Strategic **RISK**

GUIDE TO: Property & casualty

SUPPORTED BY



\$100M

Average property casualty claims paid each business day in 2013









What's behind AIG's numbers?







World Trade Centre rebuilding as lead insurer





Years helping people insure brighter tomorrows

People.

Insurance isn't about numbers. It's about people. In our case, 63,000 people coming together to take on the impossible challenges. Because we believe that with the right people and the right attitude you can turn even the toughest today into the brightest of tomorrows. Learn more at www.aig.com



Bring on tomorrow

Insurance and services provided by member companies of American International Group, Inc. Coverage may not be available in all jurisdictions and is subject to actual policy language. For additional information, please visit our website at www.aig.com.

FOREWORD

At the heart of things

As the risks businesses face evolve and change, so do the insurance coverage and mitigation strategies to address them

PROPERTY AND CASUALTY (P&C) coverage lies at the heart of most large corporate insurance programmes. Taken in its most basic form, this is the major insurance line for people, bricks and mortar, but it is also more far-reaching than that.

As the range of risks faced by businesses has changed markedly in recent

Public liability, increased consumer protection and international anticorruption legislation are three reasons why litigation is also an increasingly fundamental part of P&C

years, so too has the scope of cover. Supply chain disruption, remote working, Big Data, 3D printing and nanotechnology are only some of the areas falling into P&C coverage that are indicative of the more novel risks modern companies need to tackle.

Public liability, increased consumer protection and international anti-corruption legislation are three reasons why litigation is also an increasingly fundamental part of P&C.

The purpose of this guide is to examine key elements of this fundamental insurance line and look at how risk professionals can achieve the most effective coverage through the twin mechanisms of insurance and mitigation strategies.

Mike Jones, editor, StrategicRISK

Editor Mike Jones Deputy editor Kin Ly Managing and legal editor Hélène Préchac Asia editor Sean Mooney Senior reporter Asa Gibson Commercial director, Asia-Pacific Adam Jordan Senior production controller Alec Linley Senior data analyst Fayez Shriwardhankar Publishing manager Tom Byford Publisher Jack Grocott Executive publisher, Asia-Pacific William Sanders Managing director Tim Whitehouse

© Newsquest Specialist Media 2015 To email anyone at Newsquest Specialist Media, please use the following: firstname.surname@ nqsm.com

SUPPORTED BY



INTRODUCTION



Same but different

From increased political risk, the emergence of new technologies and the stretching of the supply chain, global multinationals are facing a plethora of complex risks. However, risk managers are at hand to help, although it may sometimes appear as though they need a crystal ball 'Organisations can develop accepted understandings and fail to revisit or challenge what might be perceived as remote or even impossible events'

Eddie Best, Grant Thornton

NE OF THE MAIN CHALLENGES faced by global commerce is the increase in the risk of conducting business at a time when successful companies are so urgently needed to create employment.

In most world regions, companies are forced to devote their energies to the management of many-sided threats to their profitable functioning – and, in some cases, to their very viability.

Although some of these threats are as old as commerce itself – fire, natural catastrophes, breakdown of equipment, and fraud - others are emerging that are so complex and elusive that few companies are in a position to manage them without expert outside help. A direct function of the explosion in cross-border commerce and more advanced types of manufacturing, these particularly threats are proving challenging for multinationals as they negotiate greatly differing political, regulatory and legal cultures.

Thus, risk managers require a crystal ball. "Have we thought the unthinkable?"

asks Eddie Best, partner in Grant Thornton's business risks practice. "Organisations can develop accepted understandings and fail to revisit or challenge what might be perceived as remote or even impossible events. A strong risk professional will be willing to revisit these and challenge such areas. They should ensure that a rigorous environmental scan is capturing and considering emerging and changing risks, both positive and negative."

It is therefore no coincidence that European risk managers rate political risk as their most worrying concern. In the latest survey by the Federation Risk of European Management Associations, 59% of respondents said feared they mostly "government intervention, legal and regulatory changes". This was significantly ahead of their concerns in respect of their company's brand and reputation.

New technologies

Transformational methods of production and manufacturing, such

INTRODUCTION



as 3D printing, nanotechnology and nutraceuticals, are also raising concerns. These trends are spreading rapidly throughout the commercial world and, as they do, the long-standing issue of product liability is taking on a sharper edge and becoming more of an issue for risk managers.

Another function of the internationalisation of commerce, the stretching of supply chains – in some cases to breaking point – requires heightened levels of vigilance across every link in the chain.

Although some companies realise this too late, any business that relies on international outsourcing is acutely vulnerable to a range of risks: humanitarian, labour, pricing and finance, product quality, political and reputational. In a world of instant global communication, the immediacy of such risks makes their management a constant exercise. However, no other options are available. Extended supply chains are a direct result of increased competition, higher customer expectations and shrinking product life-cycles. These factors can only intensify.

The nature of risk

The nature of risk is not the only element that is changing; so are the speed and elusiveness of such threats. Often fighting several problems on several fronts at once, risk managers have to develop predictive skills and anticipate danger almost before it arises. Many are finding that the most effective tools are those long adopted by the military, namely exhaustive reconnaissance, attention to detail. elimination or at least neutralisation of known threats and rapid response.

Risk managers are therefore in the front lines of global commerce. Fortunately, help is at hand. **SR**

Lessons from Sandy

The loss prevention techniques that were learnt following the superstorm are being applied across the economic spectrum, resulting in savings for companies and insurers

S UPERSTORM SANDY MAY HAVE hit the US coast more than twoand-a-half years ago – in October 2012 – but lessons are still being learnt from the catastrophe in terms of loss prevention that are saving companies, and insurers, hundreds of millions of dollars. Indeed, the savings can be assessed on a global basis because the loss prevention techniques acquired since the devastation are being applied in other catastrophe-prone regions. Such practical, preventive steps are known as 'easy wins' because they can be taken in advance and they benefit client and insurer.

Ultimately, easy wins help business continuity.

In the wake of Sandy, which caused about \$50bn (€41bn) in damage, loss prevention engineers analysed the effects suffered by some of the biggest commercial property companies in the US.

One analysis concerned elevators. In short, some companies' elevators had stopped working or had been badly damaged while others continued to function smoothly, as though a superstorm had not happened. Since elevators are an essential part of the infrastructure in a tall building, the findings were of vital importance. Why did some elevators survive intact? AIG's troubleshooters discovered that, before the catastrophe struck, risk managers had included in their emergency manuals the requirement that elevators be parked at the top of the building. Safe from harm, they were not damaged by the flooding that destroyed elevators that had been left at the bottom of the well shaft as the last employees fled the approaching storm.

The only steps the smarter companies had to take to restore the elevators to normal functioning was clean any water and other debris from the well shafts while others had to replace or repair their elevators. In one instance, an insurer had to pay \$50m in claims.

Other industries, other lessons

The conclusions drawn in the wake of Sandy also proved to be of equal interest to the automotive industry. Although water and moving objects destroyed the stock in many car yards, some companies with multiple-floor showrooms hastily stored their vehicles above street level, where they stayed out of harm's way until the superstorm had passed.

The principles of loss prevention are applicable across the economic spectrum.

NAT CATS

Indeed, almost no industry or company can fail to improve the way it operates – and hence its immunity to business interruption – if it takes the time to conduct some hard-headed analysis. Further, one of the most fruitful areas for improvement lies in the seemingly mundane area of maintenance.

No time to waste

However, companies should not wait for a superstorm or hurricane to take simple steps that can lead to spectacular savings. As AIG's experts recall, one large US manufacturing company relied heavily on turbines to supply power for its assembly lines, as indeed do many other manufacturers. The turbines were subject to regular checks, but these depend on the thoroughness of the individual who conducts them. When a maintenance engineer failed to replace the \$30 battery that powered the emergency alarm shortly before the turbine broke down, the alarm predictably failed to sound. By the time engineers reached the power unit, significant damage had been done.

