

# RMS<sup>®</sup> Per Risk Treaty Analysis Service: Optimize Your Fire Reinsurance Strategy

Lack of transparency into your fire per risk treaty program can limit the effectiveness of your overall reinsurance strategy. RMS<sup>®</sup> Account Fire Analytics enable the evaluation of treaty structures at multiple levels of granularity, including the account and portfolio level, for detailed insight into fire risk management.

## Per Risk Treaty Optimization Results

- **Payout Likelihood by Treaty Layer:** Annualized probability that a given account experiences a fire event resulting in a loss that penetrates and/or exhausts a layer
- **Technical Premium by Treaty Layer:** The pure risk premium required to cover expected loss from policies that will potentially impact a given layer; also a basis for insight into counterparty risk loading
- **Account Reinsurance Cost:** A transparent reinsurance charge-back to the individual policy based on the risk of each account to each layer

Results are derived from location-level data\*, generating transparent views of risk upon which to optimize your treaty program structure, as well as your overall reinsurance strategy.

## Allocate Treaty Expense According to Policy Risk

The RMS service calculates event loss and return period, compares the results to treaty layers, and ranks policies according to activation risk. The process is repeated for reinstatements, excluding all locations in the portfolio from experiencing a second catastrophic fire loss. Use results to manage reinsurance based on account vulnerability attributes, rather than exposure value:

- Categorize and assess risk by business unit
- Allocate expense to the highest risk accounts
- Analyze reinsurance cost by layer, location, account, and business unit

Activation Probability Analysis Output for Sample 3-Layer Treaty Structure				
Layer	Layer 1 (5 XS 5)	Layer 2 (10 XS 10)	Layer 3 (15 XS 20)	
Annual Risk	Activation Risk	Activation Risk <sup>†</sup>	Activation Risk	Exhaustion Risk
<b>Total Portfolio</b>	40%	20%	5%	0.5%
<b>National Accounts</b>	30%	18%	2%	0.04%
<b>Middle Markets</b>	15%	4%	1%	0.02%
<b>Small Business Operator Policy (BOP)</b>	10%	2%	0.1%	0.00%

<sup>†</sup>Equals the exhaustion risk of the layer below

\* When location-level data is unavailable, information is supplemented according to the building code based on occupancy class and ZIP Code.

## Identify Accounts with the Highest Reinsurance Cost

Expense management no longer needs to default to insured value exposed. The RMS service analyzes current treaty expense allocation based on the policy risk to individual treaty layers and accounts, benchmarking against the same attributes used to bind an account. Results highlight individual accounts requiring further investigation.

## Evaluate Alternative Treaty Structures

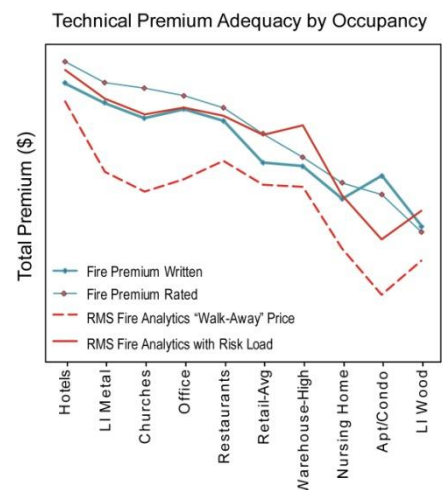
The Per Risk Treaty Analysis service performs scenario “what if” analyses on existing excess per risk treaties, enabling you to evaluate a range of alternative structures. Activation and exhaustion probability metrics generate further insight into the cost-effectiveness of existing structures.

- Define optimal layers for a written portfolio, structured by business unit risk
- Derive risk and reward insights into facultative needs
- Analyze the effectiveness of lower attachment points, and expanded or additional layers

## Link Underwriting Analytics to Portfolio-Level Insights

RMS Account Fire Analytics inform the layer underwriting process, providing account-level views on both frequency risk and severity risk. These same analytics are used to generate portfolio-level views using detailed account underwriting information, for transparent insight into:

- Account technical pricing
- Treaty layering
- Reinsurance cost allocation
- Key account-level risk drivers
- Portfolio data quality



## Success Story: Fireman's Fund Insurance Company Identifies New Reinsurance Pricing and Layering Efficiencies

In order to provide strategic views into reinsurance management, Fireman's Fund Insurance Company engaged with RMS to study its per risk fire underwriting, analyzing the in-place commercial insurance per risk treaty with RMS<sup>®</sup> Account Fire Analytics.

“Fireman’s Fund undertook this comprehensive analysis using RMS Account Fire Analytics to evaluate the effectiveness of various per risk reinsurance strategies relating to fire,” said Mike Roney, Vice President of Commercial Property Insurance at Fireman’s Fund. “Through greater transparency of our fire risk, we can demonstrate our commitment to best practices in managing commercial account underwriting, lending more insight into reinsurance decisions.”

## Contact RMS

For more information on RMS reinsurance planning, the RMS<sup>®</sup> Per Risk Treaty Analysis service, and Account Fire Analytics, contact [fire@rms.com](mailto:fire@rms.com).