

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION COMMISSION OCÉANOGRAPHIQUE INTERGOUVERNEMENTALE COMISIÓN OCEANOGRÁFICA INTERGUBERNAMENTAL МЕЖПРАВИТЕЛЬСТВЕННАЯ ОКЕАНОГРАФИЧЕСКАЯ КОМИССИЯ

اللجنة الدولية الحكومية لعلوم المحيطات

政府间海洋学委员会

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(Available in English only)

IOC/VR/ON/ah 22 January 2024

- To : ICG/PTWS Tsunami National Contacts (TNC) and Tsunami Warning Focal Points (TWFPs)
- C.c. : Official National Coordinating Bodies for liaison with IOC Member States Permanent Delegates/Observer Missions to UNESCO National Commissions for UNESCO of IOC Member States ICG/PTWS Observers ICG/PTWS Chair and Vice-Chairs IOC Tsunami List

Subject: Call for nominations for ICG/PTWS Working Groups and Task Teams

The Intergovernmental Coordination Group for the Pacific Tsunami Warning System (ICG/PTWS) at its Thirtieth session (Nuku'alofa, Tonga, 11–15 September 2023) decided on its organisational structure 2023–2025 comprising working groups and task teams with terms of reference as provided hereafter. On this occasion, the membership of all the working groups and the task teams will be renewed. For this purpose, current members of the working groups and task teams who wish to continue their work with these groups should also be registered.

I hereby kindly invite you to nominate experts to the following ICG/PTWS Working Groups and Task Teams by also providing information regarding their affiliation and their contact information preferably no later than 9 February 2024, to Mr Öcal Necmioğlu (Technical Secretary of ICG/PTWS at <u>o.necmioglu@unesco.org</u>). At the same time, I invite them to update their profile on <u>Ocean Expert</u>.

I look forward to your active participation in these groups and remain,

Yours sincerely,

[signed]

Vladimir Ryabinin Executive Secretary

Enclosures:

Sures: Terms of References of the ICG/PTWS Intersessional Working Groups and Task Teams ICG/PTWS Organisational Structure 2023–2025

Chairperson

Dr Yutaka MICHIDA Professor Atmosphere and Ocean Research Institute, The University of Tokyo Kashiwanoha 5-1-5 2778564 Kashiwa JAPAN

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Dr Nikolay VALCHEV Director Institute of Oceanology Bulgarian Academy of Sciences 40 Parvi May Str. 9000 Varna BULGARIA Mr Juan Camilo FORERO HAUZEUR Executive Secretary Colombian Ocean Commission (COO) Avenida Ciudad de Cali No. 51 – 66 Edificio WBC, Oficina 306 111071 Bogotá, D.C. COLOMBIA

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Working Group 1: Understanding Tsunami Risk

Chair: Mr. <u>Christopher Moore</u> Vice-Chair: VACANT

- 1. Develop and promote best practice tsunami risk assessment material, programmes, standards, and tools for understanding tsunami risk, to support emergency management and early warning, including but not limited to:
 - hazard assessment and coastal inundation models and products
 - risk assessment methodology and risk forecasting
 - scenario assessments including maximum credible and most likely events to understand likely exposure, vulnerability, and event frequency
 - forecast and threat models
 - evacuation and inundation modelling
 - use of new and improved data including digital elevation modelling (DEM), GNSS and paleotsunami information
- 2. Work with scientific experts to support Member State tsunami risk assessment.
- 3. Improve best practice for assessing risk of local source and non-seismic tsunami sources.
- 4. Develop projects to address gaps or areas for improvement in tsunami risk assessment, this may include land-use planning, vertical evacuation or supporting early warning improvements.

The Group will be composed of members nominated by Member States, with two co-chairs, one from a science and one from a disaster risk management background, to be elected.

