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# Introduction to TEP

Key issues and  
overall planning cycle

*Session 1.3*  
*By Harald Spahn*

*North-West Indian Ocean Regional Workshops on  
Tsunami Inundation Mapping and Evacuation Planning  
Muscat, 21-25 April 2024*

# Surviving a tsunami

is a matter of getting out of the reach of tsunami waves and inundating waters in time



North-West Indian Ocean Regional Workshops on Tsunami  
Inundation Mapping and Evacuation Planning, 21-25 April 2024

(Self-)Evacuation to safe location outside and vertical evacuation shelters inside the tsunami hazard area

Search and rescue operations, first aid, water and food supplies, allocation of temporary shelters for displaced people etc



**Before a tsunami**  
(Up to 60 min after the EQ)

**During tsunami**  
(Up to several hours)

**After tsunami**  
(from several hours up to several days and weeks)

**Tsunami Evacuation Plan**

**Emergency Response and Relief Plan**

**Tsunami Contingency Plan**

North-West Indian Ocean Regional Workshops on Tsunami Inundation Mapping and Evacuation Planning, 21-25 April 2024



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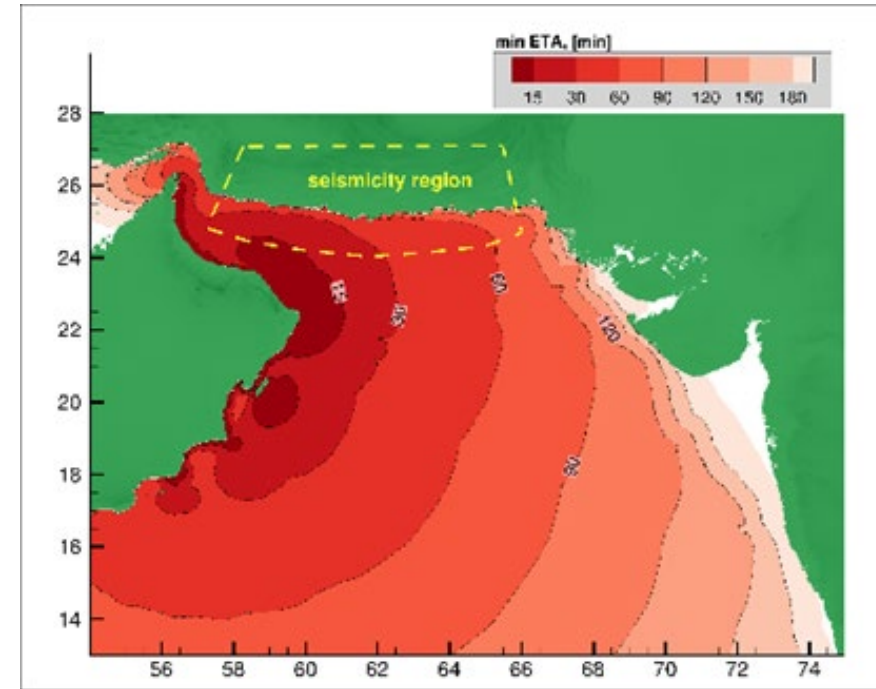
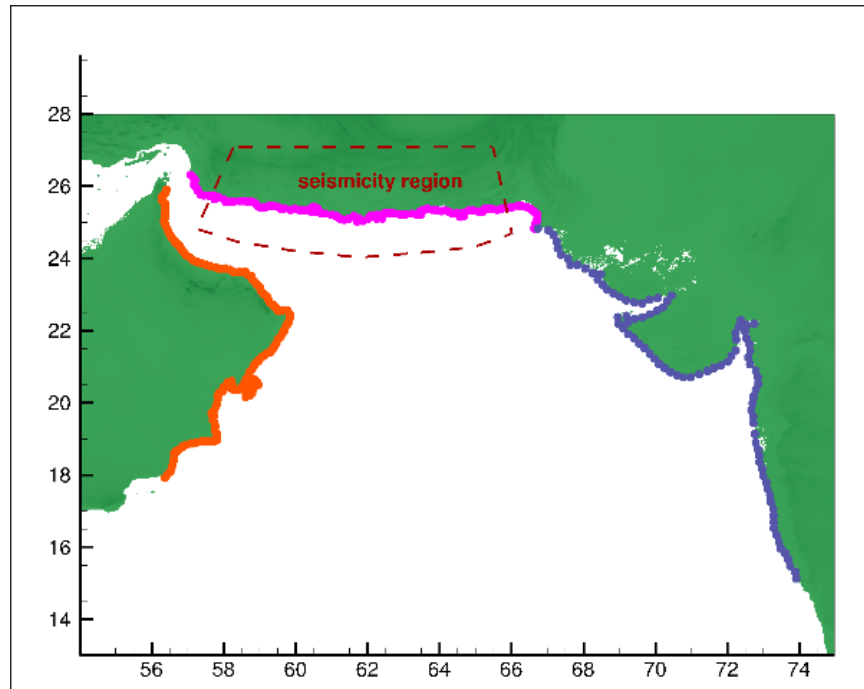
**Tsunami Contingency Plan**

