



United Nations
Educational, Scientific and
Cultural Organization



Intergovernmental
Oceanographic
Commission



UNESCO-IOC

DG ECHO CoastWAVE Project

Workshop

5 February 2024



Israel - Tsunami preparedness in numbers

- ✓ *24 Coastal cities*
- ✓ *7 Coastal National Parks*
- ✓ *1 Government resolution*
- ✓ *1400 tsunami signs (tsunami hazard zone, escape routs, assembly zones).*
- ✓ *2 National tsunami early warning teams (“Wave watch”, “Lighthouse”)*
- ✓ *3 IDSL tide gauges (Upgraded to the latest Miros tide gauge) for early warning*
- ✓ *2 National/International “Boots on the ground” exercises (Including the coastal local authorities) – about 130,000 participants*
- ✓ *7 National Tabletop exercises (Including the local authorities)*
- ✓ *1 VR tsunami simulator – Practice by all 7th graders of the Israeli education system – about 100,000 students each year*



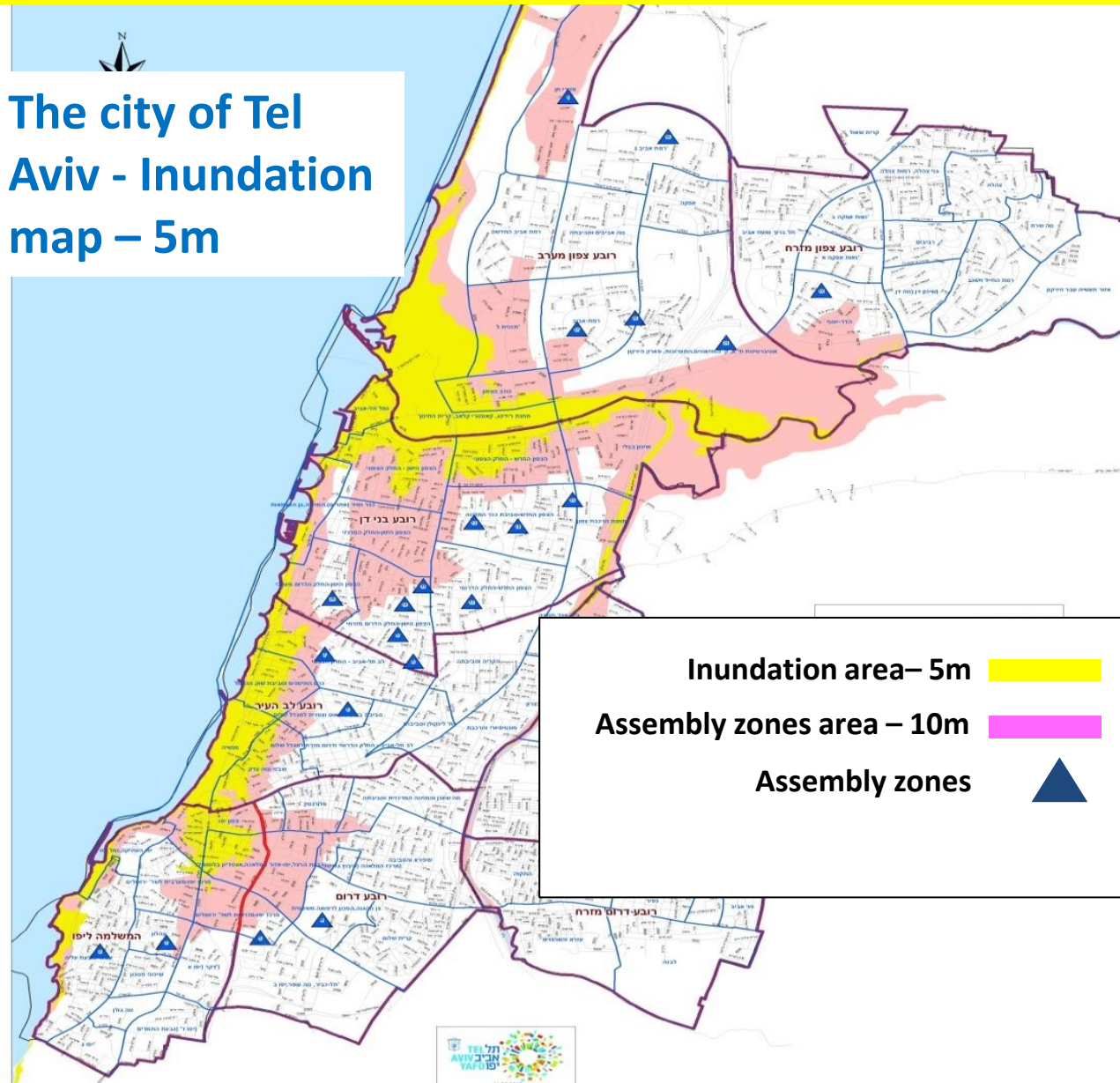
Increasing coastal cities resilience

- *Planning Escape Routes by analyzing risk areas (Hazardous materials, restricted areas, etc.)*
- *Placing of dedicated signs*

National framework for tsunami preparedness

assembly zones over 10 m

The city of Tel Aviv - Inundation map – 5m



height	Name	No.
10	בי"ס עירוני ב' ג'	1
10	בי"ס יד שפירא	2
11	כיכר רבין	3
11	מתחם דרייב אין	4
11	בי"ס אליאנס	5
12	קאנטרי רמת אביב	6
13	בי"ס תל נורדאו	7
13	בי"ס עירוני ז'	8
15	תיכון חדש	9
16	כיכר מסריק	10
16	מרכז קהילתי בני ברית	11
17	כיכר המדינה	12
18	בי"ס בלפור	13
18	בית ביאליק	14
19	בי"ס גבריאלי	15
19	בי"ס גימנסיה הרצליה	16
20	בי"ס דוד ילין	17
21	מתחם הבימה	18
22	בי"ס ברושים	19
25	פארק החורשות	20
33	בי"ס אחווה	21

