2016
London Market Review
Property, Casualty & Political Violence
Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreword</td>
<td>4</td>
</tr>
<tr>
<td>Executive Summary</td>
<td>5</td>
</tr>
<tr>
<td>International property</td>
<td>11</td>
</tr>
<tr>
<td>Metals industry</td>
<td>17</td>
</tr>
<tr>
<td>Mining industry</td>
<td>21</td>
</tr>
<tr>
<td>US property</td>
<td>27</td>
</tr>
<tr>
<td>Cyber - property damage</td>
<td>33</td>
</tr>
<tr>
<td>International casualty</td>
<td>37</td>
</tr>
<tr>
<td>Hospital professional risks</td>
<td>41</td>
</tr>
<tr>
<td>US Casualty</td>
<td>45</td>
</tr>
<tr>
<td>Political violence</td>
<td>49</td>
</tr>
<tr>
<td>Appendices</td>
<td>57</td>
</tr>
<tr>
<td>2015 and historical natural disaster event data</td>
<td>58</td>
</tr>
<tr>
<td>IUA London member markets</td>
<td>61</td>
</tr>
<tr>
<td>Lloyd’s syndicates</td>
<td>63</td>
</tr>
</tbody>
</table>
Foreword

It is our pleasure to bring to you Aon’s annual Property, Casualty and Political Violence (PC&PV) London Market Review.

The report contains a reflective view on 2015, including the 1 January 2016 renewals, forward looking commentary on how Aon views the major themes in the market developing over the coming year.

At a headline level, the softening trend in property and political violence terms is now spreading into the US excess casualty and international casualty sectors. The speed of change in these sectors accelerated during the final six months of 2015 and Q1 2016 with a more linear softening in property rates. There appears to be nothing on the immediate horizon, other than the possibility of a major loss event, which will challenge this trend.

Within the macro trend of softening terms, there are a range of micro trends applicable across country, region, specialist industry and product class. The report offers insights and data across this spectrum to assist buyers in framing risk transfer strategies and making more informed business decisions.

In addition to the rating and policy terms environment, there are related subjects we review to provide added context and knowledge for insurance buyers. These include catastrophe loss trends, how the London market is evolving in response to the soft market and where technology is playing its part as a new risk and a business solution.

Our top five topics are:

1. Big data and portfolio underwriting
2. Carrier mergers and acquisitions and the raised focus on operation expense
3. London market future state target operating model (TOM)
4. Natural catastrophe losses (the recent absence of really big ones)
5. Understanding, quantification and product development for property damage cyber risk

We have included an extended section on cyber risk where we look at what is being discussed by London market stakeholders on the subject, and provide a high level commentary on what coverage exists under property damage and PV policies and report on where the London market is working to stay at the forefront of industry developments.

Within the report there are special sections on the metals and mining industries, where the London market often sets the global trend on terms and market developments.

As with any report of this nature, there are constraints on space. While our analysis provides a thorough review of each issue, there are further layers to examine in many areas. Your Aon team is available to provide in-depth advice on all the subjects covered in the report; please do not hesitate to approach your usual contact at the firm.
2015 has seen the highest level of merger and acquisition (M&A) activity in more than a decade. Each party to these transactions held their own unique set of strategic logic for the deal, but the main reasons quoted have been the creation of scale, with associated cost savings and/or to secure a place or larger seat at the table in London via the Lloyd’s franchise. Accordingly we perceive these more as defensive rather than growth-based strategies that reinforce the need for market reform.

<table>
<thead>
<tr>
<th>Acquirer company name</th>
<th>Acquired company</th>
<th>Date</th>
<th>Value (USDm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACE Limited</td>
<td>Chubb Corporation</td>
<td>July ’15</td>
<td>$28,240</td>
</tr>
<tr>
<td>Tokio Marine Holdings, Inc.</td>
<td>HCC Insurance Holdings, Inc.</td>
<td>June ’15</td>
<td>$7,497</td>
</tr>
<tr>
<td>EXOR SpA</td>
<td>PartnerRe Ltd</td>
<td>Aug ’15</td>
<td>$6,606</td>
</tr>
<tr>
<td>Mitsui Sumitomo Insurance</td>
<td>Amlin plc</td>
<td>Sept ’15</td>
<td>$5,300</td>
</tr>
<tr>
<td>XL Group plc</td>
<td>Catlin Group</td>
<td>Jan ’15</td>
<td>$4,100</td>
</tr>
<tr>
<td>China Minsheng Investment Corp</td>
<td>Sirius (White Mountains reinsurance unit)</td>
<td>July ’15</td>
<td>$2,235</td>
</tr>
<tr>
<td>Fosun International Holdings Ltd</td>
<td>Ironshore Inc.</td>
<td>May ’15</td>
<td>$2,098</td>
</tr>
<tr>
<td>Endurance Specialty Holdings Ltd</td>
<td>Montpelier Re Holdings Ltd</td>
<td>March ’15</td>
<td>$1,394</td>
</tr>
<tr>
<td>Zurich Insurance Group</td>
<td>Wells Fargo’s crop insurance unit</td>
<td>Dec ’15</td>
<td>$1,000</td>
</tr>
<tr>
<td>Fairfax Financial Holdings Ltd</td>
<td>Eurolife ERB Insurance Group Holdings S.A</td>
<td>Dec ’15</td>
<td>$344</td>
</tr>
</tbody>
</table>

Source: Aon Benfield

The table above lists the top 10 M&As during 2015. The ACE and Chubb merger was the blockbuster, with both operating large teams in London. In terms of influencing trends in the London market, the XL Catlin merger is probably the more significant because both companies enjoyed strong London market presence and are lead markets in some of the largest property & casualty product and specialist industry areas covered in this report.

The other stand-out trend was the investment by Asia (Japan & China) in the Lloyd’s/London market.

Current soft market conditions have driven many carriers to increase their focus on the operating expense segment of their combined loss ratio. AIG and Zurich have taken the most aggressive approach in the restructuring of their businesses. We have not observed the Lloyd’s market taking such major steps, perhaps due to being insulated by good financial results in 2015. We are, however, increasingly holding discussions with London carrier executives where they reference a review of their company business models to drive cost efficiencies, ahead of the next phase in the market cycle.
London market future state operating model

The London market has many competitive advantages, the most commonly quoted being the ability to place multi-billion policy limit contracts in a single day and how the unique cluster of broking and underwriting expertise drives new product innovation and develops solutions for the most difficult-to-place risks.

While these two advantages are noteworthy, both brokers and insurers are coming under increasing pressure to provide these services at the most competitive price. With alternative underwriting hubs developing that offer similar services, often closer to clients at a lower cost to the providers, the challenge is obvious and increasingly well documented following the publication of the recent London Matters report by the London Market Group.

London has risen to this challenge with all market stakeholders supporting the formation of Placing Platform Ltd, with the aim to accelerate the modernisation of the market infrastructure based on an agreed target operating model. The centre piece of which is simplification, standardisation and technology that will support the London market in becoming more accessible to growth markets and help it to overcome the barriers of different time zones, language and regulatory environments.

For context, Aon trades 30% of its London portfolio electronically, and this modest figure is the highest percentage of any London broker. Manual entering of data, particularly of endorsements, still prevails in large areas of the market and taking this online will be a cross market job and take a huge amount of time and resource. We will report on progress in future reports but, once this issue is addressed, clients will see a faster and more accurate service at a lower cost.

Alongside this efficiency initiative, there has been progress towards addressing the other London market challenge: for many countries the London market isn’t open when they are. The office day trading windows are small for important events and alternative underwriting hubs are open when they are. The office day trading windows are small for important events and taking this online will be a cross market job and take a huge amount of time and resource. We will report on progress in future reports but, once this issue is addressed, clients will see a faster and more accurate service at a lower cost.

As a solution to this, Aon has led the way in creating a direct dealing platform in the London market. Aon Carrier Link for Lloyd’s offers 24 hour access to the London market at 6am or 10pm.

As a solution to this, Aon has led the way in creating a direct dealing platform in the London market. Aon Carrier Link for Lloyd’s offers 24 hour access to the London market at 6am or 10pm.

“Whilst thought of as a technology play, direct dealing platforms are actually more focused on the ease of access to market and improving service”

Natural catastrophe losses

Insured natural catastrophe losses during 2015 were USD 35 billion which was 31% below the 15-year mean of USD 51 billion and 14% lower than the median (USD 40 billion). This was the fourth consecutive year with declining catastrophe losses since the record setting year of 2011. Notable events during the year included winter storms in the United States; extensive flooding in parts of India, the US, UK and China; a major earthquake in Nepal; record setting tropical storms in the Pacific Ocean; European windstorms and massive forest fires in Indonesia.

When natural catastrophe losses are below the median, the London market – Lloyd’s syndicates in particular – tend to post better than global peer group loss ratios. 2015 was a case in point.

This helped London underwriters successfully compete and retain market share, when rates for many territories and industrial risk classes are near or heading towards those last seen at the end of the soft market of 1999-2001.

There are literally clouds on the horizon however, with Global Weather Oscillations forecasting that the next two Atlantic hurricane seasons will see the largest number of US landfalls since the record breaking seasons of 2004/2005, being the most dangerous and costly for a decade.

With interest rates in the main global economies seemingly set to stay at low levels in the medium term and unlikely to pull on the increased alternative market capital in the (re)insurance markets, it would appear that only increased natural catastrophe losses will reduce the surplus capital in the market.

“Global Weather Oscillations forecast that the next two Atlantic hurricane seasons will see the largest number of US landfalls since the record breaking seasons of 2004/2005, being the most dangerous and costly for a decade”
Cyber risk

In respect of stand-alone coverage for data breach, the current insurance market for cyber risk is predominantly handled by the professional risk departments of brokers and underwriters. This is a growth area with many industries such as banks, telecoms and healthcare companies now purchasing the cover.

Coverage for first party property damage is less clear and, due to the difficulty in quantifying and underwriting the widely different cyber risk for each industry (there have not been many losses), there are presently a multitude of opinions and ways of covering the risk. We therefore thought it would be helpful to dedicate a section of this report to cyber with an aim to provide an overview of where the market is and how we expect it to develop. Our analysis is not definitive and aimed at non-cyber experts, who are in the majority.

