

Intergovernmental Oceanographic Commission
Reports of Governing and Major Subsidiary Bodies



**Intergovernmental Coordination
Group for the Tsunami Early
Warning and Mitigation System
in the North-Eastern Atlantic,
the Mediterranean and Connected
Seas (ICG/NEAMTWS)**

Nineteenth Session
27–29 November 2024
Paris, France

UNESCO

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UNESCO 2025

IOC/ICG/NEAMTWS-XIX/3
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¹ The Executive Summary is available in English, French, Russian and Spanish.

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Executive Summary

The Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the North-Eastern Atlantic, the Mediterranean and Connected Seas (ICG/NEAMTWS) held its 19th session on 27–29 November 2024, at the UNESCO-IOC Headquarters in Paris, France.

The [19th Session](#) saw strong participation, with 67 attendees, including 5 online. Representatives from 17 Member States took part, including Tunisia and Algeria after a long absence. Additionally, two international organizations —DG ECHO and the Joint Research Center (JRC) of the European Commission— were present.

The ICG/NEAMTWS:

Welcomed the ICG/NEAMTWS officers Mr Alessandro Amato, Italy, as the new ICG/NEAMTWS Chairperson, Mr Amr Hamouda (Egypt) and Mr Ignacio Aguirre Ayerbe (Spain) as vice Chairpersons who were elected in February at the 18th Session on 6–8 February 2024, at the UNESCO-IOC Headquarters in Paris, France.

Recognized the continued awareness-raising efforts nationally on tsunami hazards and preparedness by Member States during the inter-sessional period in line with, and as a contribution, to the World Tsunami Awareness Day, 5 November 2024;

Also welcomed the final [draft evaluation report of the NEAMWave23 Exercise](#) conducted on 6–7 November 2023;

Expressed its thanks to Co-Chairpersons of the Task Team and members on Tsunami Exercise for the preparation of the final draft evaluation report of the exercise;

Further welcomed the organization of several significant meeting events in 2024, including:

- April: "[Coastal Cities and Communities Joining Tsunami Ready](#)" (11 April 2024) and "[Coastal Horizons: Pathways and Actions to Strengthen Resilience to Coastal Hazards](#)" (27 June 2024), held during the IOC Executive Council (EC-57);
- June: [Coastal Horizons: Pathways and Actions to Strengthen Resilience to Coastal Hazards](#), 27 June 2024 at the IOC Executive Council (EC-57);
- October: [A workshop organized by the National Institute of Geophysics and Volcanology \(INGV\) on Stromboli](#), Italy (5–7 October 2024), focused on observations, modeling, hazard assessment, and forecasting. This event, attended by 80 international experts, contributed to advancing understanding of non-seismic tsunami sources and emphasized the need to enhance early warning systems for tsunamis generated by Stromboli volcano and its recommendation to further advance Stromboli volcano tsunami early warning, and interest to publish a White Paper, as well as a UNESCO-IOC Technical Series document in that order;

Acknowledged the participation of several ICG/NEAMTWS members at the [2nd UNESCO-IOC Global Tsunami Symposium](#) "Two Decades After 2004 Indian Ocean Tsunami: Reflection and the Way Forward" that took place in Banda Aceh in November (11–14 November 2024).

Appreciated the launching of two [short documentaries](#) showcasing Stromboli volcano tsunami risk and early warning, as well as Malta distant tsunami risk as a side event at the ICG/NEAMTWS XIX Session with the participation of UNESCO Permanent Delegations on the 28 November 2024;

Noted the [IOC Circular Letter, 3006](#) on cessation of fax transmissions of tsunami information products by Tsunami Service Providers by 31 March 2025;

Also appreciated the increase in number of actions submitted in response to Call for Decade actions N° [7/2024](#) in the NEAM region with reference to Challenge 6 “Increase Community Resilience to Ocean Hazards” of the United Nations Decade of Ocean Science for Sustainable Development (2021–2030);

Further appreciated the newly recognized UNESCO-IOC [Tsunami Ready](#) Communities in Egypt ([Alexandria](#)), France ([Cannes](#)), Greece ([Samos](#)), Italy ([Minturno](#)), Spain ([Chipiona](#)) and Türkiye ([Büyükçekmece](#)) in 2024;

Encouraged other countries, in particular Cyprus (Larnaca), Israel (entire coast), Malta (Marsaxlokk) and Morocco (El Jadida) to finalize their efforts to complete the Tsunami Ready Recognition process and application;

Also encouraged the continued progress made towards establishing UNESCO-IOC Tsunami Ready communities in Italy (Palmi, Marzamemi, Otranto and Stromboli), and in Portugal (Loule);

Reaffirmed the target to have a total of 25 UNESCO-IOC Tsunami Ready Recognized communities in NEAM countries by the end of 2026, thereby contributing to making 100% of tsunami-prone communities being tsunami prepared and resilient by 2030 through the implementation of the UNESCO-IOC Tsunami Ready Programme and other initiatives, as outlined in the Ocean Decade Tsunami Programme;

Noted the official closure of Phase I of the European Union DG-ECHO CoastWAVE project on 30 June 2024 and the external evaluation carried out, which recommends that UNESCO-IOC, for instance, support the twining of “Tsunami Ready Cities” with common characteristics in order to establish strategic partnerships at political and scientific levels and achieve a common goal of knowledge sharing and collaboration;

Also noted the official start of Phase II of the new CoastWAVE Project ([CoastWAVE 2.0](#)) ‘Scaling-Up and Strengthening the Resilience of Coastal Communities in the North-Eastern Atlantic and Mediterranean Regions to the Impact of Tsunamis and Other Sea Level-Related Coastal Hazards’ on 1 July 2024 and its kick-off workshop on 6 November 2024;

Further welcomed the SMART Cables initiatives in particular the Atlantic Smart CAM and the planned deployment of two Ocean Bottom Pressure Sensors by INGV, Italy in the Ionian Sea in 2025;

Agreed to adopt the threat levels as requested by the Task Team on Tsunami Watch Operations, which is reflected in the draft of the new Global Service Definition Document (GSDD);

Decided to establish the new Task Team on Governance and conduct the next NEAMWave exercise in March 2026 (NEAMWave26);

Also recommended to increase the availability of seismic and sea level data in the North of Africa through agreements with Member States and with the institutions in charge of the management of the monitoring networks;

Appreciated the contributions made by DG ECHO under the European Union Civil Protection Mechanism (UPCM) to support the development and improvement of tsunami early warning systems and preparedness in the NEAM region (CoastWAVE projects, ARISTOTLE- amongst

others), and **notes** that these efforts should be considered as a valuable contribution to the Early Warning for All (EW4All) initiative and EU Disaster Resilience Goals;

Welcomed the provisional offer of Italy to host the next session of ICG/NEAMTWS in 2025.

Résumé exécutif

Le Groupe intergouvernemental de coordination du Système d'alerte rapide aux tsunamis et de mitigation dans l'Atlantique du Nord-Est, la Méditerranée et les mers adjacentes (GIC/NEAMTWS) a tenu sa 19^e session du 27 au 29 novembre 2024 au Siège de l'UNESCO (COI) à Paris (France).

La [19^e session](#) a connu une forte participation, avec 67 participants, dont cinq en ligne. En outre, deux organismes internationaux – la Direction générale de la protection civile et des opérations d'aide humanitaire européennes (DG-ECHO) et le Centre commun de recherche (CCR) de la Commission européenne – étaient présents.

Le GIC/NEAMTWS :

Souhaite la bienvenue aux nouveaux membres du Bureau du GIC/NEAMTWS, M. Alessandro Amato (Italie), Président du GIC/NEAMTWS, ainsi que M. Amr Hamouda (Égypte) et M. Ignacio Aguirre Ayerbe (Espagne), Vice-Présidents, qui ont été élus en février à la 18^e session, tenue du 6 au 8 février 2024, au Siège de l'UNESCO (COI) à Paris (France) ;

Prend acte des actions continues de sensibilisation et de préparation aux risques de tsunami menées à l'échelle nationale par les États membres au cours de la période intersessions, parallèlement et à titre de contribution à la Journée mondiale de sensibilisation aux tsunamis, le 5 novembre 2024 ;

Accueille favorablement la version finale du [projet de rapport d'évaluation de l'exercice NEAMWave23](#) mené les 6 et 7 novembre 2023 ;

Remercie les coprésidents et les membres de l'Équipe spéciale sur les exercices d'alerte aux tsunamis d'avoir finalisé le rapport d'évaluation de l'exercice ;

Se félicite de l'organisation de plusieurs réunions importantes en 2024, notamment :

- avril : « [Villes et communautés côtières rejoignant le programme Tsunami Ready](#) » (11 avril 2024) et « Horizons côtiers : voies et actions pour renforcer la résilience face aux risques côtiers » (27 juin 2024), organisées pendant la session du Conseil exécutif de la COI (EC-57) ;
- juin : « [Horizons côtiers : voies et actions pour renforcer la résilience face aux risques côtiers](#) » (27 juin 2024), pendant la session du Conseil exécutif de la COI (EC-57) ;
- octobre : [Atelier sur le Stromboli organisé par l'Institut national de géophysique et de volcanologie \(INGV\)](#), en Italie (5-7 octobre 2024), axé sur les observations, la modélisation, l'évaluation des risques et les prévisions. Cette manifestation, à laquelle ont pris part 80 experts internationaux, a permis de mieux comprendre les tsunamis d'origine non sismique et de souligner la nécessité de renforcer les systèmes d'alerte rapide pour les tsunamis générés par le volcan Stromboli. Il a également été recommandé de publier un livre blanc ainsi qu'un document de la série technique de la COI à cet égard ;

Prend acte de la participation de plusieurs membres du GIC/NEAMTWS au [deuxième Colloque mondial UNESCO-COI sur les tsunamis](#), intitulé « Vingt ans après le tsunami de 2004 dans l'océan Indien : Réflexion et perspectives », qui s'est tenu à Banda Aceh du 11 au 14 novembre 2024 ;

Salue le lancement de deux [courts documentaires](#) présentant le risque de tsunami et les dispositifs d'alerte rapide liés au volcan Stromboli, ainsi que le risque de tsunami en champ

lointain à Malte, en marge de la 19^e session du GIC/NEAMTWS et avec la participation de plusieurs délégations permanentes de l'UNESCO, le 28 novembre 2024 ;

Prend note de la [Lettre circulaire de la COI n° 3006](#) relative à la cessation des transmissions par télécopie des produits d'information sur les tsunamis par les prestataires régionaux de services relatifs aux tsunamis d'ici au 31 mars 2025 ;

Se félicite de l'augmentation du nombre d'actions soumises en réponse à l'Appel à actions de la Décennie [n° 7/2024](#) dans la région de l'Atlantique du Nord-Est, de la Méditerranée et des mers adjacentes (NEAM) en ce qui concerne le défi 6, « Accroître la résilience des communautés face aux risques océaniques », de la Décennie des Nations Unies pour les sciences océaniques au service du développement durable (2021-2030) ;

Salue les nouvelles communautés ayant reçu la certification [Tsunami Ready](#) de la COI en Égypte ([Alexandrie](#)), en France ([Cannes](#)), en Grèce ([Samos](#)), en Italie ([Minturno](#)), en Espagne ([Chipiona](#)) et en Türkiye ([Büyükçekmece](#)) en 2024 ;

Encourage d'autres pays, en particulier Chypre (Larnaca), Israël (toute la côte), Malte (Marsaxlokk) et le Maroc (El Jadida) à finaliser leurs efforts pour mener à bien le processus de candidature et de certification Tsunami Ready ;

Encourage également la poursuite des progrès accomplis en vue de l'établissement de communautés certifiées Tsunami Ready par l'UNESCO-COI en Italie (Palmi, Marzamemi, Otranto et Stromboli) et au Portugal (Loule) ;

Réaffirme l'objectif de compter un total de 25 communautés certifiées Tsunami Ready par l'UNESCO-COI dans les pays de la région NEAM d'ici la fin de 2026, contribuant ainsi à ce que 100 % des communautés exposées à un risque de tsunami soient préparées et résilientes d'ici à 2030 grâce à la mise en œuvre du programme Tsunami Ready de l'UNESCO-COI et d'autres initiatives, comme indiqué dans le Programme relatif aux tsunamis de la Décennie de l'Océan ;

Prend note également de la clôture officielle de la phase I du projet CoastWAVE de la DG-ECHO de l'Union européenne le 30 juin 2024 ainsi que de l'évaluation externe réalisée, qui recommande que l'UNESCO-COI, par exemple, soutienne le jumelage de « villes certifiées Tsunami Ready » ayant des caractéristiques communes afin d'établir des partenariats stratégiques sur les plans politique et scientifique et d'atteindre un objectif commun de partage des connaissances et de collaboration ;

Prend note en outre du début officiel de la phase II du projet CoastWAVE ([CoastWAVE 2.0](#)), intitulée « Étendre et renforcer la résilience des communautés côtières de l'Atlantique du Nord-Est et de la mer Méditerranée face à l'impact des tsunamis et autres risques côtiers liés au niveau de la mer », le 1^{er} juillet 2024, ainsi que de son atelier de lancement qui s'est tenu le 6 novembre 2024 ;

Se félicite également des initiatives SMART Cables, en particulier de l'Atlantic Smart CAM et du déploiement prévu de deux capteurs de pression en eaux profondes par l'INGV (Italie) dans la mer Ionienne en 2025 ;

Adopte les niveaux de risque recommandés par l'équipe spéciale inter-GIC sur les opérations de veille aux tsunamis, tels que définis dans le projet de nouveau document intitulé « *Tsunami watch operations: global service definition document* » (GSDD) ;

Décide d'établir une nouvelle équipe de travail sur la gouvernance et de réaliser le prochain exercice NEAMWave en mars 2026 (NEAMWave26) ;

Recommande d'accroître la disponibilité des données sismiques et des données relatives au niveau de la mer dans le nord de l'Afrique grâce à des accords avec les États membres et avec les institutions chargées de la gestion des réseaux de surveillance ;

Salue les contributions apportées par la DG-ECHO, dans le cadre du mécanisme de protection civile de l'Union européenne (UPCM), à l'appui du développement et de l'amélioration des systèmes d'alerte rapide et de préparation aux tsunamis dans la région NEAM (projets CoastWAVE, ARISTOTLE, entre autres), et **note** que ces efforts devraient être considérés comme une contribution précieuse à l'initiative « Alertes précoces pour tous » (EW4ALL) et aux objectifs de l'Union européenne en matière de résilience face aux catastrophes ;

Se félicite de l'offre provisoire de l'Italie d'accueillir la prochaine session du GIC/NEAMTWS en 2025.