Kindly reserved to the city of Tel Aviv

The city of Tel Aviv - Inundation area



"Kerem Hateimanim" residential quarter

לב-תל אביב - החלק הצפוני

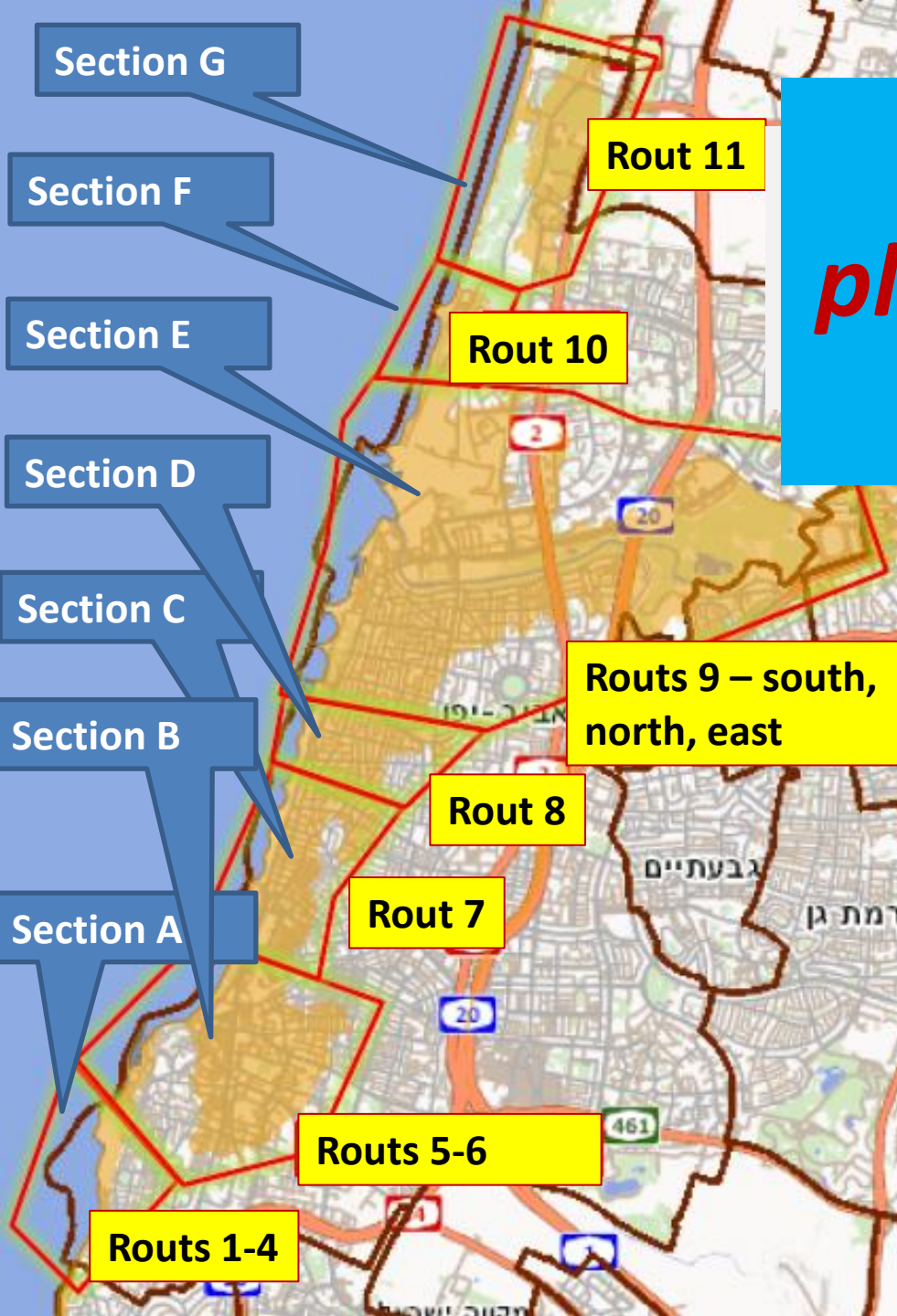
רובע-לב העיר

סביבת בית שטראוס וצפנית למגדל שלום

לב-תל אביב - החלק הדרומי ודרום מזרח למגדל שלום

מתשיה

Escape routes planning for Tel Aviv area

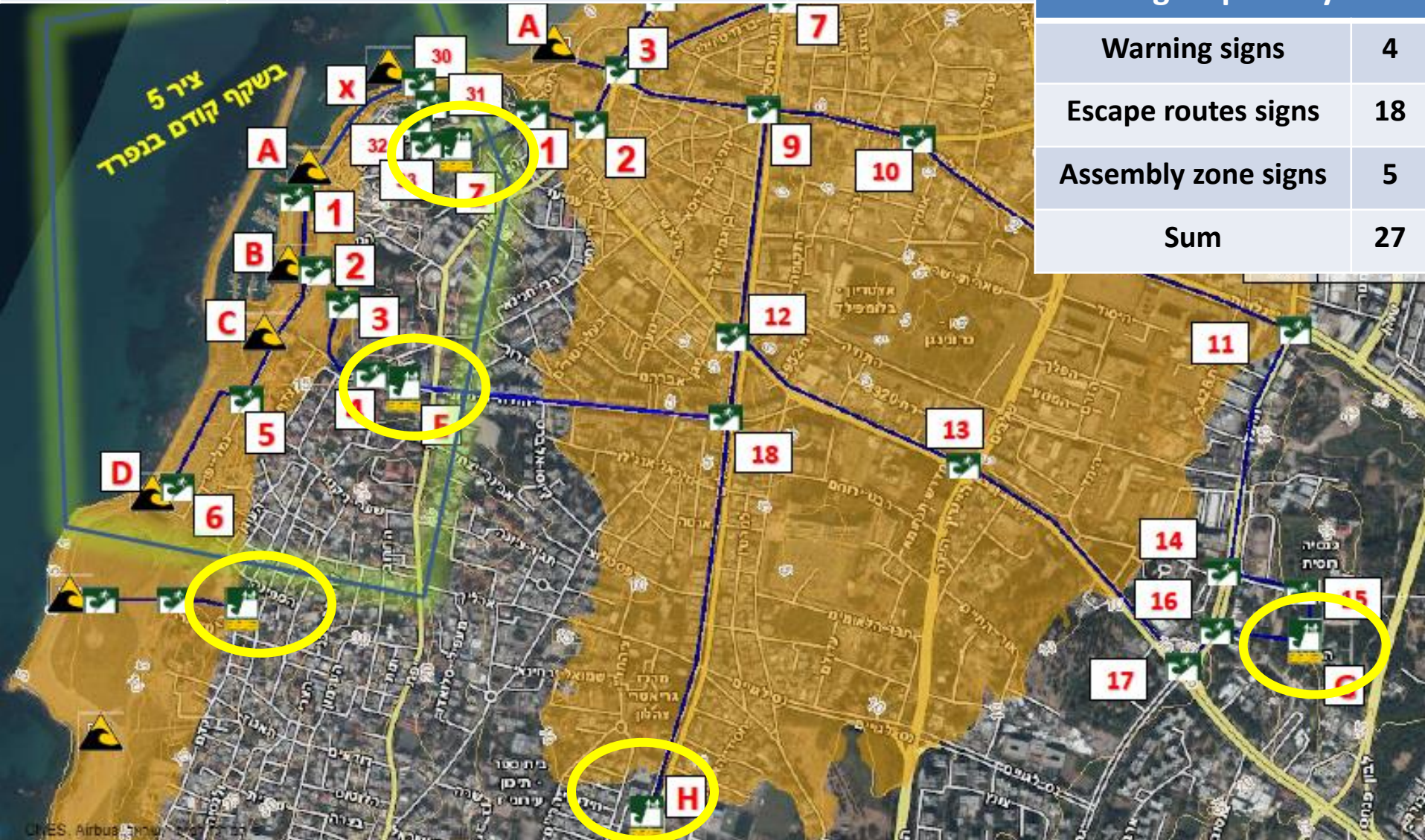


Rout 6 south

Wing	Assembly zone	Area	Max. length
Jaffa	<ul style="list-style-type: none"> The top park Russian church Jerusalem av. 	Bloomfield	1400 m

Signs quantity

Warning signs	4
Escape routes signs	18
Assembly zone signs	5
Sum	27





אזור סיכון מצונאמי
منطقة الخطر تسونامي
Tsunami Hazard Zone

בהתראת צונאמי:
• יש לעלות למקום גבוה
• יש להתקדם לאזור כינוס בטוח בהתאם לשילוט הכוונה
• **إنذار تسونامي:**
• عليك أن ترفع لمكان عال
• عليك أن تتقدم لمنطقة تجمع مفتوحة اعتماداً على
• علامات التوجيه



צונאמי - נתיב מילוט
تسونامي - طريق مهرب
Tsunami-Escape Route
→
300 m מ'



צונאמי - אזור כינוס
تسونامي - منطقة تجمع
Tsunami-Assembly Zone





Tsunami smart mapping – Ongoing project

On Israel's government GIS (open to the public)

- ✓ The location of the signs on the GIS map creates the escape routes, from the Tsunami hazard zone sign to the assembly zone sign.
- ✓ Scanning the Barcode on the Assembly zone sign will display the necessary emergency information to the current location and will indicate the local authority of the presence of people in need at that specific assembly zone