In the London market there has been significant activity in working towards quantifying and developing products for cyber risk. The most advanced is the Cyber Insurance Exposure Data Schema, which is a partnership between the key participants in the London market and the Centre for Risk Studies at University of Cambridge.
2015 trends

The international (non U.S.) sector of the London market provides insurance and reinsurance solutions for companies in over 200 countries. Consequently high-level market trends should be considered with local factors, such as specific natural catastrophe events or regional market cluster trends. The major trend has been that of softening rates, in conjunction with historically low insured natural catastrophe events, which was broadly consistent across all geographies as shown in the tables on the following pages.

Despite the continued softening of rates, the majority of London underwriters reported another strong set of financial results. This has fuelled an increased per-risk capacity and competition amongst the carriers. In order to maintain market share on placements, carriers continued to offer inflated capacity with the expectation of being signed down; many placements have been over-subscribed to levels rarely seen before.

From Aon London’s internal data, we received a small decrease in the number of quote requests compared to the previous year, but the total number of firm orders actually increased. This is indicative of two trends: firstly that local markets’ appetite has increased for the more vanilla risks; secondly for the larger, more complex accounts, the willingness of the London market to compete for market share has stepped up a notch.

Theoretical London per-risk capacity rose to USD 2.2 billion, part of the theoretical global per-risk capacity of USD 5.5 billion. This was an approximate 10% increase, most of which came from increased capacity from existing carriers, but a small number of new start-ups in either niche areas or on a non-lead basis also contributed to this rise. Actual offered capacity varies enormously from risk to risk.

“In order to maintain market share on placements, carriers continued to offer inflated capacity with the expectation of being signed down; many placements have been over-subscribed to levels rarely seen before”

2015 Top 5 Most Significant Events in Latin America

<table>
<thead>
<tr>
<th>Date(s)</th>
<th>Event</th>
<th>Location</th>
<th>Deaths</th>
<th>Economic Loss (USD)</th>
<th>Insured Loss (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 25- April 8</td>
<td>Flooding</td>
<td>Chile</td>
<td>25</td>
<td>1.5 billion</td>
<td>450 million</td>
</tr>
<tr>
<td>September 16</td>
<td>Earthquake</td>
<td>Chile</td>
<td>14</td>
<td>1.5 billion</td>
<td>600 million</td>
</tr>
<tr>
<td>Yearlong</td>
<td>Drought</td>
<td>Canada</td>
<td>N/A</td>
<td>1.0 billion</td>
<td>600 million</td>
</tr>
<tr>
<td>August 27-29</td>
<td>Tropical Storm Erika</td>
<td>Caribbean Islands</td>
<td>36</td>
<td>512 million</td>
<td>50 million</td>
</tr>
<tr>
<td>October 22-25</td>
<td>Hurricane Patricia</td>
<td>Mexico</td>
<td>14</td>
<td>410 million</td>
<td>100 million</td>
</tr>
<tr>
<td>All other events</td>
<td></td>
<td></td>
<td>~1,300</td>
<td>2.5 billion</td>
<td>1.2 billion</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>~1,400</td>
<td>7.5 billion</td>
<td>3.0 billion</td>
</tr>
</tbody>
</table>

Source: Aon Benfield
1 Subject to change as loss estimates are further developed
2 Includes losses sustained by private insurers and government-sponsored programs

2016 Outlook

2015 saw another year in which the increased capacity and a lack of market-changing natural catastrophe events continued to drive rates down further.

We observed an increase in global programmes coming to London; this was a result of Latin American clients looking to rationalise their insurance programmes, which required London capacity. These multi-latina placements created substantial economies of scale and we expect to see these efficiencies replicated by other buyers in the future.

Despite the majority of the continent having few major events, Chile saw large catastrophes in March (rain, floods) and September (earthquake), equating to insured losses of USD 450m and USD 600m respectively. Despite this, rates in Chile were resistant to change and continued to decrease throughout the year, a trend we expect to continue.

The Brazilian authorities unexpectedly relaxed the regulatory environment for reinsurance companies, which we expect will lead to greater competition and more sophisticated buying across the continent.
Europe, Middle East & Africa (Exc. UK)

2015 Top 5 Most Significant Events in EMEA

<table>
<thead>
<tr>
<th>Date(s)</th>
<th>Event</th>
<th>Location</th>
<th>Deaths</th>
<th>Economic Loss (USD)</th>
<th>Insured Loss (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 22-31</td>
<td>Flooding</td>
<td>United Kingdom</td>
<td>N/A</td>
<td>2.5 billion</td>
<td>1.3 billion</td>
</tr>
<tr>
<td>March 29-April 1</td>
<td>Windstorms Mike &amp; Niklas</td>
<td>Western &amp; Central Europe</td>
<td>9</td>
<td>1.4 billion</td>
<td>1.0 billion</td>
</tr>
<tr>
<td>October 3-4</td>
<td>Flooding</td>
<td>France</td>
<td>19</td>
<td>1.3 billion</td>
<td>725 million</td>
</tr>
<tr>
<td>July - December</td>
<td>Drought</td>
<td>South Africa</td>
<td>N/A</td>
<td>2.0 billion</td>
<td>25 million</td>
</tr>
<tr>
<td>January 9-11</td>
<td>Windstorms Elon &amp; Felix</td>
<td>Western &amp; Central Europe</td>
<td>N/A</td>
<td>650 million</td>
<td>400 million</td>
</tr>
<tr>
<td></td>
<td>All other events</td>
<td></td>
<td>1,170</td>
<td>6.5 billion</td>
<td>1.1 billion</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>1,250</td>
<td>14.35 billion</td>
<td>5.0 billion</td>
</tr>
</tbody>
</table>

2016 Outlook

The trend we observed in 2014 of London carriers casting their underwriting territorial net wider continued through 2015. This was a diversification play for those underwriters with a heavy U.S. portfolio weighting but, from Aon's experience, it was also a response to London market brokers being more active in sourcing opportunities for London from countries and territories that have strong local markets but with pricing disconnects or coverage limitations. Additionally, risk managers with their own pricing pressures sought terms from London to compete against local and regional options.

The principal premium growth areas were from France, Germany, Israel, Scandinavia, Switzerland and Turkey. Middle East and Africa premium flow was marginally lower, although deal flow was stable. Russia and Central Europe was mixed with some growth from Poland but for those countries with commodity (metals and mining) risks, reduced business interruption values translated into decreasing premium flow.

The outlook for 2016 is more of the same, with overcapacity driving further rate softening as evidenced by the 1 January 2016 renewal season. We also expect the trend for underwriters to offer higher policy limits, policy sub-limits, lower deductible options and long term contracts to remain features of the market.

Asia Pacific

2015 Top 5 Most Significant Events in APAC

<table>
<thead>
<tr>
<th>Date(s)</th>
<th>Event</th>
<th>Location</th>
<th>Deaths</th>
<th>Economic Loss (USD)</th>
<th>Insured Loss (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yearlong</td>
<td>Forest fires</td>
<td>Indonesia</td>
<td>19</td>
<td>16.1 billion</td>
<td>250 million</td>
</tr>
<tr>
<td>April 25 &amp; May 12</td>
<td>Earthquake</td>
<td>Nepal</td>
<td>9,120</td>
<td>8.0 billion</td>
<td>200 million</td>
</tr>
<tr>
<td>Nov - Dec</td>
<td>Flooding</td>
<td>India, Sri Lanka</td>
<td>386</td>
<td>4.0 billion</td>
<td>650 million</td>
</tr>
<tr>
<td>August 15 - 26</td>
<td>Typhoon Goni</td>
<td>Japan, Philippines, China</td>
<td>70</td>
<td>1.8 billion</td>
<td>980 million</td>
</tr>
<tr>
<td>April 20-24</td>
<td>Severe weather</td>
<td>Australia</td>
<td>3</td>
<td>925 million</td>
<td>671 million</td>
</tr>
<tr>
<td></td>
<td>All other events</td>
<td></td>
<td>6,950</td>
<td>30 billion</td>
<td>3.5 billion</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>-16,500</td>
<td>61 billion¹</td>
<td>6.0 billion ²</td>
</tr>
</tbody>
</table>

2016 Outlook

The market for Australian and New Zealand domiciled companies continued to be competitive. With the global and corporate property sector in Asia & New Zealand under scrutiny from insurers in the region due to marginal returns to insurers during a relatively benign natural catastrophe period, there are areas of resistance to further rate reductions. The London market matched local terms to retain market share and there are pockets of increasing resistance to follow the market down further. An example of this was Axis’ withdrawal from the Australian market in Q3 2015.

Notwithstanding these signs of change, the absence of major natural catastrophe losses underpinned loss ratios and we forecast that, by an increasing focus on risk selection, the London market will wish to remain competitive and maintain market share through 2016.

Specifically for Australia, we have observed the increased role of the Chinese markets for risks with Chinese whole or JV interests, thereby increasing competition in this risk segment. In addition, the depressed commodity market sector has made already highly cost-focused companies drive their risk partners harder for rate improvements on top of premium reductions relating to lower business interruption values.

The Tianjin explosion loss was a timely reminder of the significant accumulation exposures for both local and multi-national companies with assets in China. The insured loss is estimated to total USD 5 billion, a large share of which related to contingent business interruption, causing a flurry of checking and recalculation of exposures by both insurers and reinsurers.

The London market share of Asian risks remains relatively small, other than from multi-national programmes. With a growing local and regional market in Singapore, we anticipate limited London market share growth, other than where coverage issues make London an attractive alternative or where market stretching policy limits are required or when specific industries require specialist underwriting knowledge and services from London.

