

Steering Committee of the Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the North Eastern Atlantic, the Mediterranean and Connected Seas (ICG/NEAMTWS)

Teleconference, 12-13 April 2023

CoastWAVE Project Progress



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EU DG ECHO CoastWAVE

A UN Ocean Decade project under the theme of "resilient ocean"

Strengthening the Resilience of Coastal Communities in the North-Eastern Atlantic, Mediterranean Region to the Impact of Tsunamis and Other Sea Level-Related Coastal Hazards



2021 2030 United Nations Decade of Ocean Science for Sustainable Development

**MEET THE
TEAM**


**NATIONAL
OBSERVATORY OF ATHENS**


IHCANTABRIA


**MIDDLE EAST TECHNICAL UNIVERSITY
KANDILLI OBSERVATORY AND
EARTHQUAKE RESEARCH INSTITUTE**


CHOUAIB DUKKAILI UNIVERSITY


GEOLOGICAL SURVEY DEPARTMENT


**NATIONAL INSTITUTE OF
OCEANOGRAPHY AND FISHERIS**


UNIVERSITY OF MALTA

COMMUNITIES



SAMOS



CHIPIONA



BUYUKCEKMECE



EL JADIDA



LARNACA



ALEXANDRIA



MARSAXLOCK

3 Components

1

Adopt Global Tsunami Ready Standards and Guidelines and pilot Tsunami Ready within ICG/NEAMTWS.

3 Components

1

Adopt Global Tsunami Ready Standards and Guidelines and pilot Tsunami Ready within ICG/NEAMTWS.

2

Supply and install tsunami detection and alerting equipment in selected NEAMTWS countries

3

Evaluate the effectiveness, compatibility, performance, and benefits of the “Inexpensive Device for Sea Level” (IDSL) network

5 Outcomes



1

COMMITMENT

of NEAMTWS Member States to Implement Tsunami Ready

2

UNDERSTANDING AND COMMUNICATION

Review literature related of tsunami and other sea-level related risks

3

BETTER PREPARED

to respond to sea level related hazards

4

ACCESS

to near real time seismic and/or sea level detection and alert technology to provide early warning

5

LONGER TERM SUSTAINABILITY

of the Inexpensive Device for Sea Level (IDSL) network to provide early warning

1 Commitment of NEAMTWS Member States to Implement Tsunami Ready

Key Activities Completed

- IOC-UNESCO published Tsunami Ready MG-74 .
- Task Team on Tsunami Ready within ICG/NEAMTWS WG 4 has been established.
- CoastWAVE project partners agreed to implement the IOC-UNESCO TRRP.



1 Commitment of NEAMTWS Member States to Implement Tsunami Ready Key Activities Completed

- IOC-UNESCO published Tsunami Ready MG-74 .

Intergovernmental Oceanographic Commission
Manuals and Guides

74

Standard Guidelines for the
Tsunami Ready Recognition
Programme

A Tsunami Ready recognition does not imply approval or confirmation that a community can or will perform at a certain level in case of a tsunami. Tsunami Ready recognition does not mean that a community is tsunami proof; it is rather an acknowledgment and recognition of the measures adopted by the community to cope with their tsunami risk.



UNESCO

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MG-74:

- describes TR Standard Guidelines for TRRP
- includes the framework and background information
- presents the requirements through 12 indicators
- includes the templates, a list of available tools and references

Member States were informed about the publication of MG 74.

1 Commitment of NEAMTWS Member States to Implement Tsunami Ready

Key Activities Completed

12 indicators

- were developed based on decades experience of the experts on tsunami awareness, preparedness, education, and early warning.
- are based on a consistent and proven standard of assessment of the risk, preparedness and respond to tsunamis
- brings the ownership of preparedness and sense of belonging to the community

| TSUNAMI READY INDICATORS | |
|--------------------------|---|
| I | ASSESSMENT (ASSESS) |
| 1 | ASSESS-1. Tsunami hazard zones are mapped and designated. |
| 2 | ASSESS-2. The number of people at risk in the tsunami hazard zone is estimated. |
| 3 | ASSESS-3. Economic, infrastructural, political, and social resources are identified. |
| II | PREPAREDNESS (PREP) |
| 4 | PREP-1. Easily understood tsunami evacuation maps are approved. |
| 5 | PREP-2. Tsunami information including signage is publicly displayed. |
| 6 | PREP-3. Outreach and public awareness and education resources are available and distributed. |
| 7 | PREP-4. Outreach or educational activities are held at least 3 times a year. |
| 8 | PREP-5: A community tsunami exercise is conducted at least every two years. |
| III | RESPONSE (RESP) |
| 9 | RESP-1. A community tsunami emergency response plan is approved. |
| 10 | RESP-2. The capacity to manage emergency response operations during a tsunami is in place. |
| 11 | RESP-3. Redundant and reliable means to timely receive 24-hour official tsunami alerts are in place. |
| 12 | RESP-4. Redundant and reliable means to timely disseminate 24-hour official tsunami alerts to the public are in place. |

1 Commitment of NEAMTWS Member States to Implement Tsunami Ready

Key Activities Completed

- Task Team on Tsunami Ready within ICG/NEAMTWS WG 4 has been established.
 - TT on TR was formed at the ICG/NEAMTWS -XVII session in November 2021 with twenty-five members from seven countries.
 - The TT on TR is co-chaired by Spain and Greece.

1 Commitment of NEAMTWS Member States to Implement Tsunami Ready

Key Activities Completed

- CoastWAVE project partners agreed to implement the IOC-UNESCO TRRP.

Implementing TRRP will:



Strengthen

tsunami and other hazards preparedness of coastal communities



Support

assessment of Risk, Inundation, and Evacuation



Improve

early warning systems/warning chain, public awareness, understanding of tsunami threat and preparedness



Provide

International recognition from UNESCO IOC as Tsunami Ready Community

2

Understanding and communication of risk

Key Activities Completed

Multi-hazard Risk Perception Questionnaire:

- reviewed by IOC-UNESCO TRS, ICG/NEAMTWS Task Team on Tsunami Ready, WG 4 and CoastWAVE project partners
- designed survey protocol
- translated it into 5 languages
- conducted the survey at the communities
- completed community reports



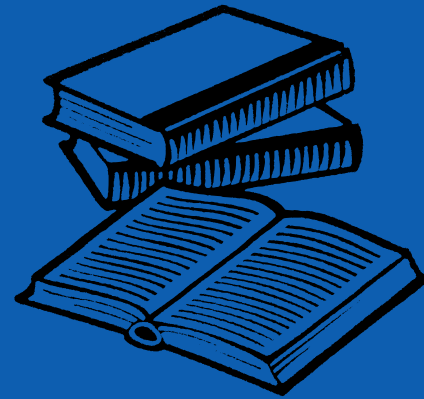
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Understanding and communication of risk

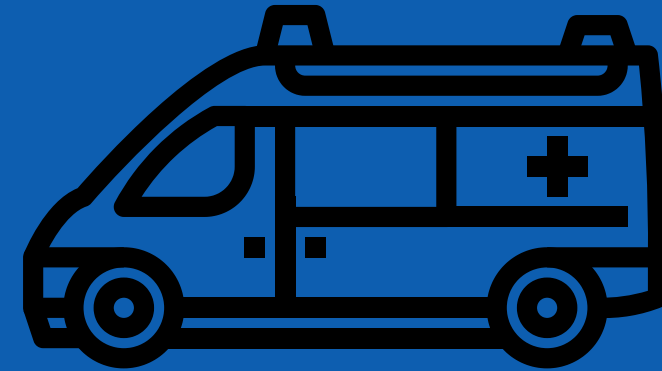
Key Activities Completed

- Survey methods, distribution and target groups were defined.

