

# Global Risk Dialogue

Allianz Global Corporate & Specialty  
Issue 2: 2015

SPECIAL TOPIC  
Crisis management

## Safety takes center stage

Concerts and festivals are increasingly elaborate productions. Behind-the-scenes, risk management ensures the show can go on.

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**The drones are coming**

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**Product recall**

Dealing with danger in the digital age

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**Political risk**

What are the hotspots in 2016?

Allianz 

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## EDITORIAL



Crisis management scenarios can arise from many different sources. Whether it is an interruption to the ever-expanding global supply chain, a problem relating to a product's safety, the threat of political violence in a country where employees are located or even the unexpected interruption of a live entertainment production, all have one thing in common: companies increasingly have to manage issues outside of their comfort zone.

In today's world of fast and viral communication, a company's reputation or brand can be quickly impacted if it does not respond appropriately to a crisis situation, even if that crisis is not of its own making. Speed of response can be a decisive factor but pre-event planning and scenario testing is also crucial. Insurance and crisis management services can have a pivotal role to play in mitigating the impact of such events.

This edition of **Global Risk Dialogue** looks at how companies can best respond to such challenges. Enjoy the issue.

Chris Fischer Hirs  
CEO  
Allianz Global Corporate & Specialty

# Global risks at a glance

## Taipei tops GDP at risk rankings



Photo: Wikimedia

Taipei heads the Lloyd's risk index.

A total of \$4.6trn of 301 cities' projected GDP is at risk from 18 manmade and natural threats over the next 10 years, according to research from the Center for Risk Studies at the University of Cambridge Judge Business School, conducted on behalf of the Lloyd's insurance market.

Taipei tops **The Lloyd's City Risk Index 2015-2025** with **\$181bn** of GDP at risk. All of the top four cities in the index are located in Asia, with Tokyo (**\$153bn**), Seoul (**\$104bn**) and Manila (**\$101bn**) following Taipei. New York (**\$90bn**) completes the top five rankings.

Manmade threats are becoming increasingly significant. Market crash, cyber-attack, power outage and nuclear accident alone are associated with almost a third of the total GDP at risk. Market crash puts the most GDP at risk globally – representing nearly a quarter of all cities' potential losses.

The index calculates the total projected GDP of the 301 cities between 2015 and 2025 to be **\$373trn**. View the full report at <http://www.lloyds.com/cityriskindex/>

## Nat cat protection gap increasing

Underinsurance of property risks is growing and represents a global challenge, according to Swiss Re. The reinsurer's latest **sigma** study **Underinsurance of property risks: closing the gap** notes that much of this underinsurance is due to global natural catastrophe risk, which has risen steadily over the past 40 years.

Over the past 10 years, cumulative total damage to global property as a result of natural disaster events was **\$1.8trn** – just 30% of those losses were insured. In other words, the total shortfall in insurance cover – the protection gap – was **\$1.3trn**.

With economic development and ongoing urbanization, particularly in emerging regions, the value of global property at risk has outpaced the purchase of insurance. Catastrophe models estimate global uninsured losses from future natural disaster events to total **\$153bn** annually. Combined with other general property risks there is global total property underinsurance of **\$221bn** per annum in expected losses, the study concludes. View the report at <http://www.swissre.com/sigma/>

## Mature markets to drive motor growth

Traditional automotive markets in Europe and the US are showing the most promising signs of growth and have taken a lead over emerging economies, according to **Auto Market – a live wire**, a new report by global trade credit insurer, Euler Hermes.



Photo: Shutterstock

For example, in China, sales are set to fall sharply to 3% growth in 2015 and 2016, compared to 10% expansion last year. Meanwhile, registrations in Brazil are expected to fall by 14% in 2015 to 2.3 million units, well below the 3 million units produced in 2013.

Conversely, the US has enjoyed six consecutive years of growth, climbing back to its pre-crisis peak. Euler Hermes predicts that the market will grow a further 4% in 2015 to 17.5 million vehicles. In Europe, the automotive industry has a projected expansion rate of 5%. View the report at [www.eulerhermes.com](http://www.eulerhermes.com)

# News from AGCS and Allianz

[www.agcs.allianz.com](http://www.agcs.allianz.com)

## AGCS founder member of unmanned aircraft association



Photo: Shutterstock

Increasing use of drones presents new risk challenges.

AGCS is one of the founder members of a new insurance association focused on risk management and safety related to the commercial use of unmanned aircraft systems (UAS), also known as drones or unmanned aerial vehicles (UAVs).

Increasing use of such technology, regulatory uncertainty and concerns about collisions involving unmanned aircrafts present new challenges for the insurance industry.

The newly-created UAS Insurance Association (UASIA) will assist the industry in establishing and maintaining best practices and procedures around such vehicles.

Other founding members of the UASIA include AIG, Global Aerospace and Transport Risk Management. For more information visit [www.planelyspokenblog.com/the-uas-insurance-association](http://www.planelyspokenblog.com/the-uas-insurance-association)

## AGCS teams up with Kudelski Security

Cyber security specialist Kudelski Security is partnering with AGCS to offer incident response services to AGCS customers in the event of a cyber breach, a service that is part of AGCS' insurance solution for cyber and IT risks, **Allianz Cyber Protect**.

Kudelski Security will assist AGCS clients by evaluating the organization's ability to detect and respond to cyber-attacks, as well as supporting them in the event of an incident. If a cyber incident should occur, Kudelski Security can assist AGCS clients by assigning a multi-disciplinary cyber security emergency response team to help

## Countdown: World's longest railway tunnel



Photo: Alp Transit Gotthard AG

Under construction for 16 years, the Gotthard Base Tunnel will open on June 1, 2016.

One of the most important transport projects in Europe is almost finished. The Gotthard Base Tunnel, the core of the new rail link through the Alps connecting Erstfeld in the Swiss canton of Uri to Bodio in Ticino, is to open in June 2016, becoming operational later in the year.

At **57km-long**, the tunnel will not only become the longest railway tunnel in the world but also the deepest. In some places there are 2,000 meters of rock between the tunnel and the earth's surface. Trains will be able to achieve top speeds of 250 km/h, significantly reducing the traveling time between Zurich and Milan.

AGCS, in cooperation with Allianz Suisse, has been part of the project as an insurance partner of AlpTransit AG, which is building the tunnel.

The first tunnel to be built through the Gotthard massif – the Gotthard Tunnel – was constructed over 130 years ago. It is still in operation today. For more information visit <http://www.gottardo2016.ch/en>

deal with the aftermath. The tie-up with Kudelski Security covers Germany, Austria and Switzerland.



Photo: Shutterstock

AGCS has been offering Cyber Protect since 2013 but has been insuring cyber risks since the start of the century. Cyber Protect is a comprehensive suite of three insurance products addressing various first and third party liability losses that can arise from a serious cyber-attack or data breach.

# The cost of cyber-crime

Cyber risk is complex and forever-changing. Attacks and incidents are increasing and the losses can be eye-watering.

Cyber risk is now a major threat to businesses. Companies increasingly face new exposures, including first- and third-party damage, business interruption and regulatory consequences.

It is estimated that cyber-crime alone costs the global economy approximately \$445bn a year<sup>1</sup> with the world's largest 10 economies accounting for half of this total (see graphic), according to data in a new AGCS report **A Guide to Cyber Risk: Managing the Impact of Increasing Interconnectivity**.

There is a **\$200bn+** annual cost to the world's four largest economies – US, China, Japan and Germany – from cyber-crime. The US (**\$108bn**) is the top hotspot, accounting for almost **25%** of the annual cost to the global economy, with

China (**\$60bn**) ranked second and Germany (**\$59bn**) third. Brazil (**\$7.7bn**), the world's seventh largest economy according to the World Bank GDP data used in the study, ranks as the fourth top hotspot for cyber-crime.

As well as detailing the cost of cyber-crime, the report also warns that businesses need to prepare for a new generation of fast-evolving cyber risks, moving beyond the established threats of data breaches, privacy issues and reputational damage to operational damage, business interruption and even potentially catastrophic losses.

To view the full report visit <http://www.agcs.allianz.com/insights/white-papers-and-case-studies/cyber-risk-guide/>

## How much does cyber-crime cost the world's leading 10 economies?

This AGCS atlas examines the estimated total cost to the global economy from cyber-crime per year, with a particular focus on the impact on the world's top 10 economies, according to GDP.



Country Ranking by GDP <sup>1</sup>	Cyber-crime as a % of GDP <sup>2</sup>	Estimated cost <sup>3</sup>	Country Ranking by GDP <sup>1</sup>	Cyber-crime as a % of GDP <sup>2</sup>	Estimated cost <sup>3</sup>
1 USA	16.8trn .64%	\$108bn	6 UK	\$2.7trn .16%	\$4.3bn
2 China	\$9.5trn .63%	\$60bn	7 Brazil	\$2.4trn .32%	\$7.7bn
3 Japan	\$4.9trn .02%	\$980m	8 Russia	\$2.1trn .10%	\$2bn
4 Germany	\$3.7trn 1.60%	\$59bn	9 Italy	\$2.1trn .04%	\$900m
5 France	\$2.8trn .11%	\$3bn	10 India	\$1.9trn .21%	\$4bn

