

Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWMS)

Working Group 2 on Tsunami Detection, Warning, and Dissemination

25th IOTWMS Communications Test Report 7 December 2022

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1 PURPOSE

To report on the IOTWMS Communications Test conducted on 7 December 2022.

2 BACKGROUND

Working Group 2 (WG2) of the Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWMS), at its meeting in Hyderabad, India on 10-11 February 2011, decided that regular communications tests should be conducted between the Tsunami Service Providers (TSPs) and the National Tsunami Warning Centres (NTWCs) of the IOTWMS.

The objectives of the communications tests are to:

- a. Validate the TSP processes for disseminating tsunami bulletin notification messages to NTWCs.
- b. Validate the reception of the notification messages by NTWCs.
- c. Validate the access by NTWCs to TSP password-protected web sites containing bulletins, threat maps and tables of predicted arrival times and maximum wave amplitudes in real time.
- d. Validate the reporting by NTWCs of national warning status information back to TSPs, via a web-based warning status report form.

Four tests were conducted in 2011, and two tests have been conducted each year between 2012 and 2019. In 2020 only one test was conducted as the second test would have occurred in close proximity to Exercise IOWave20. This is the report of the twenty-fifth test held on 7 December 2022. The next test is scheduled for 14 June 2023. Below is the test schedule:

Test Number	Date	Status
1	16 March 2011	Conducted
2	15 June 2011	Conducted
3	14 September 2011	Conducted
4	14 December 2011	Conducted
5	13 June 2012	Conducted
6	12 December 2012	Conducted
7	12 June 2013	Conducted
8	11 December 2013	Conducted
9	11 June 2014	Conducted
10	10 December 2014	Conducted
11	10 June 2015	Conducted
12	9 December 2015	Conducted
13	8 June 2016	Conducted
14	14 December 2016	Conducted
15	14 June 2017	Conducted
16	13 December 2017	Conducted
17	13 June 2018	Conducted
18	12 December 2018	Conducted
19	12 June 2019	Conducted
20	11 December 2019	Conducted
21	10 June 2020	Conducted
22	9 June 2021	Conducted
23	8 December 2021	Conducted
24	8 June 2022	Conducted
25	7 December 2022	Conducted

Test Number	Date	Status
26	7 June 2023	Planned
27	13 December 2023	Planned

Notes:

- a. All communication test reports are available on the IOC Tsunami Resilience Section [webpage](#).
- b. In the 2011 tests TSPs issued 12 messages each within a 3-hour period. Since 2012 the TSPs have issued 4 messages each within a 45-minute period.
- c. In addition to the communication tests, five IOTWMS exercises have been conducted since 2011:
 - IOWave11 (12 October 2011)
 - IOWave14 (9-10 September 2014)
 - IOWave16 (7-8 September 2016)
 - IOWave18 (4-5 September 2018)
 - IOWave20 (6-20 October 2020)

3 TEST DETAILS

The details of the procedures used in the 7 December 2022 test are described in the document “IOTWMS Communications Test 7 December 2022 Technical Manual” distributed to NTWCs and TSPs by the ICG/IOTWMS Secretariat on 17 November 2022.

Test Earthquake Event Scenario:

Magnitude: 9.0 Mwp
Depth: 10 km
Date: 7 December 2022
Origin Time: 06:00 UTC
Latitude: 12.65N
Longitude: 93.50E
Location: Andaman Islands, India Region

As in previous tests, each participating country was requested to complete a Communications Test Log during the test, recording the time and method of reception of test messages at the NTWC, the NTWC’s ability to access the TSP websites and TSP-Indonesia Warning Receiver System, and the time of the NTWC’s reporting of national warning status information. The Test Log was available for completion online. The Test Logs are the primary source of information for this report and are archived on the Alchemer online survey platform.

4 TEST PARTICIPATION

Twenty-two (22) IOTWMS Member States participated in the test. This represents the average number of participating Member States across the 25 tests conducted to date. The highest participation rate has been 25 countries and the lowest participation rate has been 17 countries.

The participants in this test were:

- TSPs - Australia, India, Indonesia
- NTWCs - Australia, Bangladesh, Comoros, France (Indian Ocean Territories), India, Indonesia, Iran, Kenya, Madagascar, Malaysia, Mauritius, Myanmar,

Oman, Pakistan, Seychelles, Singapore, South Africa, Sri Lanka, Tanzania, Thailand, United Arab Emirates, and Yemen.

Maldives, Mozambique, and Timor Leste did not participate in the test.

Table 1, Chart 1 and Chart 2 show the participation by Member States in all tests conducted so far.

Table 1: Log of Member State Participation in all Tests

Test	AUS	BAN	COM	FR	IN	IND	IR	KEN	MAD	MAL	MD	MAU	MZ	MM	OM	PK	SY	SIN	SA	SLK	TAN	THA	TL	UAE	YEM	Total	
1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1		1	21	
2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1		1	23	
3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1		1	23	
4	1	1	0	1	1	1	0	1	1	1	0	1	1	1	1	0	1	1	0	1	1	1	1		1	19	
5	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1		1	21	
6	1	1	0	1	1	1	0	1	1	1	1	0	1	1	0	1	1	1	0	1	0	0	1		1	17	
7	1	1	0	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	0	1	1	1		1	20	
8	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0		1	21	
9	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1	23	
10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1	24	
11	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1		0	21	
12	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1	1	0	1	1		0	20	
13	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0		1	23	
14	1	1	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0		1	21	
15	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0		1	22	
16	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	0		0	20	
17	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0		0	21	
18	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1		1	1	22	
19	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1	22
20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	25
21	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	25
22	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	21
23	1	1	0	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	0	1	1	1	20
24	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	25
25	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1	22
Total	25	25	17	25	25	25	17	24	24	25	22	24	16	24	22	24	25	25	19	23	20	23	15	7	21	Av: 22	

AUS=Australia, BAN=Bangladesh, COM=Comoros, FR=France (Indian Ocean Territories), IN=India, IND=Indonesia, IRA=Iran, KN=Kenya, MAD=Madagascar, MAL=Malaysia, MD=Maldives, MAU=Mauritius, MZ=Mozambique, MM=Myanmar, OM=Oman, PK=Pakistan, SY=Seychelles, SIN=Singapore, SA=South Africa, SLK=Sri Lanka, TAN=Tanzania, THA=Thailand, TL=Timor-Leste, UAE=United Arab Emirates, YEM=Yemen

1=Participated in test, 0=did not participate

Chart 1: Number of Tests Participated in by Member State

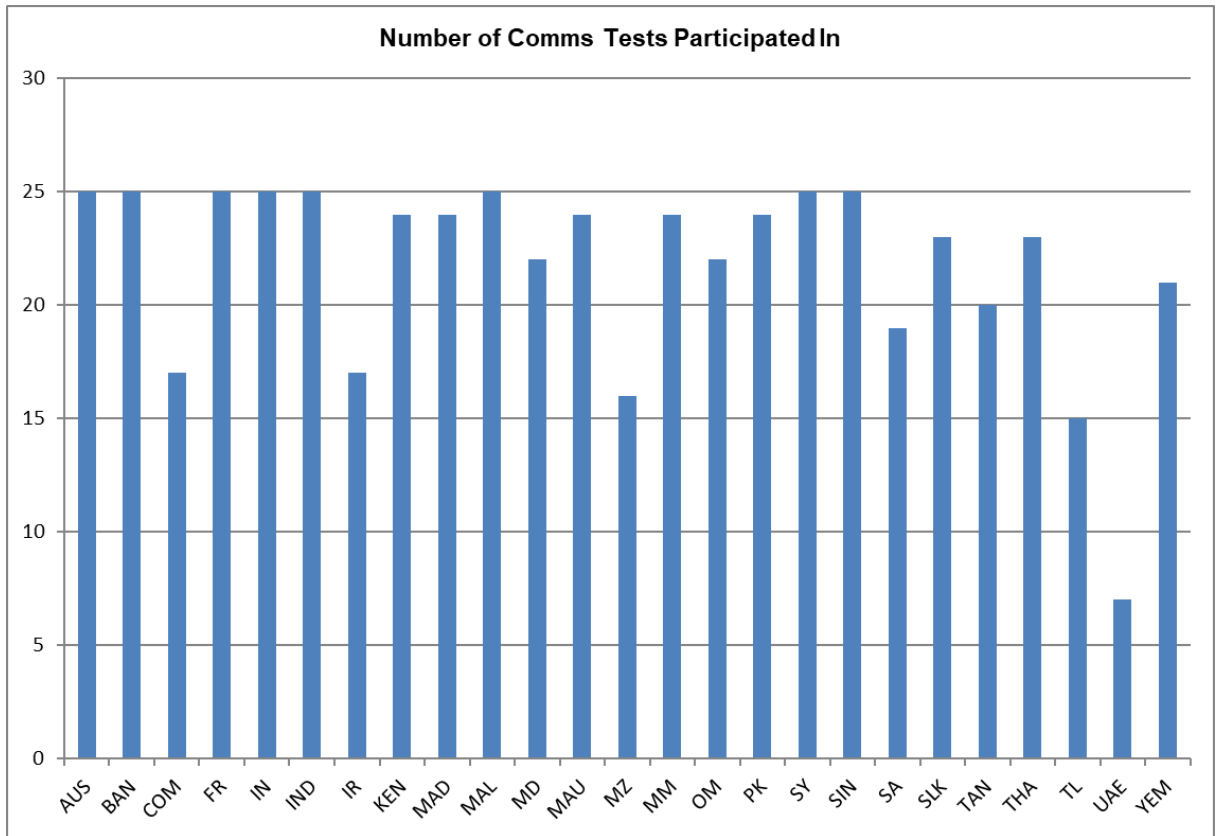
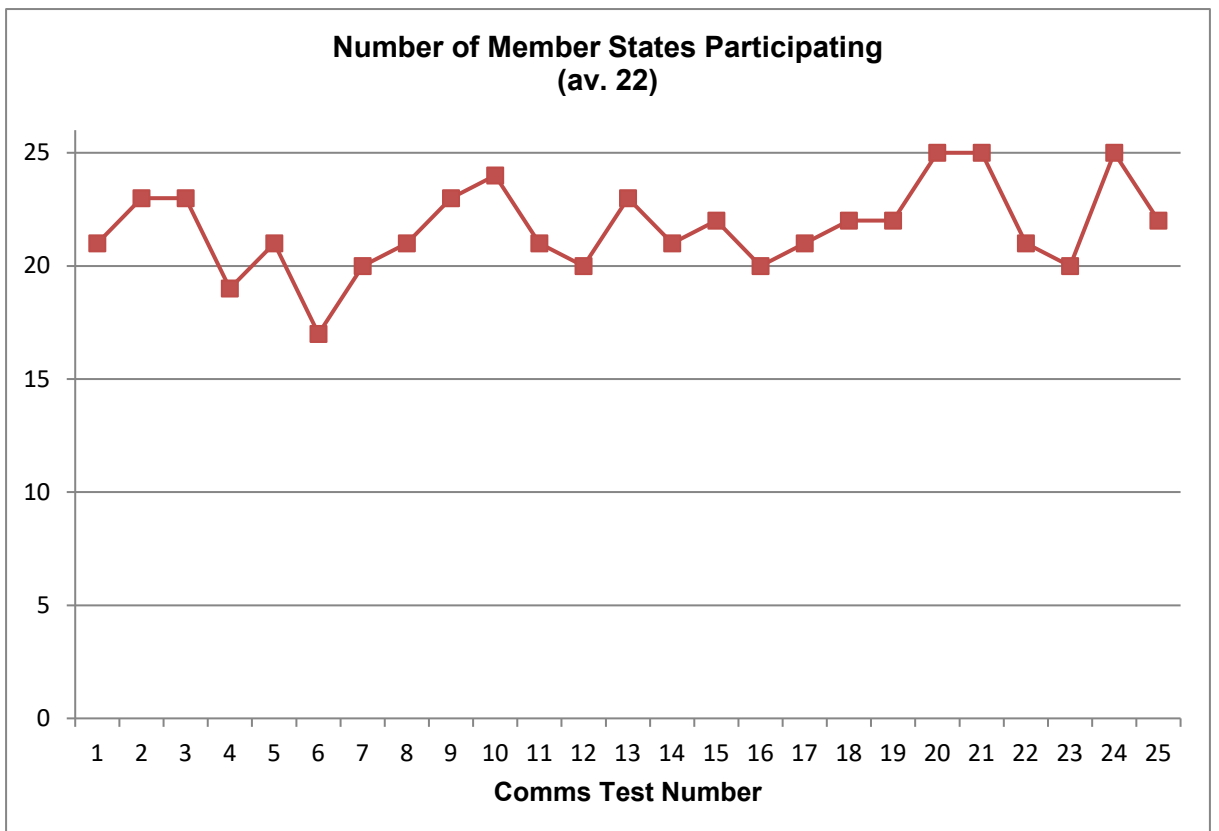


Chart 2: Number of Member States in Each Test



5 MESSAGE DISSEMINATION AND RECEPTION RESULTS

5.1 Message Dissemination

Dissemination Media: All TSPs issued their test bulletin notification messages via GTS, email, fax, and SMS.

Issue Times: See Table 2 for the actual issue times of each TSP bulletin notification message compared to the scheduled issue times.

Table 2: TSP Test Bulletin Notification Message Issue Times (UTC)

IOTWMS TSP	Test Start 06:00	Message 1 06:05	Message 2 06:15	Message 3 06:30	Message 4 06:45
Australia	06:00	06:05	06:15	06:31	06:45
India	06:00	06:05	06:17	06:30	06:46
Indonesia	06:00	06:05	06:15	06:30	06:45

Addresses: The NTWC fax, email and SMS addresses used by the TSPs were those contained in updates to the IOTWMS NTWC Contact Databases supplied to the TSPs by the ICG/IOTWMS Secretariat on 26 August 2022.

All messages sent by the TSPs are given in Appendix H.

