

# On the Frontline

The 360° view of risk

Crawford & Company®  
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## First on the scene

Counting the  
cost of Tohoku





### On the FrontLine

This May, Crawford & Company® celebrates its 75th anniversary. 1941 saw Jim Crawford's vision for an independent loss adjusting firm become a reality, and since then the firm has gone from strength to strength.

In this issue's *Crawford Matters*, we speak to 'veteran' employees Bud Trice and Tim Wolfe about how the firm has evolved. Another Crawford® stalwart is Mike Reeves, head of global technical services. His 40 years in the industry have been about the people. "I have made so many good friends," he says, "from different parts of the world. Living and working in different cultures has enriched my life above and beyond anything I could have imagined."

When discussing what has changed most in our industry during this time, Mike believes the biggest change has been "the meaning of time itself". He adds: "This is wider than just insurance but the need for instant communication at all stages throughout the claim, particularly in a major loss, is now critical."

For Crawford, much has also changed over the last 75 years – and perhaps this issue of On the FrontLine reflects that. Topics range from business interruption and the Rio Olympics, to environmental damage; from supply chain losses to the global insurance gap, demonstrating just how diverse and far-reaching our organization has become.

**Kara Grady**  
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Crawford & Company

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## 06

**All set for the best show in town**  
The planning and risk management that goes into ensuring the 2016 Rio Olympics kicks off without a hitch

## 17

**Guilty until proven innocent?**  
Why environmental damage losses are growing in severity as unforgiving regulators take polluters to task



## 04

**News**  
Counting the cost of U.S. tornadoes, how oil prices are shaping political risk, the risks and opportunities of 3D printed buildings and London moots possible Brexit impact

## 10

**First on the scene**  
Five years on from the Tohoku Earthquake and Tsunami the industry remembers a catastrophe like none other

## 21

**Adjusting to a new world**  
Crawford CEO of international operations Ian Muress considers the role of the loss adjuster in an ever changing world



## 24

**4D: The Protection Gap**  
Four industry experts offer their views on how to close the gap between economic and insured losses

## 26

**Identifying the weakest link**  
How large and complex supply chain losses are highlighting issues with insurance coverage and claims



Tornado hits Washington, Illinois, America - Nov 18, 2013

U.S.

## Monster tornadoes cause widespread devastation

SEVERE U.S. STORMS LEAD TO THE GREATEST NUMBER OF FEBRUARY TORNADOES SINCE 2008, CAUSING DEVASTATION AS FAR NORTH AS VERMONT

On February 22 and 23 a severe weather outbreak in the South and Mid-Atlantic U.S. resulted in 31 tornadoes. The twisters damaged over 340 buildings and mobile homes, causing 111,000 power outages and killing at least seven people across more than a dozen states.

What was unusual about this particular event was how far north the severe weather stretched, according to RMS manager Jeff Waters. "Severe thunderstorm watches were in effect as far north as Vermont and parts of Massachusetts," he said. "The last time western Massachusetts experienced a severe thunderstorm warning was in February 1997."

"Some may also be wondering about the connection between the strong El Niño phase currently taking place in the Pacific, and the severe weather," he continued. "The El Niño-Southern Oscillation (ENSO) phase may have some influence on the frequency of tornadoes, but it's difficult to differentiate the large factors from the many small-scale factors. El Niño does not, by itself, spark tornadoes or severe weather outbreaks."

While historically it is Atlantic hurricanes

that have caused the largest U.S. catastrophe claims, severe weather and tornadoes have been responsible for the most costly events in recent years. Last year's El Niño was credited for another benign hurricane season in the North Atlantic, however a February winter storm in the U.S. was the largest loss-making natural disaster of the year, resulting in insured losses of over \$2bn, according to Swiss Re Sigma.

Insured losses due to natural disasters in the U.S. in 2015 totaled \$16bn, according to Munich Re. Severe thunderstorm losses, at \$9.6bn, accounted for about 60% of the total with two tornado outbreaks in December in the southern states contributing to some of the highest losses.

Annually, about 1,000 tornadoes are reported nationwide in the U.S., according to the National Oceanic and Atmospheric Administration. Tornado intensity is measured by the enhanced Fujita (EF) scale of 0 through 5. During February's outbreak at least six tornadoes were rated EF2 or stronger, with at least EF3 damage from a tornado that hit near Pensacola, Florida. ☉

U.K.

## London insurance market considers potential impact of Brexit

With the U.K.'s EU referendum rapidly approaching, London market insurers and reinsurers are considering the possible implications if the U.K. populous votes to leave the EU, a potential outcome that has been dubbed Brexit. The considerable uncertainty such an outcome would create could leave U.K.-based re/insurers at a disadvantage vis-à-vis their EU counterparts, according to AM Best.

"Insurers should identify the potential consequences of operating without the EU financial services 'passporting' scheme," said Catherine Thomas, director, analytics.

She added: "Pulling out of the EU could result in the need for U.K. insurers to establish an EU-domiciled subsidiary to underwrite business there."

The London and Lloyd's market has attracted considerable investment in recent years, with total income of £48.22bn in 2014, according to research by the International Underwriting Association (IUA). However, there is a recognition that the market must continue to innovate and evolve in order to maintain its competitive position relative to other international hubs.

This is particularly critical with the threat of Brexit looming, according to the IUA. "If the U.K. were to exit, insurers and reinsurers from countries such as the U.S. and Japan might be obliged to choose other European centers over London in order to passport into the EU," it said in a statement last year.

The market as a whole must work together according to Dave Matcham, chief executive of the IUA. "Individual companies are, of course, pursuing their own research and development projects. But the question of how London can encourage innovation and attract the entrepreneurial talent to deliver new products is one which has market-wide implications."



Global

## Low oil prices exacerbate political risk in oil-dependent markets

Plummeting oil prices are at the top of political risks facing emerging market investors in 2016, according to the Aon Political Risk Map 2016. This is particularly the case for states that are already fragile, such as Iraq, Libya, Russia and Venezuela.

However, countries with more resilient institutions and greater foreign currency reserves will be better placed to minimize sovereign non-payment and exchange transfer risks, including the members of the Gulf Cooperation Council (GCC) as well as Colombia, Malaysia and Kazakhstan. Still, increased security risks in neighboring countries could prove an issue.

Ongoing conflicts create heightened levels of political violence and present further risks, according to the risk report. The effectiveness of extremist groups in the Middle East and Africa, including ISIS and Boko Haram, taking advantage of porous borders and weak institutions will also be amplified in afflicted countries, many of which are also feeling the effects of low oil prices.

"Oil-producing nations must find substitutes for lost revenues which will put pressure on their corporate sectors at a minimum through tax regime adjustments and at the extreme through IPOs of state-owned enterprises," said Matthew Shires, head of Political Risk for Aon Risk Solutions. "With no sign of oil prices returning to previous levels, turbulence in many oil producing states is likely to continue, and could worsen."

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A stand-alone villa, which has been 3D printed by WinSun Decoration Design Engineering Company

Asia

## Construction firms turn to 3D printing

Faced with a growing skills gap in many countries, construction firms are increasingly adopting new technology to help take the strain, with the increasing use of robotics, autonomous machinery, drones and even 3D printing. However, it is uncertain what risks may be associated with 3D printed buildings.

In January 2015, Chinese firm WinSun Decoration Design Engineering Company built ten homes using 3D printing. It went on to "print" a five-storey structure in Suzhou Industrial Park, adjacent to Shanghai, currently "the world's tallest 3D-printed building". Like previous buildings, the walls are comprised of a mix of concrete and recycled waste materials, such as glass and steel.

Italian engineering company WASP recently showcased a record-

breaking 39 foot tall 3D printer called the Big Delta, which could be utilized for similar projects in the future. Japan's infrastructure ministry has shown significant interest and is hoping the technology will help resolve its construction labor shortages, caused by an aging workforce and the global recession.

However, the technology is in its infancy and there is some concern over whether 3D-printed structures can withstand the test of time and the elements. With layers of concrete drying at slightly different rates there could be a higher chance of fracturing, for instance, a significant issue anywhere, but particularly for structures in earthquake zones.

Building codes are expected to evolve to respond and to ensure, where the technology is utilized,

that 3D printed buildings are safe. In the meantime, the insurance industry is taking a more cautious approach, explains John Roberts, UK Construction Industry leader at Willis Towers Watson.

"Additive Manufacturing (AM) or 3D Printing, has been around for a while now, and in theory anyway is intended to give increased confidence in component safety, operational quality and reduced downtime in the event of a loss," he told *On The FrontLine*. "However, in practice there is still concern regarding whether AM components should be considered as being prototypical or untried. This in turn gives rise to concerns over the availability of full cover being provided in respect to defective design, material and workmanship type losses" ☉

## News in brief

The Pentagon has invited outside hackers to test the cyber security of U.S. Defense Department websites in the first ever "Hack the Pentagon" pilot intended to identify flaws in their networks.

Combined claims from four catastrophes over the Australian summer - including three major bushfires - have so far reached AU\$15m, according to the Insurance Council of Australia.

The EU's eCall emergency initiative will require all new cars to be fitted with telematics devices by April 2018, offering insurers the opportunity to use the infrastructure, according to Fitch.

# All set for the best show in town

THERE IS LITTLE DOUBT THE OPENING CEREMONY THAT KICKS OFF RIO 2016 WILL BE A SHOW STOPPER... BUT A GREAT DEAL OF PLANNING HAS GONE INTO ENSURING THE SHOW GOES ON



It's been years in the planning and the fever and excitement is already building as Brazil prepares to kick off the 2016 Summer Olympic Games in Rio de Janeiro on August 5 in the Maracanã Stadium. But with concerns over the Zika virus and potential for social unrest in a country beset by economic and political upheaval, the event organizers are gearing up to respond to unpredictable and potentially disruptive forces.

At the time of writing, officials were reassuring athletes and visitors that Rio was a safe city to visit in spite of the Zika outbreak. However, given the suspected link between the mosquito-borne virus and microcephaly in babies, the advice from scientists was for pregnant women to stay away.

#### Kicking off with a bang

Three renowned film directors are the creative force behind the Opening Ceremony, which is promising to include lots of color, spectacle and pyrotechnics. Rio - a city renowned for its

## The organizers are keen to ensure nothing disrupts the Games, as the eyes of the world are on Brazil and Rio

beautiful beaches, colorful and electric carnival and iconic statue of Christ the Redeemer - is set to provide a stunning backdrop.

Fernando Meirelles, director of the City of God and The Constant Gardener, has however estimated Rio will spend one-tenth of what was spent on London's Opening Ceremony, given the Olympics are taking place "in a country where we need sanitation and education". Social unrest ahead of the 2014 World Cup in Brazil was a lesson the Olympic Organizing Committee is taking on board.