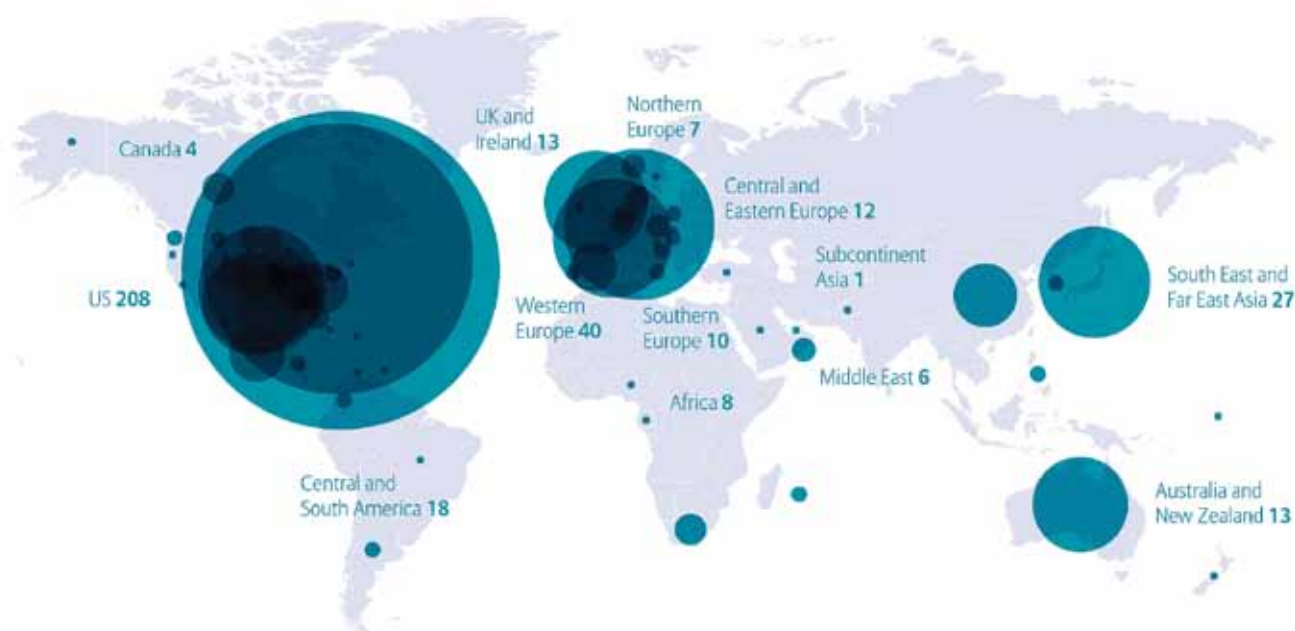
Sources: <sup>1</sup>World Bank (2013) <sup>2</sup>Net Losses: Estimating the Global Cost of Cyber-Crime, CSIS/McAfee <sup>3</sup>Allianz Global Corporate & Specialty

<sup>1</sup> Net Losses: Estimating the Global Cost of Cyber-Crime, CSIS/McAfee

# Loss Log

The US is the global hotspot but more than 50 countries have suffered significant windstorm losses in recent years, insurance claims analysis shows.

**In focus:** Five-year windstorm loss locations of business claims (€100,000+\*)



Source: Allianz Global Corporate & Specialty (Based on analysis of 426 insurance industry windstorm claims over €100,000 over a five accident year period 2009-2013)

Whether it is hurricanes in the US, typhoons in Asia or winter storms in Europe – strong winds can easily cause property and business interruption losses for companies, as an analysis of more than **11,000** AGCS major business insurance claims worldwide in excess of **\*€100,000 (\$112,000)** indicates.

Over 400 storm-related claims were filed during the time period analyzed<sup>[1]</sup> meaning windstorm ranks fifth in the top 10 causes of loss for business, according to value of claims. Windstorm losses account for approximately **40%** of all natural hazard losses by number of claims and **26%** by value, according to AGCS analysis contained in a new report published to mark the 10th anniversary of the deadliest windstorm in history – Hurricane Katrina.

The US is the top loss location, accounting for almost half (**49%**) of the 426 global claims analyzed (see

*graphic*). Germany ranks second with 19 significant storm events having occurred during the five accident-year period. France (15), Japan (14) and Australia (12) complete the top five global loss locations.

However, the report also predicts that losses across Asia are expected to rise exponentially in future with **80%** of the top 10 exposed locations to coastal flooding from storm surge and wind damage expected to be in this region in the next 50 years. Growth of exposure is far outpacing take-up of insurance coverage, resulting in a growing gap in natural catastrophe preparedness.

To view the report **Hurricane Katrina 10: Catastrophe Management and Global Windstorm Peril Review** visit [www.agcs.allianz.com/insights](http://www.agcs.allianz.com/insights)

<sup>[1]</sup> Between 2009 and 2013

# 4 Questions for...

## Paul Schiavone

Regional Head of Financial Lines, North America, Allianz Global Corporate & Specialty

Tougher governmental scrutiny and heightened class action activity in previously benign areas is resulting in an extremely volatile landscape for financial institutions and service providers, as Paul Schiavone explains.



### **AGCS is launching a range of financial lines insurance products in North America. Which risks are covered?**

Financial lines insurance entails the following product lines at Allianz: directors and officers (D&O) liability; employment practices liability; pension trustee liability; and crime. Coverage is available for all commercial companies and financial institutions (banks, insurance companies, private equity firms, asset management firms, and hedge funds). Financial lines also includes various errors and omissions products such as lawyers, accountants, insurance agents/agencies, technology, cyber, media, architects and engineers, and miscellaneous parties. North America is a significant growth opportunity for Allianz in the financial lines space and we intend to become a reliable partner for brokers by delivering sustainable, profitable growth. There is a need for a strong global brand like Allianz in this market and being active here gives our teams further credibility worldwide.

### **What differentiates Allianz's financial lines product in the North America market?**

The international footprint of Allianz, combined with the expert technical capabilities of our experienced team, will allow us to stand out in a crowded and competitive field. These factors, along with unmatched financial strength, quality people, a global brand, innovative culture, and existing customer base in other lines of business, will help us gain a significant foothold in this market. We also see opportunities to make inroads into the market by using international insurance solutions to deliver program capabilities throughout the world. Finally, we see the claims service we provide as being central to our business strategy and as the ultimate delivery on our promise to brokers and their clients. Delivering first-class claims management supported by a solutions-oriented culture is a further differentiation we can add.

### **Which trends do you see in financial lines that will impact the industry the most in the near future?**

There are a number of disturbing trends that will continue to impact the financial lines industry. The enduring and tightening regulatory pressure, both domestically and internationally, continues to change the liability landscape, as governments further clamp down on bribery, corruption, and market conduct abuses in reaction to past crises. Penalties have grown for offenders and enforcement activity has increased around trading errors and breaches of sanctions, as well. Class actions, once limited to the highly litigious US market, have trended higher in new areas like Europe, Australia and Asia, as increasingly savvy litigators and litigation funders become dominant in the industry. The combination of tightening governmental scrutiny and heightened class action activity in previously benign areas has made for an extremely volatile landscape for financial institutions and other professional financial services providers. As an insurer, Allianz must be sensitive to these trends and quick to capitalize on the opportunities that result.

### **How does the financial lines offering in North America differ from Allianz's' global product?**

The product offerings and appetite within financial lines North America are similar to what is offered in other markets but we offer a more varied and diverse product portfolio in the US than elsewhere. There is a full suite of products in both the corporate and middle market space that is tailored for the extensive US distribution chain, which includes global, large national/regional, wholesale, MGA/MGU and program brokers. This allows us the ability to offer our services to a full array of commercial clients, ranging from very large **Fortune 200** companies to local or regional small and mid-sized businesses, giving us an edge over most of our competitors.

### **PAUL SCHIAVONE**

Paul Schiavone joined Allianz after a long and successful career in the financial lines industry, most recently at Zurich US, where he was responsible for the Private Equity Practice. Prior, he worked in the London office of Zurich General Insurance, as the Global Chief Underwriting Officer for Special Lines, inclusive of D&O, management liability, financial institutions, professional indemnity, surety, political risk and trade credit insurance, since February 2011. He worked at Zurich in several other capacities since April 2006. Prior to Zurich, Paul was Vice President at American Wholesale Insurance Group (AmWINS) Brokerage, where he was responsible for wholesale brokering of all financial liability lines of business. He has also served in a variety of roles at AIG Europe SA, American International Underwriters (the international underwriting subsidiary of AIG), and National Union Fire Insurance Company.

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# Tianjin explosions highlight growing claims complexity

The shift of manufacturing to China and South East Asia and increasing interdependencies continue to result in larger business interruption claims.



Photo: Voice of America, Wikimedia Commons

Tianjin is the latest large loss incident in Asia to highlight increasing concentrations of risk.

## DID YOU KNOW?

Tianjin will be one of the top 10 cities in the world most exposed to storm surge and wind damage within 50 years, according to the OECD.

In August 2015, the Chinese port city of Tianjin was rocked by a series of explosions that killed more than 170 people. The explosions also destroyed property, causing significant disruption and an insured loss that is expected to total billions. The incident was the latest to highlight the growing complexity of large property insurance claims and the increasing relevance of business interruption (BI).

Tianjin is an important transport hub and manufacturing center – it is ranked as the fourth largest port in the world in terms of total cargo throughput and the 10th largest container port. A number of different industries have been impacted by the blasts including automotive, maritime, chemicals, food and steel.

Over the past five years in particular there have been a number of large losses following major fires, storms, floods and earthquakes, where BI has been a key loss driver.

Almost all large property insurance claims now include a major element of BI. So much so, that BI losses typically account for the lion's share of large property claims, sometimes dwarfing the property damage itself. According to AGCS' **Global Claims Review**, the average BI claim is **€997,602 (\$1.13m)** – 32% higher than the average direct property damage claim (**€755,198**) – (based on claims over €100,000).

## Loss drivers

The primary drivers for increasing BI losses have been the growth in complex global supply chains and increasing concentrations of risk, as companies,

products and processes become more specialized. Adding to the problem has been the shift of manufacturing to China and South East Asia, where assets are exposed to natural catastrophes, and where risk management and asset protection are still maturing. These trends have also resulted in a rise in contingent business interruption (CBI) losses, where a company suffers a financial loss that is "contingent" on that of another.

For example, many automotive and electronics companies in Europe and the US suffered losses when suppliers in Japan were unable to produce vital components following the 2011 Tohoku earthquake and subsequent tsunami. Similar losses were experienced by global companies later in the same year when widespread flooding affected clusters of manufacturers located in Thailand.

