

# Together, towards a safer India

Monthly Newsletter of the Ministry of Home Affairs  
National Disaster Management Division, Government of India  
Edition 9-May, 2004

## CONTENTS

*Development of National  
Emergency Communication Plan*

*Approval of National Programmes  
for Capacity Building of Engineers  
and Architects in Earthquake Risk  
Management*

*Meeting of National Resource  
Institutions for implementation of  
National Programme for Capacity  
Building of Engineers in  
Earthquake Risk Management*

*Earthquake risk management and  
seismic micro-zonation of Delhi*

*Meeting to discuss development of  
landslide mitigation strategies*

*Meeting with Council of Boards for  
School Education (COBSE) to  
discuss inclusion of disaster  
management in school education*

*Dissemination of Information,  
Education and Communication  
(IEC) material to Chief Security  
Officers of Banks*

*MHA-CII sensitization programme  
for disaster risk management in  
industries in Delhi*

*Progress of work in States under  
Disaster Risk Management  
(DRM) Programme*

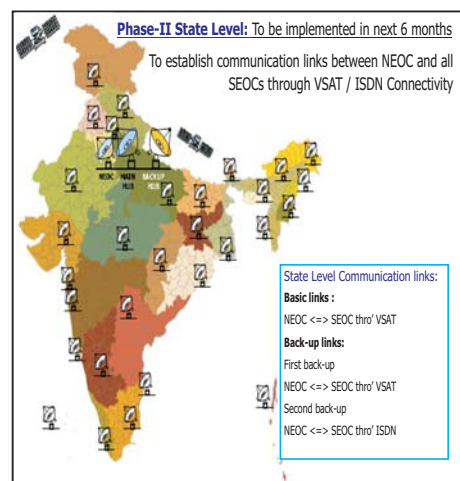
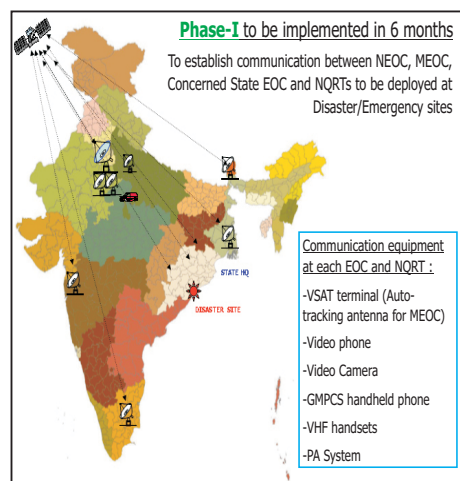
*Progress of work under Urban  
Earthquake Vulnerability Reduction  
Project (UEVRP)*

## Development of National Emergency Communication Plan

Recognizing the importance of putting in place a fail-proof and operational communication link between the decision-makers and response managers/personnel for organizing an effective emergency response and management, the Ministry of Home Affairs had constituted an Expert Group on Communication under the Chairmanship of Director, Directorate of Communication and Police Wireless (DCPW) to develop a National Emergency Communication Plan. The first casualty in a disaster situation is normally the communication network. It was, therefore, felt that setting up a reliable information and communication network employing satellite-based technology to inter-connect the National Emergency Operations Center (EOCs), State and District EOCs and mobile EOCs at the disaster site was essential.

The Expert Group has recommended a nationwide network with triple redundancy and full reliability during emergencies to connect the national, state and district EOCs. In view of the fact that this multi-agency task would require considerable time, the Expert Group has proposed establishment of this network in two phases. In Phase-I, it is proposed to establish an Emergency Communication System to provide mobile communication linkages through satellite between on-site emergency/disaster response teams to be deployed in remote locations and the national and state EOCs. The implementation of Phase-I has been approved by the Government.

In Phase-II, the plan envisages connectivity using leased lines with various satellite back ups from the existing networks such as BSNL, Police Network, NICNET and SPACENET to establish an integrated network among all EOCs and the mobile EOCs at disaster/emergency sites. Completion of this phase will enable adequate level of redundancy in the National Emergency Communication System with appropriate bandwidth for voice, data and limited video conferencing facilities among all Government stakeholders.



