

Global Risk Dialogue

Analysis and insight from the world of corporate risk and insurance



Insuring the world's biggest offshore wind farm

Why Dogger Bank marks a sea change in renewable power

Sustainable aviation gets ready to fly

Entertainment recovers to make box office gold

How the energy crisis galvanized net zero goals

Seven trends in multinational insurance

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Let's start the dialogue

Welcome to the latest **Global Risk Dialogue**, the twice-yearly conversation between AGCS experts and thought leaders for a global audience of risk managers, brokers, insurance professionals, and the media. The business landscape for 2023 continues to be challenging, as businesses confront geopolitical uncertainty and economic volatility in all regions. In this issue, we explore the emerging exposures on the radar of AGCS underwriters, claims experts and risk engineers to help you steer your company through the shocks, disruptions and transformations it could encounter in a changing world.

Thank you for reading

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News from AGCS and Allianz

Allianz to serve global commercial insurance segment as one go-to-market business

Allianz to operate its mid-corporate and large corporate insurance businesses under one strategy and market approach

Allianz Group has announced that it will serve the global commercial insurance segment as one go-to-market business under the trading name Allianz Commercial, featuring an integrated approach encompassing its Allianz Global Corporate & Specialty (AGCS) business serving large corporate clients and the insurance businesses of Allianz's operating entities serving mid-sized country-based accounts.

The new integrated approach anticipates the increasing globalization of risks, closes internal structural gaps in market reach, and extends Allianz's product offering and delivery at the local level. Clients and distribution partners will experience a consistent underwriting approach and access harmonized insurance solutions that are globally coordinated and locally delivered with one market interface.

"Allianz Commercial allows us to deliver the full value of Allianz's scale and capabilities for the benefit of our customers, brokers and shareholders," said Chris Townsend, Member of the Allianz SE Board of Management. "The introduction of Allianz Commercial is a powerful and natural continuation of our existing multiyear strategy to scale and globalize the commercial segment."

The establishment of the Global Commercial Division in 2021 to globally steer Allianz's mid-corporate business in conjunction with Allianz's local operating entities, along with the ongoing improvement of the performance of AGCS, have laid the groundwork for the new model.

Allianz Commercial will feature one single commercial lead in each country or region to represent the Allianz Commercial businesses. Teams currently focused on trading, underwriting, and customer delivery will work closely together under the new operating

model. The legal entities conducting the insurance business and their leadership will remain the same.

Joachim Mueller will lead Allianz Commercial as part of his responsibilities as CEO of AGCS SE, and Dirk Vogler, previously Member of the Board of Management of Allianz Versicherungs-AG, has been appointed as Chief MidCorp Transformation Officer.

"Allianz Commercial is the result of market feedback encouraging us to combine the best of AGCS with the best of local Allianz businesses to serve more clients around the world," said Mueller. "The result will be simplicity, clarity and consistency for customers, with a wider range of products, from Allianz Multinational to climate solutions, in a seamless approach that preserves the trusted relationships and local know-how they value."

Leaders for four of the largest markets have already been appointed. These are: Phuong Ly, Chief General Manager, Australia; Patrick Thiels, Country Managing Director, France; Hans-Joerg Mauthe, Commercial Managing Director, Germany; and Nadia Côté, Commercial Managing Director, UK. The appointment of additional Allianz Commercial regional leaders in other markets globally will follow in due course.







Joachim Mueller



Dirk Vogler

Loss log: TMT claims trends

Allianz Global Corporate & Specialty (AGCS) analysis of more than \$1bn worth of insurance claims over five years involving Technology, Media and Telecommunications (TMT) companies identifies some of the top causes of loss from this sector.