## Indirect impact

With increased interdependencies, BI and CBI losses can significantly affect the total cost of a major natural catastrophe. For example, the Tohoku earthquake and tsunami alone led to some 150 claims notifications for AGCS. The vast majority of notifications were from companies located outside Japan.

Supply chain disruption also played a part in the fire at the SK Hynix factory in Wuxi, China, in September 2013, which was reported to have cost insurers around \$1bn. The cost of the claim reflected the time and expense of restoring specialist 'clean rooms' used in the production of semi-conductors, as well as CBI losses suffered by manufacturers in North America.

Coming soon: A new AGCS report **The Business Interruption Global Claims Review** assesses the impact of this risk on industry. Visit <http://www.agcs.allianz.com/insights/>

# Cleared for take-off...



Photo: [www.microdrones.com](http://www.microdrones.com)

Unmanned aerial vehicles (UAVs) or drones used to be associated with military raids or unmanned spacecraft. Today, compact versions are increasingly operating in everyday life and the UAV industry is fast becoming a multi-billion dollar business. However, the rise of such innovative technology also brings a number of risk and liability challenges.

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JOEL WHITEHEAD



UAVs have increasing uses in civilian life, including on-site inspections of industrial plants.

The stories of so-called drones or UAVs crashing or causing near disastrous scenarios are enough to make any risk manager cringe:

A drone crashes in front of German Chancellor Angela Merkel during a political rally. On the other side of the world, a small drone crash-lands in the grounds of the White House.

A drone crashes into a skyscraper sending glass falling to the street below. No one is injured, but it could have been very different. Elsewhere, a drone misses an airplane as it takes off – narrowly avoiding a catastrophic accident.

## UAV USES

### WILDLIFE PROTECTION

Drone technology is being used in national parks in Kenya to help reduce poaching.

A drone crashes outside a correctional facility. Operators used it to smuggle cell phones, cigarettes, and drugs into the prison.

### Threat scenarios

Such horror stories of UAVs operating in public airspace are real and becoming more common but even worse scenarios could happen. Third-party hackers could overtake a flight, for example. UAV loss of control due to frequency interference could occur, and already has done so, potentially resulting in fatalities. Almost any kind of small aircraft, helicopter or crop duster could be susceptible to accidental collision with a UAV.

Particularly worrisome is the potential terrorist threat of UAVs targeting power stations or nuclear reactors. In 2014, after more than a dozen overflights of reactors, French authorities announced the expenditure of **€1m (\$1.1m)** “to detect, identify and neutralize small aerial drones”.<sup>1</sup>

Despite mishaps and misgivings of UAV technology, their commercial use in industries such as public safety, law enforcement, agriculture, construction, environmental/climate research, entertainment, cargo delivery, and even insurance risk assessment is increasing. UAVs are here to stay, along with their risks and rewards. According to aerospace and defense market analysis firm, The Teal Group, the commercial and consumer UAV market is anticipated to more than triple in the next decade, with spending totalling **\$93bn**. The key to their deployment on a widespread basis, however, is a structured regulatory system.

### The question of regulation

Although UAVs have been used for years, it is only now that they are coming into their own in a commercial sense. “UAVs will evolve in years to come,” says **Thomas Kriesmann, AGCS Senior Underwriter General Aviation**. “Perhaps, we might even see their uses further expand boundaries to include such things as flying cars as the technology develops.”

Compared with manned aviation, the worldwide regulation of UAVs is in its infancy, as evidenced by the numerous organizations and professional associations lobbying governments for harmonization. Once available, companies will bear the brunt of the most stringent regulations.

Governments see the need for adequate regulatory control. In some jurisdictions, such as Canada and the

## “A concern is the lack of data with regard to operation and loss in the UAV arena”

### UAV USES

#### WILDFIRE PROTECTION

Fire crews have used drone technology to help provide early indications of fires in California.

European Union, complex and comprehensive laws are already in place and certification is a prerequisite for commercial use. Clear distinctions are made between UAVs for business use and **“model aircraft”** for recreational use.

Other countries, such as the US and UK are reviewing broader regulations to supplant simpler guidelines currently in force. The US will finalize comprehensive regulations sometime in 2016, while the UK considers how to proceed without severely affecting jobs or limiting commercial growth.

Elsewhere, in locations such as Brazil, Mexico, New Zealand, Switzerland, and Japan restrictions are limited, at best. In most cases, the designation between commercial and recreational UAV use is the key starting point in deciding whether to regulate and enforcing regulations once they're set.

#### Common standards

No matter the jurisdiction, however, commonalities exist. Because investing in UAV technology is relatively inexpensive – models are available for a few hundred euros or dollars and are easy to operate – most standards begin with a few simple rules:

- Operators must maintain a visual line of sight (VLOS) fix on the vehicle at all times
- UAVs must be under a certain size (usually <55 pounds/25 kilograms)
- UAVs must not be operated in close proximity to airports or sporting venues.

For widespread commercial use of the technology to become the norm, however, clearly defined rules and penalties must be in place. Companies often work in tandem with governments to work out best practices.

Recently, for example, the online retailer Amazon proposed creating a separate airspace lane for commercial drone delivery service from between 200 and 400 feet elevation, with the air traffic in the corridor monitored

by an automated computer system. Along with similar companies like Google and Verizon Communications, Amazon will work with the National Aeronautics and Space Administration (NASA) to devise and test that system.<sup>2</sup>

#### Commercial UAV applications

UAVs especially work well in places where it is not safe for humans – for example at a demolished site after a storm, around wind turbines, in collapsed mine tunnels, or at sites where mudslides or wildfires have laid waste.

“UAVs in commercial use will increase greatly in the next decade because they're effective at carrying out tasks under certain conditions, especially in unsafe and dangerous environments,” says **Josef Schweighart, AGCS Head of Aviation Central and Eastern Europe.**

While some larger corporations own their own UAVs and regularly deploy them, the majority of commercial operators – especially those without a frequent need for them – find it cheaper and easier to “rent out” UAVs from third party “drones-for-service” companies.<sup>3</sup> In the first instance, the company would be the **“owner”** of the UAV; in the second, they would be the **“non-owner”**.

#### Key risks and insurance concerns

As UAVs become cheaper to purchase, smaller in size and easier to operate, insurance considerations come into play. While there haven't been many accidents so far, there have been enough to generate concern among underwriters that the likelihood of collisions will only grow. Once regulations are somewhat standardized, the general use of UAVs will increase, which will likely results in more incidents.

### UAVs by numbers

**\$93bn** = economic impact of the drone industry in 2024<sup>1</sup>

**10,000** = units of drones sold per month by Amazon<sup>2</sup>

**70,000** = number of jobs that the drone industry will create by 2024<sup>1</sup>

**55** = weight in pounds a drone can weigh and still be considered **“model aircraft”** by the FAA<sup>3</sup>

**7** = incidents of near misses with aircraft at UK airports between May 2014 and March 2015<sup>2</sup>

Sources:

<sup>1</sup> Teal Group Corporation

<sup>2</sup> The Independent: *Drones boom puts insurers at risk of multi-billion dollar bill*

<sup>3</sup> Federal Aviation Administration

## UAV USES

### AIRPLANE PROTECTION

Engineers at UK budget airline Easyjet, are developing a way to use automated drones to inspect aircraft for damages.

The potential risks are obvious, namely collision or third-party damage or injury and the resulting liability. Most countries require operators to hold adequate levels of insurance in order to meet liabilities in the event of an accident. Commercial flights usually are covered for hull physical loss and product liability.

According to a report by insurance broker Marsh: **Dawning of the Drones: The Evolving Risk of Unmanned Aerial Systems**, the largest growth area for insurance in the UAV area is expected to be for commercial VLOS operations for unmanned cargo that require up to \$1m physical loss sums insured.

“AGCS has a long history of insuring unmanned aircraft operations and unmanned aircraft manufacturers,” says **James Van Meter, Unmanned Aircraft Systems (UAS) Product Line Head, AGCS**. “We are presently insuring a number of UAS risks: manufacturers, distributors, universities, test sites, corporate operators, government contractors and service providers.

“A key element to the growth of the UAS industry is to have strong insurance partners like AGCS who are dedicated to supporting the industry,” Van Meter continues. “AGCS will continue to design custom solutions for our clients as the regulations and technology evolve.”

## UAV USES

### PROPERTY PROTECTION

Insurers are testing drones as a way of gaining access to otherwise inaccessible areas or property.

While government agencies continue to wrestle with the regulatory implications of UAVs, insurers are concerned with breach of privacy issues and privacy protection, data collection and enforcement, harassment, spying, and other potentially criminal activities. Currently, most opt to exclude those exposures. Adjusting, investigating and settling losses nonetheless could be very difficult. Another concern is the lack of data with regard to operation and loss in the UAV arena.

### The importance of UAV education

In the US, by Federal Aviation Administration (FAA) mandate, all military, commercial or private-owner operations in civil airspace must meet minimum levels of safety requirements. Education is a key component and as private ownership grows so will expectations for safety education.

AGCS partners with two of the top US aviation universities, Embry-Riddle Aeronautical University and the University of North Dakota. Both institutions are focused on training professional UAV operators with an emphasis on risk mitigation strategies and public safety awareness. The entry point for the novice operator is so low that even small things like safety check lists and reminders to avoid airports, agricultural areas and other settings where they might encounter low-flying aircraft are useful.



Although drones have been used to help locate wildfires, the US Forest Service has warned that civilian use is hampering firefighting efforts.

“Users have multiple options of manually operating UAVs,” says Kriesmann. “Training should cover radio technology, battery technology, flight time calculation, meteorology, security checks for aircraft navigation systems, audible and visible signals, emergency instructions, and air traffic law and clearance issues.

“For corporations additional training should include on-board camera image uses, flight communications and planning, flight rules over buildings and forests, advanced meteorology, system maintenance and other technology issues.”

Just like in manned aviation, UAV operators should focus on safety as their top priority and obtain the necessary training and experience to competently pilot the UAV they are operating.

