National Reports will be posted to the ICG/CARIBE EWS-XVI web site without TWFP contact details

NATIONAL REPORT
Submitted by COSTA RICA

BASIC INFORMATION

1. ICG/CARIBE EWS Tsunami National Contact (TNC)

The person designated by a Member State to an Intergovernmental Coordination Group (ICG) to represent his/her country in the coordination of international tsunami warning and mitigation activities. The person is part of the main stakeholders of the national tsunami warning and mitigation system. The person may be the Tsunami Warning Focal Point, from the national disaster management organization, from a technical or scientific institution, or from another agency with tsunami warning and mitigation responsibilities.

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Title: Coordinator
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2. ICG/CARIBE EWS Tsunami Warning Focal Point (TWFP)

The 7x24 contact person, or other official point of contact or address, is available at the national level for rapidly receiving and issuing tsunami event information (such as warnings). The Tsunami Warning Focal Point either is the emergency authority (civil defense or other designated agency responsible for public safety), or has the responsibility of notifying the emergency authority of the event characteristics (earthquake and/or tsunami), in accordance with national standard operating procedures. The Tsunami Warning Focal Point receives international tsunami warnings from the PTWC, or other regional warning centres.

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Title: Jefe de Operaciones
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Emergency Fax Number: +506-2522-2713
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National Tsunami Warning Centre (if different from the above)
Person in Charge: Silvia Chacón-Barrantes
Title: Coordinator
Responsible Organization: National Tsunami Monitoring System (SINAMOT)
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3. Tsunami Advisor(s), if applicable
(Person, Committee or Agency managing Tsunami Mitigation in country)

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Name: Marino Protti
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4. Tsunami Standard Operating Procedures for a Local Tsunami (when a local tsunami threat exists, less than 1 hour travel time)

What organization identifies and characterizes tsunamigenic events?

SINAMOT obtains seismic data from OVSICORI, RSN and/or LIS (the three seismic networks in Costa Rica). These data include Mw, depth, location and source (local fault, subduction, etc.)

What is the threshold or criteria for declaring a potential tsunami emergency?

A coastal earthquake Mw>=6.5

What organization acts on the information provided by the agency responsible for characterizing the potential tsunami threat?

CNE

How is the tsunami information (warning, public safety action, etc.) disseminated within country? Who is it disseminated to?

If time is enough, it is sent to Municipal and Communal Emergency Committees through radio and telephone. They should disseminate the warning.

How is the emergency situation terminated?

When SINAMOT recommends and CNE decides. If there are no tsunami reports near the source region within two hours.

5. Tsunami Standard Operating Procedures for a Regional Tsunami (when a regional tsunami threat exists, 1–3 hour travel time)

Same as for distant tsunami.

6. Tsunami Standard Operating Procedures for a Distant Tsunami (when a distant tsunami threat exists, more than 3-hour travel time)

- *What organization identifies and characterizes tsunamigenic events?*

SINAMOT receives seismic information from PTWC, USGS and CISN.

- *What is the threshold or criteria for declaring a potential tsunami emergency?*

There are several criteria. Seismic magnitude, depth, travel time, historical events, etc.

- *What organization acts on the information provided by the agency responsible for characterizing the potential tsunami threat?*

CNE

- *How is the tsunami information (warning, public safety action, etc) disseminated within country? Who is it disseminated to?*

The CNE communicates the information to radio bases in coastal communities, to the officer in turn and to the link officers of the affected regions. They shall communicate to the Regional, Local and Community Emergency Committees, and those Committees to the public.

- *How is the emergency situation terminated?*

When SINAMOT recommends it to the CNE, the CNE decides and communicates it further.

- *For Distant Tsunami Procedures:*
  What actions were taken in response to warnings issued by PTWC and/or US NTWC, during the intersessional period?

SINAMOT analyzed the information for all the Tsunami Bulletins issued for the Caribbean coast during the intersessional period, created a Report using the App UNA Costa Segura and sent the report by email to CNE and other institutions in our email list. We also shared the information in Facebook, Instagram and Twitter. In all the cases there was no tsunami threat for Costa Rica.

7. National Sea Level Network

Please include a table with position and description of stations/sensors, and a map.

Name	***Code***	***Lat.***	***Lon.***	***Status***	***Sensors***	***Rec. Rate***	***Transm. Rate***
Limón	limon, limn	9.9886	-83.0203	Operational	1. Pressure 2. Radar	1 min	6 min
Isla del Coco (Pacific coast)	cocos	5.556083	-87.04783	Operational	1. Pressure 2. Radar	1 min	6 min

Quepos (Pacific coast)	quepo	9.4255	-84.1702	Operational	1. Pressure 2. Radar	1 min	6 min

8. Information on Tsunami occurrences/Tsunami Exercises

Please include sea level observations, pictures, wave arrival descriptions, public, media, or other responses to warnings, lessons learned, etc.

