

## Case study areas and End Users

1. Barcelona, SPAIN (End users: City of Barcelona, Civil Protection Catalonia and Spain)
2. Salzach River, Salzburg, AUSTRIA (End users: Government of Salzburg, Ministries, various associations, nature protection agencies, Verbund Hydropower)
3. Prato, Pistoia, Florence, Luca, ITALY (End users: City and Province Administrators, Region of Tuscany)
4. Cologne/Bonn, GERMANY (End users: Region of Bonn and Cologne, Regional Planning Authority and Flood Protection Agency Cologne)
5. London, UNITED KINGDOM (End users: Office of the Mayor of London, UK Environment Agency)



Esposende, Portugal

6. North Western Portugal, PORTUGAL (End users: Municipal administration, Civil Protection, Institute for Nature Conservation)

7. South Tyrol (Province of Bolzano), ITALY (End users: Ministry of Spatial Planning, Environment and Energy of Bolzano, Dep. of Geology and Construction Materials, Dep. of Fire and Civil Protection of Bolzano)

University of Florence, ITALY, [www.unifi.it](http://www.unifi.it)

BRGM French geological Survey, FRANCE, [www.brgm.fr](http://www.brgm.fr)

Centre for Geoinformatics, University of Salzburg, AUSTRIA, [www.zgis.at](http://www.zgis.at)

EURAC (European Academy, Institute of Applied Remote Sensing), ITALY [www.eurac.edu](http://www.eurac.edu)

Atlas Innoglobe Tervező és Szolgáltatás Kft., HUNGARY [www.atlasco.hu](http://www.atlasco.hu)

King's College, University of London, UNITED KINGDOM, [www.kcl.ac.uk](http://www.kcl.ac.uk)

Norwegian Geotechnical institute (NGI), NORWAY, [www.ngi.no](http://www.ngi.no)

Rupprecht Consult Forschung und Beratung GmbH, GERMANY, [www.rupprecht-consult.eu](http://www.rupprecht-consult.eu)

CIMNE, International Centre for Numerical Methods in Engineering, Barcelona, SPAIN, [www.cimne.upc.es](http://www.cimne.upc.es)

United Nations University, Institute for Environment and Human Security, GERMANY, [www.ehs.unu.edu](http://www.ehs.unu.edu)

Dortmund University of Technology, GERMANY, [www.tu-dortmund.de](http://www.tu-dortmund.de)

University of Oporto, Faculty of Arts PORTUGAL, [www.letras.up.pt](http://www.letras.up.pt)

University of Vienna, AUSTRIA, [www.geomorph.univie.ac.at](http://www.geomorph.univie.ac.at)



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# Methods for the Improvement of Vulnerability Assessment in Europe

# MOVE

[www.move-fp7.eu](http://www.move-fp7.eu)

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## The Challenge

Both the heatwave of 2003 in Europe and Hurricane Katrina in the US in 2005 dramatically revealed that developed countries are far from immune from the worst effects of natural hazards. Under conditions of global environmental change it is expected that Europe will face increases in the intensity and frequency of extreme natural events. In addition to this, growing urbanisation of hazardous areas, high levels of dependency on critical infrastructure and the increasing vulnerability of particular social groups point to an urgent need to improve our knowledge on vulnerability in Europe.



Florence, Italy

Although it is widely acknowledged that the reduction and measurement of vulnerability are important tasks the concept of vulnerability remains relatively unclear and under-researched. In addition to that, there is a lack of a common ground between different disciplines and schools of thought regarding the concepts approaching vulnerability. Evident is also the lack of a common framework for the definition and measurement of vulnerability with regard to its physical, social, economic, environmental, cultural and institutional nature.

## MOVE Objectives

- The overall objective of MOVE is to provide policy makers, public administrators, researchers, educators and other stakeholders with an improved generic framework and methodology for the measurement and assessment of vulnerability to natural hazards in Europe's regions. It will employ an integrated, comprehensive approach that will help to guide decision making in the future.



Kolmkar, Salzburg, Austria

- MOVE will develop and test a multi-dimensional vulnerability framework that takes into account various hazards as well as different social settings and which can support practical users e.g. in urban and regional planning.
- MOVE will harmonise existing concepts and frameworks of vulnerability assessment within a generic framework that will provide general guidance on what vulnerability encompasses in the European natural hazard context.
- MOVE will link the development of methods to different scales, landforms and hazard phenomena such as floods, droughts, landslides and earthquakes and it will examine the means of combining these different aspects. Hazard dependent and hazard independent aspects and indicators will be identified and analysed in order to improve the estimation of vulnerability.
- MOVE will test the usefulness of the framework in 7 different case studies in Europe by integrating stakeholders and end-users at an early stage of the research.

## MOVE for you!

The main outcome of the MOVE project will be the Manual of Vulnerability Assessment in Europe. The manual will:

- present a rationale for vulnerability estimation and explain its benefits.
- present the theoretical methodology in readily applicable terms.
- use the case studies as general illustrations of how to achieve results with the methods illustrated in the manual.
- offer examples of best practice in vulnerability and discuss and interpret them in terms of general applicability.



Solofra, Italy

Additional MOVE outcomes include:

1. A website with practical information. ([www.move-fp7.eu](http://www.move-fp7.eu)).
2. The organisation of meetings between stakeholders, end-users and project partners at the plenary level and local levels in various countries and in different environmental settings.
3. Scientific papers by the project participants in order to disseminate the results of MOVE to the scientific community.