













## UNESCO - IOC INTERNATIONAL TSUNAMI INFORMATION CENTRE (ITIC)

# ITIC TRAINING PROGRAMME (ITP-TEWS-Hawaii) TSUNAMI EARLY WARNING SYSTEMS AND THE PACIFIC TSUNAMI WARNING CENTER (PTWC) ENHANCED PRODUCTS, TSUNAMI EVACUATION PLANNING AND UNESCO IOC TSUNAMI READY PROGRAMME

#### 15-26 September 2025, Honolulu, Hawaii USA

The ITIC Training Program on Tsunami Early Warning and Mitigation Systems has focused since 2005 on improving operating procedures for tsunami warning and emergency response as essential for successful tsunami warning. While infrequent, tsunamis can be extremely deadly because of their quick onset and immediate impact in minutes. In order to warn quickly and have the public evacuate when necessary, agencies must pre-plan and have protocols and procedures which are well-known to every stakeholder and to the public, and which are well-exercised and practiced. Communities must know their hazard and risk, and prepare in advance, so that every person can recognize the tsunami danger and know what to do to save their lives.

This training follows the tsunami warning chain, with week one focusing on tsunami warning activities and week two focusing on tsunami emergency response. Emphasis is on the importance of Standard Operating Procedures (SOPs) for enabling consistent and rapid tsunami warning and response. SOP development is a dynamic process, and each event is unique in its generation and impact, and so also in its response. In every event, we learn a little more about the science of tsunamis and how to better mitigate against their impact.

The training will use Hawaii as a working example of an end-to-end tsunami warning and mitigation system demonstrating close stakeholder coordination and partnership for operational warnings and in preparedness activities. Participants will engage in a series of presentations and discussions with the Pacific Tsunami Warning Center (PTWC) and Hawaii technical and emergency agencies (State and County Emergency Operation Centre, University of Hawaii).

Recognizing that local tsunamis remain the most challenging operation for countries, the ITP-TEWS will focus its training as guided by IOC Manual and Guides for warning and emergency response, and evacuation planning (Procedures for Tsunami Warning and Emergency Management (MG 76, 2017), PTWS National Tsunami Warning Center Minimum Competency Levels (2023), PTWS Local-Source Tsunami Response Best Practice (2019), Preparing for Community Tsunami Evacuations: from inundation to evacuation maps, response plans and exercises (MG 82, 2019)). The training will also overview the UNESCO-IOC Tsunami Ready Recognition Programme (MG 74, 2022). A goal of the IOC's Ocean Decade Tsunami Programme

is "make 100% of communities at risk of tsunami prepared for and resilient to tsunamis by 2030."

During the training course, participants are expected to give a 15-minute presentation on their country's tsunami warning and mitigation system, including their tsunami SOPs and plans for implementing Tsunami Ready or other similar initiatives. Participants will engage in a tsunami evacuation drill to test the viability of evacuation on foot from a local tsunami. On the last two days, a tsunami exercise will be conducted requiring country decision-making and action using national products supplemented by the PTWC Enhanced Products.

#### **Primary Resource Organisations:**

International Tsunami Information Center

Pacific Tsunami Warning Center

University of Hawaii

Honolulu Dept of Emergency Management, City & County of Honolulu, Oahu, Hawaii, USA Hawaii State Emergency Management Agency (HI-EMA), Honolulu, Hawaii, USA

#### Speakers and Resource Persons (Biographies available)

International Tsunami Information Centre (ITIC), UNESCO-IOC NOAA, Honolulu, HI USA

Dr. Laura Kong, Director

Christa von Hillebrandt-Andrade, Deputy Director

ITIC Staff (Tammy Fukuji, Kimberly Maisonet-Gonzalez, Marie Eblé)

Pacific Tsunami Warning Center (PTWC), NOAA, Honolulu, HI, USA

Dr. Charles "Chip" McCreery, Director

Dr. Stuart Weinstein, Deputy Director

PTWC Duty Scientist Staff (Dr. Nathan Becker, Dr. Stanley Goosby, Carolina Hincapié-Cárdenas, Caroline Jackson, Dr. Andrei Natarov, Dr. David Walsh, Dr. Dailin Wang, Dr. Jonathan Weiss)

