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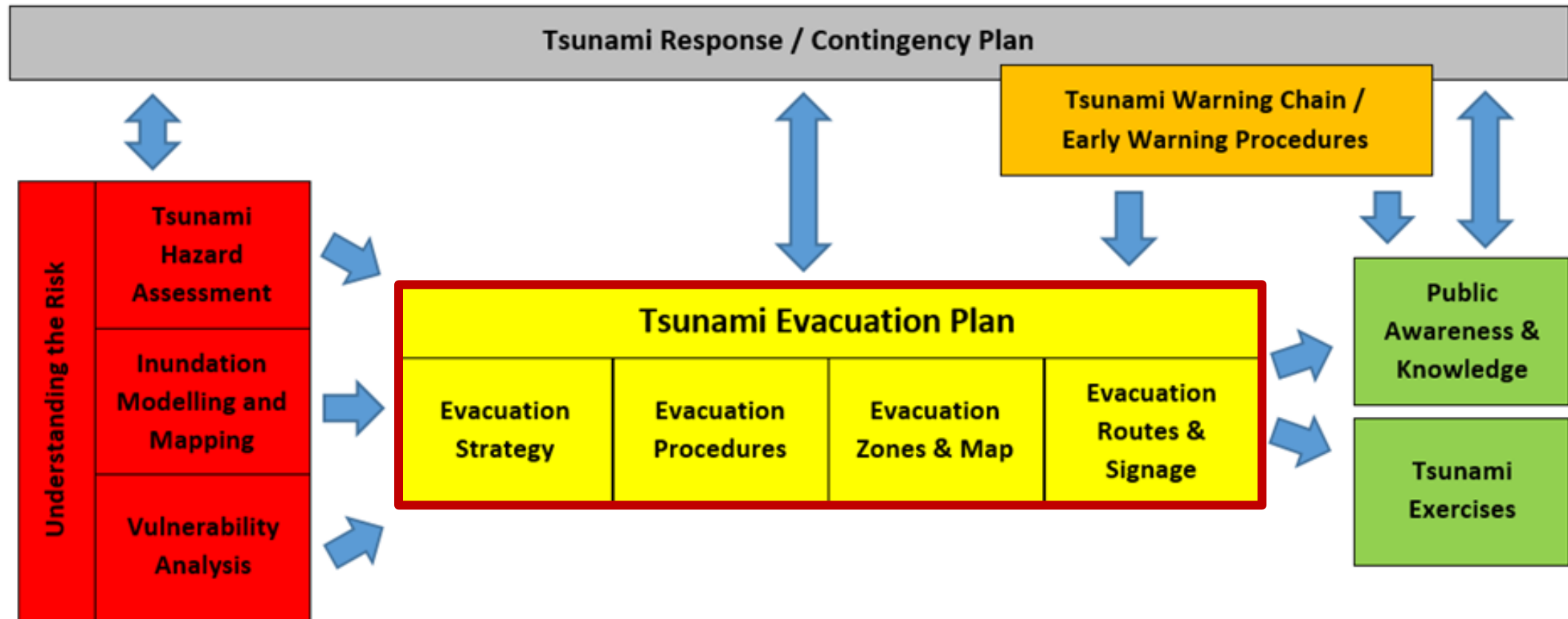
Elements of a TEP

