



## **Risk communication on earthquake prediction studies: Possible pitfalls of science communication**

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The ANSA web news titled "'No L'Aquila quake risk' experts probed in Italy in June 2010" gave a shock to the Japanese seismological community. For the previous 6 months from the L'Aquila earthquake which occurred on 6th April 2009, the seismicity in that region had been active. Having become even more active and reached to magnitude 4 on 30th March, the government held the Major Risks Committee, which is a part of the Civil Protection Department and is tasked with forecasting possible risks by collating and analyzing data from a variety of sources and making preventative recommendations. According to this ANSA news, the committee did not insist on the risk of damaging earthquake at the press conference held after the committee. Six days later, however, a magnitude 6.3 earthquake attacked L'Aquila and killed 308 people. On 3rd June next year, the prosecutors started on the investigation after complaints of the victims that far more people would have fled their homes that night if there had been no reassurances of the Major Risks Committee in the previous week.

Lessons from this issue are of significant importance. Science communication is now in currency, and more efforts are made to reach out to the public and policy makers. But when we deal with disaster sciences, it contains a much bigger proportion of risk communication. A similar incident had happened with the outbreak of the BSE back in the late 1980's. Many of the measures taken according to the Southwood Committee are laudable, but for one – science back then could not show whether or not it was contagious to humans, and is written in the committee minutes that "it is unlikely to infect humans". If read thoroughly, it does refer to the risk, but since it had not been stressed, the government started a campaign saying that "UK beef is safe".

In the presentation, we review the L'Aquila affair referring to our interviews to some of the committee members and the Civil Protection Department, and also introduce similar issues from the 2011 Tohoku earthquake. We would like to suggest how scientists should behave when faced to give advice on the ongoing phenomena whose future situation cannot be forecasted scientifically, and how science communication should be done in ordinary times to help the emergency situation.