North-West Indian Ocean Regional Workshops on Tsunami Inundation Mapping and Evacuation Planning, 21-25 April 2024



# Time is the most critical factor

as the NWIO region faces near-field tsunami threats



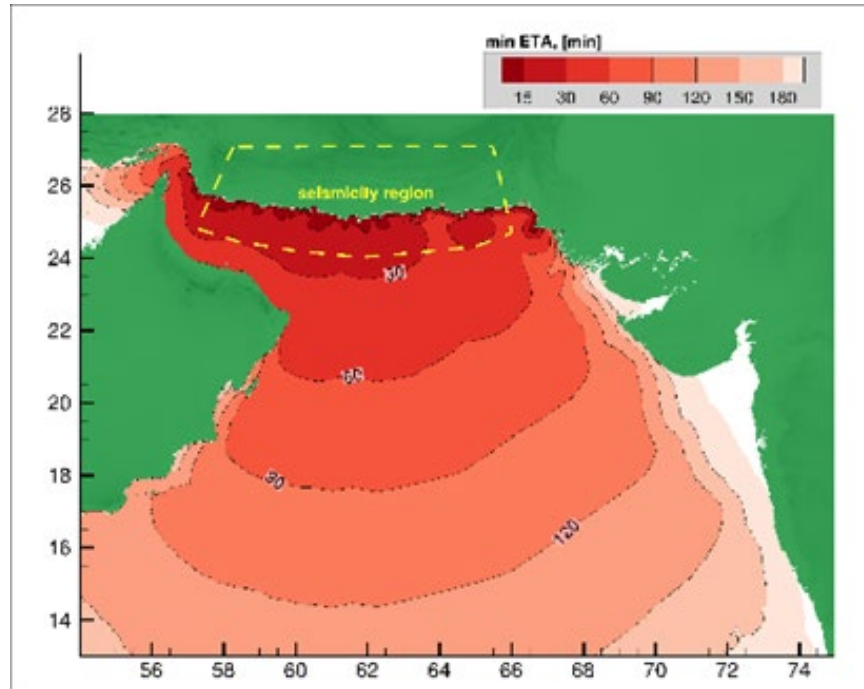
Western Coastlines: ETA 15-60 Min

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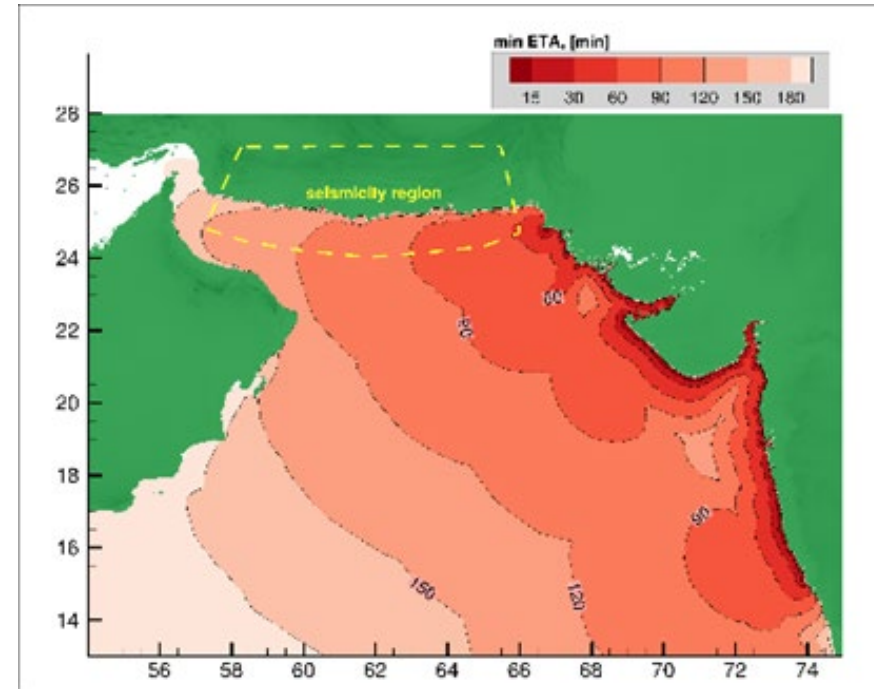


