

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 June 2022

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1 PURPOSE

To report on the IOTWMS Communications Test conducted on 08 June 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 fourth test held on 8 June 2022. The next test is scheduled for 7 December 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	Conducted
25	7 December 2022	Planned

Notes:

- a. All test reports are available on the IOC website at [IOC Tsunami Programme \(ioc-tsunami.org\)](https://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 June 2022 test are described in the document “IOTWMS Communications Test 8 June 2022 Technical Manual” distributed to NTWCs and TSPs by the ICG/IOTWMS Secretariat on 26 May 2022.

Test Earthquake Event Scenario:

Magnitude: 9.2 Mwp
Depth: 10 km
Date: 8 June 2022
Origin Time: 06:00 UTC
Latitude: 3.30S
Longitude: 95.96E
Location: Northern Sumatra, 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. 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.

4 TEST PARTICIPATION

All twenty-five (25) IOTWMS Member States participated in the test. The average participation rate is 22 Member States across the 24 tests conducted to date. 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, Comoros, France (Indian Ocean Territories), India, Indonesia, Iran, Kenya, Madagascar, Malaysia, Maldives, Mauritius, Mozambique, Myanmar, Oman, Pakistan, Seychelles, Singapore, South Africa, Sri Lanka, Tanzania, Thailand, Timor Leste, United Arab Emirates, and Yemen.

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	1	0	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	25
Total	24	24	16	24	24	24	16	23	23	24	22	23	16	23	21	23	24	24	18	22	19	22	15	6	20	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

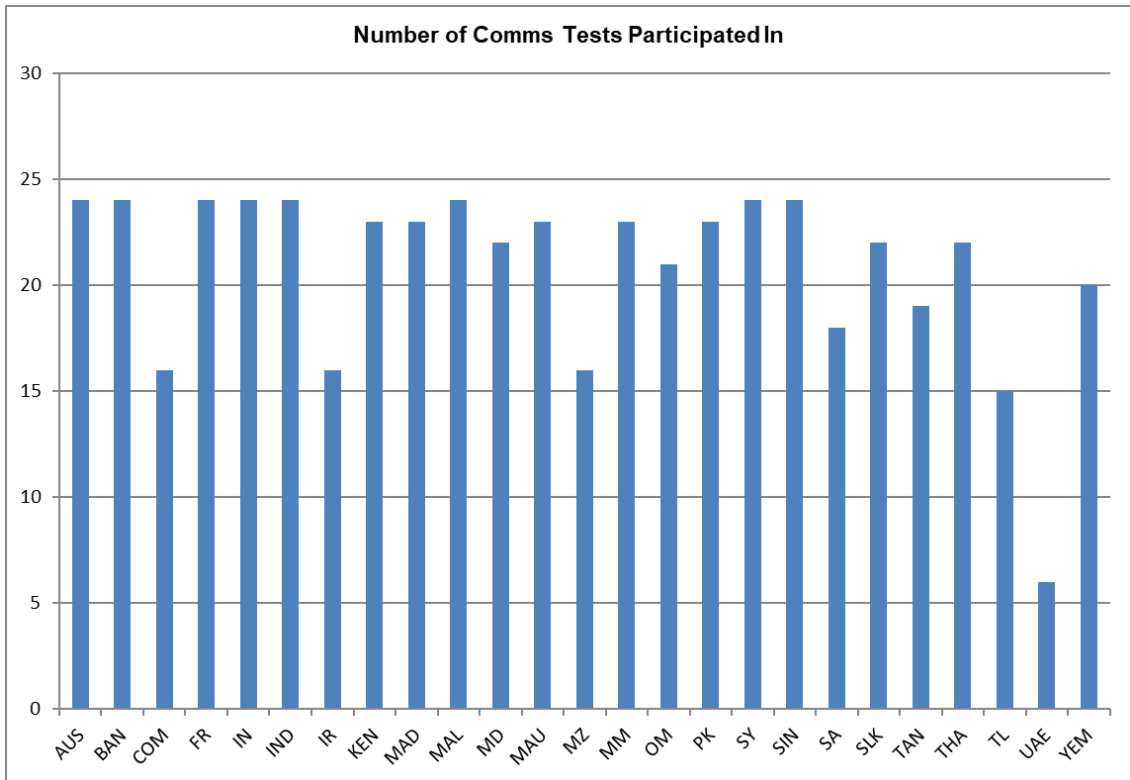
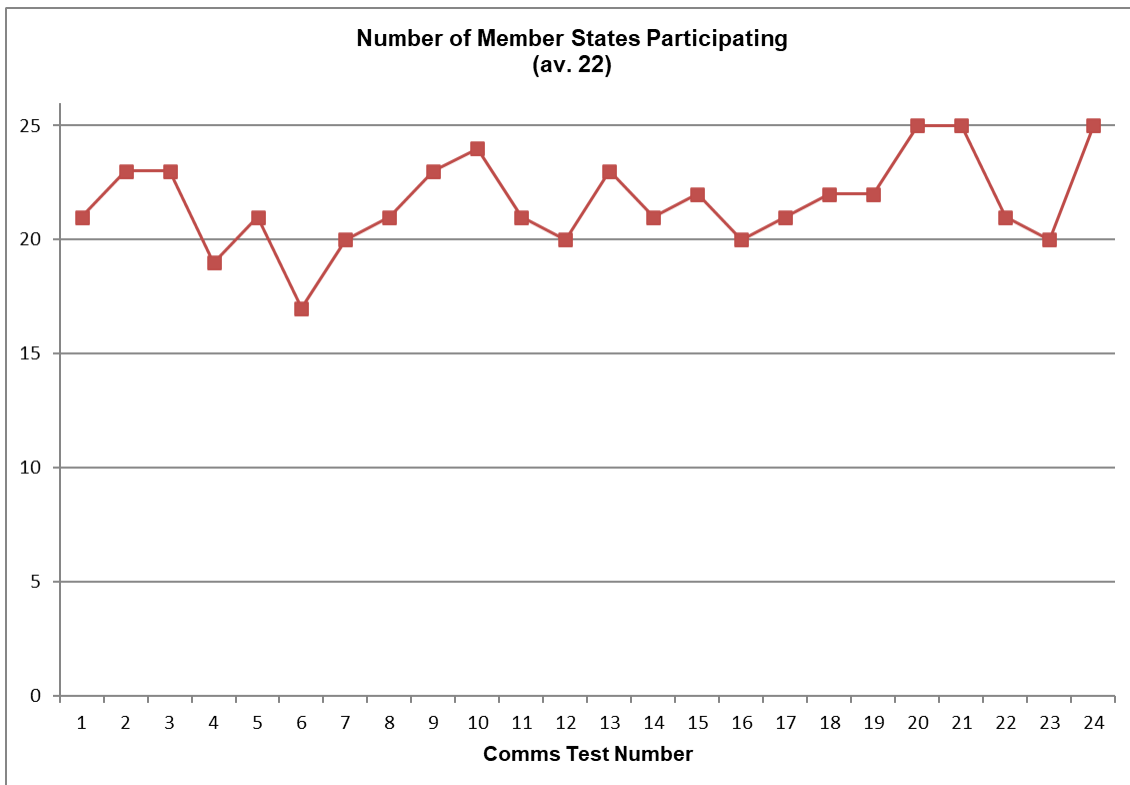


