

Gesellschaft für aktuarielle Beratung mbH

# Cyber data pool Big data against digital dangers

Cyber attacks have become frighteningly common and can affect large corporations and small businesses alike. The economic damage in Germany already amounts to about 220 billion euros. While cyber damages are very diverse, we are capable of recording, classifying and evaluating them through the use of insurance mathematics – which allows insurers to reputably insure them. In order to do so with significant statistical power Meyerthole Siems Kohlruss joined forces with German reinsurer E+S Rück in 2021 in order to found the first data pool for cyber damages in the Germanspeaking market.

In the cyber data pool we are currently collecting and actuarially analyzing the individual contract data of four insurance companies, which collectively represent a market share of 10 %. In addition to a general assessment at policy level, we offer the option of a more detailed analysis at component level for first or third party losses and service costs.

## Identify risks in time, capitalize on opportunities faster

- > Enhancement of data quality: By a high-grade validation, the data of companies that take part in the pool are assessed with regard to plausibility. Possible mistakes are detected early and common standards in the coverage of data are established.
- > Supplement to the statistics of the German umbrella organisation of private insurers (GDV): The GDV only provides its members with basic information. In addition to these GDV characteristics, the evaluation tool of the data pool contains a wide range of other characteristics and possible evaluations.
- > Accumulation control: insurer-specific and overarching cumulative losses are defined and analyzed in coordination with the pool members.
- > Examination of calculation assumptions: We examine whether the damage estimates on which the pricing is based are correct and whether the underwriting guidelines are appropriate for the limiting insurable risks.
- > A new perspective: Pricing models that rely on technical exposure values (e.g. the number of electronic devices or IT security scorings) are analyzed and discussed.



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## Further benefits of the data pool

- > Access to qualified pool data for independent analyses make use of our software tool »Cyber Analyzer«
- > Support for the identification and evaluation of anomalies in the company's portfolio, carried out by experts of E+S Rück and Meyerthole Siems Kohlruss
- Anonymized benchmarking of a number of key figures e.g. damage frequency, claims ratio, completion rates – for a significant market comparison
- > Development of multivariate risk models for an optimal description of risks and an evaluation of the portfolio of the company
- > Regular opportunities for exchange with other managers and specialists that take part in the data pool

### **Meyerthole Siems Kohlruss**

Meyerthole Siems Kohlruss was founded in Cologne in 1998 as the first German actuarial consulting firm. It supports insurers in strategic decisions and operative processes. Our areas of focus include data pooling, pricing, telematics, cyber, sustainability, assessment of reserves, reinsurance, Solvency II and EbAV II.

### Data protection and data security

The DEKRA certificate ISO 27001:2017 is a confirmation from an independent party that Meyerthole Siems Kohlruss (MSK) continuously keeps a very high level of data security. The employed methods are in line with current legal requirements concerning basic regulation of data security, antitrust law and the Code of Conduct.

### Contact

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