# Together, towards a safer India

## Approval of National Programmes for Capacity Building of Engineers and Architects in Earthquake Risk Management

Government have approved two separate programmes viz. National Programme for Capacity Building of Engineers in Earthquake Risk Management [NPCBEERM] and the National Programme for Capacity Building of Architects in Earthquake Risk Management [NPCBAERM]. The overall goal of the programmes is sustainable earthquake risk reduction in the country through application of disaster mitigation technologies.

The programme aims to build up resource institutions in the States which will help the States to:-

- i) put in place an appropriate techno-legal regime for seismically safe construction.
- ii) building capacities of Municipal Bodies/Urban Local Bodies to implement techno-legal regime.
- iii) training of engineers in State PWDs.
- iv) putting in place a system of training and certification of Civil and Structural Engineers practicing in the private sector.
- v) establishment of Hazard Safety Cells in each State/UT
- vi) provide technical support to the State Governments in carrying out retrofitting of lifeline buildings and systems.

The objective of the programme for Architects are:-

- i) ensure seismically safer habitats by training of practicing architects.
- ii) capacity building of the Colleges of Architecture at the National and State levels for ensuring effective

training of practicing architects in earthquake safety.

- iii) development of resource materials/training modules for sensitization/training of architects.
- iv) putting in place a system of training and subsequent certification for practicing architects.

Under the NPCBEERM, two to five State Resource Institutes (leading Engineering Colleges) in each State/ Union Territory will be identified to assist the urban local bodies in the review and revision of by-laws to incorporate the Bureau of Indian Standard (BIS) Codes and train the Municipal Engineers in earthquake-resistant construction and retrofitting techniques. These Institutes will impart training to Government and private sector Engineers in seismically safe constructions and provide consultancy to the States on retrofitting of lifeline buildings. Faculty members from the State Resource Institutes will be trained in identified National Resource Institutes in earthquake engineering to equip these Institutes for discharging their role.

The training of Engineers will not be sufficient by itself as Architects also have a major role to play in ensuring seismically safe construction. While structural safety is the main focus of Engineers, the structural configurations chosen by Architects determine its behaviour during disasters. In this context, the role of an Architect is crucial as he finalizes the functional and structural aspects in the entire cycle of building construction. Thus, it is important for both the Engineers and Architects to be aware of the building behavior during earthquakes and of the forces that act on the building.

Practicing Engineers and Architects need to be trained to ensure that all new constructions are earthquake-resistant. The training would, inter-alia,

educate and build their capacity on engineering and architectural aspects of buildings, earthquake effects on buildings, EQ resistant design and construction as also in vulnerability assessment of existing buildings and their retrofitting.

## Meeting of National Resource Institutions for implementation of National Programme for Capacity Building of Engineers in Earthquake Risk Management [NPCBEERM]

A meeting of designated National Resource Institutions under NPCBEERM was held on 26<sup>th</sup> April in the Ministry of Home Affairs and Heads of Departments of IITs of Delhi, Roorkee, Kanpur, Mumbai, Kharagpur, Chennai and Guwahati, IISc., Bangalore and BITS, Pilani attended the meeting along with the Institution of Engineers (India). The following decisions were taken:

- i) The Committee constituted for finalization of draft curriculum for a six-week training module would also develop the list of teaching aids, books, equipments for National Resource Institutions (NRIs) and State Resource Institutions (SRIs).
- ii) Teachers with a background in Structural Engineering or Civil Engineering or Applied Mechanics and presently teaching the subjects should only be nominated by the State Resource Institutions for success of the programme
- iii) NRIs would assist SRIs for developing capacities for adoption of updated building by-laws incorporating latest BIS standards.
- iv) The Ministry of Home Affairs would write to Directors of NRIs for nominating Coordinators for implementation of the programme.