עוד



שתף



יישומים

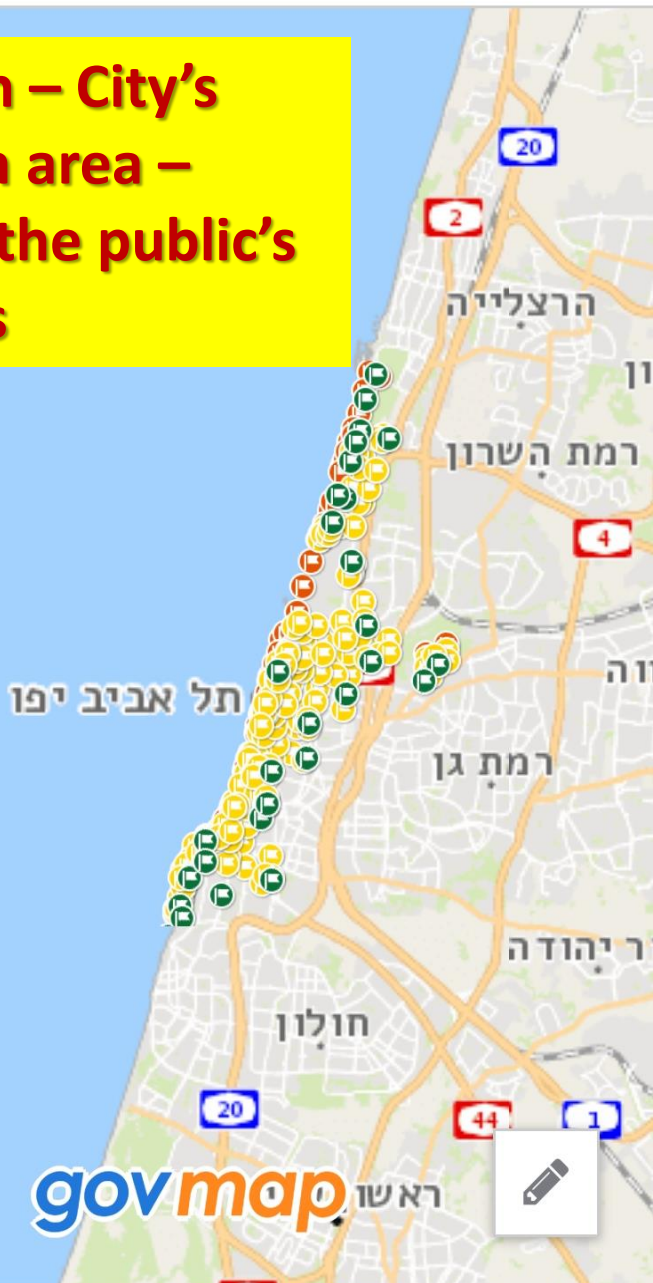


שכבות

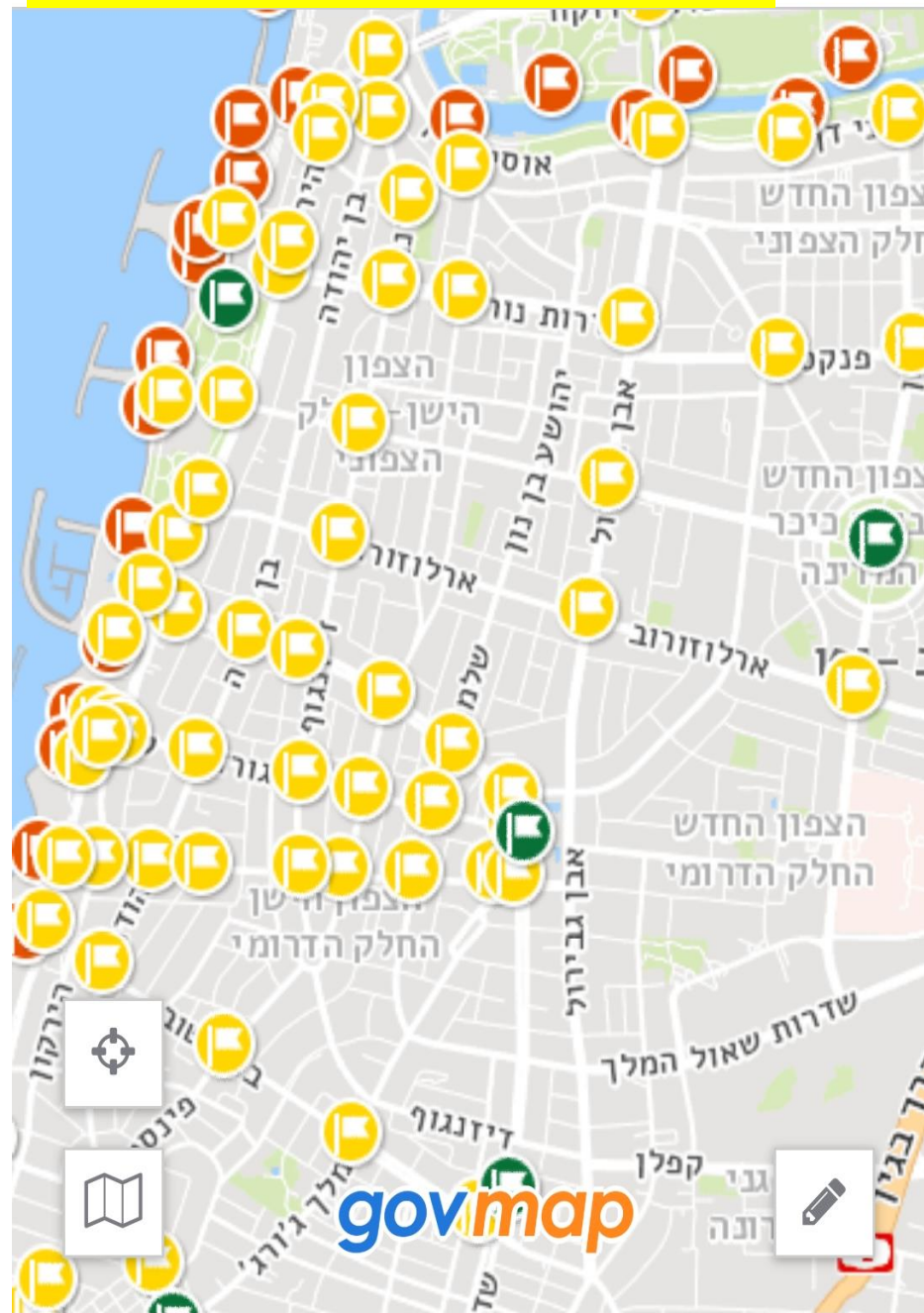


חיפוש

Zooming in – City's Inundation area – related to the public's necessities

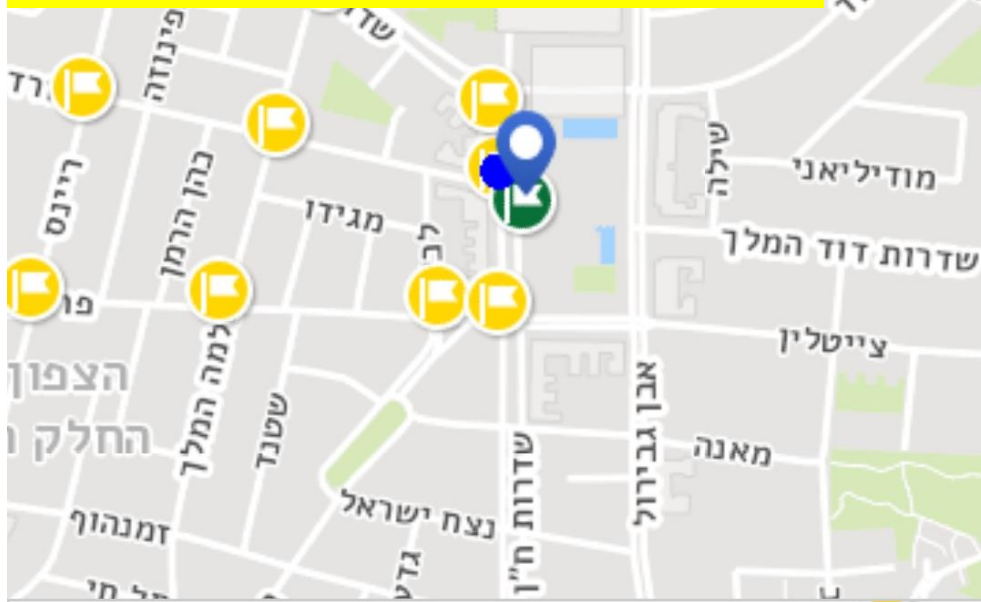


Zooming in – Escape routes



חיפוש

Clicking the Assembly zone sign – Getting a necessary emergency information



Future – Necessary emergency information - for the public and for the local authority

Tsunami hazard zone sign – the distance to the closest assembly zone.

Assembly zone sign -

- Assembly zone number (given by the local authority)