Resumen

El Grupo Intergubernamental de Coordinación del Sistema de Alerta Temprana contra los Tsunamis y Atenuación de sus Efectos en el Atlántico Nororiental y el Mediterráneo y Mares Adyacentes (ICG/NEAMTWS) celebró su 19ª reunión del 27 al 29 de noviembre de 2024 en la Sede de la UNESCO-COI, en París (Francia).

La [19ª reunión](#) registró una nutrida participación, al contar con 67 asistentes, 5 de ellos en línea. El encuentro congregó a representantes de 17 Estados Miembros, entre ellos Túnez y Argelia tras una larga ausencia. Además, estuvieron presentes dos organizaciones internacionales: la Dirección General de Protección Civil y Operaciones de Ayuda Humanitaria Europeas (DG ECHO) y el Centro Común de Investigación (CCI) de la Comisión Europea.

El ICG/NEAMTWS:

Dio la bienvenida a los nuevos miembros de la Mesa del ICG/NEAMTWS, Sr. Alessandro Amato (Italia), Presidente del ICG/NEAMTWS, Sr. Amr Hamouda (Egipto) y Sr. Ignacio Aguirre Ayerbe (España), vicepresidentes, que fueron elegidos en febrero en la 18ª reunión, celebrada del 6 al 8 de febrero de 2024 en la Sede de la UNESCO-COI, en París (Francia);

Reconoció los continuos esfuerzos de sensibilización y preparación en relación con los peligros de tsunami desplegados por los Estados Miembros a escala nacional durante el periodo entre reuniones con motivo del Día Mundial de Concienciación sobre los Tsunamis, el 5 de noviembre de 2024, y como contribución a él;

Acogió con satisfacción la versión final del [proyecto de informe de evaluación del simulacro NEAMWave23](#) realizado los días 6 y 7 de noviembre de 2023;

Expresó su agradecimiento a los copresidentes y los miembros del Equipo de Trabajo sobre los simulacros de tsunami por haber preparado la versión final del proyecto de informe de evaluación del simulacro;

Acogió con satisfacción también la organización de varias reuniones importantes en 2024, a saber:

- abril: [“Ciudades y comunidades costeras que se unen al programa Tsunami Ready”](#) (11 de abril de 2024) y [“Horizontes costeros: vías y acciones para reforzar la resiliencia ante las amenazas costeras”](#) (27 de junio de 2024), organizadas durante la reunión del Consejo Ejecutivo de la COI (EC-57);
- junio: [“Horizontes costeros: vías y acciones para reforzar la resiliencia ante las amenazas costeras”](#), 27 de junio de 2024, durante la reunión del Consejo Ejecutivo de la COI (EC-57);
- octubre: [Taller sobre el Stromboli organizado por el Instituto Nacional de Geofísica y Vulcanología \(INGV\)](#) en Italia (5-7 de octubre de 2024), centrado en las observaciones, la modelización, la evaluación de los peligros y las previsiones. Este evento, al que asistieron 80 expertos internacionales, ayudó a comprender mejor los tsunamis de origen no sísmico y puso de relieve la necesidad de mejorar los sistemas de alerta temprana contra los tsunamis generados por el volcán Stromboli. Además, se recomendó seguir reforzando la alerta temprana contra los tsunamis para el volcán Stromboli y publicar un libro blanco, así como un documento de la serie técnica de la COI a este respecto;

Agradeció la participación de varios miembros del ICG/NEAMTWS en el [segundo Simposio Mundial UNESCO-COI sobre los Tsunamis](#), titulado “Dos décadas después del tsunami del

Océano Índico de 2004: reflexión y camino a seguir”, que tuvo lugar en Banda Aceh del 11 al 14 de noviembre de 2024.

Apreció la presentación de dos [documentales cortos](#) en los que se muestra el riesgo de tsunami y los dispositivos de alerta temprana vinculados al volcán Stromboli, así como el riesgo de tsunami de campo lejano en Malta, en el marco de la 19ª reunión del ICG/NEAMTWS con la participación de varias delegaciones permanentes de la UNESCO, el 28 de noviembre de 2024;

Tomó nota de la [circular de la COI nº 3006](#) relativa al cese de las transmisiones por fax de productos de información sobre tsunamis por parte de los proveedores de servicios sobre tsunamis a partir del 31 de marzo de 2025;

Se congratuló del aumento del número de acciones presentadas en respuesta a la Convocatoria de Acciones del Decenio N° [7/2024](#) en la región del Atlántico Nororiental y el Mediterráneo y Mares Adyacentes (NEAM) en lo que respecta al desafío 6, “Aumentar la resiliencia de las comunidades ante los peligros oceánicos”, del Decenio de las Naciones Unidas de las Ciencias Oceánicas para el Desarrollo Sostenible (2021-2030);

Felicitó a las nuevas comunidades que habían obtenido el reconocimiento [Tsunami Ready](#) de la COI en Egipto ([Alejandría](#)), Francia ([Cannes](#)), Grecia ([Samos](#)), Italia ([Minturno](#)), España ([Chipiona](#)) y Türkiye ([Büyükçekmece](#)) en 2024;

Alentó a otros países, en particular a Chipre (Larnaca), Israel (toda la costa), Malta (Marsaxlokk) y Marruecos (El Jadida), a finalizar sus esfuerzos para concluir el proceso de solicitud y obtención del reconocimiento Tsunami Ready;

Alentó también a seguir realizando progresos en la creación de comunidades Tsunami Ready de la UNESCO-COI en Italia (Palmi, Marzamemi, Otranto y Stromboli) y Portugal (Loule);

Reafirmó el objetivo de contar con un total de 25 comunidades acreditadas Tsunami Ready de la UNESCO-COI en los países de la región NEAM a finales de 2026, contribuyendo así a que el 100 % de las comunidades propensas a los tsunamis estén preparadas y sean resilientes de aquí a 2030 mediante la ejecución del Programa Tsunami Ready de la UNESCO-COI y otras iniciativas, como se indica en el Programa de Tsunamis del Decenio del Océano;

Tomó nota de la clausura oficial de la fase I del proyecto CoastWAVE de la DG-ECHO de la Unión Europea el 30 de junio de 2024 y de la evaluación externa llevada a cabo, en la que se recomienda que la UNESCO-COI, por ejemplo, apoye el hermanamiento de “ciudades acreditadas Tsunami Ready” con características comunes a fin de forjar alianzas estratégicas en los ámbitos político y científico y de alcanzar un objetivo común de intercambio de conocimientos y colaboración;

Tomó nota también del inicio oficial de la fase II del nuevo proyecto CoastWAVE ([CoastWAVE 2.0](#)), “Aumento y fortalecimiento de la resiliencia de las comunidades costeras en la región del Atlántico Nororiental y el Mediterráneo ante el impacto de los tsunamis y otros peligros costeros relacionados con el nivel del mar”, el 1 de julio de 2024, y de su taller inaugural, que tuvo lugar el 6 de noviembre de 2024;

Acogió con satisfacción además las iniciativas SMART Cables, en particular Atlantic Smart CAM y la instalación prevista por el INGV (Italia) de dos sensores de presión en aguas profundas en el mar Jónico en 2025;

Convino en aprobar los niveles de amenaza solicitados por el Equipo de Trabajo sobre Operaciones de Vigilancia de los Tsunamis, que se definen en el proyecto de nuevo documento titulado "Tsunami watch operations: global service definition document" (GSDD);

Decidió crear el nuevo Equipo de Trabajo sobre Gobernanza y llevar a cabo el próximo simulacro NEAMWave en marzo de 2026 (NEAMWave26);

Recomendó que se aumentara la disponibilidad de datos sísmicos y sobre el nivel del mar en África Septentrional mediante acuerdos con los Estados Miembros y con las instituciones encargadas de la gestión de las redes de vigilancia;

Apreció también las contribuciones realizadas por la DG ECHO en el marco del Mecanismo de Protección Civil de la Unión Europea (UPCM) para favorecer el desarrollo y la mejora de los sistemas de alerta temprana y la preparación contra los tsunamis en la región NEAM (proyectos CoastWAVE, ARISTOTLE, entre otros), y **observó** que esos esfuerzos debían considerarse una valiosa contribución a la iniciativa "Alerta temprana para todos" (EW4All) y a los objetivos de la UE en materia de resiliencia frente a los desastres;

Acogió con satisfacción la oferta provisional de Italia de acoger la próxima reunión del ICG/NEAMTWS en 2025.

Рабочее резюме

Межправительственная координационная группа по системе раннего предупреждения о цунами и смягчения их последствий в Северо-Восточной Атлантике, Средиземном и прилегающих морях (МКГ/СПЦСВАСМ) провела свою 19-ю сессию 27-29 ноября 2024 г. в Штаб-квартире ЮНЕСКО в Париже, Франция.

В общей сложности в работе [19-й сессии](#) приняли участие 67 человек, пятеро из которых участвовали в онлайн-формате. В сессии приняли участие представители 17 государств-членов, в том числе (после долгого отсутствия) представители Туниса и Алжира. Кроме того, на сессии присутствовали представители двух международных структур – Генерального директората по вопросам защиты гражданского населения и гуманитарной помощи (DG ECHO) и Объединенного исследовательского центра (ОИЦ) Европейской комиссии.

МКГ/СПЦСВАСМ:

приветствовала г-на Алессандро Амато (Италия), нового председателя МКГ/СПЦСВАСМ, и двух его заместителей – г-на Амра Хамуду (Египет) и г-на Игнасио Агирре Айербе (Испания), избранных в феврале 2024 г. в ходе 18-й сессии МКГ/СПЦСВАСМ, которая прошла 6-8 февраля 2024 г. в Штаб-квартире МОК/ЮНЕСКО в Париже, Франция;

отметила важность продолживших предприниматься государствами-членами в межсессионный период усилий по повышению степени осведомленности населения о потенциальной опасности цунами и по обеспечению готовности к ним, по случаю проведения 5 ноября 2024 г. Всемирного дня распространения информации о проблеме цунами;

с удовлетворением приняла к сведению окончательный вариант [проекта отчета о проведении 6-7 ноября 2023 г. учений по проверке готовности к цунами «СВАСМ волна-23»](#);

выразила признательность сопредседателям и членам целевой группы по цунами за подготовку окончательного варианта отчета о проведении учений;

с удовлетворением отметила организацию в 2024 г. нескольких значимых мероприятий, включая:

- Апрель: совещание на тему [«Участие прибрежных городов и общин в программе сертификации готовности к цунами»](#) (11 апреля 2024 г.);
- Июнь: совещание экспертов [«Прибрежные горизонты: стратегии действий по повышению устойчивости к потенциальным опасным явлениям в прибрежной зоне»](#), организованное 27 июня 2024 г. на полях 57-й сессии Исполнительного совета МОК;
- Октябрь: [семинар-практикум для специалистов, организованный Национальным институтом геофизики и вулканологии на о. Стромболи, Италия, 5-7 октября 2024 г.](#) и посвященный научным наблюдениям, моделированию и составлению прогнозов и оценке факторов риска. Данное мероприятие, в котором приняли участие около 80 специалистов из разных стран, способствовало углублению понимания сейсмических источников происхождения цунами и необходимости модернизации системы раннего предупреждения о цунами, вызываемых деятельностью вулкана Стромболи, а также позволило сформулировать соответствующие рекомендации.