# Together, towards a safer India

## Earthquake Risk Management and seismic micro-zonation of Delhi

A meeting was held in the Ministry of Home Affairs on 30<sup>th</sup> April to discuss the proposal of Government of Delhi for seismic micro-zonation linked to GIS platform.

The Department of Science and Technology (DST) gave details of ongoing micro-zonation in Delhi in four Phases. Phase I involves hazard mapping of Delhi on 1:50,000 scale and first report will be presented within six months. Phase II concerns ground motion analysis and mapping of peak ground acceleration. Phase III will do built environment impact analysis. Phase IV involves design and development of decision support system for EQ risk management and mitigation in Delhi considering likely earthquake scenarios.

## Meeting to discuss development of landslide mitigation strategies

A meeting was held on 30<sup>th</sup> April in the Ministry of Home Affairs to discuss and develop a landslide mitigation strategy for the country. Officers from NRSA, IIT Roorkee and GSI participated in the meeting. After detailed deliberations and keeping in mind the need to apply latest technical know-how in developing landslide zonation maps, it was decided that ---

- i) GSI will develop a work plan for landslide hazard zonation on a higher resolution map [1:10,000 or 1:20,000].
- ii) GSI will organize a Workshop to discuss work plan with agencies having technical know-how and landslide hazard zonation capacity.
- iii) States/UTs to identify habitations close to landslide prone areas.
- iv) GSI to establish an information system for incidences of landslides.

- v) GSI to work with NRSA to establish a satellite-based sensors and data collection platforms for early warning systems on landslides.

## Meeting with Council of Boards for Secondary Education (COBSE) to discuss inclusion of disaster management in school education

A meeting with Council of Boards for Secondary Education (COBSE) and NIDM was held in the Ministry of Home Affairs on 27<sup>th</sup> April to discuss the strategy for inclusion of DM in school education.

COBSE was requested to develop an action plan for inclusion of DM in all School Boards in India.

## Dissemination of IEC material to Chief Security Officers of Banks

Following up on the sensitization of Security Officers of various Banks in Disaster Management, a collection of relevant IEC materials along with multimedia CDs on different disasters have been sent to all Security Officers to serve as a reference material for information and dissemination to staff and customers of Banks. The material would also be helpful in organizing training and capacity building of the staff and in promoting mitigation and preparedness through banks.

**The Union Bank of India has prepared its Disaster Management manual which once approved by the Bank management, will become a part of Security guidelines of the Bank.**

## MHA-CII sensitization programme for disaster risk management in industries in Delhi

The Confederation of Indian Industry (CII) organized a sensitization programme for disaster risk management in industrial and high-rise buildings in Delhi on 15<sup>th</sup> April.

Inaugurating the session, Shri S.Sen, Deputy DG, CII referred to initiatives taken by CII in association with MHA to sensitize and encourage industries to take disaster management measures.



The Ministry of Home Affairs apprised the industry to adopt a pro-active approach for disaster mitigation & preparedness, greater awareness amongst industrial workforce, development of on-site and off-site DM plans and establishment of effective linkages with the District Administration.

Presentations on the vulnerabilities and disaster risk in Delhi, the factors compounding it and the effects of earthquakes on structures and EQ-resistant designs and techniques were made.

The Chief Fire Officer, Delhi Fire Service stressed that every industrial and high-rise building should have in-built facilities and capacity to prevent and control fire incidents.

## PROGRESS OF WORK UNDER GoI-UNDP DISASTER RISK MANAGEMENT PROGRAMME

**DELHI:** A sensitization event was organized for the members of Punjab, Haryana and Delhi Chambers of Commerce & Industry with a talk by Prof. Sudhir Jain, IIT Kanpur on EQ vulnerabilities in these States.

During March-April, Delhi was rocked by seven tremors ranging from 1.6 to 3 on the Richter scale which has renewed concerns to take up EQ mitigation measures in Delhi.

