

CASE STUDY

NEW CATRADER FEATURE SET OFFERS HANNOVER RE ENHANCED FLEXIBILITY AND A MORE COMPREHENSIVE VIEW OF GLOBAL RISK

With a diverse global property-catastrophe book and a reputation for implementing innovative approaches, Hannover Re is an undisputed leader in the global reinsurance industry. One of the company's most important objectives is managing an optimized and diversified property portfolio that maximizes risk-adjusted returns. To do this, Hannover Re partnered with AIR Worldwide to make CATRADER® an even more comprehensive risk management tool for the reinsurance market.

This new suite of enhancements to AIR's CATRADER, the industry-standard software application for analyzing reinsurance contracts and insurance-linked securities, provides Hannover Re with a truly global and flexible risk management platform.

THE CHALLENGE

For more than twenty years, Hannover Re has primarily used CATRADER to manage their portfolio of reinsurance treaties. However, upcoming Solvency II regulations and reporting requirements, along with a desire for more flexible risk analyses and a more comprehensive understanding of global risk, prompted Hannover Re to propose a joint development effort with AIR to make CATRADER a more universal risk management platform for reinsurance treaties.

Hannover Re's primary objectives were:

- The ability to analyze a wider range of treaties, beyond the scope covered by AIR's traditional suite of models;
- The flexibility to modify modeled losses, both at an event level and at a program level.

THE SOLUTION

The result of this three-year collaboration is a new feature set that significantly extends CATRADER's capabilities. Hannover Re can now model all global reinsurance contracts by seamlessly integrating in-house or third-party

models for regions and perils outside of those traditionally served by the private market and by creating customized lines of business. The enhancements also give Hannover Re powerful new capabilities to adjust modeled losses.

BENEFIT 1: A SINGLE, TRULY GLOBAL RISK MANAGEMENT PLATFORM

Hannover Re can now access all their reinsurance information from within a single platform, eliminating the need to manually incorporate risk information from non-modeled regions and perils during post-processing. They can fully model risks that fall outside the scope of traditional catastrophe modeling, such as earthquakes in South Africa, wildfires in Russia, or floods in Vietnam. They also can develop custom lines of business to account for specialized exposures and vulnerabilities. Examples include fine arts, construction business, hospitals, churches, schools/universities, wind turbine parks, heavy industrial, and energy.

Hannover Re's risk modelers not only have more ways to analyze their data now, they also can do the analyses more efficiently. The seamless integration of non-modeled risk into CATRADER's existing workflow for modeled regions and perils standardizes the risk analysis process, reducing the likelihood of human error and ensuring consistency. This is especially important during renewal season, when faster turnaround times and a more consistent pricing process enable more robust risk selection.

BENEFIT 2: UNPRECEDENTED FLEXIBILITY CATRADER's expanded feature set gives Hannover Re a suite of powerful new tools that provide an unprecedented level of flexibility. Users can make loss adjustments to individual events within AIR's catalogs at the subarea or Line of Business level. They also can adjust exceedance probability losses for individual programs and can handle third-party exceedance probability curves received with reinsurance submissions to maintain event correlations in the catalogs.

Whether made by event or by program, these adjustments allow Hannover Re to incorporate their expert knowledge and the company's loss experience, consider nonmodeled loss and secondary perils, and reflect particular details in a submission. These capabilities also enable additional sensitivity testing so Hannover Re can easily examine the marginal impact of various factors on losses—ultimately generating valuable insight into the drivers of risk.

These tools enable Hannover Re to more confidently diversify their pool of risks. They are now able to develop robust risk profiles for exposures in areas previously not covered by existing models.

BENEFIT 3: MORE EFFICIENT REGULATORY REPORTING Having a single global catastrophe risk platform, powerful sensitivity analysis capabilities, and the ability to consistently interpret model results and use the results to more accurately evaluate submissions help Hannover Re in reporting to outside agencies. A “path-identical” modeling approach (full correlation between events used for modeling) is a major requirement for Solvency II compliance. Another is the ability to demonstrate a robust model update management process. Hannover Re can now more easily evaluate how model updates will impact modeled loss estimates for their portfolio.

In addition, important regulatory requirements are covered through the feature set, allowing Hannover Re to meet supervisory demands and to potentially reduce risk capital costs.

FOR TODAY, AND TOMORROW

With CATRADER's new feature set, Hannover Re can now manage the risk associated with a broader range of submissions within one platform; underwrite more profitable and more diversified portfolios across a wider range of regions, perils, and lines of business; and perform more sensitivity analyses. These enhanced capabilities support the company's current modeling needs and future growth plans. Today, Hannover Re is able to own their risk like never before.

REFERENCES

If you are interested in learning more from Hannover Re about their experience with CATRADER's expanded feature set, your AIR account manager will be happy to put you in touch with Jörg Steffensen, General Manager at Hannover Re.

ABOUT AIR WORLDWIDE

AIR Worldwide (AIR) is the scientific leader and most respected provider of risk modeling software and consulting services. AIR founded the catastrophe modeling industry in 1987 and today models the risk from natural catastrophes and terrorism in more than 90 countries. More than 400 insurance, reinsurance, financial, corporate, and government clients rely on AIR software and services for catastrophe risk management, insurance-linked securities, detailed site-specific wind and seismic engineering analyses, and agricultural risk management. AIR is a member of the Verisk Insurance Solutions group at Verisk Analytics (Nasdaq:VRSK) and is headquartered in Boston with additional offices in North America, Europe, and Asia.

ABOUT HANNOVER RE

Hannover Re, with a gross premium of around EUR 12 billion, is the third-largest reinsurer in the world. It transacts all lines of non-life and life and health reinsurance and is present on all continents with around 2,200 staff. The rating agencies most relevant to the insurance industry have awarded Hannover Re very strong insurer financial strength ratings (Standard & Poor's AA- “Very Strong” and A.M. Best A+ “Superior”).