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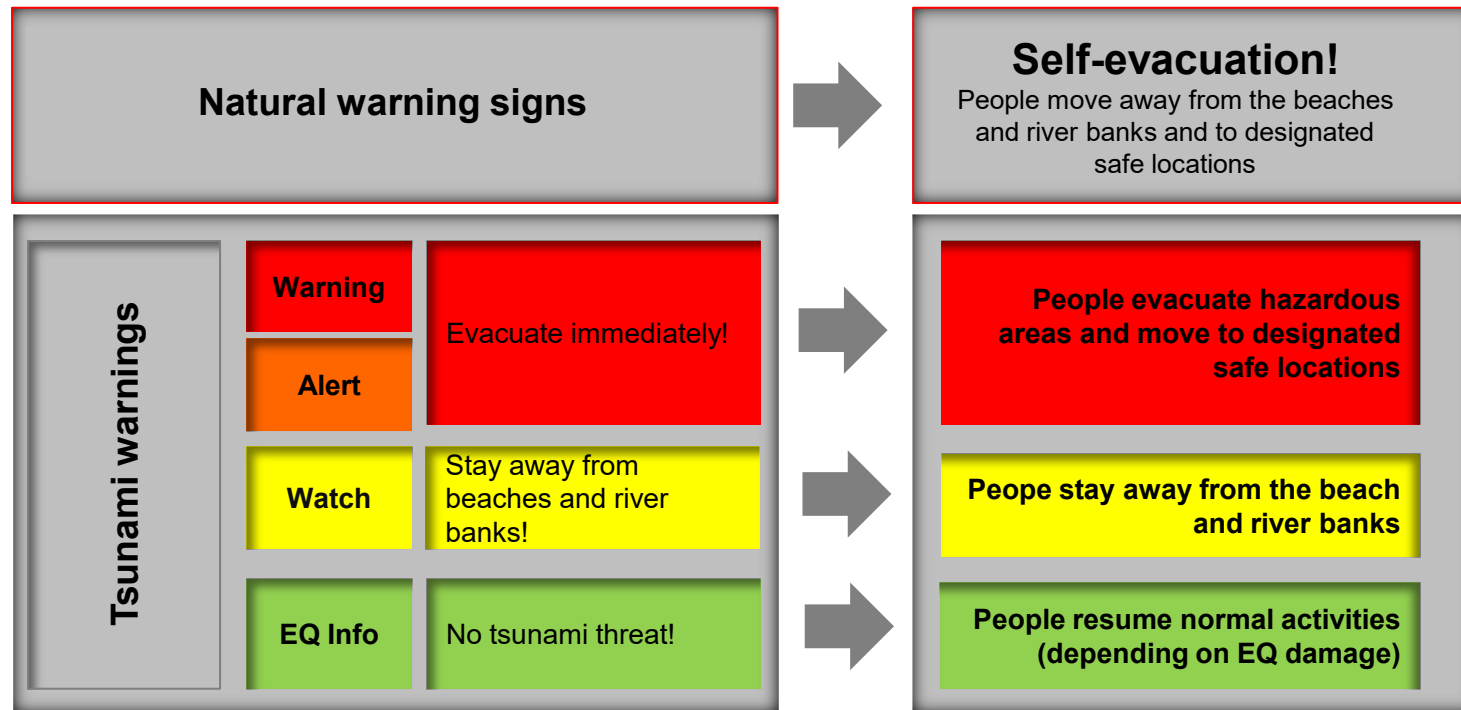
Northern Coastlines: ETA <15-30 Min