We didn't have events during the intersessional period.

9. Web sites (URLs) of national tsunami-related web sites

www.sinamot.una.ac.cr

10. Summary plans of future tsunami warning and mitigation system improvements. *This information will be used to aid the development of the CARIBE-EWS Implementation Plan*

Cahuita community just presented their application for the UNESCO/IOC Tsunami Ready recognition.

We recommended building tsunami vertical evacuation shelters for Cahuita National Park. However, funding has not been identified yet.

NATIONAL PROGRAMMES AND ACTIVITIES INFORMATION

11. EXECUTIVE SUMMARY

Brief statement of no more than one page addressing all items discussed in the Narrative section of the National Report (below).

Costa Rica is developing tsunami evacuation maps and plans for Caribbean communities and National Parks. Also a mobile App was developed notifying users of tsunami threat and guiding them through evacuation routes.

12. NARRATIVE

Detailed description of innovations or modifications to National tsunami warnings procedures or operations since last National Report, tsunami research projects, tsunami mitigation activities and best practices (especially in preparedness and emergency management), tsunami exercises, as well as public education programmes or other measures taken to heighten awareness of the tsunami hazard and risk.

SINAMOT Program currently has two projects to improve tsunami preparedness at both shores. One of these projects is with communities and the other with Wildlife Protected Areas (National Parks). The projects include creation of tsunami evacuation maps and tsunami preparedness and response plans for communities and National Parks. In the case of National Parks, the project also recommends mitigation measures if needed and assist organizing tsunami exercises and UNESCO/IOC Tsunami Ready guidelines.

SINAMOT developed a Mobile App named UNA Costa Segura. This App notifies when there is a Tsunami Threat and guides the user through the tsunami evacuation routes giving estimated distances and times.

In the upcoming months, SINAMOT will perform bathymetric surveys at Tortuguero National Park at the northern Caribbean coast and Gandoca-Manzanillo National Park at the southern Caribbean coast. These data will be employed to define the inundation area, arrival times and flow depths for those locations. Tsunami evacuation maps and plans are expected to be developed based in those outcomes. Tsunami mitigation measures will be recommended if needed.

Date: 22 April 2024 Name: Silvia Chacón Barrantes

Seventeenth session of the IOC Intergovernmental Coordination Group for the Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (ICG/CARIBE-EWS-XVII)
Managua, Nicaragua, 6–9 May 2024

INFORMATION NOTE FOR PARTICIPANTS

1. Contacts

The ICG/CARIBE-EWS XVII is hosted by Instituto Nicaragüense de Estudios Territoriales (INETER) on behalf of the Government of Nicaragua. The Tsunami Advisory Center (CATAC) is subordinated to the Director of INETER.

Principal local contacts are:

Dr. Wilfried Strauch
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Ing. Rosario Aviles
Logistics Assistant
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Other personnel mainly from INETER´s seismology section will provide assistance to the session.

2. Venue and Accommodation

The Meeting will be organized at the **Hotel Crowne Plaza Managua**. The hotel rooms have to be reserved and paid by the participants of the meeting through its webpage.

3. Visa, Arrival, Departure and Customs Requirements

INETER will inform the authorities about your participation in the meeting. In a special communication INETER will ask you to provide your travel information to considerably accelerate your entrance formalities to Nicaragua. Further visa requirements are provided on the website of the General Directorate of Migration and Immigration of Nicaragua (in Spanish only), but you are kindly advised to verify the visa requirements subject to your conditions.

The arrival of most of the participants by air travel will be at the International Airport of Managua (MGA) “Augusto C. Sandino”.

All travelers should have a return ticket and evidence of funds to support themselves during your presence in Nicaragua. You must always carry a valid identity document.

Once you arrive in Nicaragua, you must purchase a tourist card for $10 USD at the immigration counter (exact change recommended), valid for up to a total of 90 days in any of the member countries of the Central America-4 Border Control Agreement. Visitors remaining longer must obtain an extension from Nicaraguan immigration to avoid large fines.

Individuals traveling from countries at risk of yellow fever transmission must show proof of yellow fever vaccination administered at least 10 days before travel to be permitted entry to Nicaragua. If you use a passport of a different nationality than you did on prior trips to Nicaragua, Nicaraguan authorities may deny you entry. If you possess multiple nationalities, you should carry a valid passport for all of them.

International Airport of Managua (MGA) “Augusto C. Sandino" has only one exit. Please look for the INETER personnel (speaking Spanish and English) who will be waiting for you. If there is some unusual situation (you lost your flight, you failed to meet the INETER personnel), please try to phone or chat via Whatsapp or using email to one of the contacts given above.

