



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

Working Group 2 on Tsunami Detection, Warning and Dissemination

Report on the IOTWMS Communications Test 08 December 2021

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1 PURPOSE

To report on the IOTWMS Communications Test conducted on 08December2021.

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 third test held on 8 December 2021. The next test is scheduled for 8 June 2022. 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	Planned
25	7 December 2022	Planned

Notes:

- a. All test reports are available on the IOC website at [IOC Tsunami Programme \(ioc-tsunami.org\)](http://ioc-tsunami.org).
- 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 8 December 2021 test are described in the document “IOTWMS Communications Test 8 December 2021 Technical Manual” distributed to NTWCs and TSPs by the ICG/IOTWMS Secretariat on 18 November 2021.

Test Earthquake Event Scenario:

Magnitude: 9.1Mwp
Depth: 10 km
Date: 8 December 2021
Origin Time: 06:00 UTC
Latitude: 10.40S
Longitude: 112.80E
Location: South of Java, Indonesia

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. For the second time, the Test Log was available for completion online. The Test Logs are the primary source of information for this report and are now archived on the Alchemer online survey platform (previously named SurveyGismo).

4 TEST PARTICIPATION

Twenty (20) IOTWMS Member States participated in the test. This is slightly lower than the average participation rate of 22 Member States across the 23 tests conducted so far. The highest participation rate has been 25 participants and the lowest participation rate has been 17 participants.

The participants in this test were:

- TSPs - Australia, India, Indonesia
- NTWCs—Australia, Bangladesh, France (Indian Ocean Territories), India, Indonesia, Kenya, Madagascar, Malaysia, Maldives, Mauritius, Myanmar, Oman, Pakistan, Seychelles, Singapore, South Africa, Sri Lanka, Thailand, United Arab Emirates, and Yemen.

Five active IOTWMS Member States did not participate in the communications 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	1	0	0	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	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	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	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	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	20
Total	23	23	15	23	23	23	15	22	22	23	21	22	15	22	20	22	23	23	17	21	18	21	14	5	19	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

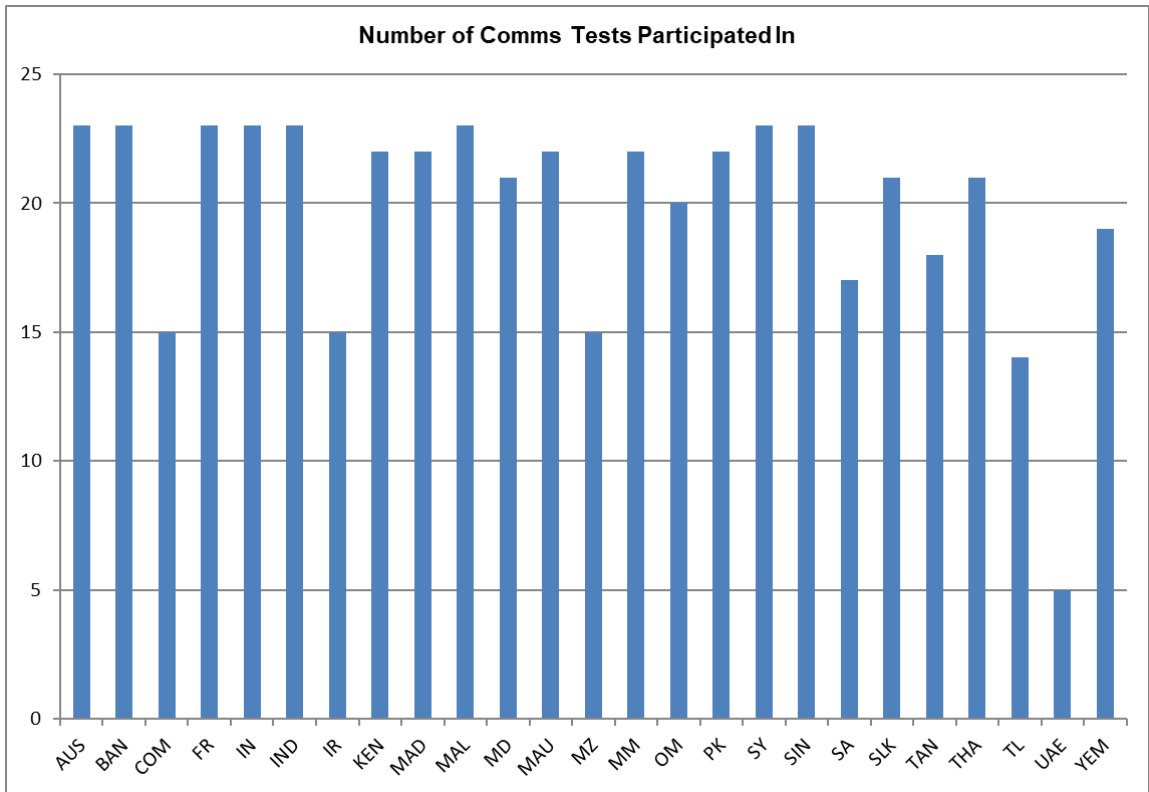
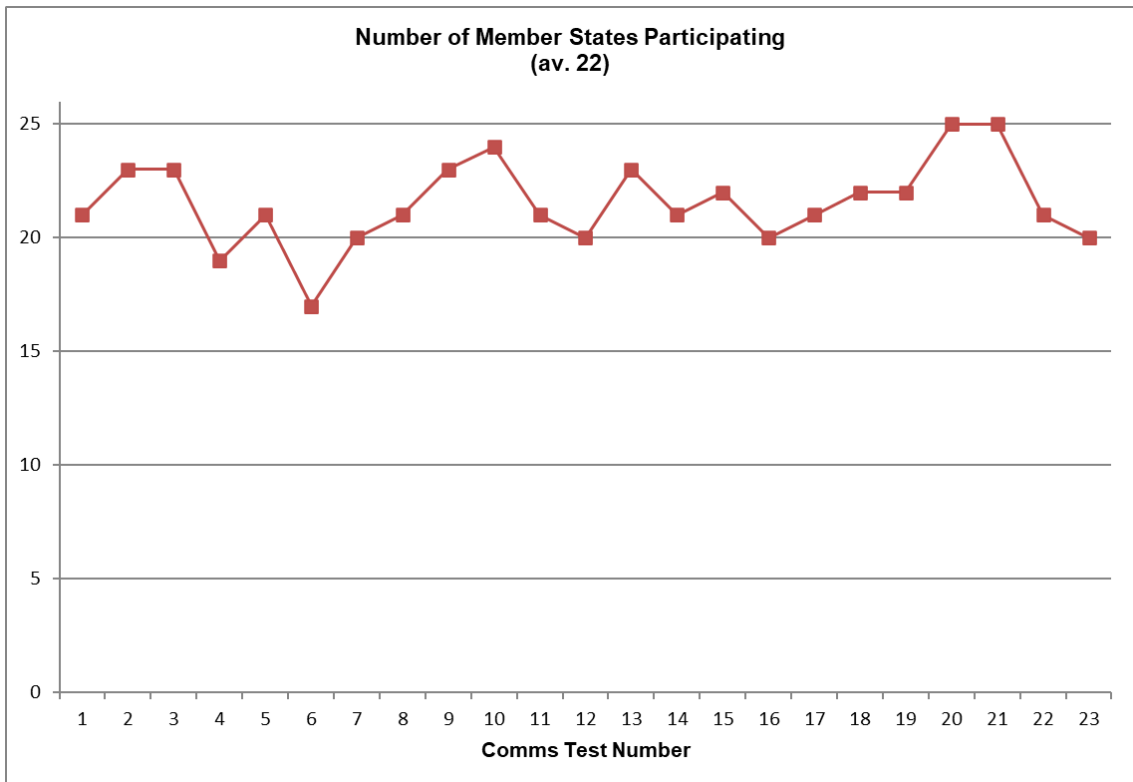


Chart 2: Number of Member States in Each Test



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)

TSP	Test Start 0600	Message 1 0605	Message 2 0615	Message 3 0630	Message 4 0645
Australia	06:00	06:04	06:15	06:30	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 18 November 2021.

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 79%, which was slightly higher than the past tests, but it was less than overall COMMs tests highest 84%.

Seventeen (17) of the 20 NTWCs received GTS messages. Bangladesh, Madagascar and Yemen did not receive GTS messages from any TSP (noting that Madagascar have no GTS connection), while South Africa didn't receive any GTS messages from TSP Indonesia. Maldives did not receive the start-up and the notification message Number 4 from Australia, notification messages 1 to 4 from India, and start-up & notification messages 1 to 3 from Indonesia. Myanmar did not receive notification message 1 from any of the 3 TSPs.

GTS messages continued to be received promptly in this test, with most messages received within 1-3 minutes of issuing. The longest delay was 35 minutes for Myanmar to receive TSP Indonesia notification message 2.

5.2.2 Fax

The overall fax reception rate was 20%, lowest ever from all communication tests.

Only Nine (09) of the 20 NTWCs reported receiving fax messages, with TSP Australia's messages being received by 2 NTWCs, India's by 9 NTWCs and Indonesia's by 4 NTWCs.

Fax message delay times mostly varied between 2-5 minutes, with the longest delay being 32 minutes for a TSP Indonesia message received by Oman.

5.2.3 Email

The overall email reception rate in this test was 83%, which was equal to the past test. Nineteen (19) of the 20 NTWCs received email notifications. Maldives did not receive email notifications from any TSP. Emails from TSP Australia were received by 19 NTWCs, emails from TSP India were received by 18 NTWCs and emails from TSP Indonesia were received by 15 NTWCs.

