

More than 250 seismic risk professionals and key stakeholders from over 50 different countries attended the GEM Outreach Meeting 2010 at the World Bank's headquarters in Washington D.C. from 3-4 June 2010. They learned about the progress the Global Earthquake Model initiative has made, and discussed the way forward.

At the meeting, GEM proudly announced delivery of a proof-of-concept of the global earthquake model, which mainly was the fruit of the collaborative GEM1 project. The session 'calculating and communicating earthquake risk' included interactive demonstrations of the GEM risk engine that is being developed and the first preliminary global calculations and output it produced. Participants furthermore experienced that the tools currently under development will not only cater for earthquake risk calculations allowing users to plug-in their own data, but are also centred around the idea of collaborative development and sharing of data and experiences between users through innovative web-based technologies. Participants were hence shown the potential of the model and its applications, which should become available no later than 2013.

A session on GEM's users and their needs led to vivid debate. The main outcome to be incorporated in future activities was that GEM should not only consider the needs of those directly using the application and tools, but also those of 'socio-economic agents' that will in many cases provide the link between the former and various consumers or beneficiaries of GEM. Valuable lessons were hence learned for when additional user/consumer assessments are carried out, focusing for a great part on the need of those using the output and information coming from GEM. In addition it was suggested to build applications that are as flexible and expandable as possible and focus current development of the tools on well-identified use cases and then allow the community itself to identify remaining use cases, and – in a later stage - even develop the tools they need.

Regional Programmes are crucial in validating data and standards that are created on a global scale, in generating local data and as a starting point for technology transfer on (use of) the model. Many regional meetings and workshops took place between the present and the previous Outreach Meeting, and regional programmes in Africa, South-Asia and South-East Asia/Oceania described the status of their respective initiatives. Three programmes in Europe are linked to GEM; allowing for data and knowledge exchange on hazard, risk and socio-economic aspects. In the Middle East, the EMME programme is progressing well; in particular for what concerns the city scenarios work package with important contributions in light of mega-city growth around the world. The organisational structure and technical programme have been defined for the sub-Saharan African and South-Asia regions; currently both programmes are focused on securing the necessary funding and support. After a recent detailed assessment of the state-of-the-art and needs, the countries involved in the SE-Asia/Oceania programme showed the next steps, which include workshops for harmonisation of hazard data and knowledge exchange on risk assessment in the region. In Central-Asia, South and Central-America, the Caribbean and North-East Asia, GEM collaborators are discussing how to best link-up and define a regional programme. The discussion on this topic highlighted that regional programmes provide an essential link to the local use of GEM tools and promotion of the information coming out of them. It was therefore suggested that they should feature case studies on seismic risk mitigation applications and explore how local users of the model might translate the information coming out of GEM into local needs.

The strong focus on community development was emphasized during the meeting. GEM believes that a global model can only be built in cooperation with the community and be authoritative because the community thus believes in it. International consortia that involve renowned institutions and hundreds of international and local experts are developing the global components, which constitute the core of the model. The hazard consortia presented the groundbreaking work that they have recently started and an overview was provided of the risk projects scheduled to start towards the end of the year. This network of experts will hence lead the development of standards, methodologies and datasets on a global scale - in constant interaction with developments in the regions and the model building activities. A year of intensive discussions on socio-economic impacts of earthquakes have led to a convergence in thinking on the strategy suggested for modelling and mapping social and economic effects of seismic events; within weeks the community will be able to comment online on this strategy document. Promoting its open (source) character, GEM will involve within the next year a registered community of users and developers in contributing to development of the risk engine. It was decided that the application and tools, rather than the output itself, need to be released in order to propel further development and integration of the newest technologies available. Concluding, over the past year GEM experienced that community development is truly essential and needs a community that is involved in all that GEM is doing. GEM will therefore continue to be as transparent and open as possible, giving the possibility to the community to take part in all discussions and decision-making processes.

Secretary General Rui Pinho: "During the meeting we were able to demonstrate that we can calculate and also communicate earthquake risk on a global scale. GEM must now endeavour to release as soon as possible a community platform that will allow users/developers to start contributing to the application and testing and development of GEM tools, while at the same time the international scientific community develops the standards, data and methods on hazard, exposure, vulnerability and socio-economic impact".