The probabilistic seismic loss model as a tool for portfolio management: the case of Maghreb.

Guillaume Pousse (1), Francisco Lorenzo (2), and Vladimir Stejskal (3)

(1) Impact Forecasting, Aon Benfield Reinsurance Brokers, London, United Kingdom (guillaume.pousse@aonbenfield.com),
(2) Impact Forecasting, Aon Benfield Reinsurance Brokers, Hamburg, Germany, (3) Impact Forecasting, Aon Benfield
Reinsurance Brokers, Prague, Czech Republic

Although property insurance market in Maghreb countries does not systematically purchase an earthquake cover, Impact Forecasting is developing a new loss model for the calculation of probabilistic seismic risk. A probabilistic methodology using Monte Carlo simulation was applied to generate the hazard component of the model. Then, a set of damage functions is used to convert the modelled ground motion severity into monetary losses.

We aim to highlight risk assessment challenges, especially in countries where reliable data are difficult to obtain. The loss model estimates the risk and allows discussing further risk transfer strategies.