

Agenda 14.2: Seismic data sharing through the establishment of the Oceania Regional Seismic Network (ORSNET) for Tsunami Early warning.

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Objective

- The Oceania Regional Seismic Network is established
 - to support Seismic observatories in the South West Pacific
 - to improve their national capabilities through regional arrangement of sharing of seismic data, resources and technical expertise for tsunami early warning



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Background Information

- 30% of seismic activity in the SWP Region (Lebellegard et al., 2007) but <3% of seismic stations are available
- information required was made available 10 to 15 minutes after the earthquakes
- The only way to better cover the wide Pacific Ocean in earthquake detection for Tsunami Early warning is through sharing of seismic data. The need was clear but technically it was impossible with the level of communication at that time



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Background Information

- Vanuatu advocate for ORSNET in various audiences for endorsement, 2011 in New Zealand (UNESCO IOC PTWS Working Group of Tsunami detection and warning dissemination meeting) and 2012 in Samoa (IOC/ICG/PTWS)
- Trialled in 2011 between NC and Vanuatu and was successful
- Expansion of the network in 2013, with support from Pacific Fund (French Government)



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Update

- Vanuatu coordinates ORSNET since 2013
- New Caledonia hosts and maintains server
- All ORSNET data are shared with PTWC since the end of 2016.
- Solomon Islands in 2013, Samoan in 2014
- Fiji & Tonga in 2015, Papua New Guinea in June 2017.
- Member countries are Vanuatu, New Caledonia, Solomon Islands, Fiji, Tonga, and PNG
- ORSNET: the only vehicle for seismic data sharing in the region.



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Update

- Annual Meetings – Four Annual meetings, first in Port Vila in 2014, then in Fiji in 2015, in Honiara in 2016 and the fourth in Honiara in 2017
- Products and services - made available to ORSNET member countries through www.ORSNET.org



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Recommendation

Note

1. The progress of ORSNET
2. The commitment and contribution of all ORSNET countries in the development and running of this regional network
3. The Commitment of Vanuatu in coordinating and leading the project
4. The technical expertise and commitment of New Caledonia in managing and maintaining the ORSNET server and providing assistance to ORSNET countries
5. That ORSNET member countries are the owners of the network
6. The concern on the medium to long term sustainability of ORSNET
7. The high cost of communication including internet bandwidth for seismic data transmission



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Recommendation

Request

1. ORSNET to be aligned to PMC, and the formation of a PI Panel on ORSNET (to work closely with PICI an PIMOS panel)
2. Support for ORSNET to be sustainable in the long term

Endorse

1. ORSNET as the approved vehicle for sharing seismic data in the region for tsunami early warning



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