DECLARATION BY THE INTERNATIONAL ASSOCIATION FOR EARTHQUAKE ENGINEERING ON THE SENTENCING OF SEVEN SCIENTISTS IN ITALY OVER ACCUSATIONS OF HAVING MADE A FALSELY REASSURING STATEMENT BEFORE THE L'AQUILA EARTHQUAKE IN 2009

We are deeply shocked that seven scientists who were members of the National Commission for the Forecast and Prevention of Major Risks have been sentenced to prison terms for having provided "inaccurate, incomplete and contradictory" information about the danger of the minor tremors felt ahead of 6 April 2009 M6.3 earthquake, leading to the deaths of some 300 persons in and around the historic town of L'Aquila in central Italy.

While we have not examined the wording of the court's decision we must take a stand on what we believe is a flawed judgment that might have a negative impact for the future. Earthquake science is not a magical tool that allows anyone to state with any degree of credible reliability when and where an earthquake with a prescribed size will occur because earthquake occurrence does not conform to a simple and coherent pattern. The interpretation of minor foreshocks to state whether they herald a major earthquake to follow has yet never been done, except in the imagination of publicity seekers with no scientific credentials or on account of pure coincidence. The seven defendants are all well known in their respective professional fields, and enjoy the respect of their peers. We feel that justice has been poorly served, and a dangerous precedent has been established with the verdict. No responsible scientist will henceforth dare to risk his or her professional reputation (not to mention personal well-being) by interpreting signals of activity from volcanoes or possible effects of hurricanes. Forces of nature usually do not lend themselves to easy forecasts, and most are inherently unpredictable.

The communication of risk to the public in a way that it can be easily understood is one of the most difficult challenges facing science and technology. The loss of life that occurred in L'Acquila was tragic and regrettable, but that is attributable to many other causes besides the statement undersigned by the defendants, and the variability of the ground motions that attacked those buildings. The aftermath must not be allowed to turn into a spectacle calling for false culprits to punish in the interest of appeasing the public outrage. Instead, we must draw the right lessons so that there will be no victims in the future in this type of a preventable disaster.