

## ***Interactive comment on “The connection between long-term and short-term risk management strategies: examples from land-use planning and emergency management in four European case studies” by K. Prenger-Berninghoff et al.***

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General The present paper addresses the issue of existing and necessary linkages between long- and short-term risk management strategies, in particular between spatial planning for risk mitigation on one hand and preparedness and emergency planning and actions on the other. In this sense the paper addresses queries that fit perfectly to the scope of NHESS. These issues are indeed at the heart of the problems of ineffectiveness and inefficiency of risk management and they seem to be still unresolved at

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least at the level of policy-making and implementation.

The authors study the thematic object of their interest from both a theoretical and an empirical point of view. Their theoretical suggestions are based on the existing and most recent literature while empirical validation of assumptions (as regards in particular differences in linkages between the two policy domains owing to diversities of legal-administrative, geographical and cultural contexts) is realized by means of four case study areas. More specifically, these are Nehoiu Valley in Romania, Ubaye Valley in France, Val Canale in Italy and Wieprzouka catchment in Poland. The basic concern of the authors, i.e. coordination of risk management strategies in both the temporal sense (all along the risk management cycle and particularly among prevention, preparedness and emergency phases) and the sectoral sense (among spatial planning, civil protection and other involved sectoral policies) is indeed of paramount importance for efficient and effective risk reduction. However, what remains unclear in the paper is whether the analysis and results are valid in every case of sudden risk (i.e. trans-risk perspective). Since all case study areas suffer from hydrological risks and cascade hazardous effects, i.e. floods, mudflows and debris flows and landslides, the reader wonders about the validity of findings in case of other extreme events (e.g. earthquakes, forest fires, heat waves etc).

Another shortcoming of the theoretical section in particular, is that certain terms and notions that are widely used throughout the paper are not defined or specified appropriately with regard to their meaning and connotations in the context of the paper. A prominent example is the term “coordination” which is a key term in the paper while it is not considered in terms of its several dimensions. How is the term considered? - Solely as a process of information sharing / exchanging? - Additionally as a process of co-deciding? - Additionally as a process of co-acting, co-implementing, co-monitoring, co-feedback? - . . . . . Surely, the innovation of the paper rests basically with the empirical part of it, i.e. parallel realization of expert interviews and stakeholder meetings that focused around a common issue (coordination of spatial planning with short-term

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risk management) but operating in diverse country contexts, which however are all members of the EU.

Nevertheless empirical findings do not seem to have been accordingly elevated or turned to advantage for policy-making proposals. Examples of important findings that are not mentioned in the conclusions and have not functioned as a point of departure for proposals by the authors are the following: i) Uncertainty regarding hazard and exposure location inhibits structural mitigation measures. ii) Risk mitigation may compete with other urgent objectives in the context of spatial planning and may lose this competition, i.e. by being considered as subordinate to other more urgent and serious socio-economic objectives. iii) Radical spatial planning measures that are favourable to risk mitigation may be undesirable because they come in conflict with other important socio-economic objectives (e.g. relocation to less hazardous areas may boost further existing trends of out-migration of declining areas or regions). iv) Coordination, co-operation and interaction is a critical issue also for the relationship between spatial planning and other than risk management forms of sectoral planning (e.g. industrial, tourism, housing and other policies). This condition attributes an integrative element to spatial planning which however is not recognized in most countries at least at the level of formal policy-making. v) To a great extent risk and multi-risk production processes are realized at the local level (due to hazard interactions, manmade interventions and climate change) but these are not controllable locally because the respective competences lie at higher levels of administration. Hence, spatial distribution of risk mitigation needs more often than not is not compatible with the allocation of risk mitigation competences. vi) Lack of trust between the state (central and local) and the citizens and a diffuse culture of breaching spatial planning law in certain societies cancel usability of spatial planning as a long term risk mitigation strategy. vii) Necessary preconditions for spatial planning to serve risk mitigation are multi-hazard and exposure mapping.

Above obstacles to coordination of spatial planning with risk management elevates real causes of the problem and difficulty to overcome it. In this sense there is a need

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of contextual changes to facilitate proper interaction between risk management and spatial planning. Contextual changes refer to administrative structures, education of planners, dissemination of risk information to the public etc.

Specific Comments on the content, method, conclusions and references

1. As regards the methodology followed in empirical studies these are mentioned clearly but very briefly. In particular, the introduction mentions expert interviews and stakeholder meetings conducted with mayors and local crisis management teams, volunteer and professional fire brigades, civil protection and regional and district level crisis management offices, spatial planners and sectoral planners (like water authority officials). However, there is a necessity for further details, e.g. interview structure, issues raised by the participants in the meetings, conflicting views among experts, stakeholders and administrations etc.
2. The title and abstract are clear and understandable and truly reflect the contents of the paper. However, there is an ambiguity about the types of risk and risk management that are pertinent to the findings or may benefit from the risk policy recommendations.
3. The authors give credit to previous and related work and they outline their own contribution. In certain sections of the paper however, the reader has the feeling that some arguments and statements are mentioned repeatedly (e.g. in page 3163 as regards the role of ISU).
4. The references are exhaustive and match well with the issues raised in the paper. However, some recent socioeconomic and fiscal trends (like the economic and public debt crisis in the case of Italy for example) impacting on risk responsible public administrations have not been taken into account.
5. In some cases suggestions and arguments are not very convincing because of missing factual or practical evidence. For instance in page 3165 (in the Conclusions) Romania is referred to as the only case of a two way communication process; however,

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this is not supported by reference to practical, successful experiences.

6. The conclusions elevate the SDSS tool as the basic means of enhancing coordination between short- and long-term risk management strategies. Besides the fact that the tool has not been adequately described and presented it is obvious from the preceding analysis that the basic obstacle to coordination is not the lack of the tool. There are other important root causes (some of them already highlighted in the analysis) and only preoccupation with these causes might result into better coordination between spatial planning and short-term risk management policies.

#### Specific Technical Corrections

Page 3149 (in the middle): "The PPR is an instrument designed for the prevention of any type of hazard". As hazards are hardly prevented the phrase reads better if modified ". . . . .for the prevention of any type of risk / disaster.

Page 3152: "Despite the differences . . . . . while incorporating local knowledge and citizen-based approaches". What are the citizen-based approaches in detail?

Page 3163: The sentence "ISU has a member . . . . . sufficiently addressed " is not understandable because of language problems.

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