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

Ioan Ianoş et al.
gmpome@ship.edu

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The authors highly appreciate the interactive comment related to the approach of the measuring accessibility in a congested urban area that could be affected by an earthquake. Thanking to anonymous referee, the authors consider the comment very interesting and this was deeply analyzed. Our direct answers are the followings:

a) In relation with the comment that “fire after earthquake is considered a major threat as the roofs are out of wood”, we know very well that excepting the “Hanul lui Manuc” complex, the majority of buildings have sheltered covers. But the roof board is fixed to a wooden stand, so the wood is dominant on the roof. Analysing the referee’s suggestion, we will improve the phrases, underlying that the majority of buildings have wood structure and/or components (some buildings from “Selari” – see “Crama Domneasca”, “Co-vaci” and “Smardan” streets, for example). At the same time, we will add the fact that each building has restaurants, cafes or pubs, which means a huge quantity of furniture, an important source for fire.

b) The authors will develop, in the final form, the description of the data about high seismic risk buildings; this suggestion could increase, indeed, the relevance of the study.

c) Regarding the statistical data approach to obtain relevant results, it should be mentioned that the study is focused on highlighting the degree of accessibility as a pattern in two distinct situations: before and, especially, after the earthquake. For the next topic development, we intend to go in-depth study, collecting more statistical information and to make the step to scenarios’ elaboration (for example, blocking the crossroads X or Y, by the collapse of building A or B, what is happens?). The idea of the referee is very good one and we will take into consideration in our future research.

d) Thank you so much to recommend us the Goretti (including his collaborators) works! Indeed, he has interesting approaches of earthquake management (adapted to the specific of Italian earthquakes, especially), and we will cite him in the final form. For example, some ideas from his paper “The Urban System of Crotone, Italy, Facing the Earthquake Impact” published in Bostenaru Dan, Armas and Goretti: Earthquake Hazard Impact and Urban Planning, Springer (2014) we find very useful. It’s true that there are many other authors, who have had an important contribution to a better knowledge of the earthquake mechanisms and management, but the limited space and the aim of our paper have reduced the development possibilities.