Chart 2: Number of Member States in Each Test



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	06:05	06:15	06:30	06:45
India	06:00	06:09	06:20	06:31	06:44
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 07 June 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 76%, which was slightly higher than the past tests, but it was less than overall COMMs tests highest 84%.

Twenty-one (21) of the 25 NTWCs received GTS messages. Bangladesh and Yemen did not receive GTS messages from any TSP while Iran and Madagascar have opted out of the service. Comoros reported receipt of the GTS messages from only TSP-Indonesia.

GTS messages continued to be received promptly in this test, with most messages received within 1-3 minutes of issuing. The longest delay was 12 minutes for Myanmar to receive TSP India notification message 2.

5.2.2 Fax

The overall fax reception rate was 20%, the second lowest ever from all communication tests. The lowest fax reception rate of 20% occurred in the previous test.

Only seven (7) of the 25 NTWCs reported receiving fax messages, with TSP Australia's messages being received by 2 NTWCs, India's by 6 NTWCs and Indonesia's by 4 NTWCs.

Fax message delay times mostly varied between 2-5 minutes. The longest delay was 2 hours and 57 minutes for a TSP Indonesia message 4 received by Oman.

5.2.3 Email

The overall email reception rate in this test was 87%, which was slightly higher than the past test (83%). Twenty-four (24) of the 25 NTWCs received email notifications. As in the previous test, Maldives did not receive email notifications from any TSP. Emails from TSP Australia were received by 23 NTWCs, emails from TSP India were received by 23 NTWCs and emails from TSP Indonesia were received by 21 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 44 minutes to Mozambique from TSP India.

5.2.4 SMS

The overall SMS message reception rate in this test was 61%, slightly lower than the last test but close to the average rate.

In this test twenty-one (21) of the 25 NTWCs received SMS messages. Sri Lanka, Mauritius, and Yemen 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 15 of the 25 NTWCs, TSP India's were received by 12 NTWCs and TSP Indonesia's were received by 18 NTWCs.

As with email, most SMS messages were received very promptly, typically within 1 to 3 minutes. The longest delay was 16 minutes to Oman and Seychelles 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 68%, down 12% from the 80% in the previous test and lower than the average of around 83%.

Twenty (20) of the 25 NTWCs were able to access at least one TSP website during the test, compared with 17 of 20 in the previous test. France, Singapore 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 25 NTWCs reported that they lodged web status reports. This is a rate of 40%, down 35% from the 75% in the previous test and significantly lower than the average of around 59% since 2011, and 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 56%, i.e., 14 out of 25 NTWCs. Mauritius, Mozambique and Myanmar reported of not having attempted access yet. Eight (8) NTWCs did not report of whether having accessed TSP-Indonesia WRS.

This is the third 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 87% 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 76% was down on the previous test and remains the second-most successful delivery medium.
- The SMS message reception is steady at 61% was down on the previous test, around the average for the previous few years.
- The Fax message reception was second lowest at 23% in this test, compared with all communication tests.

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

Web site access decreased significantly to 68% in this test compared with 80% of the previous test, significantly lower than the long-term average of around 83% since 2011. Twenty (20) of the 25 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 40%, lower 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 (25) IOTWMS Member States participated in this 24th IOTWMS Communications Test, which represents participation of all active 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 rates of 23% in this test and 20% in the previous test calls for a review of the validity of fax numbers and necessity of providing such delivery channel.

This is the third time that the TSP Indonesia's WRS system was tested. The feedback was mostly positive from the 14 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.

Both TSP webpage access and national warning status reported showed decreases from the recent communications tests. The national warning status reporting was at its lowest ever rate of only 40%. Therefore, it is suggested to emphasis the 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)	
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)
Received GTS Messages										
Australia	76%	64	79%	6	76%	38	82%	16	78%	9
India	80%	58	73%	6	76%	6	80%	27	74%	12
Indonesia	76%	65	68%	19	75%	4	75%	35	76%	11
TSP Average	78%	62	74%	10	76%	16	79%	26	76%	11
Received Fax Messages										
Australia	50%	57	45%	39	43%	80	7%	27	19%	152
India	30%	15	44%	38	36%	95	38%	9	30%	145
Indonesia	15%	79	18%	8	12%	15	14%	32	21%	177
TSP Average	32%	50	36%	28	31%	63	20%	23	23%	158
Received Email Messages										
Australia	92%	37	84%	6	85%	15	93%	3	91%	6
India	97%	26	82%	12	76%	14	90%	5	87%	44
Indonesia	86%	58	79%	15	74%	4	70%	7	83%	10
TSP Average	92%	40	82%	11	78%	11	83%	5	87%	20
Received SMS Messages										
Australia	55%	11	61%	5	66%	15	69%	70	58%	6
India	69%	96	58%	17	63%	34	59%	10	50%	8
Indonesia	63%	15	68%	62	62%	15	61%	34	75%	16
TSP Average	62%	41	62%	28	64%	21	63%	38	61%	10
Accessed Web Pages										
Australia	69%	n/a	73%	n/a	75%	n/a	75%	n/a	70%	n/a
India	67%	n/a	72%	n/a	78%	n/a	81%	n/a	58%	n/a
Indonesia	76%	n/a	77%	n/a	84%	n/a	85%	n/a	76%	n/a
TSP Average	71%		74%		79%		80%		68%	
Lodged Web Status Reports										
	50%		58%		54%		75%		40%	