“The current regulations do not contain any formal training requirements for UAV operators,” says Van Meter. “The final rules will create a new pilot certificate for UAV operators and will contain training requirements and a written test,” he concludes.

<sup>1</sup> Newsweek <http://europe.newsweek.com/most-french-nuclear-plants-should-be-shut-down-over-drone-threat-309019>

<sup>2</sup> Risk and Insurance <http://www.riskandinsurance.com/rogue-drones/>

<sup>3</sup> Fortune – <http://fortune.com/2015/07/17/commercial-drone-service/>



Flood mapping is a crucial element of flood risk management.

Flooding represents a significant risk for companies like Faurecia. In addition to having the potential to produce significant property damage, it can disrupt operations, which is why one of the world's largest automotive equipment suppliers' sites became the pilot for AGCS' first-ever flood risk survey.

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#### FLORENCE CLARET AND GREG DOBIE

Specializing in the production and supply of high-spec automotive exteriors and interiors, seating and emissions control technologies, Faurecia has a presence in 34 countries around the globe. Approximately, 100,000 people are employed at its 330 production and research and development sites across Europe, Africa, North and South America and Asia.

During 2015, the automotive equipment supplier decided to conduct a review to identify the exposure of these sites to natural catastrophe perils such as earthquakes, storms and hailstorm, with a particular emphasis placed on the risks posed by flooding.

"Naturally, the group turned to AGCS, our property insurer since 1998, and partnered with Allianz Risk Consulting (AGCS' risk consultancy arm)," Michel

Josset, Risk, Insurance and Real Estate Manager at Faurecia tells **Global Risk Dialogue**.

AGCS regularly conducts reviews of the natural catastrophe exposure of the major sites in its insured portfolio. For the Allianz Risk Consulting (ARC) team such reviews involve a number of different stages, starting with the assessment of local and regional data and information. Following the sharing of this with the company concerned, it can then arrange a visit to the site in order to provide a specific diagnosis – which includes a series of recommendations that can help to optimize the resilience of the site to a natural catastrophe event.

"According to the **Allianz Risk Barometer**, natural catastrophes is the second top risk which occupies the attention of companies today, while the top risk –



The Thailand floods in 2011 remain the costliest insured flooding event of all-time

business interruption – often results from such events,” says **Patrick Thiels, CEO of the Mediterranean Region, AGCS**. “The impact of natural catastrophe events on businesses has increased significantly over the last decade, driven by the greater interconnectivity of the global economy,” he continues. “This is why, five years ago, AGCS decided to launch a global study of its portfolio to assess risks and exposures to natural disasters. We began with risks such as earthquakes and hurricanes and are now extending our in-depth studies to flood risks, with this service available to all businesses in 2016.”

#### Identifying the most probable flooding scenario

One of Faurecia’s French plants, located in Marckolsheim in the Bas-Rhin department in Alsace, northeastern France, was chosen as the first site to receive the flood risk survey.

The Marckolsheim site specializes in the production of vehicle interiors, in particular acoustic products, which are shipped around the world. This site is potentially highly-exposed to flooding risk, given that the facility is located close to both the Rhine and the Ischert rivers. It is also crossed by a water source that flows into a pond.

Following a two-day audit of the site and the undertaking of both statistical analysis and risk mapping of the surrounding area, ARC experts were able to identify the most probable flooding scenario

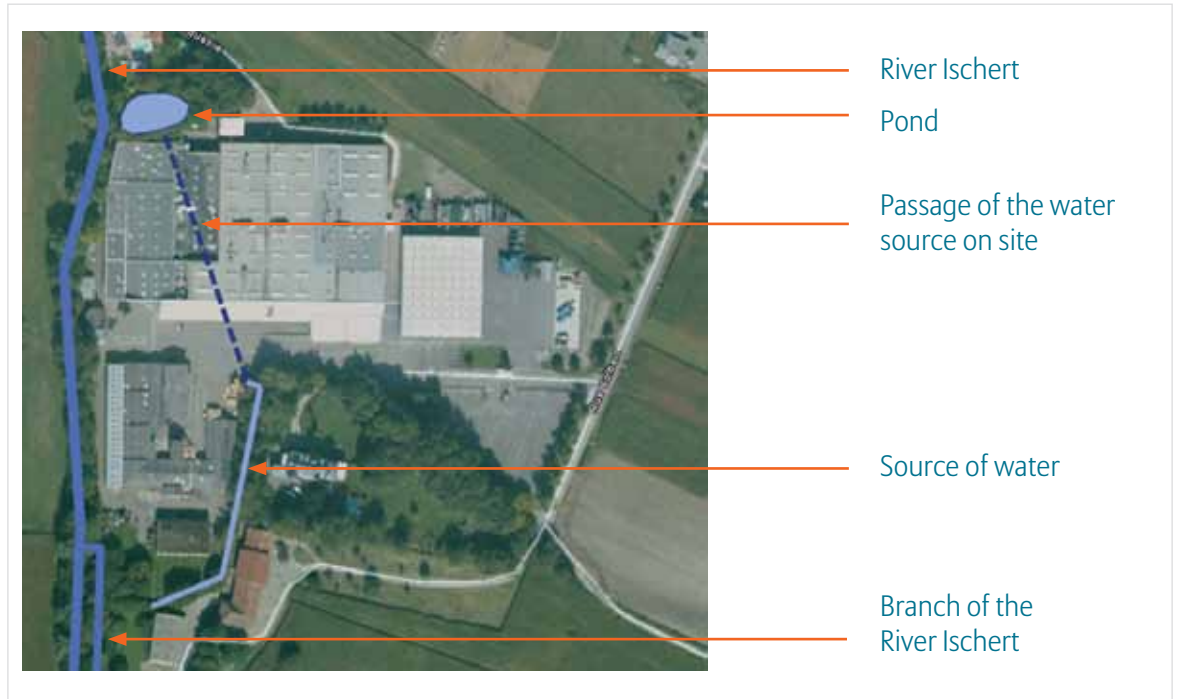
## Flooding threat comes in many forms

Floods are a natural catastrophe that can be caused by many different events, including overflowing of natural or man-made bodies of water, surface water, tidal water, rainwater runoff, rising ground water, sewer back-up, or from blocked yard and roof drainage systems. Flooding poses a greater threat in low-lying areas, near a body of water, or downstream from dams, but even the smallest streams, creek beds, ditches, culverts, or drains can overflow and create flooding. Some floods develop slowly over a period of days, but flash floods can develop within a few minutes to a few hours and possibly without any visible signs of rain.

In short, floods can occur anywhere, making them one of the most common natural disasters. According to AGCS’ **Global Claims Review**, analysis of insurance claims over **€100,000 (\$112,000)** shows that flooding is the 7<sup>th</sup> top cause of loss for businesses today.

Even if a property or site is not susceptible to flooding, the surrounding infrastructure may be exposed. This can create problems with ingress and egress, possibly resulting in a business interruption.

Diagnosis: Flood Risk - The Marckolsheim site, Faurecia



Source: Faurecia

“The objective of the flood risk analysis is not to avoid the flood, but to optimize site resilience”

to impact the site – a gradual rise in the level of the Rhine river. Based on such a scenario, they then prepared an in-depth diagnostic of this exposition, as well as a number of recommendations to mitigate the impact of such an event occurring.

A crucial point that was identified during the survey was the fact that if this event occurred, surrounding roads would become inaccessible. A knock-on effect of this would be that the company would then be unable to dispatch its products. Similarly, it would be unable to be supplied with the necessary materials to manufacture its products. The survey showed the potential for significant interruption to operations was high and needed to be considered further.

It is estimated that potential losses from the Marckolsheim site could exceed €8m (\$9m) in overall

damages in the event of such a scenario occurring. Following ARC’s site survey, Faurecia has initiated a risk preventive approach, implementing a flood contingency plan with the aim of better protecting crucial areas of the site.

**Optimizing flood resilience**

“The analysis of ARC experts created a heightened awareness regarding the flood risk of the site,” Josset explains. “Such natural catastrophe risks are now regularly monitored by Faurecia’s risk committee.”

“Our analysis demonstrated that the whole site could be flooded without any protection or undertaking of preventative measures,” adds **Ludovic Leduc, Consulting Engineer at ARC**, who was in charge of the diagnosis.

“The plant is located in the plains, meaning the access roads to the site would not be able to be used while the water level was rising or subsiding, creating problems with ingress and egress. Therefore it was crucial for Faurecia to develop and implement a formal flood emergency plan (*see page 17*) to mitigate any potential losses.”

At the Marckolsheim site, this process is now up-and-running – the emergency plan has been drafted – and the staff is being trained. The flood contingency plan implemented for this industrial site is to also act as a

guide for 37 other Faurecia sites exposed to flood risks in Europe, Africa, Asia and the Americas – in locations as diverse as Argentina, China, Iran, South Africa, the UK and the US – meaning ARC will also be involved, for the first time, in a worldwide flood risk diagnosis.

“As far as the flood risks are concerned, we have put in place a collaborative process with AGCS,” Josset adds.

“We share the results of our analysis through each step of the process. The aim of this approach is to identify the most exposed sites, to raise awareness and to put in place a risk-reduction action plan. The objective

“Flooding is the 7th top cause of loss for businesses today, AGCS analysis shows”

of the flood risk analysis is not to avoid the flood but to optimize the resilience of the site in question,” he concludes.

## Flood emergency plan – the key stages

Obviously, the best way to prevent flooding for a new construction is to avoid building in flood-prone areas. If this is not possible, buildings need to be constructed above anticipated flood water levels and designed to limit the potential for flood water entry. For existing buildings subject to flooding, the key to mitigating potential loss is the development and implementation of a formal **flood emergency plan**.

The key to minimizing flood damage is adequate preparation before the event. Having a flood emergency plan in place – which is a properly documented series of actions, assigning emergency organization roles and responsibilities – is absolutely vital in the event of a potential flood happening. Flood mitigation can be the difference between a company suffering a serious loss and a catastrophic one.