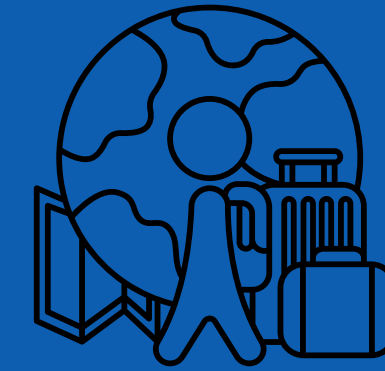
TARGET GROUPS



EDUCATION



EMERGENCY RESPONDERS



TOURISM



PUBLIC

SURVEY METHODS/DISTRIBUTION



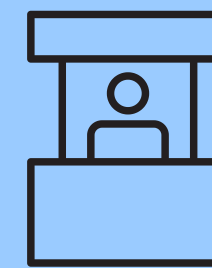
ONLINE



CATI



STREET



BOOTH



FOCUS GROUPS

2

Understanding and communication of risk

Key Activities Completed

Results have been analyzed
in 5 main category



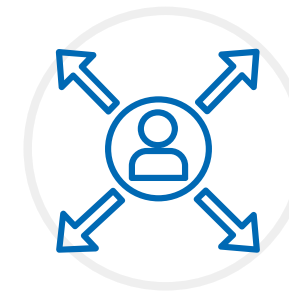
PERSONAL INFORMATION

Place of residence, age, education,gender



AWARENESS AND KNOWLEDGE

knowledge, causes, how likely,impact,
municipality efforts



EXPOSURE AND SENSE OF EXPOSURE

distance from coast



ASSESSMENT,PREPAREDNESS, RESPONSE