Evacuation Strategy

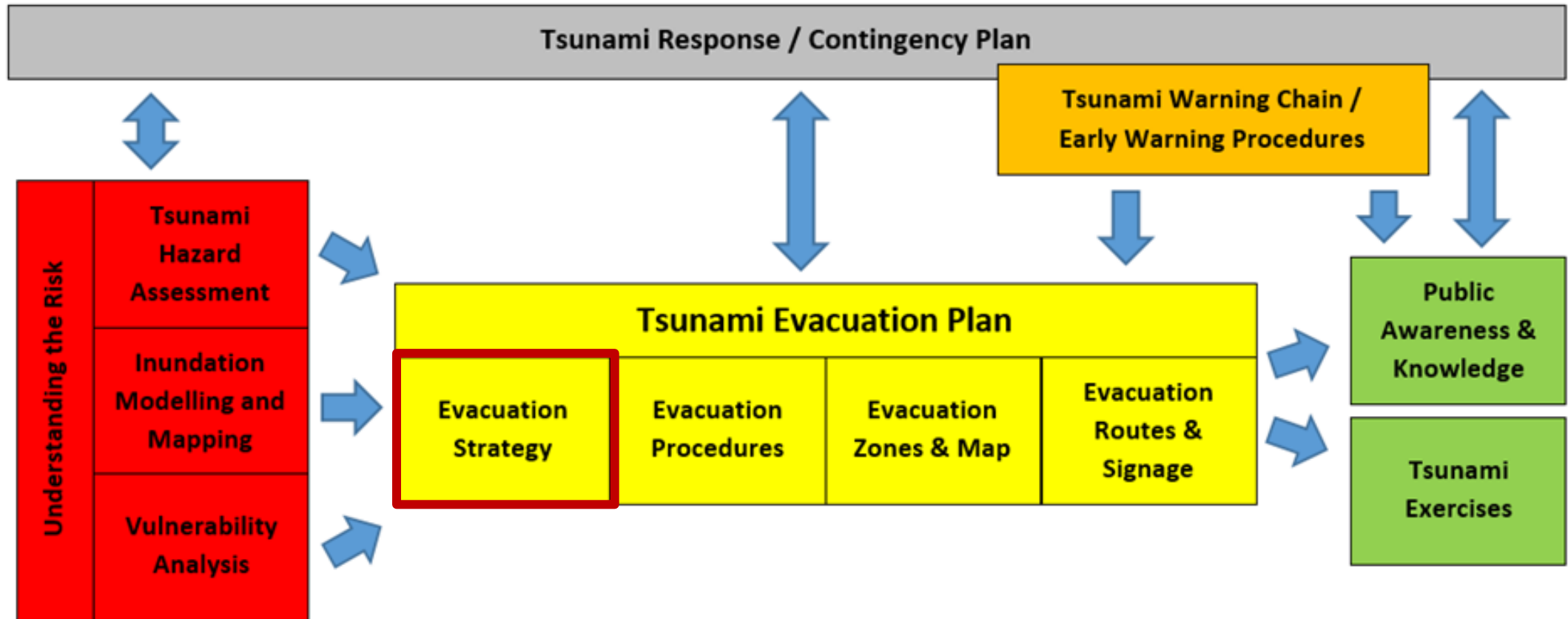
Session 2.2
By Harald Spahn

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

Key elements of a TEP



Evacuation Strategy



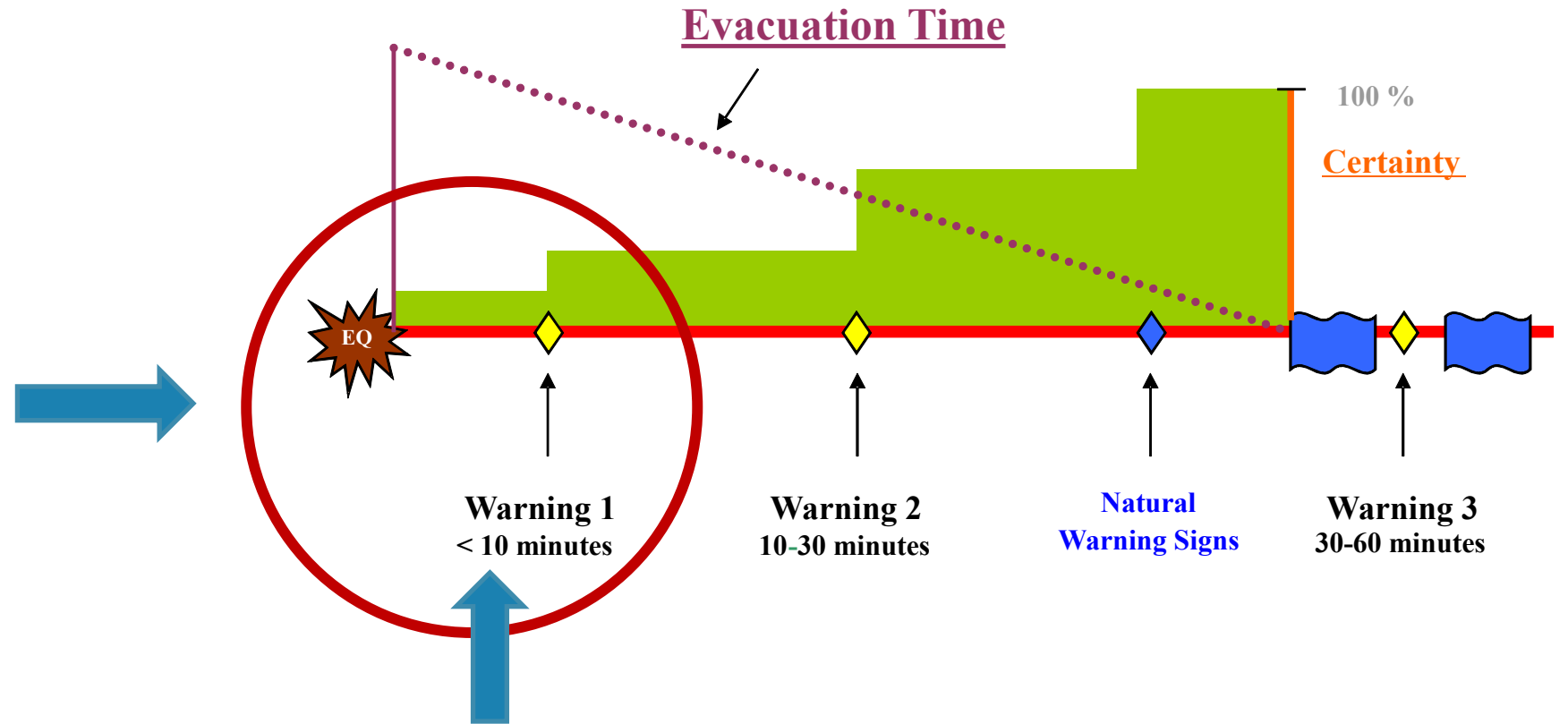
Aspects to consider in an Evacuation Strategy

- In line with time (ETA first wave)
- Evacuation zone (to be evacuated)
- Type of evacuation: voluntary, mandatory, self-evacuation
- When to evacuate and decision making to call for evacuation and return once situation is safe. Notification to the public
- Modes of evacuation: horizontal, vertical, by foot, bike or car
- Assembly areas
- Difficult-to-evacuate areas
- Support measures for vulnerable facilities
- Traffic management

Type of evacuation and timing issues

The main threat in the Makran Region are near-field tsunamis

A tsunami evacuation strategy must consider the very short warning and evacuation times and need to set a strong focus on **self-evacuation**