On the following page is a table of the range of rate changes recorded on Aon’s International property portfolio. Most changes fell within the lower end of these ranges, but for companies with an improved risk management story and good loss records, rate reductions towards the upper end of the range were noted.
### 2015 Range of Rate Changes

<table>
<thead>
<tr>
<th>Country</th>
<th>Loss free</th>
<th>Loss active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>-10% to -25%</td>
<td>flat to +5%</td>
</tr>
<tr>
<td>Brazil</td>
<td>-10% to -15%</td>
<td>+0% to +5%</td>
</tr>
<tr>
<td>Chile</td>
<td>-15% to -20%</td>
<td>-5% to +5%</td>
</tr>
<tr>
<td>China</td>
<td>-5% to -10%</td>
<td>+0% to +5%</td>
</tr>
<tr>
<td>Colombia</td>
<td>-15% to -20%</td>
<td>-5% to +5%</td>
</tr>
<tr>
<td>Europe (ex UK)</td>
<td>-10% to -20%</td>
<td>0% to +10%</td>
</tr>
<tr>
<td>India</td>
<td>-5% to -25%</td>
<td>flat to +5%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>-5% to -10%</td>
<td>flat to +10%</td>
</tr>
<tr>
<td>Israel</td>
<td>-5% to -25%</td>
<td>flat to +5%</td>
</tr>
<tr>
<td>Japan</td>
<td>-5% to -15%</td>
<td>+5 to +10%</td>
</tr>
<tr>
<td>Middle East</td>
<td>-5% to -15%</td>
<td>flat to +15%</td>
</tr>
<tr>
<td>New Zealand</td>
<td>-10% to -20%</td>
<td>0% to +10%</td>
</tr>
<tr>
<td>Russia / CIS</td>
<td>-5% to -15%</td>
<td>+5% to +15%</td>
</tr>
<tr>
<td>South Africa</td>
<td>-5% to -15%</td>
<td>-5% to +5%</td>
</tr>
<tr>
<td>Taiwan</td>
<td>-5% to -15%</td>
<td>+5% to +10%</td>
</tr>
<tr>
<td>Turkey</td>
<td>-10% to -20%</td>
<td>-5% to +10%</td>
</tr>
<tr>
<td>Global programmes</td>
<td>-5% to -25%</td>
<td>-5% to +15%</td>
</tr>
</tbody>
</table>

Source: Aon Inpoint

---

### Metals Industry

---

### Contacts

Max Roveda  
CBO - Property & Casualty  
+44 (0)20 7086 4922  
massimiliano.roveda@aon.co.uk

Edward Jeffrey  
Broker - International Property  
+44 (0)20 7086 3512  
edward.jeffrey@aon.co.uk

Jamie Topping  
Pacific Property Team Leader  
+44 (0)20 7086 1137  
jamie.topping@aon.co.uk

---
2015 trends

Many metals companies insure their refining and smelter risks separately, because they secure better terms from the market due to larger capacity and greater competition for stand-alone smelting risks, compared to combined mining and smelter placement options.

Hybrid placements are a feature of the metals sector, where the smelter and mining risk are insured together but the below-ground is reinsured separately into either:

1) a specialist market
2) a captive insurance vehicle
3) a standalone local market placement.

Some companies use a mix of all three strategies.

This section of the report covers the refining and smelter risk on a standalone basis, or the parts of the hybrid placement left by carving out elements of mining risk. The mining section of this report covers stand-alone miners and integrated miners with combined placements.

Historical lows

In the 2015 version of this report we observed property damage and business interruption rates were at or near historical cycle lows and we also questioned how much further rates could fall before finding a floor. The answer was quite a way actually.

Based upon Aon’s data, the metals industry experienced one of the lowest loss years on record, with both risk losses and catastrophe losses being below average. Often considered one of the most difficult market sectors to turn a profit, the heavy industry portfolio of many of the main market participants delivered carrier loss ratios lower than comparable sectors such as metals, power and oil and gas.

Previously historic loss active territories, such as the Middle East aluminium smelters and Latin America steel companies delivered improved loss profiles. Russian and Central European steel risks produced excellent underwriting results for carriers exposed to this sector. Asia and U.S. risks were more loss active but they did not exceed the metal industry’s rolling 10 year average for these regions.

The diagram on the following page outlines the average rate reduction for metals risks. (Made up from 95% steel/aluminium/copper/zinc producers/and 5% other metals)

We observed that some of the traditional metals markets were prepared to walk away from risks that in their view had moved below their technical pricing range in the first quarter of 2015, particularly in the primary layer areas. We observed a trend as the year progressed for some of these markets to return and, along with the remaining mostly quota share underwriters, aggressively underwrite to protect market share, thereby increasing competition.

2016 outlook

With the metals industry producing good underwriting results, it is quite difficult to predict confidently where terms may head in the year ahead. On one hand, rates are at or near historical lows and, with a return to average or above average loss activity, a firming of rates would be expected. On the other hand, Aon’s data shows that the average loss ratios for the industry are showing an improving trend, due to improved risk management, and underwriters may continue to compete for market share because of this. The great unknown is the potential for increased natural catastrophe losses, which would change calculations.
Risk selection

One of the underlying trends within the metals sector is how companies with good loss records and a strong reputation for risk management are being targeted by underwriters, particularly if these underwriters are actively involved in the client’s risk engineering programmes. Most lead underwriters in the metals sector offer risk engineering services to clients and, when involved, unlock increased capacity from these markets at attractive terms.

We anticipate this trend of bundling capacity and risk engineering services to continue to expand. Clients appreciate the added value of risk engineering and business continuity planning advice and it creates a closer understanding of each party’s common interest.

On balance, we expect the rates in the sector to continue to soften, perhaps more slowly during 2016, and to be more sensitive to per client loss activity, and if natural catastrophe losses pick up, the market will find a floor and possibly start to firm.

For further details on the steel and aluminium industries, please refer to the Aon 2016 report dedicated to the sector.
Relatively low claims activity

Claims activity in 2015 was relatively low term of in both operational and natural catastrophe losses. The largest event in 2015 was undoubtedly the fatal tailings dam failure at Samarco in Brazil, which will most likely result in a full policy limit loss on their Property policy and significant losses under their casualty and D&O policies. There were other losses in Latin America (although considerably less significant that the Samarco loss) and Pacific that would have impacted primary and quota share markets. Canada, South Africa, US and Europe experienced a relatively quiet year.

Tailings dams

The Samarco event has once again brought into focus the insurance cover that is provided on tailings dams. Whilst cover is still being provided for tailings dams, underwriters are requesting a lot more technical information on the engineering and operation of such dams and insureds are advised to prepare in advance and present detailed information in their renewal submissions. Typical information that would be required by insurers would be type of dam construction and lift methodology, age, original design and safety factors, building codes, frequency and details of own and statutory inspections and monitoring mechanisms supplemented with copies of latest inspection reports.

Reduction in business interruption insured values

Virtually all commodity prices continued to fall in 2015 e.g. gold -8.5%, silver -18%, copper -20%, iron ore -42%, lead -15%, nickel -30%, zinc -11%. This resulted in a significant reduction in business interruption declared values and maximum foreseeable loss calculations. A number of insureds have moved to insure their business interruption on a standing charges only basis particularly as accounting profits fall. In addition, a number of uneconomical mining operations have been put into care and maintenance. In extreme cases, some mines that are approaching their end of mine life have been closed early to reduce operating costs.

Increased underwriting capacity

Traditional mining markets have not reduced available capacity with some increasing both above ground and below ground capacity. A number of new entrants have emerged, particularly from local and regional markets around the world as well as Lloyd’s where a number of new syndicates have started up and are keen to underwrite mining risks. Overall market capacity has increased and estimated economic mining capacity is:

<table>
<thead>
<tr>
<th>Risk type</th>
<th>2015 capacity (millions)</th>
<th>2016 capacity (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above ground / open pit</td>
<td>USD 1,500 to USD 2,000</td>
<td>USD 1,800 to USD 2,200</td>
</tr>
<tr>
<td>Below ground hard rock</td>
<td>USD 450 to USD 700</td>
<td>USD 500 to USD 750</td>
</tr>
<tr>
<td>Below ground soft rock / coal</td>
<td>USD 180 to USD 300</td>
<td>USD 200 to USD 320</td>
</tr>
</tbody>
</table>

Note: Economic capacity is that offered which the buyers are prepared to pay, and provides the breadth of coverage required.

Global mining companies loss free, -5% to 0%
Global mining companies loss active, +5% to 0%
Medium and junior mining companies loss free, -5% to -25%
Medium and junior mining companies loss active, +10% to 0%

Note: Global miners are those with insured values of USD 20 billion + and multi-country locations. Med and junior were due to miners into mining in the sector, high self-insured retentions and one off odd profile factors.
Coverage improvements and some sub-limit increases

Underwriters are always open to discussions on clarity of cover and exclusions in policy wordings. With the provision of good quality risk information, underwriters are prepared to review policy sub-limits and coverage improvements/enhancements such as contingent business interruption, underground, strikes riots and civil commotion, malicious damage, transmission and distribution lines and infectious diseases.

Resistance to deductible reductions

With most operational business interruption deductibles being time based, these would vary in line with business interruption values. However, some insureds have been requesting renewal terms at lower property damage and business interruption deductible levels. To date, markets have in general resisted this. In addition to operational deductibles, the larger insureds have self-insured retention levels which have generally remained the same and in some instances have increased as they look to take control of their own claims settling process.
Outlook for 2016

With an increasing number of insurers chasing a reducing mining premium pool, rates are expected to continue to reduce in 2016. This will contribute to a further decreasing premium pool but will be offset to some extent by additional new premium entering the market as a result of the larger miners selling off individual operations. It is expected, however, that the pace at which insurance rates are reducing will slow as an increasing number of underwriters reach their minimum premium levels and would rather walk away.

With commodity prices expecting to remain depressed in 2016, mining insureds will continue to seek year on year savings on their insurance expenditure.

Key to favourable renewal results for insureds are:

- Good quality and detailed renewal information including recent engineering survey reports
- Provision of detailed information in specialist engineering areas e.g. tailings dams
- Provision of detailed information in areas of community and sustainable development
- Demonstration of well risk managed operations with high take up of risk recommendations
- Low claims activity

UK Contacts

Mark Kettle
Client Director - NA Property
+44 (0)20 7086 3392
mark.kettle@aon.co.uk

Bruce Dettling
Broker - AUS & NZ Property
+44 (0)20 7086 2776
bruce.dettling@aon.co.uk

James Pash
Senior Placing Broker
+44 (0)20 7086 2028
james.pash2@aon.co.uk

ROW Contacts

Paul Pryor
Global Mining Practice Leader
+61 392 113 052
paul.pryor@aon.com
2015 trends

The US London property market is closely linked to the US domestic property market with most buyers who utilise London carriers having programmes structured across both market access points. Consequently, there is often a mirroring of term evolution; although London does tend to see more natural catastrophe-exposed risks or those where policy limits purchased stretch market capacity in the US. It is a common practice to have both markets on programmes to maintain competitive tension and retain important carrier relationships that provide value over a market cycle.