actions before,during.after hazards



GOVERNANCE

responsibility of municipality, communication
channels

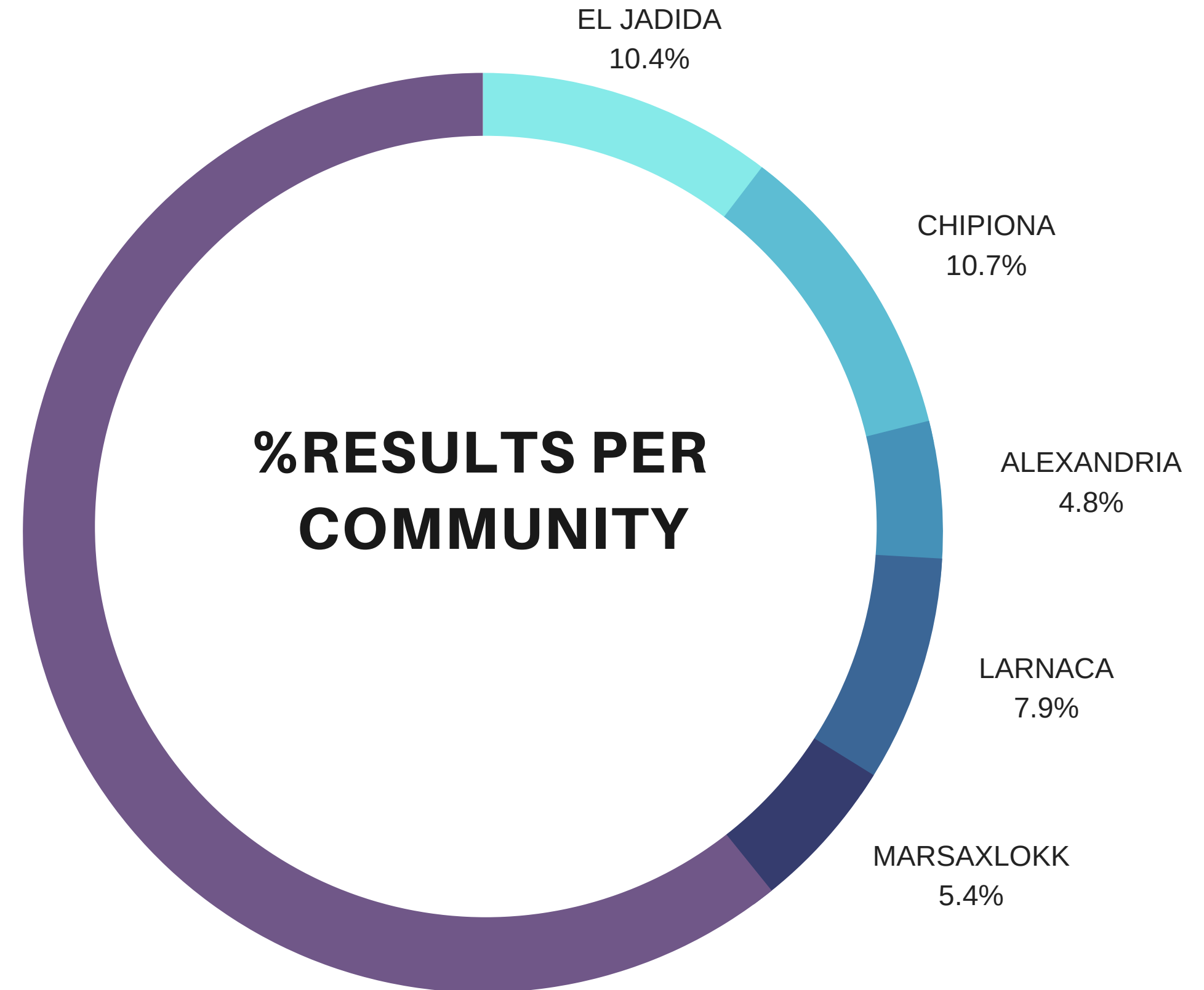


PERSONAL INFORMATION

Place of residence, age, education, gender



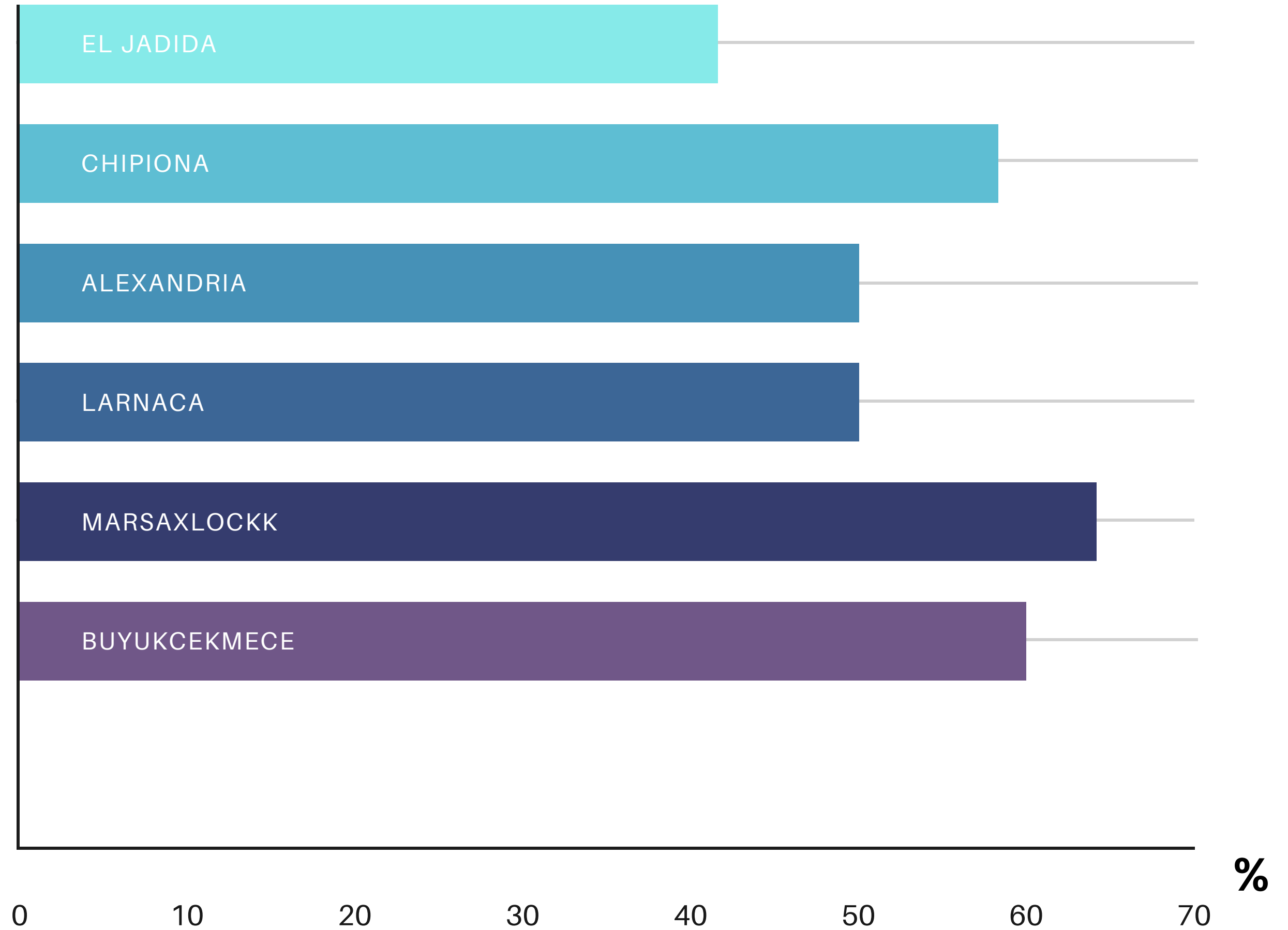
BUYUKCEKMECE
60.8%





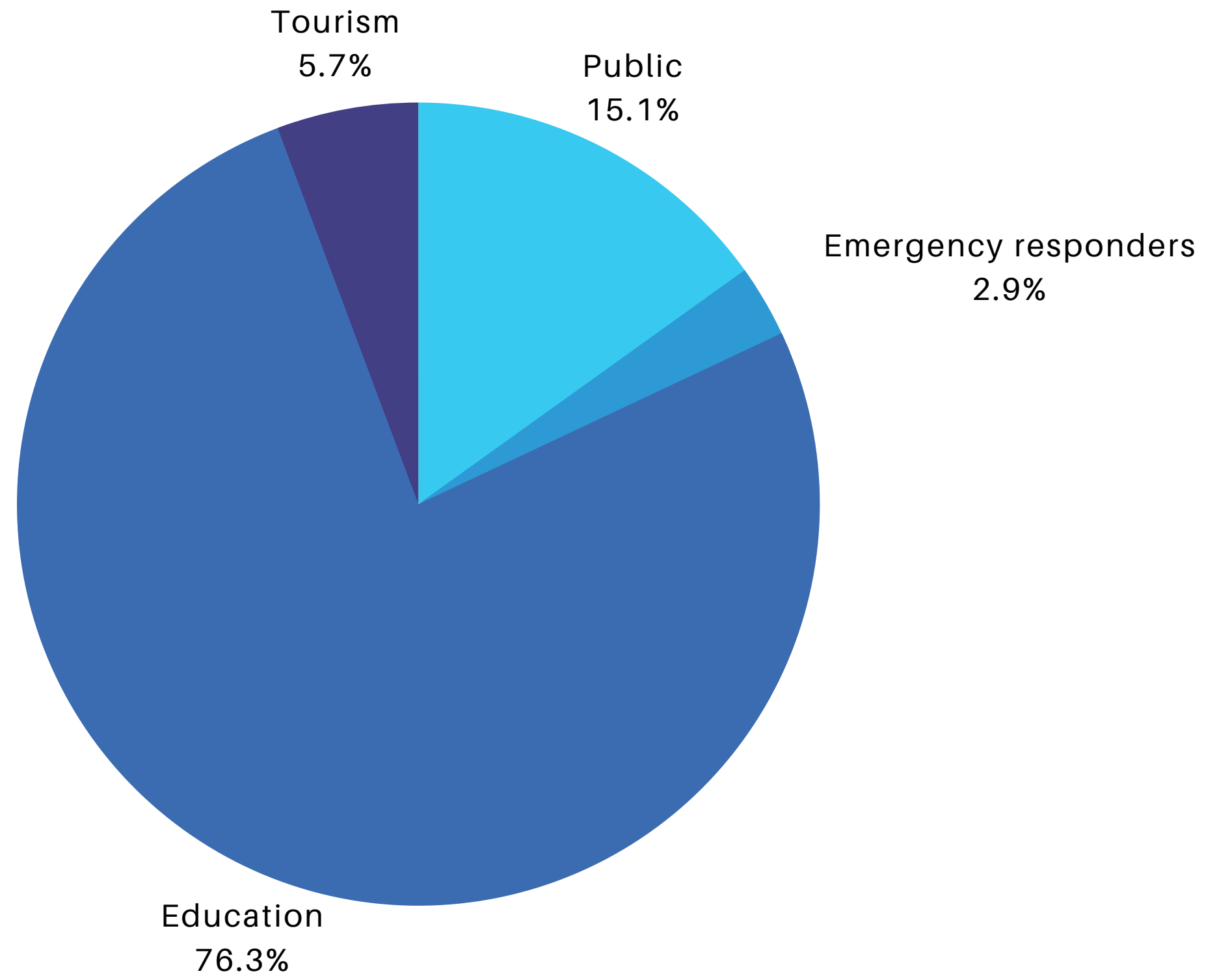
Gender

**FEMALE
DISTRIBUTION**





Sectors

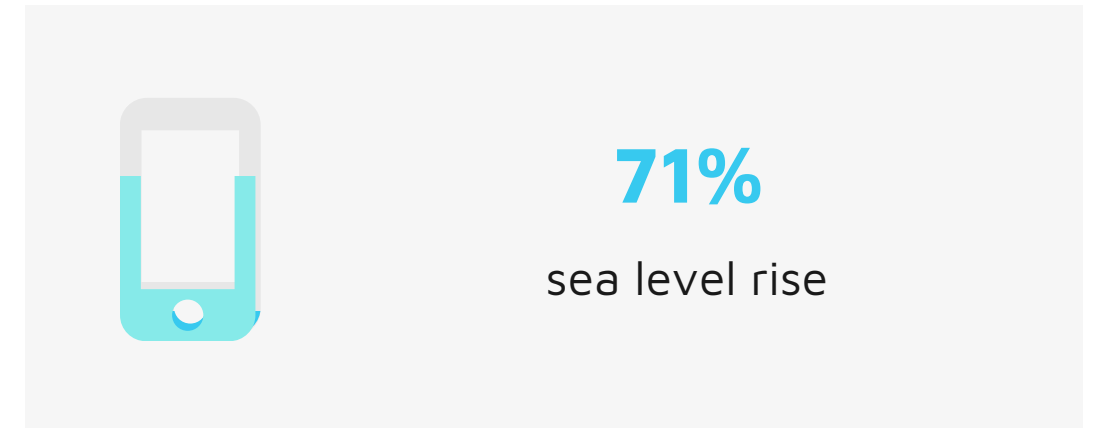
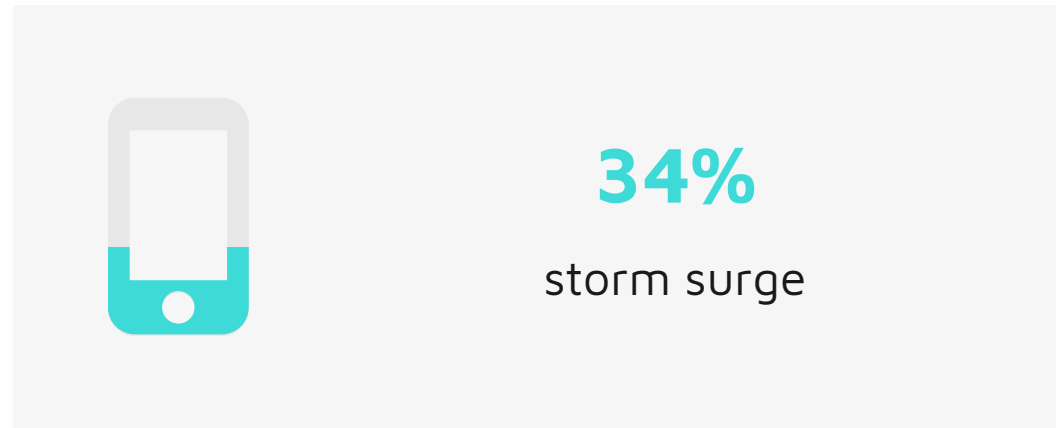
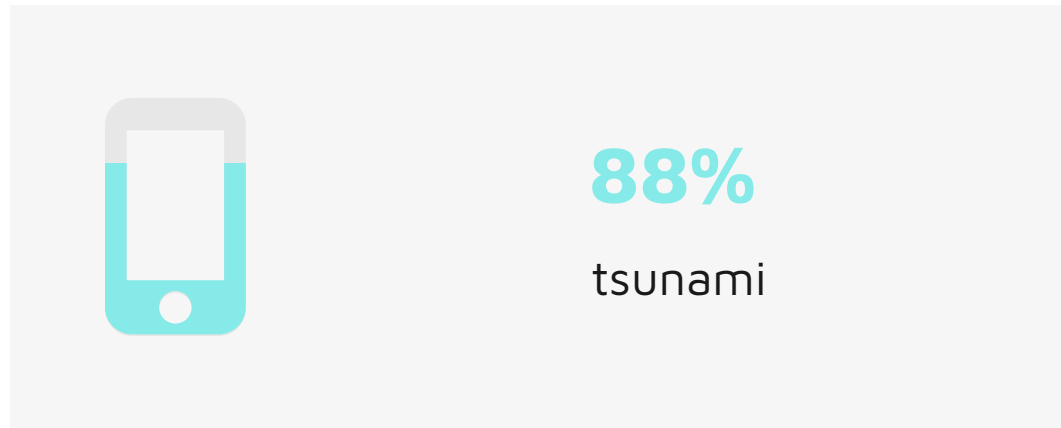


DISTRIBUTION %

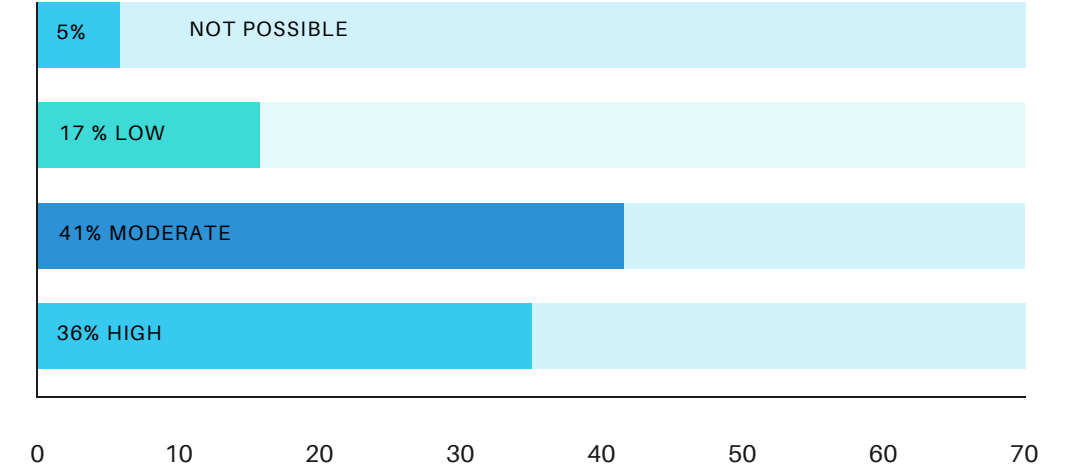
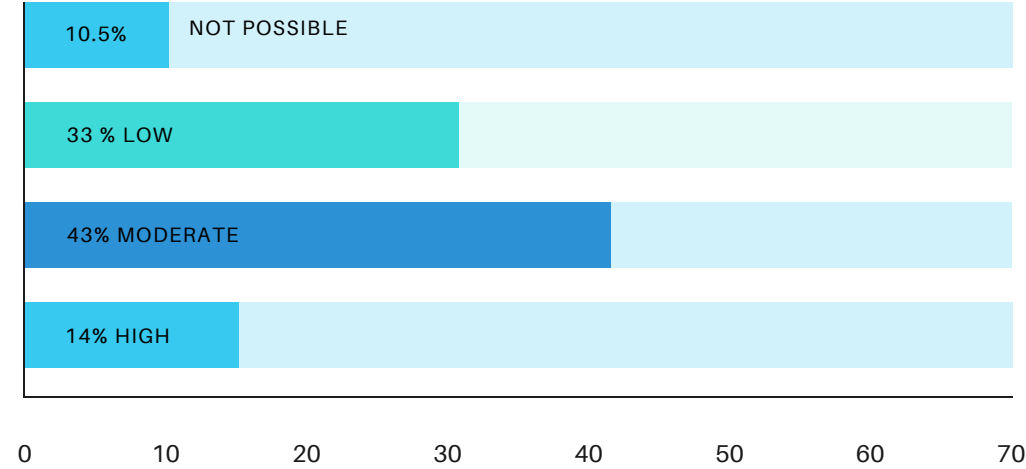
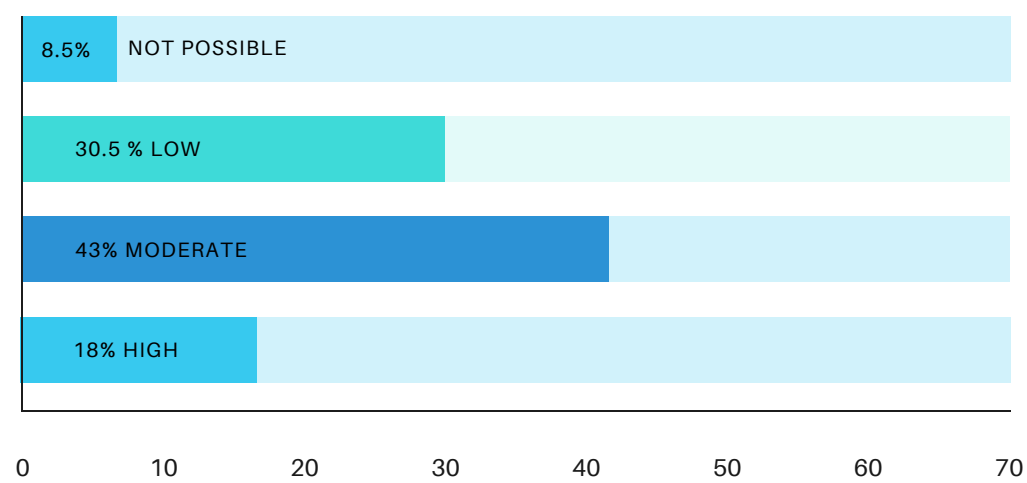


