Exercise IOWave25 Evaluation

Exercise IOWave25 Post-Exercise Evaluation

Exercise IOWave25 is comprised of four scenarios with simulated tsunami waves travelling across the Indian Ocean basin. Member States are invited to participate in one or more scenarios, which will be run in real-time:

- Scenario 1, **Sunda Trench**: Starting at 01:00 UTC on 25 September 2025 (Thursday): Magnitude 9.0 earthquake in Sunda Strait, Indonesia.
- Scenario 2, **Makran Trench**: Starting at 06:00 UTC on 15 October 2025 (Wednesday): Magnitude 9.0 earthquake in the Makran trench off the coast of Pakistan.
- Scenario 3, **Fani Maore Volcano**: Starting at 15:00 UTC (eruption at 14:00 UTC) on 25 October 2025 (Saturday): Tsunami generated by volcanic eruption at Fani Maore in the Mozambique Channel between Madagascar and the eastern coast of Africa.
- Scenario 4, **Sumatra Trench**: Starting at 03:00 UTC on 05 November 2025 (Wednesday): Magnitude 9.2 earthquake in Northern Sumatra, Indonesia.

Exercise Objectives

There are nine (9) objectives of Exercise IOWave25. Each objective is designed to validate a part of the end-to-end tsunami warning and mitigation system.

Objectives 1 and 2 survey questions relate to the at-risk coastal communities.

- Objective 1: Validate procedures are in place to ensure tsunami warnings get to all in the community, including those with disabilities, all genders, elderly, and youth.
- Objective 2: Validate the level of community awareness, preparedness, and response.

Objective 3 and 4 survey questions relate to standard operating procedures at all levels in the national tsunami warning chain.

- Objective 3: Validate the Standard Operating Procedures associated with tsunami warning chains within countries for generating and disseminating tsunami warnings to their relevant emergency response agencies, other authorities, media, and the public.
- Objective 4: Validate the Standard Operating Procedures associated with tsunami warning chains within countries for the issuing of public safety messages, ordering evacuations and where possible issuing all-clear messages.

Objectives 5 to 8 survey questions relate to the National Tsunami Warning Center and NAVAREA stakeholders.

- Objective 5: Validate dissemination by TSPs of Tsunami Bulletin Notification Messages to NTWCs via Tsunami Warning Focal Points (TWFPs) of Indian Ocean countries and the reception by NTWCs of the TSP messages. Validate the access by NTWCs to the tsunami bulletins and other products on the TSP websites, and the use of that information for the production of national warnings.
- Objective 6: Validate dissemination by TSPs of Tsunami Bulletin Notification nmessages for NAVAREA stakeholders to ensure navigational safety and security.
- Objective 7: Validate access by NTWCs to the tsunami bulletins and other products on the TSP websites, and the use of that information to produce national warnings. Validate the reporting by NTWCs to the TSPs of their National Tsunami Warning Status.
- Objective 8: Validate the reporting by NTWCs to the TSPs of their National Tsunami Warning Status.
- Objective 9: Validate receipt and understanding by NTWCs of new TSP service for tsunamis generated by non-seismic and complex sources.

Instructions

The evaluation will take approximately 2-3 hours to complete once all required inputs have been received from your national stakeholders (i.e., National Tsunami Warning Centres, NAVAREA coordinators, Disaster Management Organisations, communities) who were involved in the exercise.

It is possible to exit a partially completed survey for completion later. Simply exit the survey and use the link provided to you by email to access it again when you are ready to answer more questions. In this way you can complete the survey at your own pace and go back to amend responses if necessary.

Please complete and submit the online survey by **30 November 2025**.

Any questions can be directed to the ICG/IOTWMS Secretariat (email: iotwms@unesco.org).

