



## Strengthening public trust in science: how to.

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Finding an appropriate way of communicating scientific knowledge to citizens that in principle just want to know when and where the next big earthquake will strike or a major volcano will start erupting has always been a demand, but it has become way more difficult in the last months. In fact a few recent episodes have dramatically weakened the mutual confidence between society and the world of research. This happened after a long journey that was leading scientists to more responsibly and effectively communicate risk and hazard to a scientifically naive population, for example by adopting a non-technical language or disseminating information through more modern and rapid means (Twitter, Facebook, You Tube, Wikipedia) on the one side, and the society to slowly get keen on the science behind natural hazards on the other side. This growth in interest has greatly been favoured by the incredible varieties and amount of natural phenomena of the last years, when the strongest-ever tsunami (Sumatra, 2004), one of the most spectacular eruption (Iceland, 2010), a major earthquake followed by a strong tsunami with severe consequences on the nuclear power plants (Japan, 2011) and several hurricanes (Sandy, 2012, among the others) captured the attention of media and required the assistance of scientists for the description of their origin and nature. Unfortunately, in many cases the failures or the approximation in describing the evolution of the catastrophes turned to be very negative for the scientific community. In addition, in a few cases scientists were considered at fault or co-responsible for the actions taken to mitigate (or not) the risk, confusing the role of science with that of politics.

In this work we try to analyze what went wrong under the light of geoethics, which studies the moral behaviour and then can discriminate between concepts of right and wrong conduct, no matter what the result of actions is. We then try to figure out what can be done to recover and possibly gain more confidence in science, again in terms of ethics. In summary, the recent developments of the relationship between science and society suggest a "new deal", with more information - less expectations kind of society and a scientific community more inclined to communication where talking in / to public is the result of a long and adequately trained experience.