

4th Meeting of the European Forum for
Disaster Risk Reduction (EFDRR)
23-25 September 2013



MATRIX

New Multi-Hazard and Multi-Risk Assessment Methods for Europe



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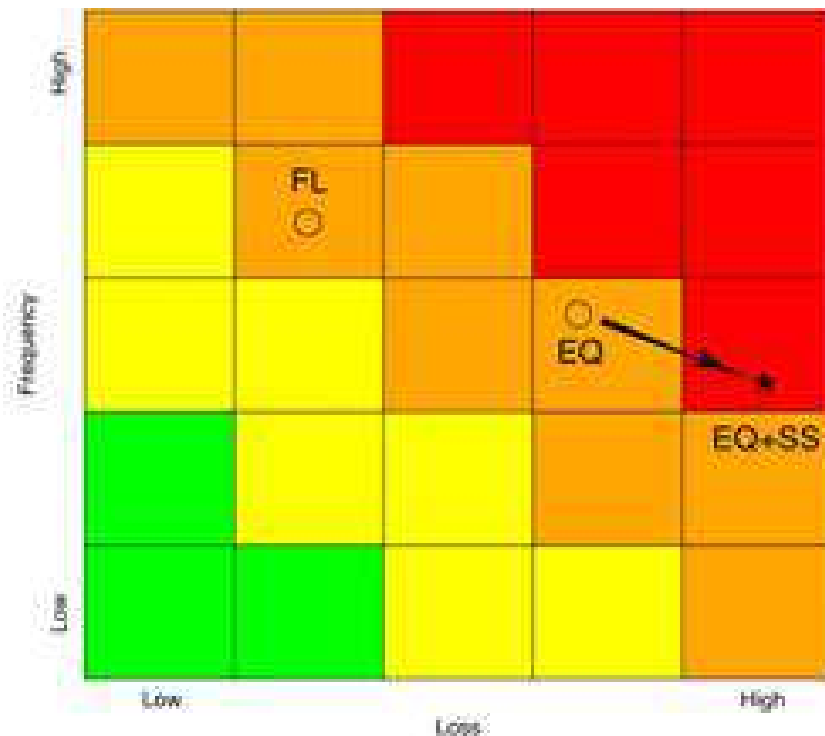
Main aims of MATRIX

1. Develop new methods and tools to tackle **multi-type** natural hazards
2. Establish an **IT framework** for test case analysis
3. Disseminate the results to the relevant communities - **National Platforms for DRR**
4. Compare new multi-type methods with single-risk analysis

1st MATRIX Stakeholder Workshop, July 2012

1. IT framework not operational
2. Educational tool
3. Helpful feedback from NP
4. Multi-risk not current practice of NP
5. Different understanding of hazard and risk assessments

Communication interface - MATRIX IT framework



Example of a risk matrix where hazard interactions are considered.

Floods (FL) and earthquakes (EQ) are considered independently.

When considering interactions the (EQ) results in a tsunami (SS) and moves to a higher risk level.

2nd MATRIX Stakeholder Workshop, June 2013

1. Realistic scenarios / design criteria
2. Cooperation among different authorities and institutions
3. No multi-risk legal framework and low awareness
4. Need to define useful multi-risk scenarios
5. Communicating the results and benefits of risk assessments
6. Cooperation in research project

Conclusions & Outlook

1. The interactions raised the awareness of multi-risk among NP
2. NP provided useful advise to MATRIX
3. Cooperation in research projects
4. Currently not applying multi-risk in practice
5. Integrating real test cases into IT framework
6. Vision paper

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MATRIX website
<http://matrix.gpi.kit.edu/>

Thank you for your attention