The priorities of a flood emergency plan will differ depending on the site and industry in question but, in general, should focus on three crucial stages:

### 1 Pre-flood (including):

- Inspect all existing flood prevention devices and check recovery equipment
- Inspect, clean and clear areas that could cause water to backup
- Monitor rising water levels
- Define priority actions to protect the factory, the production lines and storage units
- Develop a business continuity plan – specific to flood risks – for continuing/restoring operations during/after the event

### 2 During the flood (including):

- Emergency response personnel should remain at the facility if safe to do so and be prepared to respond
- Monitor flooding in all buildings
- Increase focus on fire risk protection. There can be an increased risk of fire after flooding

### 3 After the flood (including):

- Secure the site to prevent unauthorized entry
- Initiate salvage and recovery plans
- Restart production lines

Review the effectiveness of the flood emergency plan and revise as needed. The plan should be reviewed annually and updated.

Download/view the full ARC checklist for flood preparedness

<http://www.agcs.allianz.com/insights/white-papers-and-case-studies/natcat-checklist-flood/>

# Total recall?

When a product's safety comes into question, time is everything – particularly in the age of social media. Decisions need to be made quickly, but ill-judged ones can add cost and damage a company's reputation.

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STUART COLLINS

In the past, product recalls were relatively straightforward and would usually have passed unnoticed by the public. Today, recalls are much more complex and the stakes higher – both in terms of the potential impact to a company’s profits and reputation.

Product recall exposures have increased substantially over the past decade, shaped by tougher consumer regulation, the rise of social media and the increasing complexity of supply chains, according to **Christof Bentele, Head of Global Crisis Management at AGCS.**

The regulatory environment, in particular, has changed dramatically over this period, Bentele tells **Global Risk Dialogue.** “Many countries – including the US, China, Australia and those in Europe – have implemented much stricter product safety laws. At the same time authorities are now far more proactive when it comes to product safety,” he says.

Recall exposures have also grown with the rise of large multi-national corporations and the development of complex supply chains in sectors ranging from food to automotive to electronics.

“Fifteen years ago the ingredients for a burger purchased in a fast food restaurant would have mostly been sourced locally,” says Bentele (*see page 21*). Now the spice may come from China, the gherkin from the US and the tomatoes from Spain, while the meat could be from multiple sources.

“The product value chain is now global, and this has substantially changed the risks. Larger supply chains are more vulnerable, with more critical points where things can go wrong and that are outside the control of clients,” he adds.

**Automotive woes**

The food and beverage industry is particularly exposed to product recalls. According to a recent report by Swiss Re **Food Safety in a Globalized World**, the number of recalls per year in the US has doubled since 2004. There were 240 United States Food and Drug Administration (FDA) related recalls during that year compared with 565 in 2014.

However, non-food recalls have also been increasing in both frequency and severity in recent years, reflecting changes in manufacturing and supply chains. This has been particularly evident in the automotive sector (*see image*) where such processes have been revolutionized.

Sleeker and more efficient production has seen automotive recalls increase exponentially as just-in-time manufacturing and a faster speed-to-market has left less time for product testing. Many common

US: Number of annual vehicle recalls (in millions)



components are used across models and brands, so an issue with a product can affect millions of vehicles around the world.

For example during the second quarter of 2015 there were almost 34 million equipment units recalled in the US alone, according to consultant Stericycle – one of the largest US recalls in history – after airbags from one Japanese supplier were found to be faulty.

**Larger recalls, harsher penalties**

Such large incidents are becoming increasingly familiar. An issue with a component or ingredient can cascade through the supply chain, with recalls crossing borders and embroiling whole sectors.

For example, peanut ingredients produced by The Peanut Corp of America were contaminated with salmonella, resulting in one of the largest food recalls ever in 2008. Over 3,200 products were recalled as more than 700 people were taken sick and the company eventually filed for bankruptcy protection. Seven years after the salmonella outbreak, in September 2015, its CEO was sentenced to 28-years in prison, the harshest criminal penalty ever for a US producer in a food-borne illness case.

Earlier in 2015, a recall of spice – originating in India – contaminated with peanuts affected 14 separate product companies, 100 brands and 769 products, according to Stericycle.

“Today, we are seeing and experiencing recalls on a scale not seen before,” says Bentele.

**No place to hide – the growth of social media and regulation**

Regulation has made recalls more public – in many countries recalls are now recorded, closely monitored and disclosed publically by the authorities. However, growth in use of social media has been a real game-changer, according to Bentele. “The free flow of information means that even a relatively small product recall can give rise to a major crisis,” he says.

“Social media has made it more challenging to manage a crisis as it is free, immediate and open to everyone,” explains Simon Weaver, Commercial Manager at red24, a crisis management assistance company delivering a range of products and services to businesses, organizations and individuals around the world.

“In a genuine case of contamination, social media can help make consumers aware of a problem quickly. This is good for safety but the control will be largely out of a company’s hands unless they have a robust crisis management plan in place, which includes social media,” he says.

Social media also means that a potential issue has gone viral before a company has been able to establish the facts, including whether they are at fault or even if it is their product. One of the biggest issues in a product recall is to determine if there is a genuine case of contamination or malicious product tampering and extortion, Weaver adds.

“A company can have an issue even when it is not their fault. Social media gives people much greater power to manipulate the situation,” he says.

Weaver also warns of an emerging cyber risk for food companies and manufacturers. Hackers could compromise automated machinery and alter ingredients, or hack a company’s systems to steal confidential information or take over social media accounts, he explains.

### Pre-crisis management

For many companies managing a major product recall is now too big a task, and the exposure too great, to go it alone.

“Companies understand that product recall is a real cost that can damage the bottom line and destroy a brand. As a result they are now much more open to help from third parties and consultants than was the case in the past,” says Bentele.

AGCS currently partners with red24 to help clients build their resilience, so if a crisis does strike, they are better prepared and can mitigate their loss, he adds.

“Response capability is vital in fighting the size of a product recall claim. A company that embraces crisis management and makes this part of its DNA is far less likely to suffer a major incidence.”

## Managing a recall

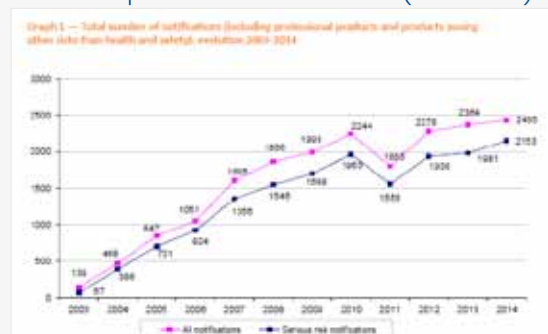
With tougher regulation, more complex supply chains and social media combining to increase risk for brands and their suppliers, recall costs and the potential loss of sales are now more likely to be material and potentially damaging for even the largest of companies.

And while the financial implications of a recall are larger, mitigating reputational damage is also another key factor in product recall. “In today’s world of fast and viral communication a company’s reputation or brand can be quickly destroyed,” says Christof Bentele, Head of Global Crisis Management at AGCS.

How you manage a recall is crucial, according to Simon Weaver, Commercial Manager at red24. “A company’s reputation and very survival can be at stake,” he says. Recalls are pressured and difficult situations, he continues.

“Reacting quickly is key in a potential product recall situation. The first few hours are crucial when consumers’ safety and a company’s reputation are at stake,” says Weaver.

### Non-food product recall notifications (2003-2014)



Source: RAPEX

red24 has reviewed thousands of recall plans and believes around 70% have been inadequate. “Often a recall plan is in place but it would not stand up to the rigors of a recall. Plans need to be implemented and tested at least annually,” adds Weaver.

“A typical issue we see in a recall is that the CEO takes on too many roles. It is better to have a team to handle the different aspects such as public relations, product testing and communicating with customers or suppliers.”

## Where does your hamburger come from?

Recall exposures have grown with the rise of large multi-national corporations and the development of complex supply chains.

**Bun**

Wheat grown in Kansas. Milled in Missouri. Baked in state where purchased

**Bacon**


Pigs from Canada. Shipped to Iowa. Slaughtered in Missouri

**Tomato**

Grown in Spain

**Sesame Seeds**

Grown in New Mexico. Packaged in Arizona



**Ketchup**

Tomatoes from California. Vinegar from the Philippines. Spices from around the world

**Mayonnaise**

Blended in Ohio. Eggs from Virginia. Lemon juice from Florida. Salt mined in Utah. Caribbean spices

**Pickle**

Grown in Arkansas. Pickled in Mississippi. Spices from around the world

Photo: Shutterstock

One of the main roles of a crisis management expert is to help companies to prepare for a crisis. “Some 75% of our work is pre-event crisis consultation, testing protocols and recall plans, running scenario sessions to put the crisis team through its paces,” Bentele says.

A crisis management company will also ensure that all parts of the business are operating to the same set of global procedures, and give people a central point of contact to help them through a crisis, explains Weaver.

“We focus our experience and skilled personnel where and when it is needed, helping clients reach their own decisions in an appropriate way. It is important in a crisis to get all the facts and not rush decisions,” says Weaver.

For example, he recalls an incident where cross contamination during product testing led to an unnecessary recall. The company risked its reputation but did not carry out secondary tests.

“Companies do not have the luxury of time. Testing of products can sometimes take weeks, yet decisions will sometimes have to be taken in the absence of facts and information,” says Weaver.

“Management need help to make balanced decisions and understand the regulatory perspective and response. Crisis management can save money, reducing the cost and time of recall,” Weaver concludes.

## Product recall protection

Demand for product recall insurance has been increasing over the past decade with greater awareness of the potential for reputational damage and significant financial loss.

The product has also become more attractive, both to the traditional food, beverage and pharmaceutical client base, as well as to non-food sectors like automotive and consumer goods. Product recall insurance coverage has broadened over the past decade and goes beyond contamination, explains Christof Bentele, Head of Global Crisis Management, AGCS.

