

Fostering self-responsibility in natural hazard management: encouraging local stakeholders to use adapted building designs

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INTRODUCTION

Recent developments re-arrange a new role and responsibility to the state and to the individual households for natural hazards mitigation and adaptation strategies. Emerging natural hazards strategies place the lead responsibility on local organisations to determine local strategies to manage local risks, which demand societal transformation in vulnerability reduction. This re-arrangement of a new role and responsibility to private-public actors and citizens has been driven by various developments including: recent financial and economic crises, implementation of new legal requirements, such as EU Floods Directive (2007), recent natural hazards events, such as flood events in 2002 or 2005 in Austria, or due to future impacts of climate change. These changes suggest that the policy agendas should enhance self-responsibility of private actors and stakeholders in risk management and in order to substitute the bounded effectiveness of governmental regulation. Therefore, risk governance requires a new definition of the role of public and private actors and stakeholders in natural hazard management. This is especially relevant in division between private and public discourse, where implications arising from specific adaptation strategies at property level including to implement resistance and resilience measures. However, key challenges are lack of risk awareness and low interests by private house owners in dealing with risk management. These limitations are mainly based on a lack of proper risk transfer between public and private actors and stakeholders.

OBJECTIVES

In order to overcome these limitations, we develop a step-wise procedure, in close co-operation with the Austrian Service for Torrent and Avalanche Control (WLVA), the insurance industry, experts from all different natural hazards fields and other

stakeholders, to increase the individual capacity. The key aim is to elaborate the approximate exposure of real estates or buildings to various natural hazards and provide information to different stakeholders, such as individual house owners and architects, about intensity and frequency of impact to promote a more holistic view for building designs and concepts. The information for the evaluation is based on official maps and expert knowledge. Moreover, the guidance document includes a list of examples for local protection measures to encourage local stakeholders to use adapted building designs.

In overall, the guidance document (see figure 1) foresees five steps: (1) description of natural hazard processes, (2) providing information on exposure to natural hazard process, (3) evaluation of the exposure using a decision diagram, (4) examples of local structural protection measures and (5) documentation of local protection measurements using a form.

CONCLUSIONS

As a result the forms include information on implemented local structural protection measures where pictures can be added. This can be used in the following activities: to improve risk awareness on the housing market, in the field of insurance market or during consultant work. The results will be presented during various workshops to validate and to improve the guidance document.

The first parts of the project will be finalised in autumn 2015.

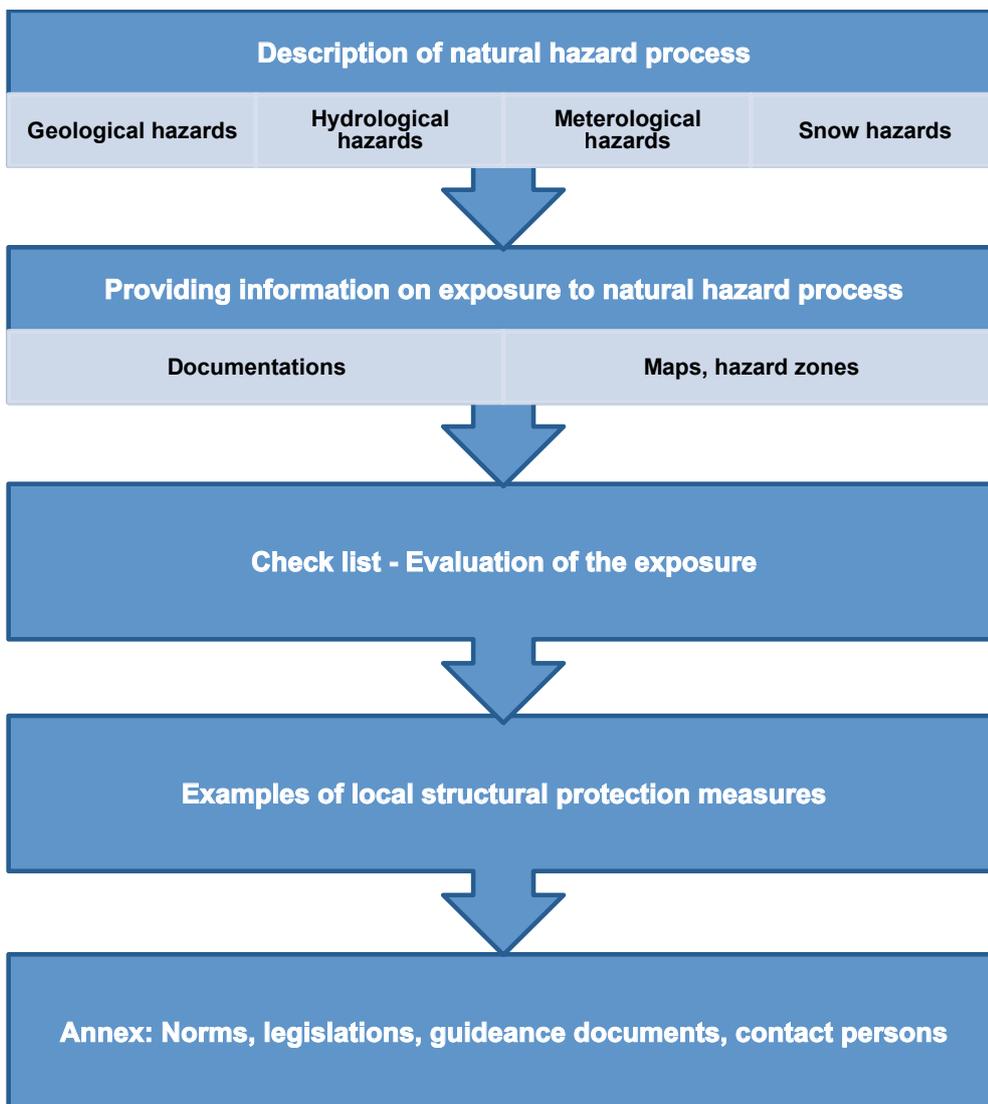


Figure 1. Flowchart of proposed steps to encourage local stakeholders to use adapted building designs

KEYWORDS

self-responsibility; natural hazards management; risk governance; local structural protection measures

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