AWARENESS AND KNOWLEDGE

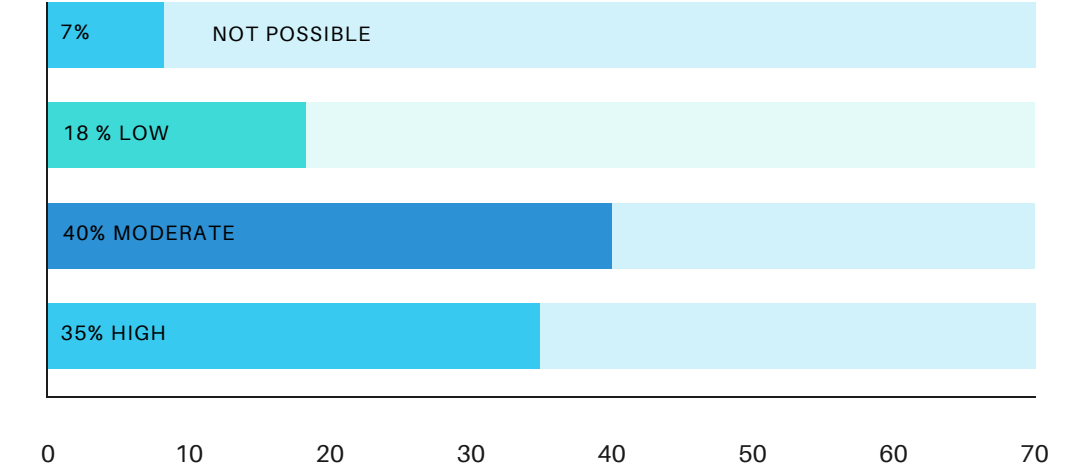
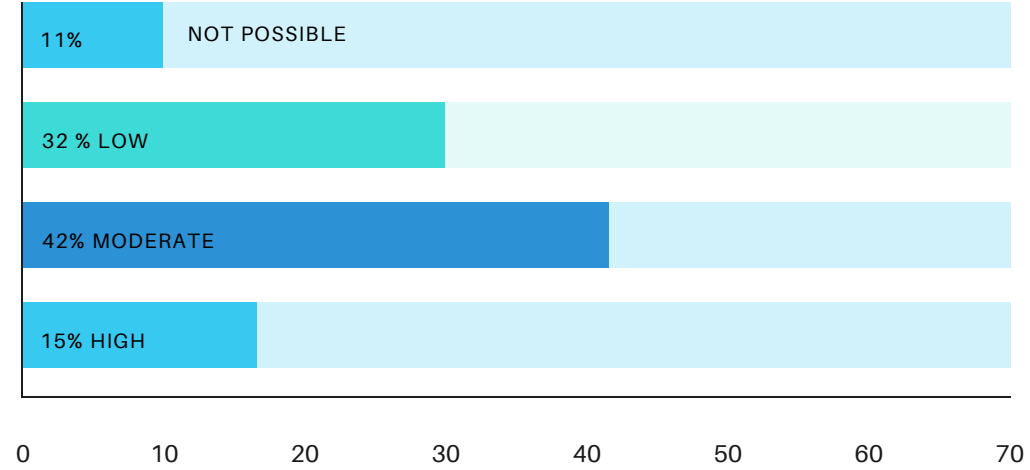
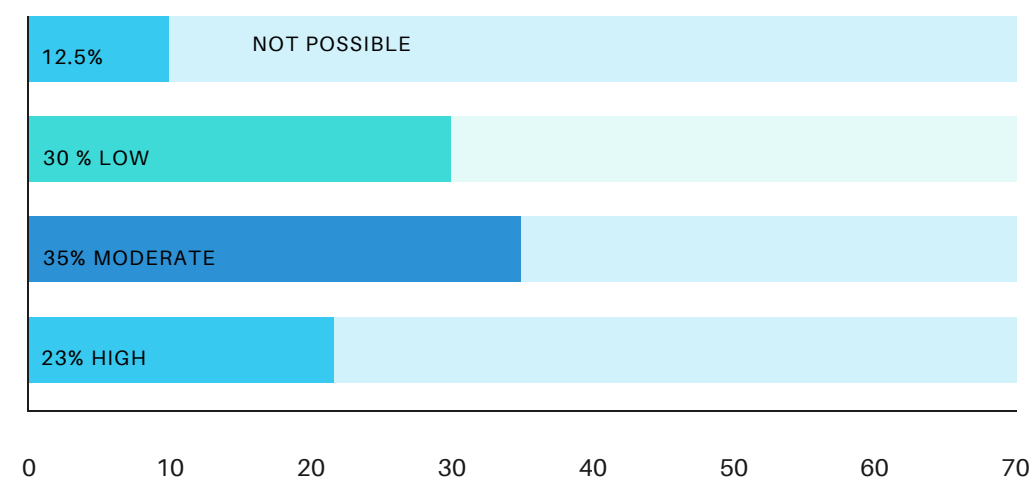
Have you ever heard of any of the following hazards?



How likely in NEAM the next 10 years?



How likely in your community the next 10 years?