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

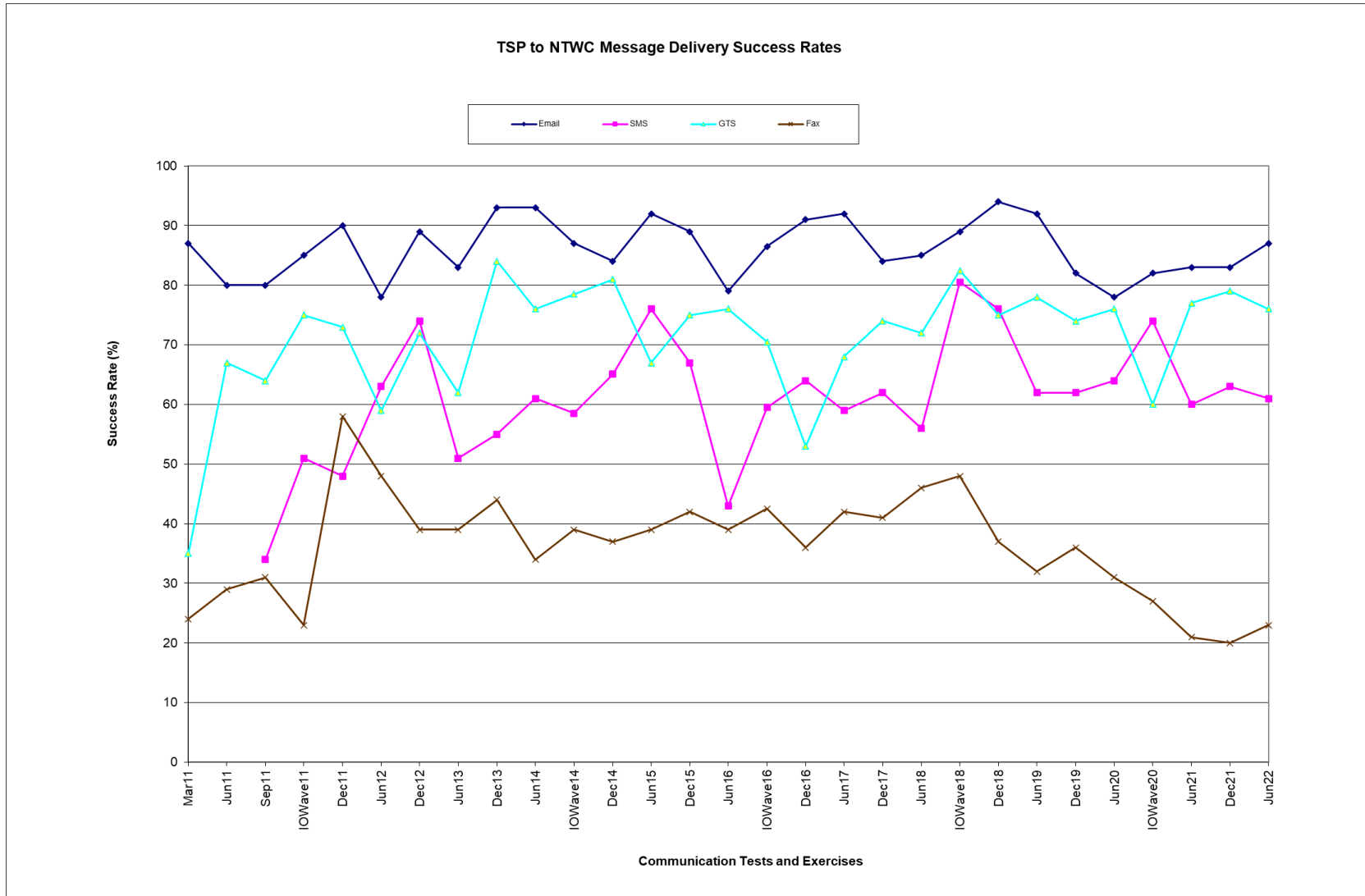
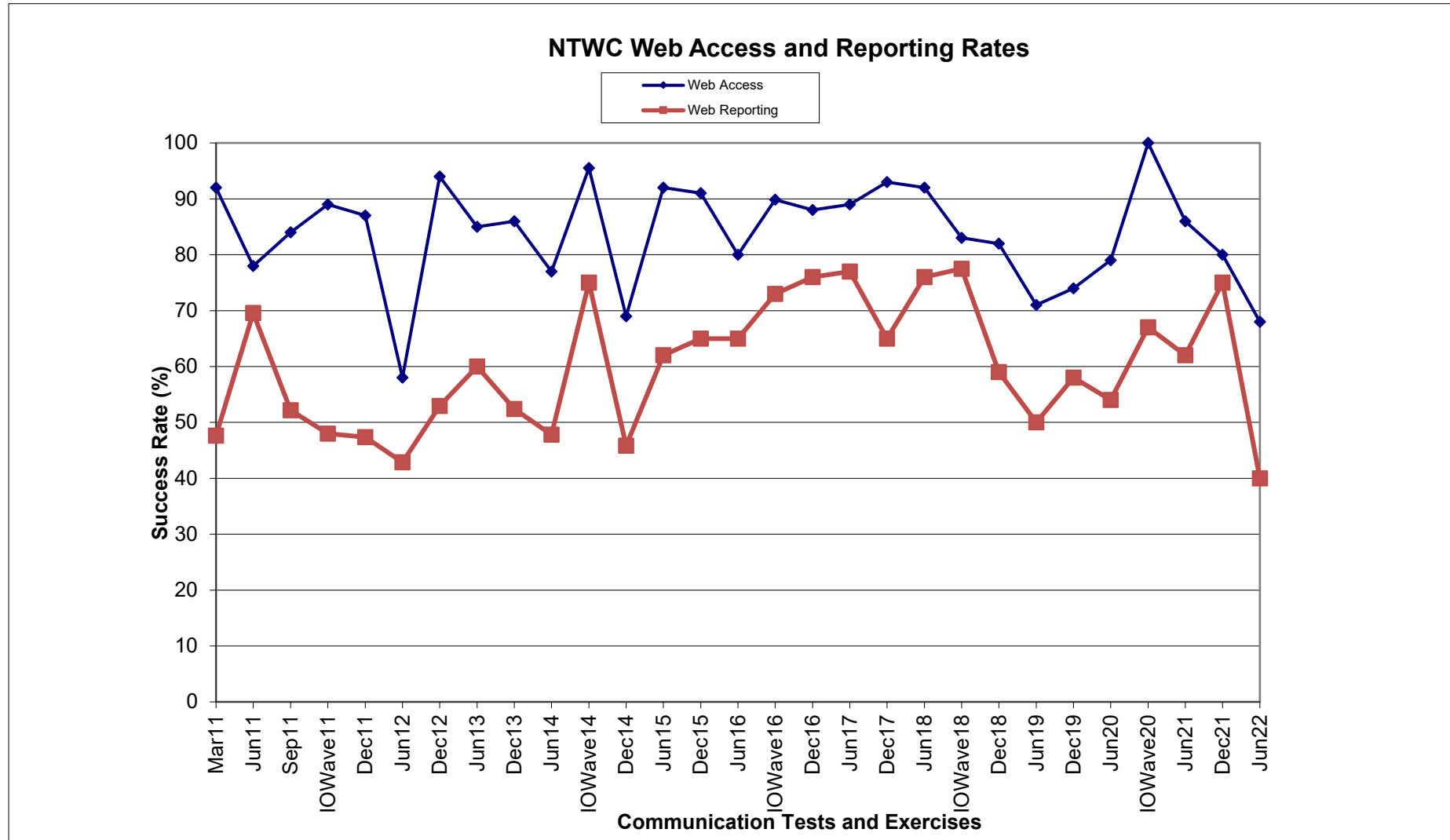