Working Group 2: Tsunami Detection, Warning and Dissemination

Chair: Mr. <u>Bill Fry</u>

Vice-Chairs: Ms. Lara Bland and Mr. Vasily Titov

- 1. Liaise with other working group(s) and Task Team(s) within the ICG/PTWS and with working groups from the other ocean basins through the TOWS-WG to:
- 2. Develop, coordinate, and enhance operational implementation of interoperable tsunami threat information products and services.
- 3. Undertake studies to determine warning requirements for seismic and sea level data.
- 4. Monitor and report on the performance of key observational, warning and communication system components.
- 5. Contribute to the conduct of regular exercises and communication tests of the PTWS.
- 6. Identify areas of priority for action following assessments, communications tests, exercises, and real tsunami events.
- 7. Develop and maintain relevant documentation, such as the PTWS TSP User's Guides.
- 8. Provide advice to the International Tsunami Information Centre (ITIC) on educational materials and for capacity building about the warning systems and services.
- 9. Help strengthen the capacity and capability of Member States.
- 10. Provide advice to the PTWS considering emergent data and novel processing and forecasting technologies to support NTWC and TSP, ensuring alignment to the UN ODTP goals.

The Working Group will be composed of members nominated by Member States, representatives for each ICG designated TSPs, ITIC, and invited observers, with a Chair and two Vice-Chairs to be elected by the ICG.

WG2 Task Team: Tsunami Service Providers (TT-TSP)

Chair: Mr. Charles McCreery

- 1. Share with each other their response to significant events including a timeline of actions, analyses made and the result of those analyses, decisions made and the basis for those decisions, the timeliness and accuracy of products issued, and any other notable successes or challenges.
- 2. Share with each other information about existing and any new methodologies for rapidly detecting and characterizing tsunami source events, for detecting and measuring tsunami waves, and for forecasting tsunami propagation and impacts.
- 3. Share with each other information on the effectiveness of products including format and content to make them understandable and actionable, dissemination methods and their testing, and any other support to customers prior to and during events.
- 4. Report to ICG on Task Team activities during the intersessional period as well as any resulting findings, changes, or recommendations regarding TSP operations.

The Task Team will be composed of representatives of PTWS Tsunami Service Providers (TSPs) and a representative from ITIC.

WG2 Task Team: Integrated PTWS Sensor Networks for Tsunami Detection and Characterisation (TT-ISN)

Chair: Ms. <u>Adrienne Moseley</u> Vice-Chair: Mr. <u>Timothy Melbourne</u>

This expert Task Team will establish and document a methodology to test the sensitivity of the PTWS sensing networks, integrating new and emerging techniques and technologies by:

- 1. Developing a methodology for gap and sensitivity analysis that combines multiple sensing technologies for tsunami detection and characterisation.
- 2. Integrating emerging techniques and sensor technologies (e.g. better use of tide gauges; GNSS technology and processing; sensors on SMART Cables) with the existing sensing network to meet tsunami warning service requirements in support of UN ODTP goals.
- 3. Where possible, include cost-benefit analysis of the potential technologies being considered.
- 4. Undertake to establish direct collaboration between ICG/PTWS Member States and other expert groups (such as International Association of Geodesy (IAG), International GNSS Service (IGS)) for the purpose of collaborating on data sharing and research efforts that are adaptable to the tsunami warning systems and operations of the IOC-Tsunami Programme, and aligned to the 10-year Research, Development and Implementation Plan of the UN ODTP.
- 5. Assess the utility and limitations of emergent technologies and techniques, e. g. GNSS, ADDOSS and SMART Cable, that have potential to deliver ocean height in real-time.
- 6. Align efforts with the *Task Team on Tsunami Forecasting from Ocean Observations* to ensure that Task Team recommendations account for existing and likely future observation systems.
- 7. Align efforts with the *Task Team for TSPs* and NTWC operational needs, to ensure that the Task Team recommendations consider the current and potential operational feasibility of emergent technologies augmentation for TSPs and NTWCs.

The Task Team will be open to TSPs, members nominated by Member States, and invited experts. Co-chairs to be elected by the ICG.