Indian Ocean Tsunami Information Centre (IOTIC), IOC, Jakarta, Indonesia

Ardito Kodijat, Head, Indian Ocean Tsunami Information Center

**SMART Cables** 

Ceci Rodriguez Cruz, Director, SMART Cable International Programme Office, Hawaii, USA

Hawaii State Emergency Management Agency (HI-EMA), Hawaii, USA

Jack Lee, Operations Chief

Honolulu Department of Emergency Management (DEM), City and County of Honolulu, USA

Dr. Randal Collins, Administrator

Jennifer Walter, Deputy Director, Molly Pierce, Public Information Officer

University of Hawaii (UH) at Manoa, Honolulu, HI, USA

Dr. Kwok Fai Cheung, Professor, Dept of Ocean and Resources Engineering (ORE), School of Earth Science and Technology (SOEST)

Dr. Yoshiki Yamazaki, Research Scientist, ORE, SOEST

Dr. Ian Robertson, Professor (retired), Dept of Civil & Environmental Engineering, School of Engineering

University of Hawaii Sea Level Center

Dr. Phil Thompson, Director

Jonathan Ayers, Sea Level Specialist

Chile

Mario Andrés Guerra Vera, Coastal Geologist & Disaster Risk Specialist, Pontificia Universidad Católica de Valparaíso (PUCV), Valparaíso, Chile

### PROVISIONAL AGENDA

(version 14 September 2025)

Sess ion	Start Time	End Time	Topic	Location, Session Chair, Speaker
1 - 3			MONDAY, 15 SEPTEMBER, DAY 1	NOAA Pier 38
			Opening, Course Overview, Tsunami Early Warning, IOC Tsunami Warning and Mitigation System, Country Presentations	von Hillebrandt- Andrade
	8:00	8:15	PICKUP ALA MOANA HOTEL (AMH, Polynesian Adventures bus - Kimberly to meet group); TRANSIT to NOAA Pier 38 training venue	Kimberly Maisonet- Gonzalez,ITIC
	8:30	9:00	Registration	
1.1	9:00	9:40	Opening Welcome  1 Bernardo Aliaga, Head, UNESCO-IOC Tsunami Resilience Section (TSR)  2. AJ Reiss, Director, NOAA NWS National Centers for Environmental Prediction, Ocean Prediction Center (NCEP/OPC)  3. Capt Carloz Zúñiga, Director, Servicio Hidrográfico y Oceanográfico de la Armada de Chile  4. Ms Litea Buikoto, Deputy Director, The Pacific Community  5. Dr. Laura Kong, Director, UNESCO-IOC/NOAA International Tsunami Information Centre  6. Dr. Charles McCreery, Director, NOAA NWS Pacific Tsunami Warning Center	IOC, USA, Chile, SPC, ITIC, PTWC
1.2	9:40	9:50	Participant and Trainer Self-introductions	All
1.3	9:50	10:00	Programme Logistics – Health and Safety, Building and Foreign Visitor Rules, Local Transportation, Coffee/Tea/Lunch Breaks, Information Technology Support	Kong, Tammy Fukuji, ITIC
1.4	10:00	10:15	Course Overview, Learning Activities, Manuals, Materials, including Awareness and TW Tools, OTGA tsunami courses	Christa von Hillebrandt- Andrade, ITIC
	10:15	10:45	Group Photo, COFFEE / TEA BREAK	
2.1	10:45	11:15	Responding Rapidly and Effectively: Tsunami Warning and Emergency Response Requirements	Kong
2.2	11:15	11:45	UNESCO IOC Global Tsunami System: Intergovernmental Coordination Groups; Roles of Tsunami National Contacts, Regional Tsunami Service Providers and Tsunami Information Centers, Tsunami Warning Focal Points, National Tsunami Warning Centers	Charles McCreery, PTWC