Member State Details

1. **Country**

[contact("country")]

2. **Details of National IOWave Exercise Contact**

Name

[contact("first name")]

3. Position

[contact("role")]

4. Agency

[contact("organization")]

5. Email

[contact("email")]

6. Phone

[contact("work phone")]

Participation

7. Please select all exercise scenarios that your country partiicpated in.
(More than 1 option can be selected.) *

- ☐ Sunda Trench (25 September 2025)
- ☐ Makran Trench (15 October 2025)
- ☐ Fani Maore Volcano (25 October 2025)
- ☐ Sumatra Trench (05 November 2025)

8. Please indicate if the following statements reflect your level of in-country participation.

	Yes	No
National Disaster Management Organisation was involved.	○	○
Provincial Disaster Management Organisation(s) participated.	○	○
Local Disaster Management Organisation(s) participated.	○	○
Media representatives participated.	○	○
The community was involved (not necessarily evacuation).	○	○
Public evacuation drills were conducted.	○	○

Comments

9. Please indicate the type of exercise(s) conducted.
(More than 1 option can be selected.)

- ☐ Orientation Exercise
- ☐ Drill
- ☐ Tabletop Exercise
- ☐ Functional Exercise
- ☐ Full Scale Exercise

Comments

10. I would like more information about the types of exercise.

- ○ Yes, please.
- ○ No, thank you.

TYPES OF EXERCISES

1. **An Orientation Exercise** lays the groundwork for a comprehensive exercise programme. It is a planned event, developed to bring together individuals and officials with a role or interest in multi-hazard response planning, problem solving, development of standard operational procedures (SOPs), and resource integration and coordination. An Orientation Exercise will have a specific goal and written objectives and result in an agreed upon Plan of Action.
2. **A Drill** is a planned activity that tests, develops, and/or maintains skills in a single or limited emergency response procedure. Drills generally involve operational response of single departments or agencies, organizations, or facilities, but may be a subset of full-scale exercises. Drills can involve internal notifications and/or field activities. Limited evacuation may or may not be conducted, such as within a school, pilot hotel, or village.
3. **A Tabletop Exercise** is a planned activity in which local officials, key staff, and organizations with disaster management responsibilities are presented with simulated emergency situations. It is usually informal, in a conference room environment, and is designed to elicit constructive discussion from the participants to assess plans, policies, and procedures. Individuals are encouraged to discuss decisions based on their organization's Standard Operating Procedures (SOPs) with emphasis on slow-paced problem solving, rather than rapid, real-time decision-making. A Tabletop Exercise should have specific goals, objectives, and a scenario narrative.
4. **A Functional Exercise** is a planned activity designed to test and evaluate individual functions, multiple activities within a function, or interdependent groups of functions among various agencies. It is based on a simulation of a realistic emergency situation. The Functional Exercise gives the decision-makers a fully simulated experience of being in a major disaster event. It should take place at the appropriate coordination locations (e.g. warning centres and emergency operations centres) and activate all the appropriate members designated by the plan. Organisations should test their SOPs using real-time simulation tsunami bulletins. Public evacuations may or may not be included. A Functional Exercise should have specific goals, objectives, and a scenario narrative.
5. **A Full-scale Exercise** is the culmination of a progressive exercise programme that has grown with the capacity of the community to conduct exercises. A Full-Scale exercise is a planned activity in a "challenging" environment that encompasses a majority of the tsunami warning and emergency management functions, and involves multiple layers of government (national, provincial, local). This type of exercise involves the actual mobilization and deployment of the appropriate personnel and resources needed to demonstrate operational capabilities. DMOs (Disaster Management Office) and other local command centres are required to be activated. It tests all aspects of emergency response, and should demonstrate inter-agency cooperation. A Full-scale exercise is the largest, costliest, and most complex exercise type. It may or may not include public evacuations.

End of the Participation survey section.

Objective 1: Validate procedures are in place to ensure tsunami warnings get to all in the community, including those with disabilities, all genders, elderly, and youth.

11. Were public tsunami warning messages accessed and understood by those with disabilities, all genders, elderly, and youth?

- Yes
- No

12. If yes, please describe measures implemented.

13. If no, please describe measures to be implemented.

Objective 2: Validate the level of community awareness, preparedness and response.

14. Have there been any pre-exercise community tsunami awareness activities?

- Yes
- No

15. Please specify the awareness activities undertaken (for example, public displays, community briefings, educational materials):

16. Did these activities cater for people with disabilities, all genders, elderly, and youth?

- Yes
- No

Comments

17. Have there been any pre-exercise community preparedness activities?

- Yes
- No

18. What were the community preparedness activities between the last exercise and the current exercise? (Select all that apply.)

