

# NATIONAL DISASTER PREPAREDNESS IN TURKEY

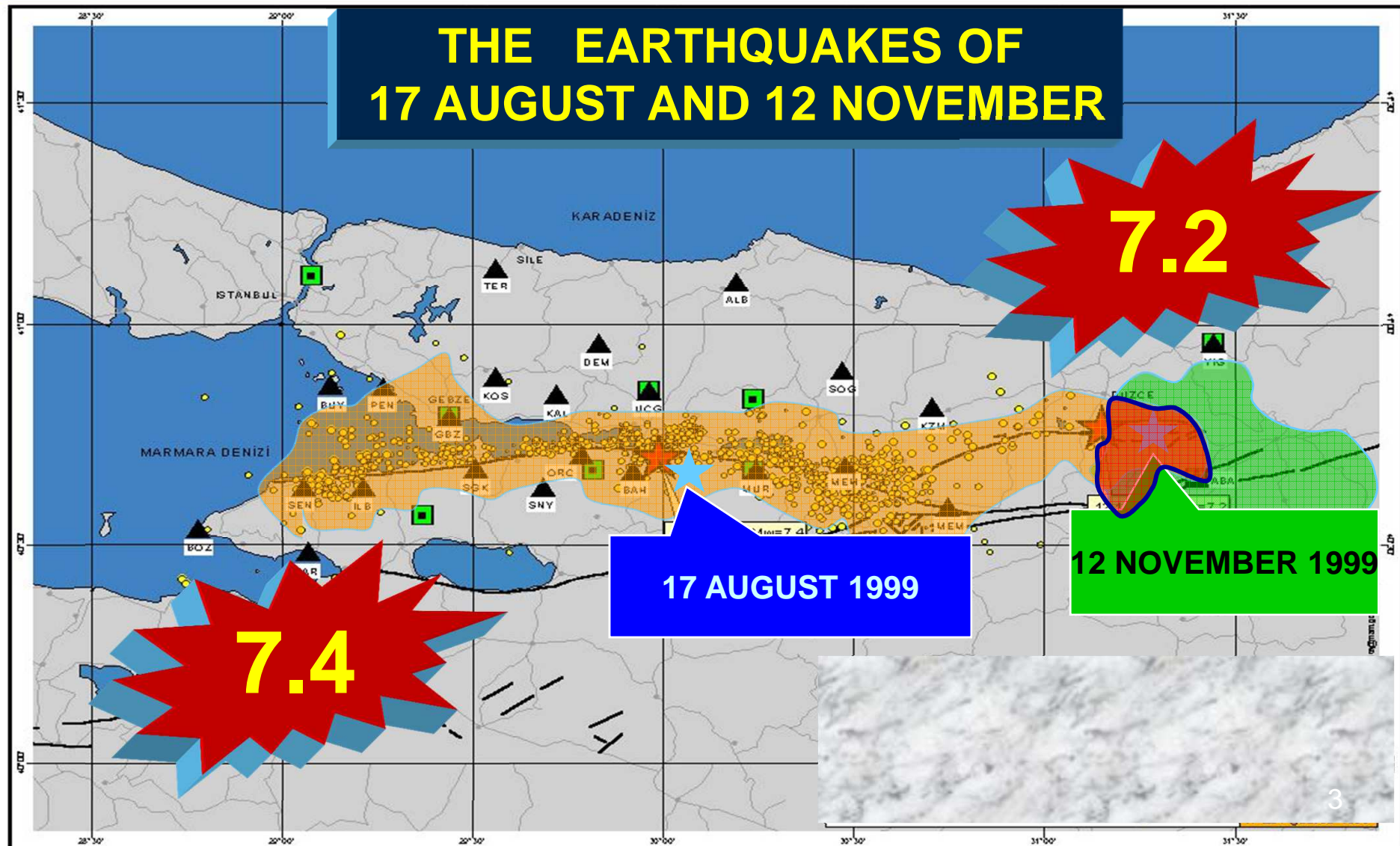
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# Turkey is prone to mainly three types of natural disasters

- Earthquakes;
  - 70% of the population living in seismically active areas
  - 66% of the country is located on active fault zones
  - 75% of damaged buildings and 64% of the total disaster losses in the last century are due to earthquakes
- Floods;
  - Mostly in coastal plains and exacerbated by deforestation, erosion and ignorant development
  - 15% of total losses are due to floods
- Landslides;
  - 25% of country is exposed to landslide hazard
  - 11% of total population is located in landslide areas
  - 16% of total disaster losses are due to landslides.