Участники выразили заинтересованность в публикации экспертного доклада по этой теме и технического доклада МОК;

с удовлетворением отметила участие нескольких членов МКГ/СПЦСВАСМ во [втором Всемирном симпозиуме МОК/ЮНЕСКО по цунами](#) на тему «Два десятилетия спустя после цунами 2004 года в Индийском океане: осмысление произошедшего и предлагаемые дальнейшие действия», который состоялся в Банда-Ачехе, Индонезия, 11-14 ноября 2024 г.;

дала высокую оценку организованной 28 ноября 2024 г. в качестве параллельного мероприятия 19-й сессии МКГ/СПЦСВАСМ с участием постоянных представительств при ЮНЕСКО презентации [двух короткометражных документальных фильмов](#), рассказывающих о потенциальных рисках цунами в результате деятельности вулкана Стромболи и о работе системы раннего предупреждения, а также об угрозе телецунами на Мальте;

приняла к сведению информацию, содержащуюся в [циркулярном письме МОК № 3006](#), о прекращении к 31 марта 2025 г. факсимильной передачи поставщиками данных слежения за цунами информационных предупреждений о цунами;

выразила удовлетворение увеличением в рамках [седьмого запроса предложений \(2024 г.\)](#) числа инициатив, касающихся осуществления в регионе СВАСМ деятельности, направленной на реализацию задачи 6 Десятилетия ООН, посвященного науке об океане в интересах устойчивого развития (2021-2030 гг.) («Повышение устойчивости сообществ к воздействию опасных природных явлений в океане»);

отметила важность получения в 2024 г. сертификатов МОК/ЮНЕСКО «[К цунами готов](#)» территориальными общинами Египта ([Александрия](#)), Франции ([Канны](#)), Греции ([Самос](#)), Италии ([Минтурно](#)), Испании ([Чипиона](#)) и Турции ([Бююкчекмедже](#));

призвала другие страны, в частности Кипр (Ларнака), Израиль (все прибрежные поселения), Мальту (Марсашлокк) и Марокко (Эль-Джадида), принять меры, касающиеся завершения процедуры признания готовности к цунами и представления соответствующих заявок;

призвала также территориальные образования Италии (Пальми, Марзамеми, Отранто и Стромболи) и Португалии (Луле) продолжить усилия по программе сертификации готовности к цунами МОК/ЮНЕСКО;

подтвердила цель обеспечить к концу 2026 г. сертификацию готовности к цунами в общей сложности 25 территориальных образований в регионе СВАСМ, с тем чтобы к 2030 г. 100% территорий, подверженных соответствующему риску, были готовы противостоять цунами благодаря Программе МОК/ЮНЕСКО по обеспечению готовности к цунами и другим инициативам, предусмотренным в Программе ООН по цунами в рамках Десятилетия науки об океане;

приняла к сведению официальное завершение 30 июня 2024 г. первой фазы проекта «Прибрежная волна», осуществляемого Европейским союзом (DG ECHO), а также результаты независимой оценки, по итогам проведения которой МОК/ЮНЕСКО было рекомендовано, в частности, поддержать идею объединения городов со схожими характеристиками в сеть «Города, готовые к цунами» в целях налаживания формального партнерского взаимодействия на политическом и научном уровнях и достижения общей цели обмена научными знаниями, а также развития сотрудничества;

приняла к сведению также официальное начало реализации с 1 июля 2024 г. второй фазы проекта «Прибрежная волна» («[Прибрежная волна 2.0](#)») «[Масштабирование](#)

проекта и повышение потенциала устойчивости прибрежных населенных пунктов в регионе Северо-Восточной Атлантики и Средиземноморья к негативным последствиям цунами и других опасных природных явлений, связанных с изменением уровня моря» и проведение по этому случаю 6 ноября 2024 г. стартового рабочего совещания;

выразила удовлетворение в связи с осуществлением инициатив в рамках проекта «Интеллектуальные кабели», в частности в связи с созданием платформы «Atlantic Smart CAM» и планируемым размещением в 2025 г. компанией INGV, Италия, в Ионическом море двух глубинных датчиков давления;

постановила утвердить уровни угрозы в соответствии с просьбой целевой группы по наблюдению за цунами, что нашло отражение в проекте нового документа об универсальном определении услуг (ДУОУ);

приняла решение об учреждении новой целевой группы по организации управления и о проведении следующих учений по проверке готовности к цунами в регионе СВАСМ («СВАСМ волна-26») в марте 2026 г.;

рекомендовала повысить доступность сейсмических данных и данных об уровне моря в районе Северной Африки посредством заключения соглашений с государствами-членами и учреждениями, отвечающими за управление сетями наблюдений;

высоко оценила вклад DG ECHO в рамках Механизма Европейского союза по защите гражданского населения, связанный с поддержкой развития и совершенствования систем раннего предупреждения о цунами и обеспечения готовности к ним в регионе СВАСМ (проекты «Прибрежная волна», ARISTOTLE и др.), и **подчеркнула**, что эти усилия следует рассматривать как ценный вклад в осуществление инициативы «Заблаговременные предупреждения для всех» (инициатива ЗПДВ) и реализацию целей Европейского союза, касающихся обеспечения устойчивости к рискам стихийных бедствий;

с удовлетворением приняла к сведению предварительное предложение Италии провести у себя следующую сессию МКГ/СПЦСВАСМ в 2025 г.

1. OPENING THE SESSION

1. The Nineteenth session of the Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the North-Eastern Atlantic, the Mediterranean and Connected Seas (ICG/NEAMTWS-XIX) was opened on Wednesday 27 November 2024 at 10:00 CET by Mr Alessandro Amato, new Chairperson of ICG/NEAMTWS. The new vice-chairpersons, Mr Ignacio Aguirre Ayerbe, and Prof Amr Hamouda welcomed the participants.

2. The Head of the Tsunami Section, Mr Bernardo Aliaga, opened the session with a [presentation](#) highlighting key tsunami events of 2024. These included exhibition side events in collaboration with UNDRR and UNDP titled 'I Survived a Tsunami,' as well as the Second UNESCO-IOC Global Tsunami Symposium held from 11–14 November 2024 in Banda Aceh, Indonesia. He also outlined plans for the inaugural Ocean Decade Tsunami Programme Conference scheduled for 2025.

3. The Head of Tsunami Section, Mr Bernardo Aliaga provided a presentation to open the session highlighting key tsunami events in 2024 including the exhibition side events with UNDRR, UNDP on “I survived a tsunami” and the second UNESCO-IOC Global Tsunami Symposium, 11–14 November 2024, Banda Aceh, Indonesia and planned first Ocean Decade Tsunami Programme conference in 2025.

4. The session continued with the organization of proceedings and the adoption of the agenda without changes. It was agreed to work overtime on Day 1 to compensate for time lost to sessional committees due to the official launch of two video documentaries in the UNESCO Cinema Room on Thursday, 28 November. In the absence of volunteers, the Chairperson requested the Secretariat to serve as the rapporteur for the ICG/NEAMTWS

5. Ms Anna von Gyldenfeldt, Head of the German Delegation, and Ms Elena Daskalaki, member of the Greek Delegation, agreed to prepare the ICG/NEAMTWS draft Decisions and Recommendations. Mr Denis Chang Seng, Technical Secretary of ICG/NEAMTWS informed the session to propose the establishment of sessional committees by end of morning of Thursday 28 November. The session then proceeded with its deliberations and presentations.

2. REPORTS ON ICG/NEAMTWS INTERSESSIONAL ACTIVITIES

[Report by the Chairperson of ICG/NEAMTWS](#), Alessandro Amato, INGV, Italy.

[Report by the IOC Secretariat](#), Denis Chang Seng, Programme Specialist, Technical Secretary of ICG/NEAMTWS, Tsunami Resilience Section.

Report by other ICGs chairpersons:

- [Pacific Tsunami Warning System](#), NISHIMAE Yuji.
- [Caribbean Tsunami Warning System](#), Marie- Noëlle Raveau.
- [Indian Ocean Tsunami Warning and Mitigation System](#), E. Pattabhi Rama Rao.

Reports by other Intergovernmental Organizations:

- [WebCritech of the Joint Research Centre of the European Commission](#), Daniele Gallian, JRC.
- [EU Civil Protection Mechanism & Early Warnings For All Initiative](#), Aurian Loupot, DG ECHO.

Reports by the Working Groups and Task Teams:

- [Working Group 1 – Hazard Assessment and Modelling](#) – Co-Chairs: Jorge Macías (University of Malaga, Spain) and Audrey Gailler (Commissariat à l’Energie Atomique et aux Énergies Alternatives, France). See [recommendations of Working Group 1](#).
- [Working Group 2 and 3 – Seismic, Geophysical and Sea Level Measurements and Sea Level Data Collection and Exchange, Including Offshore Tsunami Detection and Instruments](#) – Co-Chairs: Anna von Gyldenfeldt (Federal Maritime and Hydrographic Agency, Germany) and Didem Cambaz (Bogazici University Kandilli Observatory and Earthquake Research Institute, Türkiye).
- [Working Group 4 – Public Awareness, Preparedness and Mitigation](#) – Chair: Cecilia Valbonesi (Università Degli Studi di Firenze, Italy) and Raluca Partheniu (National Institute for Earth Physics, Romania). See [recommendations of Working Group 4](#).
- [Task Team on Tsunami Exercises](#) – Co-Chairs: Ceren Ozer Sözdinler (Gebze Technical University, Türkiye) and Marinos Charalampakis (Institute of Geodynamics, National Observatory of Athens, Greece). See [recommendations of TT Tsunami Exercises](#).
- [Task Team on Operations](#) – Co-Chairs: Alessio Piatanesi (Istituto Nazionale di Geofisica e Vulcanologia, Italy) and Fernando Carrilho (Instituto Português do Mar e da Atmosfera, Portugal). See [recommendations of TT Operations/Documentation](#).
- - Co-Chairs: Stefano Lorito (Istituto Nazionale di Geofisica e Vulcanologia, Italy) and Nikos Kalligeris (National Observatory of Athens, Greece)
- [Task Team on Tsunami Ready](#) – Co-Chairs: Maria Ana Baptista (Instituto Superior de Engenharia de Lisboa, Instituto Politécnico de Lisboa, Portugal) and Elena Daskalaki (National Observatory of Athens, Greece). See [recommendations of TT TTR](#).
- [Task Team on Non-Seismic Tsunami Sources](#) – Co-chairs: Rachid Omira (Instituto Português do Mar e da Atmosfera, Portugal) and Fabrizio Romano (Istituto Nazionale di Geofisica e Vulcanologia Roma, Italy) were appointed as the co-chairs for the newly established Task Team.

3. IMPLEMENTATION

[Report on CoastWAVE Project](#), Derya Venin, Project Coordinator, Tsunami Resilience Section.

Reports from Tsunami Service Providers (TSPs), National Tsunami Warning Centres and Organizations

Tsunami Service Providers (TSPs)

- [CENALT, France](#)
- [INGV, Italy](#)
- [IPMA, Portugal](#)
- [KOERI, Türkiye](#)
- [NOA, Greece](#)

National Tsunami Warning Centres and Organizations

- [IGN, Spain](#)
- [Marine Hazards Mitigation Center \(MHMC\), NIOF, Egypt](#)
- [NEIP, Romania](#)

- [National Oceanography Centre, UK](#)
- [Norwegian Directorate for Civil Protection, Norway](#)
- [Reports on other major Projects Related to NEAMTWS \(EU\)](#), EPOS, GeoInquire, GTM, NEAM-COMMITMENT: NEAM Collaboration for improved tsunami risk mitigation and management, Dr Stefano Lorito, INGV, Italy.
- [Tsunami Ready Programme Implementation](#), Elene Daskalaki, Co-chair of TT on Tsunami Ready.
- [Report on NEAMWave23 Exercise, Co-chair on Tsunami Exercise](#), Ceren Ozer Sözdinler (Gebze Technical University, Türkiye) and Marinos Charalampakis (Institute of Geodynamics, National Observatory of Athens, Greece).
- [Reports on World Tsunami Awareness Day \(WTAD\)](#), Partheniu Raluca (National Institute for Earth Physics, Romania) and Cecilia Valbonesi (UnitelmaSapienza University of Rome and for the Istituto Nazionale di Geofisica e Vulcanologia in Rome, Italy).