- [ ] Tsunami exercise
- [ ] Tsunami education in schools
- [ ] Participatory evacuation planning
- [ ] Community education seminars
- [ ] Evacuation maps
- [ ] Evacuation signage
- [ ] Shelter facilities
- [ ] Other - Write In

- [ ] Other - Write In

19. Has there been any support for the following activities prior to the exercise and from whom?

	Supported activity		If supported, from whom:
	Yes	No	
Hazard mapping	○	○	
Tsunami inundation mapping	○	○	
Evacuation route mapping	○	○	
Tsunami signage	○	○	
Vertical evacuation shelters	○	○	

20. **I**f evacuation maps exist, do they consider evacuation of disabled persons, all genders, elderly, and youth?

- ○ Evacuation maps exist and do account for evacuation of disabled persons, all genders, eldery, and youth.
- ○ Evacuation maps exist, but do not account for evacuation of disabled persons, all genders, eldery, and youth.
- ○ Evacuation maps do not exist.

Comments

21. Were community evacuations conducted in any areas?

- ○ Yes
- ○ No

22. How many communities participated in evacuations?

Objective 2: Validate the level of community awareness, preparedness and response.

Please answer the following questions for **Community** .

23. Name of community:

24. Is the community recognised as UNESCO-IOC Tsunami Ready or any other similar recognition programme at national level?

- Yes
- No

25. Comments:

26. What excercise scenario did the community evacuate during?

- Sunda Trench (25 September)
- Makran Trench (15 October)
- Fani Maore Volcano (25 October)
- Sumatra Trench (05 November)

27. What is the estimated number of people that evacuated?

28. Approximately what percent of the people that evacuated were women?

29. Who evacuated? (Select all that apply.)

- [ ] Beachgoers
- [ ] Boat Users
- [ ] Home Residents
- [ ] Businesses
- [ ] Schools
- [ ] Hospitals
- [ ] Hotels
- [ ] People with disabilities
- [ ] Elderly
- [ ] Elderly (in supported care)
- [ ] Youth
- [ ] Other - Write In
- [ ] Other - Write In

30. Have community members received prior evacuation training?

- ○ Yes
- ○ No

Comments

31. Are Standard Operating Procedures for community evacuation in place?

- ○ Yes
- ○ No

32. Please provide the details:

33. How were community members notified that an evacuation order was issued? (Select all that apply.)

- [ ] Siren
- [ ] Door-to-door
- [ ] Public announcement
- [ ] Radio / TV
- [ ] Mobile Phone / Social Media
- [ ] Evacuation time set prior to the exercise
- [ ] Other - Write In
- [ ] Other - Write In

34. What time was the evacuation order issued? (Specify UTC or local time.)

35. What time did the community receive the evacuation notification? (Specify UTC or local time.)

36. At what time was the evacuation? (Specify UTC or local time.)

37. Did the community receive an all-clear message?

- ○ Yes
- ○ No

38. At what time did the community receive the all-clear message? (Specify UTC or local time.)

39. How was the all-clear message issued to the public? (Specify the mode of communication.)

40. At what time did the people return to their residences? (Specify UTC or local time.)

41. Please provide the details of any problems encountered during evacuation:

42. How could future evacuation exercises be improved?

Objective 2: Validate the level of community awareness, preparedness and response.

End of the Objective 1 and 2 survey questions related to at-risk coastal communities.

Objective 3: Validate the Standard Operating Procedures associated with tsunami warning chains within countries for generating and disseminating tsunami warnings to their relevant disaster response agencies, other authorities, media, and the public.

The following section is designed to assess who is responsible for generating and disseminating tsunami warnings and information to five types of recipients:

1. National Disaster Management Organisation (NDMO)
2. Provincial Disaster Management Organisation (PDMO)
3. Local Disaster Management Organisation (LDMO)
4. Other Authorities (e.g. port and airport authorities, marine rescue, beach life-saving organisations)
5. Media
6. Public

43. In the following table, please indicate who is responsible for the generation and dissemination of tsunami warnings and information to each recipient listed in the left-hand column, and if exercised, the details of the warning delivery.

