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## CTBTO to manage earthquake short-term risks

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MEMS instruments are more commonly known as inexpensive instruments to create seismic monitoring systems. As a result, independent efforts would have access to the required data stream to start analysis and applying new-generation models to continuously detecting patterns that increased creativity amid managing risks of major earthquakes. In project Earling, such data helps to distinguish high-risk seismic patterns from low risk and normal patterns. As an example, Earling issued an alert to the Icelandic Meteorological Office a few days before Iceland's largest earthquake since 2008. MEMS instruments require setup, power supply, stable connectivity, maintenance, which also are some of their constrain alongside accuracy. Utilizing accelerometers of smartphones can overcome the limitation as a mobile app would do whatever is needed to turn a smartphone into one of the nodes of a seismic network, but most of the patterns can appear in uninhabited regions with no smartphone or other instruments to record the seismic patterns. Here, the CTBTO instruments can be very useful to draw a clear viewpoint of the current risk situation in its undercover regions to detect high-risk seismic time-window when the probability of an unusual event is remarkably increased, which accurate enough especially for transferring financial risks.

### Promotional text

AI, CTBO instruments and new generation of disaster modeling now can be used together to detect high-risk time-window when probability of an unusual seismic activity is remarkably increased in a specified region. CTBTO data are very useful to manage or transfer the related risks.

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