4. POLICY MATTERS

- [Reports on Ocean Decade, Ocean Decade Tsunami Programme Scientific Committee and ODTP Related Submitted Actions \(Call 7\)](#) and [Early Warning for All and DRR Process](#), Programme Specialist, Technical Secretary of ICG/NEAMTWS, Tsunami Resilience Section.
- [Report on the Second UNESCO-IOC Global Tsunami Symposium, Banda Aceh, November 11–14, 2024](#), Alessandro Amato, Chairperson of ICG/NEAMTWS.
- [Maritime Products](#), Helene Hebert, CENALT.
- [Report on of the Steering Committee Meeting on Governance and Reorganization](#), Ignacio Aguirre Ayerbe, New Task Team Co-Chair on Governance.
- [Summary Report of the Report of the Seventeenth Meeting of the Working Group on Tsunamis and Other Hazards related to Sea Level Warning and Mitigation Systems \(TOWS-WG-XVII\), 22–23 February 2024, Sendai, Japan.](#)

5. DATE AND PLACE FOR ICG/NEAMTWS-XX

6. The ICG/NEAMTWS-XIX welcomed the provisional offer of Italy to host the ICG/NEAMTWS-XX session in 2025.

6. DECISIONS AND RECOMMENDATIONS

7. The Decisions and Recommendations of the ICG/NEAMTWS XIX session are included in Annex I.

7. ANY OTHER BUSINESS

8. No other business was discussed.

8. CLOSURE

9. The meeting was closed on Friday, 29 November at 17:30 CET.

ANNEX I

DECISIONS AND RECOMMENDATIONS

Paris, France, 27–29 November 2024

Decision ICG/NEAMTWS-XIX.1

The Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the North-Eastern Atlantic, the Mediterranean and Connected Seas (ICG/NEAMTWS),

Having met in Paris, France for its 19th Session on 27–29 November 2024,

Having reviewed the progress made in the implementation of the NEAMTWS,

Thanks the Chairpersons of the Intergovernmental Coordination Group for the Tsunami and other Coastal Hazards Warning System for the Caribbean and Adjacent Regions, the Indian Ocean and the Pacific Tsunami Warning System for exchanging and sharing recent developments in the Caribbean, Indian Ocean and Pacific and **agrees** to continue exchanging information between the ICGs as appropriate;

Appreciates the participation of the ICG/NEAMTWS chairperson in other ICGs;

Recognizes the continued awareness-raising efforts nationally on tsunami hazards and preparedness by Member States during the inter-sessional period in line with, and as a contribution, to the World Tsunami Awareness Day, 5 November 2024;

Welcomes the final draft evaluation report of the NEAMWave23 Exercise conducted on 6-7 November 2023;

Expresses its thanks to Co-Chairpersons of the Task Team and members on Tsunami Exercise for the preparation of the final draft evaluation report of the exercise;

Appreciates the organization of the side events on [Coastal Cities and Communities Joining Tsunami Ready](#), 11th April 2024, and [Coastal Horizons: Pathways and Actions to Strengthen Resilience to Coastal Hazards](#), 27 June 2024 at the IOC Executive Council (EC-57);

Also appreciates the organization of the [international workshop](#) organized by the National Institute of Geophysics and Volcanology (INGV), Italy on *Stromboli: Observations, Modeling, Hazard Assessment, and Forecasting* with the participation of eighty international experts from 5-7 October 2024 as a contribution to the topic on non-seismic tsunami sources;

Welcomes the recommendations to further advance Stromboli volcano tsunami early warning, and interest to publish a White Paper, as well as a UNESCO-IOC Technical Series document in that order;

Further appreciates the organization and participation of ICG/NEAMTWS and its members in several meetings since the ICG/NEAMTWS XVIII Session, 5-7 February 2024 in particular:

- [2nd UNESCO-IOC Global Tsunami Symposium](#) “Two Decades After 2004 Indian Ocean Tsunami: Reflection and the Way Forward”, Banda Aceh, 11-14 November 2024;

- The meetings of the Tsunami Service Providers in Athens, Greece, on 6-7 June 2024, and in Rome, Italy, on 30 September – 1 October 2024;
- [Official launching meeting of the new CoastWAVE 2.0 Project](#), 6th November 2024 (online);
- The meeting of the Tsunami Service Provider Meetings, Athens, Greece and Rome, Italy, 30th September 2024;
- Participation of Technical Secretary in the [IODE-GOOS Data Management and Sharing Workshop](#) with the purpose to establish optimized collaboration between IODE and GOOS, and to develop an integrated view of the data landscape and lay the ground for the development of an integrated, efficient, future facing, and FAIR data landscape between GOOS and IODE and across GOOS OCG, BioEco, BGC data and tsunami;

Notes the efforts of the Technical Secretary in enhancing the monitoring and tracking tool of the Working Groups' (WGs) and Task Teams' (TTs) work plans;

Also notes the Tsunami Resilience Section coordination efforts to engage in the [Early Warning For All Stakeholder Forum](#), 2-3 June 2025 and [Eighth Global Platform for Disaster Risk Reduction \(GP2025\)](#), 4-6 June 2025, Geneva;

Appreciates the launching of two short documentaries showcasing Stromboli volcano tsunami risk and early warning, as well as Malta distant tsunami risk as a side event at the ICG/NEAMTWS XIX Session with the participation of UNESCO Permanent Delegations on the 28 November 2024;

Further notes the advice of the TT on TR to the ICG to establish the role of the National Tsunami Ready Focal Point (NTRFP). This will be further discussed during the next SC meeting;

Welcomes the update of ICG/NEAMTWS Working Groups and Task Teams members as per [IOC Circular Letter, 2997](#) request;

Notes the progress made by the Task Team on Documentation on preparing the new Tsunami Operational User Guide (OUG);

Takes note of the Decisions and Recommendations of the Working Group on Tsunamis and Other Hazards Related to Sea-Level Warning and Mitigation Systems ([TOWS-WG XVII](#)) and its Task Team Seventeenth Meeting in Sendai, Japan, 19-23 February 2024; hosted at the [International Research Institute of Disaster Science \(IRIDeS\)](#), Tohoku University;

Also notes the [IOC Circular Letter, 3006](#) on cessation of fax transmissions of tsunami information products by Tsunami Service Providers by 31 March 2025;

Also appreciates the increase in number of actions submitted (Ocean Decade Call 7) in the NEAM region to be endorsed on Ocean Decade with reference to Challenge 6 “Increase Community Resilience to Ocean Hazards”;

Further appreciates the newly recognized UNESCO-IOC Tsunami Ready Communities in Egypt ([Alexandria](#)), France ([Cannes](#)), Greece ([Samos](#)), Italy ([Minturno](#)), Spain ([Chipiona](#)) and Türkiye ([Büyükçekmece](#)) in 2024;

Encourages other countries, in particular Cyprus (Larnaca), Israel (entire coast), Malta (Marsaxlokk) and Morocco (El Jadida) to finalize their efforts to complete the TRR process and application;

Also encourages the continued progress made towards establishing UNESCO-IOC Tsunami Ready communities ongoing communities in Italy (Palmi, Marzamemi, Otranto and Stromboli), and in Portugal (Loule);

Reaffirms the target to have a total of 25 UNESCO-IOC Tsunami Ready Recognized communities in NEAM countries by the end of 2026, further contributing to making 100% of communities at risk of tsunami prepared for and resilient to tsunami by 2030 through the implementation of the UNESCO-IOC Tsunami Ready Programme and other initiatives, as stated by the Ocean Decade Tsunami Programme;

Welcomes the initiative to prepare a new Tsunami Ready Tool kit prepared by TICs to assist Member States in implementing the Tsunami Ready Recognition Programme as per TOWS Task Team on Disaster Management and Preparedness' Decisions and Recommendations;

Also welcomes the OTGA Tsunami Awareness and Tsunami Ready courses by the ITIC and IOTIC as a key contribution to building capacity for implementation of the Tsunami Ready Recognition Programme globally;

Notes the official closure of the European Union DG-ECHO CoastWAVE Project Phase I on 30 June 2024 and external evaluation conducted;

Also notes the external evaluation completed for CoastWAVE Project Phase I and requests the ICG Secretariat to share the document with the ICG/NEAMTWS MS;'

Further notes its recommendations to UNESCO:

- to support the twining of "Tsunami Ready Cities" with shared characteristics to establish strategic partnerships at the policy and scientific levels and achieve a common goal of knowledge sharing and collaboration.
- should facilitate pairing of partnering institutions to conduct research collaboration, share and analyze scientific data, and conduct tours to understudy other countries with advanced observatory systems and models. Currently, there is no platform for countries, cities, and municipalities to share their experiences

Notes the official start of the new CoastWAVE Project Phase II (CoastWAVE 2.0) '*Scaling-Up and Strengthening the Resilience of Coastal Communities in the North-Eastern Atlantic and Mediterranean Regions to the Impact of Tsunamis and Other Sea Level-Related Coastal Hazards*' on 1 July 2024 and its kick-off workshop on 6 November 2024;

Encourages Member States through Tsunami National Contacts (TNCs) and Tsunami Warning Focal Points (TWFPs) to support and foster the implementation of the UNESCO-IOC Tsunami Ready Recognition Programme (TRRP) and to submit a potential list of communities at tsunami risk to join the UNESCO-IOC TRRP, and to initiate the recognition process where applicable through their Tsunami National Contact (TNC) in line with IOC Circular Letter, [2896](#);

Also notes the utilization of multi-purpose sea level monitoring stations in support of MHEWS to enhance data coverage and reduce costs, in particular in Italy and Türkiye;

Welcomes the foundation of the Global Tsunami Model Association (GTM);

Also welcomes the SMART Cables initiatives in particular the Atlantic Smart CAM and the planned deployment of two Ocean Bottom Pressure Sensors by INGV, Italy in the Ionian Sea in 2025;

Acknowledges the progress report on the Thematic Core Service (TCS) Tsunami within EPOS — The European Plate Observing System;

Agrees to adopt the threat levels according to the request by the TT-TWO which is reflected in the draft of the new Global Service Definition Document (GSDD);

Requests the Co-Chairs of the Working Groups and the Task Teams to prepare, in consultation with the members of their respective Working Groups or Task Teams, a plan of action for the current inter-sessional period, and to submit it to the IOC Secretariat no later than the end of January 2025;

Appreciates the development of a new UNESCO-IOC Tsunami Resilience Section website hosting NEAMTIC and **encourages** its timely completion and content improvement;

Accepts additional recommendations of Working Groups and Task Teams as outlined in Annex 1 to this decisions;

Decides to:

- i. continue the Task Team on Documentation according to the Terms of Reference in [Appendix 2](#);
- ii. continue the Task Team on Tsunami Exercises according to the revised Terms of Reference in [Appendix 3](#) and revise the name to Task Team on NEAMWave Exercises;
- iii. continue the activities of the Task Team on Operations according to the Terms of Reference in [Appendix 4](#);
- iv. continue the activities of the Task Team on Tsunami Ready according to the Terms of Reference in [Appendix 5](#);
- v. continue the activities of the Task Team on Non-Seismic Tsunamis according to the Terms of Reference in [Appendix 6](#);
- vi. establish the new Task Team on Governance - the Terms of Reference will be established by next SC meeting;
- vii. continue the activities of the Steering Committee during the intersessional period according to the Terms of Reference in [Appendix 7](#);
- viii. conduct the next NEAMWave exercise in March 2026 (NEAMWave26). The exercise scenarios would be created through collaboration between TSPs and NTWCs, with one or more single or joint scenarios proposed to meet the specific needs of the Member States.

Recommends:

- i. TSPs, NTWCs, WGs, TTs and Member States to provide key documents and reports to the IOC Secretariat at least one month before the next ICG/NEAMTWS Session;

Also recommends:

- i. that each TSP continues to provide alert-level information based on their best practices, including decision matrices, scenario databases or other methods, these methodologies need to be documented in the NEAMTWS Operational Users Guide;
- ii. that all sea-level data should be made available to the TSPs and NTWCs using bilateral agreements, between TSPs/NTWCs, whenever possible;

- iii. to increase the availability of seismic and sea level data in the North of Africa through agreements with Member States and with the institutions in charge of the management of the monitoring networks;
- iv. to increase sea level sampling rate (towards a 1s resolution) and to reduce the real time data latency to 1 minute or less;
- v. that Member States should encourage the active involvement of their national Civil Protection Authorities (CPAs);
- vi. the Executive Secretary to contact Member States who have not provided Tsunami Forecast Points (TFPs) and remind them to urgently do so;
- vii. a final draft of the OUG at the ICG/NEAMTWS XX session;

Welcomes the continued progress of the investigation and the possibility to adopt tsunami forecasting methods by TSPs which represent an improvement over the Decision Matrices presently in use with a view to reducing uncertainty and false alarms, particularly the forecasting methods which consider tsunami numerical modeling and uncertainty quantification (e.g., the Probabilistic Tsunami Forecasting (PTF), pre-calculated scenario databases, etc.);

Notes CAT-INGV (Centro Allerta Tsunami - Istituto Nazionale di Geofisica e Vulcanologia, Italy) TSP ongoing progress towards implementing a PTF based Decision Matrix, and requires that the methodology implemented is documented in the updated NEAMTWS Operational User Guide and that TSP subscribers are informed accordingly;

Acknowledges and thanks the Joint Research Center (JRC) of the European Commission with gratitude for its contributions during the last 15 years to the implementation of the IOC's tsunami programme and noted with satisfaction the continued interest of JRC in this regard in the ICG's future activities;

Invites the Secretariat to collect from Member States their feedback and preferences among the 4 scenarios prospected by JRC for the future of the WebCritech applications, communicating them back to JRC by the end of January 2025;

Encourages TSPs and NTWCs to contact respective NAVAREA operators in order to understand the characteristics and expectations of maritime products provision;

Appreciates the contributions made by DG ECHO under the European Union Civil Protection Mechanism (UPCM) to support the development and improvement of tsunami early warning systems and preparedness in the NEAM region (such as CoastWAVE projects, ARISTOTLE-ENHSP, NEAMCOMMITMENT project amongst others), and **notes** that these efforts, as well as those of the ICG should be considered as a valuable contribution to the Early Warning for All (EW4All) initiative and EU Disaster Resilience Goals;

Welcomes the new members of the WGs and TTs and suggests to further discuss the topic of the mechanism of the membership in the new TT on Governance;

Welcomes the provisional offer of Italy to host the ICG/NEAMTWS-XX session;

Appendix 1 to Decisions and Recommendations ICG/NEAMTWS-XIX.1

Terms of References for Working Groups 2 and 3 on Seismic and Sea Level Measurements

Mandate

The working group will be responsible for:

- i. Defining, based on existing organizations and functions, detection transnational networks, like seismic, geophysical and sea-level/marine networks as part of early warning tsunami detection instruments;
- ii. Providing recommendations on the data processing and analysis;
- iii. Providing a list of possible sea level stations for the NEAMTWS.