	Who sends tsunami messages to the recipient? (e.g. NTWC, NDMO, PDMO, LDMO and/or media)	Number of messages sent	Time 1st message sent (UTC)	Time last message sent (UTC)	Methods of delivery (e.g. email, webpage, sms, fax, phone, tv, radio, social media)	Were the messages received in a timely manner?
NDMO						Yes No n/a
PDMO						Yes No n/a
LDMO						Yes No n/a
Media						Yes No n/a
Public						Yes No n/a

Comments

44. Do the following authorities and organisations have Standard Operating Procedures in place to ensure tsunami warnings are efficiently transmitted along the national tsunami warning chain in a timely manner?

	Standard Operating Procedures		
	Yes	No	Partially
NTWC	○	○	○
NDMO	○	○	○
PDMO	○	○	○
LDMO	○	○	○
Other Authorities	○	○	○
Media	○	○	○
Public	○	○	○

45. How well did your Standard Operating Procedures perform for generating and disseminating tsunami warnings within your country?

- ○ Extremely Well
- ○ Very Well
- ○ Well
- ○ Poor
- ○ Very Poor

Comments

Objective 3: Validate the Standard Operating Procedures associated with tsunami warning chains within countries for generating and disseminating tsunami warnings to their relevant disaster response agencies, other authorities, media, and the public.

To be completed with input from Disaster Management Organisations (DMOs) and/or National Tsunami Warning Centre (NTWC) as appropriate.

46. What Media participated in the Exercise?
(Select all that apply.)

- ☐ Press (newspapers, magazines, journals)
- ☐ Radio
- ☐ Television
- ☐ Social - Facebook
- ☐ Social - WhatsApp
- ☐ Social - Twitter
- ☐ Other - Write In
- ☐ Other - Write In

Comments

47. What information did the Media broadcast?

- [ ] Pre-exercise tsunami awareness
- [ ] Information on the upcoming scheduled exercise
- [ ] Tsunami threat information
- [ ] Tsunami evacuation information
- [ ] All-clear information
- [ ] Mock interviews
- [ ] Coverage of the event
- [ ] Other - Write In

- [ ] Other - Write In

Comments

48. Was the information broadcast by the Media useful?

- ○ Yes
- ○ No
- ○ Partially useful

Comments

49. How could Media involvement be improved in future exercises and real events?

Objective 4: Validate the Standard Operating Procedures associated with tsunami warning chains within countries for the issuing of public safety messages, ordering evacuations and where possible issuing all-clear messages.

Agency abbreviations used are:

1. National Tsunami Warning Centre (NTWC)
2. National Disaster Management Organisation (NDMO)
3. Provincial Disaster Management Organisation (PDMO)
4. Local Disaster Management Organisation (LDMO)

50. Were **public safety messages** issued during the exercise? Public safety messages provide information about the tsunami threat and appropriate actions to take for each level of threat, but do not include evacuation orders or all-clear messages.

- Yes
- No

51. Please complete the following table for **public safety messages** issued during the exercise.
(Complete one row for each agency/authority that issued public safety messages as required.)

	Name of agency/authority that issues public safety messages	Agency type	Time message issued (UTC)	Communication method (e.g. email, webpage, sms, fax, phone, tv, radio, social media)	Were there any communication problems?	Content of message	Reason message issued	Comments
1.		NTWC NDMO PDMO LDMO Other			Yes No			
2.		NTWC NDMO PDMO LDMO Other			Yes No			
3.		NTWC NDMO PDMO LDMO Other			Yes No			
4.		NTWC NDMO PDMO LDMO Other			Yes No			
5.		NTWC NDMO PDMO LDMO Other			Yes No			

52. Were **evacuation orders** issued during the exercise?

- Yes
- No

53. Please complete to following table for **evacuation orders** issued during the exercise.
(Complete one row for each agency/authority that issued public safety messages as required.)

	Name of agency/authority that issues evacuation orders	Agency type	Time message issued (UTC)	Communication method (e.g. email, webpage, sms, fax, phone, tv, radio, social media)	Were there any communication problems?	Content of message	Reason message issued	Comments
1.		NTWC NDMO PDMO LDMO Other			Yes No			
2.		NTWC NDMO PDMO LDMO Other			Yes No			
3.		NTWC NDMO PDMO LDMO Other			Yes No			
4.		NTWC NDMO PDMO LDMO Other			Yes No			
5.		NTWC NDMO PDMO LDMO Other			Yes No			

54. Were **all-clear messages** issued during the exercise?

- Yes
- No

55. Please complete to following table for **all-clear messages** issued during the exercise.
(Complete one row for each agency/authority that issued public safety messages as required.)