5.2 Message Reception

Refer to Appendices A, B, C and D for tables listing the arrival times of the GTS, fax, email, and SMS notification messages received by each NTWC, as reported in their Test Logs. Also refer to Table 3 and Chart 3 for summary figures across all NTWCs.

5.2.1 GTS

The overall GTS reception rate was 90%, which was higher than the past tests. It was highest than overall COMMs tests.

Nineteen (19) of the 20 NTWCs received GTS messages. Comoros, Seychelles, and Yemen did not receive GTS messages from any TSP while Iran and Madagascar have opted out of the service.

GTS messages continued to be received promptly in this test, with most messages received within 1-3 minutes of issuing. The longest delay was 28 minutes for Myanmar to receive all TSPs notification message 3.

5.2.2 Fax

The overall fax reception rate was 29%, which was higher than the past tests. The lowest fax reception rate of 20%.

Only eight (8) of the 19 NTWCs reported receiving fax messages, with TSP Australia's messages being received by 6 NTWCs, India's by 8 NTWCs, and Indonesia's by 6 NTWCs.

Fax message delay times mostly varied between 1-7 minutes. The longest delay was 5 hours and 7 minutes for a TSP India message 1 received by Malaysia.

5.2.3 Email

The overall email reception rate in this test was 82%, which was slightly lower than the past test (87%). Twenty-one (21) of the 22 NTWCs received email notifications.

Emails from TSP Australia were received by 20 NTWCs, emails from TSP India were received by 21 NTWCs, and emails from TSP Indonesia were received by 17 NTWCs.

Email messages continued to be received promptly, with almost all email messages received within 1 to 4 minutes of the issue time. The maximum delay was 3 hours 7 minutes to Comoros from TSP Australia and TSP India.

5.2.4 SMS

The overall SMS message reception rate in this test was 58%, slightly lower than the last test but close to the average rate.

In this test sixteen (16) of the 21 NTWCs received SMS messages. Sri Lanka and Mauritius did not receive SMS messages from any TSP while France (Indian Ocean Territories) has opted out of the service.

TSP Australia's SMS messages were received by 13 of the 21 NTWCs, TSP India's were received by 12 NTWCs, and TSP Indonesia's were received by 16 NTWCs.

The longest delay was 2 hours 20 minutes to South Africa from TSP-Indonesia.

6 WEB ACCESS AND REPORTING RESULTS

Refer to Table 3 and Chart 4 for summary figures of web access and reporting across all NTWCs.

6.1 Web Access

Refer to Appendix E for a table of web accesses reported by each NTWC. In this test the web access overall success rate was 70%, up 2% from the 68% in the previous test and lower than the average of around 82%.

Nineteen (19) of the 22 NTWCs were able to access at least one TSP website during the test, compared with 20 of 25 in the previous test. Iran, Seychelles, and Yemen did not report of access to any of the TSP websites.

6.2 Web Reporting

Refer to Appendix F for a table of NTWC web status reports lodged, as reported by the NTWCs.

In this test, 10 of the 22 NTWCs reported that they lodged web status reports. This is a rate of 45%, which is 5% greater than the 40% reported in the previous test. However, the web reporting rate is lower than the average rate since 2011 of around 57%. It is also significantly lower than the highest-ever rate of 77%.

6.3 TSP-Indonesia WRS Access

Refer to Appendix G for a table of TSP-Indonesia WRS accesses reported by each NTWC. In this test the TSP-Indonesia WRS access overall success rate was 77%, i.e., 17 out of 22 NTWCs. Iran, Seychelles, Singapore, Tanzania, and Yemen reported they did not attempt access the TSP-Indonesia WRS during the test. Five (5) NTWCs did not report if they accessed the TSP-Indonesia WRS.

This is the fourth time that the TSP-Indonesia WRS was used in communications tests. In general, NTWCs gave the positive feedback and could access the TSP-Indonesia WRS.

7 RESULTS ASSESSED AGAINST OBJECTIVES

7.1 Validate TSP dissemination processes for tsunami bulletin notification messages

All three TSPs successfully issued their test messages according to the Test Timeline and via all four specified communications media: GTS, fax, email, and SMS.

7.2 Validate reception of notification messages by NTWCs

- Email continues to be the second most successful communications medium, with 82% of the TSP email messages being received by NTWCs in this test, and almost all NTWCs received email messages from at least one TSP.
- The GTS message reception was 90% and higher than all previous communication tests.
- The SMS message reception was 58%. It was down on the previous test and around the average for the previous few years.
- The Fax message reception was 29% in this test, which is slightly higher than previous communication tests.

7.3 Validate access by NTWCs to TSP password-protected web sites

Web site access increased to 70% in this test compared with 68% of the previous test. This is lower than the long-term average of around 82% since 2011. Nineteen (19) of the 22 NTWCs were able to access at least one TSP website.

7.4 Validate reporting by NTWCs of national warning status information

NTWC status report lodgements reported by NTWCs is 45%. This is higher than the previous 5 communications tests and in line with the longer-term average.

8 COMPARISON WITH PREVIOUS TESTS

The results of this test in comparison with previous tests are summarised in Table 3 and Charts 3 and 4 below.

Twenty-two (22) IOTWMS Member States participated in this 25th IOTWMS Communications Test. This test demonstrated the continuing strength of GTS as the primary TSP delivery mechanism for notifying NTWCs of bulletin updates, followed by Email and SMS as the next most reliable mechanisms. The historically low fax reception rates of 29% in this test and 23% in the previous test calls for a review of the validity of fax numbers and necessity of providing such a delivery channel.

This is the fourth time that the TSP Indonesia's WRS system was tested. The feedback was mostly positive from the 17 NTWCs who accessed the system, suggesting this could be a viable alternative or addition to the current four delivery channels of GTS, Email, SMS, and Fax.

Both TSP webpage access and national warning status reporting showed increases from the recent communications tests. The national warning status reporting was 45%, slightly higher than the previous communications test. Therefore, it is suggested to include how to lodge the online status reports in future training activities.

Table 3: Test Results Comparison

Test Date:	16-Mar-11 (21 NTWCs)		15-Jun-11 (23 NTWCs)		14-Sep-11 (23 NTWCs)		14-Dec-11 (19 NTWCs)		13-Jun-12 (21 NTWCs)		12-Dec-12 (17 NTWCs)		12-Jun-13 (20 NTWCs)		11-Dec-13 (21 NTWCs)		11-Jun-14 (23 NTWCs)	
Originating TSP	% of NTWCs	Max. Delay (mins)	% of NTWCs	Max. Delay (mins)	% of NTWCs	Max. Delay (mins)	% of NTWCs	Max. Delay (mins)	% of NTWCs	Max. Delay (mins)	% of NTWCs	Max. Delay (mins)	% of NTWCs	Max. Delay (mins)	% of NTWCs	Max. Delay (mins)	% of NTWCs	Max. Delay (mins)
Received GTS Messages																		
Australia	43%	16	61%	47	70%	14	80%	28	66%	3	72%	7	59%	30	87%	15	74%	15
India	57%	5	70%	17	70%	26	80%	25	71%	7	70%	14	65%	40	81%	4	79%	10
Indonesia	5%	-	70%	12	52%	104	59%	37	39%	26	73%	15	63%	35	86%	24	76%	17
TSP Average	35%	11	67%	25	64%	48	73%	30	59%	12	72%	12	62%	35	84%	14	76%	14
Received Fax Messages																		
Australia	38%	165	26%	178	11%	2	85%	43	70%	49	66%	26	55%	47	66%	38	50%	99
India	29%	61	37%	91	52%	93	65%	35	54%	35	32%	32	37%	184	49%	32	43%	20
Indonesia	5%	107	24%	35	30%	43	25%	27	20%	20	18%	12	26%	19	19%	23	8%	7
TSP Average	24%	111	29%	101	31%	46	58%	35	48%	35	39%	23	39%	83	44%	31	34%	42
Received Email Messages																		
Australia	86%	12	85%	39	83%	11	94%	7	83%	3	87%	6	75%	28	94%	16	98%	8
India	90%	48	83%	48	80%	15	87%	9	81%	2	87%	4	85%	5	93%	16	90%	28
Indonesia	86%	18	72%	15	78%	61	89%	21	71%	10	94%	17	88%	39	90%	8	90%	10
TSP Average	87%	26	80%	34	80%	29	90%	12	78%	5	89%	9	83%	24	93%	13	93%	15
Received SMS Messages																		
Australia	-	-	-	-	15%	3	47%	4	57%	2	82%	3	54%	13	61%	1	68%	52
India	-	-	-	-	46%	13	76%	23	69%	1	82%	3	59%	9	61%	2	60%	37
Indonesia	-	-	-	-	41%	15	21%	5	64%	3	59%	14	39%	3	43%	3	56%	19
TSP Average					34%	10	48%	11	63%	2	74%	7	51%	8	55%	2	61%	36
Accessed Web Pages																		
Australia	95%	n/a	65%	n/a	87%	n/a	93%	n/a	57%	n/a	94%	n/a	79%	n/a	90%	n/a	77%	n/a
India	90%	n/a	91%	n/a	87%	n/a	87%	n/a	73%	n/a	94%	n/a	85%	n/a	90%	n/a	77%	n/a
Indonesia	90%	n/a	78%	n/a	78%	n/a	82%	n/a	44%	n/a	94%	n/a	90%	n/a	76%	n/a	77%	n/a
TSP Average	92%		78%		84%		87%		58%		94%		85%		86%		77%	
Lodged Web Status Reports																		
	48%		70%		52%		47%		43%		53%		60%		52%		48%	

Table 3: Test Results Comparison Continued

Test Date:	10-Dec-14 (24 NTWCs)		10-Jun-15 (21 NTWCs)		9-Dec-15 (20 NTWCs)		8-Jun-16 (23 NTWCs)		14-Dec-16 (21 NTWCs)		14-Jun-17 (22 NTWCs)		13-Dec-17 (20 NTWCs)		13-Jun-18 (21 NTWCs)		12-Dec-18 (22 NTWCs)	
Originating TSP	% of NTWCs	Max. Delay (mins)	% of NTWCs	Max. Delay (mins)	% of NTWCs	Max. Delay (mins)	% of NTWCs	Max. Delay (mins)	% of NTWCs	Max. Delay (mins)	% of NTWCs	Max. Delay (mins)	% of NTWCs	Max. Delay (mins)	% of NTWCs	Max. Delay (mins)	% of NTWCs	Max. Delay (mins)
Received GTS Messages																		
Australia	81%	16	81%	8	79%	40	76%	7	76%	5	69%	3	74%	8	71%	22	76%	5
India	81%	15	80%	5	69%	40	78%	10	9%	0	75%	94	75%	8	75%	16	73%	5
Indonesia	80%	12	40%	10	77%	40	75%	31	75%	7	59%	5	72%	300	70%	12	76%	6
TSP Average	81%	14	67%	8	75%	40	76%	16	53%	4	68%	34	74%	105	72%	17	75%	5
Received Fax Messages																		
Australia	60%	355	50%	54	63%	32	57%	99	60%	57	70%	99	51%	60	63%	57	53%	67
India	41%	335	47%	11	45%	65	39%	10	32%	333	41%	35	40%	10	58%	21	32%	31
Indonesia	10%	337	20%	12	18%	27	22%	26	15%	88	15%	34	32%	103	18%	13	25%	35
TSP Average	37%	342	39%	26	42%	41	39%	45	36%	159	42%	56	41%	58	46%	30	37%	44
Received Email Messages																		
Australia	93%	32	94%	3	89%	5	74%	5	90%	30	95%	4	90%	60	90%	2	95%	6
India	86%	95	93%	17	94%	10	80%	14	90%	388	84%	9	79%	65	86%	8	96%	5
Indonesia	87%	5	88%	3	85%	27	82%	3	93%	11	96%	7	83%	61	78%	8	95%	2
TSP Average	89%	44	92%	8	89%	14	79%	7	91%	143	92%	7	84%	62	85%	6	95%	4
Received SMS Messages																		
Australia	67%	4	76%	6	70%	5	63%	7	61%	7	70%	280	69%	7	66%	3	75%	7
India	62%	397	76%	9	61%	148	41%	56	66%	31	44%	12	42%	4	30%	3	85%	16
Indonesia	67%	553	75%	13	70%	20	26%	4	65%	14	64%	67	75%	22	71%	16	67%	11
TSP Average	65%	318	76%	9	67%	58	43%	22	64%	17	59%	120	62%	11	56%	7	76%	11
Accessed Web Pages																		
Australia	70%	n/a	86%	n/a	95%	n/a	86%	n/a	90%	n/a	89%	n/a	95%	n/a	95%	n/a	82%	n/a
India	69%	n/a	95%	n/a	89%	n/a	80%	n/a	86%	n/a	84%	n/a	88%	n/a	92%	n/a	78%	n/a
Indonesia	68%	n/a	95%	n/a	89%	n/a	75%	n/a	88%	n/a	94%	n/a	95%	n/a	89%	n/a	86%	n/a
TSP Average	69%		92%		91%		80%		88%		89%		93%		92%		82%	
Lodged Web Status Reports																		
	46%		62%		65%		65%		76%		77%		65%		76%		59%	

