**Co-RISK**

The Co-RISK toolkit is a workshop developed to aid the co-creation of collaborative inter-organizational projects to translate risk-related science into modified actions. It is fully described in a paper submitted to *Geoscience Communications* on 8th June 2023, revised on 19th Sept 2023.

**1. Workshop Evaluation**

To evaluate the workshop a questionnaire was issued and filled in, these are in folder /Workshop\_Evaluation/

* Questionnaire: Beta\_Test\_Eval\_1.4.pdf
* Anonymised responses: CoRISK\_Eval\_1.1\_results.xlsx

**2. Co-RISK toolkit**

This resource contains the following in folder /Toolkit/

* Submitted paper: Toolkit\_GC\_4.3\_reSUBMIT.pdf
* Pre-structured mind maps: These are the three exercises that form the core of Co-RISK
  + 6\_Co-RISK\_Maps\_2.1.pdf
  + 6\_Co-RISK\_Maps\_2.1.pptx
  + Map1\_blank.pdf
  + Map2\_blank.pdf
  + Map2\_blank.pdf
* Facilitator notes: Prompts and pointers to guide the use of Co-RISK in a workshop context
  + Facilitator\_notes.pdf
  + Facilitator\_notes.docx
* Presentation: Illustrative set of Powerpoint slides that can be adapted to facilitate the Co-RISK workshop.
  + Presentation.pptx
* Logistical details: Some additional information that may be helpful when running a Co-RISK workshop.
  + Timing\_Organisational\_Detail.docx

Co-RISK: A tool to co-create impactful university-industry projects for natural hazard risk mitigation

John K. Hillier1, Michiel van Meeteren1,2

1Geography and Environment, Loughborough University, Loughborough, LE1 3TU, UK

2Dept. Human Geography and Spatial Planning, Utrecht University, 3584 CB Utrecht, The Netherlands

*Correspondence to*: John K Hillier ([j.hillier@lboro.ac.uk](mailto:j.hillier@lboro.ac.uk))

**Abstract.** Translation of geoscience research into tangible changes, such as modified decisions, processes or policy in the wider world is an important yet notably difficult process. Illustratively, university-based scientists and professionals work on different timescales, seek different insights and may have a substantial cognitive distance between them. The work on Co-RISK reported in this paper is motivated by an ongoing need for mechanisms to aid this translation process. Co-RISK is an accessible (i.e. open access, paper-based, zero cost) ‘toolkit’ for use by stakeholder groups within workshops. Co-RISK has been developed to aid the co-creation of collaborative inter-organizational projects to translate risk-related science into modified actions. It is shaped to avoid adding to a proliferation in increasingly complex frameworks for assessing natural hazard risk and is given a robust basis by incorporating paradox theory from organisation studies, which deals with navigating the genuine tensions between industry and research organizations that stem from their differing roles. Specifically designed to ameliorate the organizational paradox, a Co-RISK workshop draws up ‘Maps’ including key stakeholders (e.g. regulator, insurer, university) and their positionality (e.g. barriers, concerns, motivations), and identifies *exactly* the points where science might modify actions. Ultimately a Co-RISK workshop drafts simple and tailored project-specific frameworks that span from climate to hazard, to risk, to implications of that risk (e.g. solvency). The action research approach used to design Co-RISK, its implementation in a trial session for the insurance sector and its intellectual contribution are described and evaluated. The initial Co-RISK workshop was well received, so application is envisaged to other sectors (i.e. transport infrastructure, utilities, government). Joint endeavours enabled by Co-RISK could fulfil the genuine need to quickly convert the latest insights from environmental research into real-world climate change adaptation strategies.