- Emergency units that are responsible to arrive this assembly zone
- Amount of people it can contains
- The closest hospital
- Emergency contact phone numbers
- etc.

X

כינוס תל אביב



יישוב : ת'א

סוג שלט : כינוס

איזור כינוס בטוח : 8



Regional Early warning system

3 IDSL tide gauges (Upgraded to the latest Miros tide gauge)

Home Front Command - Alert distribution

Distributing the tsunami alert through the alert operations room to coastal polygons

Getting a call from the Home Front Command's headquarter



Sirens





Operative instructions to the public

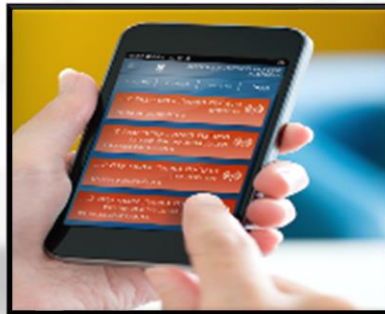


By SMS and social media platforms and by police and home front command's call centers

Available platforms



Social media + call centers

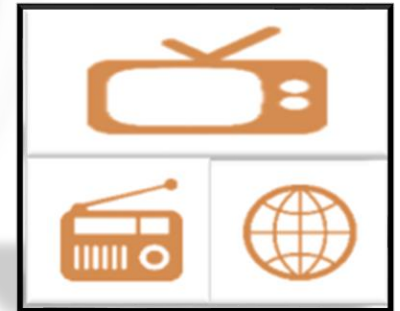


SMS: Alert + instructions



Media

Radio



Outbreak to media + Alert + instructions

Home front command exercise – loudspeakers alerting the public (250m from the loudspeaker)





ועדת ההיגוי הבין-משרדית להיערכות לרעידות אדמה
National Steering Committee for Earthquake Preparedness
لجنة التنسيق الوزارية للتأهب للهزات الأرضية



Raising awareness for earthquake and tsunami

An experiential geography lesson on earthquake and tsunami:

Simulator for tsunami and earthquake practice in virtual reality



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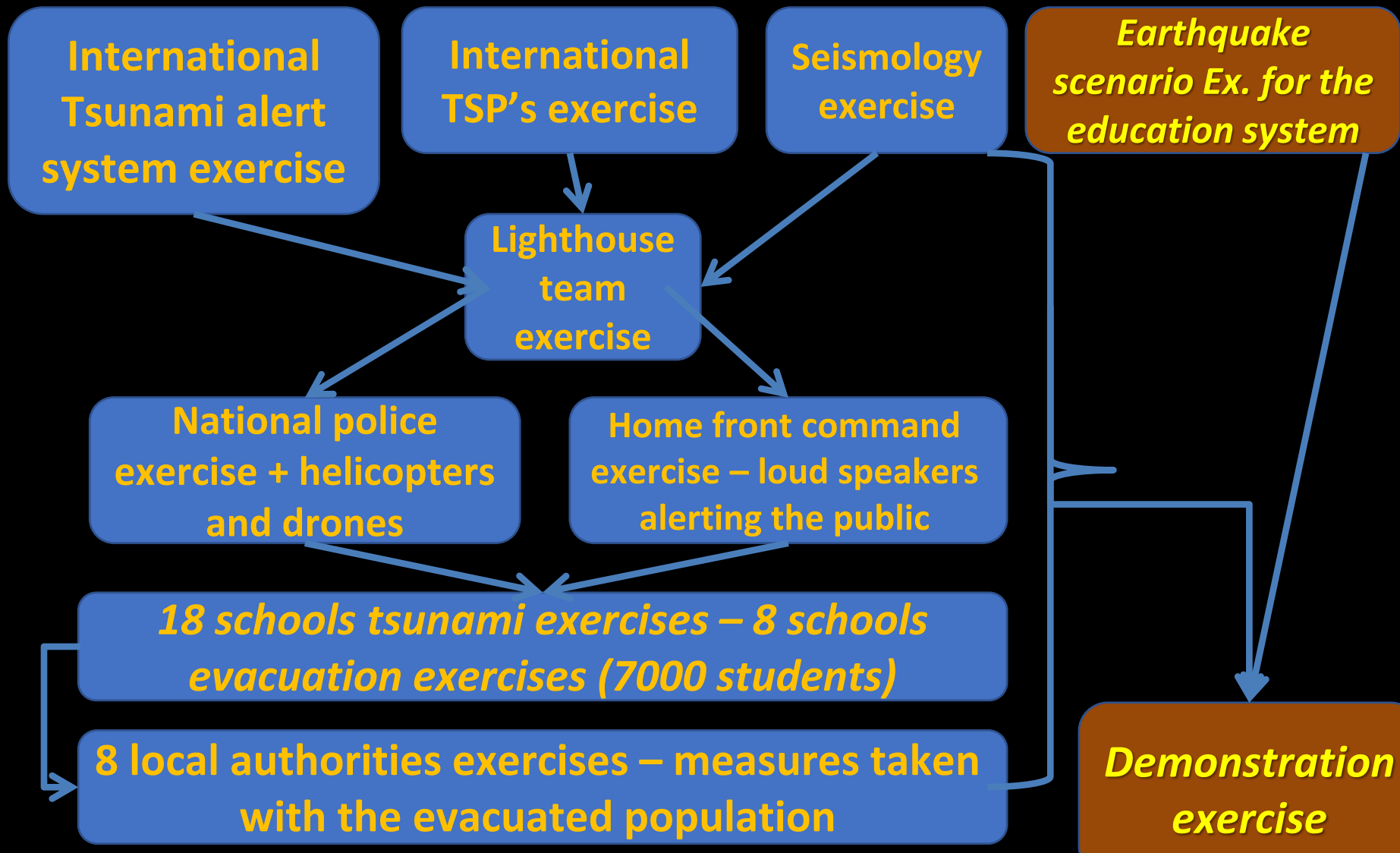


Tsunami exercise for Israel's education system

March 12th 2019



Performed exercises



International Tsunami alert system exercise

International TSP's exercise

Seismology exercise

Earthquake scenario Ex. for the education system

Lighthouse team exercise

National police exercise + helicopters and drones

Home front command exercise – loud speakers alerting the public

18 schools tsunami exercises – 8 schools evacuation exercises (7000 students)

8 local authorities exercises – measures taken with the evacuated population

Demonstration exercise

Demonstration exercise – Independence park, Tel Aviv



Global exposure – demonstration exercise



Thank You

Amir Yahav

Director

**Israel's National Steering committee
for Earthquake preparedness**

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