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[\[Disaster Prevention\] NARL Develops Onsite Earthquake Warning System](#)

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CNA (2012/01/26) To cope with the high frequency of earthquakes in Taiwan, National Applied Research Laboratories (NARL) develops an onsite earthquake early warning system, which could issue prompt alerts via broadcast or subtitle machines to the public when an earthquake is sensed.

NARL points out, the data since 1736 indicates that one catastrophic earthquake may occur to Taiwan, the island in the circum-Pacific seismic belt, every 15 to 20 years.

As efficient earthquake forecast is still missing, the early warning is best, as widely considered, to rely on the transmission feature of seismic waves, namely, to capture P waves, which go faster yet with lower destructive power than the following stronger S waves, and earn the critical few seconds for people to protect themselves before strong tremors arrive.

According to NARL, the time earned could be between a few seconds and several tens of seconds regarding the distance of the epicenter.

NARL points out, Japan has developed and used some similar warning systems for years and they showed excellent performance in 311 Earthquake in Japan.

NARL says, the development of the present onsite earthquake early warning system is a cooperation achievement between its National Center for Research on Earthquake Engineering and National Science and Technology Center for Disaster Reduction, together with Central Weather Bureau's collected data and data from the present onsite earthquake monitoring equipment.

Research Fellow at National Center for Research on Earthquake Engineering Pei-yang LIN says, the construction of the system costs about three hundred thousand to five hundred thousand NT dollars. Most of the completed constructions are equipped at schools. When an earthquake comes, the alert would be issued via broadcast and subtitle machines so that the students and teachers would gain a few valuable seconds for necessary measures.

LIN says, there are already nine sites equipped with the system, including elementary schools, junior high schools, university, train station and security company in Taipei, Yilan, Hualien and Chiayi. The next site will be located either in Yilan or Chiayi.

Further Information:

[CNA 2012/01/26](#) (Chinese)

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[National Science Council International Cooperation Sci-Tech Newsbrief](#)

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