## Iran

#### **Scenarios Exercised:**

- Andaman Trench (4 Oct)
- Makran Trench (11 Oct)
- ☐ Heard Island (18 Oct)
- ☐ Java Trench (25 Oct )













Participation of several Stakeholders in IOWAVE 23 at Jask in Community level



Participation of several Stakeholders in IOWAVE 23 Chabahar in Community level

### **Exercise** Participants

About 500 people were participated in IOWave23 exercise in two sites: totally 300 people involved in the exercise at three location in the Chabahar City, and 200 in the Jask City. In addition to the local coordinating organizations such as the governor's office and the Iranian Red Crescent Society, "Ordinary people" like students, beachgoers, fishermen, and vendors, among others, also participated in this exercise.

#### **National Tsunami Warning & Mitigation System**

The Iranian National Institute for Oceanography and Atmospheric Science (INIOAS) has established a national center, INCOH, to forecast and issue warnings for hazardous marine phenomena in light of the significant marine hazards in the country. Due to the proximity of the Makran Trench to the Iranian coastline, construction of a National Tsunami Early Warning System began. This system simulates 824 tsunami scenarios using the ComMIT numerical model, producing results like inundation maps, tsunami wave heights, and arrival times for specific points, all accessible through a web application. When an earthquake occurs in the Makran Trench, the application receives data from the Institute of Geophysics of University of Tehran, looking for the most relevant tsunami scenario, and disseminates warnings and notifications based on the Tsunami Warning Chain and a prepared Standard Operating Procedure (SOP). Additionally, INCOH is connected to the Indian Ocean Tsunami Warning and Mitigation System (IOTWMS) to receive their tsunami warnings.

#### **National Organisation of Exercise IOWave23**

On October 25, 2023, the IOWave23 tsunami exercise was conducted in Chabahar and Jask, Iran, simulating a fictional 9 Mw earthquake in the Makran Trench with significant coastal impact. The Iranian National Center for Ocean Hazards (INCOH) organized meetings with relevant organizations, including the National Disaster Management Organization (NDMO), Iranian Red Crescent Society, and Emergency Medical Services (EMS), to establish exercise start times and communication protocols.

A training pre-workshop was held on October 24th in Chabahar and Jask to educate participants from various organizations about IOWave23. The exercise began with the distribution of initial messages via SMS, Fax, and Telephone at 6:00 UTC. When the tsunami scenario started, portal sirens were activated in the field, and public speakers informed people about the danger and provided safety instructions.

Evacuation procedures were put into action, with buses and ambulances transporting evacuees to predetermined safe locations. Large printed evacuation maps were displayed at the exercise sites to guide participants in finding escape routes. A dedicated webpage offered additional information, including earthquake location, tsunami characteristics, inundation maps, evacuation routes, and tsunami bulletins.

Communication with authorities was maintained through telephone calls and the automated sending of Fax and SMS messages.

#### **Lessons Learnt**

- Necessity of Enhancement of infrastructures for warning dissemination
- Necessity of dedicating special staffs in NTWC for each area at threat
- Indian Ocean Tsunami Ready should encourage for communities
- -National and Local Media should involve to join the exercise in the future



# Further Information:

Please send to UNESCO-IOC IOTIC and ICG/IOTWMS Secretariat:

- 1. Videos of activities undertaken in IOWave23
- 2. Links to social media (X, Instagram, Facebook, Linkedin) related to IOWave23
- 3. Links to online media related to news and coverage of IOWave23