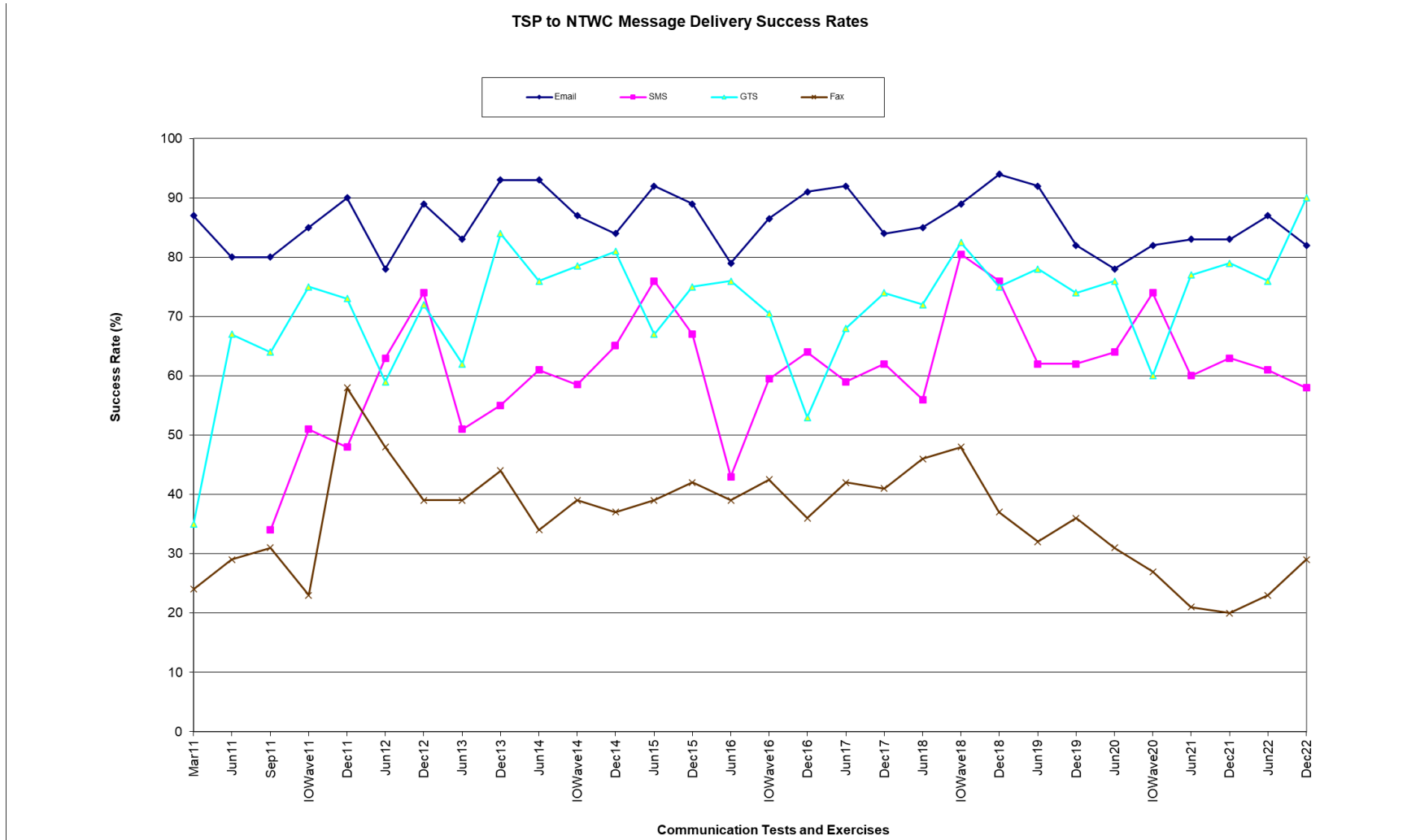
Table 3: Test Results Comparison Continued

Test Date:	12-Jun-19 (22 NTWCs)		11-Dec-19 (25 NTWCs)		10-Jun-20 (25 NTWCs)		08-Dec-21 (21 NTWCs)		08-Jun-22 (25 NTWCs)		07-Dec-22 (22 NTWCs)	
Originating TSP	% of NTWCs	Max. Delay (mins)	% of NTWCs	Max. Delay (mins)	% of NTWCs	Max. Delay (mins)	% of NTWCs	Max. Delay (mins)	% of NTWCs	Max. Delay (mins)	% of NTWCs	Max. Delay (mins)
Received GTS Messages												
Australia	76%	64	79%	6	76%	38	82%	16	78%	9	89%	28
India	80%	58	73%	6	76%	6	80%	27	74%	12	93%	28
Indonesia	76%	65	68%	19	75%	4	75%	35	76%	11	87%	27
TSP Average	78%	62	74%	10	76%	16	79%	26	76%	11	90%	
Received Fax Messages												
Australia	50%	57	45%	39	43%	80	7%	27	19%	152	28%	44
India	30%	15	44%	38	36%	95	38%	9	30%	145	33%	307
Indonesia	15%	79	18%	8	12%	15	14%	32	21%	177	26%	46
TSP Average	32%	50	36%	28	31%	63	20%	23	23%	158	29%	132
Received Email Messages												
Australia	92%	37	84%	6	85%	15	93%	3	91%	6	85%	187
India	97%	26	82%	12	76%	14	90%	5	87%	44	88%	187
Indonesia	86%	58	79%	15	74%	4	70%	7	83%	10	73%	183
TSP Average	92%	40	82%	11	78%	11	83%	5	87%	20	82%	186
Received SMS Messages												
Australia	55%	11	61%	5	66%	15	69%	70	58%	6	55%	41
India	69%	96	58%	17	63%	34	59%	10	50%	8	50%	32
Indonesia	63%	15	68%	62	62%	15	61%	34	75%	16	68%	140
TSP Average	62%	41	62%	28	64%	21	63%	38	61%	10	58%	71
Accessed Web Pages												
Australia	69%	n/a	73%	n/a	75%	n/a	75%	n/a	70%	n/a	77%	n/a
India	67%	n/a	72%	n/a	78%	n/a	81%	n/a	58%	n/a	57%	n/a
Indonesia	76%	n/a	77%	n/a	84%	n/a	85%	n/a	76%	n/a	77%	n/a
TSP Average	71%		74%		79%		80%		68%		70%	
Lodged Web Status Reports												
	50%		58%		54%		75%		40%		45%	

Notes on Table 3:

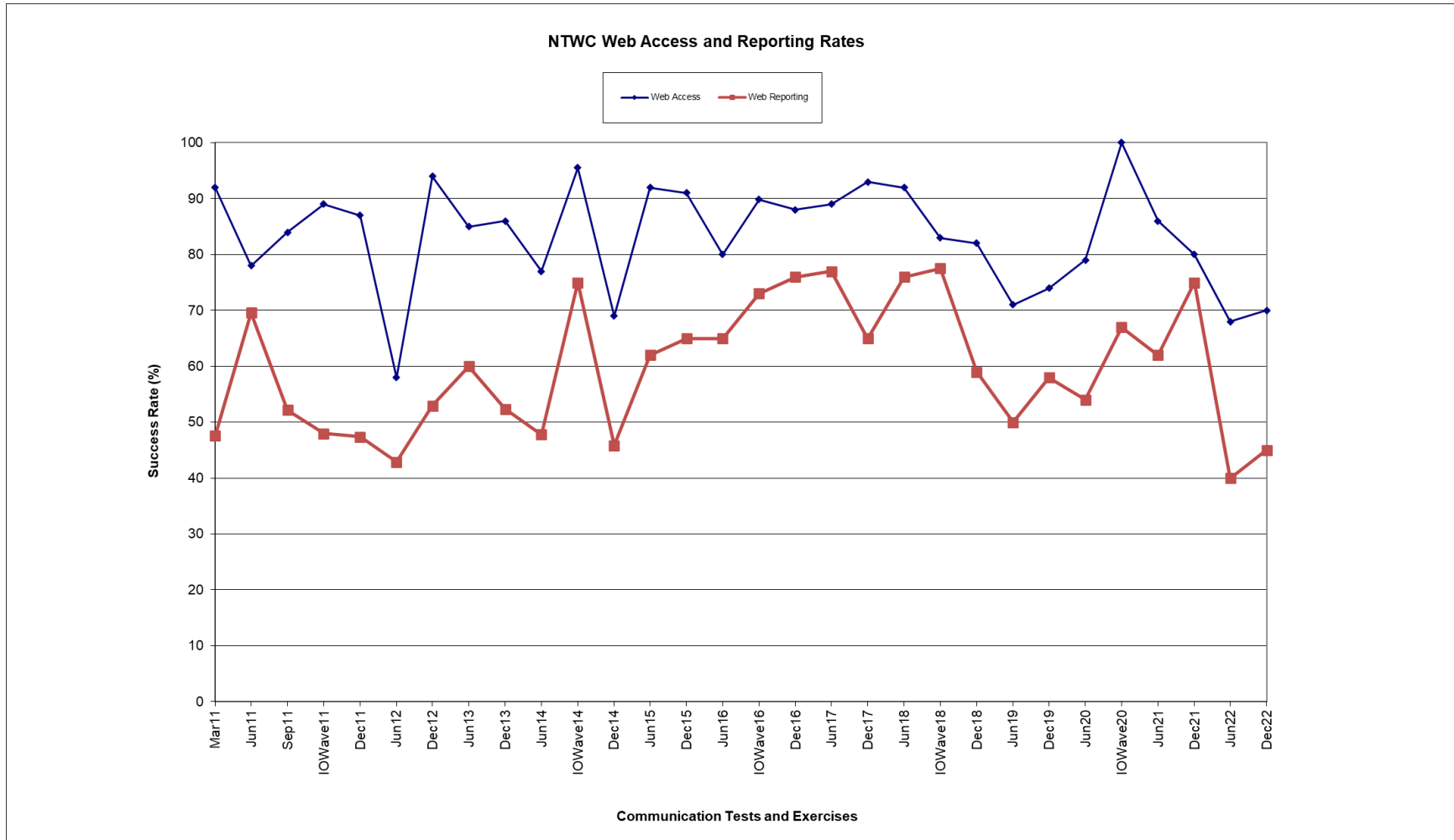
1. Percentages are based on the number of NTWCs that:
 - a. Received each TSP's notification messages
 - b. Were able to access TSP web pages
 - c. Were able to lodge NTWC Warning Status Reports via a TSP web page.
2. "Max Delay" is the highest message delay reported across all NTWCs for each TSP's messages.
3. "-" = not issued in test
4. "n/a" = not applicable

Chart 3: Message Delivery Success Rates



The methodology was updated in Dec-22 such that countries that have opted out of a service were excluded from the total when calculating the delivery success rate.

Chart 4: Web Access and Status Reporting Success Rates



9 SUMMARY OF ISSUES ARISING

The NTWC receipt of TSP messages by NTWCs, access to TSP websites, and status reporting is summarized in Table 4 below. Follow-up is required to ensure all NTWCs receive TSP messages wherever practical and be able to access the TSP websites. Furthermore, all NTWCs should be encouraged to report their national status during tsunami events and exercises.

Table 4: Summary of Message Receipt and Website Access and Reporting

			AUS	BAN	COM	FR	IN	IND	IR	KEN	MAD	MAL	MAU	MM	OM	PK	SY	SIN	SA	SLK	TAN	THA	UAE	YEM	
Message Receipt	GTS	AUSTRALIA	●	●	○	●	●	●	N/A	●	N/A	●	●	●	●	●	○	●	●	●	○	●	●	○	
		INDIA	●	●	○	●	●	●	N/A	●	N/A	●	●	●	●	●	○	●	●	●	●	●	●	●	○
		INDONESIA	●	●	○	●	●	●	N/A	●	N/A	●	●	●	●	●	○	●	●	●	○	●	●	●	○
	Fax	AUSTRALIA	N/A	○	○	N/A	○	○	○	○	N/A	●	○	○	●	○	○	●	○	●	○	○	●	○	○
		INDIA	N/A	○	○	N/A	●	●	○	○	N/A	●	○	●	●	○	○	●	○	●	○	○	○	○	○
		INDONESIA	N/A	○	○	N/A	○	●	○	○	N/A	○	○	○	●	○	○	○	○	○	●	○	●	○	○
	Email	AUSTRALIA	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○
		INDIA	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○	●	●	●
		INDONESIA	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○	○
	SMS	AUSTRALIA	●	●	●	N/A	●	○	○	●	●	●	○	●	●	●	○	●	○	○	○	○	●	○	○
		INDIA	○	●	○	N/A	●	○	○	●	●	●	○	○	○	○	●	○	●	○	○	●	○	○	●
		INDONESIA	●	●	○	N/A	●	●	●	○	●	●	○	●	●	●	○	●	○	○	○	○	●	●	○
Website	Access	AUSTRALIA	●	●	●	○	●	●	○	●	●	●	●	●	●	●	○	●	●	●	●	●	○	○	
		INDIA	○	●	●	●	●	●	○	○	●	●	○	●	○	○	●	○	○	○	○	○	●	○	
		INDONESIA	●	●	●	○	●	●	○	●	●	●	●	●	●	●	○	●	○	○	○	○	○	○	
	Report	Any TSP	●	○	●	●	●	○	○	○	○	○	○	○	●	●	●	○	○	○	○	○	○	○	

AUS=Australia, BAN=Bangladesh, COM=Comoros, FR=France (Indian Ocean Territories), IN=India, IND=Indonesia, IR=Iran, KEN=Kenya, MAD=Madagascar, MAL=Malaysia, MAU=Mauritius, MM=Myanmar, OM=Oman, PK=Pakistan, SY=Seychelles, SIN=Singapore, SA=South Africa, SLK=Sri Lanka, TAN=Tanzania, THA=Thailand, UAE=United Arab Emirates, YEM=Yemen

● = Received, accessed, or reported

○ = Not received, accessed, or reported

N/A = Not applicable. Opted out of service.