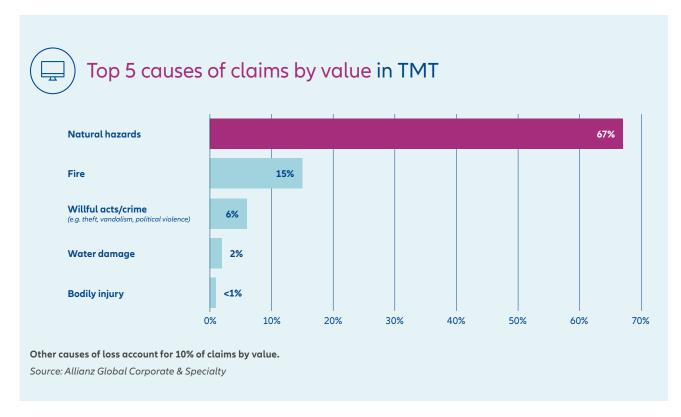
According to the dataset, natural catastrophes remain a major concern for Technology, Media and Telecommunications (TMT) companies, even if their main assets are in the cloud. They may not store large amounts of goods or inventory, but they have physical servers and office buildings. Many are located in coastal cities or campuses so if they are hit by a hurricane, tornado or an earthquake, both material property damage and additional business interruption losses from flooding can be significant as insurers have seen from claims experience in recent years.

Willful acts/crime is the third top cause of loss according to value, as well as being the most frequent cause of claims in the analyzed dataset, accounting for around one in five claims by number. As a loss category it covers a variety

of different causes, ranging from the theft of high-value telecommunications equipment while in transit to cyber incidents such as hacking.

Recent years have also seen TMT companies file claims for damages to property and infrastructure, including fires resulting from riot, looting and civil commotion activity in the wake of protests such as those surrounding the murder of George Floyd by the police in the US in 2020.

The analysis was conducted on 5,006 claims worldwide worth approximately €1.2bn, between January 1, 2017, and December 31, 2021, involving telecommunications, media and television broadcasting and production companies. Claims total includes the share of other insurers in addition to AGCS.



5



4 questions for...



Anthony Vassallo, Global Product Leader – Energy and Head of Energy & Construction, UK and Nordics, at Allianz Global Corporate & Specialty (AGCS)

Anthony Vassallo discusses the ongoing impacts of the global energy crisis and its galvanizing effect on the net-zero transition.

What are the long-standing consequences of the global energy crisis and how has this impacted the green transformation?

We recently published our annual **Allianz Risk Barometer** survey in which the energy crisis appeared for the first time¹. The overreliance of major European economies on cheap Russian gas had been credited with fueling economic growth for years, but Russia's invasion of Ukraine created economic and political shockwaves that will take years to subside.

Coinciding with French nuclear reactor maintenance, droughts in Europe affecting hydropower, and the Nord Stream gas pipelines attack, it is clear why energy costs rocketed in 2022.

Supply chains looked fragile. Loss situations that used to be addressed in six to 12 months have taken 50% to 100% longer due to shortages of components and supplies. Replacement costs have increased at rates not seen in decades.

On the risk side, as businesses seek an alternative to gas, there are hazards associated with reactivating or upgrading redundancy systems that have been unused for a while, carrying out delayed maintenance, or running plants harder after a couple of 'slow' years.

Nonetheless, we are presented with an opportunity: the acceleration of the energy transition. Legacy energy players and new entrants are driving investment, with spending on the global net-zero transition surpassing \$1trn in 2022².

The winter of 2022-2023 was mild in Europe, with reduced heating requirements. Liquefied natural gas (LNG) import facilities were built across Europe, there were favorable conditions for wind and hydro power, and French nuclear plants came back online.

Energy prices are returning to levels last seen before summer 2022, but are still above long-term averages. As economic growth materializes, industrial energy demand will rise. The switch to renewable energy needs to accelerate, or even with near-full storage facilities Europe could be short if there is a bad winter in 2023-2024.

AGCS is already an established insurer of wind and solar energy. What trends and developments are you watching in the renewables space?