Email messages continued to be received promptly, with almost all email messages received within 1 to 3 minutes of the issue time. The maximum delay was 7 minutes to Pakistan from TSP Indonesia.

5.2.4 SMS

The overall SMS message reception rate in this test was 63%, slightly higher than the last test but close to the average rate.

In this test seventeen (17) of the 20 NTWCs received SMS messages, France, Sri Lanka and UAE did not receive SMS messages from any TSP, noting France (Indian Ocean Territories) did not wish to receive SMS messages.

TSP Australia's SMS messages were received by 15 of the 20 NTWCs, and TSP India's were received by 12 NTWCs and TSP Indonesia's were received by 14 NTWCs.

As with email, most SMS messages were received very promptly, typically within 1 to 3 minutes. The longest delay was 70 minutes to Indonesia from TSP-Australia.

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 80%, down 6% from the 86% in the previous test and slightly lower than the average of around 83%.

Seventeen (17) of the 20 NTWCs were able to access at least one TSP website during the test, compared with 20 of 21 in the previous test. 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. Also refer to Figures 1, 2a, 2b, 3a, 3b, 4a and 4b of Appendix F for snapshots of the TSP India and TSP Australia public NTWC Status Display webpages following transmission of each of the four test messages.

In this test, 15 of the 20 NTWCs reported that they lodged web status reports. This is a rate of 75%, up 13% from the 62% in the previous test and significantly higher than the average of around 59%, very close to 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 90%,

i.e., 18 out of 20 NTWCs. Bangladesh reported of not having attempted access yet. Yemen did not report of whether having accessed TSP-Indonesia WRS.

This is the second time that the TSP-Indonesia WRS was used in a Communications Test. 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 most successful communications medium, with 83% of the TSP email messages being received by NTWCs in this test, and almost NTWCs received email messages from at least one TSP.
- The GTS message reception at 79% was up on the previous test and remains the second-most successful delivery medium.
- The SMS message reception is steady at 63% was up on the previous test, around the average for the previous few years.
- The Fax message reception was lowest at 20% in this test, compared with all communication tests.

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

Web site access decreased slightly to 80% in this test compared with 86% of the previous test, slightly lower than the long-term average of around 83% since 2011. Seventeen (17) of the 20 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 75%, higher than the previous 4 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 (20) IOTWMS Member States participated in this 23rd IOTWMS Communications Test, which is slightly lower than the participation average of 22 Member States. This test demonstrated the continuing strength of email as the primary TSP delivery mechanism for notifying NTWCs of bulletin updates, followed by GTS and SMS as the next most reliable mechanisms. The historically low fax reception rate of only 20% calls for a review of the validity of fax numbers and necessity of providing such delivery channel.

This is the second time that the TSP Indonesia's WRS system was tested. The feedback was mostly positive from all those 18 NTWCs who accessed the system, suggestion this could be a viable alternative or addition to the current four delivery channels of GTS, Email, SMS and fax.

On the TSP webpage access, this test showed slight decrease from the recent communications tests but national warning status reporting is higher than the previous 4 tests.

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 (26 NTWCs)		10-Jun-20 (26 NTWCs)		08-Dec-21 (21 NTWCs)	
Originating TSP	% 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
India	80%	58	73%	6	76%	6	80%	27
Indonesia	76%	65	68%	19	75%	4	75%	35
TSP Average	78%	62	74%	10	76%	16	79%	26
Received Fax Messages								
Australia	50%	57	45%	39	43%	80	7%	27
India	30%	15	44%	38	36%	95	38%	9
Indonesia	15%	79	18%	8	12%	15	14%	32
TSP Average	32%	50	36%	28	31%	63	20%	23
Received Email Messages								
Australia	92%	37	84%	6	85%	15	93%	3
India	97%	26	82%	12	76%	14	85%	5
Indonesia	86%	58	79%	15	74%	4	70%	7
TSP Average	92%	40	82%	11	78%	11	83%	5
Received SMS Messages								
Australia	55%	11	61%	5	66%	15	69%	70
India	69%	96	58%	17	63%	34	59%	10
Indonesia	63%	15	68%	62	62%	15	61%	34
TSP Average	62%	41	62%	28	64%	21	63%	38
Accessed Web Pages								
Australia	69%	n/a	73%	n/a	75%	n/a	75%	n/a
India	67%	n/a	72%	n/a	78%	n/a	81%	n/a
Indonesia	76%	n/a	77%	n/a	84%	n/a	85%	n/a
TSP Average	71%		74%		79%		80%	
Lodged Web Status Reports								
	50%		58%		54%		75%	

- 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

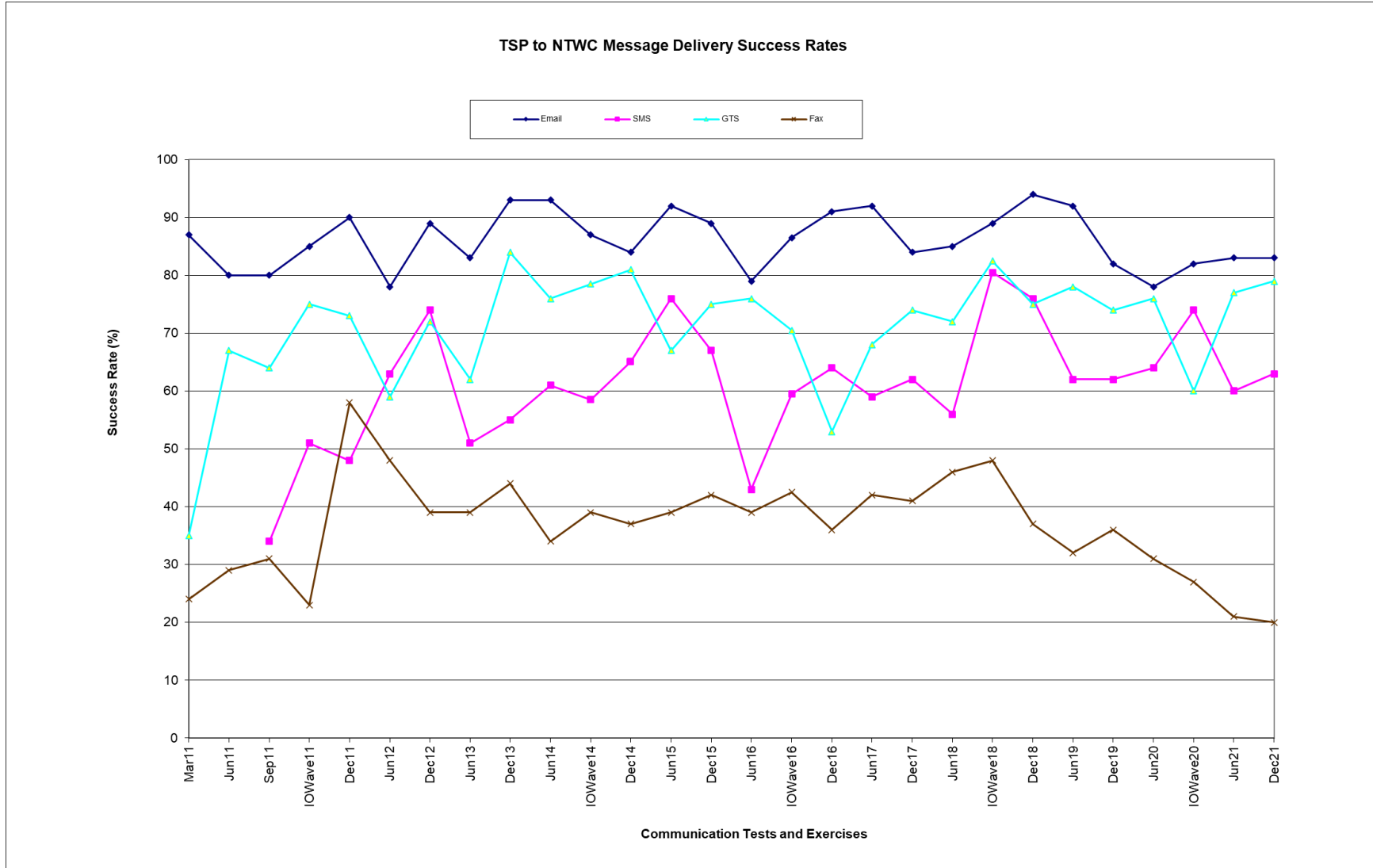
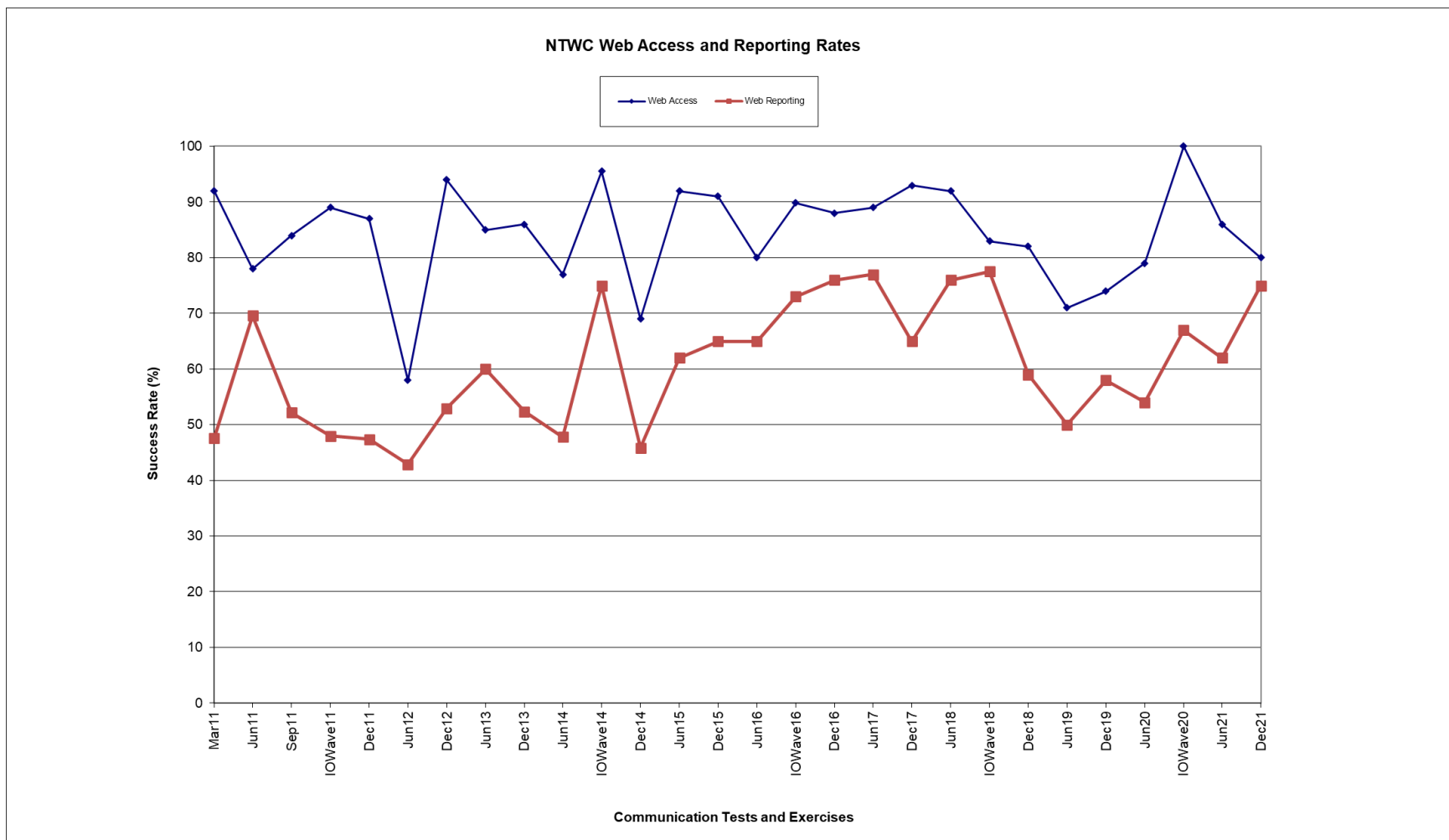


