines How to Prepare, Conduct and Evaluate a Community-based Tsunami Response Exercise (http://www.ioc-tsunami.org/index.php?option=com_oe&task=viewDocumentRecord&docID=19139) before or during CARIBE WAVE Exercise 19?

- Yes
- No
- Not Familiar with the Guideline

Comments:

68. 4.16:

If used, indicate the usefulness of this document for the conduct exercises on the following levels from 1 (poor) to 5 (excellent).

1	2	3	4	5
<input type="radio"/>				

Comments:

69. 4.17:

Is this evaluation appropriate?

Yes

No

Comments:

70. 4.18:

Please provide a general statement on your CARIBE WAVE 19 Tsunami Exercise experience, about what went well, what did not go well and what could be improved, in terms of both exercise planning and exercise conduct. You may comment about international, national, provincial and/or local level aspects. Also, please share recommendations for the CARIBE WAVE 20 exercise, format, scenario, etc.