Appendix 2 to Decisions and Recommendations ICG/NEAMTWS-XIX.1

Terms of Reference of the ICG/NEAMTWS Task Team on Documentation

Mandate

The Task Team will:

- i. Coordinate inputs from Tsunami Service Providers (TSPs), Working Groups and the Task Team on Operations and the Technical Secretariat to produce the NEAMTWS Strategy and Operational User Guide (OUG);
- ii. Report to ICG/NEAMTWS Steering Committee in March/April 2024 and subsequent ICG/NEAMTWS session.

Modus operandi

The Task Team will mainly work by correspondence but will meet by teleconference as required.

Membership

- The ICG/NEAMTWS Officers;
- All TSP representatives;
- Co-Chairpersons of existing NEAMTWS Task Teams and Working Groups;
- Co-Chairpersons of the Task Team will be appointed by the ICG/NEAMTWS Chairperson in consultation with Vice-Chairpersons for a one-year term;
- Reappointed, if needed, on a rotational basis.

Appendix 3 to Decisions and Recommendations ICG/NEAMTWS-XIX.1

Terms of Reference of the ICG/NEAMTWS Task Team on Tsunami Exercise

Mandate

The Task Team will:

- i. Collaborate with TSPs and NTWCs for the preparation of exercise scenarios
- ii. Support the ICG/NEAMTWS Secretariat to finalize NEAMWave23 Evaluation report;
- iii. Work on the preparations of the next NEAMWave exercise, in cooperation with the exercise team;
- iv. Update the NEAMWave Exercise Manual and online forms for subscription and evaluation, in collaboration with the ICG/NEAMTWS Secretariat;

- v. Support the ICG/NEAMTWS Secretariat in the organization of online meetings for exercise preparation.

Appendix 4 to Decisions and Recommendations ICG/NEAMTWS-XIX.1

Terms of Reference of the ICG/NEAMTWS Task Team on Operations

Mandate

- i. The Task Team on Operations will facilitate improvements and harmonization of operational implementation of warning centres/systems through:
- ii. Continue to improve the Performance Monitoring Framework for NEAMTWS upstream components, based on the functions-requirements defined in the approved accreditation procedure and performance indicators developed for Communication Test Exercises;
- iii. Advice on the modalities of operation, interoperability, methods and standards for the development and issuance of warnings, such as methods and reporting of magnitudes, and requirements in terms of coordination and operation of NEAMTWS;
- iv. Foster and propose a technical solution for real-time data exchange among TSPs and possible new CTSPs;
- v. Evaluate the recommendations made by the inter-ICG/TOWS Working Group on Tsunami Operation for possible implementation by ICG/NEAMTWS;
- vi. Advice on arrangements for redundancy and back-up arrangements;
- vii. Support the Task Team on Documentation;
- viii. Continue the assessment of the Global Service Definition Document and investigate its adaptability by the NEAMTWS and report progress to ICG/NEAMTWS-XVIII.

Modus operandi

The Task Team will mainly work by correspondence and if required, another one in preparation for the next ICG meeting.

Membership

- The ICG Officers;
- All TSP Representatives;
- NTWC, TWFP and CPA Representatives;
- Co-Chairpersons of existing NEAMTWS Task Teams and Working Groups;

Co-Chairpersons of the Task Team will be appointed by the ICG/NEAMTWS Officers and will be reappointed on a rotational basis every year.

Appendix 5 to Decisions and Recommendations ICG/NEAMTWS-XIX.1

Terms of Reference of the ICG/NEAMTWS Task Team on Tsunami Ready

Mandate

- i. The Task Team on Tsunami Ready Team will:

- ii. Promote the Tsunami Ready Programme in the NEAM region and encourage Member States to join the programme;
- iii. Coordinate and foster cooperation among NEAM countries and other regions worldwide on the Tsunami Ready Programme in place, as well as exchange knowledge, experiences and best practices;
- iv. Provide advice on the procedures to achieve a Tsunami Ready recognition;
- v. Adapt the standards in NEAM region according to the IOC UNESCO Tsunami Ready guidelines;
- vi. Report to and have a strong interaction with the ICG/NEAMTWS/WG4.

Modus operandi

The Task Team on Tsunami Ready will mainly work by correspondence. Online meetings will be scheduled as required and agreed.

Membership

Nominated experts by Member States according to IOC Circular Letter, [2821](#). The list of experts can be updated by Member States, if needed;

- WG 4 members on request to join the Task Team of Tsunami Ready through their respective Tsunami National Contacts; Steering Committee members.

Appendix 6 to Decisions and Recommendations ICG/NEAMTWS-XIX.1

Terms of Reference of the ICG/NEAMTWS Task Team on Non-Seismic Tsunamis

- i. To explore potential approaches to assess hazard, monitor, and to warn for non-seismic tsunamis (e.g., volcanoes, landslides including earthquake-induced landslides, meteotsunamis).
- ii. Identify critical areas in the NEAM region which may serve as test cases to guide future risk management measures.

Modus operandi

The Task Team on Non-seismic tsunami will mainly work by correspondence. Online meetings will be scheduled as required and agreed.

Membership

The Task Team will be composed of:

- All TSP Representatives;
- NTWC Representatives;
- CPA Representatives of TSP/NTWC countries
- Co-Chairpersons of existing NEAMTWS Task Teams and Working Groups.

Appendix 7 to Decisions and Recommendations ICG/NEAMTWS-XIX.1

Terms of Reference of the ICG/NEAMTWS Steering Committee

Mandate

The Steering Committee shall coordinate and integrate the work of ICG/NEAMTWS in the intersessional periods, as implemented through the various Working Groups and Task Teams, including but not limited to:

Monitor performance and interoperability of the NEAMTWS and report to ICG/NEAMTWS;

- i. Implement decisions and recommendations of the ICG and provide strategic advice on the implementation of the NEAMTWS;
- ii. Identify relevant funding sources taking account of the resource implications of approved activities;
- iii. Facilitate implementation at the level of the ICG of relevant resolutions, decisions and recommendations of the IOC governing bodies;
- iv. Evaluate the feasibility of implementation of the recommendations of the Working Group on Tsunamis and Other Hazards related to Sea-Level Warning and Mitigation Systems (TOWS-WG) in NEAMTWS;
- v. Develop and maintain the NEAMTWS Implementation Plan and Interim Operations Users Guide;
- vi. Examine continuing compliance of Tsunami Service Providers (TSPs) with the adopted operational and organizational function and requirements;
- vii. Implement the procedures as adopted and the Terms of References (ToRs) for the accreditation of Candidate Tsunami Service Providers (CTSPs);
- viii. Nominate accreditation teams, foster the accreditation process during the coming year;
- ix. Liaise with the Steering Committees of equivalent structures of other ICGs;
- x. Consider the potential re-organization of Working Groups and Task Teams structure;
- xi. Promote increased awareness of NEAMTWS.

Modus operandi

The Steering Committee will mainly work by correspondence, but hold a coordination meeting prior to each ICG session. Other meetings will be held as needed.

Membership

- The ICG/NEAMTWS Officers (Chairperson and two Vice-Chairpersons);
- The Co-Chairpersons of ICG/NEAMTWS Working Groups and Task Teams;
- Representatives of TSPs
- Representatives to TOWS Task Team on Disaster Management and Preparedness (TT-DMP) and Task Team on Tsunami Watch Operations (TT-TWO)
- Members of the Ocean Decade Tsunami Programme: Scientific Committee and Tsunami Coalition.

Annex I to Decisions and Recommendations ICG/NEAMTWS-XIX.1

Recommendations of Working Group 1 on Hazard Assessment and Modelling, Working Group 2 and 3 on Seismic, Geophysical and Sea level Measurements and the Task Team on Non-Seismic Tsunami Sources

Recommendations:

- i. To organise workshops and/or webinars as applicable on non-seismic tsunami with a focus on volcanic processes as a preliminary step.
- ii. To develop future bulletin formats including tsunami from non-seismic sources.
- iii. In view of the TSP-IOT (Tsunami Service Providers Interoperability Tool) that will be developed in the framework of the EPOS-ON project, we recommend that the forecast points information (coordinates, names and country) will be updated and made available in order to be included in the TSP-IOT. This is also aligned with the sensors information that WG2/3 started to collect in the NEAM region.

General Recommendations:

- i. WG1 acknowledges the recommendations of the last ICG/NEAMTWS -XVIII with a special emphasis on the guidelines within the CoastWAVE 2.0 Project.
- ii. The WG2/3 acknowledges the ongoing challenge of low availability of near real time data for coastal hazard monitoring along some coastlines including the North African and Eastern Mediterranean within the NEAM region. This may be due to the sparsity of tide gauge stations but may also be attributable to tide gauges that are operated for other purposes. The WG recommends densifying networks with low costs and low maintenance devices and simultaneously working with the EuroGOOS Tide Gauge Task Team and their data tools to promote data sharing and identify true monitoring gaps in the region.
- iii. Requests from NTWCs information about instrumentation, projects as well as data availability and restrictions on use or share.
- iv. To estimate the part of deterministic/probabilistic to include in tsunami hazard maps and how this would be valuable to users and Member States.
- v. To propose standards and guidelines to elaborate flooding maps for evacuation maps in connection with CoastWave2.0 project, with a special emphasis on how to use the PTHA products to sharpen information to be provided.
- vi. To interact with and exploit the synergies between the WG and the GTM.
- vii. To leverage in other projects results as a way to achieve WG goals.
- viii. To foster collaboration with the Thematic Core Service (TCS) Tsunami (EPOS)
- ix. To include non-seismic sources in all discussion, modelling, hazard and risk assessment, and early warning.
- x. To explore the potential of machine learning techniques and AI approaches in Early Warning.
- xi. To find a mechanism to promote WG activities during the intersessional period.

Recommendations of Working Group 4 on Public Awareness, Preparedness and Mitigation

Recommendations:

- i. Contribute to the development and update of the NEAMTIC products (web pages, news, press releases, photos, videos, multimedia and social media) of Member States and TSPs, translate and release them to NEAM countries and increase public awareness.

- ii. Update NEAMTIC website noting that at the moment, there is quite a poor visibility and accessibility on NEAMTIC/ICG-NEAMTWS website (old site is not working anymore, but the new one is not complete) regarding documents, flyers, booklets, posters, procedures, etc.
- iii. Cooperate with Task Team on Tsunami Ready and CoastWAVE 2 project for improving tsunamis awareness and response to tsunami.
- iv. Continue studies to better understand risk perception (both for tourists and locals).
- v. Collect and compare results of risk perceptions studies from Member States for creating future surveys and risk communication strategies.
- vi. Analyse multiple means to improve tsunami risk communication.
- vii. Prepare and share educational / informative packages regarding tsunamis for schools, in different languages.

Recommendations of the Task Team on Tsunami Ready

Recommendations:

- i. Strengthen the promotion of the TRRP among key stakeholders in the NEAM region by organizing an annual event (online workshop) for the promotion and explanation of the TRRP in NEAM region, for a wide audience including TNCs, especially representatives of municipalities from NEAM countries at risk, civil protection officials from all levels, and institutions that can provide support to meet all TRRP requirements.
- ii. Organise annual coordination meetings between TT-TR, WG4, and NEAMTWS Technical Secretariat.
- iii. Translate [IOC Manuals and Guides, 74](#) and tsunami-related brochures into other languages.
- iv. Identify critical points and suggest modifications to MG74 for a better adaptation to the NEAM region.
- v. The ICG to centralize the TRRP information and resources on the NEAMTIC portal. Additionally, enhancing the online presence of Tsunami Ready activities and resources is necessary.
- vi. Continue promoting TR activities during the next intersessional period.

Welcomes the new TT members.

Acknowledges the progress made in developing a TR toolkit and looks forward to its presentation at the upcoming TOWs meeting.

Advises the ICG to establish the role of the Tsunami Ready Focal Point and to issue a Circular Letter (CL) to the Member States via official channels, requesting nominations for this position.