WG2 Task Team: Tsunami Forecasting from Ocean Observations (TT-FOO)

Chair: Mr. <u>Bill Fry</u> Vice-Chair: Mr. <u>Vasily Titov</u>

- 1. Compare and document existing strategies for source-independent tsunami early warning and quantify and document their operational usefulness. Efforts will include consideration of both existing and emerging ocean observations technologies and techniques.
- 2. Connect with appropriate entities in the WMO and IOC Oceanographic communities to allow best-practice direct observation driven forecasting techniques to be assessed for their usefulness in Tsunami Forecasting from Ocean Observations.
- 3. Align efforts with the Task Team Integrated PTWS Sensor Networks to ensure that existing and likely future monitoring systems support TT recommendations.

The Task Team will be open to members nominated by Member States, invited experts. Co-chairs to be elected by the ICG.

WG2 Task Team: Tsunami Generated by Volcanoes (TGV)

Co-Chairs: Mr. Geoff Kilgour and VACANT

- 1. To confirm the list of volcanoes identified by the TGV as posing a potential threat to the Pacific (referred in Annex 4 Technical Series 183), to identify additional potential threat volcanoes, and continually review the list.
- 2. Among the volcanoes with potential tsunami threat, to identify those with implemented tsunami hazard assessment, monitoring, warning, and preparedness systems.
- 3. To establish direct collaboration between ICG/PTWS member states and IAVCEI to facilitate the contribution of PTWS tsunami expertise to the monitoring and warning capability of existing volcano monitoring centres or NTWCs, as appropriate.
- 4. To Identify potential volcanic partners in countries and international bodies, and recommend collaboration opportunities with them to improve tsunami early warning and to support the downstream decision makers affected by the volcanically-generated tsunami
- 5. To develop guidelines on SOPs to monitor, detect, warn, and prepare for any volcanoinduced tsunami waves.
- 6. To develop guidelines on SOPs to monitor, detect, warn, and prepare for any volcano process that could induce tsunami waves.

The Task Team will be composed of members nominated by Member States, a representative from ITIC, and invited observers. Co-chairs to be elected by the ICG.

Working Group 3: Disaster Risk Management and Preparedness

Chair: Ms. <u>Ashleigh Fromont</u> Vice-Chair: Ms. <u>Laura Kong</u>

- 1. In collaboration with TOWS Task Team on Disaster Management and Preparedness and organizations such as UNDRR, support the exchange of experiences and information on risk reduction and preparedness actions, and matters related to disaster management.
- 2. Promote preparedness in coastal communities through education and awareness products and campaigns.
- 3. Facilitate SOP training across regions to strengthen emergency response capabilities of Member States and their Disaster Management Offices.
- 4. Develop and promote best practice preparedness material, programs, and assessment tools.
- 5. Develop and Promote tsunami risk reduction theory and practice.
- 6. Support the ITIC of the ICG.

The Group will be composed of members nominated by Member States, regional organisations, a representative of ITIC with a Chair and a Vice-Chair to be elected by the ICG.

WG3 Task Team: Tsunami Ready

Co-Chairs: Ms. Laura Kong and Ms. Ashleigh Fromont

This expert Task Team will facilitate and coordinate efforts relating to the Tsunami Ready Recognition Programme and within the ICG/PTWS, in support of UN Ocean Decade Goals.

- 1. Develop formal PTWS guidelines following the 'Tsunami Ready Equivalency Approach' for recognition of tsunami readiness of communities not implementing the IOC Tsunami Ready Recognition Programme,
- 2. Monitor Tsunami Ready campaigns and outcomes, and report results,
- 3. Ensure the advocacy for Tsunami Ready is aligned with other PTWS and IOC documents,
- 4. Advise on the Tsunami Ready workflow as it pertains to the PTWS and regions,
- 5. Support ITIC in its efforts to facilitate the implementation of Tsunami Ready in PTWS Member States,
- 6. Support ITIC's efforts to develop standardized training supporting Tsunami Ready under the framework of OTGA, such as through feedback on content and helping to test trainings before officially deployed,
- 7. Help to identify sources of funding in support of the implementation of Tsunami Ready,
- 8. Report progress on encouraging the standard text in the UNESCO-IOC Tsunami Ready signage for vertical evacuation, such as "Go to the designated building for vertical evacuation",
- 9. Report progress toward informing the public on the validity of the recognition, to be indicated on Tsunami Ready signage and on the certificate under the UNESCO-IOC Tsunami Ready logo.