US property rates in 2015 continued to soften as another below average year of natural catastrophe events (see table below) supported carrier loss ratios in the sector. The top five natural catastrophe losses totalled USD 21 billion. There were no major insured hurricane or earthquake events during the year and tornado events were slightly above average in number. In fact, no event exceeded USD 1 billion in loss, with events proving insufficient to stem the continued softening of rates.

Top 5 Most Significant Events in the United States

<table>
<thead>
<tr>
<th>Date(s)</th>
<th>Event</th>
<th>Location</th>
<th>Deaths</th>
<th>Economic Loss (USD)</th>
<th>Insured Loss (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 22-26</td>
<td>Winter Weather</td>
<td>Eastern &amp; Central US</td>
<td>30</td>
<td>3.3 billion</td>
<td>2.1 billion</td>
</tr>
<tr>
<td>Yearlong</td>
<td>Drought</td>
<td>Western US</td>
<td>N/A</td>
<td>4.5 billion</td>
<td>1.0 billion</td>
</tr>
<tr>
<td>October 1-11</td>
<td>Flooding</td>
<td>Eastern US</td>
<td>21</td>
<td>0.5 billion</td>
<td>700 million</td>
</tr>
<tr>
<td>May 23-28</td>
<td>Severe Weather</td>
<td>Plains, Midwest, Rockies, Southeast</td>
<td>32</td>
<td>3.8 billion</td>
<td>1.4 billion</td>
</tr>
<tr>
<td>September</td>
<td>Wildfires</td>
<td>California (Valley &amp; Butte Fires)</td>
<td>6</td>
<td>2.0 billion</td>
<td>1.3 billion</td>
</tr>
</tbody>
</table>

|                |                    | All other events                  | -200   | 16 billion          | 14 billion         |

|                |                    | **Totals**                        | -350   | 38 billion¹         | 21 billion²        |

¹ Subject to change as loss estimates are further developed
² Includes losses sustained by private insurers and government-sponsored programs

The most significant London market trend observed as a result of the continuing competitive market environment was London offering more capacity on a quota basis to match the US domestic carriers’ participation, as opposed to the more common shared and layered structures. This was not an across the board change and each placement continues to be structured to match the risk profile and preferences of buyers.

In addition to rate reductions, increased policy limits and sub-limits were offered to offset premium reductions or where clients had specific exposures or wished to top up natural catastrophe covers.

While lower deductibles and attachment points were often available in London, US clients in general elected to maintain higher retentions based on each company’s total cost of risk calculations. Contingent time element remained a focus and London carriers were generally willing to offer higher policy sub-limits when provided with satisfactory underwriting information on supplier and customer exposures.

The table below outlines the increase in London market capacity year-on-year driven by the introduction of the Aon Client Treaty (ACT) and new markets entering the London US property market sector.

**US Large Risk Sector Capacity Risk**

<table>
<thead>
<tr>
<th>Peril</th>
<th>2015 Total capacity per risk</th>
<th>2015 London market capacity per risk</th>
<th>2016 total capacity per risk</th>
<th>2016 London market capacity per risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>California earthquake</td>
<td>USD 600m</td>
<td>USD 225m</td>
<td>USD 750m</td>
<td>USD 285m</td>
</tr>
<tr>
<td>Windstorm</td>
<td>USD 1bn</td>
<td>USD 350m</td>
<td>USD 1.5bn</td>
<td>USD 445m</td>
</tr>
</tbody>
</table>

United States Tornado Activity

![United States Tornado Activity Chart](chart.png)
Below is the average rate change band noted by Aon during the past 18 months. The story is one of linear softening with a small jump in the final quarter after the end of the 2015 hurricane season. The ranges are quite wide to pick up the full picture and most rates changes occurred more in the centre of these bands, with specific risk features or natural catastrophe exposures being reflected in the upper rate reduction levels.

### 2015/2016 Average Quarterly Rate Changes

<table>
<thead>
<tr>
<th>Quarter and year</th>
<th>Claims free</th>
<th>Loss active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3 2014</td>
<td>0% to 5%</td>
<td>+0% to +12.5%</td>
</tr>
<tr>
<td>Q4 2014</td>
<td>-5% to -10%</td>
<td>0% to +10%</td>
</tr>
<tr>
<td>Q1 2015</td>
<td>-5% to -15%</td>
<td>0% to -5%</td>
</tr>
<tr>
<td>Q2 2015</td>
<td>-5% to -15%</td>
<td>0% to -5%</td>
</tr>
<tr>
<td>Q3 2015</td>
<td>-5% to -20%</td>
<td>0% to -7.5%</td>
</tr>
<tr>
<td>Q4 2015</td>
<td>-7.5% to -25%</td>
<td>0% to -7.5%</td>
</tr>
<tr>
<td>Q1 2016</td>
<td>-5% to -15%</td>
<td>0% to -5%</td>
</tr>
</tbody>
</table>

### 2016 outlook

We forecast that without a market changing event during the first nine months of 2016 we will see a further softening of rates. If there is an above average hurricane season we may see a floor for rates then, but there is such a level of overcapacity it will probably need to be a mega-event to burn off enough capital to change market terms.

In London we expect to see continued competition for market share. How the newly formed XL Catlin approaches US property is being closely monitored. And we would not be surprised to see further carrier consolidation in the London market.

The facultative reinsurance market will continue to be a driver of direct market terms and conditions on certain placements. Increasingly we are seeing London markets considering client-centric facultative solutions that answer the pricing and capacity needs of US buyers.

The introduction of Aon Client Treaty (ACT) within the US property market provides for an additional 20% (up to USD 100 million) of critical catastrophe capacity on London market orders placed through the Aon London Global Broking Centre. This additional capacity will be significant in maintaining London market participation and providing more choice for buyers.

There will also be new capacity available via London from a number of European (re)insurers as RSA, Mapfre and Helvetia have set up new teams or increased their existing appetite to underwrite US property risks.
The London market continues to offer dedicated structured portfolio solutions (SPS) facilities which are being seen by carriers as an alternative way to underwrite SME business to offset reduced premiums in more traditional large client open market placements.

The London market offers through Aon a wide range of SPS including:

- Real estate
- Mortgage impairment
- Flood
- Deductible buy down

These solutions stand alongside London carrier expertise in financial institutions, retail, railroads, pharmaceutical and technology industries, all of which enjoy access to broad policy wordings and the London market’s highly valued claims service.

Mutual benefits

It is a unique feature of the London carrier and US insured relationships that both enjoy a deep mutual understanding, developed over decades of trading together. This business empathy is built upon annual face-to-face dialogue often as part of a pre-renewal European roadshow, or at the Aon Miami Symposium – both of which are highly valuable events for all parties. This business connectivity and understanding continues to ensure London remains relevant to US clients during the current soft phase of the market cycle.
First party property damage and business interruption

There is a well-established London cyber insurance market with products providing coverage for privacy and security liability, data breach response, crisis management, business interruption (limited to non-property damage trigger events), data recovery and restoration plus extortion. The policies offer cover for first and third party losses, which cover customer or vendor relationships and customer sensitive information that a business may hold.

What is not covered under a standard cyber market policy is physical property damage and business interruption with a property damage trigger.

At present cover for property damage-business interruption claims is available either through a property all risk policy being silent on the subject or, more usually, through a buyback of elements of a loss - and then only the resulting damage from the cyber event. In London the most commonly used buy-back is via the NMA 2914 data exclusion, which includes buy back for ensuing fire and explosion perils.

Coverage buy-back

There is however no consistent approach across the London (and global) market and some carriers are looking to exclude all cyber risk if they can, while others are prepared to extend the perils under the data exclusion buy-back. Examples include the buyback of collision and derailment perils for railway risks or pot freeze for the aluminium sector.

While there have been billions of cyber-attacks on organisations and many high-profile incidents that have led to claims under cyber market policies, there have been very few property damage-business interruption losses. Consequently, quantification of the actual and future risk of a property damage-business interruption cyber event risk is difficult to establish, making it a difficult piece of coverage for carriers to underwrite and price.

In response to this need for data, the London market in partnership with the University of Cambridge have come together to develop a schema which in the first instance will look at the data required for managing cyber exposure accumulations. Whilst not definitive, this information is likely to form a platform that will start to support the market in its efforts to underwrite individual accounts, select risks, price decisions, manage claims and understand operational risk.

In parallel to this London market work, many carriers are looking at how they can either expand their current cyber policy to provide some form of property damage trigger cyber cover, or else develop a cyber all-events policy. Other carriers are simply questioning whether or not the specific property damage-business interruption exposure has a place in the cyber market at all (as opposed to the property and liability markets).

The most advanced product in the market at present is the Brit Cyberus policy. Supported by a consortium of 15 Lloyd’s underwriters, it offers up to USD 350 million of capacity. According to Brit’s marketing material, the difference between Cyberus and standard market policies are as follows:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Brit Cyberus policy</th>
<th>Standard Cyber market policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business interruption (with property damage trigger)</td>
<td>✔</td>
<td>x</td>
</tr>
<tr>
<td>Business interruption (with no property damage trigger)</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Physical property damage</td>
<td>✔</td>
<td>x</td>
</tr>
<tr>
<td>Digital asset restoration</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Data restoration</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Free loss migration advice</td>
<td>✔</td>
<td>x</td>
</tr>
<tr>
<td>Bodily injury</td>
<td>✔</td>
<td>x</td>
</tr>
<tr>
<td>Threat/extortion</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Environmental liability</td>
<td>✔</td>
<td>x</td>
</tr>
<tr>
<td>Crisis management</td>
<td>✔</td>
<td>x</td>
</tr>
</tbody>
</table>

At present very few of these products have been purchased because buyers are unsure what their true exposure is and consequently cannot establish if the premiums quoted are appropriate. In addition, the limits available are relatively small compared to the overall property market, and many feel are not yet adequate.

The property damage-business interruption cyber market is in a similar place to the terrorism market after 9/11, when limited historical data made it difficult to rate coverage. Lloyd’s led the way post 9/11, offering relatively small policy limits which grew year-on-year to a point now where there is USD 3 billion of per risk capacity available globally.
Future developments

How the property damage-business interruption cyber market will develop is difficult to forecast. Many believe the principal risk will, in time, be underwritten as part of an all risk property damage-business interruption policy once the risk accumulation piece is better understood. Others believe, because of possible accumulation, a standalone market will develop similar to terrorism and when the premiums start to make some technical sense to buyers, this will grow rapidly. One thing is clear, for the time being the two exposures are very closely linked and must be addressed as a single interconnected solution.