Policies typically cover first party losses, such as the cost of the recall, loss of gross profit and brand rehabilitation, but increasingly insurers are being asked to cover losses incurred in the supply chain.

For example, a manufacturer selling tomato paste to supermarkets and through bulk food companies would incur substantial third party liabilities if its product were contaminated, such as with salmonella, explains Bentele.

The inclusion of crisis management services is also adding to the value of product recall insurance. “Companies buy product recall insurance for the financial protection although more and more clients see the value of crisis management services in mitigating loss and reputational damage,” according to Bentele.

Visit [www.agcs.allianz.com/services/liability/](http://www.agcs.allianz.com/services/liability/)



# When the geopolitical situation changes...

The resignation of Hosni Mubarak marked the beginning of a new era of political instability in Egypt.

Five years on from the events of the **Arab Spring** the geopolitical environment around the globe continues to be volatile. More countries are experiencing situations which can pose huge challenges for companies' staff and assets. **Global Risk Dialogue** looks at the hotspots for 2016 and the importance of good risk intelligence.

GREG DOBIE

On January 14, 2011, after 24 years in power, the autocratic Tunisian president Ben Ali fled to Saudi Arabia. Less than a month earlier, a Tunisian greengrocer had set himself alight in protest against the authorities and arbitrary police interventions. This was the straw that broke the camel's back.

The discontent of the Tunisian people, which had built up over decades of repression and corruption – coupled with skyrocketing food prices – helped ensure the regime was swept aside shortly afterwards, at a speed that would never previously have been thought possible.

However, revolution did not stop at Tunisia's borders. Instead, it spread with unstoppable force across much of the Arabic world – a regime change movement better known five years later as the "**Arab Spring**".

Besides Ben Ali of Tunisia, the Arab Spring also cost the long-standing heads of state of Egypt (Hosni Mubarak), Yemen (Ali Abdullah Saleh) and Libya (Muammar al-Gaddafi) their offices and, in the case of, Gaddafi, his life.

Events in the region affected many Arab countries – ranging from relatively peaceful demonstrations in

Morocco to civil war in Libya and Syria. No event since September 11, 2001 (9/11) – and the terrorist attacks on the World Trade Center – had changed the global security situation more dramatically.

Many western and global businesses operating in the region were surprised and then confronted by the direct effects of the Arab Spring. Production facilities were destroyed or put out of operation. Sales networks and supplier relationships were broken off or cut back. Sales markets were lost entirely. Worst of all, the personal safety of employees was at stake.

Five years on from the events of the Arab Spring and the geopolitical environment around the globe continues to be volatile. Today, country risk levels change more often and more frequently than in the past, making risk assessment more difficult and businesses more vulnerable.

More countries around the world are experiencing political situations which pose massive challenges for companies' people and assets.

#### 2016 outlook: Geopolitical change in SE Asia

Looking ahead, macroeconomic factors and the growing threat posed by Islamic terrorism are likely to drive increased risks of political violence and terrorism in a number of countries.

"There are a few countries that we are watching closely for political violence and terrorism risk, including Thailand, Indonesia, Malaysia, as well as parts of Africa. South East Asia and Africa are a real concern for 2016," says **Christof Bentele, Head of Global Crisis Management at AGCS.**

Terrorist groups in Indonesia and Malaysia have shifted their focus from a nationalist agenda to a religious motivated campaign, modelled to some degree on Islamic State. "Significant geopolitical change could unfold in the whole of South East Asia," says Bentele.



**Thailand:** Democratic elections have repeatedly been pushed back.

Nervousness over the succession of Thailand's 87-year-old King Bhumibol Adulyadej, who holds the country together through his extraordinary prestige and authority over the people, is also of concern, coming at a time of great political uncertainty in the country.

In 2014 the army took control following months of violent conflicts between the country's two main rival political movements. While some stability has since returned, democratic elections have repeatedly been pushed back and are not expected before the end of 2016.

#### Unrest in Africa

Meanwhile, in Africa, incumbent heads of state in a number of countries are looking to retain power, even when barred to do so by the constitution. For example, in 2015, Burundi President Pierre Nkurunziza was re-elected for a controversial third term, sparking unrest and a failed coup. A year earlier, popular protests and a coup forced former president of Burkina Faso, Blaise Compaoré, to step down after 27 years in power.



**Burundi:** President Pierre Nkurunziza has begun a controversial third term, sparking unrest.

### Businesses more worried about the geopolitical situation

According to the **Allianz Risk Barometer 2015**, which surveys over 500 risk managers and corporate insurance experts from 40+ countries about the top business risks, **political and social upheaval and war risk** is a much bigger concern for businesses than it was 12 months previously, rising nine positions to 9th overall.

A year earlier this risk had dropped one position to 18th in the barometer, so the intervening period altered risk perception significantly. Events in the Ukraine, Russia, the Middle East, Hong Kong and Thailand in particular influenced businesses' thinking.

Furthermore, the barometer ranks this risk as the second top cause of supply chain disruption after natural catastrophes. Combating political risk and terrorism are also identified as top business risk management challenges over the next five years.

Visit <http://www.agcs.allianz.com/about-us/news/press-riskbarometer2015/>



Turkey: The situation is increasingly fragile after the Ankara train station bombings.

"As presidents cling to power in some Africa states we can, at best, expect civil unrest, and worst civil war. And where instability exists, the risk posed by extremist groups like Boko Haram grows as they infiltrate weakened countries," says Bentele.

#### Turkish situation "fragile"

Countries neighboring Europe are also seeing higher risk of political violence. In particular Turkey and Ukraine – where the conflict with Russian-backed separatists continues – are of concern.

Turkey's President Recep Tayyip Erdoğan continues to hold power, but opposition has been growing, in particular following a multiple bomb attack in the Turkish capital of Ankara in October 2015, which killed more than 100 people. As tensions rise within Turkey, the country also faces threats from Islamic State, which continues to wage war in neighboring Syria and Iraq, as well as the breakdown in peace with Kurdish nationalists.

"The situation in Turkey is increasingly fragile and the potential for a real crisis is emerging," Bentele notes.

#### Financial disruption a key factor

Big falls in commodity prices and a slowdown in China and other emerging economies may also have implications for political violence. "Financial disruption often goes hand in hand with political instability. And with increased poverty, as can be seen in parts of Africa, comes extremism," says Bentele.

A case in point has been the rise of Islamic State. Six years ago the organization was unheard of, but today it has built a caliphate, notes Bentele. "Living under a weak and financially rotten government can push people towards extremism," he notes.

#### Speed of action is the decisive factor

In view of the acute and potential trouble spots all over the world, companies have to actively address the

mounting risks associated with terrorism and political violence.

As far as risk management is concerned, an ongoing evaluation of the global security situation, including a corresponding assessment of individual risks, is imperative for companies that operate at an international level.

## Terrorism and political violence protection

Crisis management scenarios arise from many sources. In an increasingly globalized economy, companies operating in regions prone to political tensions and violence face a number of daily risks to their staff, customers and business continuity. Insurance has a pivotal role to play.

Although the capability of terrorist groups to launch cross border attacks akin to 9/11 has been eroded, the threat of terrorism remains.

AGCS terrorism and political risk cover does not only provide stand-alone terrorism coverage, but also offers protection against strikes, riots and other forms of civil commotion, even in politically unstable countries, which are often excluded from such policies. Additionally, protection against war and civil war can be added as an optional coverage component:

- Physical damage/business interruption terrorism and sabotage cover with option for strikes, riots, civil commotion and malicious damage
- Contingent business interruption, denial of access, delay in start-up and advanced loss of profit for construction projects
- Stand-alone terrorism liability
- Full political violence cover including insurrection, revolution, rebellion, mutiny, **coup d'état**, civil war and war, political subversion, concerted acts and political intimidation
- Cover for nuclear, chemical, biological and radiological terrorism available
- Entertainment/event cancellation

Visit

[www.agcs.allianz.com/services/liability/crisis-management/](http://www.agcs.allianz.com/services/liability/crisis-management/)

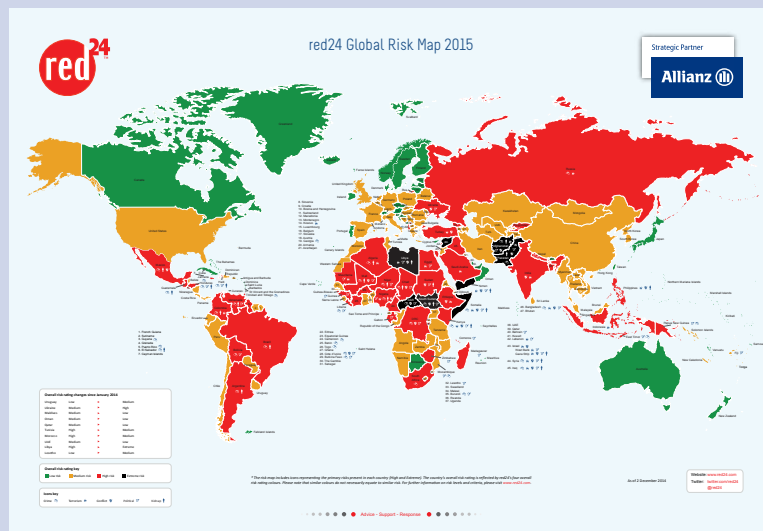
## Crisis management response

AGCS partners with red24, the global crisis management assistance company, to offer crisis management and support services to businesses.

red24 has operating experience in over 120 countries and the capability to provide on the ground assistance for businesses across the globe within 24 hours.

AGCS and red24 can assist businesses in carrying out evacuations in high-risk situations at short notice and providing prevention, risk mitigation and on-the-ground response services for emergency incidents. Such incidents are coordinated by red24's 24/7 Crisis Response Management Center in South Africa, which is staffed by a team of multilingual customer service representatives, regional analysts and security experts.

In addition, using its global network of consultants, red24 also supports AGCS underwriting of



terrorism and political risks by providing country risk profiles and in-depth analysis.