Chart 4: Web Access and Status Reporting Success Rates



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	FR	IN	IND	KEN	MAD	MAL	MD	MAU	MM	OM	PK	SY	SIN	SA	SLK	THA	UAE	YEM		
Message Receipt	GTS	AUSTRALIA	●	○	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	○	
		INDIA	●	○	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○
		INDONESIA	●	○	●	●	●	●	○	●	●	●	●	●	●	●	●	●	○	●	●	●	●	○
	Fax	AUSTRALIA	-	○	○	○	○	○	○	○	○	○	○	○	●	○	○	○	○	○	○	○	○	○
		INDIA	-	○	○	●	●	○	○	●	○	●	○	●	●	○	○	○	○	○	○	○	○	○
		INDONESIA	-	○	○	○	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Email	AUSTRALIA	●	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●
		INDIA	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	○
		INDONESIA	●	○	●	●	●	●	●	●	○	●	●	●	●	●	●	●	○	●	●	○	○	○
SMS	AUSTRALIA	●	●	○	●	○	●	●	●	●	●	●	●	●	●	●	●	○	○	●	○	○	●	
	INDIA	●	●	○	●	○	○	●	●	●	●	●	●	○	●	●	●	●	○	○	○	○	○	
	INDONESIA	●	●	○	●	●	○	○	●	●	●	●	●	●	●	●	●	●	○	●	○	○	○	
Website	Access	AUSTRALIA	●	●	●	●	●	●	●	●	●	●	-	●	●	-	●	●	○	●	-	-	○	
		INDIA	●	●	●	●	●	●	●	●	●	●	●	○	●	-	●	●	●	●	●	●	-	-
		INDONESIA	●	●	●	●	●	●	●	●	●	●	●	●	●	-	●	●	●	●	●	-	-	-
	Report	Any TSP	●	○	●	●	●	●	●	●	○	●	●	●	●	○	●	●	●	○	●	○	○	○

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

Notes:

1. ● = received, accessed or reported
2. ○ = Not received, accessed or reported
3. - = message not received or not reported
4. GTS: Iran and Madagascar are not connected to the GTS.
5. Fax: Kenya is not currently using the fax.
6. SMS: France (Indian Ocean Territories) has opted out of receiving SMS messages.

APPENDICES

Appendix A: GTS Messages Received by each NTWC

	Bulletin No \ Country	AUS	BAN	FR	IN	IND	KEN	MAD	MAL	MD	MAU	MM	OM	PK	SY	SIN	SA	SLK	THA	UAE	YEM	Tot	%	Ave	
AUSTRALIA	06:00 Test Start	06:00	-	06:01	06:01	05:59	06:00	-	-	06:00	06:01	06:00	06:00	06:00	06:00	06:01	06:01	06:00	06:02	06:00	-	16	80		
	06:05 Bulletin 1	06:05	-	06:06	06:06	06:03	06:05	-	06:21	06:05	06:04	-	06:05	06:05	06:05	06:05	06:06	06:05	06:06	06:05	-	16	80		
	06:15 Bulletin 2	06:15	-	06:16	06:15	06:13	06:15	-	06:21	06:15	06:15	06:50	06:15	06:15	06:15	06:16	06:16	06:15	06:16	06:16	-	17	85		
	06:30 Bulletin 3	06:30	-	06:31	06:30	06:28	06:30	-	06:35	06:30	06:30	06:57	06:30	06:30	06:30	06:30	06:31	06:30	06:32	06:31	-	17	85		
	06:45 Bulletin 4	06:45	-	06:47	06:45	06:43	06:45	-	-	06:45	06:46	07:06	06:45	06:45	06:45	06:46	06:45	06:46	06:45	06:46	06:46	-	16	80	82
INDIA	06:00 Test Start	06:00	-	06:01	06:00	05:58	06:00	-	06:05	06:00	06:00	06:00	06:00	06:00	06:00	06:00	06:01	06:00	06:02	06:00	-	17	85		
	06:05 Bulletin 1	06:05	-	06:07	06:06	06:04	06:06	-	-	06:06	06:07	-	06:06	06:06	06:06	06:06	06:06	06:06	06:06	06:06	06:07	-	15	75	
	06:15 Bulletin 2	06:17	-	06:17	06:17	06:15	06:17	-	-	06:17	06:17	06:50	06:17	06:17	06:17	06:17	06:18	06:17	06:16	06:17	-	16	80		
	06:30 Bulletin 3	06:30	-	06:31	06:30	06:28	06:30	-	-	06:30	06:30	06:57	06:30	06:30	06:30	06:30	06:31	06:30	06:32	06:31	-	16	80		
	06:45 Bulletin 4	06:46	-	06:48	06:46	06:44	06:46	-	-	06:46	06:46	07:06	06:46	06:46	06:46	06:46	06:47	06:46	06:47	06:47	-	16	80	80	
INDONESIA	06:00 Test Start	06:00	-	06:01	06:00	05:58	06:00	-	-	06:00	06:00	06:00	06:00	06:00	06:00	06:01	-	06:00	06:02	06:01	-	15	75		
	06:05 Bulletin 1	06:05	-	06:06	06:06	06:03	06:06	-	-	06:05	06:06	-	06:05	06:05	06:06	06:05	-	06:05	06:08	06:06	-	14	70		
	06:15 Bulletin 2	06:15	-	06:16	06:15	06:13	06:15	-	-	06:15	06:16	06:50	06:15	06:15	06:16	06:16	-	06:15	06:19	06:16	-	15	75		
	06:30 Bulletin 3	06:30	-	06:31	06:30	06:28	06:31	-	-	06:30	06:31	06:57	06:30	06:30	06:31	06:30	-	06:30	06:32	06:31	-	15	75		
	06:45 Bulletin 4	06:45	-	06:46	06:45	06:43	06:46	-	06:50	06:45	06:45	07:06	06:45	06:45	06:46	06:45	-	06:45	06:46	06:46	-	16	80	75	

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

- Notes:
- = message not received or not reported
 - "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 =35 minutes
 - The NTWCs in Iran and Madagascar are not connected to the GTS.