✘

APPENDICES

Appendix A: GTS Messages Received by each NTWC

	Bulletin No \ Country	AUS	BAN	COM	FR	IN	IND	IR	KEN	MAD	MAL	MAU	MM	OM	PK	SY	SIN	SA	SLK	TAN	THA	UAE	YEM	Tot	%	Ave
AUSTRALIA	06:00 Test Start	06:00	06:02	-	06:00	06:01	05:56	N/A	06:00	N/A	06:00	06:00	06:00	06:00	06:00	-	06:00	06:01	06:00	-	06:01	06:01	-	18	90	
	06:05 Bulletin 1	06:05	06:08	-	06:06	06:05	06:01	N/A	06:06	N/A	06:05	06:06	06:05	06:05	06:05	-	06:05	06:05	06:05	-	06:06	06:06	-	18	90	
	06:15 Bulletin 2	06:15	06:18	-	06:16	06:16	06:11	N/A	06:16	N/A	06:15	06:16	-	06:15	06:15	-	06:15	06:16	06:15	-	06:16	06:17	-	17	85	
	06:30 Bulletin 3	06:31	06:33	-	06:31	06:31	06:27	N/A	06:31	N/A	06:31	06:32	06:58	06:31	06:31	-	06:30	06:32	06:31	-	06:33	06:32	-	18	90	
	06:45 Bulletin 4	06:46	06:50	-	06:46	06:46	06:42	N/A	06:46	N/A	06:46	06:46	06:58	06:46	06:46	-	06:45	06:46	06:46	-	06:47	06:47	-	18	90	89
INDIA	06:00 Test Start	06:00	06:01	-	06:00	06:00	05:56	N/A	06:00	N/A	06:00	06:00	06:00	06:00	06:00	-	06:00	06:00	06:00	06:00	06:05	06:01	-	19	95	
	06:05 Bulletin 1	06:06	06:05	-	06:06	06:05	06:01	N/A	06:06	N/A	06:05	06:07	-	06:06	06:05	-	06:05	06:06	06:06	06:05	06:07	06:06	-	18	90	
	06:15 Bulletin 2	06:17	06:16	-	06:17	06:17	06:13	N/A	06:17	N/A	06:17	06:18	-	06:17	06:16	-	06:15	06:18	06:17	06:17	06:17	06:16	-	18	90	
	06:30 Bulletin 3	06:30	06:31	-	06:31	06:30	06:26	N/A	06:31	N/A	06:30	06:31	06:58	06:31	06:30	-	06:30	06:33	06:31	06:30	06:33	06:31	-	19	95	
	06:45 Bulletin 4	06:46	06:46	-	06:46	06:46	06:42	N/A	06:47	N/A	06:46	06:47	06:58	06:46	06:46	-	06:45	06:46	06:46	06:46	06:48	06:47	-	19	95	93
INDONESIA	06:00 Test Start	06:00	06:01	-	06:00	06:00	05:56	N/A	06:00	N/A	06:00	06:00	06:00	06:00	06:00	-	06:00	06:29	06:00	-	06:03	06:00	-	18	90	
	06:05 Bulletin 1	06:05	06:05	-	06:05	06:06	06:01	N/A	06:06	N/A	06:05	06:06	06:05	06:05	06:05	-	06:05	-	06:05	-	06:09	06:06	-	17	85	
	06:15 Bulletin 2	06:15	06:16	-	06:15	06:15	06:11	N/A	06:15	N/A	06:15	06:16	-	06:15	06:15	-	06:15	-	06:15	-	06:18	06:16	-	16	80	
	06:30 Bulletin 3	06:30	06:31	-	06:30	06:30	06:26	N/A	06:30	N/A	06:30	06:31	06:57	06:30	06:30	-	06:30	06:30	06:30	-	06:31	06:31	-	18	90	
	06:45 Bulletin 4	06:45	06:46	-	06:45	06:46	06:41	N/A	06:45	N/A	06:45	06:46	06:58	06:45	06:04	-	06:45	06:45	06:45	-	06:46	06:46	-	18	90	87

AUS=Australia, BAN=Bangladesh, COM=Comoros, FR=France (Indian Ocean Territories), IN=India, IND=Indonesia, IR=Iran, KEN=Kenya, MAD=Madagascar, MAL=Malaysia, MAU=Mauritius, MM=Myanmar, OM=Oman, PK=Pakistan, SY=Seychelles, SIN=Singapore, SA=South Africa, SLK=Sri Lanka, TAN=Tanzania, THA=Thailand, UAE=United Arab Emirates, YEM=Yemen

Notes:

- = message not received or not reported
- N/A = Not applicable. The NTWCs in Iran and Madagascar are not connected to the GTS.
- "Tot" = number of NTWCs who received message, out of 20
- "%" = percentage of NTWCs who received message
- Message(s) with maximum time delay for each TSP are highlighted in yellow. Highest overall delay =28 minutes

Appendix B: Fax Messages Received by each NTWC

	Bulletin No \ Country	AUS	BAN	COM	FR	IN	IND	IR	KEN	MAD	MAL	MAU	MM	OM	PK	SY	SIN	SA	SLK	TAN	THA	UAE	YEM	Tot	%	Ave
AUSTRALIA	06:00 Test Start	N/A	-	-	N/A	-	-	-	-	N/A	06:10	-	-	06:08	-	-	-	-	06:01	-	-	-	-	6	32	
	06:05 Bulletin 1	N/A	-	-	N/A	-	-	-	-	N/A	-	-	-	07:09	-	-	-	-	06:05	-	06:34	-	-	6	32	
	06:15 Bulletin 2	N/A	-	-	N/A	-	-	-	-	N/A	06:48	-	-	-	-	-	06:15	-	06:18	-	-	-	-	6	32	
	06:30 Bulletin 3	N/A	-	-	N/A	-	-	-	-	N/A	07:10	-	-	-	-	-	-	-	06:35	-	-	-	-	5	26	
	06:45 Bulletin 4	N/A	-	-	N/A	-	-	-	-	N/A	07:29	-	-	-	-	-	-	-	-	-	-	-	-	4	21	28
INDIA	06:00 Test Start	N/A	-	-	N/A	06:01	06:05	-	-	N/A	11:07	-	-	06:15	-	-	06:01	-	06:02	-	-	-	-	8	42	
	06:05 Bulletin 1	N/A	-	-	N/A	06:07	-	-	-	N/A	11:08	-	06:22	06:18	-	-	06:06	-	06:07	-	-	-	-	8	42	
	06:15 Bulletin 2	N/A	-	-	N/A	06:19	-	-	-	N/A	-	-	-	-	-	06:15	-	06:20	-	-	-	-	5	26		
	06:30 Bulletin 3	N/A	-	-	N/A	06:31	-	-	-	N/A	-	-	-	06:43	-	-	06:32	-	06:33	-	-	-	-	6	32	
	06:45 Bulletin 4	N/A	-	-	N/A	06:46	-	-	-	N/A	-	-	-	-	-	06:45	-	-	-	-	-	-	-	4	21	33
INDONESIA	06:00 Test Start	N/A	-	-	N/A	-	06:01	-	-	N/A	-	-	-	06:01	-	-	-	-	06:00	-	-	-	-	5	26	
	06:05 Bulletin 1	N/A	-	-	N/A	-	06:07	-	-	N/A	-	-	-	06:51	-	-	-	-	06:06	-	06:06	-	-	6	32	
	06:15 Bulletin 2	N/A	-	-	N/A	-	06:18	-	-	N/A	-	-	-	-	-	-	-	-	06:17	-	06:20	-	-	5	26	
	06:30 Bulletin 3	N/A	-	-	N/A	-	06:32	-	-	N/A	-	-	-	-	-	-	-	-	06:32	-	06:25	-	-	5	26	
	06:45 Bulletin 4	N/A	-	-	N/A	-	06:52	-	-	N/A	-	-	-	-	-	-	-	-	-	-	06:45	-	-	4	21	26

AUS=Australia, BAN=Bangladesh, COM=Comoros, FR=France (Indian Ocean Territories), IN=India, IND=Indonesia, IR=Iran, KEN=Kenya, MAD=Madagascar, MAL=Malaysia, MAU=Mauritius, MM=Myanmar, OM=Oman, PK=Pakistan, SY=Seychelles, SIN=Singapore, SA=South Africa, SLK=Sri Lanka, TAN=Tanzania, THA=Thailand, UAE=United Arab Emirates, YEM=Yemen

Notes:

1. - = message not received or not reported
2. N/A = Not applicable. Australia, France (Indian Ocean Territories), Madagascar, and Timor Leste have opted out of the fax service.
3. "Tot" = number of NTWCs who received message, out of 19
4. "%" = percentage of NTWCs who received message
5. Message(s) with maximum time delay for each TSP are highlighted in yellow. Highest overall delay =5 hours 7 minutes
6. Kenya advised that their fax reception was not available for this test.
7. Tanzania advised that their fax is currently not operational.

Appendix C: Email Messages Received by each NTWC

	Bulletin No \ Country	AUS	BAN	COM	FR	IN	IND	IR	KEN	MAD	MAL	MAU	MM	OM	PK	SY	SIN	SA	SLK	TAN	THA	UAE	YEM	Tot	%	Ave
AUSTRALIA	06:00 Test Start	06:01	06:01	06:00	-	06:00	06:00	05:59	06:00	06:00	06:00	06:01	06:00	06:01	06:00	06:00	06:01	06:01	06:00	06:00	06:00	06:01	-	20	91	
	06:05 Bulletin 1	06:05	06:06	06:05	-	06:05	06:05	06:04	06:05	06:05	06:05	06:05	06:05	06:05	06:05	-	06:06	06:05	06:05	06:05	06:05	06:06	-	19	86	
	06:15 Bulletin 2	06:16	06:17	06:16	-	06:15	06:15	06:14	06:16	06:15	06:16	06:16	06:16	06:16	07:21	-	-	06:16	06:16	06:16	06:16	06:16	-	18	82	
	06:30 Bulletin 3	06:32	06:32	08:28	-	06:31	06:31	06:30	06:31	06:31	06:31	06:31	06:31	06:32	07:39	-	-	06:32	06:31	08:23	06:31	06:32	-	18	82	
06:45 Bulletin 4	06:46	06:49	09:52	-	06:46	06:46	06:45	06:45	06:46	06:46	06:46	06:46	06:46	08:56	-	06:45	06:46	06:46	-	06:46	06:47	-	18	82	85	
INDIA	06:00 Test Start	06:01	06:01	06:00	06:00	06:00	06:00	05:59	06:00	06:00	06:00	06:00	06:00	06:03	06:00	06:00	06:00	06:00	06:00	-	06:00	06:00	06:00	21	95	
	06:05 Bulletin 1	06:06	06:06	06:05	06:06	06:05	06:05	06:04	06:05	06:05	06:05	06:05	06:05	06:06	-	-	06:06	06:06	06:05	-	06:05	06:06	06:05	19	86	
	06:15 Bulletin 2	06:18	06:16	06:17	06:17	06:17	06:17	06:16	06:17	06:17	06:17	06:17	06:17	06:17	08:13	-	-	06:18	06:17	-	06:17	06:18	06:17	19	86	
	06:30 Bulletin 3	06:31	06:31	08:18	06:31	06:30	06:31	06:29	06:31	06:31	06:31	06:31	06:31	06:38	-	-	-	06:33	06:31	-	06:31	06:31	06:31	18	82	
06:45 Bulletin 4	06:47	06:46	09:52	06:46	06:45	06:46	06:45	06:45	06:45	06:46	06:46	06:46	06:46	08:18	-	06:46	06:46	06:46	-	06:46	06:46	06:46	20	91	88	
INDONESIA	06:00 Test Start	06:01	06:01	08:47	-	06:00	06:00	05:59	06:01	06:00	06:00	06:01	06:00		06:00	06:00	06:00	06:29	-	06:00	06:00	-	-	17	77	
	06:05 Bulletin 1	06:06	06:05	06:05	-	06:05	06:05	06:03	06:05	06:05	06:05	06:05	06:05	06:05	06:05	-	06:05	-	06:05	-	06:05	-	-	16	73	
	06:15 Bulletin 2	06:16	06:16	06:15	-	06:15	06:15	06:13	06:15	06:15	06:15	06:15	06:15	06:15	07:18	-	-	-	06:15	-	06:15	-	-	15	68	
	06:30 Bulletin 3	06:31	06:31	08:52	-	06:30	06:30	06:27	06:30	06:30	06:30	06:30	06:30	06:30	07:25	-	-	06:30	06:30	-	06:30	-	-	16	73	
06:45 Bulletin 4	06:46	06:46	09:48	-	06:45	06:45	06:43	06:45	06:45	06:45	06:45	06:45	06:45	08:45	-	-	06:45	06:45	-	06:45	-	-	16	73	73	

AUS=Australia, BAN=Bangladesh, COM=Comoros, FR=France (Indian Ocean Territories), IN=India, IND=Indonesia, IR=Iran, KEN=Kenya, MAD=Madagascar, MAL=Malaysia, MAU=Mauritius, MM=Myanmar, OM=Oman, PK=Pakistan, SY=Seychelles, SIN=Singapore, SA=South Africa, SLK=Sri Lanka, TAN=Tanzania, THA=Thailand, UAE=United Arab Emirates, YEM=Yemen

Notes:

- = message not received or not reported.
- "Tot" = number of NTWCs who received message, out of 22
- "%" = percentage of NTWCs who received message
- Message(s) with maximum time delay for each TSP highlighted in **yellow**. Highest overall delay = 3 hours 7 minutes

