UNDERSTANDING BUSINESS EXPOSURE TO RISK
Businesses face a number of core challenges to identify their exposure to natural catastrophes and assess potential damage. Cat modeling enables you to:

- Raise catastrophe risk awareness so you can prepare by introducing more effective risk management.
- Identify your risks across all your asset portfolio and gain access to tools to help you manage them.
- Increase data quality awareness leading to a reduction in the uncertainty of the estimates.

COMMERCIAL BENEFITS OF CAT MODELING
Cat modeling helps businesses move away from making insurance decisions based on worst-case scenarios that lead to buying full insurance limits. Instead, an informed discussion with risk managers and underwriters ensures that capacity and insurance limits match actual vulnerabilities.

- Vulnerability of assets to potential losses taking into account, for example, construction type and occupancy to compute potential damage.
- Financial module to take into account how ground-up losses are split according to the insurance structure in place.

HOW DOES ZURICH APPROACH CAT MODELING?
Cat models need to be updated as science moves forward and new findings are discovered. The scientific community and Cat model vendors might not all share the same view. Zurich builds its own view of risk and proactively seeks dialogue in the Cat modeling and scientific communities. Regular models’ reviews are necessary to ensure that the latest findings are reflected in the analyses.

OUTPUT OF A CAT RISK REVIEW
A Cat risk review can provide a variety of outputs, from hazard maps to modelled loss estimates. You will get answers to questions such as:

- How can historical events impact my current assets?
- Does my insurance cover match my risk appetite?
- How do I obtain input for my internal model to satisfy regulatory requirements for my captive insurer?
BENEFITS OF ZURICH’S VIEW OF CAT MODELING

- Identify your exposure and potential losses by region and by peril.
- Improve the way you design insurance coverage in relation to potential losses.
- Optimize your captive insurance company structure.
- Gain access to Cat risk assessment tools and to Zurich’s expertise.

IMPROVE CAT MODELING ACCURACY

Reduce uncertainty
You can take steps to reduce uncertainty by controlling the quality and accuracy of the data you input so it is as reliable and complete as possible.

This includes:

- Inputting precise addresses for individual properties, for example:
  - If a building is located by a river, but on higher ground it will be less vulnerable to flood risk.
  - Exposure to risk within a large industrial estate could vary widely depending on precisely where assets are located on the site.
- Providing full details about buildings enables more accurate property damage and business interruption calculations, for example:
  - When was the building built, what materials were used and how many floors does it have?
  - What are the characteristics of a building that may make it more vulnerable to wind or flood events?

Q&As

Q: How do you assess the consequences of a catastrophe to a portfolio of risks?
A: Cat models have thousands of possible events in their databases that can be simulated on a client’s portfolio to calculate aggregated losses.

Q: Does Zurich use peer model comparisons?
A: Yes, we work with available vendors to include the best information available in the market and to form our Zurich view of risk.

Q: How can Cat modeling help my business planning?
A: A good example is using Cat modeling during mergers or acquisitions. Cat risk assessments should be carried out at the due diligence stage before financial decisions are made.

Q: What if no Cat models are available for a certain region or if not enough information to run a model can be gathered?
A: Hazard mapping and deterministic scenario analysis can help to get a high level view in these cases. Typically hazard mapping is a good option to assess exposure for suppliers and/or customers.
All information contained in this document has been compiled and obtained from sources believed to be reliable and credible but no representation or warranty, express or implied, is made by Zurich Insurance Group Ltd or any of its subsidiaries (the "Group") as to their accuracy or completeness. Some of the information contained herein may be time sensitive. Thus, you should consult the most recent referenced material.

Information relating to risk engineering is intended as a general description of certain types of risk engineering services available to qualified customers. The Group and its employees do not assume any liability of any kind whatsoever, resulting from the use, or reliance upon any information, material or procedure contained herein. The Group and its employees do not guarantee particular outcomes and there may be conditions on your premises or within your organization which may not be apparent to us. You are in the best position to understand your business and your organization and to take steps to minimize risk, and we wish to assist you by providing the information and tools to assess your changing risk environment. In the U.S., risk engineering services are available to qualified customers through Zurich Services Corporation and in Canada through Zurich Insurance Company Ltd.