What most organisations are doing at present is establishing what their in-house or external cyber risk experts are advising and mitigating associated business risks as best they can. From that point they are working with their property damage-business interruption insurers to secure the broadest buy-back cover available, while keeping an active interest in the development of new market products.

This is a fast evolving area and new products are being launched regularly, possibly making some of our comments out of date by the time they are read. The principal advice we would provide is to keep a close eye on market developments and regularly review coverage options. We have commented on the property damage-business interruption aspect, but nearly all insurance lines will have a cyber-coverage issue to consider.

International Casualty
2015 trends

The past year has seen a continued trend of capacity growth in the London international casualty market both through the entry of new carriers and the expansion of existing long-standing market underwriters.

We previously identified total London market capacity at approximately USD 2.5 billion on a per risk basis, with differences possible according to program criteria and industry groups. Interestingly, more of the new capacity has entered the market in a primary and lead quoting capacity, rather than taking up excess and catastrophe layer positions.

Lloyd’s capacity

In 2015 there were 35 Lloyd’s syndicates writing international casualty risk, plus specialist capacity offered by the marine market. In total there was over USD 1 billion of capacity available within the Lloyd’s market.

The London company market has also continued to expand, with global (re) insurers positioning themselves to participate either in London or through a local presence, reflecting the buying preference of clients.

We have also noted that underwriters have consolidated their own reinsurance programs, with associated cost savings providing an added competitive edge, while a number of underwriters have also elected to have higher net retentions on their treaty reinsurance program structures.

Clients have benefitted from increased competition, capacity and market interest, both in terms of coverage scope and premium, with total cost of risk factors associated with deductibles and retentions also improving the client position.

We continue to witness the movement of key underwriting personnel as new opportunities have opened up and the need for experienced people continues.

“Clients have benefitted from increased competition and market interest, both in terms of coverage scope and premium”

Hot topics

The hot topics for 2015 have undoubtedly been the potential liability losses arising from the Brazil tailings dam events, following other tailings dam incidents in the preceding two years. Underwriters are looking with increasing focus at risk management and control of tailing dam exposures.

Bushfire / wildfire remains in the spotlight with slightly increased available capacity, and mostly unchanged attachment points and market conditions.

Clients with pipeline exposures continue to need to demonstrate high-quality risk management, infrastructure investment and management planning to secure the best terms. Otherwise the energy arena has eased on onshore and offshore combined programs, with increased capacity and a strong desire from markets to maintain or grow market share.

Australia

Competitive conditions and market developments do however need to be considered within the context of claims activity on specific risks and the concept of the rate per million for capacity. In this regard the Australian market has grown more competitive than London in many areas and the Australian desire for both primary and excess business has seen more business written locally than previously. The capacity on offer has been at lower rates per million and an expanded appetite in the lower and primary layers of programs.

The table below shows the average rate change range for loss free accounts from the Aon international casualty portfolio for 2015. In respect of loss active accounts, rate changes were very dependent on the individual circumstances, with carriers weighing the longer term loss ratio, client risk profile and premium volume in decisions.

2015 rate change range

<table>
<thead>
<tr>
<th>Layer</th>
<th>Rate Change range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>-5% to -15%</td>
</tr>
<tr>
<td>Excess</td>
<td>-10% to -15%</td>
</tr>
</tbody>
</table>

In respect of loss active accounts, rate changes were very dependent on the individual circumstances, with carriers weighing the longer term loss ratio, client risk profile and premium volume in decisions.
2016 outlook

Clearly where a sector or account places greater demands on the market, there may be less appetite and/or capacity available. For example, clients who require true global servicing and integrated programs involving captives have a far more limited market selection. Conditions remain competitive and quality business is in demand, but there is more of an emphasis on underwriter and broker service and network client solutions than purely risk transfer factors.

For the main market, we do not see a change in conditions for 2016 with a continuation of market capacity expansion and a rise in competitive tension between carriers and markets. The forecast is continued cost reduction for clients across programs and an opportunity to really test the rate per million of capacity on the excess portions of programs.

It is therefore likely that that the market’s attention will again be on costs and achieving the best results through cutting back on operating costs with a backdrop of a general increase in claims cost. Prior years of reserve releasing provided a certain lift but will not provide the same benefit going forward.

The London market, via Aon, offers a range of over 20 international casualty structured portfolio solutions across both territories and industry sectors. This product specialisation provides cost benefits from bulk buying and more tailored coverage and is an area where we see the London market investing and improving on the range of products available during 2016.

**International casualty total London market capacity (per risk)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>USD 2.0 billion</td>
</tr>
<tr>
<td>2015</td>
<td>USD 2.2 billion</td>
</tr>
<tr>
<td>2016</td>
<td>USD 2.5 billion</td>
</tr>
</tbody>
</table>

**Contact**

Richard Payne  
**International Casualty Team Leader**  
+44 (0)20 7086 3273  
richard.payne@aon.co.uk

**Hospital Professional Risks (HPL)**
2015 trends

There was an increase of capacity with worldwide underwriting capabilities and a focus on single territories or regions, leading to an overall surplus.

The market remained soft with premiums reducing between 5% and 20% year-on-year. Greater reductions on rate were negotiated where a prospective view on risk could be taken, for example there was evidence of significant improvements in clinical and patient safety or operational/organisational amendments.

2015 rate change range

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate movement loss free</th>
<th>Rate movement loss active</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>-5% to -20%</td>
<td>0% to +7.5%</td>
</tr>
<tr>
<td>2015</td>
<td>-5% to -20%</td>
<td>0% to +5%</td>
</tr>
</tbody>
</table>

London market 5 year per risk capacity

<table>
<thead>
<tr>
<th>Year</th>
<th>Single territory/region programmes</th>
<th>Worldwide programmes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>USD 200 million</td>
<td>USD 100 million</td>
</tr>
<tr>
<td>2013</td>
<td>USD 230 million</td>
<td>USD 120 million</td>
</tr>
<tr>
<td>2014</td>
<td>USD 250 million</td>
<td>USD 140 million</td>
</tr>
<tr>
<td>2015</td>
<td>USD 260 million</td>
<td>USD 160 million</td>
</tr>
<tr>
<td>2016</td>
<td>USD 280 million</td>
<td>USD 200 million</td>
</tr>
</tbody>
</table>

The quality dashboard took a more influential weighting in the broking negotiation and subsequent underwriting decision, and has become a key tool used to engage clients and markets.

In the US, claims frequency decreased by approximately 1% annually but claims severity increased by 2% annually (as per the 2016 Aon/ASHRM Benchmark Study). In non-US territories, claims severity and frequency continue to rise. Despite the claims severity increases, pricing remains competitive through the surplus capacity, however given the long tail nature of HPL claims, hospitals remained loyal to carriers.

There have been several high profile batch related cases which have seen total claim values exceed USD 100 million and carriers are fearful that maximum severity will come from batch cases. These severe cases have put pressure on rates for incumbent markets but, due to the capacity surplus, other markets have been keen to remain competitive and replace incumbents on excess attachments.

Away from rating pressures, there has also been a softening of policy terms and conditions with attractive long-term agreement contracts of up to three years available. Such agreements provide clients with long-term coverage, pricing stability and also provide a buffer against any future market hardening.

2016 outlook

The market will continue to be soft due to the abundance in capacity. However, the more severe batch related cases, with a significant numbers of claimants, will put pressure on incumbent rates; so much so that some may not renew. This is evidence that pricing on excess layers is low and potentially unprofitable to carriers. Additionally carriers with loss deterioration in other property and casualty lines may look to hold HPL rates, however market forces and client relationships may challenge this.

New carriers will continue to strengthen their market share while existing carriers are protecting their positions and therefore increasing the competitive landscape. However, a small number of carriers are actually reducing their appetite to focus on a restricted number of healthcare segments due to rating levels.

As healthcare strategy evolves in each territory, London markets will continue to align hospital professional liability solutions to wider corporate objectives, so that premium correlates with quality improvements.

Emerging exposures

Buyers will need to reflect on emerging exposures in the hospital environment and it is likely there will be a push for greater integration of such coverages. The developing nature of cyber and privacy risks means clients need to review terms and conditions carefully to ensure they dovetail with other coverages.

Regulatory risk coverage is provided by a handful of carriers, many buyers are taking high retentions and quota sharing the risk with carriers as a way of protecting the severity potential in the ever changing landscape of healthcare reform.

The value of the quality and patient safety clinical dashboard in the underwriting submission will continue to be important as carriers look to take a prospective view on risk profile.

The London market is keen to diversify and expand portfolios in new regions and the Middle East and Latin America are areas of particular focus.
UK healthcare

The London market, in partnership with Aon, has developed a UK medical malpractice product which incorporates a range of coverage enhancements, preferential pricing and dedicated claims expertise targeted at small to medium healthcare providers. The product is supported by two Lloyd’s syndicates, offering diversification and the benefit of Lloyd’s security and general underwriters’ agreements.

Mental health & fertility care

London underwriters also offer a specialist product for the fertility and mental health segments in healthcare in the UK. Developed by Aon, the policy coverage has been tailored to provide the broadest coverage linked to the significant risks of these complex health areas, together with a specialist claims handling capability to ensure all losses are handled professionally and confidentially.

Canada healthcare advantage

A further example of where the London market provides dedicated products is the Canada healthcare advantage product developed by Aon with leading Lloyd’s syndicates. The solution provides a range of coverage lines, including medical malpractice, errors and omissions and general and cyber liability. This one-stop policy reduces the possibility of coverage gaps and delivers cost synergies for buyers.

Contact

William Barber
Broker - Healthcare
+44 (0)20 7086 2833
william.barber@aon.co.uk

US Casualty
2015 trends

Overcapacity in the London US casualty market continued to drive the direction of terms during 2015 with rate reductions being the norm. Overall, per risk capacity increased by USD 200 million, of which USD 100 million came from the Aon Client Treaty (ACT) and the balance from two new Lloyd’s syndicates and increased capacity from existing participants.