Chart 4: Web Access and Status Reporting Success Rates



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	COM	FR	IN	IND	IR	KEN	MAD	MAL	MD	MAU	MZ	MM	OM	PK	SY	SIN	SA	SLK	TAN	THA	TL	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, COM=Comoros, FR=France (Indian Ocean Territories), IN=India, IND=Indonesia, IR=Iran, KEN=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

● = Received, accessed, or reported ○ = Not received, accessed, or reported

X

APPENDICES

Appendix A: GTS Messages Received by each NTWC

	Bulletin No \ Country	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	Tot	%	Ave	
AUSTRALIA	06:00 Test Start	06:00	-	-	yes	06:00	06:01	-	06:00	-	-	06:00	06:03	06:00	06:00	06:00	06:00	06:00	06:00	06:01	06:00	06:00	-	06:00	06:01	-	18	72		
	06:05 Bulletin 1	06:05	-	-	yes	06:05	06:06	-	06:05	-	06:10	06:05	06:10	06:06	06:05	06:05	06:05	06:05	06:05	06:07	06:05	06:05	06:05	06:02	06:05	06:06	-	20	80	
	06:15 Bulletin 2	06:15	-	-	yes	06:15	06:16	-	06:15	-	06:20	06:15	06:22	06:16	06:26	06:15	06:15	06:15	06:15	06:15	06:16	06:15	06:15	06:03	06:15	06:16	-	20	80	
	06:30 Bulletin 3	06:30	-	-	yes	06:30	06:31	-	06:30	-	06:35	06:30	06:30	06:31	06:31	06:30	06:30	06:30	06:30	06:30	06:31	06:30	06:30	06:06	06:30	06:31	-	20	80	
06:45 Bulletin 4	06:45	-	-	yes	06:45	06:46	-	06:46	-	-	06:45	06:54	06:46	06:47	06:45	06:45	06:45	06:45	06:45	06:47	06:45	06:45	06:15	06:45	06:46	-	19	76	78	
INDIA	06:00 Test Start	06:00	-	-	yes	06:00	06:00	-	06:00	-	-	6:00	6:07	06:00	06:00	06:00	06:00	06:00	06:00	06:01	06:00	06:00	-	-	06:00	-	17	68		
	06:05 Bulletin 1	06:10	-	-	yes	06:09	06:11	-	06:11	-	06:15	06:05	06:17	06:05	06:12	06:10	06:10	06:09	06:10	06:10	06:10	06:09	06:13	06:09	06:11	-	20	80		
	06:15 Bulletin 2	06:20	-	-	yes	06:20	06:21	-	06:20	-	-	06:20	06:20	06:15	06:27	06:20	06:20	06:20	06:20	-	06:20	06:20	06:11	06:19	06:21	-	18	72		
	06:30 Bulletin 3	06:32	-	-	yes	06:31	06:32	-	06:32	-	-	06:32	06:31	06:30	06:32	06:30	06:32	06:31	06:32	06:33	06:32	06:31	06:22	06:31	06:32	-	19	76		
06:45 Bulletin 4	06:45	-	-	yes	06:44	06:45	-	06:45	-	06:50	06:44	-	06:45	06:45	06:45	06:45	06:44	06:45	06:46	06:45	06:44	-	06:44	06:45	-	18	72	74		
INDONESIA	06:00 Test Start	06:00	-	-	yes	05:59	06:00	-	06:00	-	06:04	06:00	06:07	06:00	06:00	06:00	06:00	06:01	06:00	06:07	06:00	06:00	-	-	06:02	-	18	72		
	06:05 Bulletin 1	06:05	-	-	yes	06:05	06:06	-	06:05	-	-	06:05	06:10	6:05	06:05	06:05	06:05	06:05	06:05	06:12	06:05	06:05	06:06	06:05	06:06	-	19	76		
	06:15 Bulletin 2	06:15	-	-	yes	06:15	06:16	-	06:15	-	-	06:15	06:22	06:15	06:26	06:15	06:20	06:15	06:15	06:16	06:15	06:15	06:15	06:15	06:16	-	19	76		
	06:30 Bulletin 3	06:30	-	-	yes	06:30	06:31	-	06:31	-	-	06:30	06:30	06:30	06:31	06:30	06:30	06:30	06:30	06:33	06:30	06:30	06:33	06:30	06:31	-	19	76		
06:45 Bulletin 4	06:45	-	06:45	yes	06:45	06:46	-	06:46	-	-	06:45	06:45	06:45	06:47	06:45	06:45	06:45	06:45	06:46	06:45	06:45	06:45	06:45	06:46	-	20	80	76		

AUS=Australia, BAN=Bangladesh, COM=Comoros, FR=France (Indian Ocean Territories), IN=India, IND=Indonesia, IR=Iran, KEN=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

