

Interactive comment on “Mapping Accessibility for Earthquake Hazard Response in the Historic Urban Center of Bucharest” by Cristina Merciu et al.

S. Boengiu

sboengiu@central.ucv.ro

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A. General considerations

The present-day literature regarding to civil protection in the case of such events, and, especially, in Romania, is not rich. I consider that the paper is welcome, because could push the scientists and decision-makers to work better for solving the urgent problems of communities. At the same time, comparatively with the previous version, this one is well written, in good English. The authors have avoided some confusions, have changed some maps (replacing the 3D with 2D ones), and have improved the analytical study.

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Abstract In some words, the authors succeeded to make a synthesis on their research, defining the goal of study, methods and results.

Introduction The authors achieve acceptable literature documentation, focused on the proactive management and the accessibility for emergency situations. Preparedness the people for a future strong earthquake asks a rapid accessibility to the collapsed buildings for mitigate the human and materials losses. Using GIS technologies they individualize the potential affected areas and the problems for accessibility.

Methodology A detailed description of the methodology is offer, starting with the careful field analysis of the studied area, using a selective analysis of the statistical information, and finalizing with the simulation maps for a rapid accessibility of ambulances and firefighters interventions.

Results Using vectorial and spatial data included in the GIS soft, the authors depicted critical areas and point in the case of a strong earthquake. In their concrete analysis, they used the buildings, technically investigated and included in the seismic risk I class. Their territorial distribution in the historical center of Bucharest and the location of hospitals and firefighting stations were the fundamental elements for accessibility maps at different scales. These maps could fundament the decision-makers actions for the building of appropriate emergency plans.

B. Specific remarks:

1) Starting from the fact that this is a case study made on the core of historical center of Bucharest, and, taking into account only the seismic Risk I buildings, we recommend to authors, may-be in the next research, to extend the analysis at the Bucharest level, and to other seismic risk classes of the buildings. There are many such buildings in other Bucharest areas, which need to be analysed from the point of view of accessibility. Such type of analysis is necessary to be known by the public administration offering more cartographical materials, which could be used for their future actions, and for good information of the citizens. 2) Suggestions and corrections a) Suggestions: - the

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avoiding of the comment to the Fig. 2b, respectively: “the photograph shows efforts to identify victims and property”; - the streets canevas on the Fig. 10, is not clear. Please, make clearer, for a better orientation of the readers! b) Corrections: - For uniformity of English, please replace in the entire manuscript all centre(s) with center(s), or inversely. See the followings lines: 120,165,166,168 (inside the table), 204, 340, and 412.

Appreciating this research, I consider that this version is original one, and can be published in the present-day form, with the mentioned suggestions and corrections.

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