



2.4 - TSP Performance against KPIs for 2022/23

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List of KPIs for ICG-IOTWMS (SDD V5.0)



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| No. | Key Performance Indicator | Target Value |
|-----|--|--------------------------|
| 1 | Elapsed time from earthquake to issuance of first Earthquake Bulletin | 10 minutes |
| 2 | Probability of detection of earthquakes with $M_w \geq 6.8$ (USGS final value) in the IOTWMS ESZ | 100% |
| 3 | Accuracy of earthquake magnitude | 0.3 |
| 4 | Accuracy of earthquake hypocenter depth | 30 km |
| 5 | Accuracy of earthquake hypocenter location | 30 km |
| 6 | Elapsed time from earthquake to issuance of first Threat Assessment Bulletin | 20 minutes |
| 7 | Probability of detection of tsunami above threat threshold | 100% |
| 8 | Accuracy of the tsunami forecast amplitude/height | Factor of 2 |
| 9 | Number of false or incorrect bulletins issued | 0 |
| 10 | Accuracy of time arrival of tsunami (0.02m amplitude) | Within 5% of travel time |
| 11 | Accuracy of time of arrival of 1st significant wave (0.1m) | Within 5% of travel time |
| 12 | Accuracy of threat threshold exceedance | Within 5% # |
| 13 | Percent of IO countries issued a timely product as defined above | 100% |
| 14 | Elapsed time from any product issuance to potential receipt by NTWC Contact | 5 minutes ## |
| 15 | Percent of regular Comms Tests participated in | 100% |

TSP KPIs 2022 (Jan – Dec) – M6.8+



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| | Service Level 1 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 | 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 | 12.0 (60%) | (100%) | 0.12 (95%) | 19.0 (70%) | 20.9 (90%) | 10 (100%) | n/a | n/a |
| India | 10.0 (85.7%) | (100%) | 0.2 (92.8%) | 21.1 (85.7%) | 13.3 (92.8%) | 26 (0%) | n/a | n/a |
| Indonesia | 10.39 (68%) | (100%) | 0.20 (80%) | 26.78 (72%) | 26.91 (72%) | 33 (0%) | n/a | n/a |

NOTES

| | | |
|--------------|-------------|---------------|
| Meets Target | Near Target | Misses Target |
|--------------|-------------|---------------|

TSP KPIs 2023 (Jan – Mar) – M6.8+



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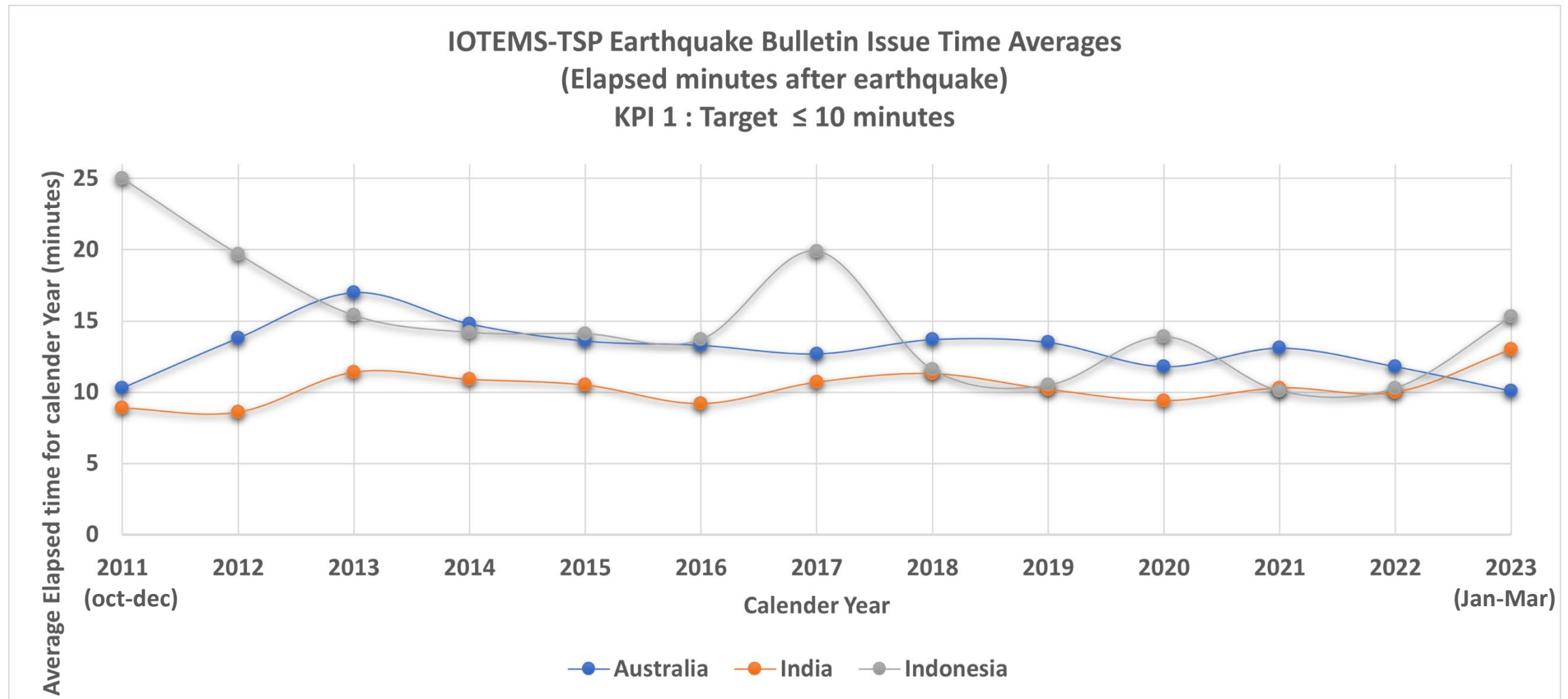
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| | Service Level 1 EQ Bulletins | | | | | Service Level 2 Threat / No Threat Bulletins | | |
|-----------|---------------------------------|--------------------|---------------------|-----------------------|-----------------------|---|-------------------|-------------------------|
| TSP | KPI 1 | KPI 2 | KPI 3 | KPI 4 | KPI 5 | KPI 6 | KPI 7 | KPI 8 |
| | ET First EQ Bull | 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 | 10.1 (85.7%) | (100%) | 0.10 (100%) | 15.9 (85.7%) | 36.7 (71.4%) | 12.0 (100%) | n/a | n/a |
| India | 13.0 (50%) | (100%) | 0.15 (100%) | 28.3 (75%) | 14.2 (100%) | n/a | n/a | n/a |
| Indonesia | 15.3 (86%) | (100%) | 0.29 (57%) | 29.26 (57%) | 33.87 (71%) | n/a | n/a | n/a |

NOTES

| | | |
|--------------|-------------|---------------|
| Meets Target | Near Target | Misses Target |
|--------------|-------------|---------------|

Earthquake Bulletin Issue Times All TSPs





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Thank you ...