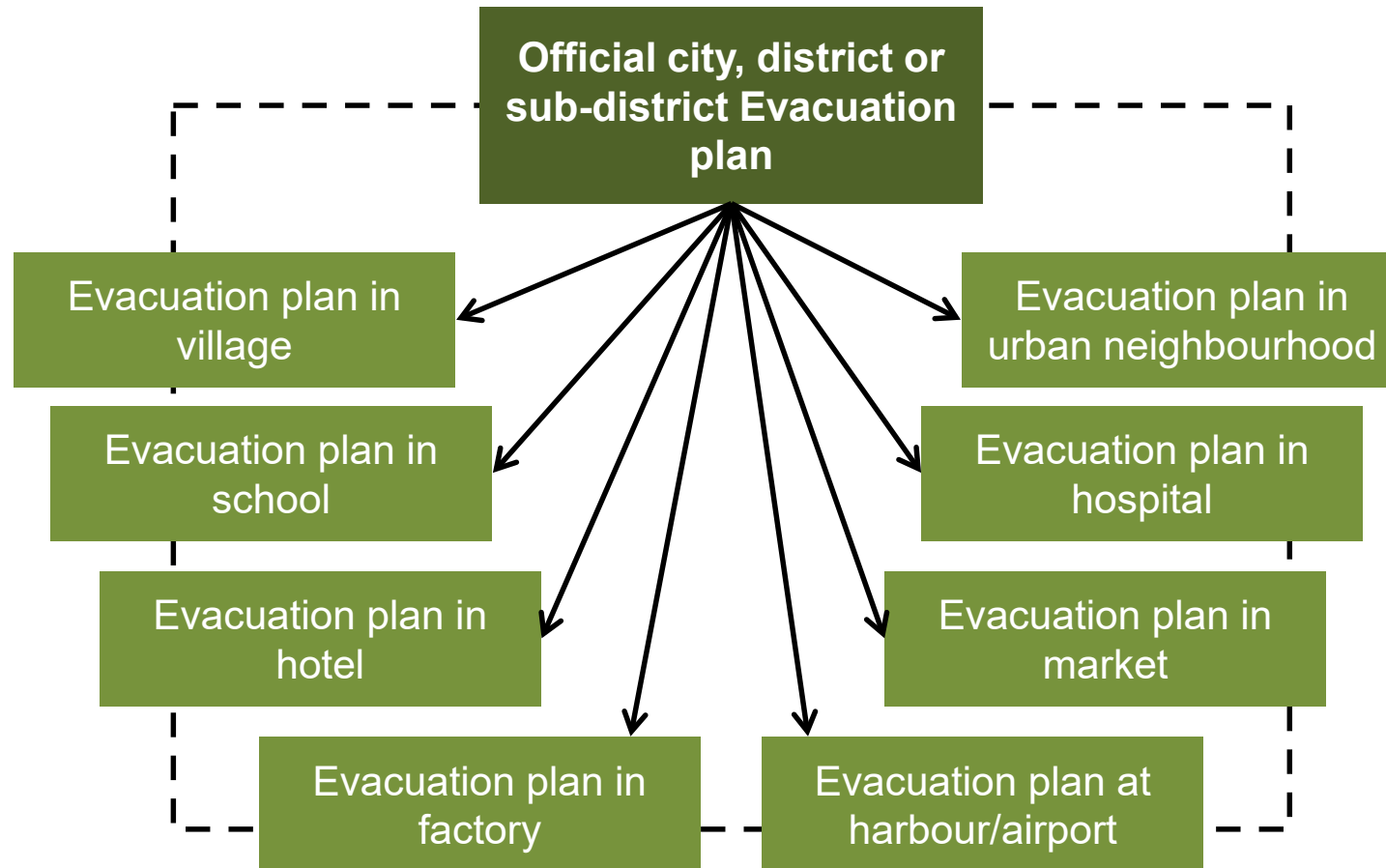
Eastern Coastlines: ETA 60-150 Min

North-West Indian Ocean Regional Workshops on Tsunami  
Inundation Mapping and Evacuation Planning, 21-25 April 2024