2.3	11:45	12:30	Country Presentations (15 min each) - 3 countries (1-3)	Countries
	12:30	13:45	LUNCH	
			Earthquake and Tsunami Science	von Hillebrandt- Andrade
3.1	13:45	14:30	What earthquake science you need to know to warn for and respond to tsunami warnings? Earthquake Seismology - what, where, how, when, and damage caused	Charles McCreery, PTWC
	14:30	14:45	COFFEE / TEA BREAK	
3.2	14:45	15:30	What tsunami science you need to know to warn for and respond to tsunami warnings? Tsunami generation, propagation, and inundation - what, where, how, when, and damage caused	Kong
	15:30	15:35	Next Day Announcements	ITIC
	15:35	15:45	Clean-up	All
	15:45	16:00	RETURN TO HOTEL	Maisonet- Gonzalez
4-5			TUESDAY, 16 SEPTEMBER, DAY 2	NOAA Pier 38
			TWC and TER Overviews, Lessons Learned by Hawaii and elsewhere from past tsunamis, Country Presentations	von Hillebrandt- Andrade
	8:15	8:30	PICKUP ALA MOANA HOTEL (AMH, Polynesian Adventures bus - Kimberly to meet group); TRANSIT to NOAA Pier 38 training venue	Maisonet- Gonzalez
	8:30	8:45	Day Overview	ITIC
4.1	8:45	9:15	Tsunami Warning Center Overview: What do Tsunami Warning Centers (TWCs) do? What do TWCs provide to Tsunami Emergency Response (TER) agencies? Challenges in Detection and Tsunami Threat Assessment	McCreery
4.2	9:15	9:45	Tsunami Emergency Response Overview: What do TER agencies provide to the Public? Challenges in Alerting, Evacuation, Safe-to-Return (All-Clear), and Preparedness	von Hillebrandt- Andrade
4.3	9:45	10:45	Lessons Learned from Past Tsunamis - Warning and Response 29 July 225 Kamchatka Tsunami Hawaii 1946, 1986, 1994	PTWC, ITIC Kong, Hawaii (Hawaii State EMA, Jack Lee; Honolulu Dept of Emergency Management, Jennifer Walter), All

	10:45	11:00	COFFEE / TEA BREAK	
4.4	11:00	11:30	Lessons Learned from Past Tsunamis - Warning and Response highlights, including Chile 1960; Papua New Guinea 1998; Japan 1983/1993; Nicaragua 1992 / Java 2006 / Mentawai 2010; Sumatra 2004; Tonga 2006; American Samoa/Samoa/Tonga 2009; Chile 2010; Japan 2011; Kaikoura NZ 2016, Palu and Anak Krakatau 2018, Tonga 2022, Honduras 2025	PTWC, ITIC, All
2.3	11:30	12:00	Country Presentations (15 min each) - 2 countries (4-5)	Countries
	12:00	13:15	LUNCH	
			Tsunami Warning Center and Emergency Response (TWC/TER) Standard Operating Procedures (SOP), PTWC SOPs, TWC Topics - Earthquake Source Characterization	von Hillebrandt- Andrade
5.1	13:15	13:45	IOC TWC and TER SOP Manual (MG 76), SOPs and checklists: TWC Operations for Distant, Regional, and Local Tsunamis - Monitoring, Detection and Evaluation, Communications, Message Dissemination	von Hillebrandt- Andrade
5.2	13:45	14:15	Pacific Tsunami Warning Center: Crisis Event SOPs: Earthquake and Sea Level Monitoring (Data networks and acquisition, quality- control/health status), Earthquake Analysis Methods, Threat Analysis, Forecasting, Products, Dissemination	Weinstein
	14:15	14:30	COFFEE / TEA BREAK	
5.3	14:30	15:00	TWC Operations: Real-time Earthquake Detection and Fast Source Characterization, Methods and Limitations: Locating Earthquakes, Estimating Magnitudes	Kong
5.4	15:00	15:30	TWC Operations: Real-time Earthquake Detection and Fast Source Characterization, Methods and Limitations: Determining Fault Mechanisms, Using GNSS/GPS to constrain co-seismic deformation	Weinstein
	15:30	15:35	Next Day Announcements	ITIC
	15:35	15:45	Clean-up	All
	15:45	16:00	RETURN TO HOTEL	Maisonet- Gonzalez
5-6			WEDNESDAY, 17 SEPTEMBER, DAY 3	NOAA Pier 38
			PTWC Enhanced Products, Travel time and Wave Amplitude Forecasting, NTWC and TER Guidance, Country Presentations	von Hillebrandt- Andrade