Insurance has a key role to play in supporting the growth of renewables through both risk transfer and unlocking access to finance. We are seeing opportunities materialize in terms of energy storage, hydrogen and carbon capture

¹ Allianz Risk Barometer, January 2023

 $^{^2}$ BloombergNEF, Global low-carbon energy technology investment surges past \$1 trillion for the first time, January 26, 2023

projects. We expect this trend to continue and, indeed, accelerate. A recent example involves the construction of one of the world's largest renewable energy hubs, to produce, store, and deliver hydrogen in the US.

The attention placed on energy security in recent months has raised the profile of energy storage. The demand and supply of energy have to be balanced, and as renewable power sources expand, so, too, will the need for energy storage. The intermittent nature of some renewables such as wind and solar also fuels this need. Future energy-storage systems are likely to be varied and complex, calling for proactive risk management and diversification. We regard optimized energy storage as an essential element of the energy transition.

The significant investments in transition technologies and infrastructure, boosted by the energy crisis, will come to fruition much earlier than could have been foreseen. We are watching the expansion of green hydrogen closely. It is made using renewable energy so it has great potential to decarbonize high-emitting industries if deployed at commercial scale and we expect production to ramp up significantly in the medium term. Hydrogen is also showing promise as an energy-storage solution if it is converted from intermittent renewable sources. Also promising are battery energy-storage systems using lithium-ion batteries, if fire safety concerns can be overcome.

What are the emerging risks associated with the energy transition?

Risks vary with the technology deployed. The vulnerability of solar PV (photovoltaic) to natural catastrophes is evidenced by recent loss activity. Europe endured a year of unprecedented hailstorms in 2022, with France suffering record insured losses of almost \$5bn³. These risks could be heightened by climate change.

Offshore wind is challenged by the risks of everlarger turbines, as well as the hazards of natural environments such as the North Sea.

Maintenance is complex and can be dangerous. Emerging technologies can bring significant benefits but also new risks, such as floating wind power, which has exposures connected to mooring and cabling.

Hydrogen production uses technology our engineers are already familiar with, but presents challenges from the rapid expansion of the market and newcomers within it, as well as risks from leaks and fires.

Energy storage using lithium-ion batteries has raised concerns about the dangers of 'thermal runaway', a phenomenon that has been implicated in several serious fires in recent years.

How is AGCS supporting customers in the drive to decarbonize?

We are committed to integrating net-zero targets into our insurance and investment activities, so we can support clients in adapting to low-carbon business models. We have the capacity, engineering expertise and underwriting experience to apply to transition activities and green energy projects. We are proactively looking to engage with clients, both existing and future, on how we can achieve mutual objectives. It is really about a partnership approach to transitioning to net zero together.

AGCS has implemented a market-leading oil and gas policy that gives us a platform to have these conversations with our customers, enabling us to better understand their plans and ensure they align with our objectives.

Roughly half the capex going into the green/ renewables space originates from legacy energy players. We have seen how many insurers (including Allianz) have addressed the coal issue. There were doubts around the efficacy of adopting such policies but we have seen their positive impact on the market environment.

Our Allianz Risk Consulting team can provide risk expertise around electricity transmission, solar, offshore wind or hydrogen operations. We can allocate our capital to the exposure and provide the risk transfer solutions clients need to facilitate ongoing investments.

We are mindful that at a portfolio level we need the capacity we deploy to generate returns for our shareholders. This will require careful underwriting and understanding of the exposures we take on. Data, information and a willing client base that wants to partner with us will go a long way to achieving this.

Biograp<u>hy</u>

Anthony Vassallo joined AGCS straight after completing an economics degree at Durham University and has enjoyed a varied career over 20 years with the firm, working across Europe, Asia and South America. A rugby fan and foodie, he was an "unsuccessful" contestant on the reality TV show *Masterchef*.

