



Survey for Seismic Protection
Ministry of Emergency Situations of Republic of
Armenia



Disaster Risk Reduction in Survey for Seismic Protection of MES

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Location of Armenia and neighboring countries



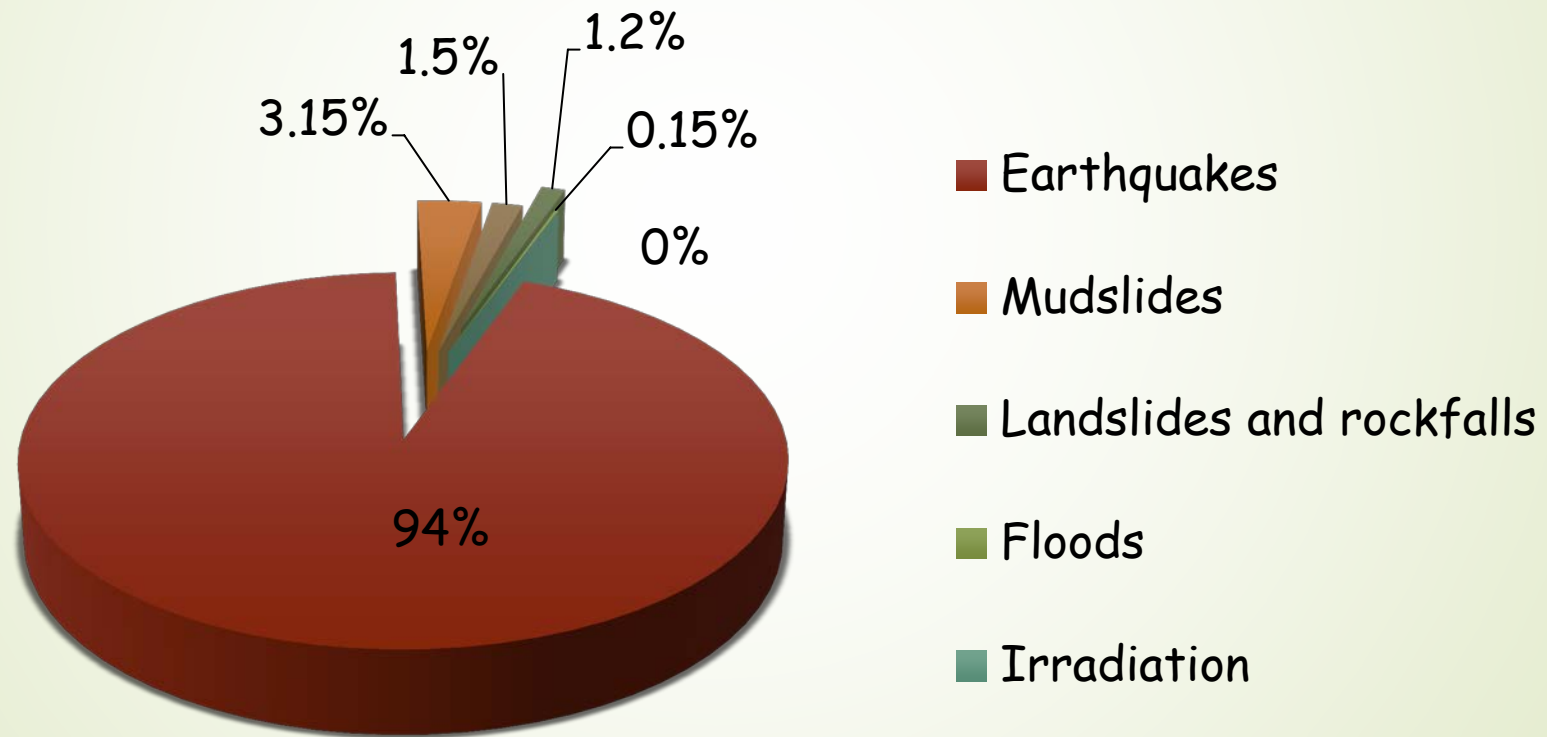
Armenia straddles the Lesser Caucasus Mountains. It is bordered in the north by Georgia, in the south by Iran, in the east by Azerbaijan, and in the west by Turkey.

General Information

Area: 29.743 km²
Population: 3.2 million
Capital: Yerevan
State form: Republic



The disasters in Armenia



Spitak Earthquake 1988

25 000 victims
250 000 people were injured
12500 people were hospitalized
514 000 homeless



Time: December 7, 1988 at 7.41.22.7 GMT (11.41.22.7 local time)

Coordinates of epicenter: latitude 40.92°N, longitude 44.23°E

The depth of the hypocenter: 10-15 km

The magnitude of the earthquake: 7.0

The intensity at the epicenter: 10 (MSK-64 intensity scale)



Ministry of Emergency Situation of RA Disaster Response and Manegment

Survey for Seismic Protection (SSP) was founded under the Government of the Republic of Armenia on July 17, 1991. Armenian SSP is under the Ministry of Emergency Situation.



The basic goal of SSP is Seismic Risk Reduction in Armenia

Armenian **SSP** has developed two Strategic National Programs on

- ❑ "Seismic Risk Reduction in Armenia"
- ❑ "Seismic Risk Reduction in Yerevan-city".

The Programs, adopted by the Government of the Republic of Armenia on the **10th** and **7th** of July in **1999** are designed for **30** years. All the Ministries and other Governmental, non-Governmental and private organizations will implement these National Programs under the general co-ordination of Armenian SSP assigned by the Government as a responsible body for the Seismic Risk Reduction Strategy development and implementation.



Laws and regulations

Seismic Protection activities are regulated by a number of laws and legislative acts and national programs of the Republic of Armenia:

Law of RA	The Law of the Republic of Armenia on Seismic Protection (2002)
Resolutions of Government	The Complex Program of Seismic Risk Reduction in the RA Territory (1999)
	The Complex Program of Seismic Risk Reduction in Yerevan city (1999)
	The Resolution of the Government of RA on establishment of the list of critical important and general facilities in the field of seismic protection (2003)
Regulation	"National Survey for Seismic Protection" Agency (2008)

The Armenian SSP Task Force members

- seismologist-seismotectonist
- seismologist
- geo-technician
- earthquake engineer
- communication engineer
- public awareness expert
- logistics, rescuer
- psychologist



The basic goal of SSP is Seismic Risk Reduction in Armenia

Seismic risk reduction Strategy includes:

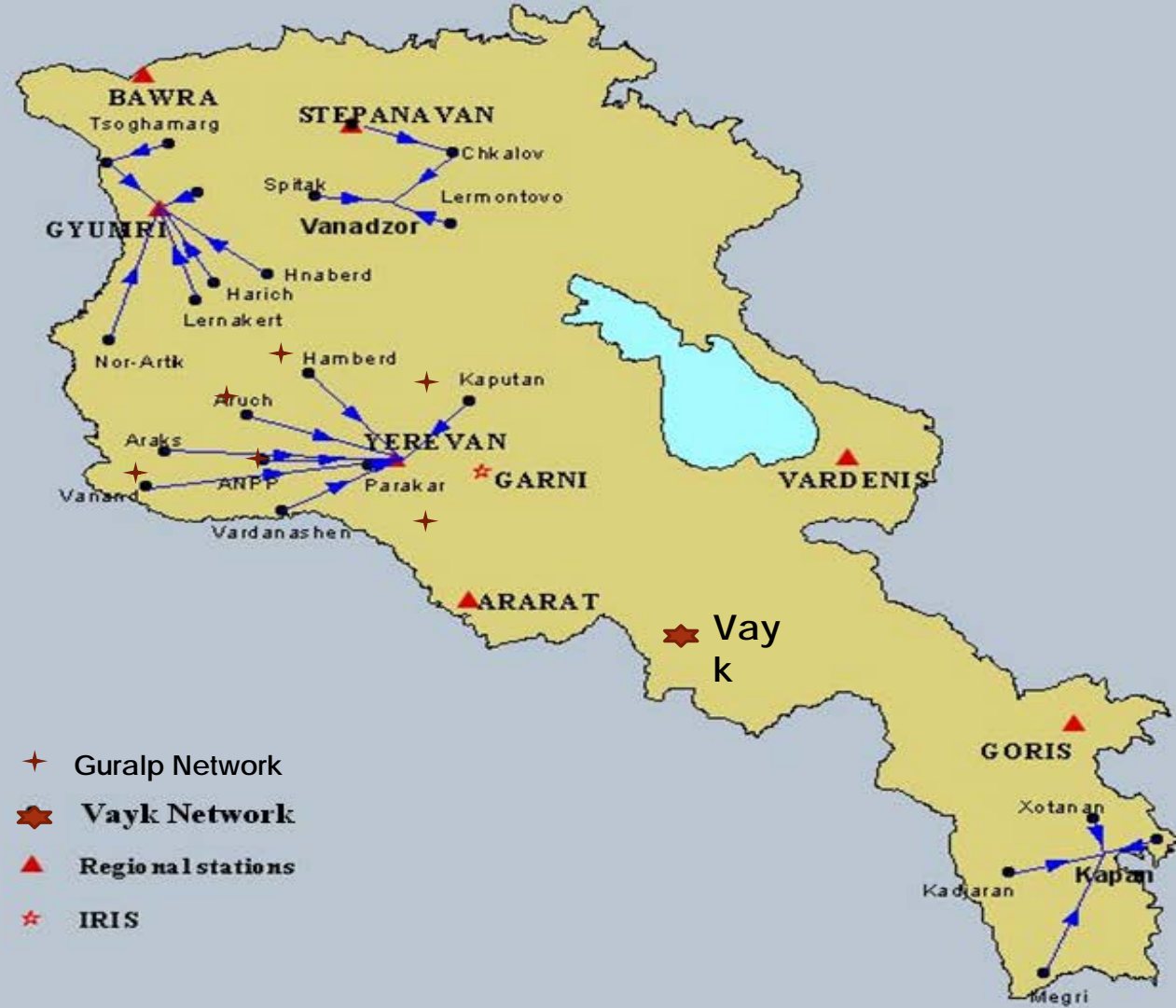
- ✓ Seismic Hazard and Risk Assessment
- ✓ Vulnerability reduction in urban areas, including reinforcement and upgrading of existing buildings, design of new codes and standards
- ✓ Public awareness, people education and training
- ✓ Early warning and notification
- ✓ Partnership establishment, involving public and private organizations
- ✓ Risk management, including Emergency Response and Rescue Operations
- ✓ Disaster relief and people rehabilitation
- ✓ Insurance
- ✓ State disaster Law and regulations



There are four types of seismic network in Armenia:

- Guralp Network
- Vayk Network
- Regional Network
- Global Seismograph Network Station (IRIS)

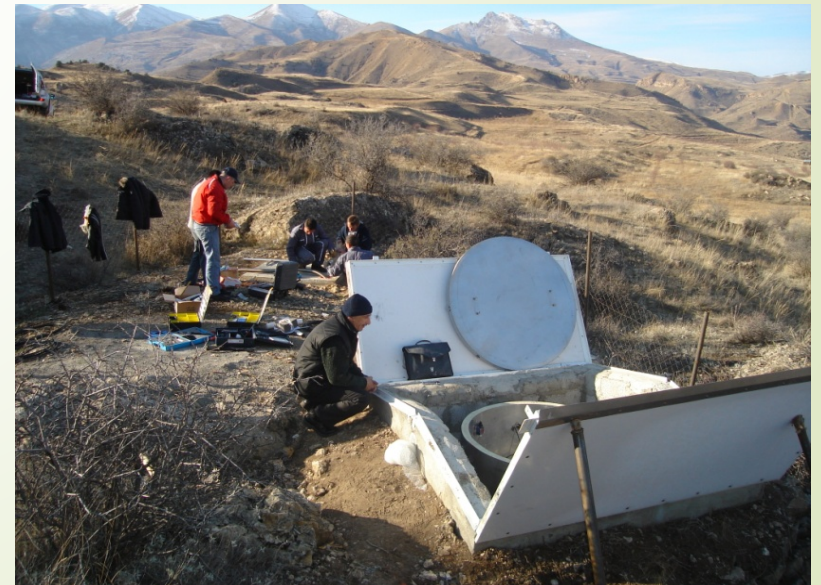
In Garni, at the geophysical observatory, installed seismic recording station. This station included in the IRIS Global Seismographic Network (GSN) and providing seismographic data to research earthquake hazard mitigation and the verification of a Comprehensive Test Ban Treaty (CTBT). It is also the goal to provide real-time access to its data via satellite. GSN Garni station meet this goal.



GURALP STATION



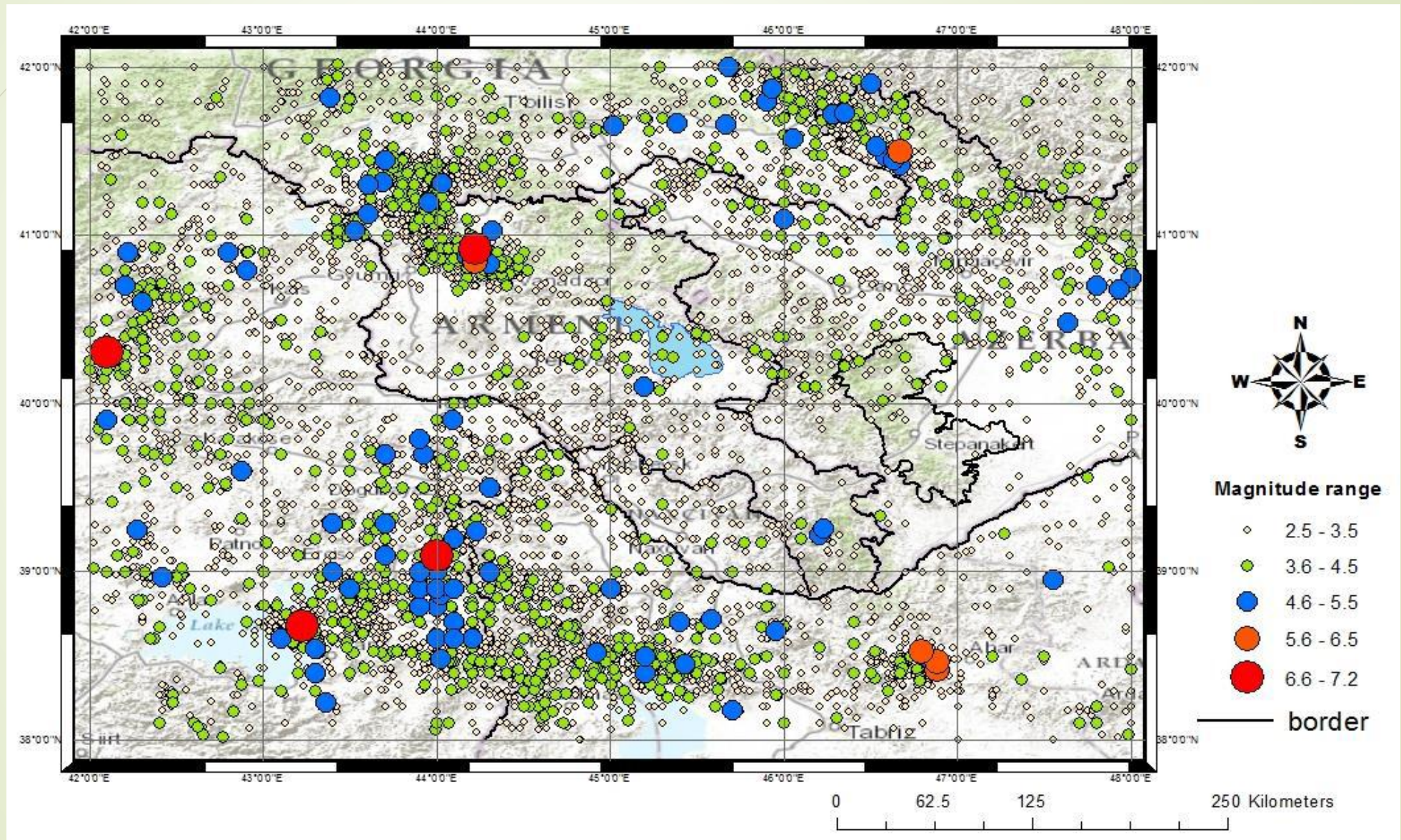
VAYK STATION



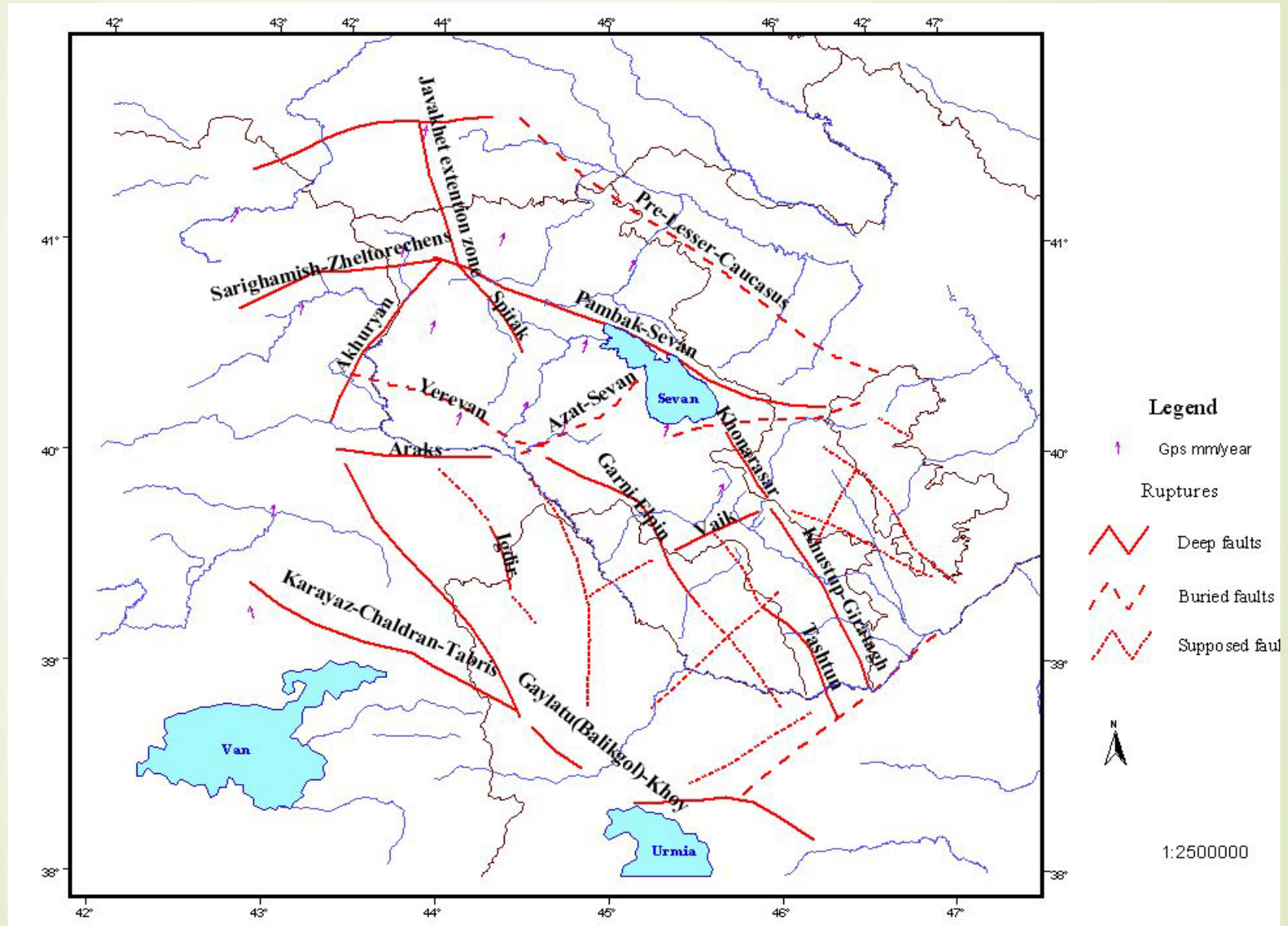
NEW BUILDING OF SSP IRIS STATION



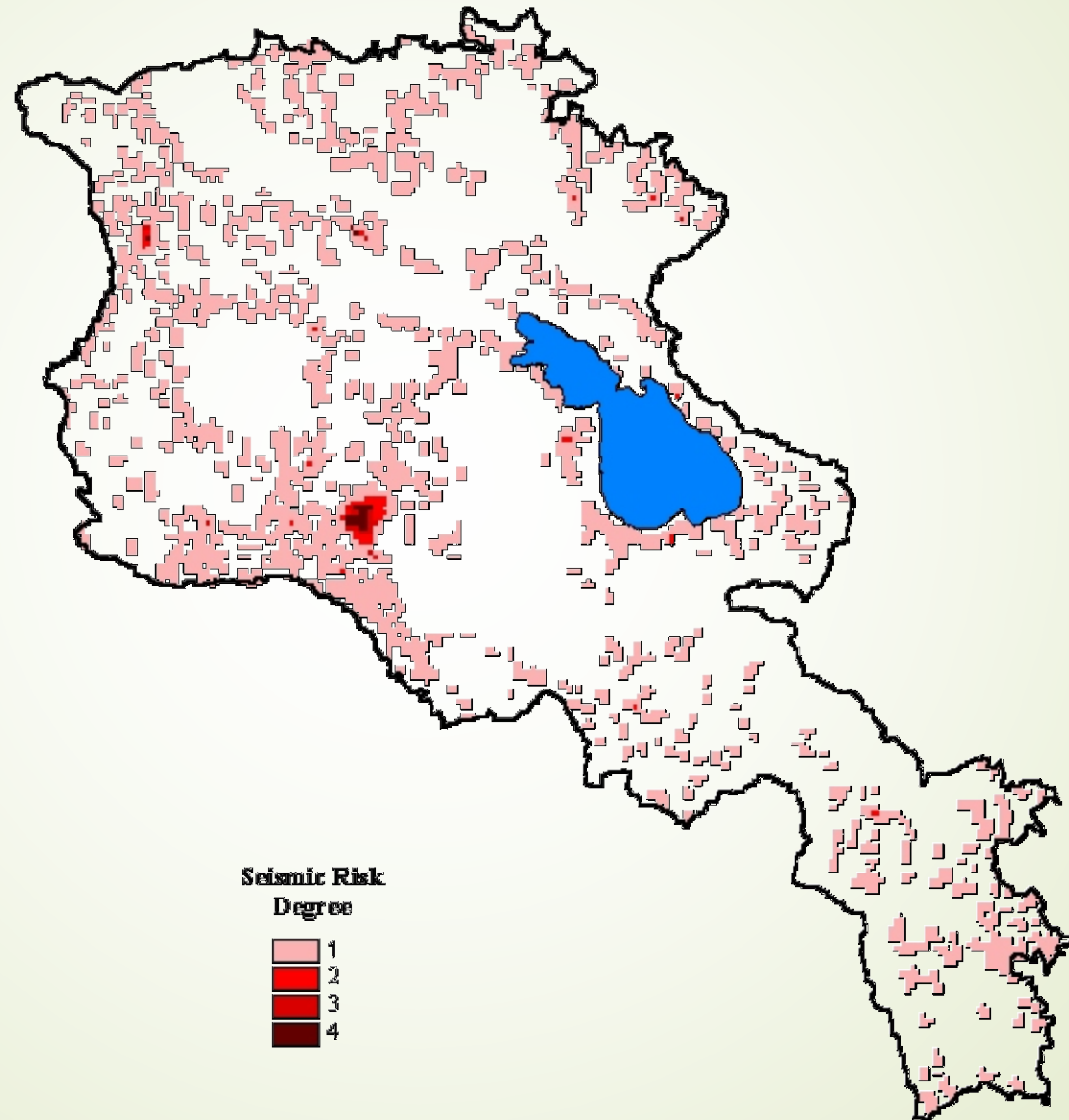
Map of the epicenters of earthquakes with magnitude $M \geq 2.5$ for time period 1962-2015