# Evacuation plans must inform people when to evacuate

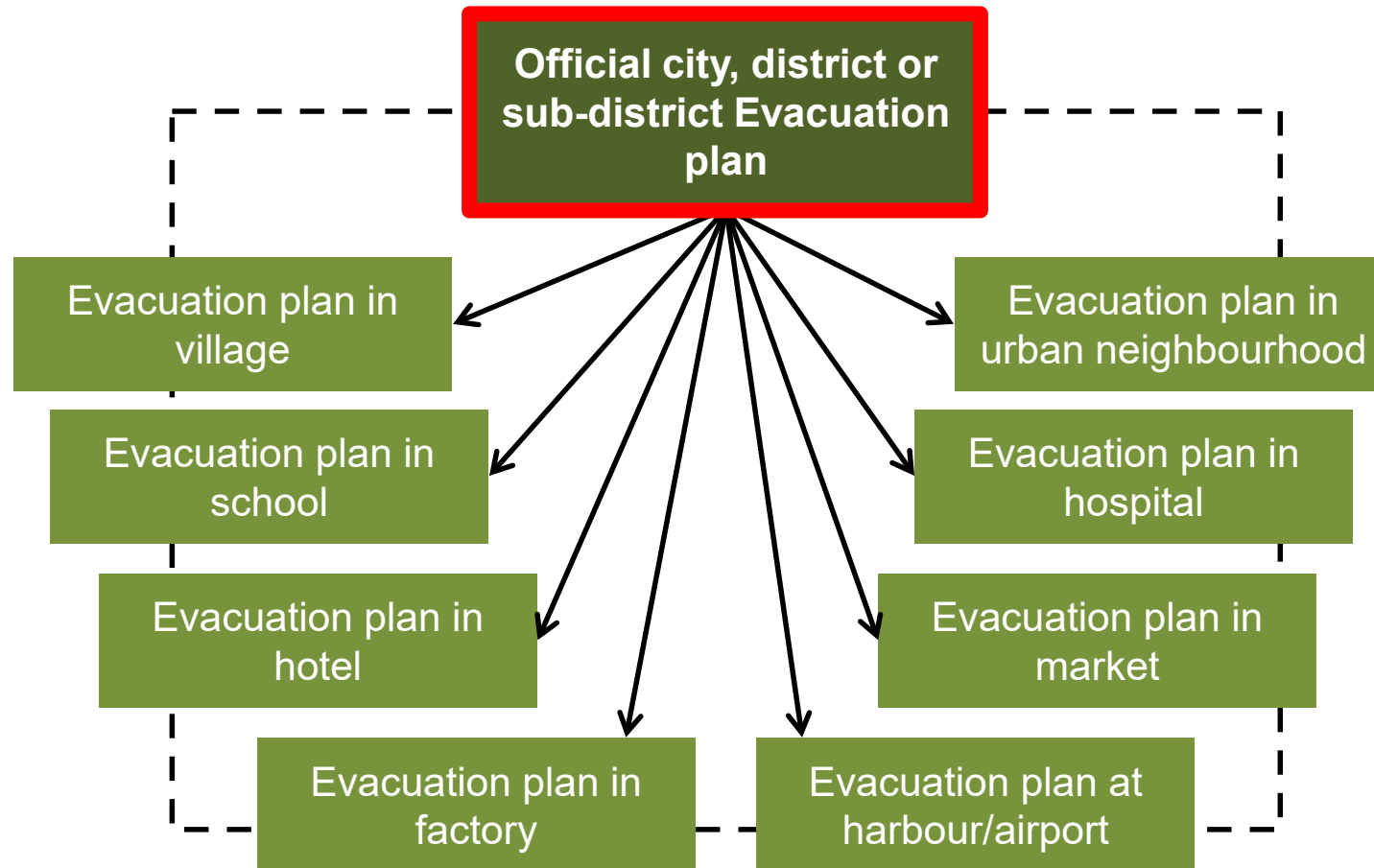


# Official TEPs provide credible and binding references for lower levels & institutions





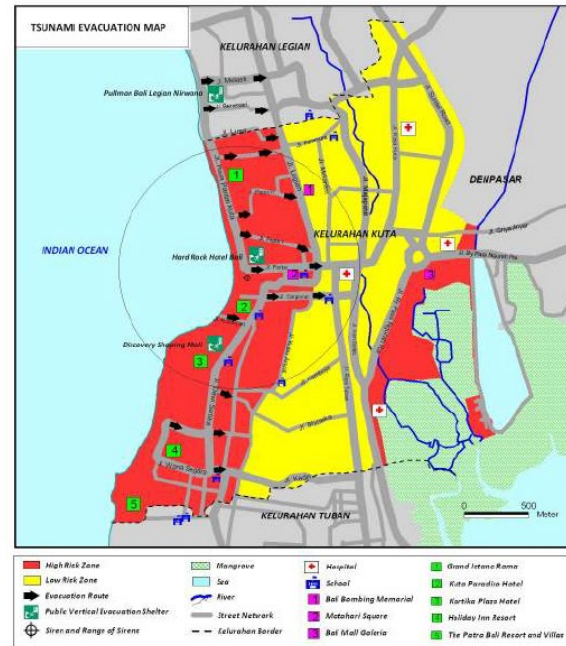
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# What is a Tsunami Evacuation Plan?