Appendix D: SMS Messages Received by each NTWC

	Bulletin No \ Country	AUS	BAN	COM	FR	IN	IND	IR	KEN	MAD	MAL	MAU	MM	OM	PK	SY	SIN	SA	SLK	TAN	THA	UAE	YEM	Tot	%	Ave
AUSTRALIA	06:00 Test Start	06:00	06:02	06:00	N/A	06:00	-	-	06:00	06:11	06:00	-	06:00	06:00	06:00	-	06:02	-	-	-	06:00	-	-	13	62	
	06:05 Bulletin 1	06:05	06:07	06:05	N/A	06:05	-	-	06:05	-	06:05	-	06:05	06:05	-	-	06:06	-	-	-	06:05	-	-	11	52	
	06:15 Bulletin 2	06:16	06:16	06:16	N/A	06:16	-	-	06:15	-	06:16	-	06:16	06:16	06:26	-	-	-	-	-	06:16	-	-	11	52	
	06:30 Bulletin 3	06:31	06:31	06:31	N/A	06:31	-	-	06:30	07:11	06:31	-	06:31	06:31	06:31	-	-	-	-	-	06:32	-	-	12	57	
	06:45 Bulletin 4	06:46	06:50	-	N/A	06:46	-	-	06:45	07:00	06:46	-	06:46	-	06:46	-	06:45	-	-	-	06:46	-	-	11	52	55
INDIA	06:00 Test Start	-	06:01	-	N/A	06:05	-	-	06:00	-	06:00	-	-	-	06:01	-	06:01	06:00	-	06:02	-	-	-	9	43	
	06:05 Bulletin 1	-	06:06	-	N/A	06:07	-	-	06:05	06:05	06:16	-	-	-	06:05	-	06:06	06:05	-	06:20	06:05	-	06:06	12	57	
	06:15 Bulletin 2	-	06:16	-	N/A	06:18	-	-	06:17	06:22	06:17	-	-	-	06:17	-	-	06:18	-	06:42	06:18	-	06:18	11	52	
	06:30 Bulletin 3	-	06:31	-	N/A	06:32	-	-	06:31	-	06:31	-	-	-	06:30	-	-	06:33	-	07:04	06:32	-	06:32	10	48	
	06:45 Bulletin 4	-	06:51	-	N/A	06:47	-	-	06:45	-	06:46	-	-	-	06:46	-	06:46	06:46	-	07:17	06:47	-	06:47	11	52	50
INDONESIA	06:00 Test Start	06:05	06:01	-	N/A	06:11	06:03	07:19	-	06:15	06:02	-	06:08	06:09	06:00	-	06:01	-	-	06:02	06:07	06:04	-	15	71	
	06:05 Bulletin 1	06:18	06:05	-	N/A	06:15	06:11	07:19	-	06:22	06:13	-	06:18	06:18	06:05	-	06:06	06:15	-	06:18	06:18	06:10	-	16	76	
	06:15 Bulletin 2	06:24	06:16	-	N/A	06:27	06:19	07:19	-	06:40	06:19	-	06:27	06:28	06:17	-	-	06:24	-	-	06:23	06:22	-	14	67	
	06:30 Bulletin 3	06:37	06:31	-	N/A	06:38	06:30	07:19	-	06:58	06:32	-	06:38	06:39	06:31	-	-	-	-	-	06:38	06:32	-	13	62	
	06:45 Bulletin 4	06:50	06:52	-	N/A	06:49	06:48	07:19	-	07:16	06:51	-	06:46	-	06:51	-	-	09:05	-	-	06:52	06:47	-	13	62	68

AUS=Australia, BAN=Bangladesh, COM=Comoros, FR=France (Indian Ocean Territories), IN=India, IND=Indonesia, IR=Iran, KEN=Kenya, MAD=Madagascar, MAL=Malaysia, MAU=Mauritius, MM=Myanmar, OM=Oman, PK=Pakistan, SY=Seychelles, SIN=Singapore, SA=South Africa, SLK=Sri Lanka, TAN=Tanzania, THA=Thailand, UAE=United Arab Emirates, YEM=Yemen

Notes:

- = message not received or not reported
- N/A = Not applicable. France (Indian Ocean Territories) has opted out of the SMS service.
- "Tot" = number of NTWCs who received message, out of 21
- "%" = percentage of NTWCs who received message
- Message(s) with maximum time delay for each TSP highlighted in yellow. Highest overall delay = 2 hours 20 minutes

Appendix E: Web Access by each NTWC

	Bulletin No \ Country	AUS	BAN	COM	FR	IN	IND	IR	KEN	MAD	MAL	MAU	MM	OM	PK	SY	SIN	SA	SLK	TAN	THA	UAE	YEM	Tot	%	Ave
AUSTRALIA	06:05 Bulletin 1	1	1	1	-	1	1	-	1	1	1	1	1	1	1	-	1	1	1	1	1	0	-	17	77	
	06:15 Bulletin 2	1	1	1	-	1	1	-	1	1	1	1	1	1	1	-	1	1	1	1	1	0	-	17	77	
	06:30 Bulletin 3	1	1	1	-	1	1	-	1	1	1	1	1	1	1	-	1	1	1	1	1	0	-	17	77	
	06:45 Bulletin 4	1	1	1	-	1	1	-	1	1	1	1	1	1	1	-	1	1	1	1	1	0	-	17	77	77
INDIA	06:05 Bulletin 1	0	1	1	1	1	1	-	0	1	1	0	1	0	1	-	1	0	1	0	1	1	0	13	59	
	06:15 Bulletin 2	0	1	1	1	1	1	-	0	1	1	0	1	0	1	-	1	0	1	0	1	1	0	13	59	
	06:30 Bulletin 3	0	1	1	1	1	1	-	0	0	1	0	1	0	1	-	1	0	1	0	1	1	0	12	55	
	06:45 Bulletin 4	0	1	1	1	1	1	-	0	0	1	0	1	0	1	-	1	0	1	0	1	1	0	12	55	57
INDONESIA	06:05 Bulletin 1	1	1	1	-	1	1	-	1	1	1	1	1	1	1	-	1	1	1	1	1	0	-	17	77	
	06:15 Bulletin 2	1	1	1	-	1	1	-	1	1	1	1	1	1	1	-	1	1	1	1	1	0	-	17	77	
	06:30 Bulletin 3	1	1	1	-	1	1	-	1	1	1	1	1	1	1	-	1	1	1	1	1	0	-	17	77	
	06:45 Bulletin 4	1	1	1	-	1	1	-	1	1	1	1	1	1	1	-	1	1	1	1	1	0	-	17	77	77

AUS=Australia, BAN=Bangladesh, COM=Comoros, FR=France (Indian Ocean Territories), IN=India, IND=Indonesia, IR=Iran, KEN=Kenya, MAD=Madagascar, MAL=Malaysia, MAU=Mauritius, MM=Myanmar, OM=Oman, PK=Pakistan, SY=Seychelles, SIN=Singapore, SA=South Africa, SLK=Sri Lanka, TAN=Tanzania, THA=Thailand, UAE=United Arab Emirates, YEM=Yemen

Notes:

1. 1 = TSP web page accessed OK
2. 0 = TSP web page not accessed
3. - = TSP web page access not reported
4. "Tot" = number of NTWCs who accessed TSP web page, out of 22
5. "%" = percentage of NTWCs who accessed web page

Appendix F: Web Status Reports lodged by each NTWC

TSP	% NTWCs reporting (out of 22)	Number of NTWCs	AUS	BAN	COM	FR	IN	IND	IR	KEN	MAD	MAL	MAU	MM	OM	PK	SY	SIN	SA	SLK	TAN	THA	UAE	YEM
Australia	0%	0	0	0	0	0	0	0	-	0	0	-	0	0	0	0	-	-	0	0	-	0	0	-
India	36%	8	1	0	0	1	1	1	-	0	0	-	0	1	1	0	-	-	0	0	-	1	1	-
Indonesia	9%	2	0	0	1	0	0	0	-	0	0	-	0	0	0	1	-	-	0	0	-	0	0	-
Any TSP	45%	10	1	0	1	1	1	1	-	0	0	-	0	1	1	1	-	-	0	0	-	1	1	-


AUS=Australia, BAN=Bangladesh, COM=Comoros, FR=France (Indian Ocean Territories), IN=India, IND=Indonesia, IR=Iran, KEN=Kenya, MAD=Madagascar, MAL=Malaysia, MAU=Mauritius, MM=Myanmar, OM=Oman, PK=Pakistan, SY=Seychelles, SIN=Singapore, SA=South Africa, SLK=Sri Lanka, TAN=Tanzania, THA=Thailand, UAE=United Arab Emirates, YEM=Yemen

Notes:

1. 1= yes
2. 0= no
3. -= not reported


Figure 1: TSP India NTWC Status Display Webpage after 1st Test Message

This is the webpage snapshot as at 0610 UTC



Indian Tsunami Early Warning System

Ministry of Earth Sciences - Government of India



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Summary of the Current Threat Status as reported by the NTWCs

This page displays the summary of feedback received from individual NTWCs regarding the Threat Status in their area of responsibility. Within 24 hrs of the current event ending (issue of FINAL bulletin by RTSPs), if no further NTWC feedback is received, this page will be cleared to indicate no warnings.

Legend


- Threat Level 0: No impact expected, no flooding, no currents.
- Threat Level 1: There is a potential for tsunami impact, but given the travel time, no response of the public is necessary at the moment.
- Threat Level 2: Threat to coastal marine areas due to strong currents and oscillations in sea level.
- Threat Level 3: Threat of tsunami inundation to land areas.
- Cancellation/All Clear

Show **50 rows** entries Search:

Country	Threat Status	Comments	Sender	Sender Time
Australia	-	-	-	-
Bangladesh	-	-	-	-
Comoros	-	-	-	-
Djibouti	-	-	-	-
France (Indian Ocean Territories)	-	-	-	-
India	-	-	-	-
Indonesia	-	-	-	-
Iran	-	-	-	-
Kenya	-	-	-	-
Madagascar	-	-	-	-
Malaysia	-	-	-	-
Maldives	-	-	-	-
Mauritius	-	-	-	-
Mozambique	-	-	-	-
Myanmar	-	-	-	-
Oman	-	-	-	-
Pakistan	-	-	-	-
Seychelles	-	-	-	-
Singapore	-	-	-	-
Somalia	-	-	-	-
South Africa	-	-	-	-
Sri Lanka	-	-	-	-
Tanzania	-	-	-	-
Thailand	-	-	-	-
Timor-Leste	-	-	-	-
UAE	-	-	-	-
UK (Indian Ocean Territories)	-	-	-	-
Yemen	-	-	-	-

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Figure 2a: TSP India NTWC Status Display Webpage after 2nd Test Message

This is the webpage snapshot at 0628 UTC

Wed Dec 07 2022 11:58:04 IST
Wed, 07 Dec 2022 06:28:04 UTC

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Summary of the Current Threat Status as reported by the NTWCs

This page displays the summary of feedback received from individual NTWCs regarding the Threat Status in their area of responsibility. Within 24 hrs of the current event ending (issue of FINAL bulletin by RTSPs), if no further NTWC feedback is received, this page will be cleared to indicate no warnings.

Legend

- Threat Level 0: No impact expected, no flooding, no currents.
- Threat Level 1: There is a potential for tsunami impact, but given the travel time, no response of the public is necessary at the moment.
- Threat Level 2: Threat to coastal marine areas due to strong currents and oscillations in sea level.
- Threat Level 3: Threat of tsunami inundation to land areas.
- Cancellation/All Clear

Show 50 rows entries Search:

Country	Threat Status	Comments	Sender	Sender Time
Australia	Threat Level 1	Potential marine threat to Cocos Island and Parts of WA	Robert Greenwood	Wed Dec 07 2022 17:19:50 GMT+1100 (Australian Eastern Daylight Time)
Bangladesh	-	-	-	-
Comoros	-	-	-	-
Djibouti	-	-	-	-
France (Indian Ocean Territories)	-	-	-	-
India	Threat Level 3	Major threat to Indian coast, High waves near Andaman & Nicobar Islands. Warning issued to DMOs. Evacuations initiated.	ITEWC	Wed Dec 07 2022 11:51:30 GMT+0530 (India Standard Time)
Indonesia	Threat Level 2	The earthquake was felt strongly in Nanggroe Aceh Darussalam and North Sumatra. NTWC issued a tsunami warning for the area.	Sigit and Alfath	Wed Dec 07 2022 13:19:22 GMT+0700 (Western Indonesia Time)
Iran	-	-	-	-
Kenya	-	-	-	-
Madagascar	-	-	-	-
Malaysia	-	-	-	-
Maldives	-	-	-	-
Mauritius	-	-	-	-
Mozambique	-	-	-	-
Myanmar	Threat Level 2	NTWC, Myanmar will issue the Tsunami Warning for Myanmar coastal areas based on the RTSPs information.	DMH, Myanmar	Wed Dec 07 2022 12:50:08 GMT+0630 (Myanmar Time)
Pakistan	Threat Level 2	IOTWMS TSP INDONESIA has detected an earthquake with the following preliminary information: Magnitude : 9.0 Mw Depth : 10km Date : 07 Dec 2022 Origin Time : 06:15:00 UT Latitude : 12.65N Longitude : 93.50E Location : Andaman Islands, India Region	NTWC, Pakistan	Wed Dec 07 2022 11:15:52 GMT+0500 (Pakistan Standard Time)
Seychelles	-	-	-	-
Singapore	-	-	-	-
Somalia	-	-	-	-
South Africa	-	-	-	-
Sri Lanka	-	-	-	-
Tanzania	-	-	-	-
Thailand	-	-	-	-
Timor-Leste	-	-	-	-
UAE	-	-	-	-
UK (Indian Ocean Territories)	-	-	-	-
Yemen	-	-	-	-

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Figure 2b: TSP Australia Public Webpage after 2nd Test Message

This is the webpage snapshot at 0628 UTC.

TEST TEST - Earthquake Current - Not a Real Event - TEST TEST
 Check bulletin and map for tsunami information in the Indian Ocean

Warning Status

Australia	Bangladesh	Comoros	Djibouti
France (Indian Ocean Territories)	India	Indonesia	Iran
Kenya	Madagascar	Malaysia	Maldives
Mauritius	Mozambique	Myanmar	Oman
Pakistan	Seychelles	Singapore	Somalia
South Africa	Sri Lanka	Tanzania	Thailand
Timor-Leste	UAE	UK (Indian Ocean Territories)	Yemen

Legend: Unknown Level 0 Level 1 Level 2 Level 3 Cancel

Earthquakes

Event	Date	Mag.	Location
1	19:24 UTC 04 December 2022	6.7	Samoa Islands Region
2	06:00 UTC 07 December 2022	9.0	ANDAMAN ISLANDS, INDIA REGION *** TEST EVENT ***

Tsunami Wave Observations

#	Location	MAX	Date	Ev.
No observations recorded.				

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Figure 3a: TSP India NTWC Status Display Webpage after 3rd Test Message

The webpage snapshot at 0643 UTC



Summary of the Current Threat Status as reported by the NTWCs

This page displays the summary of feedback received from individual NTWCs regarding the Threat Status in their area of responsibility. Within 24 hrs of the current event ending (issue of FINAL bulletin by RTSPs), if no further NTWC feedback is received, this page will be cleared to indicate no warnings.