The bill for the repairs amounted to \$30m: a million times the price of the battery. If this is not a lesson in loss prevention, nothing is. However, as an AIG loss prevention specialist points out, "although it was a substantial claim, the real issue for the company was the loss of business while the turbine was repaired".

Prevention is better than cure. SR





THE FIRST 72 HOURS

The first 72 hours matter most after the onset of a crisis, according to counsulting firm McKinsey & Company's Martin Pergler and Becca O'Brien, both veterans of helping companies manage potentially disastrous events. However, if crisis-affected businesses take the right steps, they can save themselves months or years of problems.

Below, courtesy of *gtnews*, is a summary of the tips Pergler and O'Brien provided at a conference in Washington in November 2014.

- Regulatory or legal: engage government leaders and regulators in your jurisdiction of operation to avoid them taking public positions in the early hours that they then cannot back. Announce an internal investigation with a credible leader in charge of it.
- **Financial:** estimate your worst-case cash needs in the next three months and identify emergency financial sources if the situation becomes dire.
- **Reputational:** identify the critical executives who can lead the company in its hour of need.
- **Operational:** ensure the safety of running operations. Consider shutting down any operations that could worsen the crisis. Identify resources that could solve the crisis faster. Create a two-way dialogue with employees, as they are both stakeholders and an important asset.
- Market or industry: pre-empt competitor activity by establishing how the company might counter competitors' likely courses of action. Call and reassure important customers immediately.
- **Leadership:** it is important to hark back to the core values that have guided the company's teams previously.

Belgium's winter of discomfort

Energy shortages in the country meant blackouts and cuts were a real possibility, which would have an effect on businesses



ANUFACTURERS IN BELGIUM were facing continuing power shortages during the 2014-15 winter that threatened to curtail and even stop production because of ageing gas-fired stations, the unexpected shut down of three nuclear reactors and legal challenges to renewable energy infrastructure.

Many businesses had been preparing for the worst, especially those relying on suppliers in neighbouring countries that could also have been affected by power shortages. Some had installed generators to deliver at least limited power to keep the lights on, if not the production lines moving.

Others were concerned about mainframe computers crashing with consequent loss of data in the event of a sudden outage. As experts point out, it can take two hours or more to power down a mainframe safely. Another fear was damage caused to equipment by abrupt peaks in power delivery. To help members cope with the power cuts, the Federation of Belgian Enterprises was urgently running seminars. "Risk managers must plan beforehand," suggested Carl Leeman, chief risk manager of Katoen Natie, a 24-hour a day, global distribution and logistics group specialising in automotive and chemical industries. "If [employees] have to work in the dark, it's too late." Although Katoen Natie has invested heavily in solar power, enough to provide a quarter of its energy needs in benign weather, Belgium's long dark winters significantly reduce its benefits.

Blackouts

As the cuts were looming, Elia, the operator of Belgium's electricity transmission system, warned: "If the government's plans to phase out nuclear power are factored in, it is obvious the country is facing a monumental challenge in terms of security of supply." If the winter is cold and there is little wind to drive windmills, which is normal in sub-zero conditions, the supply of power cannot be guaranteed and factories have been told to prepare for shut-downs.

Even imported energy would not have been sufficient to make up the

POWER STRUGGLE IN MUMBAI

Fast-growing megacities in India would not have had much sympathy with Belgium over its power shortages. Blackouts occur regularly in many Indian cities, routinely plunging entire districts and manufacturing operations into darkness. However, blackouts have started occurring in the business capital of Mumbai, which has so far been largely exempt, in a demonstration of the tensions and divisions that plague the energy industry and threaten the country's manufacturers. The blackouts occurred in the middle of a dispute between private power generators and regional distributors that has left the industry in disarray. The industry faces a financial disaster and is mired in some \$100bn (€81bn) in debts and arrears of interest payments. According to the manufacturing industry, the problem is likely to become a lot worse before it improves.

shortfall, especially if a cold spell were to spread across Europe and boost demand in supplier countries. For instance, France had announced it would not be able to sell power to Belgium this winter. Another concern was the reliability of the supply of Russian gas as a retaliation for economic sanctions in respect of its involvement in Ukraine. "A shortfall in Russian gas would make the situation even more difficult to handle," added Leeman.

"If Belgium cannot cover its consumption needs, there will be a power shortage", Elia had predicted. An emergency measure of "planned outages" – rolling power cuts of a few hours at a time – had been drawn up.

If the weather had turned hostile, this could have become an Europeanwide problem. As Elia explained, grids could have collapsed and caused blackouts. **SR**

BUSINESS CONTINUITY



Friction free – seamless coverage for companies that leave home

Any company expanding outside its home market, irrespective of its size, will be confronted with an array of problems and risks, from a lack of understanding of local laws to being unfamiliar with regional conditions. Working through these complexities is a challenge but data systems and new technology offer risk professionals help in assessing the dangers



HE STAMPEDE BY manufacturers out of their home markets into new – and potentially riskier – geographies inevitably involves a confrontation with challenging and different risk spectrums. These companies typically range from midmarket operations with perhaps two overseas plants through to multinationals with revenues of €1bn or more.

Surprisingly, irrespective of their size, origins and sector, these companies share common problems when the situation takes a turn for the worst. The risks they routinely face stem from unfamiliarity with local business conditions and suppliers. These include clashes with foreign legislation and regulations in respect of labour and environment, to name a few.

Moreover, they also share another problem: often, the head office cannot help. That is not because it does not want to, but because it lacks the knowledge. In short, the far-flung operations of these companies often find themselves left to their own devices in managing local risks.

Survey

These common problems in offshore risk management came to light recently when AIG undertook global research in partnership with WSJ Custom Studios and consultancy firm IPSOS. The comprehensive survey obtained the views of 300 senior executives in midmarket firms with up to \$500m (€445m) turnover across the US, Europe and Asia-Pacific.

The survey produced some startling facts. For example, only one-third of these companies run comprehensive enterprise risk management programmes, despite more than one-third saying that their biggest internal challenge is a lack of offshore market expertise. As the survey showed, a daunting array of risks exists: catastrophic risk, which 35% of companies perceived as the most difficult to manage; regulatory (24%); business interruption (23%); local suppliers (22%); and cyber security (21%).

As Carol Barton. EVP. chief underwriting officer at AIG Global Property, points out, any one of these risks are fundamental to the continuing operation of a plant, especially one located in a remote region, and logically require appropriate insurance cover. "Although insurance can help a company rebuild a facility or manufacturing plant, it will not stem the loss of market share or reputational damage from an extended closure," she explains.

"Thus, demand is growing for risk reduction strategies that focus on business continuity with business contingency planning at the centre to address the complex issues such as exposure across the entire supply chain and global interconnectedness."

Electronics companies that endured the 2011 floods in Thailand need no reminding of this.

Storehouse

Clearly, a storehouse of globally relevant data about these types of risks serves as a valuable tool for hard-pressed risk managers. A 300-strong team of engineers and data experts at AIG's Analytical Centre of Excellence in Bangalore, India, plays a key role in accumulating and interpreting vast amounts of information that enable underwriters around the world to make an accurate assessment of the risk companies face.

Thus, in even remote locations where there has historically been a paucity of data – the so-called "non-modelled areas" – underwriters can provide highly relevant information about the risk of earthquakes, floods and other natural catastrophes.

They also have insights into such basic infrastructure issues as the physical construction methods and fire protection features of local facilities that may form part of clients' business strategies. This can comprise anything from ports and warehouses to sales offices and thirdparty manufacturing sites.

What policy

However, in even the best risk-managed operations, things go wrong. AIG's research has conclusively established that the nature of the policy can have a profound effect on the longer-term health of the business in these eventualities.