- Notes:
- = message not received or not reported
 - "Tot" = number of NTWCs who received message, out of 25
 - "%" = percentage of NTWCs who received message
 - Message(s) with maximum time delay for each TSP are highlighted in yellow. Highest overall delay =12 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	COM	FR	IN	IND	IR	KEN	MAD	MAL	MD	MAU	MZ	MM	OM	PK	SY	SIN	SA	SLK	TAN	THA	TL	UAE	YEM	Tot	%	Ave
AUSTRALIA	06:00 Test Start	-	-	-	yes	-	-	-	n/a	-	-	-	-	-	-	06:13	-	-	-	n/a	-	-	-	-	-	-	4	19	
	06:05 Bulletin 1	-	-	-	yes	-	-	-	n/a	-	-	-	-	-	-	06:38	-	-	-	n/a	-	-	-	-	-	4	19		
	06:15 Bulletin 2	-	-	-	yes	-	-	-	n/a	-	-	-	-	-	-	07:29	-	-	-	n/a	-	-	-	-	-	4	19		
	06:30 Bulletin 3	-	-	-	yes	-	-	-	n/a	-	-	-	-	-	-	08:20	-	-	-	n/a	-	-	-	-	-	4	19		
	06:45 Bulletin 4	-	-	-	yes	-	-	-	n/a	-	-	-	-	-	-	09:17	-	-	-	n/a	-	-	-	-	-	4	19	19	
INDIA	06:00 Test Start	-	-	-	yes	06:01	06:24	-	n/a	-	-	-	-	-	-	06:28	-	-	06:02	n/a	-	-	-	-	-	6	29		
	06:05 Bulletin 1	-	-	-	yes	06:09	06:24	-	n/a	-	-	-	-	-	-	07:06	-	-	06:07	n/a	-	-	-	-	-	6	29		
	06:15 Bulletin 2	-	-	-	yes	06:20	06:51	-	n/a	-	-	-	-	-	-	08:01	06:21	-	06:18	n/a	-	-	-	-	-	7	33		
	06:30 Bulletin 3	-	-	-	yes	06:32	06:52	-	n/a	-	-	-	-	-	-	08:51	-	-	06:34	n/a	-	-	-	-	-	6	29		
	06:45 Bulletin 4	-	-	-	yes	06:45	06:52	-	n/a	-	-	-	-	-	-	09:10	-	-	06:50	n/a	-	-	-	-	-	6	29	30	
INDONESIA	06:00 Test Start	-	-	-	yes	-	06:06	-	n/a	-	05:58	-	-	-	-	06:16	-	-	-	n/a	-	-	-	-	-	5	24		
	06:05 Bulletin 1	-	-	-	yes	-	06:22	-	n/a	-	-	-	-	-	-	06:41	-	-	-	n/a	-	-	-	-	-	4	19		
	06:15 Bulletin 2	-	-	-	yes	-	06:28	-	n/a	-	-	-	-	-	-	07:31	06:23	-	-	n/a	-	-	-	-	-	5	24		
	06:30 Bulletin 3	-	-	-	yes	-	06:35	-	n/a	-	-	-	-	-	-	08:39	-	-	-	n/a	-	-	-	-	-	4	19		
	06:45 Bulletin 4	-	-	-	yes	-	06:47	-	n/a	-	-	-	-	-	-	09:42	-	-	-	n/a	-	-	-	-	-	4	19	21	

AUS=Australia, BAN=Bangladesh, COM=Comoros, FR=France (Indian Ocean Territories), IN=India, IND=Indonesia, IR=Iran, KEN=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

Notes:

- = message not received or not reported
- "Tot" = number of NTWCs who received message, out of 25
- "%" = percentage of NTWCs who received message
- Message(s) with maximum time delay for each TSP are highlighted in yellow. Highest overall delay =2 hours 57 minutes
- Australia, France (Indian Ocean Territories), Madagascar, and Timor Leste have opted out of the fax service.
- 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	COM	FR	IN	IND	IR	KEN	MAD	MAL	MD	MAU	MZ	MM	OM	PK	SY	SIN	SA	SLK	TAN	THA	TL	UAE	YEM	Tot	%	Ave
AUSTRALIA	06:00 Test Start	06:01	-	06:06	yes	06:00	06:00	06:01	06:00	06:00	06:00	-	06:00	06:00	06:00	06:00	06:00	05:59	06:00	06:01	06:00	06:00	06:00	06:00	06:00	06:00	23	92	
	06:05 Bulletin 1	06:06	-	06:06	yes	06:05	06:05	06:06	06:06	06:05	06:06	-	06:06	06:05	06:06	06:05	06:06	06:05	06:05	06:07	06:06	06:05	06:06	06:06	06:05	06:06	23	92	
	06:15 Bulletin 2	06:16	-	06:16	yes	06:15	06:15	06:16	06:16	06:15	06:15	-	06:15	06:15	06:16	06:15	06:16	06:14	06:15	06:16	06:16	06:15	06:16	06:16	06:16	06:16	23	92	
	06:30 Bulletin 3	06:31	-	06:29	yes	06:30	06:30	06:31	06:31	06:30	06:30	-	06:30	06:30	06:31	06:30	06:31	06:29	06:30	06:31	06:31	06:30	06:31	06:31	06:31	06:31	06:31	23	92
06:45 Bulletin 4	06:46	-	06:45	yes	06:45	06:45	06:46	06:45	-	06:45	-	06:45	06:45	06:45	06:45	06:45	06:45	06:45	06:45	06:47	06:45	06:46	06:45	06:45	06:46	06:46	22	88	91
INDIA	06:00 Test Start	06:01	06:00	06:00	yes	06:00	06:00	06:00	06:00	06:00	06:00	-	06:00	06:00	06:00	06:00	06:00	05:59	06:00	06:01	06:00	06:00	06:00	06:00	06:00	-	23	92	
	06:05 Bulletin 1	06:11	06:05	06:09	yes	06:09	06:09	06:10	06:09	06:09	06:09	-	06:09	06:09	06:09	-	06:09	06:09	06:09	06:10	06:09	06:09	06:09	06:09	06:10	-	22	88	
	06:15 Bulletin 2	06:21	06:16	06:20	yes	06:20	06:20	-	06:20	06:20	06:20	-	06:20	06:16	06:20	-	06:20	06:19	06:20	-	06:20	06:20	06:22	06:20	06:21	-	20	80	
	06:30 Bulletin 3	06:32	06:31	06:32	yes	06:31	06:32	06:32	06:32	06:32	06:32	-	06:31	06:31	06:32	-	06:32	06:31	06:31	06:33	06:32	06:31	06:32	06:32	06:32	-	22	88	
06:45 Bulletin 4	06:45	06:44	06:49	yes	06:44	06:44	06:45	06:44	06:44	06:44	-	06:44	06:46	06:44	-	06:44	06:44	06:44	06:46	06:44	06:44	06:44	06:44	06:45	-	22	88	87	
INDONESIA	06:00 Test Start	06:00	-	-	yes	06:00	06:00	06:00	06:00	06:00	06:02	-	06:03	06:00	06:02	06:00	06:00	05:59	05:59	06:07	06:00	06:00	06:00	06:00	-	-	20	80	
	06:05 Bulletin 1	06:06	-	-	yes	06:09	06:05	06:09	06:11	06:05	06:05	-	06:06	06:05	06:05	06:05	06:15	06:04	06:05	06:12	06:01	06:05	06:15	06:11	-	06:12	21	84	
	06:15 Bulletin 2	06:16	-	-	yes	06:15	06:15	06:15	06:17	06:15	06:15	-	06:15	06:15	06:15	06:15	06:15	06:14	06:15	06:16	06:17	06:15	06:15	06:15	-	06:18	21	84	
	06:30 Bulletin 3	06:31	-	-	yes	06:30	06:30	06:31	06:30	06:30	06:31	-	06:31	06:31	06:31	06:30	06:30	06:30	06:30	06:33	06:32	06:30	06:32	06:32	-	06:33	21	84	
06:45 Bulletin 4	06:46	-	-	yes	06:45	06:45	06:44	06:45	06:45	06:45	-	06:45	06:46	06:45	06:45	06:45	06:44	06:45	06:46	06:55	06:45	06:51	06:45	-	06:45	21	84	83	