# Disaster and Emergency Management System of Turkey









Total 18.243 Deaths

48.901 Injured People

**APPROXIMATELY AREA**

Total Material Loss 8  
Billions of Dollars

**100.000 KM<sup>2</sup>**  
**15 mil. population**

Zonguldak

Bolu

Bursa

## Legislative Changes

- **Obligatory Earthquake Insurance**
- **Control of Construction Processes**
- **Proficiency in Constructional Professions**

## Organizational Changes

- General Directorate of Emergency Management attached to the Prime Ministry was established
- Ministry of the Interior has set up regional centers for relief and emergency operations.
- Independent National Earthquake Council was set-up
- Local authorities' responsibilities for disaster mitigation were extended

## **New Emergency Management System**

- By the Act 29/5/2009 dated and No.5902 Establishment of Disaster and Emergency Management Presidency;
  - TEMAD Under Prime Ministry
  - Mol of Civil Defence DG
  - MoPWS Disaster Affairs DGwere closed.



## SYSTEM REORGONIZED

DIRECTORATE-GENERAL of  
CIVIL DEFENCE

DIRECTORATE-GENERAL of  
DISASTER AFFAIRS



DIRECTORATE-GENERAL of  
TURKEY EMERGENCY MANAGEMENT



BY 17 DEC. 2009

PRIME MINISTRY  
DISASTER AND EMERGENCY MANAGEMENT PRESIDENCY

- **System has been simplified and qualified.**
- **All duties, competencies and authorization of three institutions automatically passed into DEMP.**
- **Main duty of DEMP is assessment and provision of needs in coordination with all governmental institutions in case of disasters at all levels.**

## PROVINCIAL LEVEL

By the new Act;

- Disaster and Emergency Management Directorates are established in 81 provinces
- In each province the emergency centers are established affiliated to the Governor, too.



Civil Defence Battalions in 11 Provinces

**Presidency consists of 6 departments;**

- 1. Department of Planning and Mitigation**
- 2. Department of Response**
- 3. Department of Recovery**
- 4. Department of Civil Defence**
- 5. Department of Earthquake**
- 6. Department of Administrative Affairs**



## Planning and Mitigation Department

### Duties of Department;

- ✓ To prepare disaster and emergency response, risk management and hazard reduction plans which will be applied nation wide,
- ✓ To determine possible disaster and emergency areas and to pronounce preventive measures,
- ✓ To determine reconstruction, plan and project rudiments of disaster prone areas,
- ✓ To determine cash, goods and humanitarian aid rules,

## Planning and Mitigation Department

- ✓ To work for informing and raising awareness of public about disasters and emergencies,
- ✓ To collect and evaluate informations about disasters and emergencies occurred inside and abroad,
- ✓ To determine standarts of common communication and data systems in Disaster and Emergency Management Centers and inspect them,
- ✓ To carry out the routine works of Disaster and Emergency Training Center.

## Planning and Mitigation Department

- **Related to Disaster and Emergencies;**
    - ✓ To determine administrative strategies,
    - ✓ To establish and operate all kinds of communication, early warning, data and prediction centers,
    - ✓ To suggest to related agencies about public investments and personnel requirements, To do or get trainings and exercises,
    - ✓ To ensure improvements and generalize insurance services,
    - ✓ To determine and supervise service and accreditation standards,
- To do the other related works given by the Head of Agency.

# NATIONAL PLATFORM

Studies in order to create a national platform in Turkey has been started in 2008, with a committee consisted of main actors involved in disaster management structure of Turkey.

In 2009, after a restructuring period and with the establishment of Disaster and Emergency Management Presidency of Turkey (AFAD), new authority held the activities.



# Structure

- National Platform is a coordination and advisory group of several actors from disaster community.
- Platform is formed by the decision of Cabinet and chaired and managed by AFAD.

- ✓ *Governmental Organizations - 17*
- ✓ *Non-Governmental Organizations and Professional Organizations - 8*
- ✓ *Universities - 5*
- ✓ *Local Authorities - 15*
- ✓ *Private Sector - 3*
- ✓ *Media - 4*
- ✓ *National Association - 1*

# Functions and Duties

1. Contribute to the needs assessment studies for disaster risk reduction activities, policies, make proposals for national action plans on DRR,
2. Contribute to the programming, monitoring and evaluation of DRR studies at national level,

# Functions and Duties

3. Ensure more effective and multi stakeholder studies and activities among the various partner organizations working in the field of DRR and make available more effective and rationalist use of sources,



# Functions and Duties

4. To direct the in line organizations on the following topics;
  - ✓ Integration of development plans and policies into DRR targets,
  - ✓ Identification, implementation, monitoring and definition of priorities of hazard and risk studies by supplying consultancy,

# Functions and Duties

5. Develop strategies and policies in order to achieve DRR and support the existing ones,
6. Maintain the implementation and monitoring of Hyogo Framework of Action Strategy Plan in the country,
7. Support the activities in order to increase the awareness of public to disaster risk reduction,

# An Application of Local Disaster Preparedness -

## Lessons Learnt From Marmara Earthquake

### Istanbul

13-14 million people, almost 20% of Turkey's population, live in Istanbul. More than 40% of Turkish GNP is generated in the region.



- Probability of a big earthquake within the next 30 year is over 50%.
- Probability of a big earthquake within the next 10 year is over 20%.

