1.5 UNESCO/IOC ICG/CARIBE-EWS

Recent Outcomes

Christa von Hillebrandt-Andrade
NOAA-NWS Caribbean Tsunami Warning Program
Chair ICG-CARIBE EWS
International Structure

Why is it Needed?

- Tsunamis Cross Oceans and Seas in Hours – Need Rapid Information from Other Countries to Assess
- Regional Centers can do Tsunami Threat Assessment for Many Countries
- Tsunamis are Rare – Learn from Experience of Other Countries for Warning and Mitigation
- Tsunami Science is Multidisciplinary with Few Scientists – International Exchange of Results

UNESCO/IOC Tsunami Program

- Started in 1965 with Pacific System after 1960 Pacific-wide Tsunami from Chile Mw 9.5 Quake
- Expanded in 2005 to Indian Ocean, Caribbean, and NE Atlantic – Mediterranean after 2004 Indian Ocean-wide Tsunami from Indonesia
CARIBE EWS

- 10 Sessions held since 2006, most recent in May in Sint Maarten, next meeting in Colombia on April 5-7, 2016

- Members
  - 29 UNESCO Member States, of which 28 are IOC Member States
  - 7 UNESCO Associate Member States
  - 12 Territories, Overseas Territories, States of Member States

- Organizations Supporting CARIBE EWS
  - Caribbean Tsunami Information Center
  - Pacific Tsunami Warning Center
  - Caribbean Tsunami Warning Program
IOC Tsunami Program Coverage
IOC Tsunami Program Coverage

Interim service provided by
Pacific Tsunami Warning Center (PTWC)

Interim service provided by
US National Tsunami Warning Center (US NTWC)

Produced by the Intergovernmental Oceanographic Commission of UNESCO.
Date: Mar. 13, 2014
IOC Tsunami Program Coverage

CARIBE-EWS Earthquake Source Zone Map
- Bulletin issued for EQs of M > 6.0
- Bulletin issued for EQs of M > 6.5

For EQ in Pacific and Indian Oceans, forecast wave amplitude > 30cm in CARIBE-EWS AoR will trigger bulletin.
Produced by the Intergovernmental Oceanographic Commission of UNESCO
Date: Feb. 2014
Member State Participation

- Countries request to IOC to be a Member State of System(s) through official channels.
- Member States designate a Person as their National Contact for official communication and to represent country in the system’s Intergovernmental Coordination Group (ICG).
- Member States designate a 24x7 office as their Tsunami Warning Focal Point (TWFP) to receive urgent information from regional centers or other contacts during events.
- Member States may designate an office as their National Tsunami Warning Center (NTWC) that is responsible for issuing warnings within the country.
Outcomes from Recent ICG-CARIBE EWS

- Issuance of PTWC Enhanced Products in parallel with existing products as of October 26, 2015.
- Full Implementation of Enhanced Products on March 1, 2016.
- CARIBE WAVE 16 – March 17, 2016
Outcomes of Recent ICG CARIBE EWS
ICG CARIBE EWS Service Model

**CARIBE EWS Tsunami Service Model**

- Monitoring Network Operation Services (Seismic, Sea Level, GPS)

- **RTSP(s)**
  - All
  - Response

- **SRTSP(s)**
  - Subscription

- **NTWC/TWFP**

- **COMMUNITY**

- **NATURAL SIGNS**

- **LOCAL NETWORKS automatic triggering**

- **SOPs**

**Abbreviations**:

- RTSP: Regional Tsunami Service Provider(s)
- SRTSP: Sub Regional Tsunami Service Provider(s)
- NTWC: National Tsunami Warning Center
- TWFP: Tsunami Warning Focal Points
- ICG-CARIBE-EWS SOPs (Communication Plan/PTWC enhanced products manual)
- Member state and territory SOPs for alert dissemination
- Public information according to ICG-CARIBE-EWS guidelines
Outcomes from Recent ICG-CARIBE EWS

- Approval of the Community Performance Based Recognition Program: Tsunami Ready with 10 guidelines that cover:
  - Mitigation,
  - Preparedness,
  - Readiness

- Sustainability of CTIC – we recognized the significant contributions of CTIC to the CARIBE EWS, but noted that there is funding for its operations only thru Dec. 2015 and this was thanks to the UNESCO Emergency Funds. The CTIC Board will be meeting this Friday to revisit the business model and terms of reference.
Thank you

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NOAA NWS Caribbean Tsunami Warning Program