

# Reinsurance Intermediaries Face New Expectations

David H. Priebe, President of Guy Carpenter's UK and Continental European Operations, discusses the heightened standards reinsurance intermediaries must meet to serve ceding companies in the UK and Continental Europe in the years ahead.

Numerous forces are quickly reshaping risk and capital management decisions in the United Kingdom and Continental Europe. There are new corporate governance pressures; transparency considerations; increased investor scrutiny of use of and return on capital; and emerging regulations, including CP 190 and Solvency II. Thoroughly studying the strength of reinsurance markets and the security of reinsurance recoverables has also become more crucial, and more difficult, than in years past.

Consequently, companies in the UK and Continental Europe are increasingly modifying their traditional straightforward, relationship-focused approach to reinsurance buying and, instead, are increasingly considering reinsurance in the broader context of overall risk and capital management strategies. Their US counterparts have been moving in this direction for several years. In our increasingly global world, trends cross from one side of the "Pond" to the other at a pace unheard of a decade or two ago. In the US, there are more frequent and vocal calls for a move away from the traditional rules-based



approach to matters of accounting and the like to a principles-based approach, as has been prevalent in Europe for some time.

Regardless of the source of change, intermediaries today must be conversant with regulatory developments and new methodologies around the world. And, they must also be prepared to support a comprehensive view of risk and capital management. Hence, while an intermediary's ability to access reinsurance markets and execute transactions remains pivotal, these abilities are fast becoming just two on the long

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list of functions that must be performed in doing our duty for clients.

Consider all that could be required by a European company investigating property reinsurance options in the near future. The company is likely to delve far more deeply than ever into all aspects of its property perils, both natural and manmade. It will need access to quantitative and analytical tools to analyse these exposures on a per-risk and occurrence basis worldwide. It will need to demonstrate an unprecedented level of due diligence in addressing disaster scenarios and examining correlations between exposures across various lines of business. When assessing capacity requirements in certain areas, such

as terrorism, it must consider the implications of government pools around the world.

Rather than placing an order for reinsurance, this company, like its counterparts around the world, will be increasingly focused on assessing risk across its entire portfolio and analysing the impact of reinsurance solutions against its capital structure and underwriting and business strategies. Then it will be ready to structure and execute effective solutions.

All of this activity should and will fall into the domain of a trusted reinsurance advisor. To perform these new duties, however, requires that an intermediary have a depth and breadth of resources that is unusual in the marketplace.

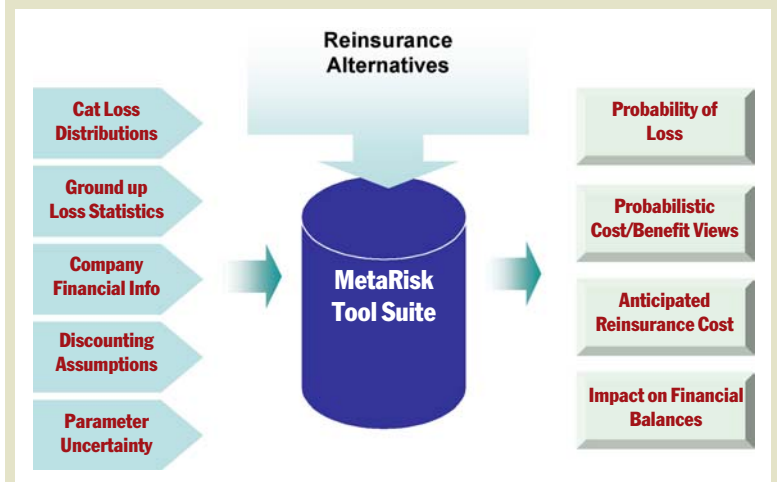
Going forward, it will be increasingly important that an intermediary bring to the table deep expertise in numerous disciplines, a thorough knowledge of the client's business, a wide breadth of quantitative and modeling tools, and the skill to deploy these tools and translate modeling results in meaningful ways worldwide. All of this is, of course, in addition to having productive relationships with global reinsurance markets.

Over the past several years Guy Carpenter has built the infrastructure to support more complex reinsurance decisions for clients, anywhere in the world. Our business model centres on local client account teams that draw on our firm's full breadth of resources and "best practices" around the globe. These resources include global Specialty Practices, comprised of experts in key disciplines, from property catastrophe, casualty and directors and officers' coverages, to life and personal accident. Industry-leading quantitative skills and modeling tools are readily available through our InStrat® unit, which is staffed by the industry's foremost experts in actuarial science, finance and accounting, catastrophe modeling, meteorology, and other sciences and disciplines. We use our proprietary MetaRisk® model to enable clients to assess wide-ranging reinsurance options quickly, and to quantify tradeoffs between various risk mitigation approaches. We also devote considerable effort to managing market relationships and to understanding their financial performance.

## MetaRisk® – A Dynamic Reinsurance Assessment Platform

MetaRisk®, Guy Carpenter's proprietary software platform, allows experienced users the ability to ask many questions fundamental to today's complex reinsurance decision-making process. Users select the model elements required (company financials, business elements, sources of losses, reinsurance structures, etc.) along with appropriate parameters.

After individual parts of a portfolio are modeled separately using catastrophe models or actuarial methods, MetaRisk® is used to bring together the effects of the risk from various lines of business and the asset portfolio, to calculate the profit or loss to the company over a simulated period. By simulating the required period many times (typically 100,000 for non-earthquake; 1 million for earthquake), full probability distributions are calculated for the aggregate incurred, paid and economic losses for a single year or multiple years.



If this quantification process is carried out in the context of a number of alternative reinsurance structures, the results generated can be used to measure the difference between gross and net and to evaluate the merits of different structures at various probability levels. These frequently take the form of variations of a cost-benefit analysis.

MetaRisk® also has the ability to calculate a full income statement, cash flow statement and balance sheet for the company, and to calculate a probability distribution on any required items in the financial statements.

In addition, MetaRisk® loss causes can be set up to read event set files that are created with a minimal amount of post-processing from standard RMS, EQECAT or AIR catastrophe model output.

An advanced mathematical concept for correlated lines of business called copulas is incorporated in MetaRisk®. Copulas allow correlations of various kinds to be entered in to the model, to represent things like windstorms passing through several underwriting regions, or increased correlation between various normally uncorrelated lines of business, in case of extremely large events. The mathematical work for correlations was awarded the Dorweiler prize by the Casualty Actuarial Society and the SCOR actuarial prize of 2002.

Guy Carpenter's global resources are aligned to one purpose: pinpointing the optimal risk and capital management solutions for each client, and identifying the optimal means of achieving these solutions in the world's reinsurance and capital markets. Importantly, we also strive to cultivate a culture that fuels this business model: one in which collaborating across

disciplines and across borders to serve clients is the norm rather than the exception.

Change is on the horizon and we look forward to providing support to help our UK and European clients understand, analyse and execute the risk and capital management solutions that will enable them to meet the challenges ahead.