Legend

- Threat Level 0: No impact expected, no flooding, no currents.
- Threat Level 1: There is a potential for tsunami impact, but given the travel time, no response of the public is necessary at the moment.
- Threat Level 2: Threat to coastal marine areas due to strong currents and oscillations in sea level.
- Threat Level 3: Threat of tsunami inundation to land areas.
- Cancellation/All Clear

Show 50 rows entries

Search:

Country	Threat Status	Comments	Sender	Sender Time
Australia	Threat Level 2	Marine Threats issued for Cocos Island and for parts of the WA coastline	Robert Greenwood	Wed Dec 07 2022 17:33:02 GMT+1100 (Australian Eastern Daylight Time)
Bangladesh	-	-	-	-
Comoros	-	-	-	-
Djibouti	-	-	-	-
France (Indian Ocean Territories)	-	-	-	-
India	Threat Level 3	Tsunami waves reported from Andaman & Nicobar Islands. Major inundation threat to Islands. East coast of India is also under threat. Evacuations are under progress.	ITEWC	Wed Dec 07 2022 12:04:44 GMT+0530 (India Standard Time)
Indonesia	Threat Level 2	The potential for a tsunami wave is estimated to hit the Aceh region with a height of more than 2 m. Most of the people evacuated to a safe place.	Alfath and Sigit	Wed Dec 07 2022 13:33:57 GMT+0700 (Western Indonesia Time)
Iran	-	-	-	-
Kenya	-	-	-	-
Madagascar	-	-	-	-
Malaysia	-	-	-	-
Maldives	-	-	-	-
Mauritius	-	-	-	-
Mozambique	-	-	-	-
Myanmar	Threat Level 3	NTWC, Myanmar will issue the Tsunami information for Myanmar coastal areas based on the RTSPs information.	DMH, Myanmar	Wed Dec 07 2022 13:02:28 GMT+0630 (Myanmar Time)
Oman	Threat Level 0		Sami Almamari	Wed Dec 07 2022 10:34:21 GMT+0400
Pakistan	Threat Level 3	DRILL TEST TEST NTWC PAKISTAN has detected an earthquake with the following preliminary information: Magnitude : 9.0 Mwp, Depth : 10kmDate : 07 Dec 2022Origin Time: 06:30:00 UTC Latitude : 12.65NLongitude : 93.50ELocation : Andaman Islands, India Region	NTWC, Pakistan	Wed Dec 07 2022 11:30:14 GMT+0500 (Pakistan Standard Time)
Seychelles	-	-	-	-
Singapore	-	-	-	-
Somalia	-	-	-	-
South Africa	-	-	-	-
Sri Lanka	-	-	-	-
Tanzania	-	-	-	-
Thailand	-	-	-	-
Timor-Leste	-	-	-	-
UAE	Threat Level 0	No impact expected	Ali Megahed	Wed Dec 07 2022 10:37:14 GMT+0400 (Gulf Standard Time)
UK (Indian Ocean Territories)	-	-	-	-
Yemen	-	-	-	-

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Figure 3b: TSP Australia Public Webpage after 3rd Test Message

The webpage snapshot at 0643 UTC.

The screenshot shows the Australian Government Bureau of Meteorology website. The main heading is "TEST TEST - Earthquake Current - Not a Real Event - TEST TEST". Below this, there is a map of the Indian Ocean region with several red and green triangles indicating seismic activity. The left sidebar contains a "Warning Status" table, an "Earthquakes" table, and "Tsunami Wave Observations".

Warning Status

Australia	Bangladesh	Comoros	Djibouti
France (Indian Ocean Territories)	India	Indonesia	Iran
Kenya	Madagascar	Malaysia	Maldives
Mauritius	Mozambique	Myanmar	Oman
Pakistan	Seychelles	Singapore	Somalia
South Africa	Sri Lanka	Tanzania	Thailand
Timor-Leste	UAE	UK (Indian Ocean Territories)	Yemen

Earthquakes

Event	Date	Mag.	Location
1	19:24 UTC 04 December 2022	6.7	Samoa Islands Region
2	06:00 UTC 07 December 2022	9.0	ANDAMAN ISLANDS, INDIA REGION *** TEST EVENT ***

Tsunami Wave Observations

#	Location	MAX	Date	Ev.
1	Port Blair	3.10m	06:15 UTC 07 Dec	2

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Figure 4a: TSP India NTWC Status Display Webpage after 4th Test Message (final)

The webpage snapshot at 0704 UTC


Wed Dec 07 2022 12:34:52 IST
Wed, 07 Dec 2022 07:04:52 UTC

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Summary of the Current Threat Status as reported by the NTWCs

This page displays the summary of feedback received from individual NTWCs regarding the Threat Status in their area of responsibility. Within 24 hrs of the current event ending (issue of FINAL bulletin by RTSPs), if no further NTWC feedback is received, this page will be cleared to indicate no warnings.

Legend

- Threat Level 0: No impact expected, no flooding, no currents.
- Threat Level 1: There is a potential for tsunami impact, but given the travel time, no response of the public is necessary at the moment.
- Threat Level 2: Threat to coastal marine areas due to strong currents and oscillations in sea level.
- Threat Level 3: Threat of tsunami inundation to land areas.
- Cancellation/All Clear

Show 50 rows entries Search:

Country	Threat Status	Comments	Sender	Sender Time
Australia	CANCELLATION/ALL CLEAR.	All Warnings Cancelled	Robert Greenwood	Wed Dec 07 2022 17:47:29 GMT+1100 (Australian Eastern Daylight Time)
Bangladesh	-	-	-	-
Comoros	-	-	-	-
Djibouti	-	-	-	-
France (Indian Ocean Territories)	-	-	-	-
India	CANCELLATION/ALL CLEAR.	Indian Tsunami Warning centre issued final bulletin. However, DMOs advised to take decision based on local conditions.	ITEWC	Wed Dec 07 2022 12:21:14 GMT+0530 (India Standard Time)
Indonesia	CANCELLATION/ALL CLEAR.	Tsunami warning is cancelled	Sigit and Alfath	Wed Dec 07 2022 13:47:36 GMT+0700 (Western Indonesia Time)
Iran	-	-	-	-
Kenya	-	-	-	-
Madagascar	-	-	-	-
Malaysia	-	-	-	-
Maldives	-	-	-	-
Mauritius	-	-	-	-
Mozambique	-	-	-	-
Myanmar	CANCELLATION/ALL CLEAR.	NTWC, Myanmar will issue tsunami cancellation for Myanmar coastal areas based on the RTSPs information.	DMH, Myanmar	Wed Dec 07 2022 13:19:36 GMT+0630 (Myanmar Time)
Oman	CANCELLATION/ALL CLEAR.		Sami Almamari	Wed Dec 07 2022 10:52:37 GMT+0400
Pakistan	CANCELLATION/ALL CLEAR.	All clear	NTWC, Pakistan	Wed Dec 07 2022 12:00:36 GMT+0500 (Pakistan Standard Time)
Seychelles	-	-	-	-
Singapore	-	-	-	-
Somalia	-	-	-	-
South Africa	-	-	-	-
Sri Lanka	-	-	-	-
Tanzania	-	-	-	-
Thailand	-	-	-	-
Timor-Leste	-	-	-	-
UAE	Threat Level 0		Ali Megahed	Wed Dec 07 2022 11:01:41 GMT+0400 (Gulf Standard Time)
UK (Indian Ocean Territories)	-	-	-	-
Yemen	-	-	-	-

Showing 1 to 28 of 28 entries Previous 1 Next

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Indian National Center for Ocean Information Services(INCOIS)
"Ocean Valley", Pragathi nagar(BO),
Nizampet(SO) Hyderabad-500090,
Telangana.

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Figure 4b: TSP Australia Public Webpage after 4th Test Message (final)

The webpage snapshot at 0704 UTC.

TEST TEST - Earthquake Current - Not a Real Event - TEST TEST
Check bulletin and map for tsunami information in the Indian Ocean

Warning Status

Australia	Bangladesh	Comoros	Djibouti
France (Indian Ocean Territories)	India	Indonesia	Iran
Kenya	Madagascar	Malaysia	Maldives
Mauritius	Mozambique	Myanmar	Oman
Pakistan	Seychelles	Singapore	Somalia
South Africa	Sri Lanka	Tanzania	Thailand
Timor-Leste	UAE	UK (Indian Ocean Territories)	Yemen

Legend: Unknown Level 0 Level 1 Level 2 Level 3 Cancel

Earthquakes

Event	Date	Mag.	Location
1	19:24 UTC 04 December 2022	6.7	Samoa Islands Region
2	06:00 UTC 07 December 2022	9.0	ANDAMAN ISLANDS, INDIA REGION *** TEST EVENT ***

Tsunami Wave Observations

#	Location	MAX	Date	Ev.
1	Port Blair	3.10m	06:15 UTC 07 Dec	2

National Tsunami Warning Centres
[Australia](#) [Bangladesh](#) [France \(Indian Ocean Territories\)](#) [India](#) [Indonesia](#) [Kenya](#) [Madagascar](#) [Malaysia](#) [Maldives](#) [Mauritius](#) [Mozambique](#) [Myanmar](#) [Oman](#) [Pakistan](#) [Seychelles](#) [Singapore](#) [Sri Lanka](#) [Tanzania](#) [Thailand](#) [Timor Leste](#) [UAE](#)

WARNINGS
 WATER | CLIMATE | ENVIRONMENT
 Tropical Cyclones
 Tsunami Warning Centre
 Agriculture - Water and the Land
 Marine & Ocean
 UV & Sun Protection
 Rainfall & River Conditions

MetEye™
 Radar Sat Maps
 Rainfall Forecasts
 Seasonal Outlooks
 Climate Variability & Change
 Climate Data Online
 Seasonal Streamflow Forecasts
 Water Storage

MetEye™
 National Weather Services
 Aviation Weather Services
 Defence Services
 Space Weather Services
 Registered User Services
 Industry Solutions
 Supplier Entry Point

Facebook **Twitter**
Youtube **Blog**
Instagram **RSS**
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 Freedom of Information
 Indigenous Weather Knowledge
 Glossary
 Students and Teachers

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Appendix G: Accessibility of TSP-Indonesia Warning Receiver System

AUS	BAN	COM	FR	IN	IND	IR	KEN	MAD	MAL	MAU	MM	OM	PK	SY	SIN	SA	SLK	TAN	THA	UAE	YEM	Tot	%
1	1	1	1	1	1	-	1	1	1	1	1	1	1	-	-	1	1	-	1	1	-	17	77

AUS=Australia, BAN=Bangladesh, COM=Comoros, FR=France (Indian Ocean Territories), IN=India, IND=Indonesia, IR=Iran, KEN=Kenya, MAD=Madagascar, MAL=Malaysia, MAU=Mauritius, MM=Myanmar, OM=Oman, PK=Pakistan, SY=Seychelles, SIN=Singapore, SA=South Africa, SLK=Sri Lanka, TAN=Tanzania, THA=Thailand, UAE=United Arab Emirates, YEM=Yemen

Notes:

1. 1= yes
2. 0= no
3. -= not reported
4. "Tot" = number of NTWCs who accessed TSP web page, out of 20
5. "%" = percentage of NTWCs who accessed web page

Comments:

Indonesia	TSP-Indonesia Warning Receiver System is easily to access and very interactive.
Mauritius	No sound available
Myanmar	All of the bulletins were updated on time at the TSP-Indonesia Warning Receiver System.
Oman	Easy to access and user friendly
Paksitan	Excellent
Sri Lanka	All the warnings were received by on time

Appendix H: Test Messages Transmitted by each TSP

TSP AUSTRALIA Test Start Message

WEIO24 AMMC 070600

TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST

INDIAN OCEAN TSUNAMI WARNING AND MITIGATION SYSTEM [IOTWMS] COMMUNICATIONS TEST
0600 UTC 7 December 2022
TSP AUSTRALIA [JATWC]

TO: NATIONAL TSUNAMI WARNING CENTRES IN THE INDIAN OCEAN

A COMMUNICATIONS TEST OF THE IOTWMS IS ABOUT TO COMMENCE.
PARTICIPATING NATIONAL TSUNAMI WARNING CENTRES SHOULD REFER TO THE -IOTWMS
COMMUNICATIONS TEST 7 DECEMBER 2022 TECHNICAL MANUAL- DOCUMENT FOR DETAILS OF THE TEST TSP
NOTIFICATION MESSAGES THEY ARE ABOUT TO RECEIVE, AND THE TEST LOG THEY ARE REQUIRED TO
COMPLETE.

THIS IS A TEST ONLY.

TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST

Appendix H: Test Messages Transmitted by each TSP (continued)

TSP AUSTRALIA Message 1

WEIO24 AMMC 070605

```
#####  
#  
# IOTWMS COMMS TEST 7 DECEMBER 2022 - NOT A REAL TSUNAMI EVENT  
#  
#####
```

TEST TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 1 IOTWMS TSUNAMI SERVICE PROVIDER
AUSTRALIA [JATWC] ISSUED AT 0605 UTC WEDNESDAY 07 DECEMBER 2022

TO: INDIAN OCEAN NATIONAL TSUNAMI WARNING CENTRES [NTWCs]
FROM: IOTWMS-TSP AUSTRALIA

NOTIFICATION:
IOTWMS-TSP AUSTRALIA HAS JUST ISSUED TSUNAMI BULLETIN NUMBER 1 FOR THE INDIAN OCEAN, BASED
ON THE FOLLOWING EARTHQUAKE EVENT:

MAGNITUDE: 9.0 MWP
DEPTH: 10KM
DATE: 07 DEC 2022
ORIGIN TIME: 0600 UTC
LATITUDE: 12.65N
LONGITUDE: 93.50E
LOCATION: ANDAMAN ISLANDS, INDIA REGION

TO VIEW THE BULLETIN GO TO THE IOTWMS-TSP AUSTRALIA WEBSITE AT:

<http://reg.bom.gov.au/tsunami/rtsp/index.shtml>

NOTE: THIS IS A RESTRICTED-ACCESS WEBSITE CONTAINING TECHNICAL DATA FOR NATIONAL TSUNAMI
WARNING CENTRES ONLY. IT IS NOT FOR GENERAL PUBLIC ACCESS.