Given the suspected link between the mosquito-borne virus and microcephaly in babies, the advice from scientists was for pregnant women to stay away

The organizers are keen to ensure nothing disrupts the Games, as the eyes of the world are on Brazil and Rio. Staging what is arguably the world's biggest sporting event requires meticulous planning and high attention to risk management, security and business continuity planning.

A great deal of expensive equipment is involved in putting on a big show like the Games, particularly during the Opening and Closing ceremonies, including audiovisual and lighting equipment. Combine that with the huge crowds of people, visiting dignitaries, inevitable pyrotechnics and it is clear the exposures are significant.

In the case of the unforeseen happening, the organizers will ensure contingencies are in place. This includes having alternative venues on standby and necessary investment in logistics and infrastructure to ensure athletes can get from A to B. The Olympic rowing, for instance, will be held at Lake Rodrigo de Freitas, but this venue could also be called upon as a contingency for the sailing events, although fewer spectators would be able to attend.

"The Rugby World Cup in New Zealand is a perfect example," explains Elizabeth Seeger, a contingency underwriter at Hiscox. "About six months prior to the tournament opening, there was a highly destructive earthquake in Christchurch. They had the capacity in other venues to reschedule those matches, so they didn't actually have to use an entirely new venue but they could spread the Christchurch scheduled matches to the other existing venues."

#### Insuring for the unexpected

Helping to fund these back-up plans and provide indemnification if those fail, is the highly specialist contingency, or event cancellation, insurance market. Limits on policies for a major event like the Olympics can be greater than \$3bn. Terrorism is typically excluded, but can be written back in.

Major sports events have been disrupted in recent years, but rarely cancelled entirely.

An exception includes the Bahrain Grand Prix in 2011, which was cancelled due to the Arab Spring.

In the history of the Games only two have ever been cancelled. This was during the two World Wars, while in 1908 they were relocated from Rome to London. Usually, given the high level of contingency planning, changes can be made to ensure major events go ahead.

"We cover if the insured event is cancelled or abandoned or postponed due to a covered peril or a peril that is beyond the control of the insured," explains Seeger. "This includes perils like weather, flood, communicable disease, war, terrorism or a venue fire that's not caused by building problems."

"So it's an all encompassing policy for all those types of events you couldn't possibly imagine," she continues. "Things that happen that we can't even imagine, talking about them today."

Should Zika reach pandemic levels, this could in theory trigger such policies. "Pandemic is a cover we've looked at for many years because we've had problems with Foot and Mouth in the U.K. which impacted a lot of events in the countryside," explains Seeger. "We've also had SARS, avian flu and swine flu, all of which have caused quite a lot of events to be cancelled if they are in those territories."

"A major global pandemic could affect an event, whether the athletes travelling to the event, or actually closing down the venue itself," she continues. "But the current virus is different because it's caused by a mosquito bite, rather than something like SARS or avian flu where they had significant human-to-human transmission."

Numerous stakeholders are impacted if an event is delayed or cancelled. "Contingency insurance will indemnify anybody with a financial interest in the event - from the main sport's governing body through to the local organizing committee, the event sponsors and broadcasters," says Seeger.



## In the history of the Games only two have ever been cancelled. This was during the two World Wars

#### Terrorist threat

Because they are high profile in nature, events such as the Olympic Games can inevitably attract the attention of terrorists. The bombing of the 1996 Atlanta Olympic Games and tragic deaths at the 1972 Munich Olympics are examples of this.

Even the threat of terrorism can cause disruption. There were security concerns surrounding the 2014 Sochi Winter Olympics after two suicide bomb attacks in nearby Volgograd. Gay rights protesters also targeted the

Games, which were protected by over 37,000 Russian police and troops. With the 2018 winter Olympics due to take place in South Korea, safety is likely to be a concern given recent nuclear testing in North Korea.

In recent years, cyber risks have also become an issue. Operators of the 2008 Games in Beijing reportedly received 12 million cyber attacks a day. The Brazilian Cyber Defense Center announced last year that Brazil would have nearly 200 specialists, military personnel and technicians "working on cyber protection" during the 2016 Games.

In spite of these exposures, there is strong appetite to provide contingency insurance for the Olympics and other major events, says Seeger. "This is because they are so well run. When the countries or cities bid for these major games, the bid document they have to put together now covers all of those organizational and risk management issues. So we know in advance whether they need spare venues for instance... that will all be covered in the original bid document." ●

# 21st century terrorism

THE EVOLVING TERRORIST THREAT IS MAKING BUSINESSES RETHINK THEIR RISK AND INSURANCE STRATEGY



The rapid rise of terrorist organizations over the last decade is a symptom of today's highly globalized world

Terrorist attacks in Brussels, Belgium, March 23, 2016

The world is on high alert. In 2014, terrorist-related incidents rose 80%, while since the beginning of 2015, ISIL - or Islamic State - alone has been directly responsible or acted as the inspiration for over 60 major acts of terror. Ranging from coordinated assaults on highly-populated areas to "lone wolf" attacks, terrorist organizations are waging war on the world.

The rapid rise of such organizations over the last decade is a symptom of today's highly globalized world. While operating primarily from strongholds in Iraq and Syria, ISIL for example is able to conduct ground-based warfare, while also directing or motivating attacks globally via social media.

According to the 2015 Global Terrorism Index, deaths from terrorist incidents almost

doubled in 2014 from 18,111 in 2013 to 32,685. The worldwide cost of terrorism was \$52.9bn, an increase of approximately \$20bn on 2013 and a tenfold increase on 2000 (\$4.93bn). Further, the number of countries impacted by terrorist attacks increased by over 4% to 93 during the period. Figures are not yet available for 2015.

At a business level, the threat posed is causing growing corporate-level concern. According to the latest "Horizon Scan" report from the Business Continuity Institute, the perceived threat to businesses has increased considerably in the last year. Respondents elevated terrorism from 10th to 4th in the list of global threats to an organization - behind cyber attacks, data breaches and unplanned IT outages.

### Disrupting businesses

While the likelihood of a direct impact from a terrorist attack is extremely small, the repercussions of such events on business activities are becoming more pronounced. Business disruptions from terrorist-related incidents are becoming an increasingly common occurrence.

Recent events have resulted in city-wide shutdowns, transport disruption, heightened security procedures and event cancellation. Businesses in impacted areas have struggled to return to normality due to ongoing fears over similar attacks.

In many holiday destinations targeted by terrorists, the industry has ground to a halt. Even the threat of an event is sufficient to cause wide-scale closures, as seen in Decem-

ber 2015 when an email threat resulted in the shutdown of over 900 schools in Los Angeles.

While numerous government-sponsored pools are in place to help businesses cope with the financial fall-out from a terrorist attack, their effectiveness is being questioned due to changing terrorist tactics. Political risk analysts note a pronounced shift in focus from major buildings and assets to so-called "soft targets", with the aim to cause disruption and fear the primary motive.

### Appropriate risk transfer

The Marsh Terrorism Risk Report 2015 showed a 50% increase in organizations turning to standalone terrorism cover in 2014 - a fact attributed primarily to previous concerns surrounding the renewal of the U.S. terrorism facility TRIPRA, but also reflecting improved rates, more expansive coverage, higher limits, and longer contracts in the terrorism insurance market.

The insurance market has been quick to respond to changing dynamics, expanding the coverage remit of terrorism policies to factor in business interruption losses and additional expenses incurred in managing such events.

In 2015, Hiscox launched a standalone threat product to protect businesses against the loss of revenue due to a threat or hoax, providing non-physical damage business interruption cover. More recently, XL Catlin has boosted its standalone terrorism product by doubling available limits to \$200m and including specialized active assailant coverage.

Businesses should, however, consider their coverage needs very carefully. Recent events have created a grey area in terms of what constitutes a terrorist versus a politically-motivated attack. Companies may need to consider a combination of political violence and terrorism insurance to build the most appropriate protection.

As the terrorist threat evolves, so too will the insurance industry's response. At a time when businesses across the world are on high security alert, protection at all levels is a priority. ●

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# Disaster resilience in a warming planet

In the aftermath of COP21 and Davos 2016, the dual challenges of urbanization and climate change have risen up the agenda.

The World Economic Forum's (WEF) annual Global Risk Report identified climate-induced catastrophe as the greatest threat to the world economy in 2016. This challenge, combined with other macro trends such as urbanization and resource scarcity, was hotly discussed by policymakers in Davos in January and in the run up to last year's Paris agreement.

2015 was the hottest year on record, with the global average surface temperature about one degree Celsius above that of the pre-industrial era, according to the World Meteorological Organization. Nevertheless, losses from natural catastrophes were the lowest of any year since 2009, with overall losses totaling \$90bn, of which roughly \$27bn were insured.

Munich Re credited a strong El Niño for curbing hurricane activity in the North Atlantic, but noted it also brought major floods and heatwaves to many developing and emerging countries. Climate scientists at the Intergovernmental Panel on Climate Change (IPCC) think such weather extremes will become more common

as a result of an increase in the Earth's average temperature.

### Public private solutions

During the December 2015 meeting in Paris, U.S. President Barack Obama pledged \$30m of funding to support the expansion of regional catastrophe pools in Africa, the Caribbean and the Pacific. He stated the new contributions would "help vulnerable populations rebuild stronger after climate-related disasters".

Referring to these regional catastrophe pools, Torsten Jeworrek, member of Munich Re's board of management, stated: "These are pioneering solutions, especially as they also permit insurance for the countries that suffer most from the consequences of climate change, but have thus far not been able to organize cover."

An additional challenge for many catastrophe-exposed countries is rapid urbanization. By 2025, the developing world will be home to 29 megacities - cities containing at least 10 million inhabitants. In such vast, densely-populated urban centers there is likely to be a much greater impact from weather-related catastrophes, such as typhoons and floods.

The Rockefeller Foundation's 100 Resilient Cities (100RC) was set up to consider ways such

cities can become more resilient to the physical, social and economic challenges they face. During the WEF's annual meeting at Davos, 100RC announced a pre-funded infrastructure resilience partnership to help ensure vital recovery of critical infrastructure after disastrous events.

The scheme is set to be piloted in New Orleans - a city that was devastated by Hurricane Katrina in 2005 - with a focus on some of the city's infrastructure, including critical water and wastewater systems. The idea is that by planning ahead for major shocks and stresses, cities not only strengthen the resistance of their vital infrastructure but can also limit economic interruption in the aftermath of a catastrophe. Partners of the scheme include Swiss Re and utility firm Veolia.