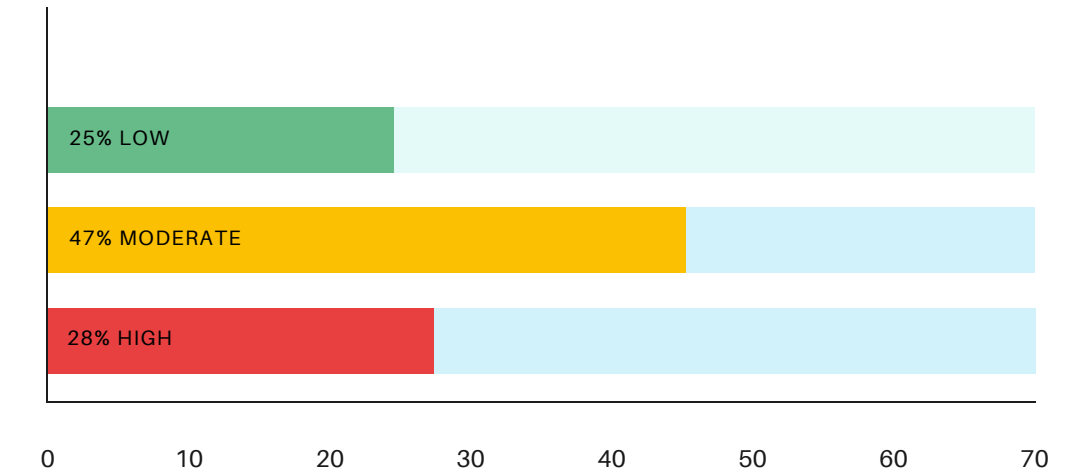
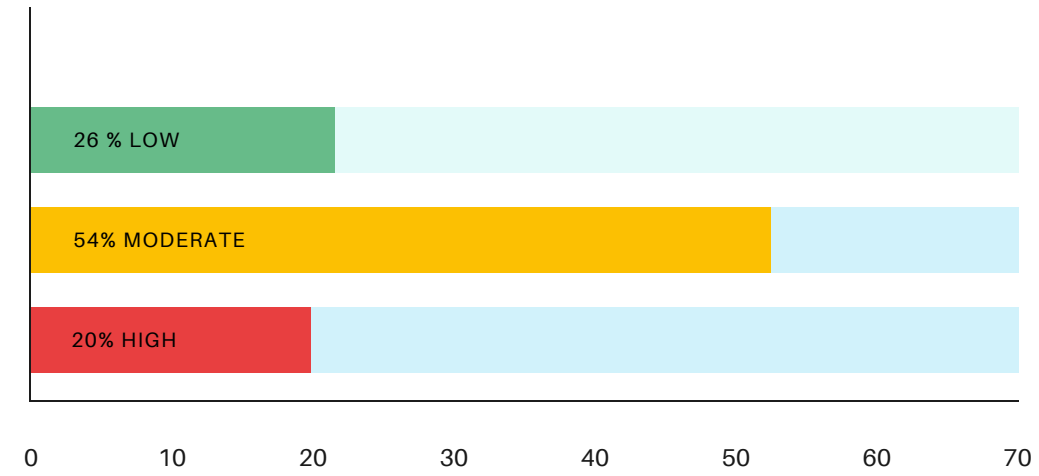
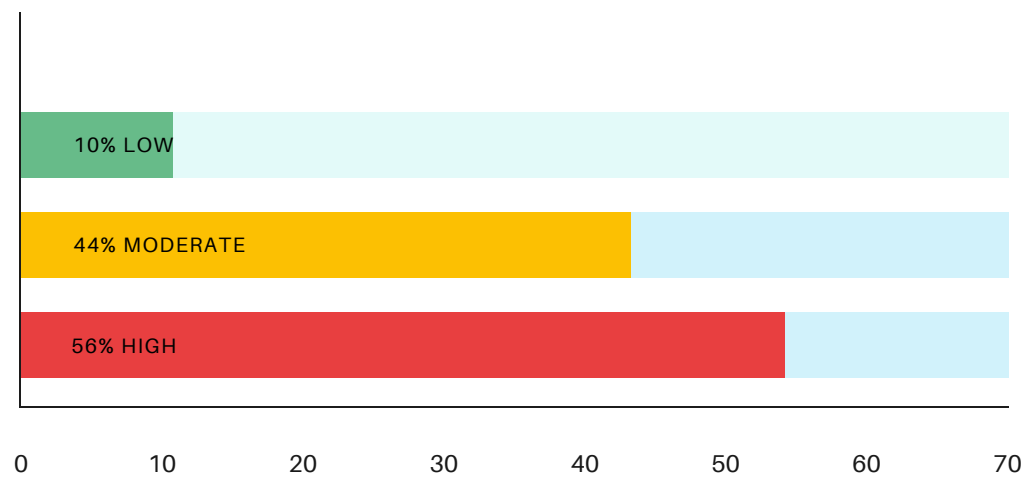
AWARENESS AND KNOWLEDGE

tsunami

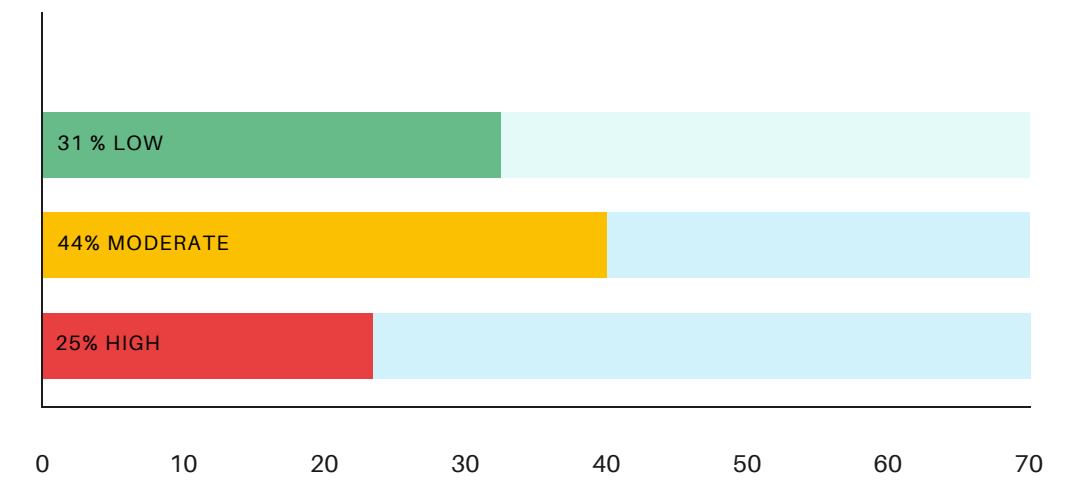
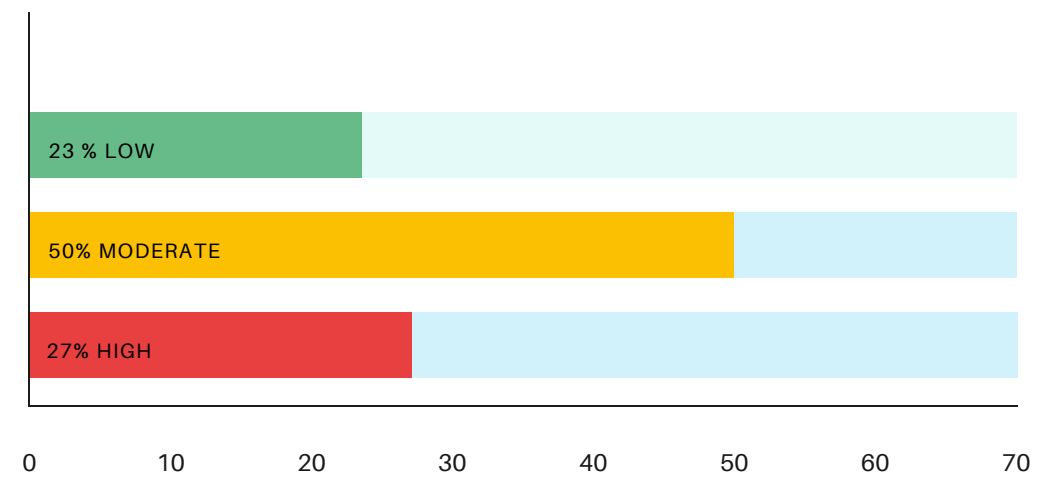
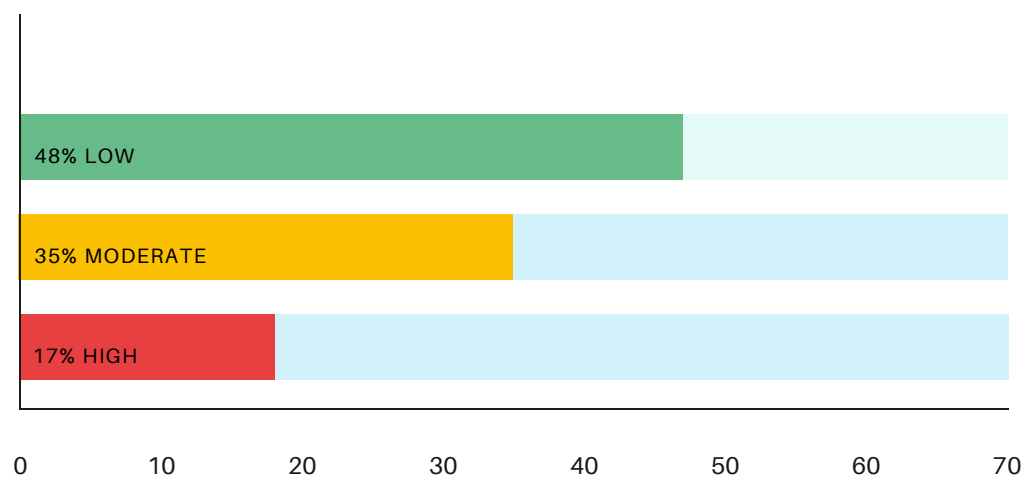
storm surge

sea level rise

The impacts in NEAM the next 10 years?



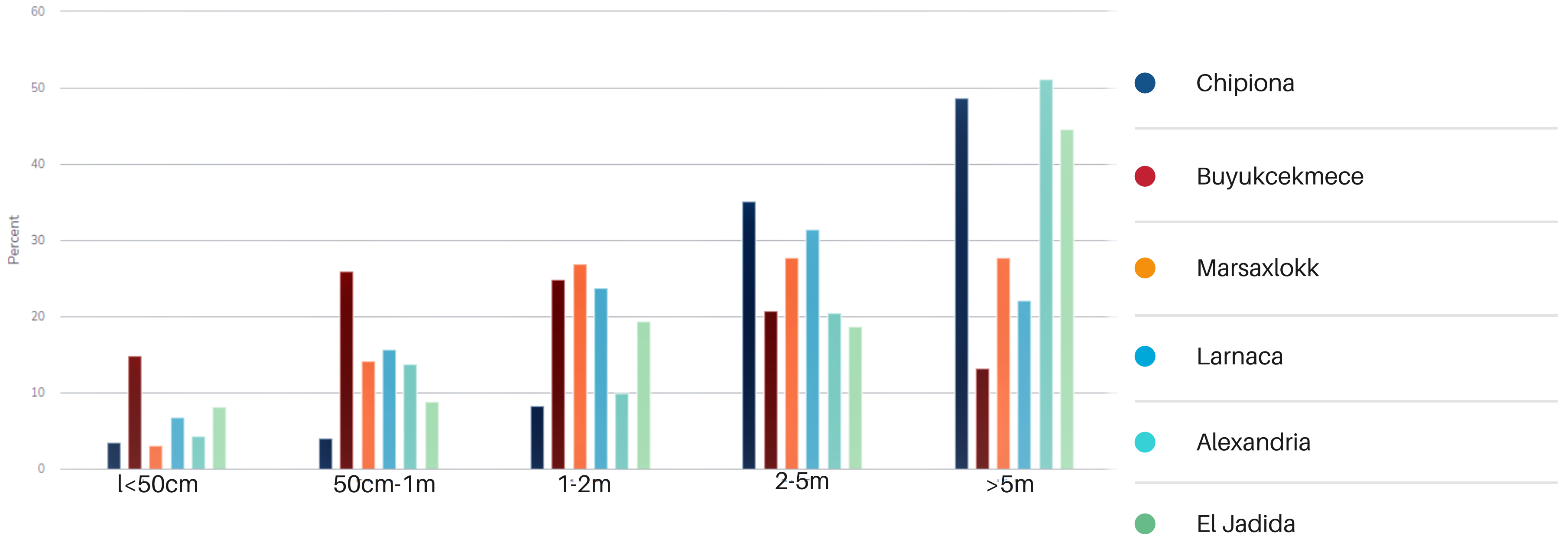
The impacts in your community the next 10 years?