³ Swiss Re, Severe 2022 hail damage in France sets new benchmarks, underscores shift of risk and calls for pricing adjustments, November 15, 2022



Exposures are increasing in an ever-more connected world

Seven trends in multinational insurance programs

In today's fast-changing world, companies face risks that span borders and regulatory regimes, which is resulting in growing interest in multinational insurance, a fully end-to-end customized service for the cross-border exposures of organizations, including risk transfer and captive services. What are some of the current and future trends in this space?

1 Cross-border exposures have never been more volatile for multinationals. Expect the unexpected

The volatile sociopolitical environment has dramatically impacted the risk landscape, presenting risk managers with the challenge of how best to protect their companies in the face of conflict, political unrest, economic risk, supply chain disruption, increasing cyber threats and climate change. Most experts, including Allianz Risk Barometer respondents, predict that businesses will continue to experience significant disruption around the world for some time yet. Scenario planning is vital in order to plan for the growing number of crises, as is ensuring holistic insurance cover is in place.

2 What are some of the current and future trends in this space?

The global programs market is set to grow in 2023 and beyond. It is already estimated to be worth in the region of \$50bn according to industry estimates¹. Anticipated drivers of future growth include: our ever-more interconnected world, a broadening customer footprint as international companies expand, the increasingly complex regulatory, tax and reporting environment around the world, and lower barriers of entry as digital tools and portals help facilitate service improvements. Global programs ensure full insurance coverage and can help prevent any regulatory violations. At the same time, global risk

consulting and claims services are becoming increasingly important, given this environment.

3 Digitalization is unlocking real-time data and enabling greater collaboration

Companies have woken up to the power of data in their businesses, and increasingly want to conduct business digitally. When it comes to global programs, firms now expect much faster turnaround times than in the past.

In response, the world's leading insurers are turning to digitalization to improve how they operate global programs, speeding up systems and improving data collection and analytics, including 24/7 accessibility and real-time updates. API (application programming interface) technology is facilitating a more streamlined, real-time exchange of data between stakeholders.

Ultimately, digitalization is helping to deliver a better and deeper understanding of risk. It is making it easier for risk managers to take an active role in risk management, offering increased access to data and greater levels of collaboration with insurers and brokers, both of whom, in turn, can then spend more time on client-focused activities.

4 Growing use of captives alongside global programs

Many multinationals are increasingly using their captives alongside their global programs, either with or without risk transfer or as a full-service captive. Captives are growing in popularity, particularly if there is a lack of capacity in certain areas or effective rate increases on certain lines of business means that for companies either increasing utilization of the captive they have or forming a new captive or cell captive is an attractive option. Financial lines, errors and omissions, directors & officers and cyber have been among the most popular lines of business for multinational captives.

A captive is an invaluable tool when it comes to coordinating the different covers of various subsidiaries around the world and collating risk information on exposures and losses.

5 Post Covid-19, the awareness of the need for greater contract certainty is growing

The pandemic brought some challenges that tested the relationships between risk managers and insurers, particularly around which risks were covered, and which were not. This has led

to a greater focus on contract certainty and data analytics, as well as increasing interest in global programs, which can be an important tool for helping multinational companies tackle the everevolving risk landscape.

Contract certainty is one of the big insurance lessons learned from the Covid-19 pandemic. It is clear that there needs to be greater clarity around what policy wordings actually mean in order to have a better understanding of what is and what is not covered.

Global programs deliver full transparency over what is covered under a local policy and what is covered under a master. Any potential gaps can therefore be easily identified and addressed as needed, making things easier for all parties.

6 Global programs can help organizations with ESG and emerging risks

Environmental, social, and governance (ESG) issues are increasingly landing on the desks of risk managers. Multinationals face growing interest and increasing scrutiny from regulators, investors, customers, and employees about how they are tackling these topics.

In global programs, ESG is integrated into underwriting via industry leading rules and tools, while technology and data analytics is increasingly delivering better insights into big, emerging risks such as climate change, cyber and global supply chain issues.