Recommendations of the Task Team on Tsunami Exercises

- i. To reschedule the next NEAMWave tsunami exercise and plan for its execution in 2026 (NEAMWave26), considering the timeline for Tsunami Ready activities within the CoastWAVE Project Phase 2.0, and facilitating the implementation of full-scale Phase B exercises by the project Member States;
- ii. To organize the NEAMWave exercise with a more flexible schedule, featuring one or two scenarios per week (based on the total number of scenarios), rather than condensing all scenarios into consecutive days;

- iii. To develop exercise scenarios through collaboration between TSPs and NTWCs, ensuring that the messages are tailored to address the specific needs of the Member States;
- iv. TSPs to co-operate and prepare one or more joint exercise scenarios and make the exercise more challenging in such a way that they can disseminate different alert messages for the same joint exercise scenario;
- v. To revise and enhance the online tools (subscription and evaluation) to make them more user-friendly. The subscription process should be streamlined to more effectively capture participant numbers, and simplified by explicitly requesting "new" contact details for the exercise when necessary and allowing the registration of new participants beyond the current subscribers to TSPs' services;
- vi. To base the statistics and assessment of participation in the exercise solely on the evaluation forms, rather than the subscription forms;
- vii. To investigate the potential for further testing of the use of Galileo EWS for message dissemination. NEAMWave Exercise Manual should be updated to illustrate the termination of fax message dissemination, while other dissemination methods like SMSs, CAP-TSU or automated phone calls should be explored, in order to evaluate the effectiveness and feasibility of non-internet-based methods, as alternative dissemination ways of sharing information. Moreover, TSPs to consider the live streaming of their activities during the exercise through an online platform;
- viii. To organize NEAMWave Preparation Meeting(s) between the TT-TE Exercise Team and targeted participant groups, like TSPs, TWFPs, CPAs etc. prior to the exercise for explaining the details of exercise scenarios and discussing on the progress of NEAMWave activities;
- ix. To organize online meetings with ERCC for discussing about the best practices in the implementation of Phase C, such as definition of minimum criteria for implementing Phase C, keeping the contact list of the national contact points up to date, etc;
- x. TNCs of Member States to encourage Civil Protection Authorities in their country to participate in future NEAMWave exercises;
- xi. Simplifying the NEAMWave Final Evaluation Reports to improve efficiency and make them more user-friendly;
- xii. Limiting the content and length of TSPs Final Evaluation Reports to specific bullet points, including a summary of exercise performance, along with suggestions and recommendations;
- xiii. To change the name of Task Team on Tsunami Exercise to Task Team on NEAMWave Exercise (TT-NEAMWave), following the practice in other ICGs.

Recommendations of the Task Team on Operations and the Task Team on Documentation
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- i. To emphasize in all possible ways the need to receive seismic and sea level data from the North African Coast to reduce the seismic and sea level observational gap to the South Mediterranean Sea
- i. To organise a TSP/NTWC meeting in January in Lisbon to discuss operational tsunami forecasting methods.
- ii. To prepare a template for the implementation of the threat levels in the TSP messages until December for consideration and feedback of the WG4 which agreed – feedback will be provided until March in written form and discussed during an online meeting.
- iii. To organize another TSP/NTWC meeting in Istanbul in May towards finalization of the OUG.

ANNEX II

AGENDA

- 1. OPENING**
- 2. ORGANIZATION OF THE SESSION**
 - 2.1 Adoption of the agenda
 - 2.2 Designation of the rapporteur
 - 2.3 Conduct of the session, timetable and documentation
 - 2.4 Establishment of sessional committees and WGs
- 3. REPORTS ON ICG/NEAMTWS INTERSESSIONAL ACTIVITIES**
 - 3.1 Report by the Chairperson
 - 3.2 Report by IOC Secretariat
 - 3.3 Reports by other ICGs
 - 3.4 Reports by other Intergovernmental Organizations (JRC etc.)
 - 3.5 Reports by the Working Groups and Task Teams
- 4. IMPLEMENTATION**
 - 4.1 Report on CoastWAVE Project 2.0
 - 4.2 Reports from Tsunami Service Providers and National Tsunami Warning Centres
 - 4.3 Reports from Civil Protection Agencies
 - 4.4 Reports on other major Projects Related to NEAMTWS
 - 4.5 Reports on UNESCO/IOC Tsunami Ready Programme Implementation
 - 4.6 Report on NEAMWave23 Exercise Evaluation
 - 4.7 Reports on the World Tsunami Awareness Day (WTAD, 5 November)
- 5. POLICY MATTERS**
 - 5.1 Review of TOWS-WG /IOC-EC-57 Decisions and Recommendations
 - 5.2 Reports on Ocean Decade, Ocean Decade Tsunami Programme and Research Development and Implementation Plan
 - 5.3 Early Warning for All and DRR Process
 - 5.4 Report on the Second Global Tsunami Symposium
 - 5.5 Governance and Reorganization
 - 5.6 Maritime Products
- 6. PROGRAMME FOR 2025**
 - 6.1 Activities scheduled for 2025
 - 6.2 Establishment of intersessional working groups and TTs
- 7. DATE AND PLACE FOR ICG/NEAMTWS-XX**
- 8. ANY OTHER BUSINESS**
- 9. ADOPTION OF DECISIONS AND RECOMMENDATIONS**
- 10. CLOSING**

ANNEX III

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ANNEX V

LIST OF ACRONYMS

AGITHAR	Accelerating Global science In Tsunami Hazard And Risk analysis
ANPC	Autoridade Nacional de Proteccao Civil
CATAC	Central America Tsunami Advisory Center
CAP	Common Alert Protocol
CARIBE-EWS	Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions
CEA	Commissariat à l'énergie atomique et aux énergies alternatives (France)
CAT	Centro Allerta Tsunami (INGV-Italy)
CENALT	CENtre d'Alerte aux Tsunamis, France
COP	Conference of the Parties
CPA	Civil Protection Authority
cTCS	Candidate Thematic Core Service on Tsunami
CTE	Communication Test Exercise
EC-DG-DEFIS	Directorate General for Defense, Industry and Space
EU-DG-ECHO	Directorate-General of the European Commission's Humanitarian Aid Office
EGU	European Geoscience Union
ENC	Elections Nominations Committee
EPOS	European Plate Observing System
ERCC	Emergency Response and Coordination Center
EWSS	Galileo Emergency Warning Satellite Service
EW4ALL	Early Warnings for All
GFZ	German Research Centre for Geosciences
GSDD	Global Service Definition Document
GNSS	Global Navigation Satellite System
GTM	Global Tsunami Model
GTS	Global Telecommunication System
GPS	Global Positioning System
HTHH	Hunga Tonga Hunga Ha'apai
ICG	Intergovernmental Coordination Group
ICERI	International Conference of Education, Research and Innovation
PTWS	Intergovernmental Coordination Group for the Pacific Tsunami Warning and Mitigation System

IGN	National Geographic Institute (Spain)
INGV	Istituto Nazionale di Geofisica e Vulcanologia (Italy)
IPMA	Instituto Português do Mar e da Atmosfera (Portugal)
IOT	Inter-Operability Tool
IOC	Intergovernmental Oceanographic Commission (UNESCO)
JCB	Joint Collaborative Board
JRC	Joint Research Centre
JICA	Japan International Cooperation Agency
KOERI	Kandilli Observatory and Earthquake Research (Türkiye)
LDS	Least Developed States
METU	Middle East Technical University, Türkiye
MHEWS	Multi-Hazard Early Warning Systems
MOU	Memorandum of Understanding
NIOF	National Institute of Oceanography and Fisheries, Egypt
NEAMTWS	Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the North-Eastern Atlantic, the Mediterranean and Connected Seas
NEAMTIC	Tsunami Information Centre for the North-Eastern Atlantic, the Mediterranean and Connected Seas
NIEP	National Institute for Earth Physics, Romania
NOA	National Observatory of Athens, Greece
NTWC	National Tsunami Warning Centre
NTRB	National Tsunami Ready Board
ODTP	Ocean Decade Tsunami Programme
OUG	Operational Users Guide
PTHA	Probability Tsunami Hazard Assessment
PTWC	Pacific Tsunami Warning Centre
QZSS	Quasi-Zenith Satellite System
SMART	Science Monitoring and Reliable Communications
SOPs	Standard Operating Procedures
SIDS	Small Island Developing States
TEWS	Tsunami Early Warning System
TEMPP	Tsunami Evacuation Maps, Plans, and Procedures
TNC	Tsunami National Contact
ToR	Terms of Reference
TOWS-WG	Working Group on Tsunamis and Other Hazards related to Sea-Level Warning and Mitigation Systems
TRRP	Tsunami Ready Recognition Programme

TSP	Tsunami Service Provider
TSR	Tsunami Service Recipient
TSUMAPS	TSUnami hazard MAPS in the NEAM Region
TT	Task Team
TTL	Tsunami Threat Levels
TGV	Tsunamis Generated by Volcanos
TWFP	Tsunami Warning Focal Point
TT-DMP	Task Team on Disaster Management and Preparedness
TT-TWO	Task Team on Tsunami Watch Operations
TT-FOO	Task Team on Forecasting from Ocean Observations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNDRR	United Nations Office for Disaster Risk Reduction
WG	Working Group
WMO	World Meteorological Organization
WTAD	World Tsunami Awareness Day

In this Series	Languages
Reports of Governing and Major Subsidiary Bodies , which was initiated at the beginning of 1984, the reports of the following meetings have already been issued:	
1. Eleventh Session of the Working Committee on international Oceanographic Data Exchange	E, F, S, R
2. Seventeenth Session of the Executive Council	E, F, S, R, Ar
3. Fourth Session of the Working Committee for Training, Education and Mutual Assistance	E, F, S, R
4. Fifth Session of the Working Committee for the Global Investigation of Pollution in the Marine Environment	E, F, S, R
5. First Session of the IOC Sub-Commission for the Caribbean and Adjacent Regions	E, F, S
6. Third Session of the <i>ad hoc</i> Task team to Study the Implications, for the Commission, of the UN Convention on the Law of the Sea and the New Ocean Regime	E, F, S, R
7. First Session of the Programme Group on Ocean Processes and Climate	E, F, S, R
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10. Tenth Session of the International Co-ordination Group for the Tsunami Warning System in the Pacific	
11. Nineteenth Session of the Executive Council, Paris, 1986	E, F, S, R, Ar
12. Sixth Session of the IOC Scientific Committee for the Global Investigation of Pollution in the Marine Environment	E, F, S
13. Twelfth Session of the IOC Working Committee on International Oceanographic Data Exchange	E, F, S, R
14. Second Session of the IOC Sub-Commission for the Caribbean and Adjacent Regions, Havana, 1986	E, F, S
15. First Session of the IOC Regional Committee for the Central Eastern Atlantic, Praia, 1987	E, F, S
16. Second Session of the IOC Programme Group on Ocean Processes and Climate	E, F, S
17. Twentieth Session of the Executive Council, Paris, 1987	E, F, S, R, Ar
18. Fourteenth Session of the Assembly, Paris, 1987	E, F, S, R, Ar
19. Fifth Session of the IOC Regional Committee for the Southern Ocean	E, F, S, R
20. Eleventh Session of the International Co-ordination Group for the Tsunami Warning System in the Pacific, Beijing, 1987	E, F, S, R
21. Second Session of the IOC Regional Committee for the Co-operative Investigation in the North and Central Western Indian Ocean, Arusha, 1987	E, F
22. Fourth Session of the IOC Regional Committee for the Western Pacific, Bangkok, 1987	E only
23. Twenty-first Session of the Executive Council, Paris, 1988	E, F, S, R
24. Twenty-second Session of the Executive Council, Paris, 1989	E, F, S, R
25. Fifteenth Session of the Assembly, Paris, 1989	E, F, S, R
26. Third Session of the IOC Committee on Ocean Processes and Climate, Paris, 1989	E, F, S, R
27. Twelfth Session of the International Co-ordination Group for the Tsunami Warning System in the Pacific, Novosibirski, 1989	E, F, S, R
28. Third Session of the Sub-Commission for the Caribbean and Adjacent Regions, Caracas, 1989	E, S
29. First Session of the IOC Sub-Commission for the Western Pacific, Hangzhou, 1990	E only
30. Fifth Session of the IOC Regional Committee for the Western Pacific, Hangzhou, 1990	E only
31. Twenty-third Session of the Executive Council, Paris, 1990	E, F, S, R
32. Thirteenth Session of the IOC Committee on International Oceanographic Data and Information Exchange, New York, 1990	E only
33. Seventh Session of the IOC Committee for the Global Investigation of Pollution in the Marine Environment, Paris, 1991	E, F, S, R
34. Fifth Session of the IOC Committee for Training, Education and Mutual Assistance in Marine Sciences, Paris, 1991	E, F, S, R
35. Fourth Session of the IOC Committee on Ocean Processes and Climate, Paris, 1991	E, F, S, R
36. Twenty-fourth Session of the Executive Council, Paris, 1991	E, F, S, R
37. Sixteenth Session of the Assembly, Paris, 1991	E, F, S, R, Ar
38. Thirteenth Session of the International Co-ordination Group for the Tsunami Warning System in the Pacific, Baja California, 1991	E, F, S, R
39. Second Session of the IOC-WMO Intergovernmental WOCE Panel, Paris, 1992	E only
40. Twenty-fifth Session of the Executive Council, Paris, 1992	E, F, S, R
41. Fifth Session of the IOC Committee on Ocean Processes and Climate, Paris, 1992	E, F, S, R
42. Second Session of the IOC Regional Committee for the Central Eastern Atlantic, Lagos, 1990	E, F
43. First Session of the Joint IOC-UNEP Intergovernmental Panel for the Global Investigation of Pollution in the Marine Environment, Paris, 1992	E, F, S, R
44. First Session of the IOC-FAO Intergovernmental Panel on Harmful Algal Blooms, Paris, 1992	E, F, S
45. Fourteenth Session of the IOC Committee on International Oceanographic Data and Information Exchange, Paris, 1992	E, F, S, R
46. Third Session of the IOC Regional Committee for the Co-operative Investigation in the North and Central Western Indian Ocean, Vascoas, 1992	E, F
47. Second Session of the IOC Sub-Commission for the Western Pacific, Bangkok, 1993	E only
48. Fourth Session of the IOC Sub-Commission for the Caribbean and Adjacent Regions, Veracruz, 1992	E, S
49. Third Session of the IOC Regional Committee for the Central Eastern Atlantic, Dakar, 1993	E, F
50. First Session of the IOC Committee for the Global Ocean Observing System, Paris, 1993	E, F, S, R
51. Twenty-sixth Session of the Executive Council, Paris, 1993	E, F, S, R
52. Seventeenth Session of the Assembly, Paris, 1993	E, F, S, R
53. Fourteenth Session of the International Co-ordination Group for the Tsunami Warning System in the Pacific, Tokyo, 1993	E, F, S, R
54. Second Session of the IOC-FAO Intergovernmental Panel on Harmful Algal Blooms, Paris, 1993	E, F, S
55. Twenty-seventh Session of the Executive Council, Paris, 1994	E, F, S, R
56. First Planning Session of the IOC-WMO-UNEP Committee for the Global Ocean Observing System, Melbourne, 1994	E, F, S, R
57. Eighth Session of the IOC-UNEP-IMO Committee for the Global Investigation of Pollution in the Marine Environment, San José, Costa Rica, 1994	E, F, S
58. Twenty-eighth Session of the Executive Council, Paris, 1995	E, F, S, R
59. Eighteenth Session of the Assembly, Paris, 1995	E, F, S, R
60. Second Session of the IOC-WMO-UNEP Committee for the Global Ocean Observing System, Paris, 1995	E, F, S, R