"This partnership is a sign that the private sector better understands what cities need to build resilience, and cities will no longer have to make difficult and often inefficient decisions after experiencing a disaster," said Michael Berkowitz, president of 100 Resilient Cities. "They will know what is at risk, how it needs to improve, who will fix it, and where the funds will come from, all of which allows them to rebound more quickly."

### Climate Change: The Numbers

\$90bn

The total cost of natural catastrophes in 2015

29

The number of expected megacities in 2025

+1°

The global average surface temperature is currently about one degree above that of the pre-industrial era



First on the scene

# Remembering Tohoku

FIVE YEARS ON FROM THE TOHOKU EARTHQUAKE AND TSUNAMI, ON THE FRONTLINE SPEAKS TO THOSE WHO WITNESSED THE AFTERMATH OF THIS DEVASTATING NATURAL CATASTROPHE

Japan, Tohoku Region, Miyagi Prefecture, Ishinomaki, view of tsunami at Kitakami river

On Friday March 11, 2011 at 2:46pm local time, the seabed 45 miles east of the Japanese city of Tohoku started to shake. The cause of the shaking was two tectonic plates, located 15 miles below the surface, sliding 164 feet one under the other, releasing massive energy built up over centuries.

The result, a magnitude-9 earthquake that lasted for around six minutes, unleashed a biblical set of tsunami waves that roared into Japan's northeastern coast less than an hour later. With run-up heights of 128 feet (measured at Miyako City) the surge travelled six miles into Sendai province, eventually flooding an area of around 217 square miles.

Waves overtopped sea walls and destroyed infrastructure in their path, including the Fukushima nuclear power station. It's hard to imagine

the force of the Great Tohoku Earthquake, but it's known that the tsunami crossed the Pacific and broke off vast bergs of ice from Antarctica, 8077 miles away, the largest of which was the size of Manhattan.

The earthquake was even heard in space, with a ripple of sound sent through the atmosphere that was picked up by the Goce satellite 158 miles above earth. Down on the ground, the aftermath was appalling, even for a country well used to destructive earthquakes. The number of confirmed deaths stands at around 16,000 - most from drowning. Hundreds of people are still reported missing today.

**Total destruction**  
Dr. Kazuya Fujimura, vice president and managing director in the Tokyo

office of catastrophe modeler AIR Worldwide, was quick to the scene. "I visited Kobe after the earthquake in 1995, but simply could not believe that the damage resulting from the Tohoku earthquake was done by a natural disaster; there was no comparison with Kobe," he says.

"It looked like the photos I've seen of areas bombed in World War Two in the sense that so many of the buildings were completely destroyed. The level of destruction was significantly greater and the extent of the damaged area was so much bigger than anything I had seen before. Also, the amount of building debris and piles of wrecked cars was huge."

Dr. Fujimura remembers simply getting to the area was challenging. "We had problems with transportation because a lot of roads were still blocked by debris and closed, and there were many areas—other than around the Fukushima nuclear power plant—where people were not allowed to enter."

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## Waves overtopped sea walls and destroyed infrastructure in its path, including the Fukushima nuclear power station

"When we finally got there, the immediate concern was aftershocks and the risk of another tsunami occurring. A relatively minor issue was finding accommodation, because many hotels were closed due to the lack of power and water," he adds.

Crawford vice president, Global Markets Mike Patton, also a veteran of the 1995 Kobe earthquake, happened to be speaking at an industry conference in Bangkok on March 11 2011 when he was taken aside and told of the unfolding catastrophe – and then told he was now in charge of Crawford's operation in the stricken area.

Initially based in Tokyo because of the access problems, Patton recalls the eerie atmosphere that had fallen: "It was unusually quiet because so many people had fled south from Tokyo in fear of the fallout from Fukushima. Meanwhile there were no trains up country and the roads were impassable," he recalls.

## How a "megaquake" made modelers think again

K-net, the network of strong-motion seismographs installed at 1,000 locations around Japan, was down for one or two weeks after Tohoku. But when it was restored, modelers were able to obtain good quality data on the spatial distribution of ground shaking and the

temblor's intensity. "The biggest problem for us was that there was no model component with which to assess damage from the tsunami," says Dr. Kazuya Fujimura, vice president and managing director at AIR Worldwide Tokyo. "We could get the footprint of the inundation, but the depth

information only came some time later. We had to assume damage ratios in the footprint so we could estimate the tsunami damage." Tohoku changed everyone's thinking about Japan earthquake models, not least in the sense that large events that we have not seen before are always

possible, and that they can occur within our lifetimes. AIR Worldwide comprehensively updated its model following the disaster. "The Tohoku event was by far the most widely instrumented megaquake of all time and it provided an unprecedented wealth of ground

motion data, damage observations, and detailed claims data," Fujimura said. "It had important implications for our understanding of seismic risk in Japan and highlighted the importance of explicitly modeling earthquake-associated perils like tsunami and liquefaction."

With nearly half a million people rendered homeless, Japan's Reconstruction Agency worked tirelessly to restore services, industry and residential property. Putting the scale of the humanitarian disaster in context, 180,000 people are still waiting to be re-homed today.

Following the Level Seven meltdown of Fukushima Daiichi Nuclear Power Plant, four out of 11 municipalities have been decontaminated.

## Broad economic impact

The total economic damages from the earthquake and tsunami are now estimated at ¥25trn (about \$300bn), according to the Japanese government. Not surprisingly, insurance played an important part in the recovery and rehabilitation process from the beginning. Insurers are believed to have paid out in the region of \$40bn to date.

The insurance classes affected by the quake and tsunami include personal accident and life, residential and commercial property, marine and motor policies as well as business and contingent business interruption covers. To get an idea of the scale of the claims handling effort required, the insurer Tokio Marine alone has paid 200,000 domestic P&C claims, totaling ¥484.6bn (\$4.26bn).

Crawford's experienced team, assembled from experts around the firm's global network as well as Japan, and led by Mike Patton, soon realized they were in for the long haul, crisscrossing the country to help clients manage their claims.

"The core team had handled jobs in the

West Indies, Chile and in New Zealand, for example, and so they were used to the challenges posed," Patton says. "Getting to the sites was difficult and head offices were often on the other side of the country. We frequently needed interpreters on site."

The most complex claims issues revolved around business interruption. "Property claims were relatively straightforward but explaining to clients what costs could be claimed under BI was often immensely difficult," Patton explains. "It could take

months of negotiation and we had to be very patient often."

Crawford Asia Pacific CEO Andrew Bart says that many BI and supply chain claims were often slow to materialize and located outside Japan – in Europe, the U.S. and elsewhere. "Motor vehicle parts distributors in places like Australia, for example, suffered big losses," he says. "But Crawford has a global network and we can seamlessly handle claims across borders with consistent processes and interchange of information, which really helps the market."

As with the Thai floods, Tohoku highlighted the global interdependencies in the automotive, computer and pharmaceutical sectors especially, Bart explains. "From an insurance perspective it showed how insurance policy wordings need to be redrafted for insureds and how insurers must ensure that coverage meets the needs of a rapidly changing economy."

**Tokio Marine alone has paid 200,000 domestic P&C claims, totaling ¥484.6bn (\$4.26bn)**

Crawford is often asked by insurers to contribute to discussions on reviewing wordings, Bart reveals. "Frequently, we're involved in post event reviews of claims responses for particular clients. We work post event with broker, insurer and insured to find out what

worked and what didn't work so well."

Many of the risk professionals that lived and worked through the aftermath of the Great Tohoku Earthquake, found the experience cathartic but came away with a sense of enlightenment, according to Tokio Marine spokesman Shirou Sasaki.

"Unfettered by rules and manuals, everyone gave serious consideration to the best and necessary options, prioritized them and acted upon their own initiatives, demonstrating outstanding teamwork and a fast response," he explains.

"After witnessing the unprecedented tragedy, each and every employee as well as our agencies thought about what they themselves could do to help provide safety and security to customers in immediate need. It was an event that enabled our employees to fully realize once again the responsibilities an insurance company must fulfill for society." ●



Workers at earthquake struck Fukushima Nuclear power plant two years on from its meltdown, Japan - March 6, 2013

REX SHUTTERSTOCK

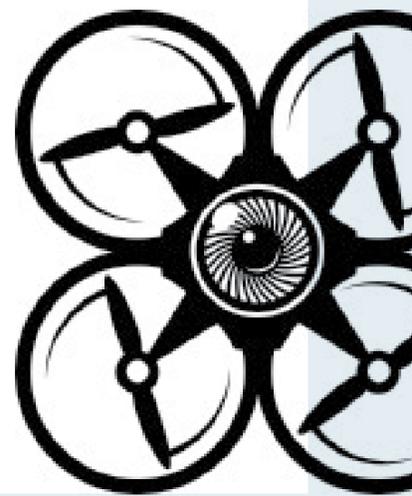
## Drones in the disaster zone

Physical access and exposure to radiation from the Fukushima nuclear plant were both key challenges in the immediate aftermath of the Tohoku earthquake and tsunami. Five years on, claims professionals will be able to obtain a bird's eye view of disaster zones thanks to big advances in drone technology.

Willis Re recently announced a strategic partnership with technology company Measure to advance the use of drones in the insurance industry. And an America Red Cross study, "Drones for Disaster Response and Relief Operations", found that drones can be used to identify properties and infrastructure that have been flooded or are in the path of rising water.

Aerial data can also be utilized to better understand the factors

leading to property damage and make recommendations for mitigating losses. Drones can provide access to real-time data, allowing insurers to collect more timely and accurate data to support the claims process, the report says.



Feature

# & Proactive & flexible

TEREX DIRECTOR OF RISK MANAGEMENT  
DAVE WINGO TELLS ON THE FRONTLINE  
HOW ITS GLOBAL TPA PROGRAM THROUGH  
BROADSPIRE® IS POSITIVELY IMPACTING ITS  
APPROACH TO EMPLOYEE HEALTHCARE CLAIMS



Dave Wingo, director of  
Risk Management, Terex

**When German employees were badly injured** in an auto accident in the U.S., Terex and its TPA advisors Broadspire took immediate action to ensure they received the best possible treatment and repatriated them back to Germany and their families. This is in spite of confusion at the time over which policies would respond to the claim.

“Bottom line, a number of coverages from travel accident to auto liability could respond,” says Wingo. “But because of the initial facts and the confusion over which program would take the lead, Terex with Broadspire, amended and prioritized the claim management protocols to address and ensure that medical, investigation and other resources were brought to bear to ensure these guys are getting the right care.”

