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Discussions

# *Interactive comment on* "Towards Resilient Vital Infrastructure Systems: Challenges, Opportunities, and Future Research Agenda" *by* Seyedabdolhossein Mehvar et al.

**Anonymous Referee #3**

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Towards Resilient Vital Infrastructure Systems: Challenges, Opportunities, and Future Research Agenda Seyedabdolhossein Mehvar, Kathelijne Wijnberg, Bas Borsje, Norman Kerle,, Jan Maarten, Schraagen, Joanne Vinke-de Kruijf, , Karst Geurs, Andreas Hartmann, Rick Hogeboom,5 Suzanne Hulscher

This has scope to be an interesting paper and to make a useful contribution to the literature on this topic. However in its current state I find it confusing and hard to follow. I would suggest that it is currently too long – and as such makes the points the authors wish to convey very difficult to follow. In addition to this – it is not clear [and thus non-reproducible] how the authors constructed the study and came to the points

listed. Therefore I have a number of points which the authors could consider before it is considered for publication.

Main points: 1. While the authors introduce many competing definitions of resilience and systems [e.g. line 61-72], they do not define it within the context of this article. Given that this is for the most part a review I think it is critical that the authors define where their starting point is. It may be that this changes through the review [or the needs of future research must consider a different definition] but it is crucial that the paper starts from a solid/clear position. 2. Systematic review/expert opinion and examples? Methods section is inadequate in its current form. It is commonplace within a systematic review to be clear on how many papers were included/excluded – how they were analysed [analysed for themes? themes identified etc?], and how the review leads to the structure of the results. This is not clear in this case. Additionally it is not clear how the expert opinion data is woven into the analysis at what stage. How were the experts targeted, what was the form of the interview; how was this undertaken, and how were the transcripts [were they recorded] analysed for themes? As it stands the methods section does not allow for method reproduction. Finally how were the examples chosen and analysed. By structuring this section – the result of the paper should be easier to follow. a. How did the review go from 30000 documents to the selection of 160 literature? How was this analysed? And synthesised? b. Why was it not time bound? c. How were the 16 experts chosen – why only academic and how did they map onto the different disciplinary backgrounds? 3. Paragraph 92-101 – this is difficult – it is very hard to follow the reasoning for the structure of this paper – I think this needs to go later [after the methods] if indeed the methods drive this as a reason for the structure? 4. Figure three is poorly explained – why are the circles different sizes and what do them mean? Is the biggest circle supposed to be in the centre? 5. Figure 4 – does this add anything to the description 6. Table 2 – how were these studies identified and why? I miss the logic of these specific studies being used over others. 7. By explaining the methods better, the results section could be streamlined, and the conclusions drawn more clearly.

**NHESSD**

Interactive
comment