Comms Tests and TSP KPIs

Agenda item 2.4 & 2.5

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Commission

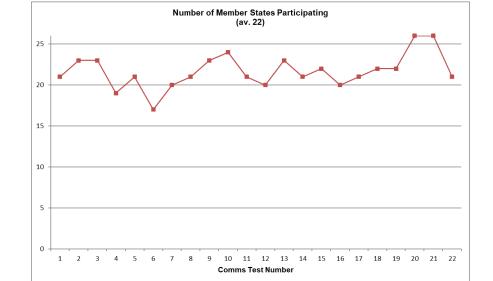
ICG/IOTWMS Working Group 2 Meeting, 3-4 November 2021

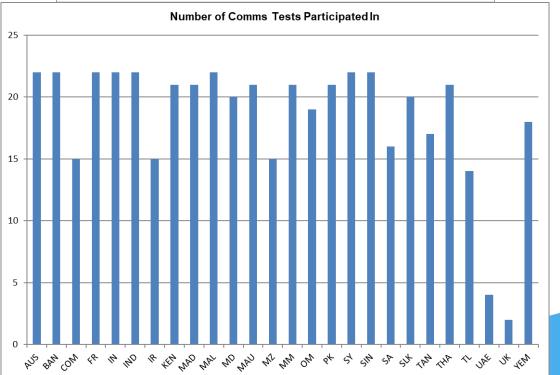
Comms Test Schedule

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	Planned



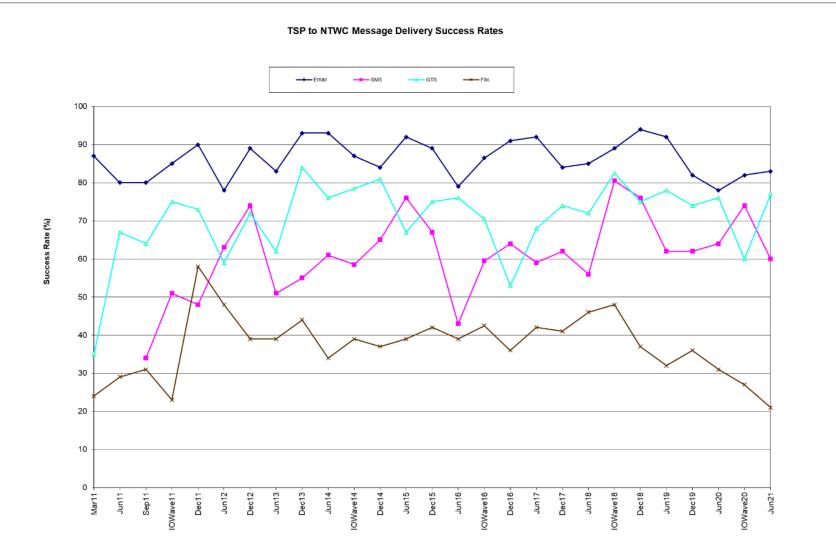
Comms Test Participation Rates







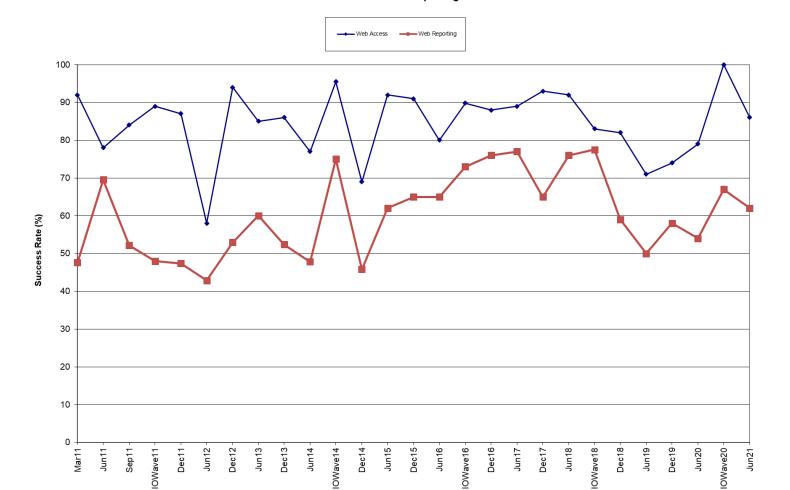
TSP to NTWC Message Delivery Success Rates All Comms Tests