As Rob Kuchinski, AIG global property executive EMEA and a veteran of such situations, points out, flexibility is key: "For example, where repairs take longer following a loss, it's more advantageous to have cover on a gross earnings basis. However, if the opposite is the case, businesses may prefer to be reimbursed on a gross profits basis."

Clients obviously cannot predict which cover will be the more appropriate before the event. In this situation, AIG's Property Performance Series® of products becomes useful. Kuchinski adds: "The wording enables our clients to choose which type of business interruption coverage fits them best after a loss has occurred."

Additionally, AIG's claims promise commits to paying half of the agreed physical damage loss as soon as possible. "That has proved to be a great help in terms of cash flow, which is typically most critical for our clients in these situations," he points out.

Friction free

The language barrier is often problematic in offshore markets. Much more than mere words, the language in which a local policy is written embodies the law, customs and other cultural considerations that influence the way it operates. If the local interpretation differs from the original policy, confusion and delays often ensue.

"When we surveyed insureds, [clients] and brokers in this segment, one theme was repeated over and over again: friction must be removed from the process," explains Kuchinski.

In this respect, AIG has come to the rescue with a rare offering: a master policy with local wording that does not clash with the original. If the two policies – master and local – do not match, as Kuchinski points out, uncertainty with regard to limits and conditions becomes normal. Almost two years in development,

the policy is unusually broad and translates seamlessly into multiple languages. "It localises that form in countries across the globe," enthuses Kuchinski.

The result is that if a Mittelstand business, armed with the policy, expands out of Germany into France, Spain, the US, Brazil or the UAE, it will enjoy the exact same language, edited for local law and coverage, in all these countries.

In short, the policy will be global, but local. **SR**



Claims game

The insurance industry is undergoing a revolution, as technological advancements mean that claims reports can be compiled quicker

S A MAJOR MULTINATIONAL, Europe-based manufacturer discovered recently, the value of a policy often becomes evident only after a company has suffered a loss and made a claim. Managers at the firm in question were shocked to discover that the company's insurance covered only 85% of what turned out to be a substantial claim. As a result, the balance had to be met from the company's financial reserves.

What happened to the company is common: it had bought off-the-shelf protection, which then failed to meet its full and complex requirements.

The multinational's experience illustrates two important developments in the insurance industry: the transformation that is occurring in claims-handling and the trend towards bespoke solutions. The latter, in particular, are designed to work to the advantage of bigger, continent-straddling companies with particularly complex issues.

As Nicolas Berg, AIG's head of casualty EMEA, points out, a number of macro trends are combining to reshape entire economies. "Increased globalisation, urbanisation, the rise of a new middle class, increasing costs of healthcare: these are all long-term economic trends that the insurance industry needs to perceive as opportunities, and to provide meaningful solutions for".

A time like no other

Simultaneously, points out Berg, whose mandate covers 44 countries, the industry is seeing rapid progress in new technologies and applications that are leading to smarter, higher-performance products. "AIG believes this is a time like no other," he enthuses.

The process of handling claims has lately taken several steps forward. As consulting firm McKinsey pointed out in a report earlier this year, the insurance industry has relied for too long on paperbased and labour-intensive systems for issuing and managing policies as well as for managing claims. The number of hand-offs between agents, adjusters and 'Increased globalisation, urbanisation, the rise of a new middle class, increasing costs of healthcare: these are all long-term economic trends that the insurance industry needs to perceive as opportunities, and to provide meaningful solutions for'

Nicolas Berg, AIG

payments staff was time-consuming and, for clients, frustrating in terms of delays.

Reform was clearly overdue. It has come in the form of IT-based solutions that streamlined the entire process, but especially in respect of claims. "New claims management systems, for example, can automatically divide claims into clusters based on their complexity, their estimated value, and the risk of fraud", McKinsey explains. "Some claims are paid automatically, others assigned to the appropriate adjustor. This approach improves cycle times, increases customer satisfaction, and reduces revenue leakage from fraud."

No client could possibly complain about any of the above.

AIG embraced the revolution. Its agents in the field were equipped with electronic devices loaded with proprietary software and applications that enabled investigators of employer and general liability claims to compile a report in real time. However, this is only the beginning.

All relevant documents and physical evidence can be photographed or videoed and then embedded in the report. Statements by witnesses can be taken and signed on-site. In difficult claims, videoconferencing helps settle issues between customer, adjuster and investigator. Remarkably, most of these functions can be done directly from the site.

The returns came immediately. Instead of taking seven days on average, liability reports are now filed on the same day. Defence reports are returned within two days instead of 15 days, about seven times quicker. Further, witness statements are filed 10 times faster – that is, within two days instead of 20.

However, the rapid settlement of a claim triggers an even more creative process, namely the analysis of claims data for the purposes of mitigating losses. In the long run, this is mutually beneficial for the client and the insurer.

In conclusion

As for the manufacturer that suffered the unexpected 85% shortfall in its claim, unsurprisingly, it looked to another provider for its future insurance needs.

As is increasingly the case, the solution was bespoke – the wording, consideration of sub limits, higher customer retentions and various risk mitigation measures: all were reworked, to provide clarity and certainty of coverage.

The company will never be exposed in the same way again. **SR**

Digging into big data

High-quality information is the risk manager's friend in need as it helps them to analyse potential loss more effectively

> T STARTED OUT AS A CENTRAL database that would eliminate much of the vast amount of manual work required to deal with AIG's biggest and most far-flung clients with hundreds of different operations around the world. However, nowadays, the firm's Bangalore-based data repository has become a treasure trove of information that enables risk to be digested, processed, modelled and managed on companies' behalf.

> Day and night, about 300 highly trained engineers and other specialists pore over data that has been accumulated over many years throughout AIG, seeking nuggets of information that will help them understand the exposures that clients may face, often unsuspectingly.

> "AIG employs a full range of riskmodelling tools to test their efficacy," explains chief executive Alex John from Bangalore. "AIG works with its partners and colleagues to explore changing risks. These are called non-modelled perils [and, for example, related to] nuclear devastation or acts of terrorism, such as a five-tonne bomb going off in Philadelphia. AIG aims to add value by trying to make insurance as risk-free as possible."

'We thought the centre of excellence would be a benefit to us, but it soon became clear it is also a benefit to our clients, particularly the ones vulnerable to supply chain exposures'

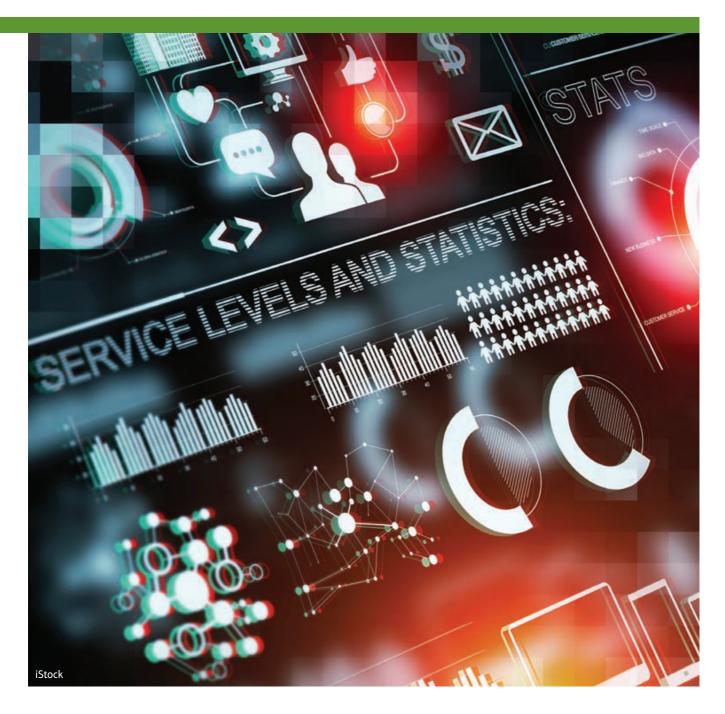
Sami Sayegh, AIG

A benefit for everyone

The results often fall straight to the bottom line. For instance, by analysing a plethora of meteorological and other data, the centre of excellence identified that several of the key suppliers of a global automotive group were vulnerable to flooding.