Access to a country intelligence online tool is granted to all AGCS crisis management clients for free.

Visit [www.red24.com](http://www.red24.com)

**“Country risk levels change more frequently than in the past, making risk assessment more difficult and businesses more vulnerable”**

Furthermore, contingency plans have to be developed for various scenarios involving political violence.

Many, but far from all, companies already have contingency plans in place so they can respond in the event of a crisis caused by political violence. However, it is important to remember that the political situation is always in a state of flux – 24 hours a day, seven days a week, 365 days a year.

This is why more companies are starting to working with specialized crisis and risk consultancy firms,

which can support them by providing background information, local security experts and analysts. This ensures that information is made accessible before a crisis hits, so that processes can be checked and employees trained accordingly – all factors which could decide between success and failure in the worst-case scenario.

If an acute crisis does materialize, for example in the form of a terrorist attack, the kidnapping of employees or a revolution, speed of action is the decisive factor: immediate access to all of the services provided by the crisis consultant is an absolute must.

Companies can secure this direct access across the globe and around the clock by taking out corresponding insurance policies which not only provide subsequent monetary compensation for the loss sustained, but also include preventative crisis consultancy services as part of the scope of cover. By offering these services, specialized insurance solutions help to minimize the impact of political violence on employees, investments and revenues before, during and after the loss event. This is “crisis management” in action, Bentele concludes.

A large crowd of people is gathered in a stadium for a live event. The stage is visible in the foreground, and the crowd is cheering with their arms raised. The stadium's architecture, including the roof structure, is visible in the background. A blue light beam is visible on the left side of the image.

# Live events: Risk management takes center stage

Live concerts and festivals are increasingly elaborate productions, generating enormous amounts of revenue. Accidents, cancellations and delays can seriously challenge the bottom line. But behind the scenes, risk management ensures the show can go on.

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JOEL WHITEHEAD



Linkin Park at the Festhalle, Frankfurt, 2015. Photo: Jim Digby

Lightning from an approaching storm illuminates a black sky as a capacity crowd of almost 100,000 people enjoy Lollapalooza, an annual outdoor music festival in downtown Chicago, US. Event promoters, working with the city’s Office of Emergency Management and Communications and local weather personnel, announce a complete festival evacuation.

It is a “textbook” evacuation, according to Jim Digby, who as President of the Event Safety Alliance (ESA),

a non-profit trade organization dedicated to safety during all phases of live event production, helped “write the book” on live event safety. For his “real job,” Digby is production manager for US rock band Linkin Park.

Evacuation instructions are broadcast over loud speakers, video monitors and media boards throughout the park: “Weather evacuation – calmly head to nearest exit.” As one concertgoer later notes: “I was impressed they announced it before it was on the internet.”

Thirty-eight minutes later, the evacuation is complete. Lightning flashes and winds whip the empty park. Soon, however, the storm passes, the all-clear is sounded and shortly afterwards an updated schedule is released for the rest of the day. All told, Lollapalooza’s delay lasts just 90 minutes.

Good planning ensures that interruption doesn’t have to become a postponement. Usually, the show can go on.

**Planning before a crisis**

Insurers, risk managers, venue operators, production managers, security personnel and other stakeholders engage in dialog and have a plan in place well before the event commences in order to safely put on a live performance. Education, communication, commitment to safety, knowledge, skill and expertise are hallmarks of a good safety plan, which can be time-consuming to put together.

“There’s recoverability in the sense of security, time, money and happy customers if there’s a plan in place where everyone decides on a strategy and agrees to an all-clear when the danger’s passed,” Digby tells **Global Risk Dialogue**. “A permanent evacuation isn’t always necessary, just a delay. It starts with pre-planning, communication and timely execution.”

**Event intelligence**

Table top planning exercises consider details such as: What emergencies are reasonably foreseeable? What will an event’s audience be like? How will crowd behavior change from event to event in the same venue? Once the possibilities have been considered, which are most and least likely to occur? Considerations like these help coordinators pre-plan and decide on action steps.

“It’s not that hard to improve a venue’s safety,” says Steven Adelman, Head of Adelman Law Group. “Big improvements may take little more than the organizational will to do something new. There is enormous value in risk management, updating and testing your crowd management methods and emergency plans, and training your staff so they know how to carry out those plans.”

## Live event risks at-a-glance

# Show Spoilers: Major Risks At Live Music Events

Festivals and concerts are elaborate productions and much can go wrong. Entertainment insurers face a number of perils. Risk management ensures the show can go on

**EVENT RISKS KEY**

- Stage stability**  
Inadequate for wind conditions or weight load
- Weather**  
Wind, water and lightning
- On-site vehicles**  
Poorly marked paths
- Inadequate lighting**  
Increased risk of falling, slipping and assault
- Crowd control**  
Inadequate security, barricades, surging
- Injury**  
Crowd activity, accidents

**Allianz**

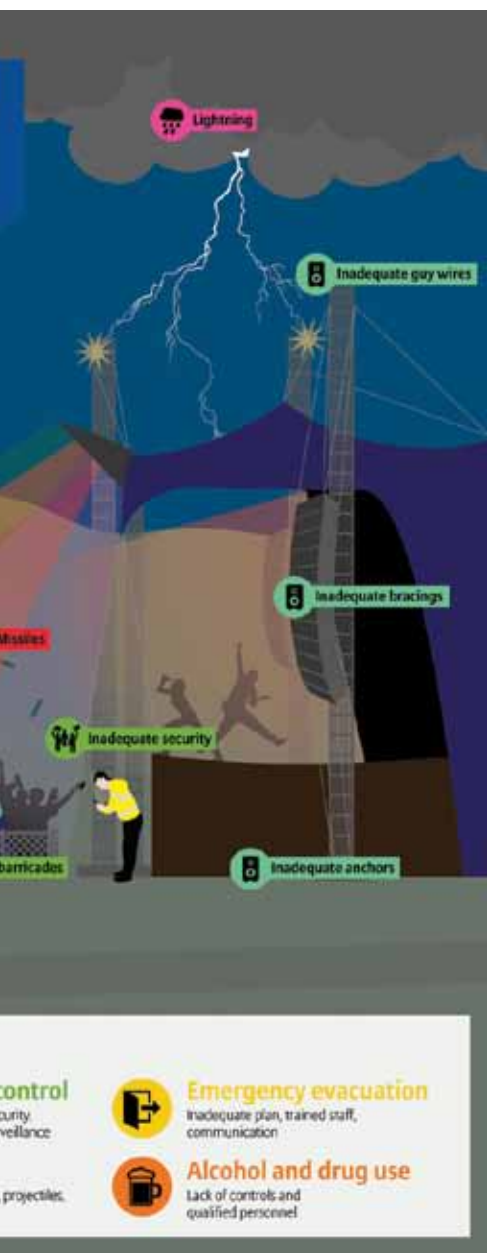
“Safety of the people – the artists, the crew and the fans – is first priority,” adds **Lauren Bailey, Global Head of Entertainment, AGCS**. “Yes, we can be responsible for the equipment as well but protecting people is first. It begins and ends with safety. Upfront mitigation is our main priority and our risk consulting is so vital. It’s also why we support ESA.”

### State fair tragedy leads to renewed safety focus

In 2011, a temporary stage roof collapsed at an Indiana State Fair concert in the US during a storm killing seven people and injuring 58. The industry was shocked. A

lack of adequate planning and communication were contributing factors to the tragedy. In its wake, Digby, Adelman and Bailey recognized the industry needed more safety awareness. With others, they formed ESA and met with State of Indiana officials to inform them of ESA’s mission as they considered reasonable practices for future events.

“North America’s first guide of reasonable practices, **The Event Safety Guide**, was released in 2014,” Digby explains. “Modeled after an existing work in the UK known as **The Purple Guide**, updated and



adapted by subject matter experts, it is intended to reach a global audience and affect a live event safety ‘call to arms’. There are ample existing codes and regulations. What is required is a more stringent adherence to these as well as a comprehensive planning process.”

By promoting “life safety first” in events, ESA and its partners from a variety of industry groups, including insurers, seek to eliminate the knowledge barrier that can contribute to unsafe conditions and behaviors by promoting and teaching reasonable practices and developing training and planning resources. ESA is expanding globally, in hope of promoting dialogue and training around safety. Affiliate branches in the Netherlands, Canada, Australia and Turkey have begun. Others, such as Germany, Italy and China, are in process.

“Not every event is insured or insured adequately,” says Digby. “It’s so important, especially in the US because of the litigious atmosphere, but certainly globally, to think safety first. We’re not out to stifle creativity but to protect others against unnecessary risk.”

### Live event risks at-a-glance

Insurers help to educate the event industry about safety. Many provide onsite risk engineers to assist at large events. Others suggest reputable third party vendors that provide similar services. Ideally, all parties involved in an event should include safety

planning language into contracts or riders and request that other parties with whom they contract do the same.

“All events are different,” says Adelman. “No two are alike, but there are common questions to ask: What are the reasonably foreseeable risks? What tools are available to address them? How will they be applied? Is a communication plan in place with someone in charge? Do all functional leaders on the team know about and understand the plan? Have they and their teams received training?”

Although no two events are the same, most share common risks (*see infographic*). These commonalities should be addressed during table-top exercises. For example, from the perspective of the stage manager, are the riggings, ropes, guy wires, bracings, anchors and other fixtures secure and within load requirements for the venue? Are there exposed electrical wires that could create shorting or electrocution in the event of heavy rain or high wind? Can performers see tour and house security, as well as communicate with the command center?

On the floor, is there adequate staff to monitor and manage crowd behavior, including pushing, moshing and surfing? Even innocent people abstaining from such activities risk injury by their inattentiveness. What is the occupant load of the audience area? Is there a threat of suffocation or trampling, should panic occur? Are the barricades sufficient for this crowd in this space? Are they collapsible or fixed? Are there enough security personnel? Are they accessible to patrons on the floor to ask questions and seek help? Have they been trained to notice reasonably foreseeable risks such as intoxication, drug use, assault or excessive aggression?