7 Don't forget the growing influence of AI and virtual economies

Artificial intelligence (AI) applications bring benefits such as increased efficiencies, new products and fewer repetitive tasks, while the metaverse – the space where interconnected physical and virtual realities converge – has the potential in the long-term to provide experiences not available in the real world, giving rise to a booming virtual economy.

Insights gained from AI-powered analytics and data could expand the boundaries of insurability, extending existing products, as well as giving rise to new risk transfer solutions. However, as with any disruptive technology, usage of AI and engagement with the metaverse will also introduce new risks and potential liability scenarios. To ensure their safe and secure use, both will need rules for users and platform providers and appropriate measures for enforcing them.



The journey to sustainable aviation

The industry has pledged, like most, to reach net zero by 2050. But what does the flight path to a greener future look like for the industry? And how realistic are the lofty goals that have been set?

From the International Air Transport Association (IATA) commitment to 'Fly Net Zero'¹, to the declaration from the International Aviation Climate Ambition Coalition at COP 26² the air transport industry is not short of promises to dramatically reduce its carbon footprint.

Compared with some other sectors, aviation is a relatively small contributor to global greenhouse gas emissions – in 2019 it was estimated to account for around 2.5% of the world's CO2 emissions³. However, it is also one of the fastest growing, and there is little doubt that every major airline and aerospace manufacturer in the

world now has its environmental impact front and center, a topic that is not creeping but is vertiginously ascending the corporate priority ladder. So what have companies got in the pipeline to make good on their promises and what are some of the innovative air travel technologies taking flight?

The first, and most obvious, conclusion is that there is no silver bullet. Potential solutions abound but there is no answer likely to single-handedly push aviation to net zero. The second is that, pressure groups and activists aside, intermediate decarbonization goals are linked to commercial

¹ IATA, Our Commitment to Fly Net Zero by 2050

 $^{^{2}}$ COP26 declaration: International Aviation Climate Ambition Coalition, December 16, 2022

³ BBC, The fastest way aviation could cut its carbon emissions, May 26, 2021



aims – stating the obvious, the more efficiently an aircraft burns fuel, the better for all concerned. Longer term, however, the aviation industry may need assistance from both its insurance, and other financial, partners in de-risking the transition as the costs associated with change are a significant, but not insurmountable, barrier to progress.

Clearing the runway for Sustainable Aviation Fuels

The sector certainly abounds with initiatives to aid the transition. The first likely to have a tangible effect is Sustainable Aviation Fuels (SAFs), with many airlines looking to increase their usage (10% is a commonly selected target). As part of the Fit for 55⁴ package, which sets out an initial target of a reduction in emissions by 55% in 2030 (compared with the level of 1990), the EU will require every flight leaving its airports to carry a minimum amount of SAF (2% in 2025 and 5% by 2030). Meanwhile, the US wants to increase the production of SAFs to three billion gallons per year by 2030. While these commitments and progress are welcome, the production of these alternative fuels remains small.

SAFs can be split into three buckets – those recycled from waste products (for example, from



The 1 minute dialogue

- ➤ Sustainable Aviation Fuels can result in an 80% reduction of lifecycle emissions, but significant capital expenditure and government incentives will be required to ramp up production.
- ➤ The electric and hybrid aircraft revolution is underway but technological maturity remains a challenge. A wholesale shift from regulators and companies is needed to embrace a new safety environment.
- Operational and design efficiencies and innovative technologies such as AI can also deliver gains in the short term for the aviation industry.
- ▶ Insurers have a key role to play in supporting the de-risking of the transition.

used cooking oil), those created directly from crops, and synthetic fuels (created by processing recovered carbon dioxide with green electricity). With the commercial aviation world requiring approximately 95 billion gallons of traditional kerosene aviation fuel in 2019, according to IATA⁵, the recycled or grown SAFs suffer from a lack of available resources (short of diverting all global agriculture towards the endeavor) while large-scale production of synthetic fuels will require cheap, high-volume green electricity.