	8:15	8:30	PICKUP ALA MOANA HOTEL (AMH, Polynesian Adventures bus); TRANSIT to NOAA Pier 38 training venue	Maisonet- Gonzalez
	8:30	8:45	Day Overview	ITIC
5.5	8:45	9:30	Pacific Tsunami Warning Center Products - Why, What, Criteria, Staging of Products; Explanation of Each Product: Public Text, Graphical Deep-Ocean Tsunami Amplitude, Coastal Tsunami Amplitude, Coastal Tsunami Amplitude Polygons, Tsunami Amplitude Statistics, Coastal Tsunami Amplitude KMZ file (videos and discussion)	Kong, Dailin Wang, PTWC
5.6	9:30	10:00	PTWC Operations: Travel Time Forecasting – Methods, Limitations, and Uncertainties	Wang
	10:00	10:15	COFFEE / TEA BREAK	
5.7	10:15	11:00	PTWC Operations: Wave Amplitude Forecasting – Methods (ATFM, SIFT, RIFT), Limitations, Uncertainties and Sensitivities	Wang
5.8	11:00	11:15	NTWC and TER Guidance on how to use PTWC Enhanced Products for National Warnings and Evacuation - Land and Marine Threats and Public Safety: Flow Charts, Criteria Tables, Timeline-driven SOPs, Message Templates (IOC MG 76)	Kong
2.3	11:15	12:00	Country Presentations (15 min each) - 3 countries (6-8)	Countries
	12:00	13:15	LUNCH	
			Tsunami Warning and Mitigation Systems (TWMS) - Hawaii example, Hazard Assessment	von Hillebrandt- Andrade
6.1	13:15	13:45	Tsunami Warning and Mitigation Systems - Hawaii example	Kong
6.2	13:45	14:30	Tsunami Hazard Risk Assessment: Modeling and Mapping of Tsunami for Inundation and Land Evacuation - Hawaii example	Kwok Fai Cheung, Univ of Hawaii
	14:30	14:45	COFFEE / TEA BREAK	
6.3	14:45	15:30	Tsunami Hazard Risk Assessment: Modeling and Mapping of Tsunami for Port and Harbor Planning and Response - Hawaii example	Cheung
	15:30	15:35	Next Day Announcements	ITIC
	15:35	15:45	Clean-up	All
	15:45	16:00	RETURN TO HOTEL	Maisonet- Gonzalez
			THURSDAY 40 OFFITHER TO A V 4	DEM NO.
7-8			THURSDAY, 18 SEPTEMBER, DAY 4	DEM, NOAA IRC
			Hawaii TWMS: City and County of Honolulu, Dept of Emergency Management visit	Laura Kong

	8:15	8:45	PICKUP ALA MOANA HOTEL (AMH, Polynesian Adventures bus); TRANSIT to Honolulu DEM	Maisonet- Gonzalez
7.1	9:00	10:45	Visit Honolulu Department of Emergency Management (DEM), Emergency Operations Center: County Response to PTWC Tsunami Products, Tsunami Evacuation (vertical), Alert Dissemination / Siren System, Signage, Preparedness and Mitigation, including Tourist and Special needs population readiness	Honolulu DEM
	10:45	11:15	TRANSIT to JBPHH Pass and ID Office	
	11:15	12:15	Pick JBPHH Base Passes	Fukuji, Behnken, Kong
	12:15	12:30	TRANSIT to Moanalua Shopping Center	
	12:30	13:30	LUNCH, Moanalua Shopping Center (on your own). https://www.moanaluashoppingcenter.com/stores- restaurants	
	13:30	13:45	TRANSIT to IRC	
			Country Presentations, TWC operations and decision support tools	Laura Kong
8.1	13:45	14:00	Welcome to IRC, Group Photo	Tom Evans, Acting Director, NWS Pacific Region
2.3	14:00	15:30	Country Presentations (15 min each) - 6 countries (9-14)	Countries
8.2	15:30	17:20	2 Groups, 2 Sessions, Switch after 45 minutes	
	15:30	15:45	Instructions and switch to rooms COFFEE TEA BREAK	
8.2	15:45	16:30	2 Group (switch after 45 minutes): Group 1: PTWC visit Data networks and acquisition, monitoring, analysis, quality-control/health status, communication and dissemination, redundancy, contingency/backup, etc Demonstration. PTWC Operational Tools (SIFT, RIFT, Wphs CMT)	PTWC
			Group 2: ITIC Library and Conference Room Tsunami Warning Decision-Support Tools - 1. Overview of available tools. Alerts, (CISN); Sea level monitoring (Tide Tool, IOC Sea Level Monitoring web site); Global Historical Tsunami Databases (WDS/NCEI web tools), Tsunami Travel Times (TTT); Hazard Assessment (TsuCAT) 2. Install and use Tsunami Warning Decision-Support Tools (CISN, Tide Tool, TTT),	ITIC, PTWC