1. Get prepared, long before anything happens
    - Study the evacuation map and get familiar with the evacuation procedures
    - Discuss procedures within your family and neighbourhood
    - Participate in drills and information events
    - If you are a visitor to Bali, please check with your hotel for procedures
  2. If you feel an earthquake, protect yourself
    - Don't panic!
    - Drop, cover and hold!
  3. After an earthquake, be aware that a tsunami may follow
    - Move away from the beach immediately as a precautionary measure!
    - After strong and prolonged ground shaking, don't wait for an official warning. Leave the **RED ZONE** immediately!
    - Listen to announcements from the local authorities and the radio for further information. Pay attention to the siren!
  4. The sound of the siren is the official call for evacuation
    - When the siren sounds, evacuate the **RED ZONE** immediately, or look for shelter in higher buildings!
    - If you are in the **YELLOW ZONE**, seek shelter on higher floors
    - If you are a visitor in a hotel, follow the instructions of hotel staff
- After the first tsunami wave, more waves are likely to come!
- Wait for an official "All Clear" message before leaving shelter



## Tsunami Evacuation Plan for Sanur, Bali

A Documentation of the Process and Results of Tsunami Evacuation Planning

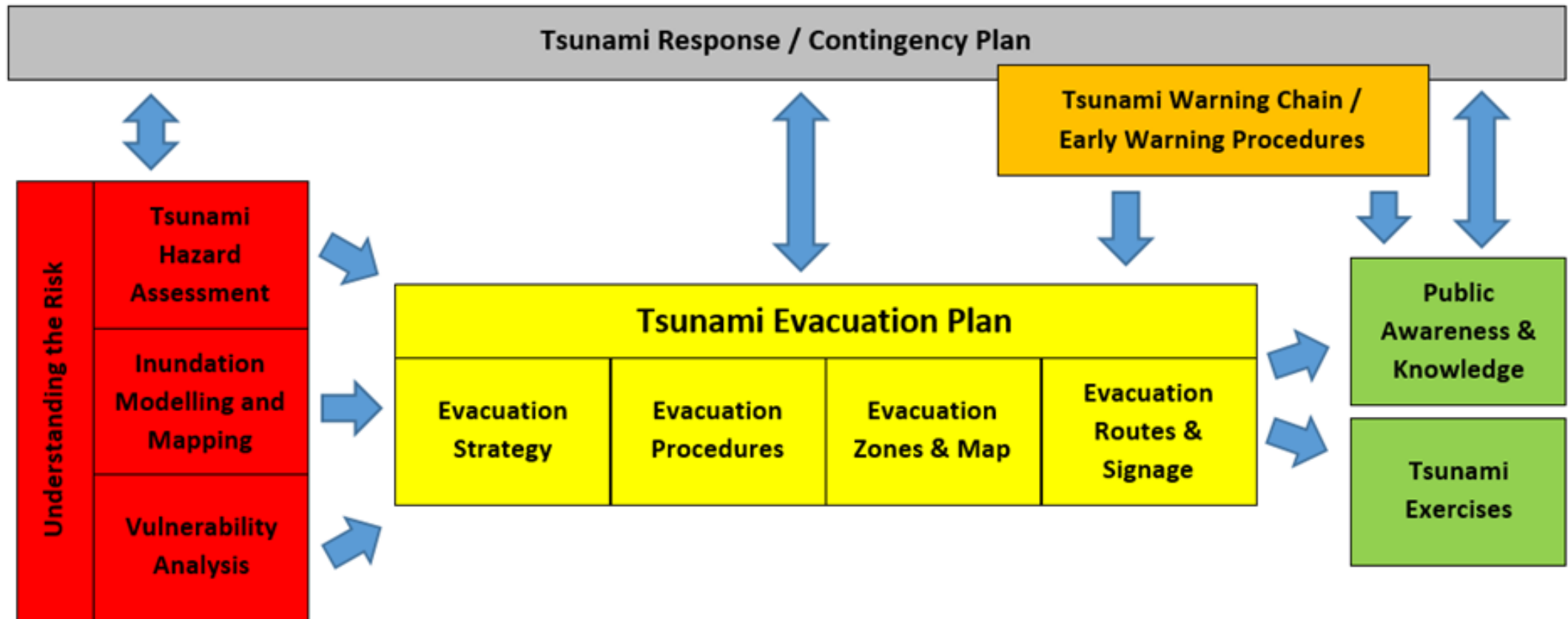
developed by  
Evacuation Planning Working Group of Sanur Denpasar

with support from  
District Government of Denpasar  
BPBD Denpasar  
Bali Hotel Association (BHA)  
The Indonesian Red Cross, Bali Chapter  
The Indonesian Red Cross, Denpasar Chapter  
Kelurahan and villages authorities  
Sanur Development Foundation