AUS=Australia, BAN=Bangladesh, COM=Comoros, FR=France (Indian Ocean Territories), IN=India, IND=Indonesia, IR=Iran, KEN=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

Notes:

1. - = message not received or not reported.
2. "Tot" = number of NTWCs who received message, out of 25
3. "%" = percentage of NTWCs who received message
4. Message(s) with maximum time delay for each TSP highlighted in **yellow**. Highest overall delay = 44 minutes

Appendix D: SMS Messages Received by each NTWC

	Bulletin No \ Country	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	Tot	%	Ave
AUSTRALIA	06:00 Test Start	06:00	-	06:00	yes	06:00	-	-	06:00	06:01	-	06:00	-	06:00	06:00	06:01	06:01	06:01	06:02	-	-	-	06:00	-	-	-	14	56	
	06:05 Bulletin 1	06:05	06:06	06:06	yes	06:05	-	-	06:10	06:05	-	06:05	-	06:05	06:05	06:06	06:05	06:07	06:06	-	-	-	06:05	-	-	-	15	60	
	06:15 Bulletin 2	06:15	06:15	06:18	yes	06:15	-	-	06:17	06:15	06:15	06:15	-	06:15	06:15	-	06:15	06:15	06:16	-	-	-	06:15	-	-	-	15	60	
	06:30 Bulletin 3	06:30	06:31	06:31	yes	06:30	-	-	06:30	06:30	06:30	06:36	-	06:30	06:30	-	06:30	06:31	06:32	-	-	-	06:30	-	-	-	15	60	
	06:45 Bulletin 4	06:45	06:45	06:45	yes	06:45	-	-	06:45	-	-	06:45	-	06:45	06:45	-	06:45	06:46	06:46	-	-	-	06:45	-	-	-	13	52	58
INDIA	06:00 Test Start	06:00	06:00	06:00	yes	06:00	-	-	-	-	06:00	06:00	-	06:00	-	-	06:00	06:00	06:01	06:00	-	-	-	-	06:02	-	13	52	
	06:05 Bulletin 1	06:10	06:01	06:10	yes	06:09	-	-	-	-	06:10	06:10	-	06:05	-	-	06:10	06:11	06:10	06:10	-	-	-	-	06:15	-	13	52	
	06:15 Bulletin 2	06:20	06:17	06:21	yes	06:20	-	-	-	-	06:21	06:21	-	06:15	-	-	-	06:20	06:21	06:21	-	-	-	-	06:26	-	12	48	
	06:30 Bulletin 3	06:32	06:31	06:32	yes	06:31	-	-	-	-	06:32	06:38	-	06:30	-	-	06:32	06:32	06:32	06:32	-	-	-	-	06:37	-	13	52	
	06:45 Bulletin 4	06:45	06:44	-	yes	06:45	-	-	-	-	06:45	06:47	-	06:45	-	-	06:47	06:45	06:46	06:45	-	-	-	-	06:49	-	12	48	50
INDONESIA	06:00 Test Start	06:04	06:00	-	yes	06:01	06:00	06:06	-	06:05	06:01	06:02	-	06:00	06:05	06:08	06:04	06:02	06:01	06:05	-	-	06:07	06:03	-	-	18	72	
	06:05 Bulletin 1	06:14	06:05	-	yes	06:05	06:12	06:20	-	06:21	06:13	06:15	-	06:05	06:18	06:19	06:19	06:15	06:06	06:19	-	06:18	06:18	06:13	-	-	19	76	
	06:15 Bulletin 2	06:27	06:15	-	yes	06:20	06:24	06:30	-	06:27	06:22	06:24	-	06:15	06:26	06:31	06:27	06:31	06:15	06:28	-	06:29	06:28	06:21	-	-	19	76	
	06:30 Bulletin 3	06:36	06:31	-	yes	06:34	06:31	06:39	-	06:36	06:33	06:31	-	06:30	06:39	06:41	06:36	06:40	06:31	06:39	-	06:41	06:39	06:36	-	-	19	76	
	06:45 Bulletin 4	06:50	06:44	-	yes	06:46	06:45	06:52	-	06:54	06:49	06:51	-	06:45	06:52	06:56	06:54	06:50	06:45	06:55	-	06:52	06:55	06:46	-	-	19	76	75

AUS=Australia, BAN=Bangladesh, COM=Comoros, FR=France (Indian Ocean Territories), IN=India, IND=Indonesia, IR=Iran, KEN=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

Notes:

- = message not received or not reported
- "Tot" = number of NTWCs who received message, out of 25
- "%" = percentage of NTWCs who received message
- Message(s) with maximum time delay for each TSP highlighted in yellow. Highest overall delay =16 minutes
- France (Indian Ocean Territories) has opted out of the SMS service.