	16:30	16:35	Switch - ITIC, PTWC	
8.2	16:35	17:20	Switch: Group 1 to ITIC Library and Conference Group 2 to PTWC	
	17:20	17:25	Return to Rm 1377 Next Day Announcements	ITIC
	17:30	18:15	RETURN TO HOTEL	Maisonet- Gonzalez
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9-10			FRIDAY, 19 SEPTEMBER, DAY 5	HI-EMA, NOAA IRC
			Hawaii TWMS: Hawaii State Emergency Management Agency visit	Laura Kong
	8:15	8:30	PICKUP ALA MOANA HOTEL (AMH, Polynesian Adventures bus); TRANSIT to Hawaii State Emergency Management Agency (HI-EMA), Diamond Head Crater	Maisonet- Gonzalez, ITIC
9.1	8:30	10:30	Visit Hawaii State Emergency Management Agency (HI-EMA), Emergency Operations Center, State Warning Point: Response to PTWC Tsunami Products, Hawaii Emergency Alert System (EAS) and Siren System, Preparedness and Mitigation	Jack Lee, HI- EMA
	10:30	11:00	TRANSIT to Moanalua Shopping Center	
	11:00	12:00	LUNCH, Moanalua Shopping Center (on your own). https://www.moanaluashoppingcenter.com/stores- restaurants	
	12:00	12:15	TRANSIT to IRC	
			Country Presentations, TWC Operations - Sea Level and Tsunami Monitoring, NTWC Competencies, Small group SOP discussion	Laura Kong
2.3	12:15	13:15	Country Presentations (15 min each) - 4 countries (15-18)	Countries
10.1	13:15	13:45	TWC Operations: Sea Level Monitoring - Methods, Instruments, Limitations, Challenges	David Walsh, PTWC
10.2	13:45	14:15	Improving Tsunami Warning - Emerging Tools and Technologies: ITU/WMO/IOC SMART Cables for Observing the Ocean	Ceci Rodrigues, SMART Cables International Programme Office
10.3	14:15	14:30	NTWC Competencies (PTWS, 2023)	Kong
10.4	14:30	15:30	Session 1 (Sep 19), Session 2 (Sep 24): Review & improve your Review & improve your TWC and TER SOPs / Checklists. Small group discussion and question-and-answer. Reference for Day 9 Exercise Hawaii Wave 2025 Week 1 presentations (countries 1-18) Week 2 presentations (countries 19-23)	PTWC, ITIC

			HOMEWORK - Review & improve country TWC SOPs / Checklists (local/regional/distant threat) Reference for Day 9 EHW-25 exercise	
	15:30	15:45	COFFEE / TEA BREAK	
10.5	15:45	17:00	Sea Level Monitoring for Tsunamis a. University of Hawaii Sea Level Center b. Sea Level Station Instrumentation - 'show-and-tell'	Phil Thompson, Jonathan Ayers, Univ of Hawaii Sea Level Center (UHSLC)
	17:00	17:15	Week 1 Recap, Week 2 Activities	ITIC
	17:30	18:15	RETURN TO HOTEL	Maisonet- Gonzalez
			SATURDAY-SUNDAY, 20-21 SEPTEMBER - FREE DAYS	
44			MONDAY OF OFFITHER DAY O	NOAA D: 00
11- 13			MONDAY, 22 SEPTEMBER, DAY 6	NOAA Pier 38, Ala Moana area
			Tsunami Emergency Response (TER) SOPs, Local Source SOP, Communications, Tsunami Event Flow	von Hillebrandt- Andrade
	8:15	8:30	PICKUP ALA MOANA HOTEL (AMH, Polynesian Adventures bus); TRANSIT to NOAA Pier 38 training venue	Maisonet- Gonzalez
			TW Tools, TsuCAT troubleshooting as needed Week 2	
	8:30	8:45	Day Overview	ITIC
11.1	8:45	9:15	SOPs and Checklists: TER operations - Example Warning Plans for Coordination of Information Flow and Evacuation (IOC MG 76). Private Sector SOPs. Developing timeline-driven SOPs (Who does What, and When (Roles and Responsibilities)?)	von Hillebrandt- Andrade
11.2	9:15	9:30	Local-Source Tsunami Response Best Practice (approved at ICG/PTWS-XXVIII, 2019)	Kong
11.3	9:30	10:15	Emergency communications - Robustness, reliability, redundancy. Technologies for the downstream transmission of warnings to communities. Case Study: Palu, Indonesia tsunami, 2018	Kong, Ardito Kodijat, IOTIC
	10:15	10:30	COFFEE / TEA BREAK	
11.4	10:30	11:00	Improving Response and Managing (reliable and unreliable) Information Flow during an Event: Media and Social Media - Good Practices	Kodijat
11.5	11:00	12:00	Learning Activity: Improving Response – Tsunami Warning and Emergency Response - What happens during an event?	ITIC, IOTIC, PTWC

