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Evaluation of the impact of preventive information on natural risks with original immersion tools

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Since its creation in the late 1990s, UNISDR has identified education and knowledge as priority factors for risk and disaster reduction, notably through Hyogo and Sendai frameworks for actions. More recently, the 2019 Assises Nationales des Risques Naturels (a major meeting event organized by the French Ministry of Ecology on the natural risks management) have pointed out the urgent need to develop a risk culture to improve the resilience of territories. One of the levers for developing this risk culture is to inform the population of the risks to which they are exposed. Preventive information can take a wide variety of forms: regulatory brochures, exhibitions, plays, etc. However, we can wonder about the impact of this information: is it effective? Does it reach its objectives? How to evaluate its influence?

In a geographical context where few natural disasters occur, questionnaire surveys can be a solution. However, several studies have shown that this method fails to put individuals in a situation of emergency and to project themselves into a potential event that they may have difficulties to imagine. This is why the I²PRI project proposes to go beyond these methods and develop innovative and immersive tools to assess the impact of preventive information on people's knowledge. The project developed both a video game and a play. The objective of these media is to immerse the respondents in a fictive but realistic disaster situation in order to evaluate their ability to mobilize their knowledge in the case of a real event. Those tools are based on a common scenario that aims at putting the respondents in a dilemma situation. They mobilize an artistic dimension and raise the question of how to transcribe natural events through sound and visual stimuli or through interactions with other characters. Each tool has an observation and a debriefing phase which allow not only to analyse the respondents reactions but also to assess the efficiency of the whole protocol.

Applied to two phenomena (fast kinetic floods and earthquakes), the survey has been carried out in six municipalities of the French Alps. Those municipalities are characterized by different

geographical contexts (urban/rural, plain/mountain) and different preventive information contexts (old information, regulatory information, alternative information). The talk will present the two protocols and the first results of their deployment in the field: the results of the survey about the level of information of the population, the side effects of the protocols in terms of preventive action, and the action-based research process in terms of public action of preventive information.