Communication Tests and Exercises

Web Access and Status Reporting All Comms Tests

NTWC Web Access and Reporting Rates



TSP KPIs 2020

		S	Service Leve EQ Bulletin	Service Level 2 Threat / No Threat Bulletins					
TSP	KPI 1	KPI 2	KPI 3	KPI 4	KPI 5	KPI 6	KPI 7	KPI 8	
	ET First EQ Bull	POD IO EQs GE M6.8	EQ Mag	EQ Depth	EQ Location	ET First Threat Bull	POD Tsunami Waves	Tsunami Height Accuracy	
	Target: 10 mins (% met)	Target: 100%	Target: 0.3 (% met)	Target: 30 km (% met)	Target: 30 km (% met)	Target: 20 mins (% met)	Target: 100%	Target: Factor of 2	
Australia	13.8 min (10.0%)	100%	0.11 (100%)	13.7 (95%)	21.1 (70%)	21.7 (66.7%)	n/a	n/a	
India	9.2 min (90.0%)	100%	0.1 (70.0%)	30.0 (70.0%)	18.6 (85%)	25 min (0.0%)	n/a	n/a	
Indonesia	13.9min (45.0%)	100%	0.26 (69.2%)	13.24 (90.0%)	26.5 (64.1%)	46.7 min (0.0%)	n/a	n/a	

NOTES

KPI 2: No IO events >= M6.8

KPI 6:

Australia issued 3 No Threat Bulletins India issued 1 No Threat Bulletin Indonesia issued 2 No threat Bulletins

KPI 7,8: No events caused threat-level tsunami waves

TSP KPIs 2021 (Jan – Oct)

		S	Service Leve EQ Bulletins	Service Level 2 Threat / No Threat Bulletins					
TSP	KPI 1	KPI 2	KPI 3 KPI 4		KPI 5	KPI 6	KPI 7	KPI 8	
	ET First EQ Bull			EQ EQ Mag Depth		ET First Threat Bull	POD Tsunami Waves	Tsunami Height Accuracy	
	Target: 10 mins (% met)	Target: 100%	Target: 0.3 (% met)	Target: 30 km (% met)	Target: 30 km (% met)	Target: 20 mins (% met)	Target: 100%	Target: Factor of 2	
Australia	18.5 min (16.2%)	n/a	0.08 (97.3%)	19.7 (75.7%)	33.1 (78.4%)	34.0 (33.3)	n/a	41%	
India	12.1 min (40.0%)	n/a	0.1 (76.0%)	17.6 (72.0%)	12.58 (92%)	29 min* (0.0%)	n/a	n/a	
Indonesia	10.1min (68.97%)	n/a	0.22 (79.31%)	16.14 (79.31%)	23.10 (65.52%)	33 (0%)	n/a	n/a	

NOTES

KPI 2: No IO events >= M6.8

KPI 6:

Australia issued 4 No Threat, 1 Potential threat, and 1 Confirmed threat Bulletin India issued 1 No Threat Bulletin For the recent South Sandwich Island event, TSP India has issued a no threat bulletin as an information. This event is not considered for calculation of KPI 6. Indonesia issued 1 No Threat Bulletin