	Name of agency/authority that issues all-clear messages	Agency type	Time message issued (UTC)	Communication method (e.g. email, webpage, sms, fax, phone, tv, radio, social media)	Were there any communication problems?	Content of message	Reason message issued	Comment
1.		NTWC NDMO PDMO LDMO-C Other			Yes No			
2.		NTWC NDMO PDMO LDMO-C Other			Yes No			
3.		NTWC NDMO PDMO LDMO-C Other			Yes No			
4.		NTWC NDMO PDMO LDMO-C Other			Yes No			
5.		NTWC NDMO PDMO LDMO-C Other			Yes No			

End of the Objectives 3-4 survey questions related to standard operating procedures at all levels in the national tsunami warning chain.

Objective 5: Validate the dissemination by TSPs of Tsunami Bulletin Notification Messages to NTWCs via TWFPs of Indian Ocean countries and the reception by NTWCs of the TSP Messages.

56. Name of National Tsunami Warning Centre (organisational name):

57. For each of the four notification message delivery mediums was the information received in a timely manner for you to carry out your warning response SOPs?

	GTS	Email	SMS
TSP Australia	Received in time Received late Not received	Received in time Received late Not received	Received in time Received late Not received
TSP India	Received in time Received late Not received	Received in time Received late Not received	Received in time Received late Not received
TSP Indonesia	Received in time Received late Not received	Received in time Received late Not received	Received in time Received late Not received

Comments

Objective 5: Validate the dissemination by TSPs of Tsunami Bulletin Notification Messages to NTWCs via TWFPs of Indian Ocean countries and the reception by NTWCs of the TSP Messages.

58. Scenario 1: **Sunda Trench**, 25 September 2025

Please provide the receipt times of **TSP-Australia** notification messages by the NTWC.

	GTS Time Received (UTC)	**Email** Time Received (UTC)	**SMS** Time Received (UTC)
01:00 Sunda Trench Announcement Message			
01:10 Notification Message 1			
01:15 Notification Message 2			
01:25 Notification Message 3			
01:35 Notification Message 4			
01:45 Notification Message 5			
02:45 Notification Message 6			
03:45 Notification Message 7			
04:45 Notification Message 8			
05:45 Notification Message 9			
06:45 Notification Message 10			
07:45 Notification Message 11			
08:45 Notification Message 12			
09:45 Notification Message 13			
10:45 Notification Message 14			
11:45 Notification Message 15			
12:45 Notification Message 16			

59. Scenario 1: **Sunda Trench**, 25 September 2025

Please provide the receipt times of **TSP-India** notification messages by the NTWC.

	GTS Time Received (UTC)	**Email** Time Received (UTC)	**SMS** Time Received (UTC)
01:00 Sunda Trench Announcement Message			
01:08 Notification Message 1			
01:15 Notification Message 2			
01:30 Notification Message 3			
02:00 Notification Message 4			
03:00 Notification Message 5			
04:00 Notification Message 6			
05:00 Notification Message 7			
06:00 Notification Message 8			
07:00 Notification Message 9			
08:00 Notification Message 10			
09:00 Notification Message 11			
10:00 Notification Message 12			
11:00 Notification Message 13			
12:00 Notification Message 14			
13:00 Notification Message 15			

60. Scenario 1: **Sunda Trench**, 25 September 2025

Please provide the receipt times of **TSP-Indonesia** notification messages by the NTWC.

	GTS Time Received (UTC)	**Email** Time Received (UTC)	**SMS** Time Received (UTC)
01:00 Sunda Trench Announcement Message			
01:05 Notification Message 1			
01:09 Notification Message 2			
01:30 Notification Message 3			
02:00 Notification Message 4			
03:00 Notification Message 5			
04:00 Notification Message 6			
05:00 Notification Message 7			
06:00 Notification Message 8			
07:00 Notification Message 9			
08:00 Notification Message 10			
09:00 Notification Message 11			
10:00 Notification Message 12			
11:00 Notification Message 13			

Objective 5: Validate the dissemination by TSPs of Tsunami Bulletin Notification Messages to NTWCs via TWFPs of Indian Ocean countries and the reception by NTWCs of the TSP Messages.