Should they be affected by sustained heavy rainfall that caused a river to burst its banks, the manufacturer would likely be forced to reduce production.

"At first, we thought the centre of excellence would be a benefit to us but it soon became clear it is also a benefit to our clients, particularly the ones vulnerable to supply chain exposures," explains Sami Sayegh, who is responsible



in the EMEA region for AIG's large limits in property.

"Now, almost all of AIG's corporate data goes to Bangalore, even for companies that we don't insure. The data that the Bangalore team produces is powerful – it means the firm can conduct a much more thorough analysis of loss potential."

In the painstaking task of identifying vulnerabilities in supply chain, the boffins at Bangalore are

proving their worth daily. More developments are planned. "We're working on a proprietary tool for global property," says John. "It recognises that, although every region does its insurance business differently, this particular platform will enable underwriters to look at all these regional differences through the same lens. This is launching soon."

That sounds like something worth waiting for. **SR**

INSURANCE TRENDS



The nano factor

Even though nanotechnology may not have resulted in any litigation yet and is widely used, many insurers exclude its application in their fine print. However, as its benefits become clearer, some insurers are revisiting their position

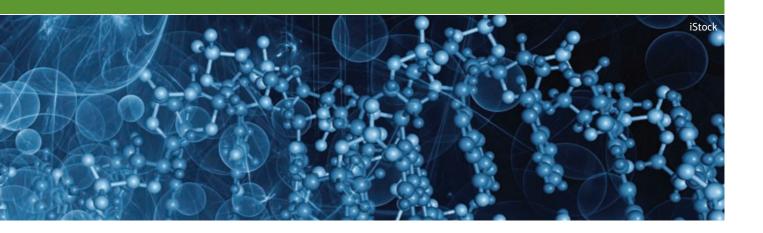
HEN NANOTECHNOLOGY started to be used more often in manufacturing, appearing in myriad everyday products from food and drink to tennis racquets and giant aircraft, the insurance industry was wary of the risks it might present. Many companies excluded any liability from nanotechnology in unequivocal terms.

A certain US company applied the following clause in 2008: "This endorsement excludes bodily injury, property damage, and personal and advertising injury related to the exposure of nanotubes and nanotechnology in any form. This includes the use of, contact with, existence of, presence of. proliferation of, discharge of, dispersal of, seepage of, migration of, release of, escape of, or exposure to nanotubes or nanotechnology."

Since then, the situation has not evolved within much of the insurance industry. Even though no litigation has arisen from the application of nanotechnology or its variants in terms of public or other liability, many firms still exclude it in the fine print.

However, the demonstrated usefulness of the science in many applications is universal. Although the majority of the public will be unaware of this, nanotechnology is responsible – or at least plays a part in – the production of everyday consumer items such as food, sports equipment, clothing, mobile phones, household products and cosmetics, even heavy duty manufacturing such automotive components and aerospace.

Nanotechnology is so important industrially that the value of products underpinned by it are expected to reach



€2trn this year. In Europe alone, the sector employs 300,000-400,000 people.

Despite its widespread use and promise, the insurance industry's caution over nanotechnology was to some extent understandable because of the unknown effects of a highly elusive element that lies somewhere in size between an atom and a virus. After all, as Amanda Kennerley, AIG senior casualty underwriter for the EMEA region, points out, "nanotechnology [involves] a process of manufacture and not a product".

Moreover, the issues raised by the widespread application of such a substance are certainly significant by any standards, and they remain so. What might, for example, be the implications arising from claims for product liability in the event of effects on consumers' health?

There is also the issue of employee safety from a substance whose structure is similar to asbestos (carbon nanotubes).

However, after a period of reflection that involved hard-headed analysis in consultation with the scientific community, a handful of insurers such as AIG concluded that it would be shortsighted to ignore whatever risks nanotechnology may present.

"It was essential to educate ourselves and to understand nanotechnology and

'It was essential to educate ourselves and to understand nanotechnology'

Amanda Kennerley, AIG

not to be merely reactive," reflected Kennerley.

Demonstrated benefits

It is demonstrable that nanotechnology has benefits to manufacturing and indeed to mankind.

It is a great scientific breakthrough, although the insurance industry needs to be mindful and keep watch as this novel aspect of science continues to develop. For instance, nanotechnology can be harnessed in the pursuit of cancer-seeking drugs.

Further, in the aerospace sector, the science – nanotechnology-derived graphenes are thinner than paper but many times stronger than steel – plays an important role in energy-saving. Nanotechnology is all-pervasive and found in materials from building materials to food packaging.

As we learn more about it, the benefits of nanotechnology are steadily becoming clearer. **SR**

The high price of defective products

However safe a product appears it may fail at some point, which could result in costly litigation for the manufacturer

OST EXPORTERS WILL KNOW, that international litigation in respect of allegedly defective products is growing. This is what an European bike manufacturer discovered at its expense when a teenager was disabled after the front fork of a Taiwanassembled bike collapsed in Australia. Lawyer Ben Stack of the eponymous Australian firm recalls the litigation became predictably complex, international and prolonged.

The boy sued the importer, which sued the manufacturer, which sued the Taiwanese sub-contractor that had made the part, and the latter then sued another Taiwanese manufacturer that had fitted the same part to the bike.

On the fourth day of the trial, the European manufacturer settled for an eight-figure sum. What can a manufacturer do in the face of such a diverse array of potential prosecutions? Hiring a lawyer would be a first step. However, suggests Kent Gardiner, chairman of international law firm Crowell & Moring and a specialist in class actions, it is even better to hire an in-house lawyer. "For corporate legal departments nowadays, success demands a more proactive approach than hiring outside counsel [to manage] costs. In-house lawyers need to know more than ever to succeed both about their clients and the legal landscape".

Prudence is key

If nothing else, the above case serves as a warning to companies that have an exciting and innovative product they are about bring out onto international markets. With product liability laws



being passed almost by the month in most jurisdictions, no risk management professional would allow a retail item to be brought out in domestic or export markets without being satisfied that it is sufficiently robust to survive in the long term and even a punishing use without triggering claims from disappointed, injured or otherwise aggrieved consumers.

As Nigel Hooker, AIG's head of casualty risk consulting for the EMEA region, points out, product liability has become a multi-jurisdictional issue. "Product liability laws cut across national boundaries nowadays," he says. A mechanical engineer by training, Hooker has learnt a lot about safety-proofing a product in 20 years of providing advice to designers and manufacturers on behalf of the underwriter.

Product fallibility

Acting in the clients' interest, he is looking for what might be called product fallibility. "For example, does the product fail to safe," he asks. "Would

'For corporate legal departments nowadays, success demands a more proactive approach than hiring outside counsel [to manage] costs'

Kent Gardiner, Crowell & Moring

the original product continue to function even if a component failed?" If, for example, a heated home appliance self-ignites but continues to function instead of shutting down, the manufacturer could face an expensive lawsuit for property damage and/or personal injury.

Reputational damage

Various product liability issues will likely be triggered with consequent damage to the manufacturer's reputation and profits. In the highly litigious US, for example, it is common for a product liability claim to cost the culpable company \$1m (\in 815,000) in compensation. Indeed, the courts are so active in prosecuting manufacturers that exporters are often reluctant to sell their products in the US.

However clever and safe the product may appear, it will fail at some point in its life. This may take months or years, but this is when the 'fail to safe' principle becomes crucial.

Essentially, as Hooker explains, the principle means the product will break down in a harmless way.