Within this landscape of capacity growth, the number of lead umbrella markets remained steady with the increased capacity electing to participate in the excess layer bands where competition was the most pronounced.

Whilst we observed significant pressure from new carriers to grow market share, the result was often the same, with the holding market succeeding in retaining their position by matching terms and leveraging the benefit of carrier continuity. Nevertheless, there were some wins for new carriers and these occurred in some of the more challenging industry classes or where the price differential was significant.

The London casualty market is closely linked to the US primary and excess casualty markets and programmes will be structured to combine the best of both markets to create the optimum placement depending on the stage of the market cycle and specific client risk features.

Trucking trouble

The industry area that bucked the soft market trend was trucking and automobile, where an increase in loss frequency and some unusually severe legal verdicts led to at least one major lead market withdrawing from the industry class and other carriers reducing capacity or writing only excess layers, causing a price spike in the lead umbrella layer area. This change in sentiment also filtered through to industries such as oil and gas and chemicals whose core business is not trucking but who still transport significant product by road.

In terms of premium flow into the London market, Aon statistics record that there were increases in the energy, construction, rail and multinational sectors, whilst the life science sector experienced a small reduction in premium flow.

The table below provides a guide to the range of rate changes that occurred within the London market during 2015.

<table>
<thead>
<tr>
<th>US casualty layer/industry</th>
<th>Loss free</th>
<th>Loss active</th>
</tr>
</thead>
<tbody>
<tr>
<td>First umbrella</td>
<td>Flat to -10%</td>
<td>+5% to +50%</td>
</tr>
<tr>
<td>Excess layers</td>
<td>-5% to -10%</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Construction</td>
<td>Flat</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
2016 outlook

We expect the softening rating pattern to continue through into 2016 with overcapacity driving improved pricing for buyers, other than in loss impacted industry sectors. Competition will be greatest in the excess layer sections of programmes.

For cyclical industries such as oil and gas and mining, where turnover/throughput values have been reducing, we expect premium rates to continue to track down, particularly where there have been plant closures or output cut backs.

Construction

The recovery in the US construction industry will continue to provide the most significant opportunity for the London market, particularly for new market entrants to grow premium volumes.

The other pricing factor driving the market is the cost of treaty protections. Whilst the importance of this pricing lever has reduced, as many insurers retain larger amounts and in some cases do not buy, treaty pricing for US casualty softened again at 1 January 2016, which indicates that there is still underwriting margin in the sector.

LLEAF

In the past, structured portfolio solutions were not a common feature of the London US casualty market. However in late 2015, Aon launched the Lloyd’s lead excess Aon facility (LLEAF) aimed at providing new alternatives for buyers in the lead umbrella layer arena. Six Lloyd’s syndicates compete for the business and from early trading experience LLEAF appears to be a welcome new offering from the London market for US based companies.

US casualty total London per risk capacity

<table>
<thead>
<tr>
<th>Year</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>USD 1,050,000</td>
</tr>
<tr>
<td>2015</td>
<td>USD 1,300,000</td>
</tr>
<tr>
<td>2016</td>
<td>USD 1,300,000</td>
</tr>
</tbody>
</table>

Contact

Simon Good  
Head of US Casualty  
+44 (0)20 7086 4873 
simon.good@aon.co.uk

David Halligan  
Senior Broker - US Casualty  
+44 (0)20 7086 4426 
david.halligan@aon.co.uk
2015 trends

The terrorism market finds itself in the most competitive and acquiescent position we have encountered. Primary reasons for this are borne from low loss ratios, increased capacity, MGA start-ups, broker facilities and a change in risk appetite.

Low concentrated regions remain heavily competitive, juxtaposed with tight capacity areas such as New York, London and Toronto. Underwriters have remained cautious when underwriting areas of high risk such as Pakistan, Iraq, Ukraine and Lebanon or situations perceived to be more of a target or of an iconic nature. The incidents in North Africa and the Middle East over the last four to five years have highlighted once again the importance of buying broad form political violence coverage.

Although market capacity has increased it remains more restricted for some of the broader political violence perils—specifically insurrection, revolution, rebellion, mutiny, coup d’état and war or/and civil war, which is a result of increased demand and stringent accumulation controls.

Total terrorism London market per-risk capacity nudged up 9% to USD 3.4 billion from USD 3.1 billion and theoretical London market political and violence capacity increased by 25%, reflecting the greater appetite for risks in this product area. The maximum amount of capacity for both terrorism and political and violence capacity deployed depends on country/city accumulation factors and pricing and can be as low as 30% of theoretical total market capacity.

<table>
<thead>
<tr>
<th>Year/product line</th>
<th>Terrorism</th>
<th>Political Violence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 2015</td>
<td>USD 3.1 billion</td>
<td>USD 1.2 billion</td>
</tr>
<tr>
<td>Q1 2016</td>
<td>USD 3.4 billion</td>
<td>USD 1.5 billion</td>
</tr>
</tbody>
</table>

Split of terrorism capacity by market/carrier

**Syndicate**
- Various Lloyd’s
- Chartis/Lexington
- Arch
- Ace European
- Axis Specialty
- Hannover
- Hiscox USA
- Lancashire Insurance
- Montpelier Re
- Starstone Insurance
- National Indemnity Co.

**Absolute Max Line (m)**
- USD 1,450
- USD 250
- USD 25
- USD 50
- USD 200
- USD 50
- USD 100
- USD 200
- USD 50
- USD 40
- USD 1,000
- USD 3,415

US

2015 trends and 2016 outlook

The absence of a major US terrorism event since the 9/11 atrocities, coupled with an increase in market capacity, has resulted in an increasingly competitive market. However, the location of risk and the demand for coverage in metropolitan areas has impacted on the available capacity. The accumulation of insurance carriers’ exposures in cities such as New York, Chicago, Houston and San Francisco is particularly congested.

With the renewal of Terrorism Risk Insurance Act (TRIA) in early 2015, a number of organisations have chosen to purchase the TRIA product despite the fact that the US government is yet to certify an act of terrorism against it. An example is the Boston Marathon bombings in 2013. While the attack was not classified as an act of terrorism under Terrorism Risk Insurance Program Reauthorization Act’s requirements, the event was described to reporters as an “act of terrorism” by President Barack Obama and several law enforcement officials and representatives creating uncertainty as to the value of TRIA cover.

This fundamental uncertainty with TRIA encouraged many organisations to more actively consider stand-alone terrorism insurance products which do not have the same certification parameters as TRIA and provide broader political and violence coverage. These market tried and tested policies have paid out on numerous large terrorism claims globally and are seen to remove the coverage gap risk of TRIA, which is important for US buyers.

Without a market changing event we anticipate that rates will continue to trend lower in 2016, with only risks located in the small number of US cities with critical aggregate restrictions experiencing terms softening at a slower speed than risks located in other areas on the US.
UK

2015 trends and 2016 outlook

Following the 2015 Paris and 2016 Brussels attacks, UK companies are recognising a broader spectrum of potential impacts from mass-casualty terror attacks. This has led to an increase in the demand for consulting services to review threat levels and ensure that existing coverage is reflective of the potential impacts could be experienced on a client by client basis.

Whilst 2015 did not see a marked reduction in the threat in the UK, the absence of a major incident meant that rates continued to drift downwards during the year with average rate reductions in the -3% to -8% range, depending on the risk profile.

This would normally be in excess of a 10% reduction that the client would receive from the government scheme, Pool Re.

With the terrorism threat constantly in the news, we are also observing risk managers adopting a more cautious view on policy coverage and many are now seeking alternatives to Pool Re when they would not have previously done so. As they cast their nets more widely, risk managers have expressed surprise at the lower rates and broader policy coverage that is now available from the stand-alone terrorism and political violence market, be it terrorism liability products or securing adequate business interruption coverage via a loss, including some forms of non-damage business interruption.

EMEA

2015 trends and 2016 outlook

Across EMEA, the threat from terrorism is very real and still evolving. There is significant uncertainty about the full scope of capabilities of terror groups operating in these regions (armed attack, high explosive attack, chemical attack, or cyber), as well as the ability of states to counter the planning and deployment of actual attacks. Many companies in France and Germany are responding by developing more articulate risk transfer and mitigation approaches to make best use of premium spend, and there is increasing awareness of the benefits of political violence coverage for elements of international portfolios. Scandinavian countries have shown increasing appetite for property terrorism coverage, recognising that international terrorism has the potential to reach out to Norway, Denmark and Sweden.

Despite local regional conflict in MENA and deteriorating security environments on the Arabian peninsula, there remain opportunities for significant, double digit rate reductions on renewal. In “distressed” countries appetite and capacity remains limited and reductions possible on renewal are limited; a close broker-client strategy and liaison are needed to deliver the desired coverage in Yemen, Lebanon, Syria and Iraq in particular. Egypt is anticipated to present increasing challenges for coverage as 2016 progresses.

There is increasing appetite for the flexibility of stand-alone coverage options for domestic and especially for international property portfolios. The demand for niche products, servicing the needs of specific companies and industries exposed to terrorism (that address property as well as casualty and liability impacts), is growing though not as rapidly as in the UK.

Middle East review

2015 saw continued increases in exposure to terrorism and political violence across the Middle East and North Africa (MENA). This was driven by Islamic State (IS) actions and the active involvement of regional powers in response to the IS threat. Uncertainty about increasing IS activity and the wider impact of Saudi, Iranian and potentially Turkish involvement will continue across the MENA region in 2016. Countries of particular concern will not change from: Algeria, Libya, Egypt, Syria and Iraq, with neighbouring countries being at risk from IS attempts to “franchise” its operations beyond its current areas of focus; this is despite the improving efforts to counter IS in Iraq and Syria. While generally terrorist efforts continue to focus on mass casualty events, property and assets remain at risk with political violence increasingly providing the coverage required for the regional exposure.

Europe review

2015 saw the most significant terrorist attacks within Europe for several years. The Charlie Hebdo and subsequent November attacks in Paris illustrated the broader spectrum of potential impact resulting from mass casualty attacks: non-property damage business interruption, liability, employees (and public) suffering casualties and death. The threat and potential additional impact will continue into 2016. Increasingly, organisations are likely to consider a broader coverage, across a number of lines in order to deliver an appropriate terrorism insurance programme.

