Intergovernmental Coordination Group
Pacific Tsunami Warning & Mitigation System
(PTWS)

TOWS-WG IX, 25-26 February 2016
Filomena Nelson, Chair ICG/PTWS
Report by Rick Bailey, Vice-Chair ICG/PTWS
PTWS Area of Service
PTWS Earthquake Source Zone
Intergovernmental Coordination Group
Steering Committee
WG1 Tsunami Hazard Assessment
WG2 Tsunami Detection, Warning and Dissemination
WG3 Disaster Management, Preparedness and Risk Reduction
Governance

Regional Working Groups:

Central American Pacific Coast
South East Pacific Region
South West Pacific Region
South China Sea Region
Governance

Task Teams:

- Steering Committee: TT PacWave Exercises
- Steering Committee: Task Team on Future Goals and Performance Monitoring
- Steering Committee: Evacuation Planning and Mapping
- WG2: TT on Enhancing Products
- Regional Working Group on Tsunami Warning and Mitigation in the South China Sea Region: TT Establishment of a South China Sea Tsunami Advisory Centre
ICG/PTWS XXVI, April 2015
50th Anniversary ITSU/PTWS
"Making the Pacific Ready for the Tsunami Threat"

- Goal of the Symposium was to “look back so we can look forward.”
- 150 participants from 30 countries, with over 40 speakers representing 19 countries.
- Recounted the achievements of last 50 years, stated and reviewed the current state of the System, and identified and recommended practical and tangible next steps, desirable partnerships, and necessary commitments needed to sustain and evolve the PTWS for the future.
PTWS Tsunami Service Provider

Pacific Tsunami Warning Centre
Hawaii
Sea Level & Seismic Monitoring

PTWC displays of sea level and seismic network data
Enhanced PTWS Products
Now more effort
Awareness & Preparedness

ICG Decided to have a balanced effort of the ICG/PTWS across: a) risk and hazard assessment; b) warning systems; and c) awareness and preparedness, taking into consideration Member States reporting and targets of the UN WCDRR Sendai Framework 2015–2030;
WG1 Hazard Assessment: ComMIT used for:
Capacity Building, Hazard Assessment and Model Standardization

In coordination with WG2, NOAA/NCEI and other relevant institutions and data providers, developing a methodology for using IOC tsunami measurement data and PTWS new tsunami warning products for improving accuracy of model forecast and hazard assessment.

- **NOAA forecast models developed during 2005-2015**
- **ComMIT training grids developed during 2005-2015**
Objectives:

1. Develop a new programme aimed at facilitating tsunami resilience through community preparedness, specifically through the preparation of tsunami evacuation maps and associated response plans for tsunami-vulnerable coastal communities.

2. Programme globally applicable and utilizing standardized tools and methodologies where they exist.
ITIC and CTWP will pilot the course in one host country in Central America, Honduras, during 2015-2016.

While ITIC and partners will lead the effort, significant commitments from the host country are required to support the project.

The Pilot will enable the host country to work with their communities in the development of tsunami evacuation plans, maps, and procedures.

Upon the Pilot’s completion, the host country should have sufficient training to replicate the process in other tsunami-prone communities in their country.

The ITIC-IOC course will then be formalized and offered widely.
Regional WG Central America

- Essential Tsunami Preparedness: Developing Tsunami Evacuation Maps, Plans and Procedures (TEMPP) Project. Honduras, with Central America and Mexico also invited

- Planned Pacific and Caribbean Seismic Tsunami Sources for Central America Workshop, June 2016, alongside the IASPEI/LACSC
Nauru newest and 148th State member of IOC as of 11 Feb 2016. 35 SIDS now participating in IOC’s programmes and activities.

- ITIC Training Programme (ITP)
  In-Country Training on Tsunami Warning & Response
  - 2015: 3 PICs (Tonga, 24-27 Aug, Solomon Is, 22-25 Sep, Cook Is, 16-19 Nov)
  - 2016: At least 2 PICs planned (Fiji, 7-11 Mar Vanuatu, 29 Mar-01 Apr)

Goal to increase decision-making capacity of first responder warning and emergency response operational staff to effectively respond to tsunami threat by having sound understanding of PTWS Enhanced Products, and up-to-date national response plans and SOPS.
4th Meeting of PTWS WG 2 Task Team on Seismic Data Sharing in the SW Pacific - held at Suva, Fiji, 3-4 Nov’15. Preceded by 1-day meeting on Oceania Regional Seismic Network (ORSNET) project. 2 days of training on seismic detection and tsunami monitoring tools followed. With expected growth of seismic networks in the PICs region, over 60 stations expected to report via ORSNET by the end of 2016.

- Multi-hazard EWSs – Siren systems installed in Samoa and Tonga recently. Plans pursued for multi-hazard use.
- Tide Gauges – Recently installed in Fiji (1) and Vanuatu (2) with data to be made externally available in due course.
• Scientific meeting of experts for coordinated scenario analysis of future tsunami events and hazard mitigation schemes for the South China Sea region (16 – 18 November 2015, Xiamen, China)
• The meeting resulted in a better understanding of the tsunami hazard and risk in the South China Sea region, which will feed into the planning for the establishment of the sub-regional Tsunami Advisory Centre, as well as allow Member States can better understand their level of tsunami exposure.
Regional WG SE Pacific

* JUL 27 3\textsuperscript{er} edition of Tsunami Diploma conducted at Universidad Católica de Valparaíso.
* OCT 05-09 Workshop “Tsunami Monitoring and Response and use of enhanced PTWC products for decision makers at national level”. Hosted by DIMAR-Colombia.
* DEC 09-11 Tsunami modelling Workshop. Hosted by DHN-Perú.

* Daily basis communication test using Land lines, satellite phones, fax, email and CPPS platform.
Magnitude 8.3 Mw Northern Chile earthquake (31.570°S, 71.654°W, depth 25 km) occurred at 2254:33 UTC

Generated a tsunami that was observed all over the Pacific region and caused damage locally.

According to news reports, more than 1 million persons immediately evacuated in Chile.

PTWC issued its 1st advisory information at 2300 UTC, and continued issuing threat information messages for the next 24 hours

A 4.75 m high tsunami wave was measured on the Coquimbo, Chile sea level gauge, and 1-2 m high waves were measured elsewhere in Chile.
National authorities confirmed reports of 8 victims, mainly due to buildings collapsing during the earthquake, and coastal fringes of several cities were flooded.
TT Enhancing Products

NW Pacific Tsunami Advisory Centre

Japan Meteorological Agency

Introduction: enhanced forecasts products by 2017/18
Exercises and Communications Tests

**PacWAVE16**
* February 2016
* Test NWTPAC enhanced products
* Conducted as a regional exercise involving the 16 countries that receive the NWPTAC products

**PacWAVE17**
* February 2017
* Conducted as a Pacific-wide exercise involving all PTWS countries as part of the regular bi-annual Pacific Wave exercise conducted since 2006

**Communications Tests**
* Regular monthly and two random tests
ICG Decided:

* To replace the current Implementation Plan with a PTWS Status Report prepared by the Steering Committee for presentation and review at each session of the ICG/PTWS.
* Action Plans of the Working Groups and Task Teams being informed by the Decisions, Recommendations and Action Plans of the ICG/PTWS to address any issues, gaps and identified enhancements identified by the PTWS Status Report.
* Develop KPIs with targets to monitor implementation and performance of all components of the warning and mitigation.