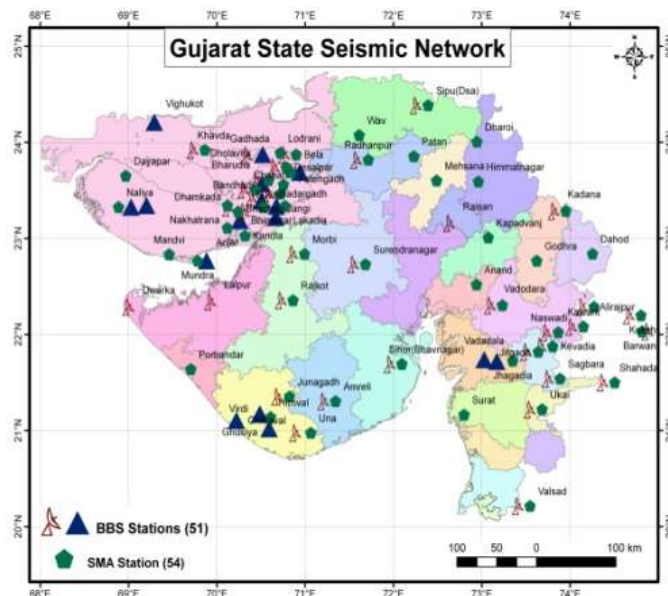


## Effective Seismological Monitoring through e-Governance

### to save Lives and Damage due to Earthquakes

Department of Science and Technology, Institute of Seismological Research, Government of Gujarat

The project aims at establishing and maintaining an advance infrastructure for seismic monitoring throughout Gujarat. It automatically disseminates information when a significant earthquake occurs and provides functionality of having online real time seismicity monitoring, auto location of earthquakes and communication of earthquake parameters to State higher authorities, decision makers, disaster management people along with general public. Earlier Citizens and Users (disaster management people) used to get the information on relevant earthquake parameters after several hours of its occurrence. Now all the information related to earthquakes is available within minutes through SMS, email and Fax.



Through this project, state of Gujarat has developed the capability of detecting, processing of earthquake parameters, and reporting of earthquakes within 10-15 minutes, even for small earthquakes anywhere in Gujarat state. Online network, analysis methodology and the auto location software detects earthquake waves, the seismic data is saved at database and locates the earthquake within 3-4 minutes and also disseminates the information about earthquake parameters via SMS, email, fax automatically along with web site updates.

The quick availability of earthquake information increases the ability and efficiency of decision makers and hence significantly reduces the time delay in start of the relief work. The reliable and immediate reports provided to media allay the anxiety/fear among the people. Two basic types of data products in the form of potential damage map and shake map further help in effective rescue and relief operations.

Outcome of this initiative is a standardized, comprehensive, and modern seismic monitoring and data analysis system, providing high-quality data and information for accurate and timely notification on

earthquakes and their impacts, as well as data for tsunami warning, earthquake hazard, loss assessments, and basic and applied research in seismology and engineering. Tsunami alerts can also be generated.

**This initiative was conferred Gold Award in the category of “Outstanding e-Governance initiatives by Academic and Research Institutions” in the National e-Governance Awards 2013-14**