“Ad hoc changes to prioritization of protocols to bring suitable resources to bear (i.e. field nurse care) is not something we would have been able to do when dealing with our coverages among various carriers,” he continues. “A lot of times carriers are too concerned about what coverage will apply and protecting their bottom line than to mitigate the overall loss. In these circumstances, when you know that someone will pay, either the company via deductible or the insurance carrier, the focus should be on mitigating the claim, looking after our team members, and then figuring out who’s going to be participating in the claim.”

Beyond the HR benefits of such an approach, the ability to be flexible and proactive in response to workplace injuries is not a purely philanthropic exercise. It also helps to miti-

gate claims and maintain a healthier workforce. This is important for a major employer like Terex Corporation.

The Connecticut-based organization employs over 20,000 people and has major business segments that include material processing and mining equipment, aerial work platforms and cranes. “The TPA allows us to take a different approach in comparison to the insurance company model,” explains Wingo. “This flexibility and proactive approach is a critical aspect that allows us to be holistic in how we’re dealing with numerous issues in claims.”

“On workers’ compensation versus employers’ liability, in collaboration with your TPA in India or Italy, many times, local operations will approach the incident as a business accident

Industrial harbor of  
Dusseldorf in the  
evening light, North  
Rhine-Westphalia,  
Germany, Europe



claim while it may be better served to address it as an employer liability claim,” he continues. “You have the flexibility to do that with a TPA like Broadspire, because they handle our claims for many lines, allowing us to adapt and adjust to meet the regulatory requirements as well as to meet the requirements of bringing better and more consistent solutions to our team members and overall claims management.”

He offers a textbook example where an expensive piece of machinery catches on fire, subsequently igniting a customer’s warehouse. “The third party liability will respond to the building while the piece of machinery, that is no longer ours but our customer’s, is left out in the cold.”

“With the TPA, and how we have set it up

with Broadspire, we can offer our customer a more holistic solution. Broadspire will not only deal with the warehouse claim but also the claim for the machine. Thus, allowing our customer to deal with one claim adjuster with one claim organization and not two adjusters with different strategies to adjust the claims.”

#### Rehabilitating injured workers

Taking immediate action to support injured workers can mitigate claims and build trust. In the U.K. this has extended to a medical management, or rehabilitation scheme, currently being carried out in partnership with Broadspire. This will supplement any medical care provided via the National Health Service with private rehabilitation care to help speed up

recovery and return to work.

“In the U.K. we have many carriers who say, ‘let’s just wait until the claim comes in,’” explains Wingo. “But you can have an incident and the claim might not be reported for 24 months. It’s important at the time of the incident or shortly afterwards to do the due diligence of a TPA going out and surveying and investigating the incident.”

“Depending on the circumstances of the incident, we also engage Broadspire’s rehab services throughout the U.K. with the focus to support team members by providing additional rehab to augment the governmental medical services without having the team member to put forth a claim,” he continues. “We believe by implementing this rehab program we’ve miti-

“With the set-up  
we have with  
Broadspire, this can  
help us offer a more  
holistic solution to  
our customer”

## A prototype for the future

**Mike Hoberman, chief client officer, Broadspire USA, highlights some of the future opportunities surrounding predictive analytics for workers' compensation**

Predictive modeling is a hot topic and you hear a lot of discussion on this. It's prevalent in the workers' compensation space as well as other classes. We have analysts and programmers who work on macro models that we use in the claims operation, as well as micro models, developed in collaboration with our large Fortune® 1000 or 500 clients.

We're currently developing an ability to use "micro triggers" which integrate predictive models and allow us to highly customize models for the client. This approach allows us to show adjuster activity related to return-to-work escalation, for instance. Return-to-work being a key initiative around workers' compensation. When your injured

workers are released to return to work, do you have a job to accommodate? Whether the employer can accommodate that release and bring them back to work has a financial impact... a positive one if they do and a negative one if they don't. It's an issue that employers in the U.S. grapple with. To be able to use the technology to put

the adjuster in the best position to make the most informed decisions is where we see the future. Client variables including operational issues, philosophies, jurisdictional issues etc., unions or employment level challenges will all be considered, allowing us to ensure these predictive models are highly customized to each individual client.



Mike Hoberman,  
chief client officer,  
Broadspire USA

gated and reduced the cost of our claims."

"And it's given our injured workers a more positive view on things," he adds. "They begin to understand that this is a proactive service to help them recover instead of waiting weeks or months to get proper rehab services. We strongly believe that if we do something in the first 24-48 hours, our team members will have a better chance of full recovery than waiting until the claim comes in several weeks later."

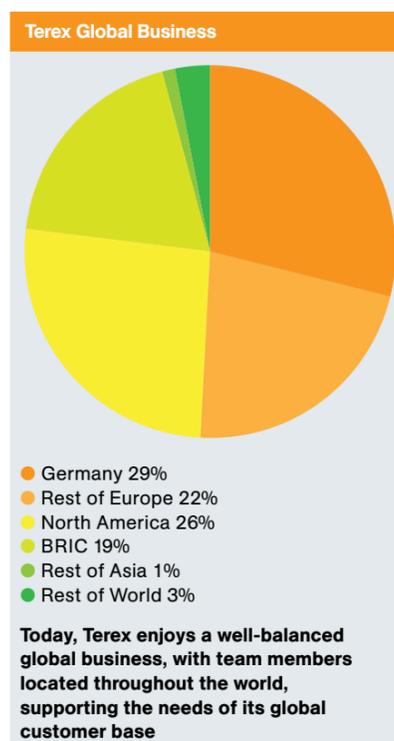
But there were doubts when the initiative was first broached with Terex's HR department. "They thought risk management was nuts!" laughs Wingo. "They said, 'basically you're going to invite a bunch more claims and this is going to be ridiculous'. The whole idea of being proactive in providing care and services at the critical time, to augment the socialized medical system, seemed to be spending more money, but in fact reduces the overall cost. Now our HR is very supportive."

"There were no big banners or announcements when we got started," he continues. "We slowly but surely introduced the service, telling an injured worker 'somebody is going to check on you to see what additional resources you need to get better'. We also had a nurse call and not a claims adjuster. If you have a claims adjuster they're thinking, 'This is going to be a claim'; but if it's a nurse, they think, 'This is somebody who is actually going to take interest in me.'"

In fact the scheme has been so successful that similar approaches are to be rolled out in Germany and Italy, where Terex has significant concentrations of staff. "We listen to

our clients and develop customized solutions to fit their global needs," says Mike Hoberman, chief client officer, Broadspire USA. "We take great interest in making sure our clients receive top quality care and use our extensive claims and clinical resources to drive innovative approaches for all types of claims."

Data has been a significant enabler, allowing the organization to aggregate and analyze



its global claims data to spot trends and pinch points. In the past, one issue was the high incidence of Vibration White Finger among staff working at a Terex facility in Motherwell, Scotland.

Vibration White Finger is an industrial injury which typically affects people who operate hand-held vibrating power tools, such as chainsaws, grinders and pneumatic drills for a number of years. "Through the data and information we gathered, we decided to change the type of tooling at our Motherwell operation and subsequently improved the overall situation there," says Wingo.

"When it comes to data and how we are aggregating the data, Broadspire includes some of our older programs, thus, allowing us to bring past and present data together," he continues. "We also take our data and put it into our enterprise system which enhances our ability to make better business decisions. It also allows us to spot trends."

"We are using this approach to data analytics in the U.S. in terms of how we're dealing with workers' compensation, particular injury and also for auto accidents," he adds. "We've also realized that because we have different segments, there are different trends within each individual segment."

"So, for instance one division has more of the small machinery, and they are typically dealing with soft tissue issues. But for large cranes it was more of the traditional accidental injuries. So we were able to facilitate changes in some of those operations because the data and analytics showed us where we needed to focus." 🍷

54

KODAK 400VC-3

55



Feature

# Adjusting to a new world

IAN MURESS DISCUSSES HOW THE ROLE OF THE LOSS ADJUSTER IS EVOLVING RAPIDLY TO MEET THE EVER-CHANGING RISK ENVIRONMENT AND EXPANDING CLIENT DEMANDS

**You have been in the loss adjusting sector for almost 40 years. How does the industry that exists today compare to the one that you joined?**

In some ways the industry is significantly different and in others it has hardly changed. If you take the high-end, large-scale complex claims, while we have seen enormous advances in terms of the levels of sophistication surrounding such claims and the tech-

nologies employed, our clients are still today buying on value and at its core this remains a skills-based purchase just as it was when I was a loss adjuster handling such claims.

What has driven change in the large claims arena is the constantly expanding risk environment. In response, the generalist loss adjuster of 40 years ago has morphed into the specialist of today. It is about being able to offer teams composed of task-specific professionals specializing in areas such as forensic accounting, or sectors such as oil & gas, cyber or environmental liability. Increasingly, we are segmenting how these large claims specialists position themselves to ensure precise alignment with our clients.

At the other end of the claims spectrum - the high volume, low value claims - the change has been enormous. The world of Amazon, next-day-delivery and self-service capabilities has dramatically altered client expectations. They are extremely sophisticated buyers and are constantly challenging

us as a business to deliver services that reflect this process-efficient, technology-reliant, fast-paced environment.

**The sector is also having to respond to tough market conditions and lower volumes of work. How difficult are conditions at present?**

The market is challenging, but we must embrace these conditions rather than fight them. The reality is that claims volume are significantly down due to a number of factors, ranging from higher deductibles down to the fact that more people today work from home reducing the risk of losses from electrical faults, or leaking pipes. Also, crime levels are at an all-time low. When I was a loss adjuster, an average claim for a domestic break-in was £5k; now most of the items that were being stolen have been replaced by your iPad.

But, as I said, we must embrace this new world. This has taken the form of expanding online capabilities, exploiting new technologies, introducing apps to boost self-service functionality as well as capitalizing on the latest in drone technology and satellite imagery to enhance claims-handling functions.

In a broader sense, we must also acknowledge the expanding scope of claims. Our role as loss adjusters is now much greater than simply “investigate, evaluate, negotiate and settle”. We are increasingly extending our reach along the supply chain to fulfill claims, which is taking us much more into contractor networks or Contractor Connection® as we call it.

So in response, we are capitalizing on new technologies, enhancing our processes, improving efficiency, and expanding our remit to meet changing client needs.

**You mentioned the impact of new technologies. How significant are these in advancing the role of the loss adjuster?**

If we start at the high-level data, technology is helping us unlock the power of Big Data, enhancing analytical capabilities and supporting our work on predictive analytics. At the coalface, we continue to develop new tools, investing more on this front than any other company in the sector. Adjusters are using the latest in hand-held technology, coupled with aerial and satellite equipment, to enhance the adjusting process and improve

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54



our data capture capabilities; while new apps are improving our client interaction. They are also making the most of the latest advances in video-streaming technology.