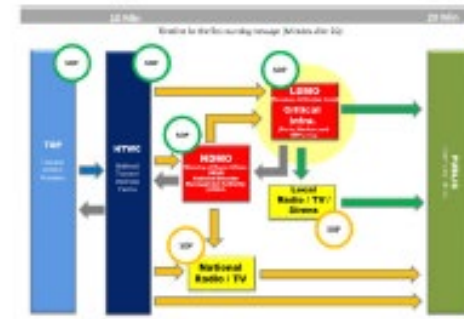
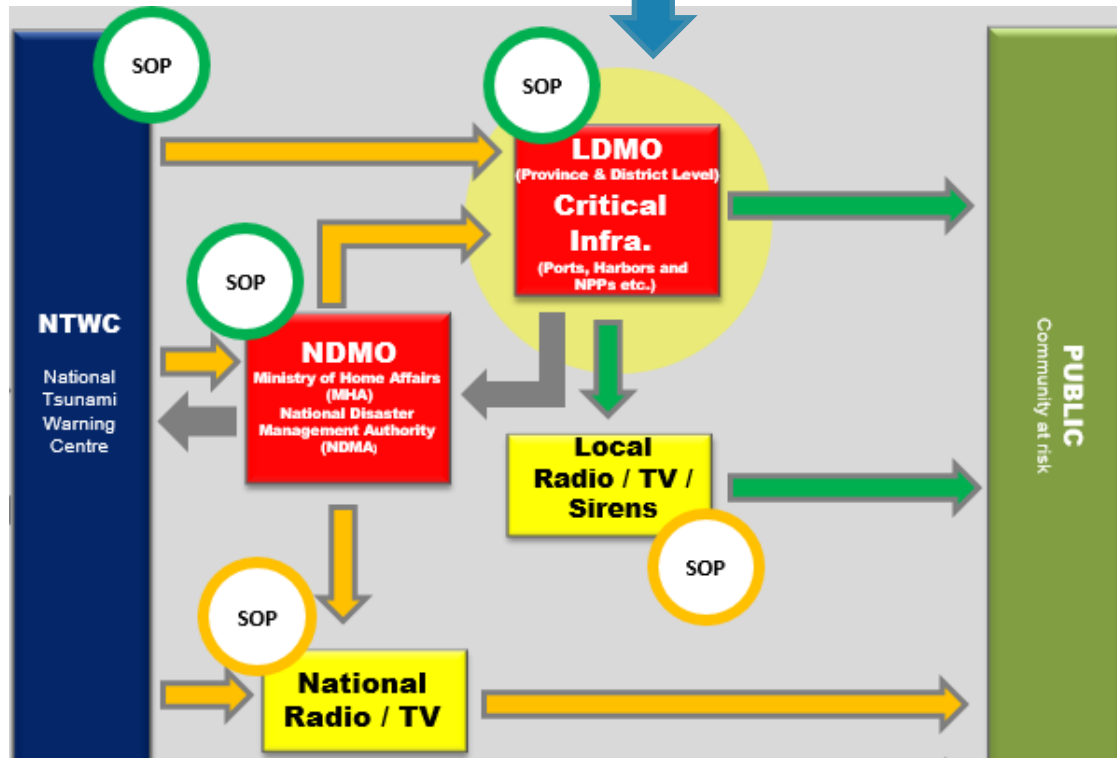


Quick Decision Making to officially call for evacuation!

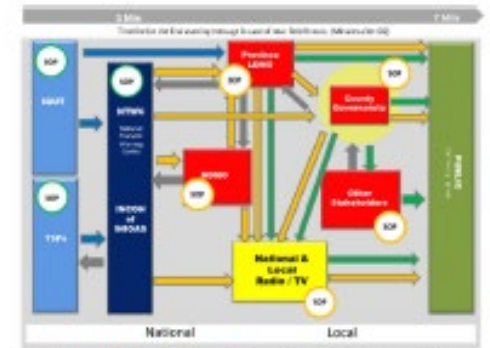
Who decides? When and upon what information? SOP in place?
How to disseminate? Link to warning chain!

Warning Chains

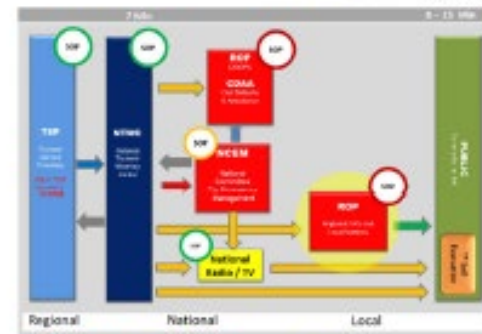
Decision making to officially call for evacuation



