

COMMUNICATIONS, MEDIA, AND TECHNOLOGY INDUSTRY PRACTICE – UK & IRELAND

Is Your Insurance Programme Optimal?

Risk Finance Optimisation for Tech E&O/Cyber risks

For companies operating in the Communications, Technology, and Media (CMT) industry, technology errors and omissions/professional indemnity (Tech E&O/PI) and cyber risks tend to be some of the most important classes of insurance. CMT companies typically have the following challenges and questions:

CMT insurance challenge	Why important?
Are we buying enough tech E&O/cyber insurance to cover our financial exposures?	Buying too little insurance, versus the exposures posed, may present the company with an unnecessary level of retained exposures (including above the maximum programme limit).
Are we buying too much insurance?	Conversely, buying too much insurance could be a waste of money.
What is the optimised insurance structure to respond to our risk exposures and company risk financing philosophy, (e.g. are our deductibles and/or attachment points optimal)?	Optimising the deductibles/attachment points is important in order to enable for an optimised level of risk retention and transfer; the deductible level is one of the primary drivers of premium and therefore getting this aspect right can be of utmost importance.

To help our CMT clients respond to the above challenges, we have tailored our existing risk finance optimisation (RFO) offering to focus specifically on the intricacies of tech E&O and cyber exposures.



Introduction

Insurance is a source of capital that can be used to mitigate loss volatility, alongside other sources of capital available to finance insurable losses, (e.g. debt and equity). By using your weighted average cost of capital (WACC) and our own proprietary economic cost of risk (ECoR) metric, Marsh's risk finance optimisation offering identifies the optimal blend of risk retention and risk transfer.

By modelling aggregate loss distributions, RFO also generates forecast annual losses at various probabilities. This supports informed decision-making with regards to insurance attachment points and limits of indemnity.

Indicative premiums are overlaid on a range of alternative insurance programme structures, providing live insurance market insight through Marsh's placement specialists. The insurance programme structure with the lowest ECoR is optimal.

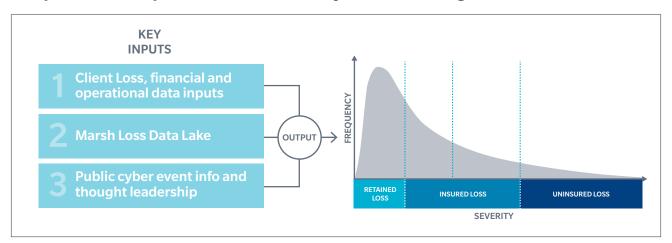
Data inputs generally include your own loss and exposure data and industry/peer data from the Marsh Loss Data Lake (LDL).

RFO for Tech E&O/Cyber

In order to provide RFO analysis* for tech E&O/cyber risks, Marsh has developed an industry and risk-specific modelling approach. Through collaboration with your risk and I.T. functions, we look to collect and then incorporate client-specific information such as:

- Number of sensitive records held, (i.e. personal identifiable, protected health and payment card).
- · Client revenue and system dependencies.
- Client revenue model, (e.g. subscription revenue).
- Calibrated key cost assumptions, (e.g. litigation costs, forensic investigation costs, credit monitoring costs).
- Customer churn and any service credit costs.
- Details of historical system outages.
- Inputs from various external sources; including thought leadership and cyber underwriting tools.

Bespoke data inputs for Tech E&O/Cyber modelling



Typical process

- Engagement with Marsh to scope out an RFO study, identify key data inputs, and determine granularity of the Tech E&O/Cyber loss models.
- Client collects data and provides to Marsh.
- Marsh generates aggregate loss models and issues draft report.
- $\bullet \ \ \text{Marsh presents draft report for discussion, then makes any necessary refinements to the models.}$
- Marsh issues final report and findings.
- Client and Marsh collaboratively action the recommendations.

^{*}This service, product, or activity is not regulated by the FCA.

Value adds for the CMT industry

- Increasing the economic value of your insurance potential for significant savings to your Total Cost of Risk (TCoR) and Economic Cost of Risk through optimised Tech E&O/Cyber insurance programme.
- Ability to test and determine appropriate attachment points and limits for insurance greater understanding of your financial exposures through modelling of loss volatility (using both your own data and Marsh's global Loss Data Lake).
- Documented audit trail detailed final reports supporting informed decision-making.

Case Studies

1

Software tech company

INCREASING LIMITS OF INDEMNITY

THE CHALLENGE

A large software tech company wanted to better understand its exposure to cyber risk and assess whether the current limit on its tech errors and omissions (E&O)/cyber insurance policy was adequate. The client had recently increased its limit following advice from our Communications, Media and Technology practice.

