



# **GLOBAL EARTHQUAKE MODEL FOUNDATION**

a world resilient to earthquakes

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# <u>WHY PARTNER WITH GEN</u>

Information from catastrophe risk models can aid in reducing solvency requirements against potential capital losses, but the development and/or licensing of such models can be expensive and oftentimes impractical for many small to mid-sized insurers. Increased rigor and accuracy of risk models does not only result in better pricing of premiums for policy holders, but also leads to greater profitability of the insurers. For low-probability, highconsequence risks, such as from earthquakes, correct pricing of premiums is even more challenging.

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GEM will provide communities with a great opportunity to strengthen their capacity to respond to disasters, invest in disaster reduction and therefore make themselves stronger and more resilient.

#### Public Sponsor (Reserved space for partner quote)



#### WHAT WE OFFER

GEM offers software tools, datasets and technical services to help insurance companies – big or small – to overcome these limitations. Our software, associated tools and datasets are all publicly available via our websites:

www.globalquakemodel.org & platform.openquake.org.

GEM is the developer of the OpenQuake engine (OQ): a stateof-the-art software for earthquake hazard and risk modeling. It has been extensively tested since its launch in 2015. Now, more than 100 public and private institutions and around thousands of individual clients around the world are using it. It is also FREE and open source. (The OpenQuake Engine is released under the GNU Affero Public License 3).

### BENEFITS OF PARTNERING WITH GEM

Take the lead in further developing the following:

The OpenQuake engine • Hazard datasets (Active Faults Database, Regional and National Earthquake Catalogues, Strong Motion Database) • Seismic Hazard Models • Global and Local Vulnerability Functions • National, Regional and Global Exposure Models • Global Coverage of Risk Models and Metrics at the National Scale

Have full access to our capacity development activities and technical support:

Reserved place in training workshops on seismic hazard and risk modeling and other events • Full scientific and IT support

### **SERVICES**

- Development of customized seismic hazard and risk models; and tools for integration with other in-house tools
- Help understand existing hazard and risk models
- Production of tailor made sets of stochastic event and/or ground motion fields
- Certification GEM Certified model leverage the GEM brand
- Provision of full scientific and technical support

### **OUR TRACK RECORD**

- Fruitful relationship with insurers and reinsurers since 2009
  - Successful partnerships with insurance companies on hazard modeling using the OpenQuake engine e.g. Hannover Re and FM Global

Open approach in tools development and model verification including open access of hazard, exponsure and vulnerability datasets

# **JOIN US!**

Support high quality data and tools sharing on free, open and transparent platform