Appendix B: Fax Messages Received by each NTWC

	Bulletin No \ Country	AUS	BAN	FR	IN	IND	KEN	MAD	MAL	MD	MAU	MM	OM	PK	SY	SIN	SA	SLK	THA	UAE	YEM	Tot	%	Ave
AUSTRALIA	06:00 Test Start	n/a	-	-	-	-	-	-	-	-	-	-	06:12	-	-	-	-	06:03	-	-	-	2	11	
	06:05 Bulletin 1	n/a	-	-	-	-	-	-	-	-	-	-	06:32	-	-	-	-	06:03	-	-	-	2	11	
	06:15 Bulletin 2	n/a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	06:15	-	-	-	1	5	
	06:30 Bulletin 3	n/a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	06:30	-	-	-	1	5	
	06:45 Bulletin 4	n/a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	06:48	-	-	-	1	5	7
INDIA	06:00 Test Start	n/a	-	-	06:01	-	-	-	06:01	-	06:01	-	06:01	-	-	06:00	-	06:02	-	-	-	6	32	
	06:05 Bulletin 1	n/a	-	-	06:06	-	-	-	06:07	-	06:07	-	06:07	06:06	-	06:06	-	06:07	06:07	-	-	8	42	
	06:15 Bulletin 2	n/a	-	-	06:17	06:20	-	-	06:19	-	06:18	-	06:17	06:15	-	06:18	-	06:17	06:26	-	-	9	47	
	06:30 Bulletin 3	n/a	-	-	06:30	-	-	-	06:32	-	06:31	-	06:32	-	-	06:31	-	06:31	06:35	-	-	7	37	
	06:45 Bulletin 4	n/a	-	-	06:46	-	-	-	06:47	-	06:47	-	06:54	-	-	06:50	-	-	06:52	-	-	6	32	38
INDONESIA	06:00 Test Start	n/a	-	-	-	06:03	-	-	-	-	-	-	06:03	-	-	-	-	06:03	-	-	-	3	16	
	06:05 Bulletin 1	n/a	-	-	-	06:09	-	-	-	-	-	-	06:37	-	-	-	-	06:05	-	-	-	3	16	
	06:15 Bulletin 2	n/a	-	-	-	06:18	-	-	-	-	-	-	-	-	-	-	-	06:15	-	-	-	2	11	
	06:30 Bulletin 3	n/a	-	-	-	06:31	-	-	-	-	06:32	-	-	-	-	-	-	06:30	-	-	-	3	16	
	06:45 Bulletin 4	n/a	-	-	-	06:46	-	-	-	-	-	-	-	-	-	-	-	06:48	-	-	-	2	11	14

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

Notes:

1. - = message not received or not reported
2. "Tot" = number of NTWCs who received message, out of 20
3. "%" = percentage of NTWCs who received message
4. Message(s) with maximum time delay for each TSP are highlighted in yellow. Highest overall delay =32minutes
5. Kenya advised that their fax reception was "not in use" for this test.

Appendix C: Email Messages Received by each NTWC

	Bulletin No \ Country	AUS	BAN	FR	IN	IND	KEN	MAD	MAL	MD	MAU	MM	OM	PK	SY	SIN	SA	SLK	THA	UAE	YEM	Tot	%	Ave	
AUSTRALIA	06:00 Test Start	06:01	06:00	06:00	06:00	06:00	06:00	06:00	06:03	-	06:06	06:00	06:00	06:00	06:01	06:01	06:01	06:00	06:00	06:01	06:05	19	95		
	06:05 Bulletin 1	06:05	06:06	06:05	06:05	06:05	06:05	06:05	06:08	-	06:05	06:05	06:05	06:05	06:05	06:05	06:06	06:05	06:05	06:05	06:08	19	95		
	06:15 Bulletin 2	06:16	06:16	06:15	06:15	06:15	06:15	06:15	06:18	-	06:15	06:15	06:15	06:15	06:16	06:16	06:16	06:15	06:15	06:16	06:18	19	95		
	06:30 Bulletin 3	06:31	06:30	06:30	06:30	-	06:30	06:30	06:33	-	06:30	06:30	06:30	06:30	06:30	06:31	06:31	06:30	06:30	06:31	06:32	18	90		
	06:45 Bulletin 4	06:46	06:46	06:47	06:45	-	06:45	06:45	06:48	-	06:45	06:45	06:45	06:45	06:46	06:46	06:46	06:45	06:45	06:46	06:47	18	90	93	
INDIA	06:00 Test Start	06:01	06:00	06:00	06:00	06:00	06:00	06:00	06:02	-	06:04	06:00	06:00	06:00	06:00	06:00	06:01	06:00	06:00	06:00	-	18	90		
	06:05 Bulletin 1	06:07	06:05	06:06	06:06	06:06	06:06	06:06	06:08	-	06:06	06:06	06:01	06:06	06:06	06:06	06:06	06:06	06:06	06:06	06:06	-	18	90	
	06:15 Bulletin 2	06:17	06:15	06:17	06:17	-	06:17	06:17	06:20	-	06:17	06:17	06:17	06:17	06:17	06:17	06:18	06:17	06:17	06:17	-	17	85		
	06:30 Bulletin 3	06:31	06:30	06:30	06:30	-	06:30	06:30	06:33	-	06:31	06:30	-	06:30	06:31	06:31	06:31	06:30	06:30	06:31	-	16	80		
	06:45 Bulletin 4	06:46	06:45	06:47	06:46	-	06:46	06:45	06:48	-	06:46	06:45	-	06:45	06:46	06:46	06:47	06:46	06:46	06:46	-	16	80	85	
INDONESIA	06:00 Test Start	06:01	-	06:00	06:00	06:00	06:00	06:00	06:03	-	06:00	06:00	06:00	06:00	06:01	06:01	-	06:00	06:00	-	-	14	70		
	06:05 Bulletin 1	06:06	-	06:05	06:05	06:05	06:05	06:05	06:09	-	06:06	06:07	06:05	06:14	06:05	06:05	-	06:09	06:07	-	-	14	70		
	06:15 Bulletin 2	06:16	-	06:15	06:15	06:16	06:15	06:15	06:20	-	06:15	06:18	06:15	06:19	06:15	06:15	-	06:17	06:23	-	-	14	70		
	06:30 Bulletin 3	06:31	-	06:30	06:30	06:30	06:30	06:30	06:33	-	06:30	06:33	06:30	06:37	06:30	06:30	-	06:33	06:39	-	-	14	70		
	06:45 Bulletin 4	06:46	-	06:45	06:45	06:45	06:45	06:45	06:49	-	06:47	06:48	06:45	06:52	06:45	06:45	-	06:50	06:47	-	-	14	70	70	

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

Notes:

1. - = message not received or not reported.
2. "Tot" = number of NTWCs who received message, out of 20
3. "%" = percentage of NTWCs who received message
4. Message(s) with maximum time delay for each TSP highlighted in yellow. Highest overall delay = 7 minutes

Appendix D: SMS Messages Received by each NTWC

	Bulletin No \ Country	AUS	BAN	FR	IN	IND	KEN	MAD	MAL	MD	MAU	MM	OM	PK	SY	SIN	SA	SLK	THA	UAE	YEM	Tot	%	Ave	
AUSTRALIA	06:00 Test Start	06:00	06:00	-	06:03	-	06:00	06:00	06:00	06:00	06:00	06:01	06:01	06:00	06:01	06:01	-	-	06:01	-	06:01	15	75		
	06:05 Bulletin 1	06:05	06:05	-	06:05	-	06:05	06:05	06:06	06:05	06:05	06:05	06:05	06:05	06:05	06:05	-	-	06:05	-	06:05	15	75		
	06:15 Bulletin 2	06:15	06:15	-	06:15	-	06:15	06:20	-	06:15	-	06:15	06:15	06:15	-	06:15	-	-	06:17	-	06:15	12	60		
	06:30 Bulletin 3	06:30	06:31	-	07:40	-	06:30	06:30	06:31	06:30	06:30	06:30	06:30	06:30	06:30	06:40	06:30	-	-	-	-	06:30	14	70	
	06:45 Bulletin 4	06:46	06:46	-	07:16	-	06:45	06:46	06:45	06:45	-	06:51	06:46	06:45	06:46	06:46	06:46	-	-	-	-	06:46	13	65	69
INDIA	06:00 Test Start	06:00	06:00	-	06:00	-	-	06:00	06:00	06:00	06:00	06:00	-	06:00	06:00	06:00	06:00	-	-	-	-	12	60		
	06:05 Bulletin 1	06:06	06:05	-	06:06	-	-	06:06	06:06	06:06	06:06	06:06	-	06:06	06:06	06:06	06:06	-	-	-	-	12	60		
	06:15 Bulletin 2	06:17	06:15	-	06:17	-	-	06:19	06:17	06:17	06:17	06:17	-	06:17	06:17	06:17	06:17	-	-	-	-	11	55		
	06:30 Bulletin 3	06:30	06:31	-	06:30	-	-	06:30	06:31	06:31	06:30	06:30	-	06:30	06:40	06:30	06:30	-	-	-	-	12	60		
	06:45 Bulletin 4	06:46	06:46	-	06:46	-	-	06:46	06:46	06:46	06:46	06:48	-	06:46	06:46	06:46	06:46	-	-	-	-	12	60	59	
INDONESIA	06:00 Test Start	-	06:01	-	-	06:00	-	-	06:00	-	06:01	-	-	06:00	06:01	-	-	-	-	-	-	6	30		
	06:05 Bulletin 1	06:12	06:06	-	06:07	06:15	-	-	06:09	06:14	06:06	06:14	-	06:14	06:09	06:10	06:13	-	06:10	-	-	13	65		
	06:15 Bulletin 2	06:19	06:15	-	06:18	06:25	-	-	06:15	06:22	06:15	06:19	06:24	06:19	06:17	06:19	06:24	-	06:20	-	-	14	70		
	06:30 Bulletin 3	06:34	06:30	-	06:35	06:40	-	-	06:33	06:30	06:30	06:37	06:38	06:37	06:31	06:34	06:41	-	06:40	-	-	14	70		
	06:45 Bulletin 4	06:55	06:47	-	07:10	06:49	-	-	06:47	06:48	06:45	06:52	06:55	06:52	06:45	06:49	06:53	-	07:19	-	-	14	70	61	

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

Notes:

1. - = message not received or not reported
2. "Tot" = number of NTWCs who received message, out of 20
3. "%" = percentage of NTWCs who received message
4. Message(s) with maximum time delay for each TSP highlighted in yellow. Highest overall delay =1 hours 10minutes
5. France (Indian Ocean Territories)has opted out of receiving SMS messages.