But it is important to remember that technology will only take you so far. For example, my 28-year-old son would be more than capable of downloading an app in the event of a flood in his flat, following the prompts to describe the claim and uploading footage of the damage via his iPhone. For my 80-year-old mother-in-law, it would be a completely different matter.

We must also continue to recognize the critical role of the on-site loss adjuster.

**In response, the generalist loss adjuster of 40 years ago has morphed into the specialist of today**

Where people have experienced a life-changing loss, whether a major flood or a devastating fire, what they want is someone knocking on their door, offering them support and advice, and essentially putting an arm around them during their time of need. New technologies play a central role in our ability to do our job, but when all your worldly possessions are floating in five feet of water what most people want is someone to be there with them to help them through it.

Yes, leading-edge technology contributes to increased efficiency and productivity, but technical, hands-on claims handling remains at the heart of what we do.

**How challenging is it to get ‘feet on the ground’ in sufficient numbers in the immediate aftermath of an event, particularly given the scale and location of events such as the Tianjin explosion, the Thailand floods, and the Christchurch earthquakes?**

Any loss adjuster of scale must be able to quickly move resources around the world, capitalizing on its global network to bolster local teams when events demand. The earthquakes

in Christchurch, New Zealand were catastrophic in every sense of the word. The overwhelming size of the event meant that we had to draw in expertise from the U.K. and Australia to help support our teams on the ground. In fact, our adjusters were on site for almost two years dealing with the resulting claims.

We also saw this during the U.K. floods in 2007, when our U.S. colleagues were able to support our U.K. adjusting teams; while more recently members of our U.K. team have been supporting our Australian teams in tackling a series of weather-related losses. And it was the same with the earthquake in Chile, the tsunami in Japan and the floods in Thailand.

This is routine for us. If you look at our Global Technical Services division, their ability to mobilize teams to tackle catastrophic events anywhere in the world at a moment's notice is central to their ability to deliver claims fulfillment.

The way I often describe our global capabilities is that we are able to join the dots.

We are a very cohesive, joined-up organization at both a local and global level. This is viewed as a key advantage by risk managers across the board, from insurance companies through to Fortune® 500 companies. In an increasingly interconnected world, we have to be able to maintain our position as a truly global provider.

**This increasing interconnectedness is of course creating the potential for significantly greater losses with global ramifications. What are the implications of this?**

Something which we are constantly having to consider is the overly used phrase “What if...?” If we take the recent U.K. floods, while these were significant events they were not on the same scale as those experienced in 2007. But what if they had been? When the Thames flood barriers were originally installed the view was that they would be lowered on average twice a year. Today they are lowered on average four times a month. What if these

defenses were to fail and London's Square Mile were to be flooded? The global economy would be impacted severely.

In fact, this is not so much a “what if” question, but rather a case of when. Records show that events of this nature are on the increase. We should therefore not be surprised if this time next month London is under ten feet of water – we've been talking about this as a realistic disaster scenario for the last decade.

As an industry, we can't sit back and simply hope that we are able to respond when such an event occurs. We have to be primed well in advance. At Crawford, we have a global bench strength of some 8,800 people spanning a range of specialist capabilities, an internal cohesiveness that strengthens our ability to respond, and a wealth of technological capabilities at our disposal. It is this depth and breadth that enables us to say with confidence that when - not if - something like this happens, we will be there.

**Looking specifically at Crawford, how is the company seeking to capitalize on market opportunities moving forward?**

At the most fundamental level, it is about evolving and enhancing our range of services and capabilities to ensure we can fully capitalize on the market potential we see. That involves leveraging our high-end technical capabilities with increased specialisation and segmentation; and further looking to develop these capabilities as part of a wider shift towards consultancy.

From a claims perspective, we need to create a more open platform to better manage networks in the claims process, as well as taking advantage of the decades of claims data that we have still to fully tap. Opportunities for increased TPA services will arise as a result of the continuing self-insurance trend and we must be able to respond to them. As I mentioned earlier, our reach is also extending further down the supply chain so we must develop more solutions to facilitate this.

Finally, we must recognize the changing demands of our clients, re-tooling our approach to align with ever-rising customer expectation, particularly amongst “Millennials”.

**Ian Muress is chief executive officer of International at Crawford**

54

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# Identifying the weakest link

LARGE AND COMPLEX SUPPLY CHAIN LOSSES ARE HIGHLIGHTING ISSUES WITH INSURANCE COVERAGE AND CLAIMS

In February 2015, a bitter labor dispute in the U.S. caused the sudden closure of major ports along the country's West Coast, disrupting imports, including supplies of critical parts to the automotive industry. The strikes were just another example of the potential for unexpected supply chain disruption, and for uninsured losses. Strike action is typically excluded from traditional property damage business interruption insurance.

Growth in international trade and a relentless drive for efficiency have dictated that supply chains become leaner, longer and more fragile. Storms, floods and earthquakes, as well as terrorism, infectious disease outbreaks and product recalls have all shown the potential to cause costly disruption.

"Supply chains are becoming more complex, extending into countries with higher natural catastrophe, political risk and health exposures," says Kieran Rigby, chief executive officer, Europe and Latin America at Crawford. "And we see this borne out in insurance claims every day."

Major loss events in recent years have helped raise awareness of supply chain risk, and this has translated into growing demand for risk transfer solutions, according to Ian Hasson, head of forensic accounting for Continental Europe, Middle East & Africa at Crawford.

"There is recognition of the growing complexity of supply chains and the impact of disruption - we now see much more contingent business interruption risk in global programs, with thought given to appropriate limits," he reveals.

Supply chain interruption is likely to become much more of a feature of insurance claims in the future as insurers look to accommodate supply chain risk in insurance. Bespoke supply chain policies are being developed by insurers to provide broader cover below first tier suppliers and to extend cover to non-damage triggers such as labor strikes, supplier insolvency, power supply disruption, cyber events, and government actions, such as the closure of air space.

However, as supply chain interruption losses have become more relevant, complex legal and quantification issues have become apparent when handling insurance claims. "As a business interruption loss adjuster, I see the difficulties of supply chain interruption for insurance claims, in particular the challenges of investigation and of establishing the cause, as well as how this relates to coverage under an insurance policy," says Hasson.

Traditional property damage insurance offers limited cover for supply chain risks, and this has been highlighted by a number of high-profile loss events. These have included

the 2011 Tohoku earthquake and tsunami in Japan, floods in Thailand, also in 2011, as well as last year's devastating series of explosions at the Chinese port city of Tianjin.

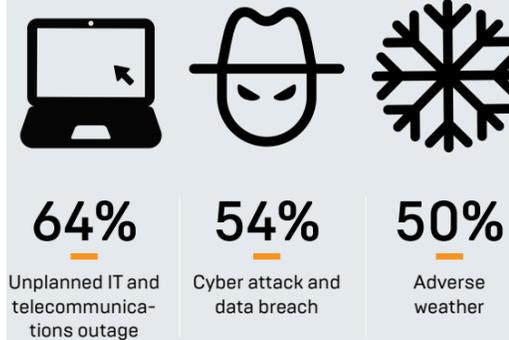
Such events have focused attention on the vulnerability of global supply chains and the need for contingent business interruption (CBI) insurance. Companies located thousands of miles away in the U.S. or Europe suffered large losses when suppliers in Japan and Thailand were put out of action.

Without CBI, many suffered large uninsured losses. And even when suppliers' extensions were in place in business interruption policies, they did not typically extend to second tier suppliers and beyond. Failure to name key suppliers in Thailand resulted in lower sub-limits applying.

Claims were also shown to be problematic where there were concurrent causes of loss, and/or an element of non-insured damage. For example, factories were affected, but they were already adversely affected by damage to companies further down the supply chain.

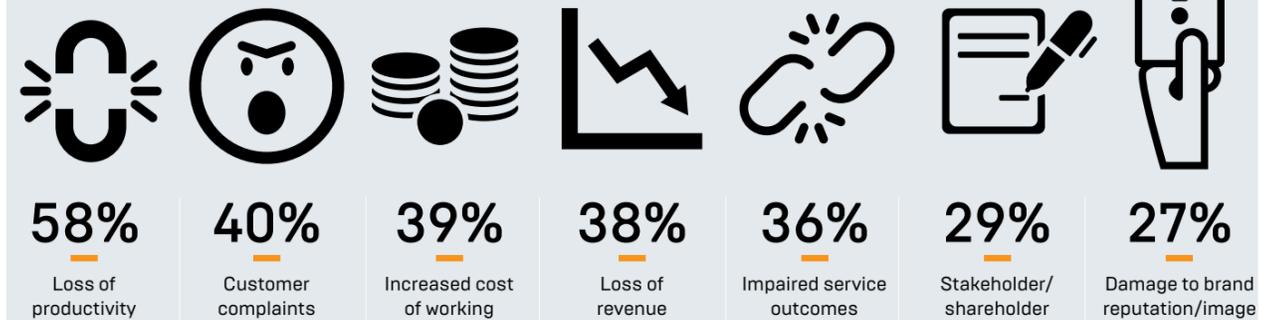
The Japanese earthquake and Thai floods of 2011 were also watershed moments for supply chain management, prompting many companies to reassess the resilience of their supply chains. Lessons continue to be learnt from more recent disruption. Last year's strikes at U.S. ports made many sup-

## Top three causes of supply chain disruption



Source: Business Continuity Institute - Supply Chain Resilience Report 2015

## Top seven consequences of disruption



Source: Business Continuity Institute - Supply Chain Resilience Report 2015

ply chain managers look to further diversify supply routes in and out of the U.S. by making greater use of ports on the East Coast.

Resilience does appear to be improving, at least among larger companies, says Rigby. However, despite some notable advancements in supply chain management, the risk of major disruption is not going to go away. "Unforeseen events will continue to cause business interruption, while the drive for efficiency and growing reliance on technology are likely to result in greater disruption when things go wrong," he warns.

Just-in-time supply chains have reduced companies' capacity to absorb disruption, with buffer stocks measured in just weeks, not months. At the same time, large manufacturers are concentrating their business on a smaller number of specialist suppliers, a trend made evident by recent product recalls.

Airbags recalled by one manufacturer in Japan affected 34 million cars in the U.S. during 2015 alone. A recall of cumin spice in the same year showed how recalls can ripple through the supply chain - the contaminated spice affected more than 100 brands and 769

## Percentage of financial impact insured

0% (losses were uninsured) - 56%
1%-25% - 16%
26%-50% - 8%
51%-75% - 5%
76%-99% - 5%
100% (losses were fully insured) - 10%

Source: BCI - Supply Chain Resilience Report 2015

products with different packages.