# Together, towards a safer India

The Dwarka Federation of Cooperative Group Housing Societies organized a sensitization programme for its member societies and their office-bearers wherein they were informed about vulnerability of high-rise buildings and the need to prepare DM plans. Cable Networks in South Delhi have begun telecasting disaster awareness programmes viz. telecast of TIFAC film to spread awareness about the need to adopt EQ-resistant construction technology.

**GUJARAT:** A hand-over ceremony was organized to present completed Village Disaster Management Plans (VDMPs) of villages of Maliya Taluka, Rajkot district to their respective Gram Panchayats in the presence of 200 VDMC members. The responsibility of Disaster Management Committees (DMCs) and Disaster Management Teams (DMTs) for updating the plan and conducting mock-drills was also emphasized.

A Health Mela was organized by Gujarat Council of Science City to observe World Health Day and it was used to spread awareness and education in emergency care in the aftermath of disasters.

A meeting was organized in Junagadh to sensitize corporate sector in disaster management and in establishing linkages with District Administration.

A two-day Masons Training programme was organized by Bhavnagar Municipal Corporation, Practicing Engineers, Architects and Town Planners Association, GSDMA and UNDP in Bhavnagar and in Vadodara to impart training to Masons in Masonry System Data, Bonds, Pattern and Joints and disaster-resistant construction.

Three Regional meetings for Collectors and District Development Officers (DDOs) for pre-monsoon preparedness were held in Rajkot, Ahmedabad and Vadodara to assess and review preparedness levels.

**MAHARASHTRA:** The first training of Municipal Engineers from Mumbai, Thane, Pune and Bhiwandi was held on 2-3 April with resource persons from IIT, Kanpur and GSDMA.

**UTTARANCHAL:** As a follow up of mason's training programme in Rudraprayag during March, follow-up trainings were organized in Jakholi block and Mansona Nyay Panchayat on the invitation of the trained masons and requests received from the local people.

## Urban Earthquake Vulnerability Reduction Project (UEVRP)

**JALLANDHAR:** Deputy Commissioner inaugurated the website on Earthquake Risk and Preparedness designed by NIC, Jalandhar.

A Radio programme 'Yuv Vani' was aired on Jalandhar AIR focusing on causes of earthquakes and prevention methods.

Teachers and students of St. Stephens' School were sensitized on DM, safety and precautions to be taken during disasters. Reading material was distributed and a mock drill was also organized.

**BHUBANESWAR:** A State-level Training of Trainers on Disaster Management was held at Red Cross Bhawan in which nearly 50 participants from almost all coastal districts were sensitized on earthquake preparedness and mitigation measures.

**UTTAR PRADESH:** A meeting was convened by Housing and Urban Planning Department to discuss strategy for retrofitting of existing buildings and raising funds for the same.

The Times of India carried out a series of articles on EQ vulnerability of UP and the mitigation and preparedness measures required to meet the situation.

The Department of Science & Technology was approached to utilize Remote Sensing Application Center for developing complete data-base and maps for UEVRP cities in UP. Follow-up meetings are being held to expedite the same.

## Central Board of Secondary Education (CBSE)

The Central Board of Secondary Education (CBSE) has decided to place Disaster Management information on their Shiksha Net, the second most popular site in India in terms of the number of hits registered.

Mizoram Board of School Education (MBSE) has included DM in its school curriculum for Class VIII with three chapters on Disaster Management-Introduction, Cyclones and Earthquakes from this year.

Training of teachers is also on the anvil.

### INDIA DISASTER RESOURCE NETWORK (IDRN)

The India Disaster Resource Network has recorded 65,751 records so far from 540 Districts and covering 33 States and Union Territories.

#### Coordinator:-

Shri R.K. Singh  
Joint Secretary and  
Central Relief Commissioner

#### For more details please contact

National Disaster Management  
Division  
Ministry of Home Affairs  
Government of India.  
Phone: +91-11-23092489,  
23092664, 23094612  
Email: dirdm2@mha.nic.in  
dsdm@mha.nic.in  
Website : www.ndmindia.nic.in