Appendix E: Web Accesses by each NTWC

	Bulletin No \ Country	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	Tot	%	Ave
AUSTRALIA	06:05 Bulletin 1	1	1	1	-	1	1	-	1	1	1	1	1	1	0	0	1	0	-	1	1	1	1	1	1	0	18	72	
	06:15 Bulletin 2	1	1	1	-	1	1	-	1	1	1	1	1	1	0	0	1	0	-	1	1	1	1	1	1	0	18	72	
	06:30 Bulletin 3	1	1	1	-	1	1	-	1	1	1	1	1	1	0	0	1	0	-	0	1	1	1	1	1	0	17	68	
	06:45 Bulletin 4	1	1	1	-	1	1	-	1	1	1	1	1	1	0	0	1	0	-	1	1	0	1	1	1	0	17	68	70
INDIA	06:05 Bulletin 1	0	1	1	-	1	1	-	1	0	1	1	1	1	1	0	1	0	-	1	1	0	1	1	0	-	15	60	
	06:15 Bulletin 2	0	1	1	-	1	1	-	1	0	1	1	0	1	1	0	1	0	-	1	1	0	1	1	0	-	14	56	
	06:30 Bulletin 3	0	1	1	-	1	1	-	1	0	1	1	0	1	1	0	1	0	-	1	1	0	1	1	0	-	14	56	
	06:45 Bulletin 4	0	1	1	-	1	1	-	1	0	1	1	0	1	1	0	1	0	-	1	1	1	1	1	0	-	15	60	58
INDONESIA	06:05 Bulletin 1	1	1	-	-	1	1	1	1	1	1	1	1	1	1	0	1	1	-	1	1	0	1	1	1	0	19	76	
	06:15 Bulletin 2	1	1	-	-	1	1	1	1	1	1	1	1	1	1	0	1	1	-	1	1	0	1	1	1	0	19	76	
	06:30 Bulletin 3	1	1	-	-	1	1	1	1	1	1	1	1	1	1	0	1	1	-	0	1	0	1	1	1	0	18	72	
	06:45 Bulletin 4	1	1	-	-	1	1	1	1	1	1	1	1	1	1	0	1	1	-	1	1	1	1	1	1	0	20	80	76

AUS=Australia, BAN=Bangladesh, COM=Comoros, FR=France (Indian Ocean Territories), IN=India, IND=Indonesia, IR=Iran, KEN=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

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 25
- "%" = percentage of NTWCs who accessed web page

Appendix F: Web Status Reports lodged by each NTWC

TSP	% NTWCs reporting (out of 25)	Number of NTWCs	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
Australia	4%	1	0	0	0	-	0	0	-	1	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	-
India	32%	8	0	0	0	-	1	1	-	0	0	1	0	1	0	1	0	1	0	-	1	1	0	0	0	0	-
Indonesia	4%	1	1	0	0	-	0	0	-	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	-
Any TSP	40%	10	1	0	0	-	1	1	-	1	0	1	0	1	0	1	0	1	0	-	1	1	0	0	0	0	-

AUS=Australia, BAN=Bangladesh, COM=Comoros, FR=France (Indian Ocean Territories), IN=India, IND=Indonesia, IR=Iran, KEN=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

Notes:

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

Appendix G: Accessibility of TSP-Indonesia Warning Receiver System

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	Tot	%
1	-	1	-	1	1	-	1	1	1	1	0	0	0	-	1	1	-	1	1	-	-	1	1	-	14	56

AUS=Australia, BAN=Bangladesh, COM=Comoros, FR=France (Indian Ocean Territories), IN=India, IND=Indonesia, IR=Iran, KEN=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

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	It was good to see that there was no bulletin information with a link to the registered users page
Indonesia	TSP-Indonesia Warning Receiver System is easily to access and very interactive.
Maldives	Very informative and user-friendly.
Seychelles	The Indonesia Warning Receiver System is accessible.
Sri Lanka	Map generated but not get voice messages during the event
Timor-Leste	TSP Indonesia is already good but we received notification and bulletin more then 1 times from email (Test notification, bulletin no 2 and 4)

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 TEST

INDIAN OCEAN TSUNAMI WARNING AND MITIGATION SYSTEM [IOTWMS] COMMUNICATIONS TEST
0600 UTC 8 June 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 8 JUNE 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

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

TSP AUSTRALIA Message 1

WEIO24 AMMC 080605

```
#####  
#  
# IOTWMS COMMS TEST 8 JUNE 2022 - NOT A REAL TSUNAMI EVENT  
#  
#####
```

TEST TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 1 IOTWMS TSUNAMI SERVICE PROVIDER
AUSTRALIA [JATWC] ISSUED AT 0605 UTC WEDNESDAY 08 JUNE 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: 9.2 MWP
DEPTH: 10KM
DATE: 08 JUN 2022
ORIGIN TIME: 0600 UTC
LATITUDE: 3.30N
LONGITUDE: 95.96E
LOCATION: OFF W COAST OF NORTHERN SUMATRA

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 JUNE 2022 - 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 JUNE 2022 - NOT A REAL TSUNAMI EVENT

#####

TEST TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 2 IOTWMS TSUNAMI SERVICE PROVIDER AUSTRALIA [JATWC] ISSUED AT 0615 UTC WEDNESDAY 08 JUNE 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: 9.2 MWP
DEPTH: 10KM
DATE: 08 JUN 2022
ORIGIN TIME: 0600 UTC
LATITUDE: 3.30N
LONGITUDE: 95.96E
LOCATION: OFF W COAST OF NORTHERN SUMATRA

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 JUNE 2022 - 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 JUNE 2022 - NOT A REAL TSUNAMI EVENT

#####

TEST TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 3 IOTWMS TSUNAMI SERVICE PROVIDER
AUSTRALIA [JATWC] ISSUED AT 0630 UTC WEDNESDAY 08 JUNE 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: 9.2 MWP
DEPTH: 10KM
DATE: 08 JUN 2022
ORIGIN TIME: 0600 UTC
LATITUDE: 3.30N
LONGITUDE: 95.96E
LOCATION: OFF W COAST OF NORTHERN SUMATRA

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 JUNE 2022 - 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 JUNE 2022 - NOT A REAL TSUNAMI EVENT

#####

TEST TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 4 IOTWMS TSUNAMI SERVICE PROVIDER
AUSTRALIA [JATWC] ISSUED AT 0645 UTC WEDNESDAY 08 JUNE 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: 9.2 MWP
DEPTH: 10KM
DATE: 08 JUN 2022
ORIGIN TIME: 0600 UTC
LATITUDE: 3.30N
LONGITUDE: 95.96E
LOCATION: OFF W COAST OF NORTHERN SUMATRA

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 JUNE 2022 - 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 JUNE 2022 - NOT A REAL TSUNAMI EVENT

#####

TEST TSUNAMI STARTUP MESSAGE NOTIFICATION IOTWMS TSUNAMI SERVICE PROVIDER INDIA
(ITEWC) ISSUED AT 0600 UTC WEDNESDAY 08 JUNE 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 08 JUNE 2022 - NOT A REAL TSUNAMI EVENT

#####

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

TSP INDIA Message 1

WEIO20 DEMS 080609

#

IOTWMS COMMS TEST 08 JUNE 2022 - NOT A REAL TSUNAMI EVENT

#####

TEST TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 1 IOTWMS TSUNAMI SERVICE PROVIDER
INDIA (ITEWC) ISSUED AT 0609 UTC WEDNESDAY 08 JUNE 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 : 9.2 M
Depth : 10.0 km
Date : 08 Jun 2022
Origin Time : 0600 UTC
Latitude : 3.30 N
Longitude : 95.96 E
Location : Northern Sumatra, Indonesia