THE SOLUTION

We utilised our Marsh cyber quantification models to quantify the client's cyber data breach exposure. As the client's revenue was generated by subscriptions, our typical methodology in quantifying the cyber business interruption risk would have been inappropriate. As such, we developed a new cyber model to quantify the effect of cyber business interruption on companies who have subscription based revenue. We then overlaid the effect of the client's current and alternative insurance programmes on our projections, to obtain a view on the optimal insurance programme.

THE RESULT

The client gained a better understanding of its cyber exposure and the key drivers of the risk. Ultimately, our work verified the client's decision to increase its limits of indemnity by 25% the prior year and actually highlighted that it would be efficient to purchase at least an additional 50% at renewal.

2

Telecommunications company

CATASTROPHIC LOSS POTENTIAL

THE CHALLENGE

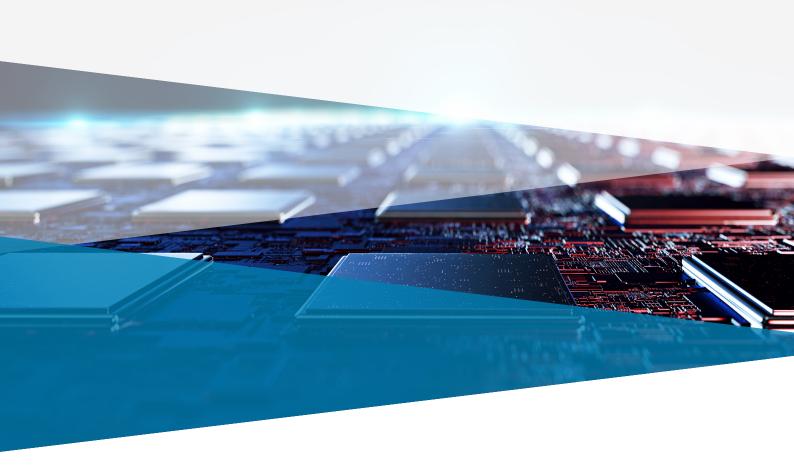
A multinational telecommunications company was interested in performing an RFO for its portfolio of insurance risks – including errors and omissions (E&O) – as the company was shortly to renew its insurance programme. We knew that the company had suffered two E&O claim notifications in the last five years, but neither had resulted in a loss. For some risks, it was determined pre-renewal that the existing programme structure would be unsustainable given prevailing market trends and the client's loss ratio performance.

THE SOLUTION

We modelled the client's losses under its current structure, to serve as a base case for our results. In order to allow for potential catastrophic E&O losses we held internal brainstorming sessions with the Marsh E&O broking team and determined an upper limit for catastrophe claims to be EUR200 million.

THE RESULT

We recommended that the client should alter its programme for certain lines of insurance to minimise the risk. For E&O, our modelling suggested that the client's 1 in 200 year losses would exceed both its calculated risk tolerance and risk appetite. The current E&O insurance provided effective mitigation of these losses.



For more information about risk finance optimisation and other solutions from Marsh, visit marsh.com, or contact your local Marsh representative.

SAM TILTMAN

Senior Vice President Communications, Media, and Technology Marsh UK & Ireland +44 (0)20 7357 3255 sam.tiltman@marsh.com

RAMASHRAM RAMAKRISHNAN

Assistant Vice President
Marsh Risk Analytics
Marsh UK & Ireland
+44 (0)20 7357 5948
ramashram.ramakrishnan@marsh.com

BRADLEY SAUNDERS

Industry Risk Leader Client Advisory Services Marsh UK & Ireland +44 (0)20 7357 1423 bradley.saunders@marsh.com



This is a marketing communication.

Marsh Ltd is authorised and regulated by the Financial Conduct Authority for General Insurance Distribution and Credit Broking (Firm Reference No. 307511).

Marsh Ireland Brokers Limited is a private company limited by shares registered in Ireland under company number: 169458. VAT Number IE 6569458D. Registered Office: 25-28 Adelaide Road, Dublin 2, Ireland, DO2 RY98. Directors: T Colraine (British), A J Croft (previously Kehoe), P G Dromgoole (British), J W Fennelly, J Flahive (British), J C Grogan, P R Howett, C J Lay (British), S P Roche, R I White (British). Marsh Ireland Brokers Limited, trading as Marsh Ireland, Bowring Marsh, and Guy Carpenter & Company is regulated by the Central Bank of Ireland.