

**GOVERNMENT OF INDIA  
MINISTRY OF SCIENCE AND TECHNOLOGY  
DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH**

**LOK SABHA  
UNSTARRED QUESTION NO. 4407  
(TO BE ANSWERED ON 29.03.2017)  
NEW EARTHQUAKE WARNING SYSTEM**

**4407. SHRI P. KUMAR:**

**Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:**

- (a) whether the Council of Scientific and Industrial Research (CSIR) has developed a new earthquake warning system that successfully alerted the Delhi Metro about the recent earthquake in real time and if so, the details thereof; and**
- (b) whether the system can also be used at nuclear reactor sites where work can be stopped in case of an earthquake and if so, the details thereof?**

**ANSWER**

**MINISTER OF STATE FOR SCIENCE AND TECHNOLOGY AND EARTH SCIENCES  
(SHRI Y.S. CHOWDARY)**

- (a) Yes, Madam. An Earthquake Warning System (EqWS) developed by CSIR-Central Scientific Instruments Organisation (CSIR-CSIO), Chandigarh consisting of five seismic sensing nodes at different Metro system locations at Mundka, Botanical Garden, Huda City Centre, Metro Bhawan and Faridabad has been commissioned since October 2015. It has been functional and alerted recent substantial earthquakes via triggering of the majority of nodes on April 10, 2016, September 9, 2016 and February 6, 2017.**
- (b) Yes, Madam. The system developed can be adopted for the safeguard of Nuclear reactor sites during earthquake by appropriate setting of some parameters which are site-specific and suitable configuration of the decision support system.**

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