Appendix E: Web Accesses by each NTWC

	Bulletin No \ Country	AUS	BAN	FR	IN	IND	KEN	MAD	MAL	MD	MAU	MM	OM	PK	SY	SIN	SA	SLK	THA	UAE	YEM	Tot	%	Ave
AUSTRALIA	06:05 Bulletin 1	1	1	1	1	1	1	1	1	1	1	-	1	1	-	1	1	0	1	-	0	15	75	
	06:15 Bulletin 2	1	1	1	1	1	1	1	1	1	1	-	1	1	-	1	1	0	1	-	0	15	75	
	06:30 Bulletin 3	1	1	1	1	1	1	1	1	1	1	-	1	1	-	1	1	0	1	-	0	15	75	
	06:45 Bulletin 4	1	1	1	1	1	1	1	1	1	1	-	1	1	-	1	1	0	1	-	0	15	75	75
INDIA	06:05 Bulletin 1	1	1	1	1	1	1	1	1	1	1	1	0	1	-	1	1	1	1	1	-	17	85	
	06:15 Bulletin 2	1	1	1	1	1	1	1	1	1	1	-	0	1	-	1	1	1	1	1	-	16	80	
	06:30 Bulletin 3	1	1	1	1	1	1	1	1	1	1	-	0	1	-	1	1	1	1	1	-	16	80	
	06:45 Bulletin 4	1	1	1	1	1	1	1	1	1	1	-	0	1	-	1	1	1	1	1	-	16	80	81
INDONESIA	06:05 Bulletin 1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	1	1	1	1	-	-	17	85	
	06:15 Bulletin 2	1	1	1	1	1	1	1	1	1	1	1	1	1	-	1	1	1	1	-	-	17	85	
	06:30 Bulletin 3	1	1	1	1	1	1	1	1	1	1	1	1	1	-	1	1	1	1	-	-	17	85	
	06:45 Bulletin 4	1	1	1	1	1	1	1	1	1	1	1	1	1	-	1	1	1	1	-	-	17	85	85

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Notes:

- 1 = TSP web page accessed OK
- 0 = TSP web page not accessed
- = TSP web page access not reported
- "Tot" = number of NTWCs who accessed TSP web page, out of 20
- "%" = percentage of NTWCs who accessed web page

Appendix F: Web Status Reports lodged by each NTWC

TSP	% NTWCs reporting (out of 20)	Number of NTWCs	AUS	BAN	FR	IN	IND	KEN	MAD	MAL	MD	MAU	MM	OM	PK	SY	SIN	SA	SLK	THA	UAE	YEM
Australia	5%	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
India	55%	11	1	0	1	1	1	0	1	1	0	1	0	0	1	0	0	1	1	0	1	0
Indonesia	15%	3	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Any TSP	75%	15	1	0	1	1	1	1	1	1	0	1	1	1	1	0	1	1	1	0	1	0

AUS=Australia, BAN=Bangladesh, FR=France (Indian Ocean Territories), IN=India, IND=Indonesia, KEN=Kenya, MAD=Madagascar, MAL=Malaysia, MD=Maldives, MAU=Mauritius, MM=Myanmar, OM=Oman, PK=Pakistan, SY=Seychelles, SIN=Singapore, SA=South Africa, SLK=Sri Lanka, 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 0609 UTC


Wed Dec 08 2021 11:39:10 IST
Wed, 08 Dec 2021 06:09:10 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 NTWC's 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	Threat Level 0	NTWC, Myanmar will issue Earthquake News.	NTWC, Myanmar	Wed Dec 08 2021 12:38:15 GMT+0630 (Myanmar Time)
Oman	-	-	-	-
Pakistan	Threat Level 0	no threat	NTWC PAKISTAN	Wed Dec 08 2021 11:02:25 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 2a: TSP India NTWC Status Display Webpage after 2nd Test Message

This is the webpage snapshot as at 0628 UTC


Wed Dec 08 2021 11:58:18 IST
Wed, 08 Dec 2021 06:28:18 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 NTWC's 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 Tsunami Threat expected for most Western Australia coasts, NT, SA, VIC, AAD stations, and Christmas and Cocos Islands. At the time, tsunami waves have not been observed	Yuelong Miao	Wed Dec 08 2021 17:17:57 GMT+1100 (Australian Eastern Daylight Time)
Bangladesh	-	-	-	-
Comoros	-	-	-	-
Djibouti	-	-	-	-
France (Indian Ocean Territories)	-	-	-	-
India	Threat Level 1	Potential tsunami threat to East Coast of India, the Disaster Management officials have been informed.	ITEWC	Wed Dec 08 2021 11:50:59 GMT+0530 (India Standard Time)
Indonesia	Threat Level 2	People in southern Java and Bali are currently reporting strong earthquakes. The BMKG issued tsunami early warnings in several affected areas, so that people could carry out self evacuations to safe places.	Alfath / Sigit	Wed Dec 08 2021 13:19:33 GMT+0700 (Western Indonesia Time)
Iran	Threat Level 0		Dr Majid Noranian	Wed Dec 08 2021 09:55:35 GMT+0330 (Iran Standard Time)
Kenya	-	-	-	-
Madagascar	Threat Level 1	Theart all East Coast fo Maggascar	Jean Bernardo	Wed Dec 08 2021 09:19:33 GMT+0300 (East Africa Time)
Malaysia	Threat Level 0	COMMS Test 8 December 2021	MNTEWC	Wed Dec 08 2021 14:22:43 GMT+0800 (Malaysia Time)
Maldives	-	-	-	-
Mauritius	-	-	-	-
Mozambique	-	-	-	-
Myanmar	Threat Level 0	NTWC, Myanmar will not issue the Tsunami information for Myanmar coastal areas based on the RTSPs information.	NTWC, Myanmar	Wed Dec 08 2021 12:53:49 GMT+0630 (Myanmar Time)
Oman	Threat Level 1	There is Tsunami potential in Oman by 0.68 meters by 17:08Z so the threat is minimal and we have time.	jafer Al-Busaidi	Wed Dec 08 2021 10:26:33 GMT+0400
Pakistan	Threat Level 0	No threat	NTWC PAKISTAN	Wed Dec 08 2021 11:15:16 GMT+0500 (Pakistan Standard Time)
Seychelles	-	-	-	-
Singapore	-	-	-	-
Somalia	-	-	-	-
South Africa	Threat Level 1	Council for Geoscience analysis suggests tsunami risk for East coast of South Africa. Will monitor further reports. Standing by. (Internet currently slow to connect to TSP sites)	Kevin Rae	Wed Dec 08 2021 08:27:34 GMT+0200 (South Africa Standard Time)
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 as at 0619 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	06:00 UTC 08 December 2021	9.1	SOUTH OF JAVA, INDONESIA *** TEST EVENT ***

Tsunami Wave Observations

#	Location	MAX	Date	Ev.
---	----------	-----	------	-----

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

The webpage snapshot as at 0641 UTC

Wed Dec 08 2021 12:11:57 IST
Wed, 08 Dec 2021 06:41:57 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 NTWC's 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 3	Confirmed Threat. Land Threat warning issued for most WA coasts, Christmas and Cocos Islands. Marine Threat warning for parts of coasts of NT, SA, VIC, TAS, and AAD stations	Yuelong Miao	Wed Dec 08 2021 17:39:38 GMT+1100 (Australian Eastern Daylight Time)
Bangladesh	-	-	-	-
Comoros	-	-	-	-
Djibouti	-	-	-	-
France (Indian Ocean Territories)	-	-	-	-
India	Threat Level 2	Tsunami waves were observed at Indonesia sea level gauges. DMOs have been informed to evacuated beaches and low lying areas near to coast in east coast of India.	ITEWC	Wed Dec 08 2021 12:07:32 GMT+0530 (India Standard Time)
Indonesia	Threat Level 3	Tsunami waves are expected to hit most areas of Southern Java and Bali. The community evacuated to a safe place and was still waiting for information updates.	Alfath / Sigit	Wed Dec 08 2021 13:37:36 GMT+0700 (Western Indonesia Time)
Iran	Threat Level 0		Dr Majid Noranian	Wed Dec 08 2021 09:55:35 GMT+0330 (Iran Standard Time)
Kenya	-	-	-	-
Madagascar	Threat Level 2	T2: 2021 12 08 14:57:15 TOAMASINA AIRPORT EWH 1.54 FARAFAGANA threat	Jean Bernardo	Wed Dec 08 2021 09:35:10 GMT+0300 (East Africa Time)
Malaysia	Threat Level 0	COMMS Test 8 December 2021	MNTEWC	Wed Dec 08 2021 14:32:26 GMT+0800 (Malaysia Time)
Maldives	-	-	-	-
Mauritius	-	-	-	-
Mozambique	-	-	-	-
Myanmar	Threat Level 0	NTWC, Myanmar will not issue the Tsunami information for Myanmar coastal areas based on the RTSPs information.	NTWC, Myanmar	Wed Dec 08 2021 13:03:31 GMT+0630 (Myanmar Time)
Oman	Threat Level 1	There is Tsunami potential in Oman by 0.68 meters by 17:08Z so the threat is minimal and we have time.	jaifer Al-Busaidi	Wed Dec 08 2021 10:26:33 GMT+0400
Pakistan	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. Pakistan	NTWC PAKISTAN	Wed Dec 08 2021 11:30:13 GMT+0500 (Pakistan Standard Time)
Seychelles	-	-	-	-
Singapore	-	-	-	-
Somalia	-	-	-	-
South Africa	Threat Level 3	CGS analysis suggests 1.4M at Margate on E Coast 18h10UTC. Escalated risk level to 3. NB: first online response logged at 0826 but not captured by INCOIS server	Kevin Rae SAWS	Wed Dec 08 2021 08:39:26 GMT+0200 (South Africa Standard Time)
Sri Lanka	-	-	-	-
Tanzania	-	-	-	-
Thailand	-	-	-	-
Timor-Leste	-	-	-	-
UAE	-	-	-	-
UK (Indian Ocean Territories)	-	-	-	-
Yemen	-	-	-	-

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Figure 3b: TSP Australia Public Webpage after 3rdTest Message

The webpage snapshot as at 0644 UTC.

