RADIUS (Risk Assessment Tools for Diagnosis of Urban Areas against Seismic Disasters)

An initiative for IDNDR

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INTRODUCTION

The Secretariat of the International Decade for Natural Disaster Reduction (IDNDR 1990-2000), United Nations, has launched the RADIUS initiative, which aims to reduce seismic disasters in urban areas, particularly in developing countries. In collaboration with 9 selected cities around the world, the RADIUS initiative will develop practical tools for seismic risk assessment of urban areas to raise public awareness and provide directions for the development and implementation of disaster mitigation measures

The nine cities selected serve as case studies to develop seismic damage scenarios and a risk management plan, aiming to raise public awareness to seismic risks and strengthen the collaboration between local governments and local scientists The experiences of the nine cities will be incorporated into the development of a practical manual and its graphic application for seismic damage assessment in urban areas, which could be applied to any earthquake prone cities. The results of the initiative as well as the case studies will be available to other cities.

The nine selected cities for case studies:
Addis Ababa (Ethiopia), Antofagasta (Chile), Bandung (Indonesia), Guayaquil (Ecuador), Izmir (Turkey), Skopje (TFYR Macedonia), Tashkent (Uzbekistan), Tijuana (Mexico), Zigong (China)

OBJECTIVES OF THE PROJECT

The RADIUS initiative has four concrete objectives:

1. To develop seismic damage scenarios and risk management plans for the nine case study cities selected worldwide
2. To develop practical tools for the seismic damage assessment, which could be applied to any earthquake prone city in the world.
3. To conduct a comparative study to understand urban seismic risk around the world
4 To promote information exchange for the seismic risk mitigation at city level

The local governments in the nine cities selected worldwide will develop seismic damage scenarios and a risk management plan as the case studies. It aims to raise public awareness of seismic risk and strengthen the collaboration between local governments and local scientists. The scenario will describe various stages of the city's damage during and after a probable earthquake Internationally renowned institutes will transfer the appropriate technologies for seismic risk mitigation to the cities. The methodologies would vary according to the availability of data.

A practical manual and its graphic application for seismic risk assessment will be developed, based on the analysis of the case studies. These tools will be utilized by local users of any earthquake prone cities, particularly the local governments. With these tools, the