The good news is that making a product 'fail-to-safe' is not normally an expensive proposition. Recently, AIG consultants were able to recommend important changes to the design of a household appliance at little extra production cost. However, over the life of the product, the savings will likely outweigh that cost many times. **SR**

SAFETY-PROOFING THE PRODUCT

Justifiably proud of a new product and excited by its imminent launch, manufacturers often have difficulty in remaining objective, rushing it to market with inflated claims of its merits. This is why consultants can perform a vital function by warning designers, manufacturers and marketing departments of some of potential problems. In this, they often become the natural allies of risk managers, who can be seen within a company as excessively negative and pessimistic.

For instance, a typical mistake is for the marketing department to describe the product as "satisfying all known regulations" (or a similar wording) when this is impossible. Regulations are changing all the time. Thus, the wording should be rewritten in a way that reflects the fact that regulations might change and to protect the company from easily avoidable claims.

Similarly, packaging is often not seen as an integral part of the product even though it must also comply with environmental, health, safety and other standards. The same is true of the instructions for use, which are vital to the correct functioning of a product, but are often lost by the customer. AIG's Nigel Hooker, head of casualty risk consulting for the EMEA region says manufacturers should consider posting product instructions on their websites for frustrated consumers to download: "Not only are the instructions available for those who have lost them, but in the event of any product experience, the instructions can be updated to reflect this."

The guarantee is another potentially litigious element. Many companies have come to rue carelessly framed guarantees, as Smith & Caughey, a long-established and successful department store in Auckland, New Zealand, can vouch. Many years ago, it famously guaranteed that a certain brand of bed sheets would not wear out. So certain was the family-owned store of the quality of its linen that it promised to replace any that did. A quarter century later, it was still replacing them for free.

The lesson is that most products benefit from a systematic analysis of the exposures faced throughout their life-cycle all the way through to the ultimate disposal. "A successful loss-control analysis is based on a partnership approach," says Hooker. "Most of our clients want to improve the product." In the long run, the consumers will be grateful. **SR**



iStock

Troubleshooters - evolution in risk management

Insurers are now as interested in preventing trouble from arising as they are in providing clients with insurance

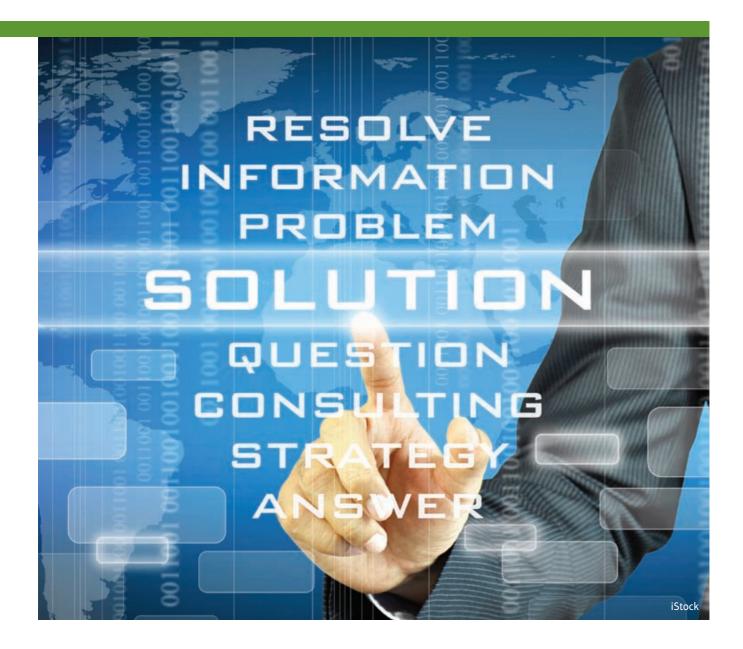
HE ROLE OF THE INSURER HAS undergone a transformation in the past years from a largely office-based industry to a more outward-looking, proactive one that aims to make life easier for risk managers.

In the forefront of this development is a small army of specifically trained experts who immerse themselves into wide variety of industries, from petrochemicals and power to steel and semi-conductors. At the behest of clients, these troubleshooters visit factories, warehouses, retailers, research institutes and other businesses to determine where risk exists and, crucially, how it can be reduced or eliminated.

Much of this on-the-ground research is in the insurers' interests. The more the troubleshooters understand about a client's exposures and its business's conscientiousness in managing them, the less likely a claim will be made. Thus, it is common for AIG to work with a client for several months before providing insurance coverage.

Simple measures

Over the years, risk engineers inevitably accumulate a wealth of practical knowledge that has trickled down



through specific sectors and industries. Between them, AIG's engineers conduct 15,000 or more surveys per year. Their view is that every client is unique and should be treated as such.

"Understanding the client's exposure is critical," explains Barry Paull, head of EMEA account engineering, global property.

However, some commonalities exist between all businesses and the troubleshooters routinely benchmark companies against their peers. Thus, if they lag in certain areas, they can see where they can make amends. Much in the vanguard of the practicalities of risk management, these people sit on technical committees and belong to organisations that draw up safety and other codes that are crucial to the successful operation of industry. They are often star turns at seminars and conferences. Ultimately, however, the main lessons about business continuity are learnt on the factory floor.

One of those lessons is that many – and perhaps most – incidents that can close a company even temporarily are preventable through a few relatively simple measures. **SR**

Class actions finally become legal in France

Consumers can now enjoy better protection and duplication of lengthy cases will also be avoided

FTER 35 YEARS OF EFFORTS to allow class actions in France, and aggressive corporate lobbying to block them, it finally became possible in early 2014 for consumers to take companies to court as a group. However, so far at least, the commercial world need not fear the kind of US-style, mass class actions that were held up for decades in France as the model to avoid at all costs.

As law firm Kennedy's partners Anne Ware and Emilie Civatte point out in a thoughtful review of the new legislation, France has taken a different and more cautious tack. In the meantime, other EU member nations such as Spain and Portugal, both of which allow class actions in limited circumstances, are watching closely and so is, probably, Belgium.

Different procedures

Unlike in the US, only designated consumer associations are entitled to issue proceedings before the civil courts on behalf of individual consumers or an identified group of consumers who may seek financial compensation from a defendant's breach of their legal or contractual obligations. The alleged breach can apply to sale of goods, supply of services or damage from anticompetitive practices.

Most importantly, the compensation can be determined only in terms of the economic loss resulting from material damage.

Although the framework has divided legal opinion in a judicial system that can be old-fashioned and hostile to change, it offers several benefits. First, consumers now enjoy better protection than previously, but without the excesses of the much-feared US system. Second, they will not have to bear the costs of the proceedings, which is especially important in claims for small amounts. Third, all consumers judged to be in the same circumstances are awarded the same compensation. Finally, all claims in a case are bundled into one process, avoiding the kind of massive and long-running duplication before the courts.

However, some risks exist. For instance, the approved consumers' associations could end up competing

between themselves to issue court proceedings first. Also, a concern arises that, despite the best of intentions, the system could over time become like the US one, where class actions are seen as a threat to companies and an important source of income for lawyers.

The issue of how French lawyers will be remunerated is also creating debate. Under the law, contingency fees are illegal. However, it is possible to agree on a "result fee" that would be supplementary to a minimum agreed fee. There is speculation that other forms of remuneration may emerge in due course.

Extending the system?

It is also possible that, under pressure from the French Green Party, which has drafted a bill for the purpose, the system could be broadened to include public health and environmental claims. As the lawyers say, "it will be interesting to see what happens with this proposal and whether the system will be extended to cover even more types of claim".

However, most interesting of all, will France's diluted class action system actually serve its original purpose? **SR**



LITIGATION

Litigious-lite – public liability in the UAE

Business in the region should not expect the legal environment to stay the same

> ISTORICALLY, AN ENVIRON-MENT that might be called litigious-lite, the United Arab Emirates (UAE) is slowly bridging the gap between local and western legal and regulatory systems, explains Tony Saada, chief executive of UAE-based Lockton (MENA). "Stricter penalties and higher awards [are given] across many sectors," he explains. "Hospitals, for example, are increasingly buying higher levels of protection as the number of medical malpractice cases are on the rise. However, these have to be grafted on to a different legal culture."