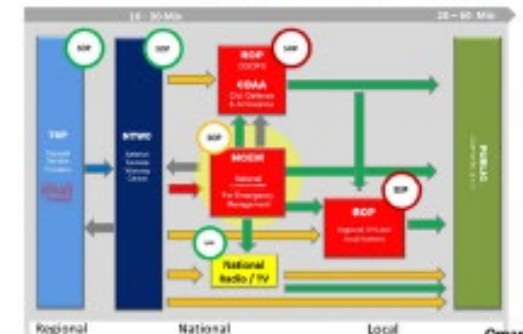
INDIA
07/08/2022



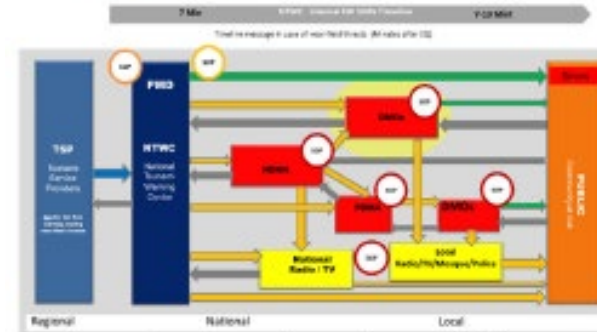
Iran
August 2022



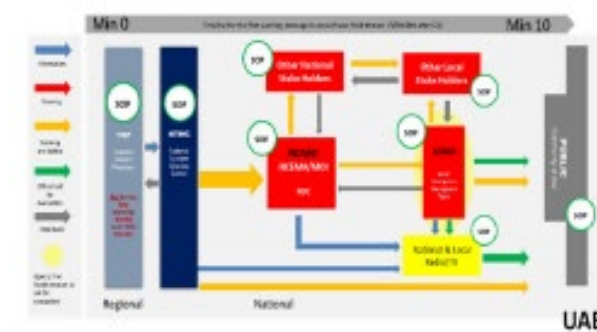
Oman
Near Field
01-08-2023



Oman
Far Field
03-08-2023



Pakistan
08/08/2023



UAE
03/08/2023

Media SOP annex corresponding to the Media Response Plan of Natural Hazards

Evacuation Modes

Horizontal evacuation

Evacuation on foot is usually the only option in urban areas to avoid traffic jams. In rural areas people may use motorbikes or cars if conditions allow



Vertical evacuation

Important option in urban flat coastal plains where safe areas are far away and when evacuation time is short. People use upper floors of strong or designated shelter buildings

Assembly Areas

Indoor locations

Community halls, mosques, temples

Open spaces

Sport fields, stadiums, parks

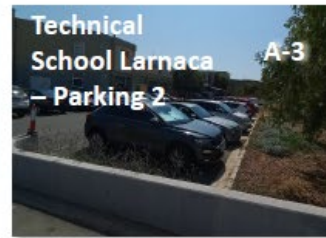
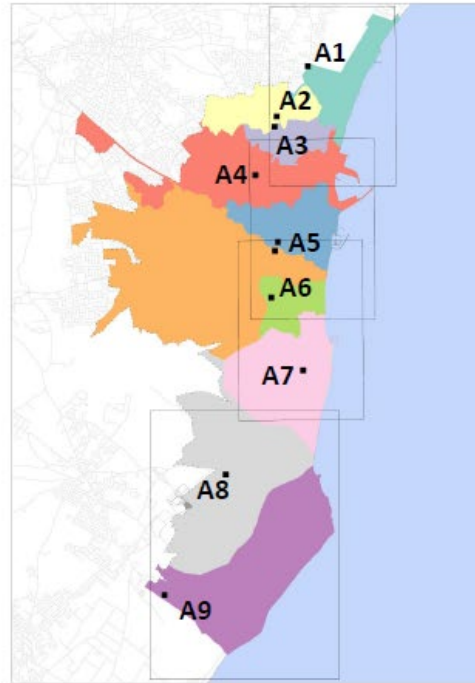


- Must be located in safe areas
- Must be able to accommodate expected number of people from surrounding areas
- To provide services for basic needs: hygiene, water, food, first aid, ...