			HOMEWORK - Review & improve country TER SOPs / Checklists (local/regiona/distantl threat) and Media SOP. Reference for Day 9 EHW-25 exercise	
	12:00	13:15	LUNCH (TWTools, TsuCAT troubleshooting as needed)	
			UNESCO-IOC Tsunami Ready, Hazard Assessment	von Hillebrandt- Andrade
12.1	13:15	13:45	Implementing Tsunami Ready programs to recognize community readiness - UNESCO-IOC Tsunami Ready Recognition Programme - Guidelines, Recognition Process (IOC MG 74)	Kodijat
12.2	13:45	14:15	Building Awareness and Community Preparedness - Tsunami Evacuation Planning - considerations and requirements. Preparing for Community Tsunami Evacuations: from inundation to evacuation maps, response plans and exercises (IOC MG 82)	von Hillebrandt- Andrade
13.1	14:15	14:45	TR ASSESS-1: Tsunami Hazard Risk Assessment - Data Requirements, Methods, Techniques. Case Study - Using ComMIT / MOST tsunami model for hazard assessment	Marie Eble, ITIC, Chris Moore, NOAA PMEL
	14:45	15:00	COFFEE / TEA BREAK	
13.2	15:00	15:30	TsuCAT (Tsunami Coastal Assessment Tool) - Uses, Limitations. Local scenario uncertainties	Moore, Kong
	15:30	15:35	Next Day Announcements	ITIC
	15:35	15:45	Clean-up	All
	15:45	16:00	RETURN TO HOTEL	Maisonet- Gonzalez
40			THEODAY OF SEPTEMBER DAY 7	NOAA Diamoo
13- 14			TUESDAY, 23 SEPTEMBER, DAY 7	NOAA Pier 38
			Country Presentations, Hazard Assessment, Evacuation Planning	Kodijat
	8:15	8:30	PICKUP ALA MOANA HOTEL (AMH, Polynesian Adventures bus); TRANSIT to NOAA Pier 38 training venue	Maisonet- Gonzalez
	8:30	8:45	Day / Week Overview	ITIC
2.3	8:45	10:00	Country Presentations (15 min each) - 5 countries (19-23)	Countries
13.4	10:00	10:15	Hazard Assessment - IOC Regional Efforts on Tsunami Seismic Sources - Caribbean, Central America, South China Sea, Southwest Pacific meeting outcomes, and upcoming plans for Colombia and Ecuador and other locations	Kong
13.5	10:15	10:30	Hazard Assessment - Role of Tsunami Deposits, Chile and Cascadia Examples	Mario Andrés Guerra Vera, PUCV Chile