61. Scenario 2: **Makran Trench**, 15 October 2025

Please provide the receipt times of **TSP-Australia** notification messages by the NTWC.

	GTS Time Received (UTC)	**Email** Time Received (UTC)	**SMS** Time Received (UTC)
06:00 Makran Trench Announcement Message			
06:10 Notification Message 1			
06:15 Notification Message 2			
06:35 Notification Message 3			
07:35 Notification Message 4			
08:35 Notification Message 5			
09:35 Notification Message 6			
10:35 Notification Message 7			
11:35 Notification Message 8			
12:35 Notification Message 9			
13:35 Notification Message 10			
14:35 Notification Message 11			
15:35 Notification Message 12			
16:35 Notification Message 13			
17:35 Notification Message 14			

62. Scenario 2: **Makran Trench**, 15 October 2025

Please provide the receipt times of **TSP-India** notification messages by the NTWC.

	GTS Time Received (UTC)	**Email** Time Received (UTC)	**SMS** Time Received (UTC)
06:00 Makran Trench Announcement Message			
06:05 Notification Message 1			
06:15 Notification Message 2			
06:30 Notification Message 3			
07:00 Notification Message 4			
08:00 Notification Message 5			
09:00 Notification Message 6			
10:00 Notification Message 7			
11:00 Notification Message 8			
12:00 Notification Message 9			
13:00 Notification Message 10			
14:00 Notification Message 11			
15:00 Notification Message 12			
16:00 Notification Message 13			
17:00 Notification Message 14			
18:00 Notification Message 15			

63. Scenario 2: **Makran Trench**, 15 October 2025

Please provide the receipt times of **TSP-Indonesia** notification messages by the NTWC.

	GTS Time Received (UTC)	**Email** Time Received (UTC)	**SMS** Time Received (UTC)
06:00 Makran Trench Announcement Message			
06:08 Notification Message 1			
06:13 Notification Message 2			
06:30 Notification Message 3			
07:00 Notification Message 4			
08:00 Notification Message 5			
09:00 Notification Message 6			
10:00 Notification Message 7			
11:00 Notification Message 8			
12:00 Notification Message 9			
13:00 Notification Message 10			
14:00 Notification Message 11			
15:00 Notification Message 12			
16:00 Notification Message 13			

Objective 5: Validate the dissemination by TSPs of Tsunami Bulletin Notification Messages to NTWCs via TWFPs of Indian Ocean countries and the reception by NTWCs of the TSP Messages.

64. Scenario 3: **Fani Maore Volcano**, 25 October 2025

Please provide the receipt times of **TSP-Australia** notification messages by the NTWC.

	GTS Time Received (UTC)	**Email** Time Received (UTC)	**SMS** Time Received (UTC)
15:00 Fani Maore Volcano Announcement Message			
15:10 Notification Message 1			
16:00 Notification Message 2			
17:00 Notification Message 3			
18:00 Notification Message 4			
19:00 Notification Message 5			
20:00 Notification Message 6			
21:00 Notification Message 7			
22:00 Notification Message 8			
23:00 Notification Message 9			
00:00 (26-Oct) Notification Message 10			
01:00 (26-Oct) Notification Message 11			
02:00 (26-Oct) Notification Message 12			
03:00 (26-Oct) Notification Message 13			

65. Scenario 3: **Fani Maore Volcano**, 25 October 2025

Please provide the receipt times of **TSP-India** notification messages by the NTWC.

	GTS Time Received (UTC)	**Email** Time Received (UTC)	**SMS** Time Received (UTC)
15:00 Fani Maore Volcano Announcement Message			
15:05 Notification Message 1			
15:30 Notification Message 2			
16:00 Notification Message 3			
17:00 Notification Message 4			
18:00 Notification Message 5			
19:00 Notification Message 6			
20:00 Notification Message 7			
21:00 Notification Message 8			
22:00 Notification Message 9			
23:00 Notification Message 10			
00:00 (26-Oct) Notification Message 11			
01:00 (26-Oct) Notification Message 12			
02:00 (26-Oct) Notification Message 13			
03:00 (26-Oct) Notification Message 14			

66. Scenario 3: **Fani Maore Volcano**, 25 October 2025

Please provide the receipt times of **TSP-Indonesia** notification messages by the NTWC.