GENERAL PUBLIC INFORMATION FOR THIS EVENT IS AVAILABLE FROM:

JOINT AUSTRALIAN TSUNAMI WARNING CENTRE [JATWC] BUREAU OF METEOROLOGY MELBOURNE,
AUSTRALIA <http://www.bom.gov.au/tsunami>

END OF NOTIFICATION MESSAGE

```
#####  
#  
# IOTWMS COMMS TEST 7 DECEMBER 2022 - NOT A REAL TSUNAMI EVENT  
#  
#####
```


Appendix H: Test Messages Transmitted by each TSP (continued)

TSP AUSTRALIA Message 2

WEIO24 AMMC 070615

#####

#

IOTWMS COMMS TEST 7 DECEMBER 2022 - NOT A REAL TSUNAMI EVENT

#

#####

TEST TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 2 IOTWMS TSUNAMI SERVICE PROVIDER
AUSTRALIA [JATWC] ISSUED AT 0615 UTC WEDNESDAY 07 DECEMBER 2022

TO: INDIAN OCEAN NATIONAL TSUNAMI WARNING CENTRES [NTWCs]
FROM: IOTWMS-TSP AUSTRALIA

NOTIFICATION:
IOTWMS-TSP AUSTRALIA HAS JUST ISSUED TSUNAMI BULLETIN NUMBER 2 FOR THE INDIAN OCEAN, BASED
ON THE FOLLOWING EARTHQUAKE EVENT:

MAGNITUDE: 9.0 MWP
DEPTH: 10KM
DATE: 07 DEC 2022
ORIGIN TIME: 0600 UTC
LATITUDE: 12.65N
LONGITUDE: 93.50E
LOCATION: ANDAMAN ISLANDS, INDIA REGION

TO VIEW THE BULLETIN GO TO THE IOTWMS-TSP AUSTRALIA WEBSITE AT:

<http://reg.bom.gov.au/tsunami/rtsp/index.shtml>

NOTE: THIS IS A RESTRICTED-ACCESS WEBSITE CONTAINING TECHNICAL DATA FOR NATIONAL TSUNAMI
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JOINT AUSTRALIAN TSUNAMI WARNING CENTRE [JATWC] BUREAU OF METEOROLOGY MELBOURNE,
AUSTRALIA <http://www.bom.gov.au/tsunami>

END OF NOTIFICATION MESSAGE

#####

#

IOTWMS COMMS TEST 7 DECEMBER 2022 - NOT A REAL TSUNAMI EVENT

#

#####

Appendix H: Test Messages Transmitted by each TSP (continued)

TSP AUSTRALIA Message 3

WEIO24 AMMC 070631

```
#####  
#  
# IOTWMS COMMS TEST 7 DECEMBER 2022 - NOT A REAL TSUNAMI EVENT  
#  
#####
```

TEST TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 3 IOTWMS TSUNAMI SERVICE PROVIDER
AUSTRALIA [JATWC] ISSUED AT 0631 UTC WEDNESDAY 07 DECEMBER 2022

TO: INDIAN OCEAN NATIONAL TSUNAMI WARNING CENTRES [NTWCs]
FROM: IOTWMS-TSP AUSTRALIA

NOTIFICATION:
IOTWMS-TSP AUSTRALIA HAS JUST ISSUED TSUNAMI BULLETIN NUMBER 3 FOR THE INDIAN OCEAN, BASED
ON THE FOLLOWING EARTHQUAKE EVENT:

MAGNITUDE: 9.0 MWP
DEPTH: 10KM
DATE: 07 DEC 2022
ORIGIN TIME: 0600 UTC
LATITUDE: 12.65N
LONGITUDE: 93.50E
LOCATION: ANDAMAN ISLANDS, INDIA REGION

TO VIEW THE BULLETIN GO TO THE IOTWMS-TSP AUSTRALIA WEBSITE AT:

<http://reg.bom.gov.au/tsunami/rtsp/index.shtml>

NOTE: THIS IS A RESTRICTED-ACCESS WEBSITE CONTAINING TECHNICAL DATA FOR NATIONAL TSUNAMI
WARNING CENTRES ONLY. IT IS NOT FOR GENERAL PUBLIC ACCESS.

GENERAL PUBLIC INFORMATION FOR THIS EVENT IS AVAILABLE FROM:

JOINT AUSTRALIAN TSUNAMI WARNING CENTRE [JATWC] BUREAU OF METEOROLOGY MELBOURNE,
AUSTRALIA <http://www.bom.gov.au/tsunami>

END OF NOTIFICATION MESSAGE

```
#####  
#  
# IOTWMS COMMS TEST 7 DECEMBER 2022 - NOT A REAL TSUNAMI EVENT  
#  
#####
```

Appendix H: Test Messages Transmitted by each TSP (continued)

TSP AUSTRALIA Message 4

WEIO24 AMMC 070646

#####

#

IOTWMS COMMS TEST 7 DECEMBER 2022 - NOT A REAL TSUNAMI EVENT

#

#####

TEST TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 4 IOTWMS TSUNAMI SERVICE PROVIDER
AUSTRALIA [JATWC] ISSUED AT 0646 UTC WEDNESDAY 07 DECEMBER 2022

TO: INDIAN OCEAN NATIONAL TSUNAMI WARNING CENTRES [NTWCs]
FROM: IOTWMS-TSP AUSTRALIA

NOTIFICATION:

IOTWMS-TSP AUSTRALIA HAS JUST ISSUED TSUNAMI BULLETIN NUMBER 4 FOR THE INDIAN OCEAN, BASED
ON THE FOLLOWING EARTHQUAKE EVENT:

MAGNITUDE: 9.0 MWP
DEPTH: 10KM
DATE: 07 DEC 2022
ORIGIN TIME: 0600 UTC
LATITUDE: 12.65N
LONGITUDE: 93.50E
LOCATION: ANDAMAN ISLANDS, INDIA REGION

TO VIEW THE BULLETIN GO TO THE IOTWMS-TSP AUSTRALIA WEBSITE AT:

<http://reg.bom.gov.au/tsunami/rtsp/index.shtml>

NOTE: THIS IS A RESTRICTED-ACCESS WEBSITE CONTAINING TECHNICAL DATA FOR NATIONAL TSUNAMI
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GENERAL PUBLIC INFORMATION FOR THIS EVENT IS AVAILABLE FROM:

JOINT AUSTRALIAN TSUNAMI WARNING CENTRE [JATWC] BUREAU OF METEOROLOGY MELBOURNE,
AUSTRALIA <http://www.bom.gov.au/tsunami>

END OF NOTIFICATION MESSAGE

#####

#

IOTWMS COMMS TEST 7 DECEMBER 2022 - NOT A REAL TSUNAMI EVENT

#

#####

Appendix H: Test Messages Transmitted by each TSP (continued)

TSP INDIA Test Start Message

WEIO20 DEMS 070600

#####

#

IOTWMS COMMS TEST 07 DECEMBER 2022 - NOT A REAL TSUNAMI EVENT

#####

TEST TSUNAMI STARTUP MESSAGE NOTIFICATION IOTWMS TSUNAMI SERVICE PROVIDER INDIA (ITEWC)
ISSUED AT 0600 UTC WEDNESDAY 07 DECEMBER 2022

TO: INDIAN OCEAN NATIONAL TSUNAMI WARNING CENTRES (NTWC)

FROM: IOTWMS-TSP INDIA

A COMMUNICATIONS TEST OF THE IOTWMS IS ABOUT TO COMMENCE.

PARTICIPATING NATIONAL TSUNAMI WARNING CENTRES SHOULD REFER TO THE TECHNICAL MANUAL DOCUMENT FOR DETAILS OF THE TEST NOTIFICATION MESSAGES THEY ARE ABOUT TO RECEIVE, AND THE TEST LOG THEY ARE REQUIRED TO COMPLETE.

THIS IS A TEST ONLY.

END OF TEST NOTIFICATION MESSAGE.

#####

#

IOTWMS COMMS TEST 07 DECEMBER 2022 - NOT A REAL TSUNAMI EVENT

#####

Appendix H: Test Messages Transmitted by each TSP (continued)

TSP INDIA Message 1

WEIO20 DEMS 070605

#

IOTWMS COMMS TEST 07 DECEMBER 2022 - NOT A REAL TSUNAMI EVENT

#####

TEST TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 1 IOTWMS TSUNAMI SERVICE PROVIDER INDIA
(ITEWC) ISSUED AT 0605 UTC WEDNESDAY 07 DECEMBER 2022

TO: INDIAN OCEAN NATIONAL TSUNAMI WARNING CENTRES (NTWC)
FROM: IOTWMS-TSP INDIA

NOTIFICATION:

IOTWMS-TSP INDIA HAS JUST ISSUED TSUNAMI BULLETIN NUMBER 1 FOR THE INDIAN OCEAN, BASED ON THE
FOLLOWING EARTHQUAKE EVENT:

Magnitude : 9.0 M
Depth : 10.0 km
Date : 07 Dec 2022
Origin Time : 0600 UTC
Latitude : 12.65 N
Longitude : 93.50 E
Location : Andaman Islands, India Region

TO VIEW THE BULLETIN GO TO THE IOTWMS-TSP INDIA WEBSITE AT:

http://www.incois.gov.in/Incois/tsunami/COMM_login.jsp

NOTE: THIS IS A RESTRICTED-ACCESS WEBSITE CONTAINING TECHNICAL DATA FOR INDIAN OCEAN NATIONAL
TSUNAMI WARNING CENTRES ONLY. IT IS NOT FOR GENERAL PUBLIC ACCESS.

GENERAL PUBLIC INFORMATION FOR THIS EVENT IS AVAILABLE FROM:

INDIAN TSUNAMI EARLY WARNING CENTRE (ITEWC) INDIAN NATIONAL CENTRE FOR OCEAN INFORMATION
SERVICES (INCOIS) ADDRESS: OCEAN VALLEY, PRAGATHI NAGAR (BO), NIZAMPET (SO), HYDERABAD - 500 090,
INDIA

PHONE: 91-40-23895011

FAX: 91-40-23895012

EMAIL: tsunami@incois.gov.in

WEB: <https://tsunami.incois.gov.in/TEWS/COMMSRegional>

END OF NOTIFICATION MESSAGE

#

IOTWMS COMMS TEST 07 DECEMBER 2022 - NOT A REAL TSUNAMI EVENT

#

#####

Appendix H: Test Messages Transmitted by each TSP (continued)

TSP INDIA Message 2

WEIO20 DEMS 070617

#

IOTWMS COMMS TEST 07 DECEMBER 2022 - NOT A REAL TSUNAMI EVENT

#####

TEST TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 2 IOTWMS TSUNAMI SERVICE PROVIDER INDIA
(ITEWC) ISSUED AT 0617 UTC WEDNESDAY 07 DECEMBER 2022

TO: INDIAN OCEAN NATIONAL TSUNAMI WARNING CENTRES (NTWC)
FROM: IOTWMS-TSP INDIA

NOTIFICATION:

IOTWMS-TSP INDIA HAS JUST ISSUED TSUNAMI BULLETIN NUMBER 2 FOR THE INDIAN OCEAN, BASED ON THE
FOLLOWING EARTHQUAKE EVENT:

Magnitude : 9.0 M
Depth : 10.0 km
Date : 07 Dec 2022
Origin Time : 0600 UTC
Latitude : 12.65 N
Longitude : 93.50 E
Location : Andaman Islands, India Region

TO VIEW THE BULLETIN GO TO THE IOTWMS-TSP INDIA WEBSITE AT:

http://www.incois.gov.in/Incois/tsunami/COMM_login.jsp

NOTE: THIS IS A RESTRICTED-ACCESS WEBSITE CONTAINING TECHNICAL DATA FOR INDIAN OCEAN NATIONAL
TSUNAMI WARNING CENTRES ONLY. IT IS NOT FOR GENERAL PUBLIC ACCESS.

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SERVICES (INCOIS) ADDRESS: OCEAN VALLEY, PRAGATHI NAGAR (BO), NIZAMPET (SO), HYDERABAD - 500 090,
INDIA

PHONE: 91-40-23895011

FAX: 91-40-23895012

EMAIL: tsunami@incois.gov.in

WEB: <https://tsunami.incois.gov.in/TEWS/COMMSRegional>

END OF NOTIFICATION MESSAGE

#

IOTWMS COMMS TEST 07 DECEMBER 2022 - NOT A REAL TSUNAMI EVENT

#

#####

Appendix H: Test Messages Transmitted by each TSP (continued)

TSP INDIA Message 3

WEIO20 DEMS 070630

#

IOTWMS COMMS TEST 07 DECEMBER 2022 - NOT A REAL TSUNAMI EVENT

#####

TEST TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 3 IOTWMS TSUNAMI SERVICE PROVIDER INDIA
(ITEWC) ISSUED AT 0630 UTC WEDNESDAY 07 DECEMBER 2022

TO: INDIAN OCEAN NATIONAL TSUNAMI WARNING CENTRES (NTWC)
FROM: IOTWMS-TSP INDIA

NOTIFICATION:
IOTWMS-TSP INDIA HAS JUST ISSUED TSUNAMI BULLETIN NUMBER 3 FOR THE INDIAN OCEAN, BASED ON THE
FOLLOWING EARTHQUAKE EVENT:

Magnitude : 9.0 M
Depth : 10.0 km
Date : 07 Dec 2022
Origin Time : 0600 UTC
Latitude : 12.65 N
Longitude : 93.50 E
Location : Andaman Islands, India Region

TO VIEW THE BULLETIN GO TO THE IOTWMS-TSP INDIA WEBSITE AT:
http://www.incois.gov.in/Incois/tsunami/COMM_login.jsp

NOTE: THIS IS A RESTRICTED-ACCESS WEBSITE CONTAINING TECHNICAL DATA FOR INDIAN OCEAN NATIONAL
TSUNAMI WARNING CENTRES ONLY. IT IS NOT FOR GENERAL PUBLIC ACCESS.