Causes of major supply chain disruption also appear to be widening, and increasingly involve non-damage events, like strikes and political risks. Two major terrorist attacks in 2015 caused significant disruption in Paris and other European cities as security services dealt with the threat.

Labor-related issues are also of growing concern. A 2015 investigation in Thailand revealed that migrants were being forced to produce fishmeal used in the global seafood supply chain, associating major retail brands with modern slavery.

Political risk consultancy Verisk Mapplecroft

Growth in international trade and a relentless drive for efficiency has seen supply chains become leaner, longer and more fragile

recently predicted that modern slavery would emerge as a major challenge for supply chains in the coming year. It warned that human rights abuses were deeply entrenched in some supply chains, yet transparency and oversight remains low below the first tier of suppliers.

Technology is also an emerging aspect of supply chain risk, and one that is likely to be a source of disruption in the future. "Cyber is just the latest threat to supply chains," says Rigby. "From the point of sale through to logistics and storage, supply chains are becoming more reliant on technology."

"Business interruption from cyber carries a high risk of financial loss as well as potential damage to a company's reputation," he adds.

It is clear that sources of supply chain interruption in the future may not be the same as they were in the past. From a business disruption perspective it is therefore essential organizations get to grips with the pinch points in their supply chains. And that they consider newer, more innovative insurance products, that will be triggered by a broader range of perils, including non-damage sources of interruption. ●

## 4D Question:

# What can be done to bridge the global insurance protection gap?

WE ASK FOUR INDUSTRY EXPERTS FOR THEIR VIEWS ON THE GLOBAL INSURANCE GAP



**Benedict Burke**  
Chief client officer,  
International, Crawford

**The gap between insured and uninsured** or economic losses – currently a ratio of approximately 1:4 – presents a key opportunity for property and casualty carriers.

Innovation is critical to bridging this gap. Markets must innovate, offering risk managers products that fully cater to their needs as these emerge, grow and evolve – products that they will buy at a given rate and deliver a successful return on R&D investment.

A good example is disease risk. Recently, Munich Re revealed it was developing epidemic-related property and casualty products, in partnership with Metabiota. Who might be interested in such products? Well, if I were an international hotel group or airline I would be very interested.

In order to innovate, you need to truly understand what the risk looks like. Previously, insurers have not sought to provide cover for areas such as cyber, pandemic, brand and reputation, for instance. This is primarily because of a lack of available data against a risk landscape that is forever shifting.

In the case of cyber, historically markets have struggled to provide insurable solutions for what is a key corporate risk, much of which is intangible. In the last 18 months, however, we have seen a significant increase in understanding and, with that, the creation of more innovative products with higher limits attaching, to the point where some now insure non-physical damage business interruption. These coverages are becoming available as loss data builds, allowing the industry to better understand the risk and encouraging necessary innovation i.e. moving the uninsured to an insured risk.

Data and analytics are critical to continued innovation. They allow insurers to measure and monitor their portfolio exposure to these risks, as well as their potential return on capital.



Innovation is critical to bridging this gap. Markets must innovate, offering risk managers products that fully cater to their needs as these emerge



**Tom Bolt**  
Outgoing director  
of Performance  
Management, Lloyd's

**Insurance plays a vital role in protecting** economies when disasters occur. In addition to indemnifying losses, the purchasing process often helps prevent losses and raise awareness of mitigation measures.

The Lloyd's City Risk Index presents the first ever analysis of economic output at risk in 301 major cities from 18 manmade and natural threats over a ten-year period. It shows that, over the next ten years, emerging economies will shoulder two-thirds of risk-related financial losses due to accelerating economic growth, with cities often highly exposed to natural catastrophes.

Economies across Latin America, Africa, and Asia currently contribute 40% to global GDP, yet represent only 16% of global insurance premiums, suggesting large-scale underinsurance. Lloyd's estimates there is a global insurance gap of around \$170bn premiums – which are vital to protecting economies from catastrophe exposures. This supports the case for more resilient infrastructure and institutions, and increased global access to insurance.

Insurance is a key source of capital after a catastrophe and supports the recovery and reduction of catastrophe impacts. Investment in risk management measures, including increasing insurance take up, could mitigate associated economic losses.

There are innovative measures insurers can develop to increase insurance penetration rates. A group of syndicates recently came together to offer specialist expertise and new insurance capacity to help developing economies build resilience against natural catastrophes, committing capacity of \$400m. Key to its effective deployment will be well designed risk sharing initiatives and risk diversification.

This type of approach is key to helping developing economies tackle underinsurance and improve their resilience against the economic impact of natural catastrophes, and will help close the underinsurance gap.

Insurance plays a vital role in protecting economies around the world when disasters occur – both manmade and natural catastrophes



**Eugene Gurenko**  
Lead insurance specialist  
at the joint World Bank/  
IFC Finance and Markets  
Global Practice

**On the supply side, one issue causing the** protection gap is catastrophe risk modeling. More models are becoming available, but for developing markets it remains a problem. Also, if catastrophe risk business is poorly regulated, and insurers are not required to reinsure properly for catastrophe risk, then the opportunity cost of writing this business is very low which leads to risk under-pricing and makes the business of catastrophe insurance unsustainable and unattractive.

On the demand side, there is considerable moral hazard in the system where governments and international donors find themselves in the business of acting as insurers of last resort, at no cost at all for those sustaining disaster losses. That supports public expectations that governments will offer disaster insurance compensation every time there is a disaster and as a result, few people are willing to buy catastrophe insurance.

Public private catastrophe pools, such as those in Turkey and Romania, are good examples of how we can close the protection gap. However, the creation of such pools must go hand-in-hand with compulsory insurance requirements introduced through national legislation. If such compulsion does not exist, experience shows the public simply will not take out insurance.

However, for me the main challenge lies on the primary side. How can we develop distribution channels, products and mechanisms which will enable us - through public private market solutions - to reach out to millions, possibly billions, of people who would never have considered buying insurance, unless it is made compulsory?

There are good examples out there of programmes where the cover has been added on to something that millions of people buy anyway, such as telecom services, water or other utility services. There are examples now for agriculture and weather risk related insurance covers, where such insurance products are automatically granted to people who spend a few dollars more on their telecom plans, for instance.

This is where the effort should really be in the next five to ten years: finding commercially viable, creative market solutions that reach out to tens of millions of people using new informational technologies. And this is the area of huge growth potential that should be promoted by the international development community, governments and the global insurance and reinsurance industries.



On the demand side, you discover there is considerable moral hazard in the system where governments and international donors find themselves in the business of acting as insurers of last resort



**Charles Whitmore**  
Managing director and  
head of Guy Carpenter's  
Property Solutions Group

**Guy Carpenter has been calling upon** the industry as a whole to help close the 'insurance gap' for a number of years. We estimate that in the past decade approximately 70% of catastrophe losses globally have not been covered which equates to some \$2.7trn.

The gap is most marked when considering catastrophe losses caused by natural perils, because these events are indiscriminate in terms of which sectors of the population and economy they affect. While the gap exists in both emerging and developing economies, it is most acute in the emerging markets where insurance penetration is still low.

Unfortunately, the gap continues to widen, primarily due to insurance penetration not keeping up with rapid asset growth and squeezed public budgets being unable to maintain funding for effective risk mitigation schemes.

At present, much of the financial burden this creates is absorbed by the balance sheets of governments, which are already stretched due to spiralling health costs and increasing social welfare needs in uncertain economic times. As a result, there is a chronic need for them to forego their role as the insurer of last resort. There must also be a change in mind-set by policymakers as current efforts focus on post-loss recovery and risk mitigation before the event.

Truly sustainable solutions for transferring risk from the public sector into the private re/insurance markets can only be created when there is a true meeting of minds between government and industry stakeholders. The private re/insurance market is much better equipped to price risk and therefore accept it at terms which it can assume for a longer period of time. This will enable government entities to de-leverage their balance sheets and ensure that adequate financial resource is aimed at areas where they have a specific responsibility.

Pool Re (UK Terror pool) and Flood Re (UK Flood pool) are excellent examples of ways in which the UK re/insurance industry is actively addressing the need to reduce the government's role, and instead utilise the industry's significant appetite to assume new sources of risk. We would hope that moving forward, such facilities will become increasingly common structures to help to bridge the insurance gap.



There must also be a change in mind-set by policymakers as current efforts focus on post-loss recovery and funding

In November 2015, the failure of a tailings dam in Brazil released a torrent of mud - waste from nearby mines - containing high levels of toxic heavy metals and resulting in the deaths of 17 people. In March, the companies involved had agreed to pay \$5.1bn in damages over 15 years for environmental and community damages.

Increasingly stringent environmental regulation is resulting in new exposures for organizations of all sizes and from a wide range of sectors, and resulting in increasingly expensive clean-up costs and fines. In addition, there is growing awareness of the reputational impact a company can face.

#### Setting the benchmark

“The U.S. probably led the way in terms of statutory regulation of growing pollution challenges,” says David Waller, U.K. head of environmental adjusting, major and complex loss team, Crawford. “As early as 1980, the U.S. Superfund legislation brought in a regime of strict liabilities for polluters and since 2009, all countries in the EU have had standardized legislation that largely follows the U.S. model, which has broadly been referred to as the Environmental Liability Directive (ELD).”

“This has, in many jurisdictions, broadened the scope of liabilities arising and brought in lower thresholds for intervention for the regulator,” he continues. “It’s also empowered regulators to act where previously under national frameworks, they couldn’t. Under the ELD the regulator can intervene if there’s contamination impact to habitats and species, for instance.”

With budgets reduced after the financial crisis, there is growing pressure on environmental regulators globally to identify polluters and hold them liable for clean-up costs. Where the original polluter cannot be identified, current site operators may find themselves liable.

There is also growing pressure from lobby groups and the public, particularly in North America, which has implications for suspected polluters and their senior management. Hitting the headlines currently is the water crisis in Flint, Michigan, where high levels of lead were discovered in drinking water after an outbreak of Legionnaire’s disease.

Another case grabbing the headlines is a methane leak which has forced thousands

#### Feature

# Guilty until proven innocent?

Why the stakes are so high when the polluter pays

**ENVIRONMENTAL DAMAGE LOSSES ARE GROWING IN SEVERITY AS UNFORGIVING REGULATORS TAKE POLLUTERS TO TASK**

from their homes in Southern California. Officials say it could be months before the leak is contained and there are also health implications, with Porter Ranch residents complaining of headaches and nosebleeds.

