



## Effects of risk communication on natural hazards on real estate owners' risk perception and risk behaviour

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In the last decade, in most of the European countries risk maps on natural hazards have been elaborated but there is so far little experience how to efficiently communicate these maps to the public. Recently, the public authorities of Zurich informed the owners of buildings located within the hazard zone on urban flood risks. The owners received official letters containing information on potential danger, the probability of flood events, constructional safety measures, and guidelines for appropriate actions in case of an immediate flood. In the cover letter they were also encouraged to achieve more detailed information about the particular risks for their building using an online accessible risk map within a geographic information system (GIS). This risk communication campaign was based on the expectation that informing citizens increases their risk awareness and that citizens aware of risks are more likely to undertake actions to protect themselves and their property. There is, however, little empirical evidence that these expected outcomes can be achieved by written forms of risk communication.

With this project we aim to find out to which degree a campaign of written risk communication can shape land owners risk perception and risk behaviour, and which other factors (e.g. trust in authorities, risk, risk zone category of the building) contributed to these outcomes... In collaboration with public authorities we conducted a survey among 1500 owners of buildings in the hazard zones in Zurich (50 % in blue zone, 50 % in yellow and yellow-white zone), that is 14% of all persons who were addressed by the authorities of the city. The standardized questionnaire comprises in particular items measuring respondents' evaluation of the virtual and physical information material, the time they spent for studying the information material, the dimensions of their risk perception, their acceptability of risks and their preparedness to implement constructional and other safety measures. The return rate achieved about 20 %. The data were analysed using multivariate statistics.

The analysis of the data revealed that most of the real estate owners respond spent only very little time for studying the flood risk information. It, however, confirmed that respondents' interest in the subject and their efforts and time spent to study the information material strongly correlated with their willingness to undertake preventive actions. The results provide also insights on additional factors that influence citizens' preparedness to implement safety measures. For instance, respondents who consider the distribution of responsibility between the public and private sphere to be rather unjust, are less motivated to take measures. The results will be discussed and implication for practice and future research will be drawn.