Any such awards for medical malpractice are additional to what is known locally as 'blood money' or '*diyah*', which has a long-established legal basis in UAE statutes. These take the form of person-to-person compensation and

'Stricter penalties and higher awards [are given] across many sectors'

Tony Saada, Lockton



the sums involved are typically much lower than court-ordered awards. "On balance, the prevailing culture is that disputes are better settled out of courts," says Saada. "Courts can often be the choice of last resort."

Although the UAE and the Middle East in general remain a low litigation environment, this situation is changing. Indeed, AIG's specialists in Dubai point out that the UAE is "evolving every day to reach the level of advanced economic systems" in part because its companies are running into different legal systems as they branch out beyond their home base. Thus, businesses operating there should not necessarily expect the non-litigious environment to remain as it is.

Lockton's Saada would agree. As he points out, regulatory bodies and criminal courts are now initiating actions against companies and individuals. A



new generation of regulators with more powers is imposing a more rigorous regulatory environment, he explains. Thus, the prospect of criminal prosecutions and civil claims is on the rise.

Evolving landscape

However, to state the obvious, this is not like many other countries. Product liability is not an automatic purchase in the UAE, at least in principle. The law does not provide, for instance, for class actions, which can lead to punitive damages. However, consumer protection laws do exist and, as Saada warns, "firms must be aware of them".

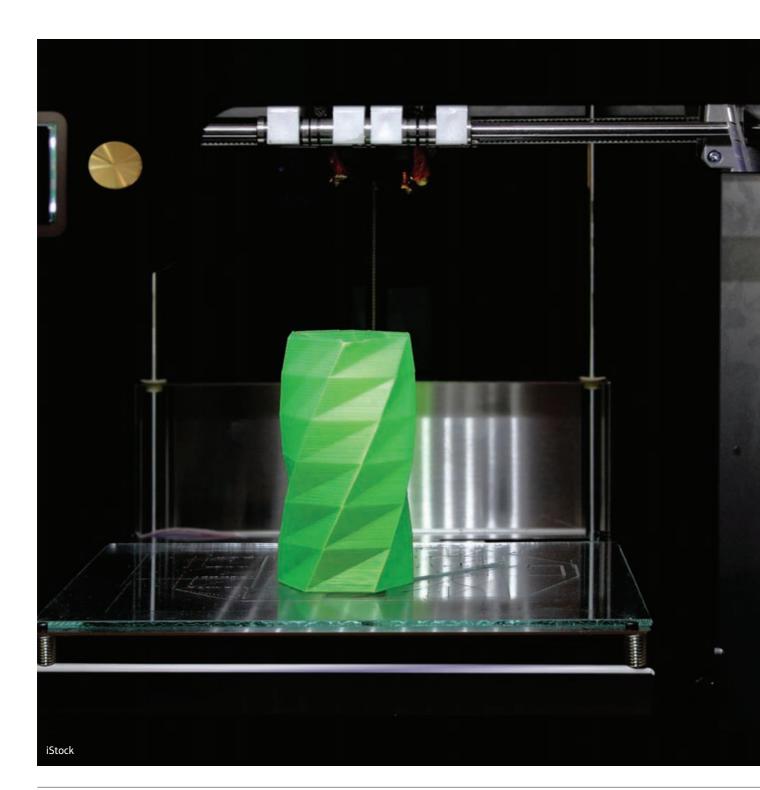
"They are based on contractual or tortbased principles with defined time limits on any actions taken", he says. A particular feature of UAE consumer law is that distributors and commercial agents are required to provide repairs and spare parts for goods that they sell.

As AIG's Dubai office points out, various consumer protection laws, starting in 2006, laid the groundwork in the UAE, and a concrete expression of this is the Abu Dhabi Quality and Conformity Council (QCC), which is now seven years old. Getting into its stride, the QCC has so far recalled 165 different products.

One definite growth area is D&O insurance, where demand is increasing as regulatory oversight intensifies. Indeed, buying D&O may be crucial to attracting expatriate staff, says Saada. This is especially the case when foreign creditors are involved because they are much more likely to enforce their rights against boardrooms they deem to be culpable.

In a country that prohibits indemnification by the company for its directors, D&O insurance may be their only line of defence. **SR**

EMERGING RISKS



Auf wiedersehen, old PET

From bottles to complicated prosthetics, 3D printing is revolutionising all aspects of manufacturing

P RODUCING GUNS BY 3D PRINT-ING may have captured the headlines, but for Germany's KHS group this revolutionary manufacturing technique has more beneficial applications. Its Innoprint subsidiary is turning out PET (polyethylene terephthalate) bottles with 3D technology that consumes fewer materials, reduces CO₂ emissions and, for good measure, makes higherquality containers that are also more easily recycled.

Another commercial bonus is that 3D printing, which works by layering the required materials in a controlled pattern, is much faster than traditional, assembly line production methods. In fact, so superior is 3D printing – also known as additive manufacturing, among other names – compared to traditional methods that KHS believes 5% of all PET bottles worldwide will be manufactured in this way by the end of 2015. Thereafter, production is expected to accelerate rapidly.

All types of production

Almost all manufacturers are testing 3D printing. France-based luxury and lifestyle group Kering, with €9.7bn in revenues, is only one of many that is already into prototype production. As its risk manager Anne-Marie Fournier, also vice-president of the French risk management association AMRAE, points out: "The consequences [of 3D printing] are probably huge for all types of production. It will change our lives. Kering has to adapt. I don't yet know how, but the firm will have to adapt."

For recent proof of the transformative influence of 3D production, she notes that it was used to build 20 houses in 24 hours in China.

Clearly, 3D printing has the power to transform manufacturing. \gg

'The possibilities encompass everything from the production of an aircraft wing, textiles and clothing, food and building materials, to replicating works of art'

» As experts on the technique point out, "the possibilities encompass everything from the production of an aircraft wing, textiles and clothing, food and building materials, to replicating works of art".

According to automotive group Ford, which is reported to have 3D-printed an engine prototype out of sand in only four days, compared to the normal several months (and price of \$500,000), the potential is extraordinary: "One day, millions of car parts could be printed as quickly as newspapers."

The implications of 3D printing for medical science could be even more transformational, with experimental work already being conducted in the production of complicated prosthetics such as knee joints and human organs, thus replacing transplants.

And yet, as the sector where much of the costs of failures in new technology inevitably fall, insurers are exercising caution.

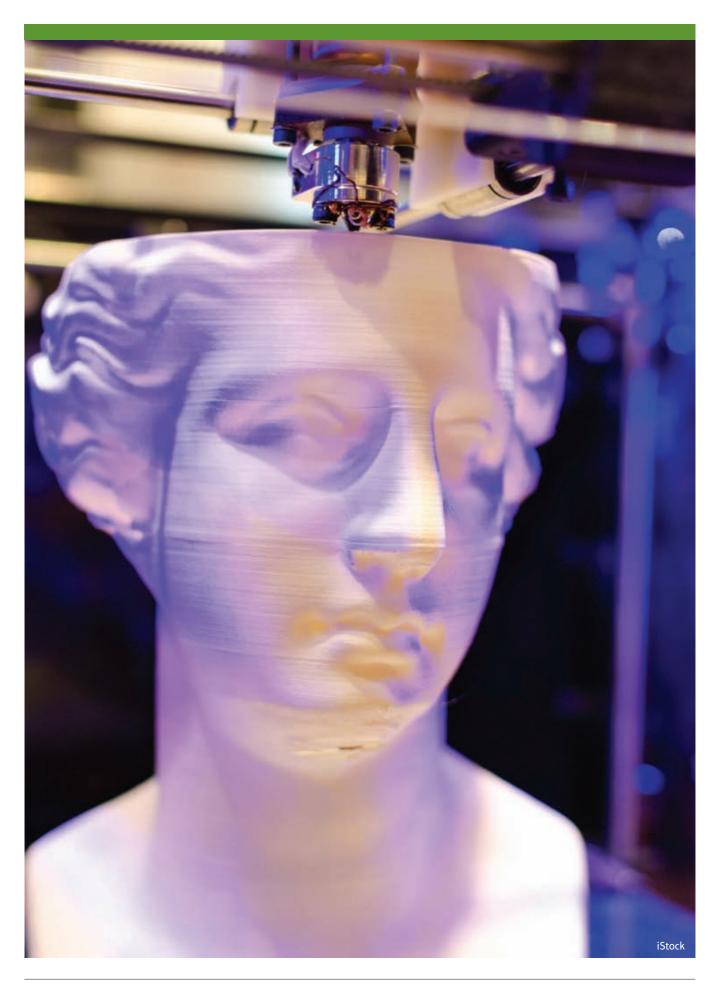
"There will be new materials and products and we don't know how their properties will behave in the long term," explains one authority.