The U.S. has a very active environmental tort liability regime, demonstrated by the history of U.S. toxic tort claims. In this market, when an environmental disaster occurs, there is inevitably a greater likelihood of third-party claims arising.

“Environmental cases are increasingly more complex because damages are not as often related solely to direct economic losses, as they are in consumer cases,” says Lorna Lightfoot-Ware, director of Operations at Garden City Group, LLC “People are affected personally and economically.”

“In addition to economic losses, these cases can include injury to real or personal property or natural resources, loss of property value, loss of subsistence use of natural resources, and physical and/or emotional injury or death,” she continues. “And to make things even more complicated, each of the foregoing can have both short and long term implications.”

“Executing on remedies for such a broad range of losses can be challenging,” she adds.

**Right. Devastation after a dam burst, unleashing the tailings and polluted water from the Samarco mine in Brazil. November 2015**



“Increasingly, companies are establishing voluntary programs when the injury or crisis warrants a prompt and coordinated response. Voluntary programs bring claimants into the process early and provide immediate assistance.”

“Medical monitoring is very often a component in environmental cases because physical damages can be sudden or very gradual, potentially manifesting over decades, and encompass an emotional component as well,” says Lightfoot-Ware.

#### Growing cost of remediation

The requirement to return sites to their original state is complicated, increasingly expensive and not always insured under general liability policies.

“As with medical monitoring, environmental damages can arise immediately or endure an evolutionary process over an extended period of time affecting public and natural resources, as well as property values,” says Kristin Oates, director of special projects in Garden City Group’s New Orleans office. “Other contributing factors to the complexity of environmental cases are naturally occurring events.”

“In south Louisiana the coastline has been in a state of erosion for over a century resulting in an evolutionary process in the Gulf of Mexico ecosystem,” says Oates. “Another such example is the impact of climate change on the environment, as well as hurricanes and other natural disasters. Combined, these factors must be weighted relative to the effects of environmental damage.”

There are lots of complications involved in remediating contamination that has spread widely beyond a specific site, explains Waller. “If you have a spill and the site lies above a productive aquifer - a geological body that holds groundwater that may be used as a drinking water source - the contaminant can migrate downwards through soils and substrata to impact the water in the aquifer.”

“Once this has happened, the contaminated water will eventually and inevitably be drawn into the local borehole, contaminating all the drinking water supplied to houses and businesses in the vicinity... and it’s then very difficult or even impossible to put right, and a very significant financial liability is unavoidable,” he continues.

“Previously, a regulator would impose on an operator who polluted the environment the requirement to clean up the affected area as best science allows,” he adds. “That in itself can be a very expensive process. The new regulations impose further requirements that an operator identified as a polluter will have to clean up the part of the environment directly affected, but if that exercise only restores the affected site to say 60% of the pre-incident environmental amenity, the polluter will have to spend further potentially significant sums to make up the shortfall by benefiting the environment elsewhere.”

It’s not all bad news. Remediation methods are improving and whereas once the response may have been to remove and dispose of all contaminated soil, now there are options to break pollutants down in other ways, minimizing the impact of the clean-up.

“There are now many innovative ways of remediating inland pollution that can avoid the necessity to excavate all affected materials and take it to landfill sites,” says Waller. “There are various options for in situ and ex situ treatment, and it is important to recognize that a successful remediation does not need to remove every last drop of contamination.”

“To ensure best possible outcomes, it is important to quickly and fully understand the nature and extent of environmental risks arising from a given event and to engage with the regulators and any stakeholders to identify and manage expectations and ensure the right remediation options are implemented,” Waller continues. “Conversely, it is equally important to avoid inappropriate ‘corner-cutting’ in a remediation scheme, as this can involve projects having to be re-opened following premature closure, often with much more significant cost and reputational damage.”

Once considered an exposure primarily for heavy industries, claims for environmental damage are increasingly being made against companies from all sectors. This includes schools, transportation companies, small manufacturers and landowners.

“The market has recently seen some interesting new environmental challenges,” says Waller. “Among these have been well publicized incidents involving contamination allegedly created by members of the traveling community, leaving behind contamina-



tion issues when they leave temporary sites. The practicalities for a regulator pursuing a recovery against the travelers are prohibitive so the statutory liability to clean up tends to be imposed, under a fall back mechanism in the legislation, on the unfortunate landowner. Where certain contaminants (e.g. asbestos) are involved, the costs can be very significant.”

#### Mitigating reputational harm

In Canada, recent complex and costly environmental damage claims have primarily stemmed from heavy industry. As in Brazil, tailing dam failures have been behind some of the more high profile claims.

“A significant proportion of Canada’s GDP still comes from primary industry - oil, petrochemicals, timber, fishing, mining etc,” says Glenn Nadworny, executive general adjuster for Crawford Global Techni-

cal Services®, based in Vancouver. “Those types of operations are often located in remote frontier areas, not close to the types of resources that might be necessary to address a severe accident.”

He recalls two mining accidents which caused widespread devastation. “Just recently there were two separate catastrophic failures of tailings ponds - one in Alberta and the other in British Columbia. In both these incidents all the retained water and tailings escaped out into the environment and water courses into some fairly major rivers. They were therefore considered to be huge environmental and political disasters, and invited significant public attention.”

Based on his experience dealing with high-profile environmental accidents, Nadworny thinks this is a lesson many firms have taken on board. “Many of these large mining, oil and

## “A significant proportion of Canada’s GDP still comes from primary industry”

Glenn Nadworny, Crawford

Reservoir containing toxic mud from the nearby Alumina factory leaks into nearby towns and villages, Hungary - October 5, 2010

gas companies do have people in place and an emergency response ready from a communications perspective, so they can manage the company’s reputation and the storyline of what’s going on.”

There is also a growing recognition that directors and officers can be taken to task for environmental disasters. “In this recent mining spill claim it was called into question whether the senior executives of a mining company that experienced this failure were culpable,” says Nadworny. “They started looking for their coverages under their D&O because they thought they could be potentially exposed.”

In January 2016, the former director of an alumina plant in Hungary, along with 14 other employees, were acquitted of charges of negligence, violations of waste management and environment pollution after a catastrophic spill in 2010. MAL Corp, the owner of the alumina plant, was nevertheless held responsible. It was taken over by the government and put into liquidation.

These high-profile incidents and concerns about the reputational damage they can cause have helped to raise awareness of standalone environmental impairment liability (EIL) insurance. There is a recognition that not all instances of pollution - including those that have occurred historically or taken place over a long period of time - are covered by general liability policies.

As a result, EIL take-up is on the rise. “With today’s environmental legislation we’re talking about damage to the environment as being the key liability trigger, so pollution has become a subset of damage,” explains Cliff Warman, environmental practice leader for Marsh within the EMEA region.

“The insurance industry has had to step up and change its wording in response to that,” he continues. “We now have damage cover on EIL policies and it has led to increases in the amount of EIL that is bought and the reasons it is bought.”

“It’s no longer just those sectors perceived to be highly polluting that could now be subject to a polluter pays principle,” he concludes. “Anybody can cause damage to the environment. You don’t need to be handling hazardous or polluting substances to have the potential to cause damage.”

For the fourth year running, Business Interruption (BI) risks have topped the Allianz Risk Barometer survey, with over one third of respondents citing it as their number one corporate risk. Yet despite this, the insurance industry's ability to accurately calculate BI claims is decreasing due to a lack of training, ineffective succession planning and over-reliance on external providers.

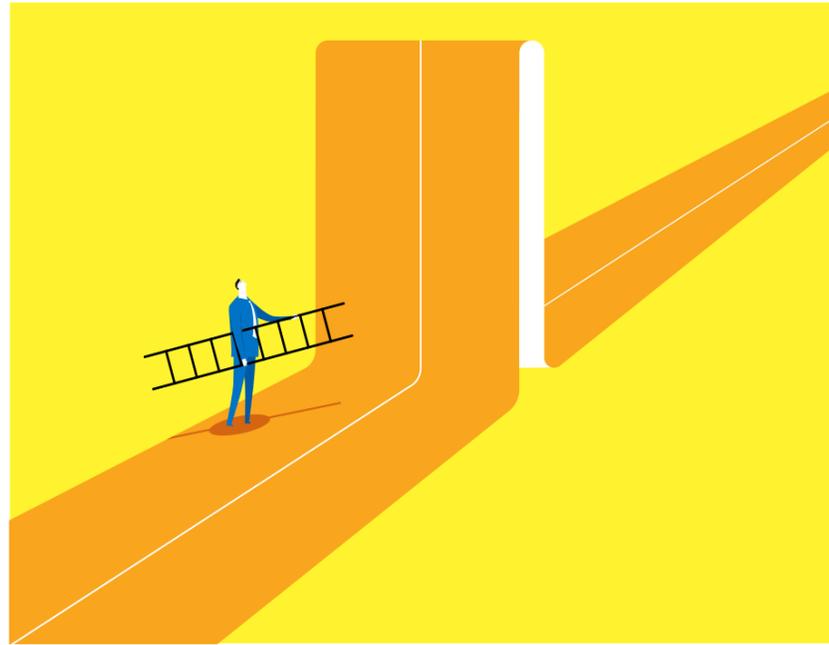
This is according to Martin Miller, national financial & forensic accounting manager at Crawford, Australia, who believes the BI knowledge gap is resulting in fundamental claims handling shortfalls. This is leading to an increased risk of loss calculation errors, requests for the wrong information or too little information, and an inability to identify major claims quickly.

"The impact of this lack of expertise," he states, "begins at the early stages of a loss, including not gathering appropriate information and an inaccurate assessment of the extent of the loss, culminating in inappropriate triage." Looking at the broader picture, the outcome "is a poor customer experience and a potential for significant claims leakage that could cause reputational damage."

In response, Crawford Forensic Accounting Service (CFAS) recently launched a market first – a combined financial risks toolkit and e-learning facility to help fill the skills gap. The kit includes an industry-specific and time-based document request list, step-by-step guide to loss calculations and a reserve calculator to provide initial loss estimates to support claims triaging.

Crucially, it also provides access to claims experts. "Our document request list takes approximately one minute to complete," Miller explains. "It only requires an estimate of the length of the indemnity period, together with base information obtained from the policy, which varies depending on the length of the interruption period."

While not all BI claims are complex, the kit's reserve calculator provides what is essentially a claims safety net, quickly catching any potentially major or complex losses. "A referral element within the calculator is key to this," points out Miller, "as it is linked to the rules set by the individual insurer governing what constitutes a complex claim."