Europe 2015 attack by industry sector

<table>
<thead>
<tr>
<th>Industry</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail</td>
<td>17%</td>
</tr>
<tr>
<td>Financial</td>
<td>33%</td>
</tr>
<tr>
<td>Oil &amp; Gas</td>
<td>4%</td>
</tr>
<tr>
<td>Telecoms</td>
<td>9%</td>
</tr>
<tr>
<td>Utilities</td>
<td>3%</td>
</tr>
<tr>
<td>Construction</td>
<td>3%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>8%</td>
</tr>
<tr>
<td>Mining</td>
<td>1%</td>
</tr>
<tr>
<td>Other business</td>
<td>14%</td>
</tr>
<tr>
<td>Other</td>
<td>31%</td>
</tr>
<tr>
<td>Other</td>
<td>3%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

Middle East 2015 attack by industry sector

<table>
<thead>
<tr>
<th>Industry</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail</td>
<td>32%</td>
</tr>
<tr>
<td>Financial</td>
<td>14%</td>
</tr>
<tr>
<td>Oil &amp; Gas</td>
<td>1%</td>
</tr>
<tr>
<td>Construction</td>
<td>3%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>8%</td>
</tr>
<tr>
<td>Mining</td>
<td>1%</td>
</tr>
<tr>
<td>Other business</td>
<td>14%</td>
</tr>
<tr>
<td>Other</td>
<td>31%</td>
</tr>
<tr>
<td>Other</td>
<td>3%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Risk Advisory Group
The tables below show the split of underwriters of industries attacked in 2015:

Structured portfolio solutions (SPS)

SPS have become common features of the terrorism and political violence markets, offering bulk buying credits for members with market leading coverage and significant automatic follow lead capacity.

Aon offers two dedicated London SPS:

<table>
<thead>
<tr>
<th>Product</th>
<th>Alpha (Global SPS)</th>
<th>Genesis (United Kingdom SPS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terrorism capacity</td>
<td>USD 500 million</td>
<td>USD 300 million</td>
</tr>
<tr>
<td>Political violence</td>
<td>USD 250 million</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Both these SPS have bespoke underwriter rating models which can provide cost advantages in comparison to open market alternatives and are utilised by many terrorism and political violence clients.

Specialist political violence and terrorism products

In addition to the standard terrorism and political violence products, there is an increasing array of specialist niche products, with underwriters developing and launching new products on a regular basis, in order to accommodate the changing terrorism and political violence landscape.

These products usually offer capacity for a type of terrorism or political violence risk that is either excluded from standard covers or where there is an emerging or new niche risk to be covered. Below are descriptions and capacity details from four of the most established:

**Nuclear, Chemical, Radiological and Biological Coverage (NCBR)**

- Standalone terrorism NCBR product offered by a limited number of markets
- Capacity approximately USD 200 million
- This product covers cost of cleanup following the insured event
- NCBR remains a standard exclusion in the Terrorism market

**Threat Product**

- Currently available to Europe and US clients
- Responds as result of a threat if the insured’s premises are evacuated, staff or the public are prevented from leaving the premises or access to your premises is prevented by order of a civil or military authority
Terrorism liability, third party and employers (T3L/T3EPL)

- Commonly purchased by hotels, retail and conference
- Coverage provided should an employer be found to be negligible and subsequently faces litigation following a terrorism event
- Capacity approximately USD 500 million
- Currently a pertinent topic in the market, following the Westgate attacks in Nairobi, October 2013

Cyber terrorism

- Offered by a limited number of markets
- Set to relaunch in 2016 and offer:
  1. USD 350 million per risk capacity
  2. Property damage and business interruption cover
  3. Restoration for the digital assets
  4. Loss mitigation
  5. Bodily injury
  6. Environmental liability
  7. Crisis management
  8. Threat extortion

Contact

Vlad Bobko  
CBO, Head of Specialty  
+44 (0)20 7086 4834  
vlad.bobko@aon.co.uk

Scott Bolton  
Director, Terrorism  
+44 (0)20 7086 8111  
scott.bolton1@aon.co.uk

Richard Sawyer  
Associate Director, North American Terrorism  
+44 (0)20 7086 6707  
richard.sawyer@aon.co.uk

Julia Dickson  
Broker, Counter Terrorism  
+44 (0)20 7086 0733  
julia.dickson@aon.co.uk

Appendices
Appendices

2015 and historical natural disaster event data

Top 10 global insured loss events 2015

<table>
<thead>
<tr>
<th>Date(s)</th>
<th>Event</th>
<th>Location</th>
<th>Deaths</th>
<th>Economic Loss (USD)</th>
<th>Insured Loss (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 16-22</td>
<td>Winter Weather</td>
<td>United States</td>
<td>30</td>
<td>3.3 billion</td>
<td>2.1 billion</td>
</tr>
<tr>
<td>May 23-28</td>
<td>Severe Weather</td>
<td>United States</td>
<td>32</td>
<td>3.8 billion</td>
<td>1.4 billion</td>
</tr>
<tr>
<td>December 26-30</td>
<td>Severe Weather</td>
<td>United States</td>
<td>46</td>
<td>3.0 billion</td>
<td>1.4 billion</td>
</tr>
<tr>
<td>December 22-31</td>
<td>Flooding</td>
<td>United Kingdom</td>
<td>N/A</td>
<td>2.5 billion</td>
<td>1.3 billion</td>
</tr>
<tr>
<td>April 7-10</td>
<td>Severe Weather</td>
<td>United States</td>
<td>3</td>
<td>1.7 billion</td>
<td>1.2 billion</td>
</tr>
<tr>
<td>March 29-April 1</td>
<td>WS Mike &amp; Niklas</td>
<td>Western &amp; Central Europe</td>
<td>9</td>
<td>1.4 billion</td>
<td>1.0 billion</td>
</tr>
<tr>
<td>Yearlong</td>
<td>Drought</td>
<td>United States</td>
<td>N/A</td>
<td>4.5 billion</td>
<td>1.0 billion</td>
</tr>
<tr>
<td>August 15-26</td>
<td>Typhoon Goni</td>
<td>Japan</td>
<td>70</td>
<td>1.8 billion</td>
<td>980 million</td>
</tr>
<tr>
<td>September 12-25</td>
<td>Wildfire (Valley)</td>
<td>United States</td>
<td>4</td>
<td>1.4 billion</td>
<td>925 million</td>
</tr>
<tr>
<td>April 18-21</td>
<td>Severe Weather</td>
<td>United States</td>
<td>N/A</td>
<td>1.4 billion</td>
<td>925 million</td>
</tr>
</tbody>
</table>

All other events 100 billion 23 billion

Total insured losses 123 billion 35 billion

1 Subject to change as loss estimates are further developed
2 Includes losses sustained by private insurers and government-sponsored programs

Global insured losses by peril

<table>
<thead>
<tr>
<th>Peril</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tornadoes</td>
<td>18</td>
</tr>
<tr>
<td>Flooding</td>
<td>14</td>
</tr>
<tr>
<td>Earthquake</td>
<td>9</td>
</tr>
<tr>
<td>Drought</td>
<td>7.2</td>
</tr>
<tr>
<td>Winter Weather</td>
<td>2.3</td>
</tr>
<tr>
<td>Heat Waves</td>
<td>2.3</td>
</tr>
<tr>
<td>Fungi</td>
<td>2.6</td>
</tr>
<tr>
<td>Diesel/Windows</td>
<td>2.6</td>
</tr>
<tr>
<td>Pests</td>
<td>4.3</td>
</tr>
<tr>
<td>Fishery</td>
<td>0.9</td>
</tr>
</tbody>
</table>

Total natural disaster events

Total events 338 326 328 193 175 232 277 253 235 248 326 298 281 300

Total events by region

<table>
<thead>
<tr>
<th>Region</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Americas</td>
<td>59</td>
</tr>
<tr>
<td>DMEA</td>
<td>63</td>
</tr>
<tr>
<td>APAC</td>
<td>36</td>
</tr>
<tr>
<td>10 Year Average</td>
<td></td>
</tr>
<tr>
<td>Americas</td>
<td>41</td>
</tr>
<tr>
<td>APAC</td>
<td>38</td>
</tr>
</tbody>
</table>
### Top 10 costliest global economic loss events (1950-2015)

<table>
<thead>
<tr>
<th>Date(s)</th>
<th>Event</th>
<th>Location</th>
<th>Economic Loss Actual (USD)</th>
<th>Economic Loss (2015 USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 11, 2011</td>
<td>EQ/Tsunami</td>
<td>Japan</td>
<td>210 billion</td>
<td>223 billion</td>
</tr>
<tr>
<td>January 17, 1995</td>
<td>Earthquake</td>
<td>Japan</td>
<td>103 billion</td>
<td>162 billion</td>
</tr>
<tr>
<td>August 2005</td>
<td>Hurricane Katrina</td>
<td>United States</td>
<td>125 billion</td>
<td>151 billion</td>
</tr>
<tr>
<td>May 12, 2008</td>
<td>Earthquake</td>
<td>China</td>
<td>85 billion</td>
<td>93 billion</td>
</tr>
<tr>
<td>October 2012</td>
<td>Hurricane Sandy</td>
<td>US, Caribbean, Bahamas, Canada</td>
<td>72 billion</td>
<td>74 billion</td>
</tr>
<tr>
<td>January 17, 1994</td>
<td>Earthquake</td>
<td>United States</td>
<td>44 billion</td>
<td>71 billion</td>
</tr>
<tr>
<td>November 23, 1980</td>
<td>Earthquake</td>
<td>Italy</td>
<td>19 billion</td>
<td>51 billion</td>
</tr>
<tr>
<td>July-December 2011</td>
<td>Flooding</td>
<td>Thailand</td>
<td>45 billion</td>
<td>47 billion</td>
</tr>
<tr>
<td>August 1992</td>
<td>Hurricane Andrew</td>
<td>United States, Bahamas</td>
<td>27 billion</td>
<td>45 billion</td>
</tr>
<tr>
<td>July/August 1998</td>
<td>Flooding</td>
<td>China</td>
<td>31 billion</td>
<td>44 billion</td>
</tr>
</tbody>
</table>