GENERAL PUBLIC INFORMATION FOR THIS EVENT IS AVAILABLE FROM:

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SERVICES (INCOIS) ADDRESS:OCEAN VALLEY, PRAGATHI NAGAR (BO), NIZAMPET (SO), HYDERABAD - 500 090,
INDIA
PHONE: 91-40-23895011
FAX: 91-40-23895012
EMAIL: tsunami@incois.gov.in
WEB: <https://tsunami.incois.gov.in/TEWS/COMMSRegional>

END OF NOTIFICATION MESSAGE

#

IOTWMS COMMS TEST 07 DECEMBER 2022 - NOT A REAL TSUNAMI EVENT

#####

Appendix H: Test Messages Transmitted by each TSP (continued)

TSP INDIA Message 4

WEIO20 DEMS 070646

#####

#

IOTWMS COMMS TEST 07 DECEMBER 2022 - NOT A REAL TSUNAMI EVENT

#####

TEST TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 4 IOTWMS TSUNAMI SERVICE PROVIDER INDIA
(ITEWC) ISSUED AT 0646 UTC WEDNESDAY 07 DECEMBER 2022

TO: INDIAN OCEAN NATIONAL TSUNAMI WARNING CENTRES (NTWC)
FROM: IOTWMS-TSP INDIA

NOTIFICATION:
IOTWMS-TSP INDIA HAS JUST ISSUED TSUNAMI BULLETIN NUMBER 4 FOR THE INDIAN OCEAN, BASED ON THE
FOLLOWING EARTHQUAKE EVENT:

Magnitude : 9.0 M
Depth : 10.0 km
Date : 07 Dec 2022
Origin Time : 0600 UTC
Latitude : 12.65 N
Longitude : 93.50 E
Location : Andaman Islands, India Region

TO VIEW THE BULLETIN GO TO THE IOTWMS-TSP INDIA WEBSITE AT:
http://www.incois.gov.in/Incois/tsunami/COMM_login.jsp

NOTE: THIS IS A RESTRICTED-ACCESS WEBSITE CONTAINING TECHNICAL DATA FOR INDIAN OCEAN NATIONAL
TSUNAMI WARNING CENTRES ONLY. IT IS NOT FOR GENERAL PUBLIC ACCESS.

GENERAL PUBLIC INFORMATION FOR THIS EVENT IS AVAILABLE FROM:

INDIAN TSUNAMI EARLY WARNING CENTRE (ITEWC) INDIAN NATIONAL CENTRE FOR OCEAN INFORMATION
SERVICES (INCOIS) ADDRESS:OCEAN VALLEY, PRAGATHI NAGAR (BO), NIZAMPET (SO), HYDERABAD - 500 090,
INDIA
PHONE: 91-40-23895011
FAX: 91-40-23895012
EMAIL: tsunami@incois.gov.in
WEB: <https://tsunami.incois.gov.in/TEWS/COMMSRegional>

END OF NOTIFICATION MESSAGE

#####

#

IOTWMS COMMS TEST 07 DECEMBER 2022 - NOT A REAL TSUNAMI EVENT

#

#####

Appendix H: Test Messages Transmitted by each TSP (continued)

TSP INDONESIA Test Start Message

TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST INDIAN OCEAN TSUNAMI
WARNING AND MITIGATION SYSTEM (IOTWMS) COMMUNICATION TEST
0600 UTC 7 DECEMBER 2022
TSP INDONESIA (InaTEWS)

TO: NATIONAL TSUNAMI WARNING CENTRES IN THE INDIAN OCEAN

A COMMUNICATION TEST OF THE IOTWMS IS ABOUT TO COMMENCE.
PARTICIPATING NATIONAL TSUNAMI WARNING CENTRES SHOULD REFER TO THE "IOTWMS COMMUNICATION
TEST 7 DECEMBER 2022 TECHNICAL MANUAL"
DOCUMENT FOR DETAILS OF THE TEST TSP NOTIFICATION MESSAGES THEY ARE ABOUT TO RECEIVE, AND THE
TEST LOG THEY ARE REQUIRED TO COMPLETE.
THIS IS A TEST ONLY.

TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST

Appendix H: Test Messages Transmitted by each TSP (continued)

TSP INDONESIA Message 1

TEST TEST TEST TEST TEST CommTEST-Dec-2022 TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST
TEST CommTEST-Dec-2022 TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST
TSP-InaTEWS-20221207-0605-001

TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 1 IOTWMS TSUNAMI SERVICE PROVIDER INDONESIA
(InaTEWS-BMKG) issued at 0605 UTC, Dec 07, 2022

TO: INDIAN OCEAN NATIONAL TSUNAMI WARNING CENTRES (NTWC)
FROM: IOTWMS-TSP INDONESIA

NOTIFICATION:

IOTWMS-TSP INDONESIA HAS JUST ISSUED TSUNAMI BULLETIN NUMBER 1 FOR THE INDIAN OCEAN, BASED
ON THE FOLLOWING EARTHQUAKE EVENT:

Magnitude : 9.0 Mwp
Depth : 10km
Date : 07 Dec 2022
Origin Time: 06:00:00 UTC
Latitude : 12.65N
Longitude : 93.50E
Location : Andaman Islands, India Region

TO VIEW THE BULLETIN GO TO THE IOTWMS-TSP INDONESIA WEBSITE AT:

<http://rtsp.bmkg.go.id>

NOTE: THIS IS A RESTRICTED-ACCESS WEBSITE CONTAINING TECHNICAL DATA FOR INDIAN OCEAN NATIONAL
TSUNAMI WARNING CENTRES ONLY. IT IS NOT FOR GENERAL PUBLIC ACCESS.

GENERAL PUBLIC INFORMATION FOR THIS EVENT IS AVAILABLE FROM:

INDONESIA TSUNAMI EARLY WARNING SYSTEM (InaTEWS) THE AGENCY FOR METEOROLOGY CLIMATOLOGY
AND GEOPHYSICS (BMKG)

Address: Jl. Angkasa I no.2 Kemayoran, Jakarta, Indonesia, 10720

Tel.: +62 (21) 65867045

Fax: +62 (21) 6546316

P.O. Box 3540 Jakarta

Website: <http://rtsp.bmkg.go.id/publicbull.php>

Email : inartsp@bmkg.go.id

monitrtwp@bmkg.go.id

END OF NOTIFICATION MESSAGE

TEST TEST TEST TEST TEST CommTEST-Dec-2022 TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST
TEST CommTEST-Dec-2022 TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST

Appendix H: Test Messages Transmitted by each TSP (continued)

TSP INDONESIA Message 2

TEST TEST TEST TEST TEST CommTEST-Dec-2022 TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST
TEST CommTEST-Dec-2022 TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST
TSP-InaTEWS-20221207-0615-002

TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 2 IOTWMS TSUNAMI SERVICE PROVIDER INDONESIA
(InaTEWS-BMKG) issued at 0615 UTC, Dec 07, 2022

TO: INDIAN OCEAN NATIONAL TSUNAMI WARNING CENTRES (NTWC)
FROM: IOTWMS-TSP INDONESIA

NOTIFICATION:

IOTWMS-TSP INDONESIA HAS JUST ISSUED TSUNAMI BULLETIN NUMBER 2 FOR THE INDIAN OCEAN, BASED
ON THE FOLLOWING EARTHQUAKE EVENT:

Magnitude : 9.0 Mwp (REVISED)
Depth : 10km
Date : 07 Dec 2022
Origin Time: 06:00:00 UTC
Latitude : 12.65N
Longitude : 93.50E
Location : Andaman Islands, India Region

TO VIEW THE BULLETIN GO TO THE IOTWMS-TSP INDONESIA WEBSITE AT:

<http://rtsp.bmkg.go.id>

NOTE: THIS IS A RESTRICTED-ACCESS WEBSITE CONTAINING TECHNICAL DATA FOR INDIAN OCEAN NATIONAL
TSUNAMI WARNING CENTRES ONLY. IT IS NOT FOR GENERAL PUBLIC ACCESS.

GENERAL PUBLIC INFORMATION FOR THIS EVENT IS AVAILABLE FROM:

INDONESIA TSUNAMI EARLY WARNING SYSTEM (InaTEWS) THE AGENCY FOR METEOROLOGY CLIMATOLOGY
AND GEOPHYSICS (BMKG)

Address: Jl. Angkasa I no.2 Kemayoran, Jakarta, Indonesia, 10720

Tel.: +62 (21) 65867045

Fax: +62 (21) 6546316

P.O. Box 3540 Jakarta

Website: <http://rtsp.bmkg.go.id/publicbull.php>

Email : inartsp@bmkg.go.id

monitrtwp@bmkg.go.id

END OF NOTIFICATION MESSAGE

TEST TEST TEST TEST TEST CommTEST-Dec-2022 TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST
TEST CommTEST-Dec-2022 TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST

Appendix H: Test Messages Transmitted by each TSP (continued)

TSP INDONESIA Message 3

TEST TEST TEST TEST TEST CommTEST-Dec-2022 TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST
TEST CommTEST-Dec-2022 TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST
TSP-InaTEWS-20221207-0630-003

TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 3 IOTWMS TSUNAMI SERVICE PROVIDER INDONESIA
(InaTEWS-BMKG) issued at 0630 UTC, Dec 07, 2022

TO: INDIAN OCEAN NATIONAL TSUNAMI WARNING CENTRES (NTWC)
FROM: IOTWMS-TSP INDONESIA

NOTIFICATION:

IOTWMS-TSP INDONESIA HAS JUST ISSUED TSUNAMI BULLETIN NUMBER 3 FOR THE INDIAN OCEAN, BASED
ON THE FOLLOWING EARTHQUAKE EVENT:

Magnitude : 9.0 Mwp (REVISED)
Depth : 10km
Date : 07 Dec 2022
Origin Time: 06:00:00 UTC
Latitude : 12.65N
Longitude : 93.50E
Location : Andaman Islands, India Region

TO VIEW THE BULLETIN GO TO THE IOTWMS-TSP INDONESIA WEBSITE AT:

<http://rtsp.bmkg.go.id>

NOTE: THIS IS A RESTRICTED-ACCESS WEBSITE CONTAINING TECHNICAL DATA FOR INDIAN OCEAN NATIONAL
TSUNAMI WARNING CENTRES ONLY. IT IS NOT FOR GENERAL PUBLIC ACCESS.

GENERAL PUBLIC INFORMATION FOR THIS EVENT IS AVAILABLE FROM:

INDONESIA TSUNAMI EARLY WARNING SYSTEM (InaTEWS) THE AGENCY FOR METEOROLOGY CLIMATOLOGY
AND GEOPHYSICS (BMKG)

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Tel.: +62 (21) 65867045

Fax: +62 (21) 6546316

P.O. Box 3540 Jakarta

Website: <http://rtsp.bmkg.go.id/publicbull.php>

Email : inartsp@bmkg.go.id

monitrtwp@bmkg.go.id

END OF NOTIFICATION MESSAGE

TEST TEST TEST TEST TEST CommTEST-Dec-2022 TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST
TEST CommTEST-Dec-2022 TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST

Appendix H: Test Messages Transmitted by each TSP (continued)

TSP INDONESIA Message 4

TEST TEST TEST TEST TEST CommTEST-Dec-2022 TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST
TEST CommTEST-Dec-2022 TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST
TSP-InaTEWS-20221207-0645-04

TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 4 IOTWMS TSUNAMI SERVICE PROVIDER INDONESIA
(InaTEWS-BMKG) issued at 0645 UTC, Dec 07, 2022

TO: INDIAN OCEAN NATIONAL TSUNAMI WARNING CENTRES (NTWC)
FROM: IOTWMS-TSP INDONESIA

NOTIFICATION:

IOTWMS-TSP INDONESIA HAS JUST ISSUED TSUNAMI BULLETIN NUMBER 4 FOR THE INDIAN OCEAN, BASED
ON THE FOLLOWING EARTHQUAKE EVENT:

Magnitude : 9.0 Mwp (REVISED)
Depth : 10km
Date : 07 Dec 2022
Origin Time: 06:00:00 UTC
Latitude : 12.65N
Longitude : 93.50E
Location : Andaman Islands, India Region

TO VIEW THE BULLETIN GO TO THE IOTWMS-TSP INDONESIA WEBSITE AT:

<http://rtsp.bmkg.go.id>

NOTE: THIS IS A RESTRICTED-ACCESS WEBSITE CONTAINING TECHNICAL DATA FOR INDIAN OCEAN NATIONAL
TSUNAMI WARNING CENTRES ONLY. IT IS NOT FOR GENERAL PUBLIC ACCESS.

GENERAL PUBLIC INFORMATION FOR THIS EVENT IS AVAILABLE FROM:

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AND GEOPHYSICS (BMKG)

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Fax: +62 (21) 6546316

P.O. Box 3540 Jakarta

Website: <http://rtsp.bmkg.go.id/publicbull.php>

Email : inartsp@bmkg.go.id

monitrtwp@bmkg.go.id

END OF NOTIFICATION MESSAGE

TEST TEST TEST TEST TEST CommTEST-Dec-2022 TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST
TEST CommTEST-Dec-2022 TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST