Disaster Management Information (DisMIS) Project 2013

Partner Agencies:

National ICT R&D Fund, Pakistan
National Disaster Management Authority (NDMA), Pakistan

Investigators:

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Pakistan is blessed with four seasons, diverse topographical features and varied climate in different regions. Like any other country, it experiences problems related to varied population density, unplanned development in disaster prone areas, vulnerability of population segments and poverty. These factors have compounded with the complex mechanism of disaster preparedness and emergency planning to increase the risk of property and life loss. As a result, the disasters, in the recent past, have been able to create unprecedented impacts on human settlements in different parts of Pakistan.

Pakistan's exposure to natural hazards could be ranked between moderate to severe. Natural hazards including avalanches, cyclones and storms, droughts, earthquakes, epidemics, floods, glacial lake outbursts, landslides, pest attacks, river erosion and tsunami pose risks to Pakistani society. A variety of human-induced hazards also threaten the society, economy and environment. These include industrial, transport, oil spills, urban and forest fires, civil conflicts and internal displacements of communities. High priority hazards in terms of their frequency and scale of impact includes earthquakes, droughts, flooding, wind storms and landslides that have caused widespread damage and losses in the past. The proposed study is based on conducting a feasibility analysis of development of a disaster management information system (Figure 1). Various components of the system will be identified in the broader context of disaster management. The study will focus on the hazards of earthquake, flood/tsunami, cyclone/wind and fire.
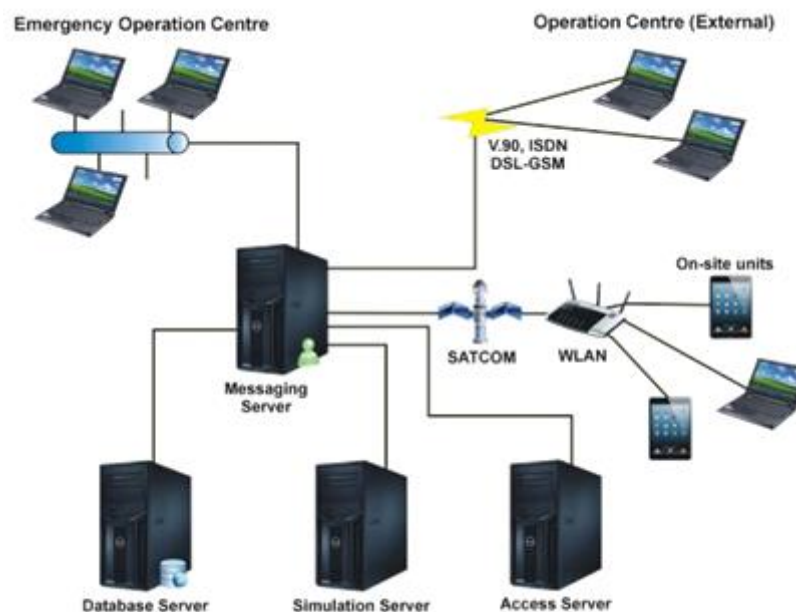

Figure 1: Scheme of operation of disaster management system