# Istanbul Seismic Risk Mitigation and Emergency Preparedness Project (ISMEP)

Country / Region : Turkey / Istanbul

Project Duration : 2006-2014

Implementation : Istanbul Special Provincial  
Administration / Istanbul Project Coordination Unit  
(IPCU)

Finance : World Bank / European Investment Bank

Loan Amount : (Joint WB-EIB) Euro 610 Million



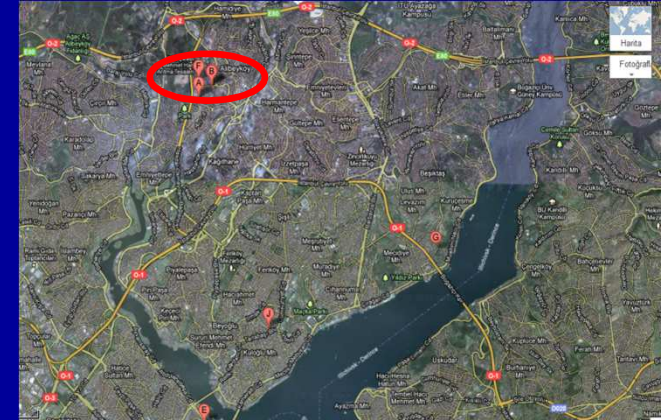
# GOALS

- Strengthening institutional and technical capacity of emergency management
- Increasing emergency preparedness and response awareness
- Retrofitting/Reconstruction of priority public buildings
- Vulnerability inventory and project design for cultural and historical heritage assets
- Taking supportive measures for the efficient implementation of development law and building codes.

# COMPONENT A

## ENHANCE EMERGENCY PREPAREDNESS

- Provincial Disaster Management Centers
  - The design and land allocation studies for the Provincial Disaster Management Center Buildings are finalized.



European Side – HASDAL  
Asian Side – FSM KOZYATAGI



# COMPONENT A

## ENHANCE EMERGENCY PREPAREDNESS

- Enhancement of Analog FM Radio Infrastructure (İstanbul Health Directorate – SAR – DMC – Police Dep)
- İstanbul Disaster Management Center
- Mobile Lighting Towers
- Disaster Containers
- Medical Equipment - National Medical Rescue Teams



# COMPONENT A

## ENHANCE EMERGENCY PREPAREDNESS

- **PUBLIC AWARENESS AND TRAININGS**
  - ✓ Individual/Family Disaster Preparedness Training
  - ✓ Disaster Preparedness Training Program for Neighborhood Disaster Volunteers
  - ✓ School and Hospital Disaster Preparedness Training
  - ✓ Business Community Disaster Preparedness Training

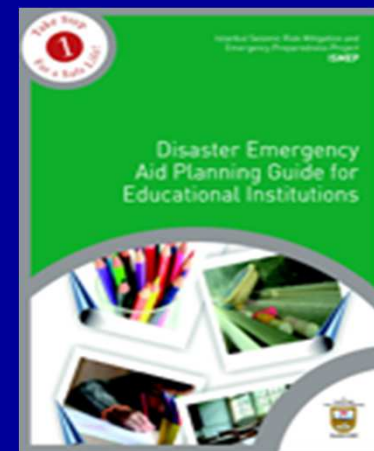




# COMPONENT A

## ENHANCE EMERGENCY PREPAREDNESS

- ✓ Survival Under Extraordinary Conditions Training
- ✓ Psychological First-Aid Program
- ✓ Structural Awareness Training Program
- ✓ Non-structural Risk Awareness Training Program
- ✓ Awareness of Compulsory Earthquake Insurance Program
- ✓ Urban Planning and Construction for Disaster Mitigation for local decision makers, technical staff and community representatives



- *Training Materials, distribution of 500.000 brochures – information cards, 3000 t-shirts, 3000 caps, 50.000 magnets, 100.000 bags*
- *Also, social guidance and awareness for the beneficiaries of retrofitting schools*

# COMPONENT B

## SEISMIC RISK MITIGATION FOR PUBLIC FACILITIES

Building Type	Feasibility Studies	Completed Retrofitting Works	Ongoing Retrofitting Works	Completed Reconstructing Works	Ongoing Reconstructing Works
HOSPITALS	28	7	1	1	1
POLYCLINICS	19	9	1	--	--
SCHOOLS	794	413	57	64	60
ADMINISTRATIVE	34	16	--	--	--
DORMITORIES / SOCIAL SERVICE	18	14	--	--	2
TOTAL	772	459	59	65	63



## COMPONENT C

### BUILDING CODE ENFORCEMENT

- Training of approximately 3000 civil engineers –
- Protocol signed with Ministry of Public Works and Settlement
  - New Turkish Building Code
  - Vulnerability assessment
  - Damage assessment after disasters

# ISMEP PROJECT

## Contributions;

- ❖ Prevention of potential loss of life
- ❖ Mitigation of social, economic and financial effects of a possible earthquake
- ❖ A model for the design and implementation of other projects and activities within the field of disaster management

***THANK YOU FOR YOUR ATTENTION***

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