	10:30	10:45	COFFEE / TEA BREAK	
14.1	10:45	11:15	TR PREP-1: Making Community-based Evacuation Maps, Routes, and Signage - guidance	Kodijat
14.2	11:15	11:45	Evacuation maps when inundation modeling is not possible or practical - Case Study - Caribbean example	von Hillebrandt- Andrade
14.3	11:45	12:30	Did you escape the wave? Ala Moana Tsunami Evacuation Drill 1. Instructions and preparations 2. Create Evacuation Map ('paper and pencil' or electronic)	TsuEvac Team (Guerra Vera, Caroline Jackson (PTWC), von Hillebrandt- Andrade)
	12:30	13:45	LUNCH (TWTools troubleshooting as needed)	
			Tsunami-resistant Building Design, Did you escape the wave?	Kodijat
14.4	13:45	14:45	Evacuation when there is no time or high ground. Designing buildings to withstand tsunamis - ASCE 7 2016, International Building Code 2018, and FEMA P- 646 rev 3 (2019)	Ian Robertson, Univ of Hawaii
	14:45	15:00	COFFEE / TEA BREAK	
14.5	15:00	15:15	Did you escape the wave? Ala Moana Tsunami Evacuation Drill - Final Instructions	TsuEvac Team
	15:15	15:45	Clean up	
	15:45	16:15	Transit to Ala Moana for Evacuation Drill	
14.5	16:30	17:00	Did you escape the wave? Ala Moana Tsunami Evacuation Drill	All
	17:00	18:00	Congratulations get-together (optional)	All
	18:00	18:00	RETURN TO HOTEL	Maisonet- Gonzalez
15- 16			WEDNESDAY, 24 SEPTEMBER, DAY 8	NOAA IRC
	=		Tsunami Response Plans, Awareness, Exercises	Kodijat
	8:15	8:45	PICKUP ALA MOANA HOTEL (AMH, Polynesian Adventures bus); TRANSIT to NOAA Pier 38 training venue	Maisonet- Gonzalez
	8:50	9:00	Day Overview	ITIC
15.1	9:00	9:30	TR RESP-1 and RESP-2: Making Tsunami Response Plans and Managing Emergency Response - guidance, how-to, and templates	Kong
15.2	9:30	10:00	TR PREP-3 and PREP-4: Increasing Awareness - 1. Strategies and examples, World Tsunami Awareness Day, 2. IOTIC and ITIC examples	Kodijat, von Hillebrandt- Andrade

15.3	10.00	11.00	TD DDED 2: Awaranasa Laarning Astinite	Awaranaa
15.3	10:00	11:00	TR PREP-3: Awareness Learning Activity 1. Using online tools such as Canva to create materials 2. Create Public Awareness Material (poster, presentation, video, etc) 3. HOMEWORK: Finish, submit on Day 9. Shared on Day 10	Awareness Team (Kodijat, Maisonet- Gonzalez, von Hillebrandt- Andrade) "Country" Teams, or individual
	11:00	11:15	COFFEE / TEA BREAK	
15.5	11:15	11:45	TR PREP-5: Increasing Preparedness - Tsunami Exercises and Drills, Guidance: IOC Tsunami Wave Exercises (IOC MG 58), IOC Community Tsunami Exercise Guideline (IOC MG 86) - guidance, how-to, and templates	Kodijat, Hillebrandt- Andrade
15.6	11:45	12:15	IOC Exercises: PACWAVE, CARIBE WAVE, IOWAVE	Hillebrandt- Andrade, Kodijat
	12:15	13:15	LUNCH (TWTools,TsuCAT troubleshooting as needed)	
			Tourists and Special Needs Populations, Marine Readiness, Small group SOP discussion, RUNAMI Board Game	Kodijat
15.7	13:15	14:00	Tsunami Evacuation: Tourist and Special Needs Population	Kong, von Hillebrandt- Andrade
15.8	14:00	14:30	Marine Sector Readiness - US and international resources, Japan Ports and Harbors SOPs	Kong
	14:30	14:45	COFFEE / TEA BREAK	
16.1	14:45	15:45	Session 1 (Sep 19), Session 2 (Sep 24): Review & improve your Review & improve your TWC and TER SOPs / Checklists. Small group discussion and question-and-answer. Reference for Day 9 Exercise Hawaii Wave 2025 Week 1 presentations (countries 1-18) Week 2 presentations (countries 19-23)	PTWC, ITIC
			HOMEWORK - Review & improve country TWC and TER SOPs / Checklists (local/regional/distant threat) and Media SOP. Reference for Day 9 EHW-25 exercise	
16.2	15:45	16:45	RUNAMI, Tsunami Ready board game - instruction and playing	Kodijat, All
			HOMEWORK - Review & improve country TWC and TER SOPs / Checklists (local/regional/distant threat) and Media SOP. Reference for Day 9 EHW-25 exercise  HOMEWORK - Finish Public Awareness Material.	
			Submit on Day 9. Shared on Day 10	
	16:45	16:50	Next Day Announcements	ITIC