"What, for example, will be the structural integrity of 3D-printed nuts and bolts compared to ones coming out of a traditional metals shop? Will electronic chips and circuits made by 3D printing last as long? Will they be able to operate in a variety of environments?" Foremost among these concerns is how 3D-printed replacement organs will perform in the long term.

Authoritative advice

With much to learn, AIG and some other firms are consulting regularly with specialists across the spectrum to develop our understanding of these complex areas.

In the meantime, in Germany, KHS Innoprint is winning hearts and minds with its PET containers. The company has been nominated for this year's coveted Hermes Award for CO₂-reducing or other "green" products that meet the selection committee's tough standards. **SR**



Rise of the mega-city

Urban sprawl is creating new challenges for insurers and city administrations and more robust infrastructure cannot come soon enough

ARTHQUAKES AND OTHER natural disasters are well known for creating the greatest damage in cities. Further, the bigger and more concentrated the city, the greater the damage in terms of infrastructure, commercial and residential property and lost lives.

Meteorological historians have long said that hostile weather leaves a trail of damage in direct proportion to the extent of urban density. When Hurricane Hazel and its successors swept into North America between 1954 and 1956, they almost wiped out entire communities across an area from Virginia to Ontario. The combined damage was estimated at about \$10bn (€9bn).

Almost 40 years later, in late August 1992, Hurricane Andrew showed once again the truism that the density of developments multiplies the damage. After it had done its work in Dade County, US, disaster economists estimated the damage at between \$25bn and \$40bn. However, they believed the cost would likely have been twice as high had the categoryfour storm made landfall only 32km further south, where industrial and residential densities were higher.

The battering suffered by New Orleans from Hurricane Katrina in 2005 raised the economic bar to unprecedented heights. The full economic damage may never be known, but the repair and reconstruction costs have been estimated at between \$105bn and \$150bn. Finally, two years ago, Hurricane Sandy exacted about \$50bn in damage when it hit the US East Coast.

Booming urban population

Thus, the inevitable logic is that the rise of the mega-city poses unique risk challenges.



As the Global Commission on Economy and Climate points out, a major and unstoppable migration to cities is under way that is adding about 1.4 million new residents every week. (This is equivalent to the entire population of Stockholm.) At this rate, by 2050, the commission estimates the planet's urban population will reach about 2.5 billion. Most people will then be living in cities.

Thirty-six mega-cities already have populations of 10 million or more,

including the capitals of London and Tokyo. Growing at a high rate are a further 291 emerging cities, mainly situated in Asia, with populations of one to 10 million. However, as the commission points out, most of these urban conglomerations are growing in sprawling unco-ordinated а and manner, without due attention to planning, quality of construction, environmental concerns, transport or much else. >>

'Sprawl results in greater congestion, accident and air pollution costs. It also locks in inefficiently high levels of energy consumption and makes it harder to implement more efficient models of waste management and district heating'

Global Commission on Economy and Climate

"Sprawl results in greater congestion, accident and air pollution costs. It also locks in inefficiently high levels of energy consumption and makes it harder to implement more efficient models of waste management and district heating," concludes the commission in its latest study.

"New modelling for this report shows that the incremental external costs of sprawl in the US are about US\$400bn per year, owing to increased costs of providing public services, higher capital requirements for infrastructure, lower overall resource productivity, and accident and pollution damages." The costs are higher in rapidly urbanising countries, and particularly China, where resources are more limited.

Although the commission focuses on greenhouse gas emissions and other environmental matters, it points out that the above issues are closely interrelated. Unplanned urban growth poses significant challenges for city administrations and insurers. Moreover, for the latter, the quality of new infrastructure, both public and private, is of paramount importance.

Promising initiatives

As AIG's loss prevention specialists and future-looking data analysts are aware, some promising initiatives are in the pipeline, such as the new certification programme for publicprivate partnerships under development between the World Bank and APMG-International, a specialist in project management. A global project that essentially aims to deliver higherquality infrastructure, the certification and training process is due to start from mid-2015.

As for the insurers responsible for providing the cover for high-value properties in tomorrow's mega-cities, more robust infrastructure cannot come soon enough. **SR**



Changing times, higher costs

Not so long ago industrial accidents would have been dealt with quickly and not have had many adverse consequences for the firms involved, but these days regulators and the public are growing increasingly litigious

> N EARLY SEPTEMBER 2014, A 60-year old male employee died from the after-effects of an explosion at a factory owned by Organo Fluid, a chemical operation in Ritterhude, Germany.

> The tragedy made only the local headlines, but the company concerned immediately became embroiled in a maelstrom of legal, political and public difficulties that demonstrate the instant and widespread reaction that is becoming standard.

> Even well into the last century an industrial mishap such as that in Ritterhude would have likely been dealt with relatively speedily, depending on its severity.

> Nowadays, however, such incidents usually result in a series of consequences in terms of employee and public liability that engage the company concerned for months and even years, particularly if there are fatalities. Further, the fall-out

increases in severity in the most environmentally conscious and litigious regions such as North America, as BP will confirm in the wake of the Gulf of Mexico disaster with its interminable legal battles over compensation.

Flouting regulations

The Ritterhude incident is proving to be no exception. Within days the company found itself accused of plying local officials with excessively generous gifts. It was said to have flouted local environmental regulations. Complaints arose that executives had ignored certain health and safety standards. Investigations by police, environmental and other authorities will take months while the company faces a hefty bill for the clean-up of local rivers following the chemical spill.

In the meantime, local prosecutors were going through documents to determine whether the company had gained resource consents illegally. Simultaneously, citizens' lobby groups were using the explosion to fuel their campaign against the establishment of another chemical operation in a nearby port. With all this going on, production at Organo Fluid has come to a standstill.

Whether the company involved is a local or multinational operation, the wrath of regulators and the public alike is almost guaranteed if the lives of ordinary people, employees especially, are involved.

Rail accidents

With seven deaths and many injured, the 2013 rail accident at Brétigny-sur-Orge, France, provides another salutary example. It was manifestly more serious than the Ritterhude tragedy. Yet both illustrate the mounting legal consequences of any industrial deaths, especially where culpability is established. After a long investigation since the incident in July 2014, France's rail management network, RFF, is facing a charge of "involuntary homicide".

Similarly, government-owned rail company SNCF is also under investigation over what court-appointed experts describe as "failings in the quality of maintenance" in that particular section of the network.

They found the rails had been weakened through fatigue, vibrations, loose bolts, overuse and other general effects. In a devastating analysis, investigators cited 100 faults that were "visible and critical".

Although the rail management company and SNCF have since jointly released a \in 410m Vigirail project designed to improve maintenance and surveillance of the lines, the courts are unlikely to take this into account. Both organisations now face a long and agonising process through the courts. **SR**

LITIGATION



Get them home in one piece

Employers that do not ensure the safety of their employees at home or abroad face being prosecuted for negligence

HEN VEOLIA SIGNED THE International Labour Organisation's protocol on industrial safety a few years ago, the France-based environmental waste

disposal group undertook a companywide mission to reduce the frequency of workplace accidents at its plants around the world. Its target was a 10% reduction. With some 320,000 employees, that goal represented a considerable benefit in terms of human resources alone.