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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	06:00 UTC 08 December 2021	9.1	SOUTH OF JAVA, INDONESIA *** TEST EVENT ***

Tsunami Wave Observations

#	Location	MAX	Date	Ev.
1	Sadeng	5.10m	06:25 UTC 08 Dec	1
2	Prigi	3.40m	06:25 UTC 08 Dec	1
3	Benoa	6.20m	06:25 UTC 08 Dec	1

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

The webpage snapshot as at 0711 UTC

Summary of the Current Threat Status as reported by the NTWCs

This page displays the summary of feedback received from individual NTWC's 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.	Threat over and cancellation issued.	Yuelong Miao	Wed Dec 08 2021 17:53:22 GMT+1100 (Australian Eastern Daylight Time)
Bangladesh	-	-	-	-
Comoros	-	-	-	-
Djibouti	-	-	-	-
France (Indian Ocean Territories)	-	-	-	-
India	CANCELLATION/ALL CLEAR.	Tsunami threat passed. Local DMOs to take decision about ALL CLEAR based on local conditions.	ITEWC	Wed Dec 08 2021 12:20:41 GMT+0530 (India Standard Time)
Indonesia	CANCELLATION/ALL CLEAR.	Tsunami warning is cancelled, confirmed tsunami occurred in Prigi with a height of 8.3 meters	Alfath / Sigit	Wed Dec 08 2021 13:49:51 GMT+0700 (Western Indonesia Time)
Iran	Threat Level 0		Dr Majid Noranian	Wed Dec 08 2021 09:55:35 GMT+0330 (Iran Standard Time)
Kenya	-	-	-	-
Madagascar	CANCELLATION/ALL CLEAR.	Final Bulletin	Jean Bernardo	Wed Dec 08 2021 09:48:36 GMT+0300 (East Africa Time)
Malaysia	Threat Level 0	COMMS Test 8 December 2021	MNTEWC	Wed Dec 08 2021 14:47:55 GMT+0800 (Malaysia Time)
Maldives	-	-	-	-
Mauritius	CANCELLATION/ALL CLEAR.	Nil	G Beegoo	Wed Dec 08 2021 11:11:31 GMT+0400 (Mauritius Standard Time)
Mozambique	-	-	-	-
Myanmar	Threat Level 0	NTWC, Myanmar will not issue the Tsunami information for Myanmar coastal areas based on the RTSPs information.	NTWC, Myanmar	Wed Dec 08 2021 13:15:51 GMT+0630 (Myanmar Time)
Oman	Threat Level 2	by reviewing RTSPs bulletin 3 the Tsunami potential in Oman by 0.68 meters by 17:08Z so the threat level is alert and the sea could be rough, on the other hand the tide is low expected by the time of impact so no inundation expected but an alert will be issued for the Sultanate of Oman Arabian Sea coastal line to stay away from the coast and move the vessels to the deep sea.	jaifer Al-Busaidi	Wed Dec 08 2021 10:52:54 GMT+0400
Pakistan	CANCELLATION/ALL CLEAR.	Threat of tsunami inundation to land areas. Pakistan	NTWC PAKISTAN	Wed Dec 08 2021 11:45:00 GMT+0500 (Pakistan Standard Time)
Seychelles	-	-	-	-
Singapore	-	-	-	-
Somalia	-	-	-	-
South Africa	CANCELLATION/ALL CLEAR.		Kevin Rae	Wed Dec 08 2021 09:07:33 GMT+0200 (South Africa Standard Time)
Sri Lanka	CANCELLATION/ALL CLEAR.		DFC	Wed Dec 08 2021 12:22:39 GMT+0530 (India Standard Time)
Tanzania	-	-	-	-
Thailand	-	-	-	-
Timor-Leste	-	-	-	-
UAE	Threat Level 0		All Megahed	Wed Dec 08 2021 11:00:29 GMT+0400 (Gulf Standard Time)
UK (Indian Ocean Territories)	-	-	-	-
Yemen	-	-	-	-

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

The webpage snapshot as at 0720 UTC.


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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

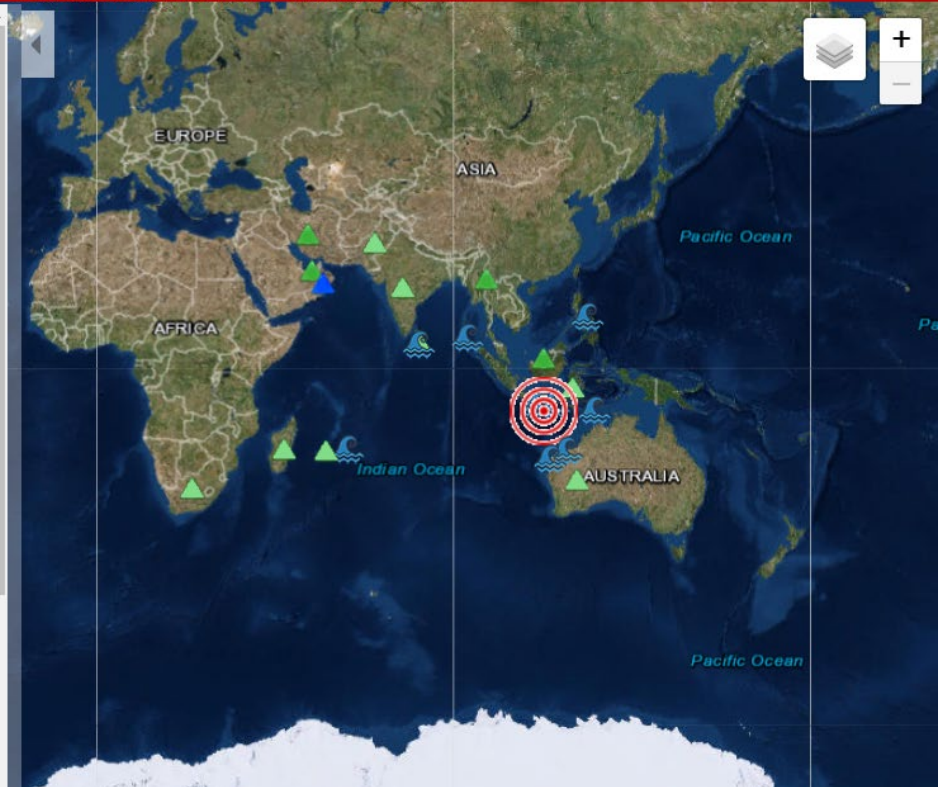
Legend: Unknown
Level 0
Level 1
Level 2
Level 3
Cancel

Earthquakes

Event	Date	Mag.	Location
1	06:00 UTC 08 December 2021	9.1	SOUTH OF JAVA, INDONESIA *** TEST EVENT ***

Tsunami Wave Observations

#	Location	MAX	Date	Ev.
1	Sadeng	5.10m	06:25 UTC 08 Dec	1
2	Prigi	3.40m	06:25 UTC 08 Dec	1
3	Benoa	6.20m	06:25 UTC 08 Dec	1
4	Kupang	3.30m	08:00 UTC 08 Dec	1



Appendix G: Accessibility of TSP-Indonesia Warning Receiver System

AUS	BAN	FR	IN	IND	KEN	MAD	MAL	MD	MAU	MM	OM	PK	SY	SIN	SA	SLK	THA	UAE	YEM	Tot	%
1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	18	90

AUS=Australia, BAN=Bangladesh, FR=France (Indian Ocean Territories), IN=India, IND=Indonesia, KEN=Kenya, MAD=Madagascar, MAL=Malaysia, MD=Maldives, MAU=Mauritius, MM=Myanmar, OM=Oman, PK=Pakistan, SY=Seychelles, SIN=Singapore, SA=South Africa, SLK=Sri Lanka, 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:

Australia	1. the comms test event didn't seem to appear on the map. 2. For the threat bulletins the travel time and energy map is shown. This is publicly available and could be miss-interpreted. We suggest this removed for consistency with the service definition.
Bangladesh	Not Applicable
Indonesia	TSP-Indonesia is fast, interactive and easy to understand
Maldives	It looks fine.
Oman	The system was functioned well. Unfortunately, we could not experience the audio.
Pakistan	no issue
Sri Lanka	That is very good system
UAE	sometimes the audio is not working properly...