#### Clear Thinking

## Filling the skills gap

**MARTIN MILLER EXPLAINS HOW CRAWFORD IS SEEKING TO ENHANCE BUSINESS INTERRUPTION CLAIMS HANDLING CAPABILITIES THROUGH ITS NEW CFAS TOOLKIT AND E-LEARNING SYSTEM**



Martin Miller, national financial & forensic accounting manager at Crawford, Australia

Crawford also offers a series of online training modules, delivered via a dedicated learning management system. The hour-long modules cover all aspects of BI claims, from the initial events that trigger a BI claim and the framework of a standard policy, through to settlement phases, including calculating expected turnover and increased costs of working.

Eighteen months in, the system is already demonstrating its value both internally and with customers. "The reserve calculator has already allowed us to allocate claims on a 'fit-for-purpose' basis to others within Crawford who are dealing with similar claims," says Miller.

Feedback from early adopters has been extremely positive, he adds and the system continues to evolve. "Ultimately," Miller says, "we want an insurer, broker or even an insured to be able to complete their own BI loss assessments quickly, efficiently and accurately."

Further information is available at: [www.cfas.com.au](http://www.cfas.com.au)

**"The outcome of the BI knowledge gap is a poor customer experience and a potential for significant claims leakage that could cause reputational damage"**

# Crawford Matters

## Crawford enters new cyber partnership

**CHUBB LAUNCHES NEW CYBER ENTERPRISE RISK MANAGEMENT SOLUTION**



Douglas Mower  
Innovation director, EMEA

In January, Crawford entered a new cyber partnership with insurer Chubb to support the firm's recently launched Cyber Enterprise Risk Management solution. Designed to provide an end-to-end cyber risk management facility, Crawford will deliver the incident response capabilities for it.

The partnership sees Crawford provide Chubb's cyber policyholders in Europe with access to its extensive team of cyber specialists, plus its global network of crisis management service providers. Through the facility, they will have a single point of contact to help them manage all aspects of their cyber incident response, a 24/7 response hotline and the dedicated services of an accredited incident manager; as well as access to Crawford's expansive global network, spanning forensics, legal, notification, fraud remediation and public relations services.



Commenting on the new service, Douglas Mower, innovation director, EMEA at Crawford, said: "Managing a cyber incident is a highly complex and challenging undertaking which requires a rapid, co-ordinated response from the outset. By providing round-the-clock access to our cyber specialists, as well as our range of support services, we can ensure Chubb's cyber policyholders are always primed to respond if their defences are breached."

Tim Stapleton, vice president and cyber insurance product manager, Overseas General Insurance at Chubb, added: "We are thrilled to partner with Crawford & Company as part of our new Cyber Enterprise Risk Management solution. Cyber incidents develop quickly and have a number of complex moving parts. It is crucial that our insureds have immediate access to a provider than can help them take control of the situation and respond accordingly."

## "Significant movement" in energy claims environment

**JOE MCMAHON DISCUSSES THE HIGHS AND LOWS OF CLAIMS ACTIVITY IN THE ENERGY SECTOR**

Energy claims have undergone a period of significant upheaval in the last 12 months, characterized by a fall in claims frequency and a sharp rise in claims size. "The drop in claims is driven primarily by the sharp fall in oil prices plus a relatively benign loss period and lack of major storms," explains Joe McMahon, chairman of Lloyd Warwick International (LWI). "However, we've also seen some of the largest mining, construction and operating claims ever to hit the sector."

Falling oil prices are having a widespread impact. "This is having multiple ripple effects," he explains. "There are fewer construction, exploration and drilling-related claims as many projects have been shelved because of financial constraints." This constrained environment is, however, also resulting in increasing smaller claims, particularly in U.S. drilling. "Normally, such claims are too small for most companies to pursue; however, current cash-flow challenges are forcing them to reconsider."

At the other end, major claims have impacted many sectors, including mining and construction. While harder to attribute specific causes, oil price is again a contributor. "Take petrochemical ethylene production or oil refining," he says. "Low oil prices mean that margins in these areas are extremely high, which leads to significantly larger business interruption claims in the event of a loss."

For LWI, despite falling claims volumes, business is brisk. "Our clients

are placing ever greater demands on us," he says. "We are under increasing pressure to deliver the very highest standards to ensure that we meet this demand." Operating primarily within the energy, marine, mining, power and special risk sectors, the firm's global reach spans 144 locations. "We're investing in new capabilities and technologies to respond quickly to incidents anywhere in the world to ensure a speedy claims resolution," McMahon adds. "It's the nature of our market."

# 75 years in the making

AS CRAWFORD & COMPANY CELEBRATES A SIGNIFICANT MILESTONE, WE LOOK AT HOW THE COMPANY HAS EVOLVED AND HOW IT HAS REMAINED THE SAME

This year, Crawford celebrates its 75th anniversary. From its humble beginnings on May 27, 1941 in an office in Columbus, Georgia, the company has evolved into one of the largest independent claims management providers, with an international network of offices reaching every corner of the globe and a workforce some 8,800 strong.

That Crawford has become what it is today is down to the simple fact that its founder Jim Crawford laid firm foundations. An imaginative and highly-motivated man, Jim saw an opportunity to greatly enhance how the insurance industry handled its losses, and through hard work and determination turned a spark of an idea into a bricks and mortar reality.

Seventy-five years on from those first loss assessments, we asked two of Crawford's longest-serving employees whether the firm still espouses Jim's 'prime characteristics of service' – "Top Quality, Promptly".

Tim Wolfe, vice president - account executive, and 43-year Crawford veteran, believes these are as relevant today as they were in 1941 – and for very good reason. "Our clients many times evaluate their claims staff on their ability to get claims investigated to internal standards and concluded in a timely manner. Crawford's performance has a direct impact on how the clients' adjusters are evaluated. If our work is not up to standard and they have to spend time chasing us for a report or having us make corrections then our chances of receiving another assignment diminish greatly."

Bud Trice, vice president, also firmly believes these words still underpin the company's ethos; however, he admits that achieving the end goal is perhaps more chal-

**"Our ability to bring online new services, to see opportunities in new markets, and to offer our clients new solutions has ensured we have always remained relevant"**



**Bud Trice**  
Vice president, Crawford



**Tim Wolfe**  
Vice president, Crawford

lenging in today's world "due to the complexity of our business as well as that of our clients". He adds: "Jim Crawford's ideals were aimed at driving customer satisfaction to a degree that's uncommon today. But if he were here today, there's little doubt that we'd both agree on the desired end result."

The firm's success can also be traced back to the staff loyalty that was embedded in those early years, according to Wolfe. "Early on Jim Crawford did an outstanding job of building loyalty amongst his staff," he says. "You see that today in the tenure of our management and claims staff. We have built a global brand 'Crawford & Company'

that is known throughout the industry."

The company has expanded rapidly over the decades to achieve this 'global brand' status. Trice puts its early expansion in the U.S. down to the simple fact that "if a client was happy with the service we provided in one location, then they became an automatic source of business in a new one". And in 1957, Crawford extended its reach beyond U.S. shores, with the opening of a London office and now has operations in more than 70 countries.

Crawford's service remit has also grown exponentially over the years, as it has strived to create a more holistic, joined-up client offering. "We have been able to expand into non-traditional areas that were relevant to our core business," says Wolfe, "such as the acquisition of Risk Sciences Group, The Garden City Group, and Prism, which was transformed into Contractor Connection. Adaption to changing industry trends, but recognizing there continues to be a need for many of our core competencies, have allowed us to remain successful."

Innovation and the ability to repond to a changing marketplace have also been at the core of Crawford's success. According to Trice, "Our ability to bring online new services, to see opportunities in new markets, and to offer our clients new solutions when the need became clear has ensured that we have always remained relevant to our clients."

As Crawford celebrates its 75th anniversary, this raises the question of how the firm plans to ensure that in the next 25 years, when it is celebrating its centenary, it is in an even stronger position.

"In my opinion, it's all about nimbleness, developing new solutions that meet the

industry's changing needs and being able to execute on them," says Trice. "I've just passed my 40th anniversary here at Crawford and the world today is a much different place to when I started here. 40 years ago, for example, we didn't handle property claims – today, it's a huge part of our business. 15 years ago, a repair contractor was more often an adversary to the adjuster – today, we have an entire network of them."

Technology will also play a major role in the firm's ongoing upward trajectory, he believes. "It's about making smart investments and ensuring that we're taking the right path with technology. Companies can waste millions by taking the wrong route, so we need to ensure that we're moving in the right direction."

"In tandem with this," he continues, "we will need to continue our focus on diversification, delivering solutions that complement our traditional business offering and enhancing our current services to ensure Crawford remains the provider of choice."

Wolfe concurs. "Over the next 25 years, changes within the industry will come much faster than in the past 25 years as industry consolidation continues. To succeed, it will be paramount for us to adapt to change quickly, use technology to give us an edge, and be the best place to work in the industry so we are able to retain top talent."

We can only speculate on how Jim Crawford would view the organization that Crawford has become. However, we can say with confidence that his ideals and principles still hold true, and the drive and commitment he instilled in his employees will ensure the company continues to build on the foundations he laid. ●



**Crawford's Atlanta Support Center, Atlanta, GA**

## Garden City Group appoints executive management team

In January, Crawford unveiled its new executive management team at Garden City Group (GCG). The new leadership sees Kenneth Cutshaw take the helm of the market-leading legal administration firm as interim chief executive officer.

Cutshaw is a strong fit for the role, having excelled in a wide spectrum of work and leadership environments, including C-suite level business management, law partnerships, academic institutes, entrepreneurial ventures, government management, political management and foreign policy. In addition, he joins Crawford's global executive management team, reporting to Crawford interim president and CEO Harsha V. Agadi.

Highlighting his industry caliber and vast experience, Agadi said: "With Ken and the other dynamic executive management team partners at the helm, we are well positioned to not only continue to deliver the notable superior service and efficiency to our clients but to take GCG to the next level."

The additional executive management team members include new executive vice president and chief operating officer, Stephen J. Cirami. Formerly GCG's senior vice president of operations and a former class



**Kenneth Cutshaw**  
Interim CEO,  
Garden City Group

**"With Ken and the other dynamic executive management team partners at the helm, we are well positioned to not only continue to deliver the notable superior service and efficiency to our clients but to take GCG to the next level!"**

action attorney, Cirami is a nationally-renowned expert on all aspects of class action notice and administration and has been with the group for more than 12 years.

In addition, Scott D. Nader has been appointed executive vice president and general counsel for GCG. Nader previously served as the chief counsel for the former Crawford Americas segment, and has more than 19 years' experience advising and leading organizations in various sectors.

# Zebra

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