You must exit Nicaragua with the same passport used for entry. If your passport is lost or stolen while in Nicaragua, you will need to get a new entry stamp from Nicaraguan Immigration before you can depart by following instructions available on the website of the General Directorate of Migration and Immigration of Nicaragua (in Spanish only). This cannot be done at the airport on departure.

Customs procedures at the airport are normally very fast (X-Ray). The entrance with special equipment as drones, professional camaras, scientific equipment is only possible with previous permissions. If you bring in the equipment without the permission customs will retain it during your stay and you must request it back from the Airports customs office when you leave the country. If you intend to enter Nicaragua with such items, please inform INETER in advance.

4. Transport

INETER will organize transportion of participants form the airport to the hotel using their pickups or buses. The distance is about 15 km and it will take around 20 to 40 minutes for rides to get to destination, depending on trafic. There are currently big construction works on the way.

Taxi
In case you fail to get in contact with personnel from INETER you might need to use a taxi. Please, use only the official taxis which are available at the airport exit. A taxi ride from airport to hotel should cost around 20 USD. The official taxis will bring you directly to the hotel. Therefore you won't need to share it with other passengers which is a common practice in Nicaragua (for cheap taxi transportation). There is no UBER service in Nicaragua and similar services should be taken with caution.

Land Connections
Some participants who come from Central America might enter the country passing the border with Honduras in the North of Nicaragua or from Costa Rica in the South. Similar border procedures to the ones of air connections apply, see above.

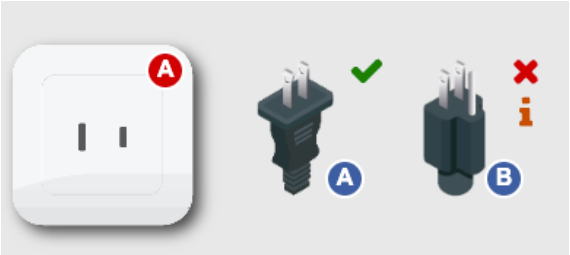
Bus terminals in Managua
There are several international bus terminals in Managua, most are rather close to the meeting Hotel. If you plan to arrive by bus, please, inform INETER in advance about your probable arrival time and bus company to be picked up and driven to the hotel. You can also use a taxi to get to the hotel.

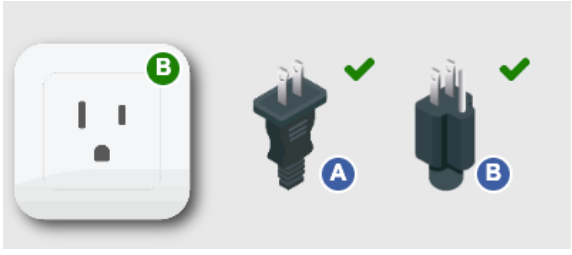
5. Currency

Nicaragua uses the "Cordoba" as its currency. 1 American Dollar corresponds to about 37 Cordobas. The money exchange at the airport might offer very unfavorable exchange rates. You can easily obtain the cash you need using your credit or debit cards at many ATM´s in Managua. Please consider that the use of US money is very common in Nicaragua. You can pay nearly everywhere with US dollars, except for very small businesses or when you must pay only small amounts. Also, when you pay in dollars you can get the exchange in Cordobas and you can use them to pay smaller transactions. It might even not be necessary to use any cash for the participation in the meeting as the use of credit or debit cards is very common in Nicaragua except for small businesses or in small villages. Changing cash from other currencies other than dollars (e.g. Euro) is rather complicated and only offered at banks.

6. Voltage and plugs

The voltage in Nicaragua is 120 V and the type A and B plugs (US style) are used. You may need a power plug adapter for sockets type A. Sockets type B can fit your plugs but may not always be available locally[1].





[1] https://www.power-plugs-sockets.com/us/nicaragua/#:~:text=Do%20your%20power%20plugs%20fit,not%20always%20be%20available%20locally.

7. Additional Information

Shopping
There is a big shopping center “Plaza Inter” in front of the Hotel Crown Plaza with ATMs and restaurants.

Sightseeing
Interesting sites near the hotel are:

- “Laguna de Tiscapa” a crater lake in a not longer active volcano
- Paseo and port “Salvador Allende” at Lake Managua with many restaurants and view to the lake and the Apoyeque volcano complex.
- Old Cathedral of Managua – destroyed by the earthquake in 1972.
- The offices of Civil Protection Agencies SINAPRED and Civil Defense and National Assembly of the Republic of Nicaragua are at only 400m and 1km away from the hotel, respectively.

Climate in Managua
Nicaragua has a tropical climate, temperatures in May in daytime are around 30-35 degrees Celsius, slightly lower temperatures during the night, 26-30 degrees Celsius. There might be slight rain falls.