Other risks can be found elsewhere. Are medical personnel deployed for personal injuries, overdoses, excessive heat or dehydration cases? Is there a clearly marked command center actively communicating to the coordinating parties and in touch with reputable weather specialists if necessary? Is an evacuation plan in place, such as the one successfully employed at Lollapalooza? Is the lighting adequate around the periphery to prevent accidents, illicit activity, or other potentially litigious risks?

### Safety first

“Safety first is a mantra that everyone involved in the successful execution of an event should have ingrained in them,” says Digby, “It’s similar to a pre-flight checklist. It should be the routine we all go through to ensure nothing bad will happen.”

“People do things at live events that invite other people’s judgment,” adds Adelman. “It’s always been like that, from Elvis to Woodstock to discos to raves to crazed fans with painted faces at a sporting event. There’s a communal sentiment that is different and almost magical at a live event as opposed to seeing it on television.

“The energy can’t be reproduced. It’s special. And it’s why those of us who care about our industry preach safety, safety, safety. It’s about protecting people and keeping it safe for them to enjoy the show. This is why ESA advocates so strongly for safety,” he concludes.

# The growing threat of **cyber extortion**

As companies have become steadily more dependent upon their cyber systems to operate, so cyber extortion becomes a greater peril, says Michelle Crorie.



## MICHELLE CRORIE

Michelle Crorie is a partner in global law firm Clyde & Co's specialty insurance practice, with particular experience in insurance coverage issues. She heads the special risks teams including Accident & Health and Contingency. Michelle focuses on coverage advice on insurance and reinsurance contracts and has acted for the Lloyd's syndicates and companies insurance markets since 2000, across a broad range of sectors. She acts in a wide variety of claims from high value, high profile risks, including international arbitration or confidential and commercially sensitive settlements, to lower value and less media sensitive Financial Ombudsman Service disputes. She has extensive experience with fraudulent claims and surveillance issues.

Following the recent cyber-attack on telecommunications provider TalkTalk in the UK, it is clear that such breaches continue to develop at a faster pace than the authorities can develop methods of preventing them.

In the past six months alone, a number of high-profile incidents have made the public and insurers ever more aware of the risks faced by individuals and companies alike in relation to cyber-extortion.

One such example is the attack on the Ashley Madison website in July 2015, a site which encourages married users to cheat on their spouses, in which hackers gained access and reportedly sought to force the owners to close the site before leaking the personal information of its users online when they failed to do so.

In addition, since last year, a group called DD4BC has been targeting large UK financial institutions, demanding that they pay a Bitcoin ransom or experience a large-scale attack likely to knock client-facing services offline. To date the group has been responsible for more than 140 attacks.

On 21 October, 2015, TalkTalk, which has over 4 million users, fell victim to cyber attackers, and the banking and personal details of customers may have been compromised. TalkTalk has been contacted by a group claiming responsibility and demanding payment of a ransom, although details of the demand had not been released at the time of writing.

This is precisely the escalation in extortions which was feared following the spate of high volume/low value extortions, notably in 2013 from Cryptolocker, which amassed ransom payments totalling \$27m worldwide across the year and in May 2014 when Apple products in Australia were hacked requiring users to pay a ransom to access their devices.

Cyber extortion also lays bare the defects in a victim's cyber security which can lead to litigation from users or regulatory consequences. TalkTalk, for example, has admitted that some of its customer data was not encrypted, which could lead to the Information Commissioner's Office (ICO) inflicting a fine of up to £500,000 (\$767,000), if it considers that TalkTalk did not take sufficient steps to protect its customers' information.

As companies have become steadily more dependent upon their cyber systems to operate, so cyber extortion becomes a greater threat to businesses. Special insurance solutions have always provided cover for such scenarios relating to interference to property but this has been

extended in recent times to electronic data. Now specific cyber extensions are reasonably common as well as comprehensive cyber insurance cover being on offer.

**“Cyber extortion lays bare the defects in a victim's cyber security, which can lead to litigation or regulatory consequences”**

A special risks cyber wording often extends “property” to include electronic data with customized covers to reimburse payments made in response to threats to introduce a computer virus designed to damage, destroy or corrupt the insured's electronic data.

Questions about “denial of access” are therefore being wrapped into specific cyber extensions. Such extensions can also include losses to the business from the attack (business interruption), together with investigation costs and response consultant assistance.

An overlap has therefore developed with a standard cyber policy that would include first-party loss such as business interruption losses and investigation costs together with third-party liability from a data breach, for example. Some such policies will also offer “cyber extortion” cover as an extension to a cyber policy.

The quality of response consultants is particularly important in securing a swift and effective resolution of an extortion claim. Data breach experts have emerged in recent times and insurers are consistently updating their panel of experts to be able to support an insured's crisis management team.

Cyber extortion insurance compliments broader cyber data breach liability insurance and assists with the immediate problem of managing a hacker's demand, which while not the traditional life and death scenario can realistically cut to the heart of a company's survival. TalkTalk's share price dropped by more than 10% during the immediate period after the attack was announced. If the ICO determines that TalkTalk could have done more to prevent the theft of its customers' data, this could have a long-lasting damaging effect on the firm's reputation. Businesses that have not purchased adequate protection will want to make considering their insurance an urgent priority.

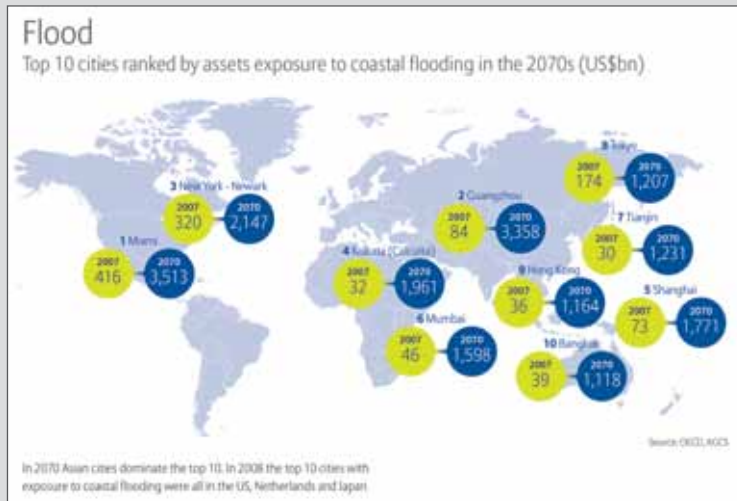
# Exposure growth to soar in Asia

Visit [www.agcs.allianz.com](http://www.agcs.allianz.com) for the latest AGCS news and expert research on topics such as aviation, construction, cyber, shipping and natural catastrophe risk.

Losses across Asia are expected to rise exponentially in future with 80% of the top 10 exposed locations to coastal flooding from storm surge and wind damage globally expected to be in this region in the next 50 years.

Ten years ago the top 10 global cities in terms of assets exposed were Miami, Greater New York, New Orleans, Osaka-Kobe, Tokyo, Amsterdam, Rotterdam, Nagoya, Tampa-St Petersburg and Virginia Beach, according to The Organization for Economic Co-operation and Development (OECD), which made a first estimate of the exposure of the world's large port cities (136 in total) to coastal flooding due to storm surge and damage due to high winds. These cities contained 60% of the total exposure, but were from only three countries: US, Japan and the Netherlands.

Based on the study's projection for 2070 – the exposure landscape looks very different with asset exposure forecast to grow dramatically, reaching **\$35trn** by the 2070s; more than 10 times the level in 2005 and rising to roughly 9% of projected global GDP in this period.



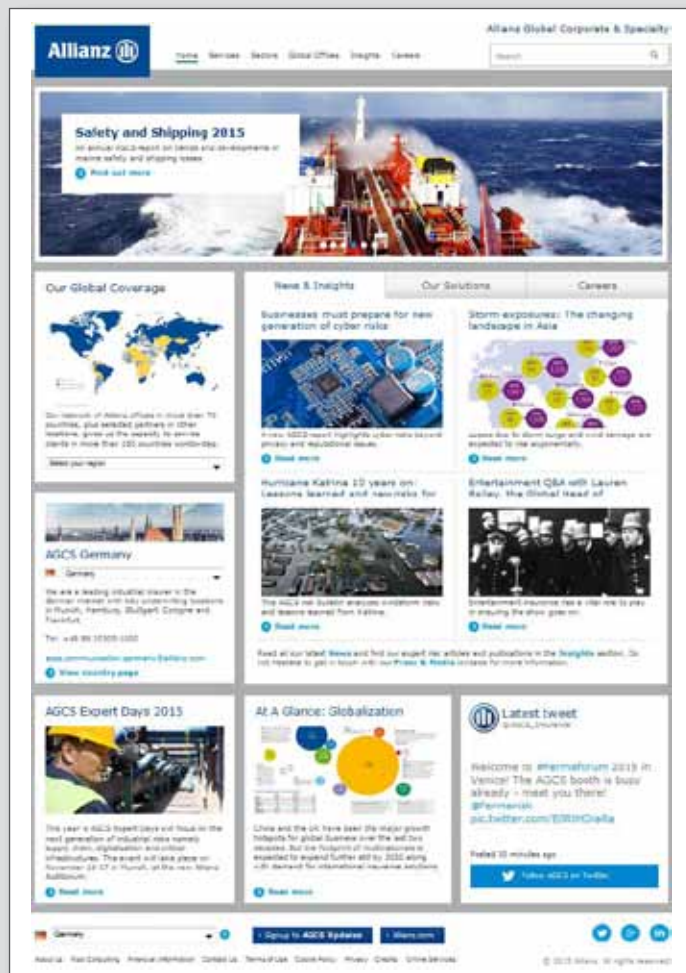
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## AGCS homepage goes live

AGCS has launched its enhanced homepage, offering easier access to our latest service offerings, news, expert articles and updates from our global locations.

By selecting a specific country under “Your local AGCS office”, users can now access the most recent regional update while still staying on the homepage.

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