	17:00	17:45	RETURN TO HOTEL	Maisonet- Gonzalez
17			THURSDAY, 25 SEPTEMBER, DAY 9	NOAA IRC
			Exercise Hawaii Wave 2025 (EHW-25)	Kong
	8:15	8:45	PICKUP ALA MOANA HOTEL (AMH, Polynesian Adventures bus); TRANSIT to NOAA IRC training venue	Maisonet- Gonzalez
	8:50	9:00	Day Overview	ITIC
17.1	9:00	9:30	Exercise Hawaii Wave 2025 (EHW-25) Tsunami Exercise, Decision-making using PTWC Enhanced Products - EXPLAN: Introduction, Format, Conduct	Exercise Team (Carolina Hincapié- Cárdenas, McCreery, Kong, von Hillebrandt- Andrade, Moore), Controllers
17.2	9:30	10:00	EHW-25 Tsunami Exercise Preparation Guidance - "Country" TWC / TER SOPs, Criteria Tables, Response Plans, Alerting, Media, Evacuation, Cancellation, etc	Exercise Team, Controllers
	10:00	10:15	COFFEE / TEA BREAK	
17.3	10:15	12:00	EHW-25 Tsunami Exercise Preparation - "Country" TWC / TER SOPs, Criteria Tables, Response Plans, Alerting, Media, Evacuation, Cancellation, etc	"Country" Teams
	12:00	13:15	LUNCH	
			EHW-25	Kong
17.4	13:15	13:45	EHW-25 Tsunami Exercise - setup and last instruction	Exercise Team, Controllers
17.5	13:45	16:00	EHW-25 Tsunami Exercise - Decision-making using PTWC Enhanced Products	"Country" Teams, Simulators, Exercise Controllers
	16:00	16:15	COFFEE / TEA BREAK	
17.6	16:15	16:45	EHW-25 Post-Exercise Evaluation Preparation - Press Conference: Situation Report and Briefing	Exercise Team, Controllers, "Country" Teams
			HOMEWORK - Finish Situation Report and Briefing	
	16:45	16:50	Next Day Announcements	ITIC
	17:00	17:45	RETURN TO HOTEL	Maisonet- Gonzalez

18- 20			FRIDAY, 26 SEPTEMBER, DAY 10	NOAA IRC Auditorium
			Awareness Sharing, Evacuation Drill Hotwash, EHW-25 Press Conference, ITP Logistics wrap-up	von Hillebrandt- Andrade
	8:15	8:45	PICKUP ALA MOANA HOTEL (AMH, Polynesian Adventures bus); TRANSIT to NOAA IRC training venue	Maisonet- Gonzalez
	8:50	9:00	Day Overview	ITIC
18.1	9:00	9:45	Sharing: Public Awareness products using Canva	Awareness Team, "Country" Teams, or individual
18.2	9:45	10:30	Ala Moana Tsunami Evacuation Drill Hotwash: Did you escape the wave?	TsuEvac Drill Team
	10:30	10:45	COFFEE / TEA BREAK	
18.3	10:45	11:45	EHW-25 Tsunami Exercise Hotwash - Press Conference: "Country" brief followed by "Media" / Audience Question-and-Answer	Exercise Team, "Country" Team representatives (TWC and TER), "Media"
18.4	11:45	12:00	ITP-Hawaii 2025 Logistics wrap-up	Fukuji
	12:00	13:30	LUNCH CELEBRATION	All, IRC 3rd Floor Lanai
			UN Ocean Decade, Calendar, Summary, Closing	Kong
19.1	13:30	14:00	UN Ocean Decade Tsunami Programme	Kodijat
19.2	14:00	14:15	2025-26 Calendar: ICG and TOWS WG Action Items and Priorities	Kong, CvH, Kodijat
19.3	14:15	15:00	Summary Discussion (Way Forward, Next Steps, Gaps and Needs): UNESCO IOC Tsunami Ready, World Tsunami Awareness Day, UN Ocean Decade Tsunami Programme	ITIC, PTWC, IOTIC, All
	15:00	15:15	COFFEE / TEA BREAK	
20	15:15	16:15	Presentation of Certificates and Closing Ceremony	ITIC, PTWC, IOTIC, NWS PR
	16:30	17:15	RETURN TO HOTEL	Maisonet- Gonzalez
			Friday - Saturday, 26-27 September	
			Hotel Checkout - Depart for home country	