

Declaration of Participants in the UNESCO-IPRED-ITU Workshop

Istanbul, 7 July 2009

This declaration is a reflection of the presentations and discussions made by during the UNESCO-IPRED-ITU Workshop on “Make the People a Part of the Solution” hosted by the Istanbul Technical University (ITU) and supported by the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the Japan International Cooperation Agency (JICA). The Workshop was held in Istanbul on 6 and 7 July 2009 at the Conference Hall of Civil Engineering Faculty of ITU Maslak Campus, as part of the decennial memorial of the earthquakes which occurred on 17 August 1999 in Kocaeli and 12 November 1999 in Düzce.

Summary of the Workshop

The Workshop was attended by high-ranking officials of the Turkish local authorities as well as local scientists mainly from the ITU and guests of nine other earthquake-prone countries (Chile, Egypt, Indonesia, Italy, Japan, Kazakhstan, Mexico, Peru and Romania). Representatives of UNESCO, UN-OCHA and JICA Turkey Office also participated and made presentations on their activities relating to earthquake disasters.

The Workshop considered the responsibilities of local authorities and community leaders such as governors, mayors and other administrators in view that the role they play is pronounced when the probability of occurrence of any type of disaster starts to increase. Earthquakes are one of the major expected disasters, especially for the metropolitan areas located in seismic zones worldwide.

Istanbul and its vicinity is recognized by the international community as a mega-settlement where the safety of critical facilities such as schools and hospitals as well as residential buildings should be ensured as a top priority. Efforts must be pursued so that all realistic measures are taken in order to realize more resilient communities. Since the magnitude of the problem communities face is clearly recognized, an encouraging continuous process should be initiated as quickly as possible for the purpose of making all of the citizens a part of the solution. This needs core people who are conscious, educated, trained and very well prepared.

The Workshop especially intended to give a fresh push in a coordinated manner toward the initiatives for public preparedness and rehabilitation of existing buildings taken by individual institutions.

International background

Prior to the Workshop, the Second Session of the Global Platform for Disaster Risk Reduction was held on 16-19 June 2009 in Geneva, and the UN Secretary-General, Ban Ki-moon, in his message called for a target to halve the losses of lives from disasters by 2015, when the term of the Hyogo Framework for Action concludes. Accordingly, in the Chair's Summary, the following specific targets were proposed as catalysts for cutting deaths and economic losses brought on by disasters:

- 1) By 2011, a global structural evaluation of all schools and hospitals should be undertaken, and by 2015 concrete action plans for safer schools and hospitals should be developed and implemented in all disaster-prone countries. Similarly, disaster risk reduction should be included in all school curricula by the same year.
- 2) By 2015, all major cities in disaster prone areas should include and enforce disaster risk reduction measures in their building and land use codes.

The following recommendations are in line with the efforts of the international communities, and in all cases, the national and local governments have to play extremely important roles.

Recommendations to the governments

In Turkey, national and local governments have made great efforts to reduce earthquake disasters, including the "Earthquake Master Plan for Istanbul" prepared in 2003 with the assistance of four local universities and the Metropolitan Municipality of Istanbul based on a JICA Development Study. These and some other works carried out by universities are milestones on our way to safer cities. It is time now to accelerate cooperative work for quick implementation of new findings in rehabilitation techniques as well as in new construction.

The participants of the Workshop sincerely hope and recommend that the following actions are to be considered by the governments:

1. Strengthen the enforcement system of mandatory building codes as well as monitoring system of their performance including actions to deal with illegally-constructed buildings;
2. Make sure all the critical facilities such as schools and hospitals can withstand the possible earthquakes, by utilizing advanced techniques such as seismic isolation when applicable, so that they will continue to function immediately after the earthquakes;
3. Promote the development and utilization of affordable retrofitting techniques to prevent the total collapse of low-cost low-rise residential buildings by reconsidering the code requirements;
4. Develop and disseminate a quick screening method as well as a detailed evaluation method of physical vulnerability of buildings;
5. Reduce social vulnerability by such measures including the integration of disaster risk reduction into education system, and raise awareness of the citizens so that they will respect the building codes and invest for the retrofitting to prevent the total collapse of buildings;

6. Examine the current insurance system against earthquake and consider the modification to enlarge the coverage and to link with the building control system. The attention should be part for preparedness activities rather than disaster management activities.
7. Provide technical trainings for professionals including building officials, architects, engineers, supervisors, masons and carpenters;
8. Create necessary legislative instruments for proper urban planning and develop land use zoning and master plans taking into account the areas prone to be affected by hazards such as landslides and liquefaction triggered by earthquake activities;
9. Develop effective measures and systems in both technical and administrative fields in order to protect historically valuable wooden, stone and earthen buildings and houses from strong vibration, fire and flood caused by great earthquakes.

Keeping in mind that the probability of having a destructive earthquake is getting higher and this is not in the proper place of political agenda. In fact cooperation between the researchers and policy makers above the political agendas is a must.

The data collected and the retrofitting techniques developed in last 10 years should definitely be utilized as initial input of a long-term strategy to be prepared. Engineering aid units consist of trained engineers in assessment and cost effective retrofitting techniques should be established to evaluate the as built structural drawings of low-rise low-cost buildings. To obtain the as built structural drawings is the main issue to be considered seriously by the local authorities. People should be convinced and should be made a part of this problem. For that purpose documentaries should be prepared in a professional way; science and community parks should be built and strategies are needed to enlighten and to help the owners of buildings.

IPRED stands for the International Platform for Reducing Earthquake Disasters. It was launched in July 2008 by UNESCO with the support of the Ministry of Land, Infrastructure, Transport and Tourism of Japan. It aims at identifying gaps and priorities through the sharing of scientific knowledge and experience in the field of seismology and earthquake engineering, and supporting the development of political will and public awareness, for the purpose of ensuring better preparation for earthquakes and building a culture of safety.