The Group will be composed of members nominated by the Member States, representative of ITIC, with two co-chairs to be elected by the ICG.

Regional Working Group on Tsunami Warning and Mitigation System on the Central American Pacific Coast

Chair: Ms. <u>Griselda Marroquin</u> Vice-Chair: Mr. <u>Wilfried Strauch</u>

- 1. To assist the Central American countries in the development, improvement and implementation of their National Tsunami Warning and Mitigation Systems, and the countries which are becoming new members of ICG/PTWS in their integration into the ICG/PTWS.
- 2. To request CEPREDENAC to support the development of CATAC in Nicaragua as interim Regional Tsunami Advisory Centre for all Central American countries.
- 3. To implement a regional communications and warning plan.
- 4. To facilitate Tsunami Hazard and Risk studies in the Central American Region.
- 5. To Serve as coordination point within the region for member states proposals related to UN ODTP objectives, including the SMART Cables initiative and advising the PTWS Steering Committee on details of such proposals for consideration.

The Group will be composed of members from Member States Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, and Panama, with a Chair and a Vice-Chair elected by the members of the Working Group and endorsed by the ICG.

Regional Working Group on Tsunami Warning and Mitigation System in the Southeast Pacific Region

Chair: Mr. <u>Matias Sifon</u> Vice-Chair: Mr. <u>Michael Linthon</u>

- 1. To enhance regional capabilities in the Southeast Pacific Region for the Detection, Assessment, Warning and Dissemination of tsunami events, based on lessons learned and global trends, with the purpose of generating improvement opportunities for the National Tsunami Warning Centres (NTWCs) following the Sendai Framework priorities as a reference.
- 2. To facilitate cooperation in the establishment and upgrading of seismic and sea level stations and networks and communication systems in the region, and their interoperability in accordance with ICG/PTWS requirements, through the active participation of appropriate national delegates from Member States, in the Working Group 2: Tsunami Detection, Warning and Dissemination.
- 3. To improve the communication channels between the countries, according to the regional communications protocol established under Permanent Commission for the South Pacific (CPPS), through periodical tests using redundant systems.
- 4. To evaluate the merits of implementing the Tsunami Ready Equivalency Approach or the IOC Tsunami Ready Recognition Programme in the region.
- 5. To promote regional activities and join projects considering in-region capacity building and enhancing disaster preparedness for response as main efforts, according to the priorities number 1 and 4 of the Sendai Framework.
- 6. To facilitate capacity building and the sharing of sea level information among others, including the free and open exchange of data.
- 7. To improve the educational programs with regional criteria based on social, cultural, and economic reality, through the active participation of appropriate national delegates from Member States, in the Working Group 3: Disaster Risk Management and Preparedness.
- 8. To develop synergies with universities and academic centres to promote and to facilitate regional tsunami research in order to cope with regional needs.
- 9. To Serve as coordination point within the region for member states proposals related to UNODTP objectives, including the SMART Cables initiative, and advising the PTWS SC on details of such proposals for consideration

The Group will be composed of representatives nominated by the Member States of Chile, Colombia, Ecuador, and Peru, with a Chair and a Vice-Chair from each country rotating every two years, following an alphabetical order. In this context, the Vice-Chair will assume regional presidency for the coming period.