61.	Third Session of the IOC-WMO Intergovernmental WOCE Panel, Paris, 1995	E only
62.	Fifteenth Session of the International Co-ordination Group for the Tsunami Warning System in the Pacific, Papete, 1995	E, F, S, R
63.	Third Session of the IOC-FAO Intergovernmental Panel on Harmful Algal Blooms, Paris, 1995	E, F, S
64.	Fifteenth Session of the IOC Committee on International Oceanographic Data and Information Exchange	E, F, S, R
65.	Second Planning Session of the IOC-WMO-UNEP Committee for the Global Ocean Observing System, Paris, 1995	E only
66.	Third Session of the IOC Sub-Commission for the Western Pacific, Tokyo, 1996	E only
67.	Fifth Session of the IOC Sub-Commission for the Caribbean and Adjacent Regions, Christ Church, 1995	E, S
68.	Intergovernmental Meeting on the IOC Black Sea Regional Programme in Marine Sciences and Services	E, R
69.	Fourth Session of the IOC Regional Committee for the Central Eastern Atlantic, Las Palmas, 1995	E, F, S
70.	Twenty-ninth Session of the Executive Council, Paris, 1996	E, F, S, R
71.	Sixth Session for the IOC Regional Committee for the Southern Ocean and the First Southern Ocean Forum, Bremerhaven, 1996	E, F, S,
72.	IOC Black Sea Regional Committee, First Session, Varna, 1996	E, R
73.	IOC Regional Committee for the Co-operative Investigation in the North and Central Western Indian Ocean, Fourth Session, Mombasa, 1997	E, F
74.	Nineteenth Session of the Assembly, Paris, 1997	E, F, S, R
75.	Third Session of the IOC-WMO-UNEP Committee for the Global Ocean Observing System, Paris, 1997	E, F, S, R
76.	Thirtieth Session of the Executive Council, Paris, 1997	E, F, S, R
77.	Second Session of the IOC Regional Committee for the Central Indian Ocean, Goa, 1996	E only
78.	Sixteenth Session of the International Co-ordination Group for the Tsunami Warning System in the Pacific, Lima, 1997	E, F, S, R
79.	Thirty-first Session of the Executive Council, Paris, 1998	E, F, S, R
80.	Thirty-second Session of the Executive Council, Paris, 1999	E, F, S, R
81.	Second Session of the IOC Black Sea Regional Committee, Istanbul, 1999	E only
82.	Twentieth Session of the Assembly, Paris, 1999	E, F, S, R
83.	Fourth Session of the IOC-WMO-UNEP Committee for the Global Ocean Observing System, Paris, 1999	E, F, S, R
84.	Seventeenth Session of the International Coordination Group for the Tsunami Warning System in the Pacific, Seoul, 1999	E, F, S, R
85.	Fourth Session of the IOC Sub-Commission for the Western Pacific, Seoul, 1999	E only
86.	Thirty-third Session of the Executive Council, Paris, 2000	E, F, S, R
87.	Thirty-fourth Session of the Executive Council, Paris, 2001	E, F, S, R
88.	Extraordinary Session of the Executive Council, Paris, 2001	E, F, S, R
89.	Sixth Session of the IOC Sub-Commission for the Caribbean and Adjacent Regions, San José, 1999	E only
90.	Twenty-first Session of the Assembly, Paris, 2001	E, F, S, R
91.	Thirty-fifth Session of the Executive Council, Paris, 2002	E, F, S, R
92.	Sixteenth Session of the IOC Committee on International Oceanographic Data and Information Exchange, Lisbon, 2000	E, F, S, R
93.	Eighteenth Session of the International Coordination Group for the Tsunami Warning System in the Pacific, Cartagena, 2001	E, F, S, R
94.	Fifth Session of the IOC-WMO-UNEP Committee for the Global Ocean Observing System, Paris, 2001	E, F, S, R
95.	Seventh Session of the IOC Sub-commission for the Caribbean and Adjacent Regions (IOCARIBE), Mexico, 2002	E, S
96.	Fifth Session of the IOC Sub-Commission for the Western Pacific, Australia, 2002	E only
97.	Thirty-sixth Session of the Executive Council, Paris, 2003	E, F, S, R
98.	Twenty-second Session of the Assembly, Paris, 2003	E, F, S, R
99.	Fifth Session of the IOC Regional Committee for the Co-operative Investigation in the North and Central Western Indian Ocean, Kenya, 2002 (* Executive Summary available separately in E, F, S & R)	E*
100.	Sixth Session of the IOC Intergovernmental Panel on Harmful Algal Blooms, St. Petersburg (USA), 2002 (* Executive Summary available separately in E, F, S & R)	E*
101.	Seventeenth Session of the IOC Committee on International Oceanographic Data and Information Exchange, Paris, 2003 (* Executive Summary available separately in E, F, S & R)	E*
102.	Sixth Session of the IOC-WMO-UNEP Committee for the Global Ocean Observing System, Paris, 2003 (* Executive Summary available separately in E, F, S & R)	E*
103.	Nineteenth Session of the International Coordination Group for the Tsunami Warning System in the Pacific, Wellington, New Zealand, 2003 (* Executive Summary available separately in E, F, S & R)	E*
104.	Third Session of the IOC Regional Committee for the Central Indian Ocean, Tehran, Islamic Republic of Iran, 21-23 February 2000	E only
105.	Thirty-seventh Session of the Executive Council, Paris, 2004	E, F, S, R
106.	Seventh Session of the IOC-WMO-UNEP Committee for the Global Ocean Observing System, Paris, 2005 (* Executive Summary available separately in E, F, S & R); and Extraordinary Session, Paris, 20 June 2005	E*
107.	First Session of the Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWS), Perth, Australia, 3-5 August 2005	E only
108.	Twentieth Session of the Intergovernmental Coordination Group for the Tsunami Warning System in the Pacific, Viña del Mar, Chile, 3-7 October 2005 (* Executive Summary available separately in E, F, S & R)	E*
109.	Twenty-Third Session of the Assembly, Paris, 21-30 June 2005	E, F, S, R
110.	First Session of the Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the North Eastern Atlantic, the Mediterranean and Connected Seas (ICG/NEAMTWS), Rome, Italy, 21-22 November 2005	E only
111.	Eighth Session of the IOC Sub-commission for the Caribbean and Adjacent Regions (IOCARIBE), Recife, Brazil, 14-17 April 2004 (* Executive Summary available separately in E, F, S & R)	E*
112.	First Session of the Intergovernmental Coordination Group for the Tsunami and other Coastal Hazards Warning System for the Caribbean Sea and Adjacent Regions (ICG/CARIBE-EWS), Bridgetown, Barbados, 10-12 January 2006	E only
113.	Ninth Session of the IOC Sub-Commission for the Caribbean and Adjacent Regions (IOCARIBE), Cartagena de Indias, Colombia, 19-22 April 2006 (* Executive Summary available separately in E, F, S & R)	E S*

114.	Second Session of the Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWS), Hyderabad, India, 14–16 December 2005	E only
115.	Second Session of the WMO-IOC Joint Technical Commission for Oceanography and Marine Meteorology, Halifax, Canada, 19–27 September 2005 (Abridged final report with resolutions and recommendations)	E, F, R, S
116.	Sixth Session of the IOC Regional Committee for the Western Indian Ocean (IOCWIO), Maputo, Mozambique, 2–4 November 2005 (* Executive Summary available separately in E, F, S & R)	E*
117.	Fourth Session of the IOC Regional Committee for the Central Indian Ocean, Colombo, Sri Lanka 8–10 December 2005 (* Executive Summary available separately in E, F, S & R)	E*
118.	Thirty-eighth Session of the Executive Council, Paris, 20 June 2005 (Electronic copy only)	E, F, R, S
119.	Thirty-ninth Session of the Executive Council, Paris, 21–28 June 2006	E, F, R, S
120.	Third Session of the Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWS), Bali, Indonesia, 31 July–2 August 2006 (*Executive Summary available separately in E,F,S & R)	E*
121.	Second Session of the Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the North Eastern Atlantic, the Mediterranean and Connected Seas (ICG/NEAMTWS), Nice, France, 22–24 May 2006	E only
122.	Seventh Session of the IOC Intergovernmental Panel on Harmful Algal Blooms, Paris, France, 16–18 March 2005 (* Executive Summary available separately in E, F, S & R)	E*
123.	Fourth Session of the Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWS-IV), Mombasa, Kenya, 30 February-2 March 2007 (* Executive Summary available separately in E, F, S & R)	E*
124.	Nineteenth Session of the IOC Committee on International Oceanographic Data and Information Exchange, Trieste, Italy, 12–16 March 2007 (* Executive Summary available separately in E, F, S & R)	E*
125.	Third Session of the Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the North Eastern Atlantic, the Mediterranean and Connected Seas, Bonn, Germany, 7–9 February 2007 (* Executive Summary available separately in E, F, S & R)	E*
126.	Second Session of the Intergovernmental Coordination Group for the Tsunami and other Coastal Hazards Warning System for the Caribbean Sea and Adjacent Regions, Cumaná, Venezuela, 15–19 January 2007 (* Executive Summary available separately in E, F, S & R)	E*
127.	Twenty-first Session of the Intergovernmental Coordination Group for the Pacific Tsunami Warning and Mitigation System, Melbourne, Australia, 3–5 May 2006 (* Executive Summary available separately in E, F, S & R)	E*
128.	Twenty-fourth Session of the Assembly, Paris, 19–28 June 2007	E, F, S, R
129.	Fourth Session of the Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the North Eastern Atlantic, the Mediterranean and Connected Seas, Lisbon, Portugal, 21–23 November 2007 (* Executive Summary available separately in E, F, S & R)	E*
130.	Twenty-second Session of the Intergovernmental Coordination Group for the Pacific Tsunami Warning and Mitigation System, Guayaquil, Ecuador, 17–21 September 2007 (* Executive Summary available in E, F, S & R included)	E*
131.	Forty-first Session of the Executive Council, Paris, 24 June–1 July 2008	E, F, R, S
132.	Third Session of the Intergovernmental Coordination Group for the Tsunami and other Coastal Hazards Warning System for the Caribbean Sea and Adjacent Regions, Panama City, Panama, 12–14 March 2008 (* Executive Summary available separately in E, F, S & R)	E*
133.	Eighth Session of the IOC Intergovernmental Panel on Harmful Algal Blooms, Paris, France, 17–20 April 2007 (* Executive Summary available separately in E, F, S & R)	E*
134.	Twenty-third Session of the Intergovernmental Coordination Group for the Pacific Tsunami Warning and Mitigation System, Apia, Samoa, 16–18 February 2009 (*Executive Summary available separately in E, F, S & R)	E*
135.	Twentieth Session of the IOC Committee on International Oceanographic Data and Information Exchange, Beijing, China, 4–8 May 2009 (*Executive Summary available separately in E, F, S & R)	E*
136.	Tenth Session of the IOC Sub-Commission for the Caribbean and Adjacent Regions (IOCARIBE), Puerto La Cruz, Bolivarian Republic of Venezuela, 22–25 October 2008 (*Executive Summary available separately in E, F, S & R)	E, S*
137.	Seventh Session of the IOC Sub-Commission for the Western Pacific (WESTPAC-VII), Sabah, Malaysia, 26–29 May 2008 (*Executive Summary available separately in E, F, S & R)	E*
138.	Ninth Session of the IOC-WMO-UNEP Committee for the Global Ocean Observing System, Paris, France, 10–12 June 2009 (* Executive Summary available separately in E, F, S & R);	E*
139.	Fifth Session of the Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the North Eastern Atlantic, the Mediterranean and Connected Seas, Athens, Greece, 3–5 November 2008 (* Executive Summary available separately in E, F, S & R)	E*
140.	Fourth Session of the Intergovernmental Coordination Group for the Tsunami and other Coastal Hazards Warning System for the Caribbean Sea and Adjacent Regions, Fort-de-France, Martinique, France, 2–4 June 2009 (* Executive Summary available separately in E, F, S & R)	E*
141.	Twenty-fifth Session of the Assembly, Paris, 16–25 June 2009	E, F, R, S
142.	Third Session of the Joint WMO-IOC Technical Commission for Oceanography and Marine Meteorology, Marrakesh, Morocco, 4–11 November 2009	E, F, R, S
143.	Ninth Session of the IOC Intergovernmental Panel on Harmful Algal Blooms, Paris, France, 22–24 April 2009 (* Executive Summary available separately in E, F, S & R)	E*
144.	Fifth Session of the Intergovernmental Coordination Group for the Tsunami and other Coastal Hazards Warning System for the Caribbean Sea and Adjacent Regions, Managua, Nicaragua, 15–17 March 2010 (* Executive Summary available in E, F, S & R)	E*
145.	Sixth Session of the IOC Regional Committee for the Central and Eastern Atlantic Ocean, Accra, Ghana, 28–30 March 2010 (* Executive Summary available in E, F, S & R)	E*
146.	Forty-second Session of the Executive Council; Paris, 15, 19 & 20 June 2009	E, F, R, S
147.	Forty-third Session of the Executive Council; Paris, 8–16 June 2010	E, F, R, S
148.	Sixth Session of the Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the North Eastern Atlantic, the Mediterranean and Connected Seas, Istanbul, Turkey, 11–13 November 2009 (* Executive Summary available separately in Ar, E, F, S & R)	E*
149.	Seventh Session of the Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the North Eastern Atlantic, the Mediterranean and Connected Seas, Paris, France, 23–25 November 2010 (* Executive Summary available separately in Ar, E, F, S & R)	E*
150.	Sixth Session of the Intergovernmental Coordination Group for the Tsunami and other Coastal Hazards Warning System for the Caribbean Sea and Adjacent Regions, Santo Domingo, Dominican Republic, 26–29 April 2011 (* Executive Summary available in E, F, S & R)	E*

