

*Making our society safer
from earthquake disaster*



Japan Association for
Earthquake Engineering

STATEMENT ON THE OCTOBER 22, 2012 VERDICT FOR SIX EXPERTS IN THE L'AQUILA EARTHQUAKE CASE

The Japan Association for Earthquake Engineering expresses its strong concern regarding the verdict of October 22, 2012 in the L'Aquila earthquake case that sentenced 6 experts on seismology and earthquake engineering to six years in prison for manslaughter.

While the reason for the sentence has not yet been released, it is reported that after the meeting of the National Committee of Major Risks on March 31, 2009, the experts provided incomplete, imprecise and contradictory information to the public that had been unnerved by months of persistent swarm tremors. However we consider that the verdict is not appropriate because of the following three reasons.

The first is the responsibility of the six experts of the Committee. They were requested to provide information available from the scientific knowledge about the seismic activity, and they faithfully contributed to this request. It was the Department of Civil Protection and the City of L'Aquila that had responsibility and authority for seismic risk inherent to the region which contained a number of ancient and fragile constructions. The judge shifted the responsibility of the Department of Civil Protection and the City of L'Aquila to the experts of the Committee.

The second is whether the experts of the Committee provided scientifically reasonable suggestions to the inquiry of the Department of Civil Protection. Based on the meeting minutes, the experts mentioned that since strong earthquakes in Abruzzo region had long return periods, an earthquake like the one in 1703 was unlikely to occur soon, but its possibility cannot be totally excluded. They also discussed there was a very limited case that swarms preceded to a large event in the past. Based on the meeting minutes, the experts cannot be condemned for deriving wrong conclusions based on the scientific knowledge due to their negligence and errors in the evaluation. They accepted their responsibility to society to support decision-making under a difficult situation of inherent uncertainty. It was unfortunate that a $M_w6.3$ earthquake occurred six days after the Committee meeting, but the experts should not be blamed because it is extremely difficult to make a short-term forecast of a major earthquake. Learning from this bitter experience, the experts have a strong

responsibility for enhancing the scientific knowledge for earthquake forecast.

The third is the news release to the population by the Department of Civil Protection and local government following the Committee meeting. It appears that the Department of Civil Protection and the local government downplayed the seismic risk facing the town. The population could have better recognized and prepared in the face of such risk if the information had been released together with the minutes of the Committee meeting.

Based on the Committee minutes, it was further discussed that the most important measure for preventing damage during an earthquake is to strengthen old fragile structures so that they do not collapse during an earthquake. It was also discussed that another important measure for protecting population is to enhance the level of emergency preparedness. It is essential to prevent or minimize the collapse of old fragile buildings which results in death, injury and damage. This can be achieved not by a short-term earthquake forecasting but by steady and long-term efforts to enhance the seismic performance of buildings and infrastructures, and post-event response measures. This was critically important in particular at L'Aquila where there were a number of old fragile masonry constructions. It is considered that the main source of this tragedy was due to lack of risk information on the vulnerability of fragile city that should have been shared among the experts, the administrative organizations, owners of buildings and population.

November 5, 2012

President, Japan Association for Earthquake Engineering
Kazuhiko Kawashima

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