Map of faults



Seismic risk map of Armenia



Disaster Management Strategy based on the Hyogo Framework of Action (HFA) and Sendai Framework for DRR

MES develops National DRR Strategy, Crisis Management Centers and National Disaster Observatory. Armenia has also registered a progress in the implementation of HFA, and among the key developments towards establishment of decentralized DRR system has been decree of the MES on appointment of Heads of MES Regional Representations as HFA implementation focal points at the country 11 regional (marz) level.

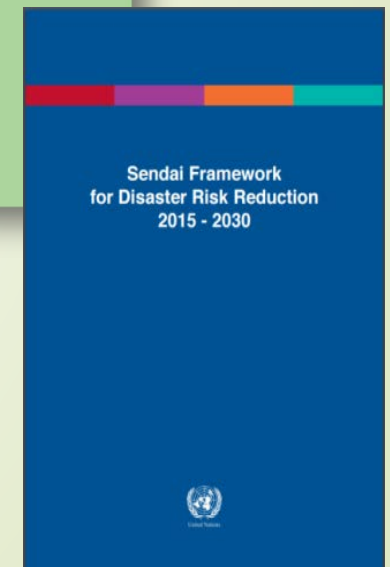
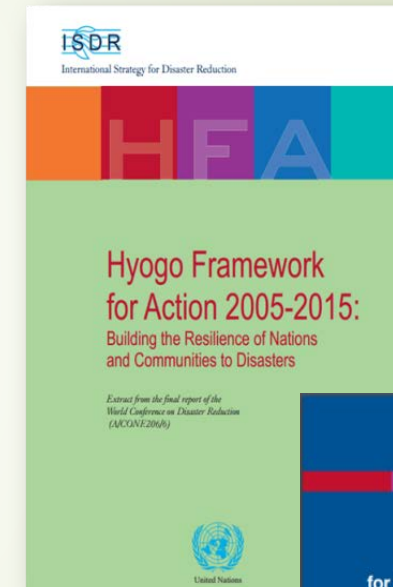
Crisis Management Center in Yerevan



Crisis Management Centers in Marzes



In base of this collaboration the Government of RA approved the methodology for assessing the economic development potential in the regions, and the 2015-2030 program of improved seismic safety in the state secondary schools of the RA.



DISASTER EDUCATION AND HUMAN RESOURCE DEVELOPMENT

Disaster mitigation education for different age groups of population as a part of Disaster Risk Reduction in Armenia.

The state training system includes the following subsystems, which are done regularly:

- Training of target groups beginning from kindergartens and schools
- Educational programs, methodical manuals, relevant interactive materials
- TV and radio programs, publications in mass media
- Social-psychological preparedness.

The Centre of Activities with Population (CAP) of SSP:

The Centre of Activities with Population of Survey for Seismic Protection (CAP SSP)

consists of Departments of Education , Methodology , as well as of Sociology and Psychology .





Thank you !!!

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