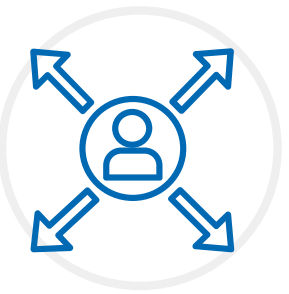




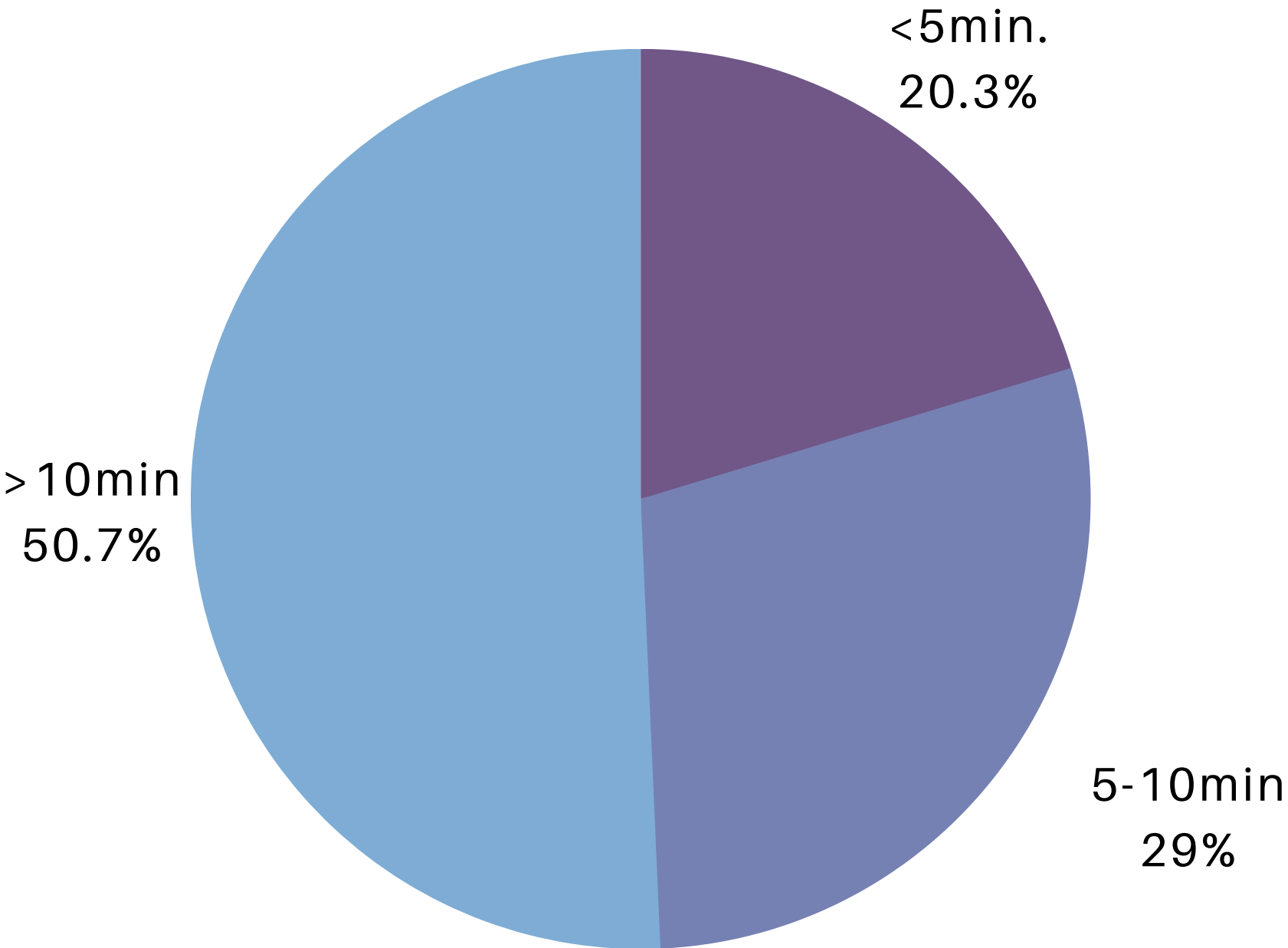
AWARENESS AND KNOWLEDGE

Approximate height of **tsunami** in NEAM in next 10 years?

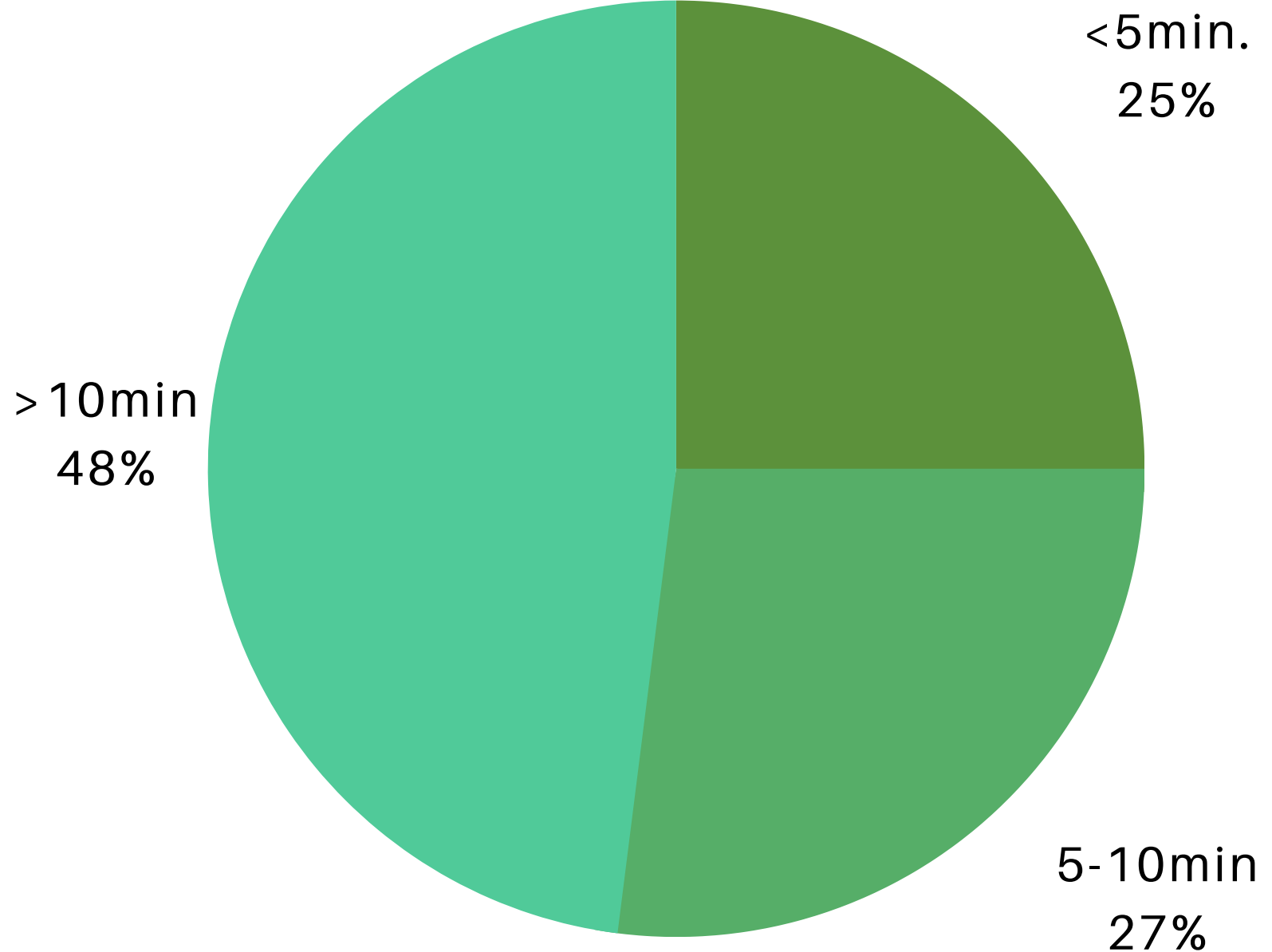




EXPOSURE AND SENSE OF EXPOSURE



Almost half **live** less than 10 min. on foot to the coast.



Almost half **work** less than 10 min. on foot to the coast.