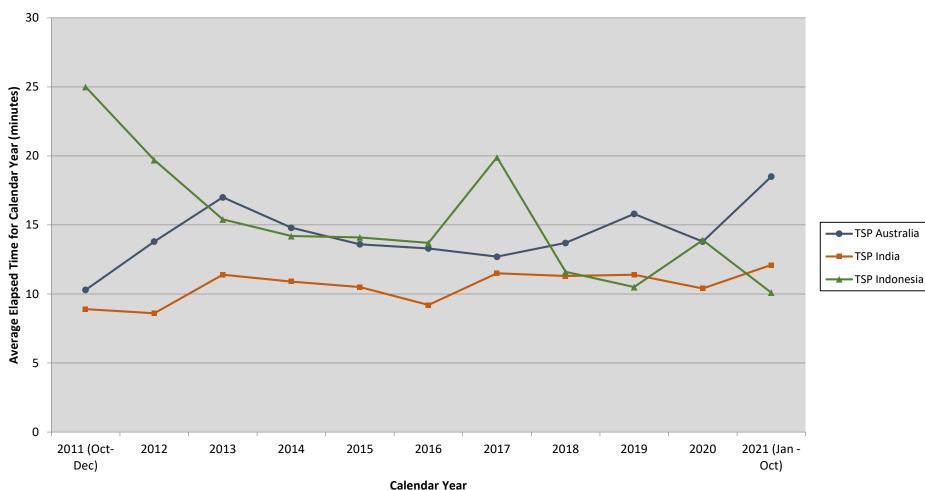
KPI 7: No events caused threat-level tsunami waves.

KPI 8: Based on 4 observations in CFZ's from the 12 Aug South Sandwich Islands event

Meets	Near	Misses
Target	Target	Target

Earthquake Bulletin Issue Times All TSPs

IOTWMS-TSP Earthquake Bulletin Issue Time Averages (elapsed minutes after earthquake) KPI 1: Target ≤ 10 minutes



TSP Earthquake Bulletins (SL1) and Threat Bulletins (SL2) – All Years

	TSP Australia				TSP India				TSP Indonesia			
X	Number		A	v. Number		nber	Av.		Number		Av.	
Year	Issued		Time (mins)		Issued		Time (mins)		Issued		Time (mins)	
	SL1	SL2	SL1	SL2	SL1	SL2	SL1	SL2	SL1	SL2	SL1	SL2
2011 (Oct-	Dct- 11	2	10.3	17	9	1	8.9	23	5	3	25	45
Dec)	11		55.6%	100%			60.00%	0.0%			50.00%	33.3%
2012	49	10	13.8	24	53	5	8.6	20	29	1	19.7	24
2012	49	10	40.8%	40.0%	55		87.20%	60.0%		1	33.30%	0.0%
2013	58	6	17	18.5	54	4	11.4	22.5	35	0	15.4	n/a
2015	50	0	5.2%	66.7%	54	4	40.50%	0.0%	55	U	29.00%	
2014	6 1	61 4	14.8	19	50	1	10.9	15	37	0	14.2	n/a
2014	01		25.0%	50.0%			50.00%	0.0%			18.20%	Πγα
2015	56	7	13.6	20.5	35	0	10.5	n/a	32	0	14.1	n/a
2015	50		31.6%	50.0%	- 35	U	78.10%	Πγά	52		34.60%	
2016	51	13	13.3	18.4	35	5	9.2	20.6	36	1	13.7	90
2010	2010 51		13.7%	71.4%			74.30%	40.0%			42.40%	0.0%
2017	40	4	12.7	15.5	30	3	11.5	27.3	27	1	19.9	190
2017		-	22.5%	75.0%			46.7%	0.0%	21	-	40.7%	0.0%
2018	32	2	13.7	22.0	30	1	11.3	25.0	39	1	11.6	38
2010		-	12.5%	50.0%		-	40.9%	0.0%		-	64.1%	0.0%
2019	31	31 3	15.8	23.0	25	2	11.4	25.5	30	4	10.5	27
2015			16.1%	33.3%			40.0%	0.0%			61.9%	62.5%
2020	20	20 3	13.8	21.7	17	1	10.4	25.0	21	2	13.9	46.7
			10.0%	66.7%	17	-	55.6%	0.0%			45.0%	0.0%
2021 (Jan -	• 37	7 6	18.5	34.0	23	1	12.1	29.0	29	1	10.1	33
Oct)			16.2%	33.3%	20		90.0%	0.0%			68.9%	0.0%
Total	446	60			361	24			320	14		
Average	44.2	6.0	14.6	21.5	35.8	2.4	10.6	21.6	31.7	1.4	14.4	50.8
	44.2		21.3%	56.3%	35.8		60.5%	20.8%			43.6%	25.0%

Thank you!

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