Regional Working Group on Tsunami Warning and Mitigation System in the South China Sea Region (WG-SCS)

Chair: Ms. <u>Suci Anugrah</u> Vice-Chair: Ms. <u>Ching-chi Lam</u>

- 1. To evaluate capabilities of countries in the South China Sea Region for providing end-to-end tsunami warning and mitigation services.
- 2. To ascertain requirements from countries in the South China Sea Region for the tsunami warning and mitigation services.
- 3. To promote and facilitate tsunami hazard and risk studies in the region.
- 4. To facilitate cooperation in the establishment and upgrading of seismic and sea level stations and networks and communication systems in the region.
- 5. To facilitate improvement of the education programmes on tsunami mitigation in the region.
- 6. To facilitate capacity building and the sharing of tsunami information in the region, including the free and open exchange of data.
- To Serve as coordination point within the region for member states proposals related to UN ODTP objectives, including the SMART Cables initiative, and advising the PTWS SC on details of such proposals for consideration

The Group will be composed of members nominated by Member States Brunei, Cambodia, China, Indonesia, Malaysia, Philippines, Singapore, Thailand, Vietnam and invited experts with a Chair and Vice-Chair to be elected by the members of the Working Group and endorsed by the ICG.

WG-SCS Task Team: Capacity Development and Services

Chair: Mr. Zhiguo Xu Vice-Chair: Mr. Indra Gunawan

- 1. To coordinate training workshops and other technical exchanges on topics related to earthquake and tsunami for enhancing the tsunami warning capabilities of the WG-SCS Member States.
- 2. To facilitate implementation of the International Staff Programme for short-term secondment of staff from WG-SCS Member States to SCSTAC on an annual basis.
- 3. To explore ways for furthering the sharing and exchange of relevant data and information in the South China Sea region.
- 4. To ascertain the latest requirements of WG-SCS Member States for tsunami advisory service provided by SCSTAC.

Membership: Representatives of Member States of the ICG/PTWS WG-SCS (Brunei Darussalam, Cambodia, China, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Vietnam) and invited experts; representatives of PTWC and NWPTAC (JMA); with Chair and Vice-Chair to be elected by the ICG.

Pacific Island Countries and Territories Working Group on Tsunami Warning and Mitigation (WG-PICT)

Chair: Ms. <u>Esline Garaebiti</u> Vice-Chair: Mr. <u>Mathew Moihoi</u>

The Pacific Island Countries and Territories Working Group on Tsunami Warning and Mitigation will contribute to the implementation to Framework for Resilient Development in the Pacific and is encouraged to share the results of the working group with the Pacific Resilience Partnership.

The working group aims to:

- 1. continually review and evaluate capabilities of and make recommendations for improvements to countries in the Pacific Islands and Territories (PICT) Region for providing end to-end tsunami warning and mitigation services.
- 2. support the involvement and contribution of PICT countries in the activities of the ICG/PTWS.
- 3. promote and facilitate the tsunami hazard and risk studies in the PICT region.
- 4. facilitate cooperation in the establishment and upgrading of seismic and sea level stations and networks in the region, and the interoperability of these systems in accordance with ICG/PTWS requirements.
- 5. facilitate training and capacity building in the end-to-end tsunami warning and mitigation system in the region.
- 6. encourage the sharing of tsunami information, including but not limited to the free and open exchange of data.
- 7. facilitate tsunami awareness in school curricula, and development and dissemination of public educational materials.
- 8. work in cooperation with PTWS Working Group 1, 2 & 3, and relevant task teams especially on activities that strengthen country capacity in tsunami warning, risk mitigation & emergency response.

Members composed of representatives from Pacific Island Countries and Territories (PICTs), Council of Regional Organizations in the Pacific (CROP) Agencies, ITIC and WMO. Chair and Vice Chair elected by the members of the Working Group and endorsed by the ICG.

WG-PICT Task Team: Seismic Data Sharing in the Southwest Pacific

Co-Chairs: Mr. Rennie Vaiomunga and Mr. Mathew Moihoi

- 1. Advocate seismic data and related tsunami monitoring sharing in the region.
- 2. Advise Southwest Pacific countries on data sharing protocols, techniques, and technologies.
- 3. Work with Southwest Pacific Countries and partners to have a common data sharing policy.
- 4. Encourage Southwest Pacific Countries with existing or planned broadband seismograph stations to (i) join the International Federation of Digital Seismograph Networks (FDSN), (ii) use the standards developed by the FDSN for data exchange and (iii) take advantage of the data archiving and services provided by FDSN.