	GTS Time Received (UTC)	**Email** Time Received (UTC)	**SMS** Time Received (UTC)
15:00 Fani Maore Volcano Announcement Message			
15:05 Notification Message 1			
16:00 Notification Message 2			
17:00 Notification Message 3			
18:00 Notification Message 4			
19:00 Notification Message 5			
20:00 Notification Message 6			
21:00 Notification Message 7			
22:00 Notification Message 8			
23:00 Notification Message 9			
00:00 (26-Oct) Notification Message 10			
01:00 (26-Oct) Notification Message 11			
02:00 (26-Oct) Notification Message 12			
03:00 (26-Oct) Notification Message 13			

Objective 5: Validate the dissemination by TSPs of Tsunami Bulletin Notification Messages to NTWCs via TWFPs of Indian Ocean countries and the reception by NTWCs of the TSP Messages.

67. Scenario 4: **Sumatra Trench**, 05 November 2025

Please provide the receipt times of **TSP-Australia** notification messages by the NTWC.

	GTS Time Received (UTC)	**Email** Time Received (UTC)	**SMS** Time Received (UTC)
03:00 Sumatra Trench Announcement Message			
03:10 Notification Message 1			
03:15 Notification Message 2			
03:35 Notification Message 3			
04:35 Notification Message 4			
05:35 Notification Message 5			
06:35 Notification Message 6			
07:35 Notification Message 7			
08:35 Notification Message 8			
09:35 Notification Message 9			
10:35 Notification Message 10			
11:35 Notification Message 11			
12:35 Notification Message 12			
13:35 Notification Message 13			
14:35 Notification Message 14			

68. Scenario 4: **Sumatra Trench**, 05 November 2025

Please provide the receipt times of **TSP-India** notification messages by the NTWC.

	GTS Time Received (UTC)	**Email** Time Received (UTC)	**SMS** Time Received (UTC)
03:00 Sumatra Trench Announcement Message			
03:08 Notification Message 1			
03:15 Notification Message 2			
02:34 Notification Message 3			
04:00 Notification Message 4			
05:00 Notification Message 5			
06:00 Notification Message 6			
076:00 Notification Message 7			
08:00 Notification Message 8			
09:00 Notification Message 9			
10:00 Notification Message 10			
11:00 Notification Message 11			
12:00 Notification Message 12			
13:00 Notification Message 13			
14:00 Notification Message 14			
15:00 Notification Message 15			

69. Scenario 4: **Sumatra Trench**, 05 November 2025

Please provide the receipt times of **TSP-Indonesia** notification messages by the NTWC.

	GTS Time Received (UTC)	**Email** Time Received (UTC)	**SMS** Time Received (UTC)
03:00 Sumatra Trench Announcement Message			
03:07 Notification Message 1			
03:12 Notification Message 2			
03:30 Notification Message 3			
04:00 Notification Message 4			
05:00 Notification Message 5			
06:00 Notification Message 6			
07:00 Notification Message 7			
08:00 Notification Message 8			
09:00 Notification Message 9			
10:00 Notification Message 10			
11:00 Notification Message 11			
12:00 Notification Message 12			
13:00 Notification Message 13			

Objective 6: Validate the dissemination by TSPs of Tsunami Bulletin Notification messages for NAVAREA stakeholders to ensure navigational safety and security.

70. Did NAVAREA stakeholders participate in the Exercise?

- Yes
- No

71. Did the stakeholders receive the new TSP Tsunami NAVAREA messages?

- Yes
- No

Comments

72. Were the new TSP products for NAVAREAs easily accessible and understood?

- Yes
- No

Comments

Objective 7: Validate the access by NTWCs to the tsunami bulletins and other products on the TSP websites, and the use of that information to produce national warnings.

