

**GOVERNMENT OF INDIA  
EARTH SCIENCES  
LOK SABHA**

UNSTARRED QUESTION NO:1630  
ANSWERED ON:09.03.2007  
INSAT BASED COMMUNICATION FACILITY  
Shaheen Shri Abdul Rashid

**Will the Minister of EARTH SCIENCES be pleased to state:**

- (a) whether the Government proposes to set up INSAT based communications facility for receiving data in real time from the Tide Gauges and Bottom Pressure Recorders in collaboration with Indian Space Research Organisation (ISRO) ;
- (b) if so, the details thereof; and
- (c) the time by which it is likely to start functioning ?

**Answer**

MINISTER OF SCIENCE AND TECHNOLOGY AND MINISTER OF EARTH SCIENCES(SHRI KAPIL SIBAL)

(a) to (c) Yes, Sir. Communication of real time data from Tide Gauges and Bottom Pressure Recorders to the Early Warning Centre at Indian National Centre for Ocean Information Services (INCOIS), Hyderabad is very critical for generating timely tsunami warning. An end to end communication plan has been worked out in collaboration with Indian Space Research organization (ISRO) that envisages use of INSAT DRT for one way and INSAT MSS for two way communication from Tide Gauges and DART buoys respectively. At present real-time data is being received at INCOIS through V-SAT connectivity from the already installed Tide gauges and Bottom Pressure Recorders. The installation of INSAT Hub Station as well as DRT and MSS Terminals will be completed by June 2007 at INCOIS.

LOK SABHA STARRED QUESTION NO. 166 (POSITION-6 ON PROPOSAL FOR EARTHQUAKE RESISTANT TECHNOLOGY TO BE ANSWERED ON 9TH MARCH, 2007.

Material for Possible Supplementary

CONTENTS

Subject	Page No.
Question reply in English State-wise detail of Seismic Zone	1 - 3
(Enclosur-1) Modified Mercalli Intensity Scale (Abridged)	4 - 5
(Enclosure-2)	6
Material for Possible Supplementary	7 - 10
1. Seismological observatories in the country	
2. Upgradation of seismological observatories	
3. Round-the-clock watch for seismic activity	
4. Damaging Earthquake in India	

5. Causes of Earthquakes
6. Earthquake Belts

7 Prediction of Earthquakes not yet possible

8. Seismic Zoning of India

9. Disaster mitigation
10. Urban Earthquake Vulnerability Reduction Project
11. Seismic Hazard and Risk Microzonation (SHRM)

Seismological Observatories of IMD (Enclosure-1a) 11  
VSAT Based Telemetry Network around Delhi (Enclosure-1b) 12  
List of some damaging Earthquake in India its neighborhood 13

(Enclosure-2)

State-wise details of Seismic Zone (Enclosure-3) 14 - 15

Modified Mercalli Intensity Scale (Abridged) (Enclosure-4) 16

List of Book on Construction to minimize the Earthquake losses 17

(Enclosure-5)

List of Brochures and Guidelines published by HUDCO & BMTPC 18

(Enclosure-6)