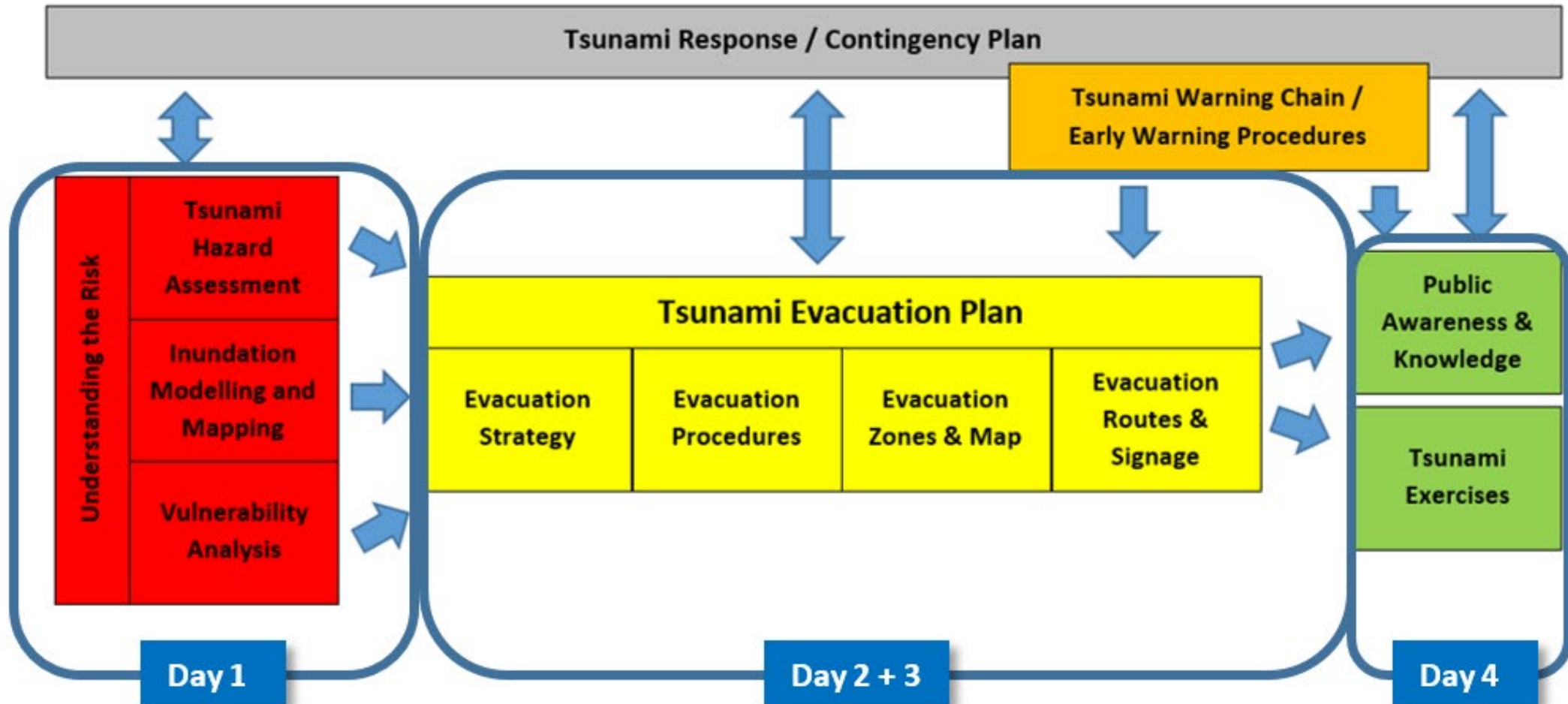
Facilitation and technical advisory by  
GTZ IS - GITEWS