By 2013, Veolia had achieved its target. In fact, it had bettered it by a significant margin. In human terms, the achievement can be measured in fewer injuries and saved lives.

However, even with the best of intentions accidents do happen and responsible firms ensure they have adequate protection for their workforces.

In handling thousands of cases in the past few years, AIG has found that the most effective protection for employer and employee covers all the bases from the initial injury and illness through to full rehabilitation before the individual returns to work in a way that reduces disruption, avoids prolonged legal disputes and – most importantly – saves careers.

High fees

International laws on employer responsibility vary widely. However, to take only the UK as an example, the perils of a firm being prosecuted on the ground of negligence are undoubtedly on the rise. As law firm Fieldfisher points out, depending on the severity of an injury from a wide variety of dangers such as toxic chemicals, falling objects on construction sites and dangerous machinery, fines and litigation can easily exceed £100,000 (€138,000) and may reach £600,000 or more.

Furthermore, under the UK's duty of care laws, a business may be held responsible for an attack on one of its representatives on a sales mission abroad. As insurers point out, although the financial risk can be transferred through a policy, that does not necessarily clear all the legal hurdles.

Clearly, no company could defend a case if it had blithely despatched employees on the understanding they were expected to fend for themselves.

The UK's health and safety at work regulations require that businesses ensure their employees undergo "suitable and efficient pre-departure risk assessments." Of course, those obligations continue when their people are in the field, which in practice means providing them with protection, support, a safe working environment to the greatest possible extent and, if things take a turn for the worse, rescue. **SR**

Rolls-Royce solution for supply chain finance

When many of its suppliers were struggling to finance the tools on which the manufacturer relied, it devised an ingenious solution to help them, thereby mitigating a key business risk

R OLLS-ROYCE HAD THE CREDIT rating, the reputation and a vast order book. It also had a lengthy, world-wide chain of suppliers producing precision components for its engines. Unfortunately, many of these suppliers were struggling to finance their tooling costs at affordable rates, so much so that the viability of some suppliers was at risk.

The suppliers depended on Rolls-Royce and Rolls-Royce depended on them to build its engines. How could Rolls-Royce leverage its financial strengths to help its suppliers? It contacted a funder to see whether a solution could be found.

The solution the various parties eventually found illustrates the revolution that has occurred in supply chain finance since the Fukushima and other natural disasters that knocked out entire linkages of suppliers.

As he told *GT News*, the site for corporate treasurers, Rolls-Royce's Andrew Leach, head of purchase risk, wanted a much cheaper and easier method of funding for the manufacturer's suppliers in what he described as "funding the unfundable." Leach, who has overall

responsibility for financial risk management in the supply chains, was aware of the danger.

High interest rates on short-term loans were making Rolls-Royce's suppliers vulnerable. The terms of the financing were so tough (generally 30 to 90 days under trade financing arrangements) that it threatened their longterm competitiveness. This state of affairs was not in the interests of Rolls-Royce or its global family.

However, Rolls-Royce had a lot to offer: a strong A credit rating, a stacked order book for its aerospace, maritime and other engines worth more than \pounds 70bn (\pounds 97bn) and a great brand.

Financing system

In due course, the funder devised an award-winning system of financing that was anchored on Rolls-Royce's A rating. However, plenty of snags remained. The system had to be available in many different countries with different currencies. The funding had to be treated as "non-recourse" from the suppliers' viewpoint but as trade payables from Rolls-Royce's. It also had to



be simple to operate, without any elaborate set-up obligations or other administrative fees.

Once the hurdles had been cleared, the solution was a much lower rate for suppliers plus a longer, three-year terms. It amounted to a major improvement for them. In addition, suppliers had recourse to more working capital. (Some of them had been forced to finance their tooling out of equity.)

The first supplier, a US-based company was signed up in a few minutes with a minimum of paperwork. As Leach recalls: "The company had the cash in its US bank account only days later. It's been followed by many more suppliers since."

Thus, overnight, the suppliers, particularly SMEs, became much more viable, and Rolls-Royce had strengthened its supply chain. "It is now possible for even the smallest supplier to finance its tooling at competitive rates," explains Leach. "Most importantly to Rolls-Royce, it has mitigated a key business risk by strengthening the resiliency of its supply chain."

In a world of financial uncertainty, the project provides the resources for suppliers to reliably deliver the engine parts that Rolls Royce requires. **SR**

'Most importantly to Rolls-Royce, it has mitigated a key business risk by strengthening the resiliency of its supply chain' **Andrew Leach**, Rolls-Royce

SUPPLY CHAIN

RELIABILITY BEATS COSTS IN SUPPLY CHAINS

A company with two outsourcing tiers may not have a clear picture of its supply chain, according to Lyndon Bird, technical director of the UK-based Business Continuity Institute. "It's difficult to keep track even at tier two, but once you get to tier four it's impossible," he explains, citing the Fukushima disaster as proof.

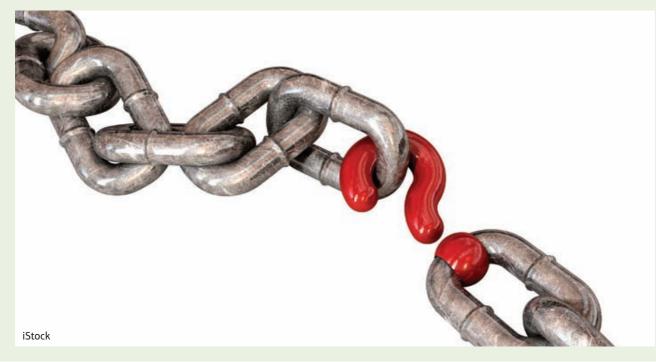
Aside from other risks, the reputational damage that can arise through supply chain opacity can be substantial. Bird points out, for example, that some of the international brands whose products were being made in the eight-storey Rana Plaza building that collapsed in Dakar, Bangladesh, in April 2013, were not aware that this was so. "In many instances sub-contractors that had been banned by the purchasing company simply worked themselves back into the chain by subcontracting to an approved subcontractor," he explains.

Supply chains, Bird adds, have become dangerously complex in the past few years in the

pressure to reduce costs. However, when a link in the chain snaps, it is the company and not the supplier that is seen to have failed its customers. "Reliability and quality of such partners is more important than cost," warns Bird. "Recently, the trend has been towards any risk at the lowest cost." Although procurement rightly tends to look at the overall level of spend, this is by no means the only factor.

However, surely redundancy can be built into supply chains by contracting multiple suppliers. Bird says that this is not necessarily the case. "This doesn't always work because there is often a single point of failure such as a raw material or a component that is common to all the suppliers."

In general, he says, companies should place more emphasis on ensuring reliability in the chain and one way of achieving that is through a business impact analysis. For many companies, this could prove a salutary exercise.



Global solutions, re-imagined.

Property insurance solutions on a new global scale.

The AIG Global Property Division is a world leader in providing insurance, risk management and loss control services for commercial and energy property. Now we're thinking even bigger. With larger per-risk capacity, new resources and capabilities worldwide. Whether your needs are local, multinational or global, our industry specialists can coordinate consistent service from engineering to claims to establishing terms and conditions you'll want others to follow. To learn more, visit www.aig.com



Bring on tomorrow

AIG is the marketing name for the worldwide property-casualty and general insurance operations of American International Group, Inc. Products and services are written or provided by subsidiaries or affiliates of American International Group, Inc. and may not be available in every jurisdiction. For additional information, please visit our website at www.aig.com. Registered in England: company number 1486260. Registered address: The AIG Building, 58 Fenchurch Street, London EC3M 4AB.