

ELEMENTS loss calculation platform from Impact Forecasting

In response to industry needs for understandable, transparent and customisable catastrophe models, Impact Forecasting – Aon Benfield’s catastrophe model development centre of excellence – has enhanced the ELEMENTS loss calculation platform. ELEMENTS is completely open and customisable, meeting insurers’ demands to create their own view of risk.

Customisation and transparency

- Complete insight into the **hazard and vulnerability components** and how they are connected, resulting in a better understanding of the model outputs.
- **Customise models** using an insurer’s claims data to derive more appropriate results from the model. Use the Parameter Adjustment tool to see the effect of modifying event frequencies or particular occupancies. Users can also create and customise models by adding historical or hypothetical events.
- **Fully understand uncertainty** to help communicate with reinsurers for more appropriate rates or with regulators and rating agencies for an informed and smoother model approval process. ELEMENTS helps visualise and quantify uncertainty within the catastrophe model and how this can be mitigated with the use of more accurate data.
- **Transparency and model validation** helps insurers satisfy rigorous regulatory requirements. ELEMENTS enables you to demonstrate understanding of how catastrophe models work and to include your own view of risk.

We’re here to empower results:

Contact us to understand more about ELEMENTS loss calculation platform and our transparent and customisable models.

Nehal Naik
+1.312.381.5884
nehal.naik@aonbenfield.com

Adam Podlaha
+44 (0)20 7522 3820
adam.podlaha@aonbenfield.com

Risk assessment capabilities to benefit users

- **Mapping:** users can visualise the hazard, exposure and losses from our catastrophe models without the need to create maps manually or use Geographic Information Systems (GIS) software.
- **Support for real-time events:** loss reporting as an event happens. After Windstorm Christian in October 2013 and the Chile earthquake in April 2014, Impact Forecasting generated insurance loss estimates within 24 hours after the event to share an early estimate of loss before claim collection began.

Enhanced functionality

- Model Development Studio enables insurers, reinsurers, or Aon Benfield Research partners to create, integrate, and deploy new models and components to the ELEMENTS platform in a streamlined way.
- Control model run times by adjusting the default number of Monte Carlo samples for analyses, depending on your desired level of modelled loss stability.
- A fully client-server application means better performance, easier client installation (also available via Citrix) and improved speed. Software as a Service (SaaS) options are also available.
- High speed loss calculation is achieved by using multiple server cores and 64-bit technology to run analyses.

New features in ELEMENTS 11

- Analysis performance has been sped up by as much as 4 times with the enhanced loss engine and an improved graphical user interface.
- Enabling catastrophe modellers to run any model – from Impact Forecasting or a third party – in the Oasis format. Additional enhancements to the way how the Oasis model files are implemented have led to a significant reduction in space for flood models.
- ELEMENTS Explorer has expanded to provide basic model documentation as well as helping to quantify uncertainty for internal and regulatory reporting purposes. In addition most components of ELEMENTS Explorer have been now included in the main ELEMENTS Client software.
- New insights for accumulation control and per policy calculation to support underwriting.
- Ability to run the platform in-house or on the cloud.

New and enhanced models in ELEMENTS 11

- Flood models for Brazil and Slovakia
- Typhoon, flood and earthquake models for Vietnam
- Iceland earthquake
- Updated US river flood model includes over 110,000 stochastic events including 2016's events
- European windstorm model coverage extended to Austria and Scandinavia – with forestry damage functions.
- Expanding third party models such as JBA's UK flood model