### Top 10 costliest global insured loss event (1950-2015)

<table>
<thead>
<tr>
<th>Date(s)</th>
<th>Event</th>
<th>Location</th>
<th>Economic Loss Actual (USD)</th>
<th>Economic Loss (2015 USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 2005</td>
<td>Hurricane Katrina</td>
<td>United States</td>
<td>66.9 billion</td>
<td>80.8 billion</td>
</tr>
<tr>
<td>March 11, 2011</td>
<td>EQ/Tsunami</td>
<td>Japan</td>
<td>35.0 billion</td>
<td>37.1 billion</td>
</tr>
<tr>
<td>October 2012</td>
<td>Hurricane Sandy</td>
<td>US, Caribbean, Bahamas, Canada</td>
<td>30.2 billion</td>
<td>31.0 billion</td>
</tr>
<tr>
<td>August 1992</td>
<td>Hurricane Andrew</td>
<td>US, Bahamas</td>
<td>15.7 billion</td>
<td>26.4 billion</td>
</tr>
<tr>
<td>January 17, 1994</td>
<td>Earthquake</td>
<td>United States</td>
<td>15.3 billion</td>
<td>24.8 billion</td>
</tr>
<tr>
<td>September 2008</td>
<td>Hurricane Ike</td>
<td>United States</td>
<td>15.2 billion</td>
<td>16.5 billion</td>
</tr>
<tr>
<td>June-December 2011</td>
<td>Flooding</td>
<td>Thailand</td>
<td>15.5 billion</td>
<td>16.2 billion</td>
</tr>
<tr>
<td>Yearlong 2012</td>
<td>Drought</td>
<td>United States</td>
<td>15.0 billion</td>
<td>15.7 billion</td>
</tr>
<tr>
<td>October 2005</td>
<td>Hurricane Wilma</td>
<td>United States</td>
<td>12.5 billion</td>
<td>14.8 billion</td>
</tr>
<tr>
<td>February 22, 2011</td>
<td>Earthquake</td>
<td>New Zealand</td>
<td>13.5 billion</td>
<td>14.5 billion</td>
</tr>
</tbody>
</table>

### IUA London member markets

#### Ordinary members
- Ace European Group Limited
- AIG Europe Limited
- Allianz Global Corporate Specialty SE
- Allied World Assurance Company (Europe) Ltd
- Arch Insurance Company (Europe) Ltd
- Aspen Insurance UK Limited
- Aspen Re UK
- Assicurazioni Generali S.p.A. (UK Branch)
- Aviva Insurance Limited
- AXA Corporate Solutions SA
- Axis Specialty Europe Plc
- Chubb Insurance Company of Europe SE
- Federal Insurance Company
- CNA Insurance Company Limited
- Endurance Worldwide Insurance Limited
- Ergo Versicherung AG
- Everest Reinsurance (Bermuda) Ltd
- Fidelis Underwriting Limited
- General Reinsurance Company
- Global Aerospace Underwriting Managers (GAUM)
- Berkshire Hathaway
- Mitsui Sumitomo
- Great Lakes Reinsurance (UK) Plc
- Hannover Rueck SE
- HDI Global SE - UK
- Houston Casualty Company London
- HSB Engineering Insurance Limited
- International General Insurance Company (UK) Ltd
- International Insurance Company of Hannover SE
- Lancashire Insurance Company (UK) Limited
- Liberty Mutual Insurance Europe Limited
- Markel International Insurance Company Limited
- Munich Reinsurance Company
- New India Assurance Company Limited
- QBE Insurance (Europe) Ltd
- QBE Re
- Royal & Sun Alliance Insurance plc
- Marine Insurance Company
- SCOR UK Company Limited
- Sirius International Insurance Corporation (publ)
- Starstone Insurance Limited
- Swiss Re Europe S.A, UK Branch
- Swiss Re International SE
- Tokio Marine Kiln Insurance Limited
- Tokio Millennium Re (UK) Limited
- Transatlantic Re
- Trans Re London
- Travelers Insurance Company
- W R Berkley Insurance Europe Ltd
- XL Catlin Insurance
- XL Catlin Re
- Zurich Insurance Plc
Affiliate members

• Bimeh Iran UK
• Catalina London Limited
• Pro Insurance Solutions
• Randall & Quilter
• Scyllogis Consulting
• Sequel Business Solutions
• Underwriter Insurance Company Limited
• Württembergische Versicherung AG

Associate members

• Eurasia Insurance Company JSC
• General Insurance Corporation of India
• Isle of Man Assurance Limited
• Mapfre Spain
• Mill Reasurers TAS
• Mitsui Sumitomo Insurance Co. Ltd
• Pool Reinsurance Company Limited
• Renaissance Reinsurance of Europe
• Samsung Fire & Marine Insurance Company of Europe Ltd
• Sunderland Marine Mutual Insurance Company Limited
• Taiping Reinsurance Co Ltd (was China International Reinsurance Co. Ltd)

Lloyd’s syndicates

• ACE Underwriting Agencies Limited
• Advent Underwriting Limited
• AEGIS Managing Agency Limited
• Allied World Managing Agency Ltd
• Amlin Underwriting Limited
• AmTrust at Lloyd’s Limited
• Antares Managing Agency Limited
• ANV Syndicates Limited
• Apollo Syndicate Management Ltd
• Arch Underwriting at Lloyd’s Ltd
• Argenta Syndicate Management Limited
• Argo Managing Agency Limited
• Ark Syndicate Management Limited
• Ascot Underwriting Limited
• Aspen Managing Agency Limited
• Asta Managing Agency Limited
• Atrium Underwriters Limited
• Barbican Managing Agency Limited
• Beaufort Underwriting Agency Limited
• Beazley Furlonge Limited
• Brit Syndicates Limited
• Canopus Managing Agents Limited
• Capita Managing Agency Ltd
• Cathedral Underwriting Limited
• Catlin Underwriting Agencies Limited
• Charles Taylor Managing Agency Ltd
• Chaucer Syndicates Limited
• Chubb Managing Agent Ltd
• Endurance at Lloyd’s Limited
• ERS Syndicate Management Ltd
• Faraday Underwriting Limited
• Hamilton Underwriting Limited
• Hardy (Underwriting Agencies) Limited
• HCC Underwriting Agency Ltd
• Hiscox Syndicates Limited
• Liberty Managing Agency Ltd
• Managing Agency Partners Limited
• Market Syndicate Management Limited
• Marketform Managing Agency Limited
• Mitsui Sumitomo Insurance Underwriting at Lloyd’s Limited
• Munich Re Syndicate Limited
• Navigators Underwriting Agency Limited
• Newline Underwriting Management Limited
• Novae Syndicates Limited
• Pembroke Managing Agency Limited
• ProSight Specialty Managing Agency Ltd
• QBE Underwriting Limited
• R&Q Managing Agency Limited
• RenaissanceRe Syndicate Management Limited
• S.A. Meacock & Company Limited
• Sirius International Managing Agency Ltd
• Starr Managing Agents Limited
• Starstone Underwriting Limited
• Talbot Underwriting Ltd
• The Channel Managing Agency Ltd
• Tokio Marine Kiln Syndicates Ltd
• Travelers Syndicate Management Limited
• Vibe Syndicate Management Ltd
• W R Berkley Syndicate Management Limited
Aon Client Treaty product sheet

Aon Client Treaty
Empowering results for clients using data & analytics

Developing the treaty
As part of our continued commitment to developing superior solutions for our clients, Aon is pleased to offer exclusive access to Aon Client Treaty.

Aon spent a considerable amount of time building the data and refined their Client Treaty, constructing analysis and modelling across expert data from over one million individual locations worldwide. Drawing on information from 64,000 policy transactions, 120 different classes of business, and 157 countries and territories, Aon created a platform that made Lloyd’s underwriters, backed by S&amp;P’s A+ rated paper, confident in assessing the risk portfolio and bringing underwriting rigor to the creation of their 3rd Aon Client Treaty.

Aon Client Treaty enables our clients to access 20% of pre-secured, unique Lloyd’s co-insurance capacity on any order placed through Aon’s Global Broking Centre (GBC) in London. This solution encompasses virtually every industry segment, product range, and geography underwritten in the London market.

Characteristics of the treaty
- Pre-secured capacity: Automatically provisioned to insurance capacity of 20% of any order placed in the London market through the GBC.
- Applies to all wholesale and retail clients, with the majority coming into force on 1 January 2016.
- Applies to business placed through the GBC in London.

Global scope
- Every industry segment underwritten in the London market, other than nuclear risks.
- Every class of insurance underwritten in the London market, other than political risk, trade credit, and certain minor exceptions.
- Every geography underwritten in the London market where Lloyd’s is licensed to do business.

Established process
- Capacity provisioned exclusively from Lloyd’s syndicates.
- Highly efficient claims agreement and settlement via the Lloyd’s Claims Scheme.
- A+ rated paper, backed by S&amp;P’s A+ credit rating.

Automated placement
- Immediately follows the pricing and placement of the lead underwriter for the London order.

Consistent coverage
- Automatically follows the pricing, wordings, terms and conditions of the lead underwriter for the London order.

Aon Client Treaty applies sophisticated data & analytics and portfolio underwriting techniques to deliver a highly differentiated solution for our clients.

About Aon
Aon plc (NYSE:AON) is a leading global provider of risk management, insurance brokerage and reinsurance brokerage, and human resources solutions and outsourcing services. Through its more than 69,000 colleagues worldwide, Aon unites to empower results for clients in over 120 countries via innovative risk and people solutions.

For further information on our capabilities and to learn how we empower results for clients, please visit aon.com.

© Aon plc 2016. All rights reserved.

The information contained herein and the statements expressed are of a general nature and are not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information and use sources we consider reliable, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

Aon UK Limited is authorised and regulated by the Financial Conduct Authority.

FP GBC00011
aon.com
About Aon

Aon plc (NYSE:AON) is a leading global provider of risk management, insurance brokerage and reinsurance brokerage, and human resources solutions and outsourcing services. Through its more than 72,000 colleagues worldwide, Aon unites to empower results for clients in over 120 countries via innovative risk and people solutions. For further information on our capabilities and to learn how we empower results for clients, please visit: http://aon.mediaroom.com/

Aon UK Limited is authorised and regulated by the Financial Conduct Authority

© Aon plc 2016. All rights reserved.

The information contained herein and the statements expressed are of a general nature and are not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information and use sources we consider reliable, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

www.aon.com

FP: GBCPC0002