151.	Twenty-fourth Session of the Intergovernmental Coordination Group for the Pacific Tsunami Warning and Mitigation System, Beijing, China, 24–27 May 2011 (*Executive Summary in E, F, S & R included)	E*
152.	Twenty-first Session of the IOC Committee on International Oceanographic Data and Information Exchange, Liège, Belgium, 23–26 March 2011 (*Executive Summary available separately in E, F, S & R)	E*
153.	Eighth Session of the IOC Sub-Commission for the Western Pacific (WESTPAC-VIII), Bali, Indonesia, 10–13 May 2010 (*Executive Summary available separately in E, F, S & R)	E*
154.	Tenth IOC Intergovernmental Panel on Harmful Algal Blooms, Paris, France, 12–14 April 2011 (* Executive Summary available separately in E, F, S & R)	E*
155.	Forty-fifth Session of the Executive Council, Paris, 26–28 June 2012 (* Decisions available in E, F, S & R)	E*
156.	Seventh Session of the Intergovernmental Coordination Group for the Tsunami and other Coastal Hazards Warning System for the Caribbean Sea and Adjacent Regions, Willemstad, Curacao, 2–4 April 2012 (*Executive Summary available in E, F, S & R)	E*
157.	Eleventh Session of the IOC Sub-Commission for the Caribbean and Adjacent Regions (IOCARIBE), Miami, USA, 17–20 May 2011 (*Executive Summary available separately in E & S)	E, S*
158.	Eight Session of the Intergovernmental Coordination Group for the Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (ICG/CARIBE EWS-VIII), Trinidad & Tobago, 29 April–1 May 2013 (*Executive Summary available in E, F, S & R)	E*
159.	Twenty-seventh Session of the Assembly, Paris, 26 June–5 July 2013 and Forty-sixth Session of the Executive Council, Paris, 25 June 2013	E, F, R, S
160.	Twenty-fifth Session of the Intergovernmental Coordination Group for the Pacific Tsunami Warning and Mitigation System (ICG/PTWS), Vladivostok, Russian Federation, 9–11 September 2013 (*Executive Summary in E, F & R)	E*
161.	Ninth Session of the Intergovernmental Coordination Group for the Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions, US Virgin Islands, 13-15 May 2014 (*Executive Summary available in E, F, S & R)	E*
162.	Forty-seventh Session of the Executive Council, Paris, 1–4 July 2014 (* Decisions available in E, F, S & R)	E*
163.	Ninth Session of the IOC Sub-Commission of the Western Pacific (WESTPAC-IX), Busan, Republic of Korea, 9–12 May 2012	E
164.	Eleventh Session of the Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the North Eastern Atlantic, the Mediterranean and Connected Seas, 12–14 November 2014, Nicosia, Cyprus (*Executive Summary available in E, F, S & R)	E*
165.	Twenty-sixth Session of the Intergovernmental Coordination Group for the for the Pacific Tsunami Warning and Mitigation System (ICG/PTWS-XXVI), Hawaii, USA, 22–24 April 2015 (*Executive Summary available in E, F, S & R)	E*
166.	Tenth Session of the Intergovernmental Coordination Group for the Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (ICG/CARIBE-EWS), Philipsburg, Sint Maarten, Kingdom of the Netherlands, 19–21 May 2015 (*Executive Summary available in E, F, S & R)	E*
167.	Tenth Session of the IOC Sub-Commission of the Western Pacific (WESTPAC-X), Phuket, Thailand, 12–15 May 2015	E
168.	Twenty-eighth Session of the Assembly, Paris, 18–25 June 2015	
169.	Twelfth 12th Session of the Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the North-eastern Atlantic, the Mediterranean and Connected Seas (ICG/NEAMTWS-XII), Dublin, Ireland, 16-18 November 2015 (*Executive Summary available in E, F, S & R)	E*
170.	Eleventh Session of the Intergovernmental Coordination Group for the Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (ICG/CARIBE EWS-XI), Cartagena, Colombia, 5-7 April 2016 (*Executive Summary available in E, F, S & R)	E*
171.	Tenth Session of the Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWS), Muscat, Oman, 24–26 March 2015	E*
172.	Forty-ninth Session of the Executive Council, Paris, 7–10 June 2016 (* Decisions available in E, F, S & R)	E*
173.	Thirteenth Session of the Intergovernmental Coordination Group for the Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions, Bucharest, Romania, 26–28 September 2016 (*Executive Summary available in E, F, S & R)	E*
174.	Twenty-seventh Session of the Intergovernmental Coordination Group for the Pacific Tsunami Warning and Mitigation System (ICG/PTWS-XXVII), Tahiti, France, 28-31 March 2017 (*Executive Summary available in E, F, S & R)	E*
175.	Twelfth Session of the Intergovernmental Coordination Group for the Tsunami and other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (ICG/CARIBE-EWS), Puntarenas, Costa Rica, 10–12 May 2017 (*Executive Summary available in E, F, S & R)	E*
176.	Eleventh Session of the Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWMS), Putrajaya, Malaysia, 18–20 April 2017 (*Executive Summary available in E, F, S & R)	E*
177.	Fourteenth Session of the Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the North-eastern Atlantic, the Mediterranean and connected seas (ICG/NEAMTWS), Lisbon, Portugal, 21–23 November 2017 (*Executive Summary available in E, F, S & R)	E*
178.	Twenty-ninth Session of the Assembly, Paris, 21–29 June 2017 and Fiftieth Session of the Executive Council, Paris, 20 June 2017 (*Executive Summary available in E, F, S & R)	E*
179.	Thirteenth Session of the Intergovernmental Coordination Group for the Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (ICG/CARIBE EWS-XIII), Curaçao, 23–27 April 2018 (*Executive Summary available in E, F, S & R)	E*
180.	Twenty-fifth Session of the IOC Committee on International Oceanographic Data and Information Exchange, Tokyo, 2019 (* Executive Summary available separately in E, F, S & R)	E*
181.	Fifteenth Session of the Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the North-Eastern Atlantic, the Mediterranean and Connected Seas (ICG/NEAMTWS), Paris, France, 26–28 November 2018 (*Executive Summary available in E, F, S & R)	E*
182.	Twelfth Session of the Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWMS), Kish, Islamic Republic of Iran, 9–12 March 2019 (*Executive Summary available in E, F, S, R)	E*
183.	Twenty-eighth Session of the Intergovernmental Coordination Group for the Pacific Tsunami Warning and Mitigation System (ICG/PTWS-XXVIII), Montelimar, Nicaragua, 2–5 April 2019 (*Executive Summary available in E, F, S & R)	E*
184.	Fourteenth session of the Intergovernmental Coordination Group for the Tsunami and other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (ICG/CARIBE-EWS-XIV/3), Punta Leona, Costa Rica, 8–11 April 2019 (*Executive Summary available in E, F, S & R)	E*
185.	Fifth Session of the Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWS-V/3), Putrajaya, Malaysia, 8–10 April 2008	E

186.	Sixth Session of the Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWS-VI/3), Hyderabad, India, 7–9 April 2009	E
187.	Eighth Session of the Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWS-VIII/3), Melbourne, Australia, 3–6 May 2011	E
188.	Fifty-first Session of the Executive Council, Paris, 3–6 July 2018 (* Decisions available in E, F, S & R)	E*
189.	Sixteenth Session of the Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the North-Eastern Atlantic, the Mediterranean and Connected Seas (ICG/NEAMTWS), Cannes, France, 2-4 December 2019 (* Executive Summary available in E, F, S & R)	E*
190.	Fifteenth Session of the Intergovernmental Coordination Group for the Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (ICG/CARIBE EWS-XV), 27–29 April 2021 (online) (* Executive Summary available in E, F, S & R)	E*
191.	Twenty-ninth Session of the Intergovernmental Coordination Group for the Pacific Tsunami Warning and Mitigation System (ICG/PTWS-XXIX), Online, 1–2 and 7–8 December 2021 (*Executive Summary available in E, F, S & R)	E*
192.	Thirtieth Session of the IOC Assembly, Paris, 26 June–4 July 2019 and Fifty-second session of the IOC Executive Council, Paris, 25 June 2019 (*Summary report available in E, F, S & R)	E*
193.	Fifty-third Session of the Executive Council, Online, 3–9 February 2021 (* Decisions available in E, F, S & R)	E*
194.	Thirty-first Session of the IOC Assembly, Online, 14–25 June-2021	E F S R
195.	Tenth Session of the International Co-ordinating Group for the Tsunami Warning System in the Pacific, Sidney, Canada, 1–3 August 1985	E
196.	Inter-Sessional Meeting of the Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWMS), online, 23–24 November 2021	E
197.	Twenty-ninth Session of the Intergovernmental Coordination Group for the Pacific Tsunami Warning and Mitigation System (ICG/PTWS), 1–2 & 7–8 December 2021 (online)	E*
198.	Sixteenth Session of the Intergovernmental Coordination Group for the Tsunami and other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (ICG/CARIBE-EWS), San José, Costa Rica, 25–28 April 2023	E (summary in F & S)
199.	Summary Report of the Eighteenth Session of the Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the North-eastern Atlantic, the Mediterranean and Connected Seas (ICG/NEAMTWS-XVIII), 6–8 February 2024, UNESCO Headquarters, Paris	E (summary in F & S)
200.	Summary Report of the Thirteenth Session of the Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWMS), 28 November–1 December 2022, Bali, Indonesia	E (summary in F & S)
201.	Summary Report of the Nineteenth Session of the Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the North-eastern Atlantic, the Mediterranean and Connected Seas (ICG/NEAMTWS-XIX), 27–29 November 2024, UNESCO Headquarters, Paris	E (summary in F & S)