Appendix H: Test Messages Transmitted by each TSP

TSP AUSTRALIA Test Start Message

WEIO24 AMMC 080600

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 8 December 2021
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 8 DECEMBER 2021 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 080604

```
#####  
#  
# IOTWMS COMMS TEST 8 DECEMBER 2021 - NOT A REAL TSUNAMI EVENT  
#  
#####
```

TEST TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 1 IOTWMS TSUNAMI SERVICE PROVIDER
AUSTRALIA [JATWC] ISSUED AT 0604 UTC WEDNESDAY 08 DECEMBER 2021

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: 9.1 MWP
DEPTH: 10KM
DATE: 08 DEC 2021
ORIGIN TIME: 0600 UTC
LATITUDE: 10.40S
LONGITUDE: 112.80E
LOCATION: SOUTH OF JAVA, INDONESIA

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 8 DECEMBER 2021 - NOT A REAL TSUNAMI EVENT  
#  
#####
```


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

TSP AUSTRALIA Message 2

WEIO24 AMMC 080615

```
#####  
#  
# IOTWMS COMMS TEST 8 DECEMBER 2021 - NOT A REAL TSUNAMI EVENT  
#  
#####
```

TEST TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 2 IOTWMS TSUNAMI SERVICE PROVIDER
AUSTRALIA [JATWC] ISSUED AT 0615 UTC WEDNESDAY 08 DECEMBER 2021

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: 9.1 MWP
DEPTH: 10KM
DATE: 08 DEC 2021
ORIGIN TIME: 0600 UTC
LATITUDE: 10.40S
LONGITUDE: 112.80E
LOCATION: SOUTH OF JAVA, INDONESIA

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 8 DECEMBER 2021 - NOT A REAL TSUNAMI EVENT  
#  
#####
```

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

TSP AUSTRALIA Message 3

WEIO24 AMMC 080630

IOTWMS COMMS TEST 8 DECEMBER 2021 - NOT A REAL TSUNAMI EVENT

#####

TEST TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 3 IOTWMS TSUNAMI SERVICE PROVIDER
AUSTRALIA [JATWC] ISSUED AT 0630 UTC WEDNESDAY 08 DECEMBER 2021

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: 9.1 MWP
DEPTH: 10KM
DATE: 08 DEC 2021
ORIGIN TIME: 0600 UTC
LATITUDE: 10.40S
LONGITUDE: 112.80E
LOCATION: SOUTH OF JAVA, INDONESIA

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 8 DECEMBER 2021 - NOT A REAL TSUNAMI EVENT

#####

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

TSP AUSTRALIA Message 4

WEIO24 AMMC 080645

IOTWMS COMMS TEST 8 DECEMBER 2021 - NOT A REAL TSUNAMI EVENT

#####

TEST TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 4 IOTWMS TSUNAMI SERVICE PROVIDER
AUSTRALIA [JATWC] ISSUED AT 0645 UTC WEDNESDAY 08 DECEMBER 2021

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: 9.1 MWP
DEPTH: 10KM
DATE: 08 DEC 2021
ORIGIN TIME: 0600 UTC
LATITUDE: 10.40S
LONGITUDE: 112.80E
LOCATION: SOUTH OF JAVA, INDONESIA

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 8 DECEMBER 2021 - NOT A REAL TSUNAMI EVENT

#####

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

TSP INDIA Test Start Message

WEIO20 DEMS 080600

#####

#

IOTWMS COMMS TEST 08 DECEMBER 2021 - NOT A REAL TSUNAMI EVENT

#####

TEST TSUNAMI STARTUP MESSAGE NOTIFICATION IOTWMS TSUNAMI SERVICE PROVIDER INDIA (ITEWC)
ISSUED AT 0600 UTC WEDNESDAY 08 DECEMBER 2021

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 08 DECEMBER 2021 - NOT A REAL TSUNAMI EVENT

#####

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

TSP INDIA Message 1

WEIO20 DEMS 080605

#####

IOTWMS COMMS TEST 08 DECEMBER 2021 - NOT A REAL TSUNAMI EVENT #
#####

TEST TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 1 IOTWMS TSUNAMI SERVICE PROVIDER INDIA (ITEWC)

ISSUED AT 0605 UTC WEDNESDAY 08 DECEMBER 2021

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 : 9.1
Depth : 10.0
Date : 08 Dec 2021
Origin Time : 0600 UTC
Latitude : 10.40 S
Longitude : 112.80 E
Location : South of Java, Indonesia

TO VIEW THE BULLETIN GO TO THE IOTWMS-TSP INDIA WEBSITE AT:
https://aus01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.incois.gov.in%2FIncois%2Ftsunami%2FCOMM_login.jsp&data=04%7C01%7Cyuelong.miao%40bom.gov.au%7Cdb3d0ca12655456df54a08d9ba10e528%7Cd1ad7db597dd4f2b816e50d663b7bb94%7C0%7C0%7C637745403985795633%7CUnknown%7CTWFpbGZsb3d8eyJWIjojMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ikk1haWwiLCJXVCi6Mn0%3D%7C3000&sd=bdqPLRXYihFKTLxJ0YS1p75u7dkmS%2BLSoPHITUArmU%3D&reserved=0

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://aus01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftsunami.incois.gov.in%2FTEWS%2FCOMMSRegional&data=04%7C01%7Cyuelong.miao%40bom.gov.au%7Cdb3d0ca12655456df54a08d9ba10e528%7Cd1ad7db597dd4f2b816e50d663b7bb94%7C0%7C0%7C637745403985795633%7CUnknown%7CTWFpbGZsb3d8eyJWIjojMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ikk1haWwiLCJXVCi6Mn0%3D%7C3000&sd=WUG1pEd%2Bwq0uCSIVOEag3eoa00483IY0PzBDC6ZQBP8%3D&reserved=0>

END OF NOTIFICATION MESSAGE

IOTWMS COMMS TEST 08 DECEMBER 2021 - NOT A REAL TSUNAMI EVENT #
#####

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

TSP INDIA Message 2

WEIO20 DEMS 080617

#####

IOTWMS COMMS TEST 08 DECEMBER 2021 - NOT A REAL TSUNAMI EVENT #

TEST TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 2 IOTWMS TSUNAMI SERVICE PROVIDER INDIA (ITEWC)

ISSUED AT 0617 UTC WEDNESDAY 08 DECEMBER 2021

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 : 9.1
Depth : 10.0
Date : 08 Dec 2021
Origin Time : 0600 UTC
Latitude : 10.40 S
Longitude : 112.80 E
Location : South of Java, Indonesia

TO VIEW THE BULLETIN GO TO THE IOTWMS-TSP INDIA WEBSITE AT:
https://aus01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.incois.gov.in%2FIncois%2Ftsunami%2FCOMM_login.jsp&data=04%7C01%7Cyuelong.miao%40bom.gov.au%7Cedaf4ee674164a4bf12908d9ba12694e%7Cd1ad7db597dd4f2b816e50d663b7bb94%7C0%7C0%7C637745410500036648%7CUnknown%7CTWFpbGZsb3d8eyJWIjojMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCi6Mn0%3D%7C3000&sdata=VLf%2BVWYHwfCkby0fmgFfov1CFqNwsDu9YWIcgA6DRgg%3D&reserved=0

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://aus01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftsunami.incois.gov.in%2FTEWS%2FCOMMSRegional&data=04%7C01%7Cyuelong.miao%40bom.gov.au%7Cedaf4ee674164a4bf12908d9ba12694e%7Cd1ad7db597dd4f2b816e50d663b7bb94%7C0%7C0%7C637745410500036648%7CUnknown%7CTWFpbGZsb3d8eyJWIjojMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCi6Mn0%3D%7C3000&sdata=ZWnHzEvVxp3u1lZsrvc4UR5IrMnrHXgKFA9%2Bxrje7A%3D&reserved=0>

END OF NOTIFICATION MESSAGE

IOTWMS COMMS TEST 08 DECEMBER 2021 - NOT A REAL TSUNAMI EVENT #
#####

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

TSP INDIA Message 3

WEIO20 DEMS 080630

#####

IOTWMS COMMS TEST 08 DECEMBER 2021 - NOT A REAL TSUNAMI EVENT #

TEST TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 3 IOTWMS TSUNAMI SERVICE PROVIDER INDIA (ITEWC)

ISSUED AT 0630 UTC WEDNESDAY 08 DECEMBER 2021

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 : 9.1
Depth : 10.0
Date : 08 Dec 2021
Origin Time : 0600 UTC
Latitude : 10.40 S
Longitude : 112.80 E
Location : South of Java, Indonesia

TO VIEW THE BULLETIN GO TO THE IOTWMS-TSP INDIA WEBSITE AT:
https://aus01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.incois.gov.in%2FIncois%2Ftsunami%2FCOMM_login.jsp&data=04%7C01%7Cyuelong.miao%40bom.gov.au%7C8f80ab01c37b4fc0537408d9ba14402e%7Cd1ad7db597dd4f2b816e50d663b7bb94%7C0%7C0%7C637745418401397198%7CUnknown%7CTWfPbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCi6Mn0%3D%7C3000&data=u9XiqqzkhPL1U1caiS7BEutTi306xn%2FhNvbjCP77eA%3D&reserved=0

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://aus01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftsunami.incois.gov.in%2FTEWS%2FCOMMSRegional&data=04%7C01%7Cyuelong.miao%40bom.gov.au%7C8f80ab01c37b4fc0537408d9ba14402e%7Cd1ad7db597dd4f2b816e50d663b7bb94%7C0%7C0%7C637745418401407144%7CUnknown%7CTWfPbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCi6Mn0%3D%7C3000&data=s94Qs17cab%2Bw716IeTr3lDlCcJwesnXnGF9g6VCYU5w%3D&reserved=0>

END OF NOTIFICATION MESSAGE

IOTWMS COMMS TEST 08 DECEMBER 2021 - NOT A REAL TSUNAMI EVENT #
#####

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

TSP INDIA Message 4

WEIO20 DEMS 080646

#####

IOTWMS COMMS TEST 08 DECEMBER 2021 - NOT A REAL TSUNAMI EVENT #

TEST TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 4 IOTWMS TSUNAMI SERVICE PROVIDER INDIA (ITEWC)

ISSUED AT 0646 UTC WEDNESDAY 08 DECEMBER 2021

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 : 9.1
Depth : 10.0
Date : 08 Dec 2021
Origin Time : 0600 UTC
Latitude : 10.40 S
Longitude : 112.80 E
Location : South of Java, Indonesia