Members are representatives of Southwest Pacific Countries and territories (Australia, Fiji, France– French Polynesia, France-New Caledonia, New Zealand, Papua New Guinea, Samoa, Solomon Islands, Tonga, Vanuatu), PTWC, NWPTAC, Japan, and United States. Co-chairs to be elected by the ICG.

WG-PICT Task Team: Capacity Development

Chair: Mr. <u>'Ofa FA'ANUNU</u>

- 1. Continue the implementation of minimum competency framework for National Tsunami Warning Centres personnel and work with the ITIC to pilot it with Australia, Fiji, Samoa, Tonga and Vanuatu, and report progress and lessons learned to ICG/PTWS WG 1, 2 and 3.
- 2. Continue to monitor and coordinate the Tsunami Ready Programme and TEMPP in Fiji, Cook Islands, Samoa, Solomon Islands, Tonga and Vanuatu and review the Tsunami Ready Checklist for schools and communities in PICT.
- 3. Continue to develop the guideline for National Tsunami Warning Centres in responding to local tsunami and report to WG 1, 2 and 3.
- 4. Develop an online survey of warning and mitigation capabilities in the Pacific Island Countries and Territories (Member countries and IOC).

The Task Team Members: Australia, Fiji, France-New Caledonia (Co-Chair), New Zealand, Papua New Guinea, Samoa, Solomon Islands, Tonga (Co-Chair), Vanuatu, ITIC, IOC, PTWC, SPC, SPREP. Co-chairs to be elected by the ICG.

WG-PICT Task Team: Information Sharing Platforms

Interim Co-Chairs: Mr. Anthony Jamelot and Mr. Jonathan Tafiariki

- 1. Propose a WG-PICT regional PacWave24 objective;
- 2. Based on Pacwave22 report, re-evaluate early / anticipatory information to be shared between NTWC and NDMO and which platform would be more adapted for each kind of information.
- 3. WhatsApp Guidelines:
 - Maintain mobile contact in order to keep the PICT PacWave22 group alive;
 - Obtain official mobile numbers of NTWC and NDMO
 - Develop a guideline for messages sent on WhatsApp
- 4. HF-Radio Guidelines:
 - Collect and collate feedback from monthly tests and recommend preliminary guidelines.
 - Membership of the task team is open to any technical communication expert on this platform.
- 5. Email Listerv Guidelines:
 - Develop a guideline for messages shared by email (no acknowledgement, etc)
 - Update and add new e-mail into the Pacwave22 listserv handled by ITIC
- 6. Identify and list new and relevant platform(s) for Information Sharing
 - Other social media (e.g., Signal)
 - Mobile App Broadcast system
 - Dedicated (private) broadcasting information web-page.

The Group to be comprised of representatives from Pacific Island Countries and Territories (PICTs) and ITIC as members, Council of Regional Organizations in the Pacific (CROP) Agencies and WMO Regional Association V (RAV) as observers. Chair and Vice Chair to be elected by the members of the Working Group and endorsed by the ICG/PTWS.

Task Team on PacWave Exercises

Chair: Mr. <u>Laitia Fifita</u> Vice-Chair: Ms. <u>Margarita Martinez</u>

Design and carry out the eleventh Exercise Pacific Wave 2024 with the following characteristics:

- An exercise shall be conducted with the aim to test PTWS Tsunami Service Provider (TSP) arrangements, and Country preparedness arrangements and operational procedures to respond and recover from a destructive tsunami.
- An exercise shall be conducted with the following objectives:
 - 1. Test communications from the PTWS Tsunami Service Providers to Tsunami Warning Focal Points and National Tsunami Warning Centers of Member States.
 - 2. Test national communication and cooperation, and readiness within the country.
 - 3. Test regional communication and cooperation between Member States.
- 2. Prepare and Evaluate Exercise Pacific Wave 2024 (PacWave24), include that it will:
 - Take place in the months of September through to November 2024 to support International Disaster Risk Reduction Day (13 October 2024, Sunday) and World Tsunami Awareness Day (5 November 2024, Tuesday),
 - National exercises conducted within the intersessional period and before September, but not strictly as part of PacWave24, may be reported through the PacWave24 Post-Exercise evaluation survey.
 - Be conducted as a series of regional exercises organized through the PTWS Regional Working Groups where applicable, with support from the PTWS TSPs and ITIC, involving all PTWS countries as part of the regular biennial Pacific Wave exercise conducted since 2006.
 - Be conducted to include one live communications test from the PTWS TSPs to Member States on 5 November 2024, Tuesday at 00:00 UTC.
 - Be conducted to include exercise activities over and above a table-top exercise. Possible exercise variations include:
 - 1. Consider conducting in real time during the daytime working hours with full staffing or simulating minimal staff during night-time or weekend hours.
 - 2. Consider testing country capability to carry out their warning and response responsibilities for the situation where one or more PTWS TSPs is not able to provide guidance in a timely manner.
 - 3. Consider conducting the exercise down to the community level, including where possible an extensive public awareness campaign.
 - 4. Consider conducting as a regional exercise to share national event and alert level information in a timely manner with neighbouring countries in order to better inform tsunami threat decision-making.
 - 5. Consider the Sendai Framework for Disaster Risk Reduction Global Sendai Framework for Disaster Risk Reduction seven global targets and four priorities for action, World Tsunami Awareness Day and/or the UN Decade of Ocean Science for Sustainable Development in designing the exercise.
 - Exercise Pacific Wave 2024 will be announced by Circular Letter from the IOC to Member States before 31 January 2024.
 - The Exercise Pacific Wave 2024 manual will

- 6. Include information on each regional exercise, such as through regional exercise manuals,
- 7. Inform Member States on the availability of exercise products for their region, including instructions to Member States regarding the distribution dates,
- 8. Include instructions to Member States regarding their participation and the evaluation instrument be prepared with content and structure similar to what was prepared for previous Pacific-wide exercises, but considering lessons learned on conducting exercises in a pandemic context, and any need to collect other additional information,
- 9. Include a compilation and summary of good practices for planning, conducting, and evaluating virtual exercise,
- 10. Be distributed by the IOC to Member States before 30 April 2024.
- Participating Member States are requested to complete and submit PacWave24 Exercise Evaluation Survey online by 15 December 2024 to complete (National/Exercise Survey + Live TSP Communications Test evaluation survey).
- Explore more automatic and efficient ways to compile the information, and accordingly implement subject to available resources.
- The Task Teak will define the survey questionnaire.
- The Task Team will compile the post-exercise evaluation survey and prepare the *Summary Report* with a list of recommendations for the PacWave24 exercise according to the following provisional calendar:
 - 11. Announcement of PacWave24 to all Member States before 31 January 2024, in the form of an IOC Circular Letter announcing the exercise period and TSPs live communication test date and time;
 - 12. PacWave24 National/Regional exercise period from 01 September to 31 November 2024;
 - 13. TSPs live communication test, 05 November 2024, 00:00 UTC;
 - 14. Deadline for PacWave24 online survey submission, 15 December 2024;
 - 15. PacWave24 Exercise Draft Summary Report will be shared with Member States 10 days prior to ICG/PTWS-XXXI;
 - 16. PacWave24 Summary Report will be published and posted at www.pacwave.info on 30 June 2025.
- **3.** The Task Team will provide guidance for the conduct of the next Exercise Pacific Wave, tentatively planned for 2026.
- **4.** The Task Team will be composed of members nominated by Member States, regional working groups, SPC, ITIC, and TSPs.
 - Members are Chile, China, Colombia, Fiji, France-French Polynesia, France-New Caledonia, Guatemala, Indonesia, Japan, Republic of Korea, New Zealand, Panama, Solomon Islands, Tonga, USA (ITIC and PTWC), and Vanuatu.