Assembly Areas

Indoor locations

Community halls, mosques, temples



Open spaces

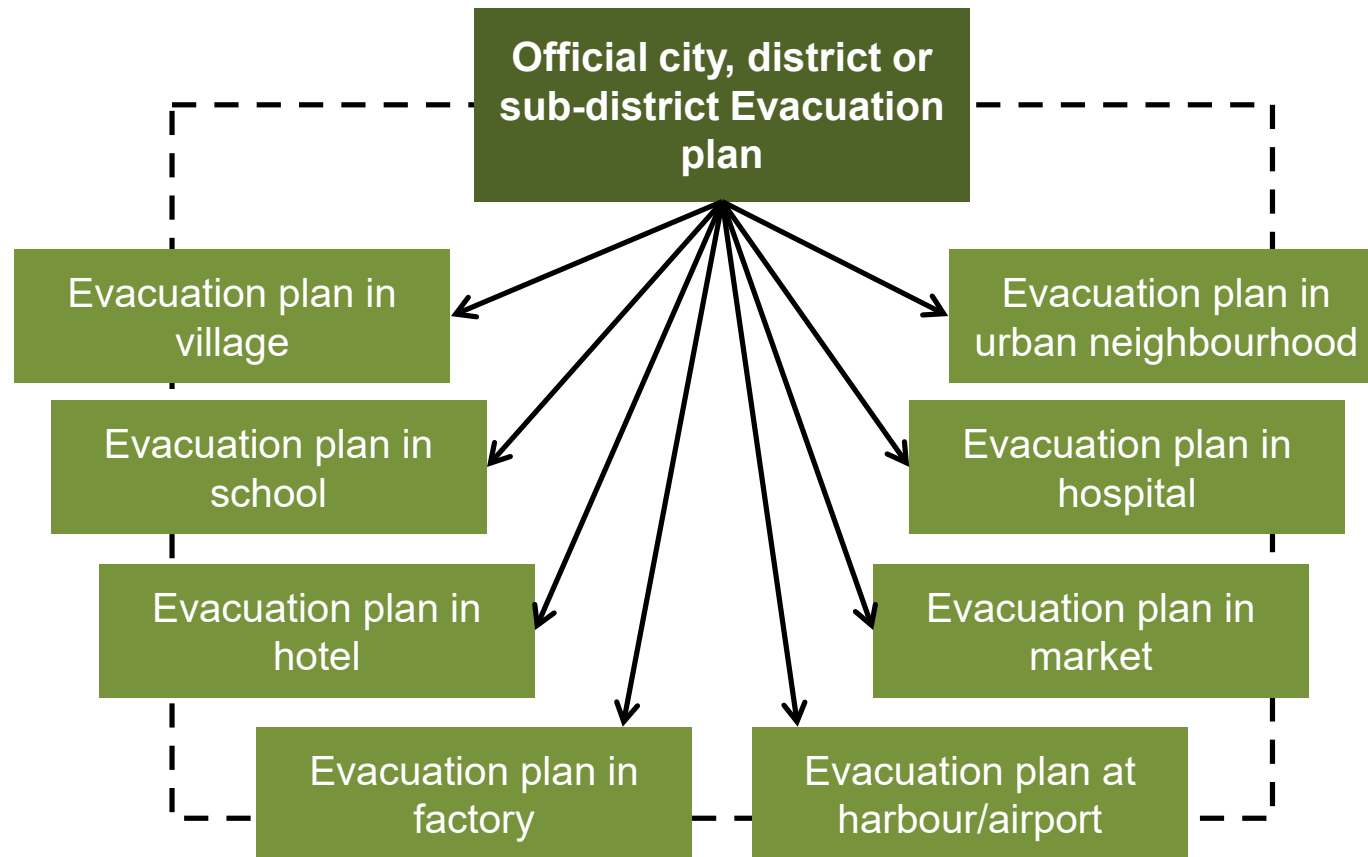
Sport fields, parking fields, parks

Assembly area						
A-1 Agios Savvas Church Parking	Public	TBC	✓	Open	<ul style="list-style-type: none"> Services: Civil Defence station and bathrooms 	1,849 ✓
A-2 Technical School Larnaca - Parking 1	Public	TBC	✓	Usually closed (especially in summer)	<ul style="list-style-type: none"> Close to tsunami hazard zone, but no other good alternatives nearby School services 	3,130 ✓
A-3 Technical School Larnaca - Parking 2	Public	TBC	✓	Open (closed in Google maps)	<ul style="list-style-type: none"> Full of cars 	3,855 ✓

Difficult to evacuate areas



Support Measures for vulnerable facilities



- **Hospitals and primary schools** are among the most vulnerable as patients and children need special guidance and assistance.
- If located in multi-storey buildings they may opt for vertical evacuation to upper floors.

Traffic Control





THANK YOU