# Key elements of community tsunami preparedness and its relation to TEP

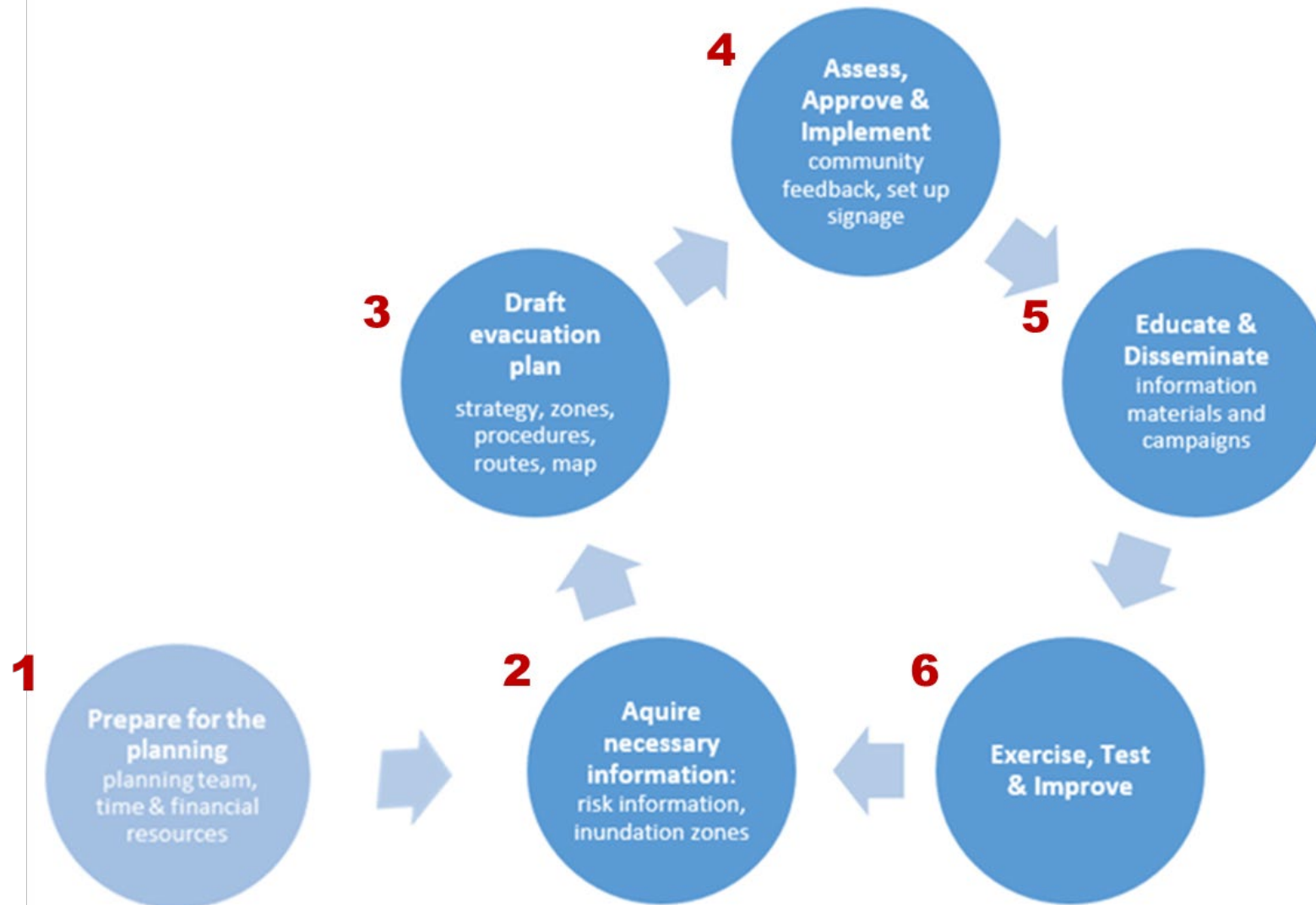


# How we cover it in the TEP Training





# The 6 Steps of a TEP Planning Process





# Evacuation Planning is a Community Affair!



Who has to be involved in the planning?

**All relevant stakeholders from local government, community representatives, private sector, universities, NGOs, ...**

Who should be aware of the evacuation plan?  
**Everyone in the community**



# Evacuation Planning by Communities

## need to be supported

- Process Advisory
- Technical Assistance / Inundation Maps
- Facilitation

Support

- National / State DMO
- Universities
- Technical Institutes
- National Warning Agencies



Who has to be involved in the planning?  
**All relevant stakeholders from local government, community representatives, universities, NGOs, ...**

# To keep in mind!

- **The main threat in the Makran Region are near-field tsunamis.** Therefore, tsunami evacuation planning must take into account the very short warning and evacuation times and need to set **a strong focus on self-evacuation** after the occurrence of a strongly felt earthquake
- The infrequent occurrence of tsunamis in the region and the short warning times require **simple and robust evacuation procedures and plans which can be easily remembered and applied** even if much time has passed since the last exercise



**THANK YOU**