The price of SAFs is double that of fossil fuels today, so the dramatic ramp up of SAF production will require significant capital expenditure, and initially government incentives are likely to be required to offset the price premium. It will be worth the time, cost and effort. SAFs can result in an 80% reduction of lifecycle emissions (as the only true emissions come from processing steps). The technology is proven and certified (having already been used on over 200,000 flights) and no changes are required to existing aircraft – SAFs can be used interchangeably with kerosene.

"There is also a key role for insurers to play in helping their clients de-risk the transition to SAFs – supporting the construction of new infrastructure and the adoption of different fuels," says Tom Fadden, Global Head of Aviation at Allianz Global Corporate & Specialty (AGCS). "For example, insuring the construction of SAF manufacturing facilities, or the installation of SAF refueling infrastructure at airports. Insurers may even be able to assist their clients with hedging to allow airlines to protect themselves against SAF price fluctuation in future."

 $^{^{\}rm 4}$ EASA, Fit for 55 and ReFuelEU Aviation

Euronews, World's first commercial plant making clean jet fuel has opened in Germany, says NGO, October 4, 2021



Destination Net Zero

The aviation industry accounts for around 2.5% of the world's CO2 emissions

In 2019, commercial aviation required approximately **95 billion gallons** of traditional kerosene fuel

Every flight leaving airports in the EU will carry a minimum amount of sustainable aviation fuel in future (2% in 2025 and 5% by 2030)

The US aims to increase sustainable aviation fuel production to three billion gallons per year by 2030

More than 200 global companies are currently developing electric aircraft concepts

Hydrogen propulsion could enable the development of the world's first zero-emission commercial aircraft by 2035

Photo: AdobeStock

Source: BBC, IATA, EASA, Airlines for America, Airbus

Ready for take-off? Electric and hybrid aircraft

While SAFs will be the short- to medium-term workhorse, perhaps the more exciting future developments are the new air travel technologies that remain nascent but capture the imagination more than a simple fuel switch. The electric aircraft revolution is firmly underway with more than 200 global companies developing concepts. Several have even completed test flights and the appeal is obvious: electric aircraft have no climate impact during operations. They are a thrilling proposition.

However, the biggest issue remains technological maturity – in particular, battery density and the associated range. Batteries will need to be at least five times denser than current lithium-ion batteries and it is not currently thought true electric aircraft will ever have a range greater than 500 to 1,000km (310 to 621 miles) – although it is estimated half of all global flights are shorter than 800km or 500 miles. They also remain relatively far off, with 2040 probably a realistic date for entry into service. There will be an arduous process of certification of such new types of aircraft, with regulators (quite rightly) needing to know the new technology is safe before allowing consumer usage.

200k+

Number of flights that have been made using sustainable aviation fuels

So what for long haul? The answer may rest with hybrid aircraft. A concept familiar with road vehicles, but likely to be a blend of electric technology and hydrogen propulsion rather than involving traditional fossil fuels. This is certainly the approach being taken by Airbus, which hopes to develop the world's first zeroemission aircraft by 2035, with its three ZEROe concepts⁶. The aircraft are powered by hydrogen combustion through modified gas turbine engines. In addition, hydrogen fuel cells create electrical power that complements the gas turbine, resulting in a highly efficient hybrid-electric propulsion system. While not as efficient as pure electric aircraft, hybrid aircraft will be able to provide a range out of reach of electric alone. They will also be able to carry greater number of passengers and offer a realistic alternative to kerosene-powered longhaul routes.

Such hybrid aircraft may seem like the nirvana, but they are not without drawbacks. Hydrogen storage and usage of course brings safety concerns. While hydrogen processing has been used for years in oil refineries and the fertilizer industry, aviation represents a new road to travel. Happily for its passengers, the aviation world is safety obsessed. All parts of the industry (transport, storage, usage etc.) must pass rigorous safety tests. Current aviation protocol is based on the fossil fuel powered jet engine – a technology that has been around for decades. There will need to be a wholesale shift from regulators and companies to embrace a new safety environment.