TO VIEW THE BULLETIN GO TO THE IOTWMS-TSP INDIA WEBSITE AT:
https://aus01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.incois.gov.in%2FIncois%2Ftsunami%2FCOMM_login.jsp&data=04%7C01%7Cyuelong.miao%40bom.gov.au%7C75b0d369bb5a48a3a82908d9ba16751b%7Cd1ad7db597dd4f2b816e50d663b7bb94%7C0%7C0%7C637745427875124203%7CUnknown%7CTWfPbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&data=Ykjp%2BtUuAgFBMybYkQT%2Bj9EHKDWucaVwDx3U1LhJ3AQ%3D&reserved=0

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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PHONE: 91-40-23895011
FAX: 91-40-23895012
EMAIL: tsunami@incois.gov.in
WEB:

<https://aus01.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftsunami.incois.gov.in%2FTEWS%2FCOMMSRegional&data=04%7C01%7Cyuelong.miao%40bom.gov.au%7C75b0d369bb5a48a3a82908d9ba16751b%7Cd1ad7db597dd4f2b816e50d663b7bb94%7C0%7C0%7C637745427875124203%7CUnknown%7CTWfPbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&data=gaT8q%2BvLsoVt%2FXzUBJtGfS%2BQH1NwBw47XjhEOj1%2FC%2F%3D&reserved=0>

END OF NOTIFICATION MESSAGE

IOTWMS COMMS TEST 08 DECEMBER 2021 - NOT A REAL TSUNAMI EVENT #
#####

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

TSP INDONESIA Test Start Message

WEIO22 WIIX 080600

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 08 DEC 2021 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 MANUAL

MESSAGES WILL BE SENT AS FOLLOWS:

TIME NOTIFICATION MESSAGE

0600 UTC ANNOUNCEMENT MESSAGE ISSUED

0605 UTC NOTIFICATION MESSAGE NUMBER 1 ISSUED (FOR TSUNAMI BULLETIN 1 - EARTHQUAKE INFORMATION)

0615 UTC NOTIFICATION MESSAGE NUMBER 2 ISSUED (FOR TSUNAMI BULLETIN 2 - POTENTIAL THREAT)

0630 UTC NOTIFICATION MESSAGE NUMBER 3 ISSUED (FOR TSUNAMI BULLETIN 3 - CONFIRMED THREAT)

0645 UTC NOTIFICATION MESSAGE NUMBER 4 ISSUED (FOR TSUNAMI BULLETIN 4 - FINAL)

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

WEI022 WIIX 080605

TEST TEST TEST TEST TEST COMMTEST-DEC-2021 TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST
TEST TEST TEST COMMTEST-DEC-2021 TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST
TSP-INATEWS-20211208-0605-001

TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 1 IOTWMS TSUNAMI SERVICE PROVIDER INDONESIA
(INATEWS-BMKG) ISSUED AT 0605 UTC, DEC 08, 2021

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 : 9.1 MWP
DEPTH : 10KM
DATE : 08 DEC 2021
ORIGIN TIME: 06:00:00 UTC
LATITUDE : 10.40S
LONGITUDE : 112.80E
LOCATION : SOUTH OF JAVA, INDONESIA

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

<https://aus01.safelinks.protection.outlook.com/?url=http%3A%2F%2Frtsp.bmkg.go.id%2F&data=04%7C01%7Cyuelong.miao%40bom.gov.au%7C78ad3f521f2a42f60dcc08d9ba10ca09%7Cd1ad7db597dd4f2b816e50d663b7bb94%7C0%7C0%7C637745403531869094%7CUnknown%7CTWFpbGZsb3d8eyJWIjoIMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ikk1haWwiLCJXVCi6Mn0%3D%7C3000&sdata=Cz5a2V2V5INoaqJogZY3sHpNA3hvBafRkuB78LUucIo%3D&reserved=0>

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:

<https://aus01.safelinks.protection.outlook.com/?url=http%3A%2F%2Frtsp.bmkg.go.id%2FPUBLICBULL.PHP&data=04%7C01%7Cyuelong.miao%40bom.gov.au%7C78ad3f521f2a42f60dcc08d9ba10ca09%7Cd1ad7db597dd4f2b816e50d663b7bb94%7C0%7C0%7C637745403531869094%7CUnknown%7CTWFpbGZsb3d8eyJWIjoIMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ikk1haWwiLCJXVCi6Mn0%3D%7C3000&sdata=FBhz%2BSx54Hk%2F1CWceVktVziwbQCveLycqLK1Zy4c5yA%3D&reserved=0>

EMAIL : INARTSP@BMKG.GO.ID
MONITRTWP@BMKG.GO.ID

END OF NOTIFICATION MESSAGE

TEST TEST TEST TEST TEST COMMTEST-DEC-2021 TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST
TEST TEST TEST COMMTEST-DEC-2021 TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST

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

TSP INDONESIA Message 2

WEIO22 WIIX 080615

TEST TEST TEST TEST TEST COMMTEST-DEC-2021 TEST TEST TEST TEST TEST TEST TEST TEST
TEST TEST TEST COMMTEST-DEC-2021 TEST TEST TEST TEST TEST TEST TEST TEST
TSP-INATEWS-20211208-0615-002

TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 2 IOTWMS TSUNAMI SERVICE PROVIDER INDONESIA
(INATEWS-BMKG) ISSUED AT 0615 UTC, DEC 08, 2021

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 : 9.1 MWP (REVISED)
DEPTH : 10KM
DATE : 08 DEC 2021
ORIGIN TIME: 06:00:00 UTC
LATITUDE : 10.40S
LONGITUDE : 112.80E
LOCATION : SOUTH OF JAVA, INDONESIA

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

<https://aus01.safelinks.protection.outlook.com/?url=http%3A%2F%2Frtsp.bmkg.go.id%2F&data=04%7C01%7Cyuelong.miao%40bom.gov.au%7Cd870cb8be0a243cde51708d9ba122ff3%7Cd1ad7db597dd4f2b816e50d663b7bb94%7C0%7C0%7C637745409539763904%7CUnknown%7CTWFpbGZsb3d8eyJWIjoIMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ikk1haWwiLCJXVCi6Mn0%3D%7C3000&sd=2F%2BvmcdnRMT6SgnUhov60iusBhd%2FbSPG%2B1B0LmF32V8%3D&reserved=0>

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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:

<https://aus01.safelinks.protection.outlook.com/?url=http%3A%2F%2Frtsp.bmkg.go.id%2FPUBLICBULL.PHP&data=04%7C01%7Cyuelong.miao%40bom.gov.au%7Cd870cb8be0a243cde51708d9ba122ff3%7Cd1ad7db597dd4f2b816e50d663b7bb94%7C0%7C0%7C637745409539763904%7CUnknown%7CTWFpbGZsb3d8eyJWIjoIMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ikk1haWwiLCJXVCi6Mn0%3D%7C3000&sd=sTMIYxikTAeKzWzDL3Y4B%2FdB0PTISfxgSzeVUhb1HNw%3D&reserved=0>

EMAIL : INARTSP@BMKG.GO.ID
MONITRTWP@BMKG.GO.ID

END OF NOTIFICATION MESSAGE

TEST TEST TEST TEST TEST COMMTEST-DEC-2021 TEST TEST TEST TEST TEST TEST TEST TEST
TEST TEST TEST COMMTEST-DEC-2021 TEST TEST TEST TEST TEST TEST TEST TEST

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

TSP INDONESIA Message 4

WEIO22 WIIX 080645

TEST TEST TEST TEST TEST COMMTEST-DEC-2021 TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST
TEST TEST TEST COMMTEST-DEC-2021 TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST
TSP-INATEWS-20211208-0645-04

TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 4 IOTWMS TSUNAMI SERVICE PROVIDER INDONESIA
(INATEWS-BMKG) ISSUED AT 0645 UTC, DEC 08, 2021

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 : 9.1 MWP (REVISED)
DEPTH : 10KM
DATE : 08 DEC 2021
ORIGIN TIME: 06:00:00 UTC
LATITUDE : 10.40S
LONGITUDE : 112.80E
LOCATION : SOUTH OF JAVA, INDONESIA

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

<https://aus01.safelinks.protection.outlook.com/?url=http%3A%2F%2Frtsp.bmkg.go.id%2F&data=04%7C01%7Cyuelong.miao%40bom.gov.au%7Cd181b314a42741eed7108d9ba166048%7Cd1ad7db597dd4f2b816e50d663b7bb94%7C0%7C0%7C637745427527371442%7CUnknown%7CTWFpbGZsb3d8eyJWIjoIMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ikk1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=nCuJcYzD4KawGnVWN%2BNUwneAmDLmZmt58PmXLsTYQ%3D&reserved=0>

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P.O. BOX 3540 JAKARTA

WEBSITE:

<https://aus01.safelinks.protection.outlook.com/?url=http%3A%2F%2Frtsp.bmkg.go.id%2FPUBLICBULL.PHP&data=04%7C01%7Cyuelong.miao%40bom.gov.au%7Cd181b314a42741eed7108d9ba166048%7Cd1ad7db597dd4f2b816e50d663b7bb94%7C0%7C0%7C637745427527371442%7CUnknown%7CTWFpbGZsb3d8eyJWIjoIMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ikk1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=bbjtwE9q5V0V4M89fCKz8CgTvNBFfd806bXvyLbZuFY%3D&reserved=0>

EMAIL : INARTSP@BMKG.GO.ID
MONITRTWP@BMKG.GO.ID

END OF NOTIFICATION MESSAGE

TEST TEST TEST TEST TEST COMMTEST-DEC-2021 TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST
TEST TEST TEST COMMTEST-DEC-2021 TEST TEST TEST TEST TEST TEST TEST TEST TEST TEST