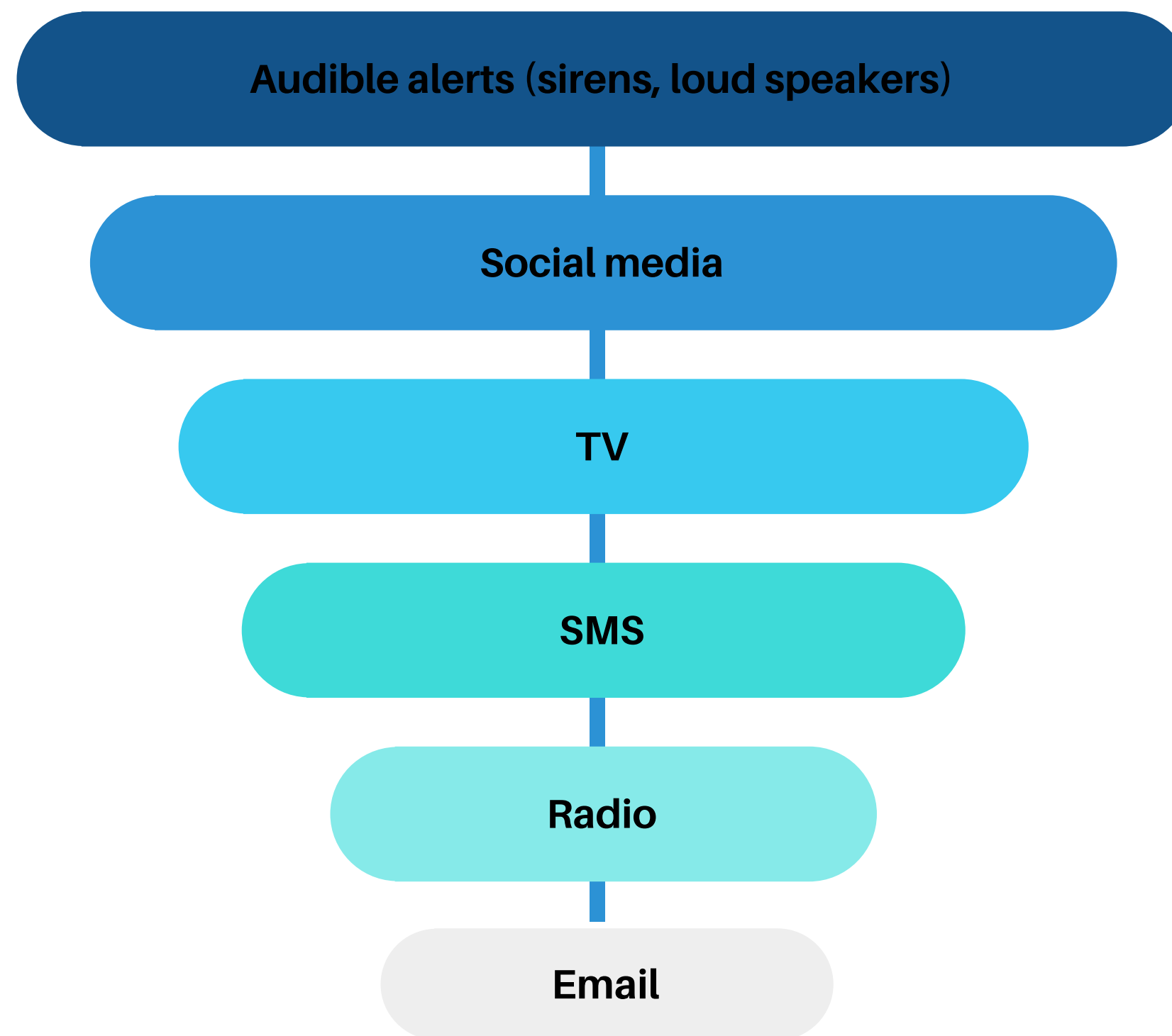
ASSESSMENT, PREPAREDNESS, RESPONSE

Imagine you are on the coast.

What would you do first if you feel a strong shaking due to an earthquake?



Which communication channel would you prefer for receiving alert messages?
Please order from most important to least important



3 Selected coastal communities are better prepared to respond tsunami and other risks

Key Activities Completed

by IOC-UNESCO

completed Inundation, SOP and TR Workshops

by partners

to be summarized by TT on TR.



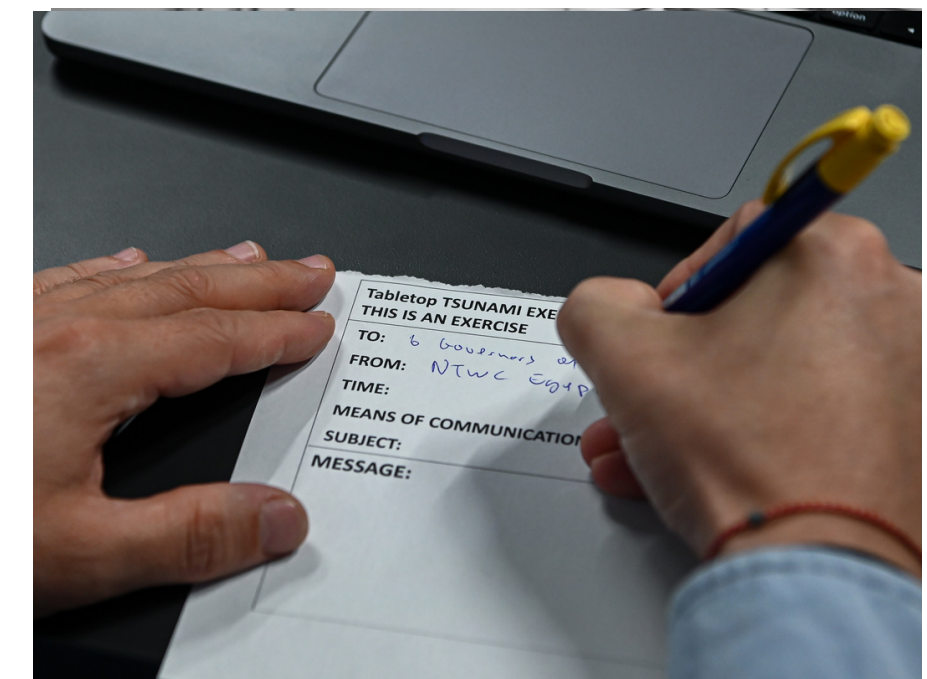
SOP WORKSHOP

National to local SOPs workshop

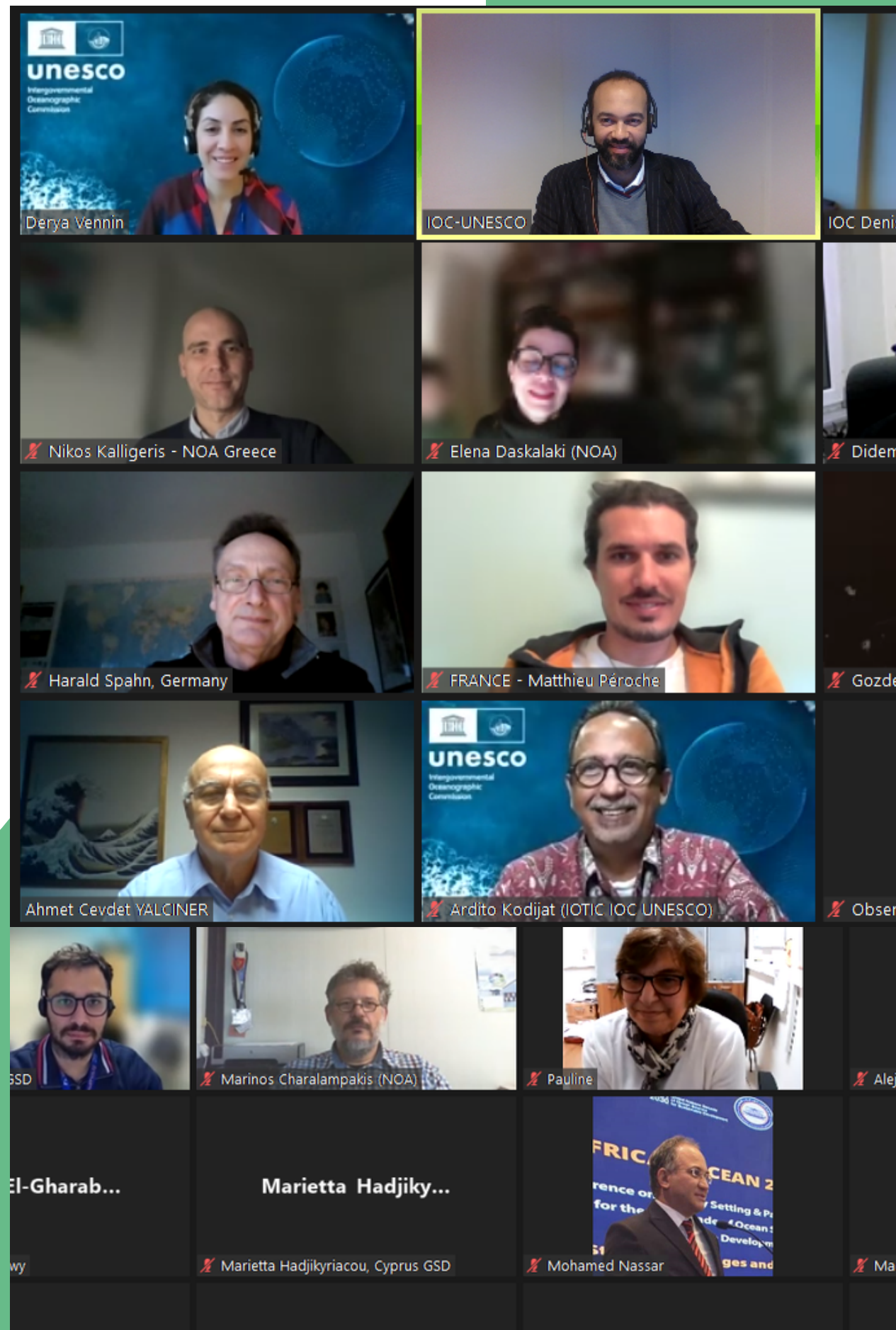
- *guided partners on the SOP Preparation Workflow for stakeholders and communities*
- *shared experiences and lessons learned for TRPs and SOPs from Indian Ocean and Caribbean*



reviewed current SOPs and governing regulations



identified gaps and possible challenges on establishing tsunami SOP Plans at national and local levels



TR WORKSHOP

TR Indicators,
Implementation workflow,
communication tools
and regional examples

The workshop provided an overview of the Tsunami Ready Recognition Programme, detailed information on the process and requirements for recognizing a community as Tsunami Ready, and available community awareness and education resources of IOC-UNESCO. This report provides a summary of the workshop.