73. Please indicate which TSP exchange products you accessed on the password-protected websites.

	Bulletins	Coastal Zone Threat Map	Threat Table	Maximum Amplitude Map	Tsunami Travel Time (TTT) Map
TSP Australia	Yes / No / Unable to access	Yes / No / Unable to access	Yes / No / Unable to access	Yes / No / Unable to access	Yes / No / Unable to access
TSP India	Yes / No / Unable to access	Yes / No / Unable to access	Yes / No / Unable to access	Yes / No / Unable to access	Yes / No / Unable to access
TSP Indonesia	Yes / No / Unable to access	Yes / No / Unable to access	Yes / No / Unable to access	Yes / No / Unable to access	Yes / No / Unable to access

74. Were any other TSP exchange products (e.g. Spatial Files) accessed on the password-protected websites?

75. Was tsunami threat information from TSP websites (bulletins and other products) **used** in the production of your national warnings?

- Yes
- No

76. Please indicate which information was used:

	Tsunami Wave Observations	Predicted Wave Arrival Times				Predicted Maximum Wave Amplitudes	Coastal Forecast Zone Threat Levels	Other
		T1	T2	T3	T4			
TSP Australia	☐	☐	☐	☐	☐	☐	☐	☐
TSP India	☐	☐	☐	☐	☐	☐	☐	☐
TSP Indonesia	☐	☐	☐	☐	☐	☐	☐	☐

Comments

77. Please comment why the tsunami threat information from the TSP websites was not used.

Objective 8: Validate the reporting by NTWCs to the TSPs of their National Tsunami Warning status.

78. Did your NTWC send reports of its warning status to the TSPs?

- ○ Yes
- ○ No

79. What TSP website did you access the status reporting form from?

- ○ TSP Australia
- ○ TSP India
- ○ TSP Indonesia

80. Why did your NTWC not report its warning status on a TSP website?

Objective 9: Validate the receipt and understanding by NTWCs of new TSP service for tsunamis generated by non-seismic and complex sources.

81. Did the NTWC access the new TSP products for tsunami generated by non-seismic and complex sources (i.e., volcano)?

- Yes
- No

82. Were the TSP products for volcanos easily accessible and understood by the NTWC?

- Yes
- No

83. Were the TSP products for volcanos used by the NTWC to generate national tsunami warnings?

- Yes
- No

84. Please provide any further and more detailed feedback on the new TSP products for tsunamis generated by non-seismic and complex sources.

End of the Objectives 5-9 survey questions related to the National Tsunami Warning Centre.

General Questions

85. Please rank the following from 4 (extremely good), 3 (very good), 2 (good), 1 (poor) to 0 (very poor).

	4	3	2	1	0
Exercise planning and communication with Member States: Timeliness and usefulness of information provided by the ICG/IOTWMS Secretariat.	○	○	○	○	○
Exercise documentation: Manual, websites, bulletins	○	○	○	○	○
Exercise format and style: Real-time operation, exercise messages similar to real event	○	○	○	○	○
Pre-IOWave SOP Workshop	○	○	○	○	○
Post-exercise evaluation: Web-based survey	○	○	○	○	○

Comments

86. Our country benefited from the exercise by:

1)

87.

2)

88.

3)

89. Future exercises could be improved by:

1)

90.

2)

91.

3)

92. Our country used exercise observers?

- Yes
- No

93. Please rank the following from 4 (extremely good), 3 (very good), 2 (good), 1 (poor) to 0 (very poor).

	4	3	2	1	0
Feedback provided by the exercise observers	○	○	○	○	○
Information for the post-exercise evaluation provided by the exercise observers	○	○	○	○	○

Comments

94. Did your country undertake any activities in commemoration of the World Tsunami Awareness Day (WTAD) 2025 on 05 November?

- ○ Yes
- ○ No

95.
Comments:

End of the General Questions survey section.

End of Survey

When the survey is completed and no further information needs to be entered or amended, the **National IOWave Exercise Contact** should submit the completed survey.

96. Are you the National IOWave Exercise Contact?

- ○ Yes
- ○ No

End of Survey

LAST PAGE

When the survey is completed and no further information needs to be entered or amended, [question('value'), id='935'] should submit the survey by pressing the *Submit* button.

Thank You!

Thank you for completing the IOWave25 Post-Exercise Evaluation.