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 08 JUNE 2022 - NOT A REAL TSUNAMI EVENT

#####

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

TSP INDIA Message 2

WEIO20 DEMS 080620

#

IOTWMS COMMS TEST 08 JUNE 2022 - NOT A REAL TSUNAMI EVENT

#####

TEST TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 2 IOTWMS TSUNAMI SERVICE PROVIDER
INDIA (ITEWC) ISSUED AT 0620 UTC WEDNESDAY 08 JUNE 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 : 9.2 M
Depth : 10.0 km
Date : 08 Jun 2022
Origin Time : 0600 UTC
Latitude : 3.30 N
Longitude : 95.96 E
Location : Northern Sumatra, Indonesia

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

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IOTWMS COMMS TEST 08 JUNE 2022 - NOT A REAL TSUNAMI EVENT

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

TSP INDIA Message 3

WEIO20 DEMS 080631

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IOTWMS COMMS TEST 08 JUNE 2022 - NOT A REAL TSUNAMI EVENT

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TEST TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 3 IOTWMS TSUNAMI SERVICE PROVIDER
INDIA (ITEWC) ISSUED AT 0631 UTC WEDNESDAY 08 JUNE 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 : 9.2 M
Depth : 10.0 km
Date : 08 Jun 2022
Origin Time : 0600 UTC
Latitude : 3.30 N
Longitude : 95.96 E
Location : Northern Sumatra, Indonesia

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

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IOTWMS COMMS TEST 08 JUNE 2022 - NOT A REAL TSUNAMI EVENT

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

TSP INDIA Message 4

WEIO20 DEMS 080644

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IOTWMS COMMS TEST 08 JUNE 2022 - NOT A REAL TSUNAMI EVENT

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TEST TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 4 IOTWMS TSUNAMI SERVICE PROVIDER
INDIA (ITEWC) ISSUED AT 0644 UTC WEDNESDAY 08 JUNE 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 : 9.2 M
Depth : 10.0 km
Date : 08 Jun 2022
Origin Time : 0600 UTC
Latitude : 3.30 N
Longitude : 95.96 E
Location : Northern Sumatra, Indonesia

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

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IOTWMS COMMS TEST 08 JUNE 2022 - NOT A REAL TSUNAMI EVENT

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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 8 JUNE 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 8 JUNE 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-Jun-2022 TEST TEST TEST TEST TEST TEST TEST TEST
TEST TEST TEST TEST TEST CommTEST-Jun-2022 TEST TEST TEST TEST TEST TEST TEST TEST
TSP-InaTEWS-20220608-0605-001

TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 1 IOTWMS TSUNAMI SERVICE PROVIDER
INDONESIA (InaTEWS-BMKG) issued at 0605 UTC, Jun 08, 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 : 9.2 Mwp
Depth : 10km
Date : 08 Jun 2022
Origin Time: 06:00:00 UTC
Latitude : 3.30N
Longitude : 95.96E
Location : Off West Coast of Northern Sumatra

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

monitrtp@bmkg.go.id

END OF NOTIFICATION MESSAGE

TEST TEST TEST TEST TEST CommTEST-Jun-2022 TEST TEST TEST TEST TEST TEST TEST TEST
TEST TEST TEST TEST TEST CommTEST-Jun-2022 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-Jun-2022 TEST TEST TEST TEST TEST TEST TEST TEST
TEST TEST TEST TEST TEST CommTEST-Jun-2022 TEST TEST TEST TEST TEST TEST TEST TEST
TSP-InaTEWS-20220608-0615-002

TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 2 IOTWMS TSUNAMI SERVICE PROVIDER
INDONESIA (InaTEWS-BMKG) issued at 0615 UTC, Jun 08, 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 : 9.2 Mwp (REVISED)
Depth : 10km
Date : 08 Jun 2022
Origin Time: 06:00:00 UTC
Latitude : 3.30N
Longitude : 95.96E
Location : Off West Coast of Northern Sumatra

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

monitrtp@bmkg.go.id

END OF NOTIFICATION MESSAGE

TEST TEST TEST TEST TEST CommTEST-Jun-2022 TEST TEST TEST TEST TEST TEST TEST TEST
TEST TEST TEST TEST TEST CommTEST-Jun-2022 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-Jun-2022 TEST TEST TEST TEST TEST TEST TEST TEST
TEST TEST TEST TEST TEST CommTEST-Jun-2022 TEST TEST TEST TEST TEST TEST TEST TEST
TSP-InaTEWS-20220608-0630-003

TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 3 IOTWMS TSUNAMI SERVICE PROVIDER
INDONESIA (InaTEWS-BMKG) issued at 0630 UTC, Jun 08, 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 : 9.2 Mwp (REVISED)
Depth : 10km
Date : 08 Jun 2022
Origin Time: 06:00:00 UTC
Latitude : 3.30N
Longitude : 95.96E
Location : Off West Coast of Northern Sumatra

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

monitrtp@bmkg.go.id

END OF NOTIFICATION MESSAGE

TEST TEST TEST TEST TEST CommTEST-Jun-2022 TEST TEST TEST TEST TEST TEST TEST TEST
TEST TEST TEST TEST TEST CommTEST-Jun-2022 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-Jun-2022 TEST TEST TEST TEST TEST TEST TEST TEST
TEST TEST TEST TEST TEST CommTEST-Jun-2022 TEST TEST TEST TEST TEST TEST TEST TEST
TSP-InaTEWS-20220608-0645-04

TSUNAMI BULLETIN NOTIFICATION MESSAGE NUMBER 4 IOTWMS TSUNAMI SERVICE PROVIDER
INDONESIA (InaTEWS-BMKG) issued at 0645 UTC, Jun 08, 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 : 9.2 Mwp (REVISED)
Depth : 10km
Date : 08 Jun 2022
Origin Time: 06:00:00 UTC
Latitude : 3.30N
Longitude : 95.96E
Location : Off West Coast of Northern Sumatra

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

monitrtp@bmkg.go.id

END OF NOTIFICATION MESSAGE

TEST TEST TEST TEST TEST CommTEST-Jun-2022 TEST TEST TEST TEST TEST TEST TEST TEST
TEST TEST TEST TEST TEST CommTEST-Jun-2022 TEST TEST TEST TEST TEST TEST TEST TEST