4

Access to near real time seismic and/or sea level detection and alert (TAD) technology

In collaboration with EC-JRC

The tsunami warning system consists of:

- Long range siren, composed of one control box (including communication and control device) and four cones to send the information in all directions.
- Led digital panel for displaying warning messages.
- Short range siren and loudspeaker.
- 3G module for connection and communication with JRC server

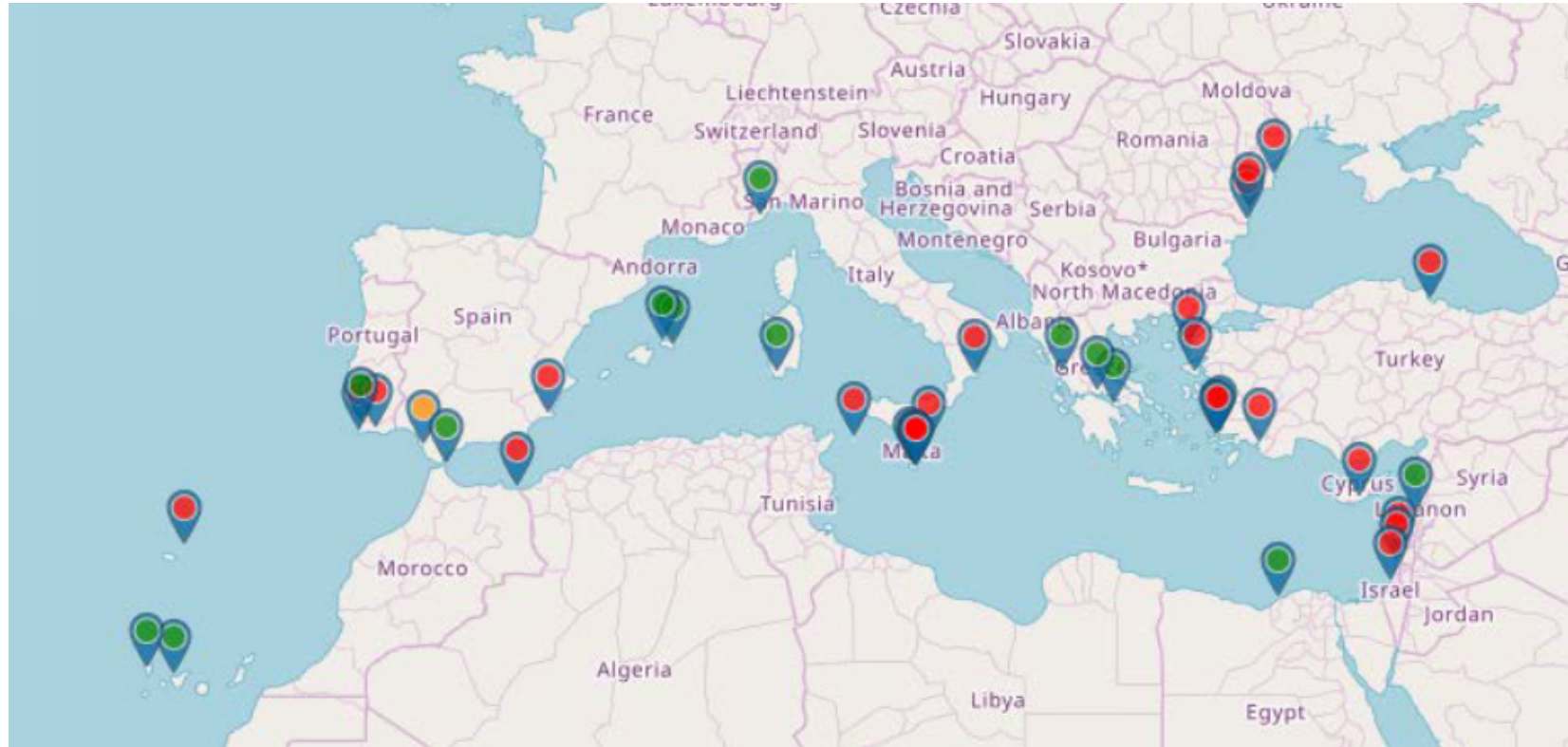
Key Activities completed

- identified local partners
- prepared the procurement for TADs
- partners agreed the installation



5 Longer Term Sustainability of the Inexpensive Device for Sea Level (IDSL) network

In collaboration with EC-JRC

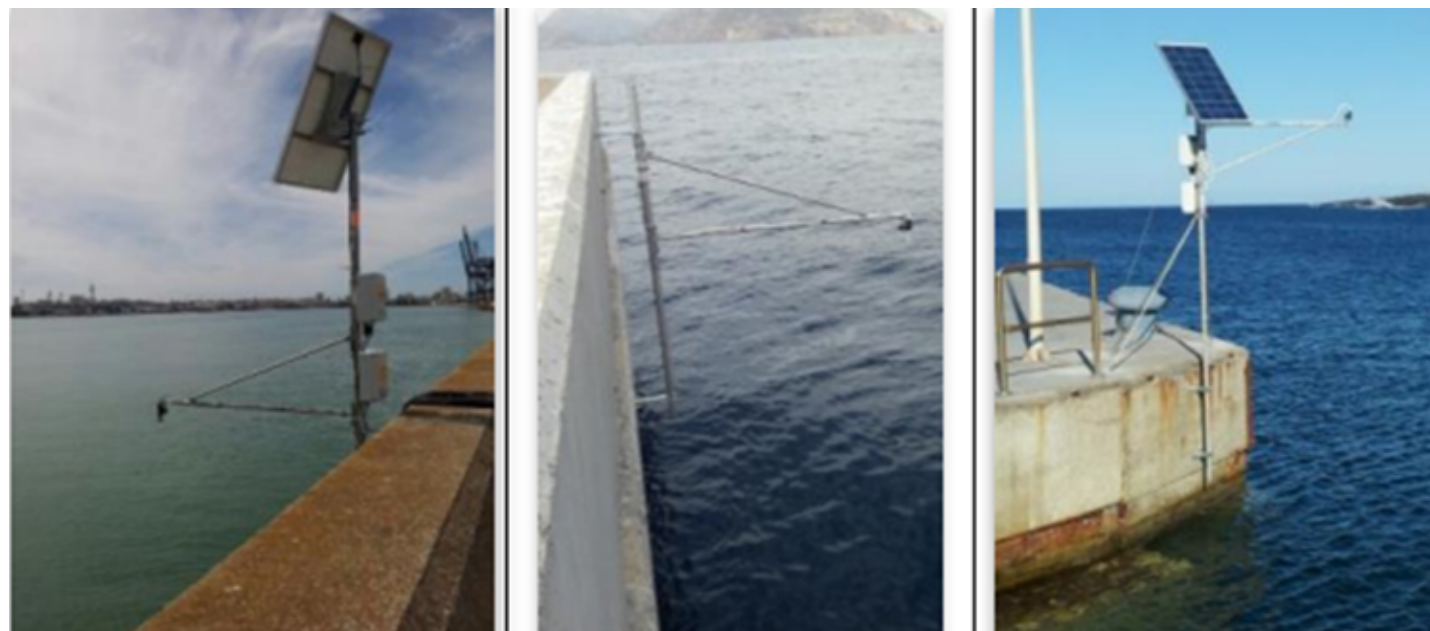


NEAMTWS Current JRC Network of Inexpensive Device for Sea-Level Measurement (IDSL) Devices *(map by JRC)*

- Developed for tsunami hazard monitoring by EC-JRC
- 42 Inexpensive Device for Sea Level (IDSL) mareographs have been installed at NEAM (each ~2k Euros)

Key Activities Completed

- Conducted assessment of maintenance requirements for IDSL
- Procured and delivered set of essential spare parts
- ensured the IDSL compatibility with IOC Sea-level monitoring facility



COMMUNICATION AND VISIBILITY

- Press releases
- Press conferences
- Interviews/ appearances
- Site visits, direct meetings
- Photographs
- Videos
- Promotional Materials
- Social media
- Web site, e-mails etc.

AIM:

raise awareness, educate-promote project and EU support, promote TR Programme, and inform about project's current and upcoming activities

@coastwaveproject

PLANING TIMELINE

KEYACTIVITIES



A hand holding a pen over a document with a laptop in the background. The scene is dimly lit with a blue tint. The text "Thank you." is overlaid in white.

Thank you.