"Insurers can of course help by providing cover for new and test products and assisting their clients in de-risking the evolution to new technology," says Adam Tozzi, Head of Underwriting Global Tasks and Processes, Aviation at AGCS. "This could include insuring electric and hybrid aircraft types through their testing phases and as they move into service or creating an insurance safety net for a company's R&D operations. Such a technological leap is not without risk and companies (both manufacturers and end users) will hugely benefit from the support of their trusted partners as they adapt for the future."

"Insurers can assist their clients in de-risking the evolution to new technology"

Don't forget about marginal gains and design efficiencies

While they are the future, both electric and hybrid technologies will not be available tomorrow and, along with SAFs, there are shorter-term, more mundane, gains to be made by the aviation industry. One of the key areas for such gains is operational efficiency and there is nothing to stop all aircraft operators looking at this side of their business and making changes now. A combination of operational levers can drive emission reductions at scale. Examples can include pre-flight via mission tailoring and fuel planning (i.e. ensuring the right aircraft is being used for the right flight); on the ground via traffic management (to reduce the time engines are in traffic); during approach and descent via better air traffic management (to reduce holding time) and adapting climb and descent procedures (to spend longer at optimal cruise altitude); during cruise via dynamic routing (responding to changing weather patterns); and after flight via preventative maintenance and cleaning.

There are plenty of airlines already embracing these marginal gains. Over 40 airlines have partnered with Sky Breathe⁷ – big data technology that uses artificial intelligence (AI) to analyze billions of data records from all types of data sources, including flight data recorders, operational flight plans and Aircraft Communications Addressing and Reporting Systems (ACARS). This is then combined with environmental data from actual flight conditions (such as payload, weather conditions, Air Traffic Control, or ATC, constraints, etc.). The technology



The industry will need to embrace a new safety environment

identifies the most relevant saving opportunities and provides a series of recommended actions which it claims can reduce total fuel consumption by up to 5%.

There are also improvements that can be made to existing aircraft design to drive fleet efficiencies. This mostly comes through the incremental introduction of enhancements (for example, wingtip, blended winglets, or increased wingspan) and improvements to engine efficiency.

"None of these improvements will drive the industry to net zero, but they will all play a vital role in reducing emissions intensity of the aircraft and inch aviation further on its journey towards a more environmentally friendly future," says **Tozzi**.

This is the broader picture in a nutshell. There are many exciting developments each with a part to play. Some will grab the headlines and appear to be futuristic leaps; others will go unremarked but are just as important.

"No one development can help the industry single-handedly. Instead aviation will look at multiple solutions and there are risks and barriers with each. Given the uncertainty, there has never been a more important time for insurers and other financial partners to support their clients as they take the steps necessary for a net zero future," **Fadden** concludes.

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Less than 10% of plastic is recycled

Plastic perils mount up

There is now an estimated 30 million tonnes of plastic waste in seas and oceans and 109 million tonnes in rivers. What are the risks associated with plastic production and usage, and how can firms reduce their exposures?

Haul in a fish from the remotest seas, and odds are high you will find plastic in its stomach. The tiny fibers could have come from washing-machine wastewater, personal care items flushed down toilets, or the disintegration of plastic bags and wrapping.

The presence of plastic in fish living in even the deepest, darkest oceans is an indication of how pervasive this human-made material has become. Rising from two million tonnes a year¹ in 1950, annual plastic production rocketed to almost 391mn tonnes in 2021² – and only a sliver is recycled.

The first fully synthetic plastic was patented in 1907. Over 100 years later, the substance dominates our world. Our homes and offices are filled with it. We clean our teeth with plastic toothbrushes, drink and eat food from plastic containers, and wear clothes derived from it. Plastic is now so prevalent it has entered the fossil record as a marker of our age.

But plastic harms our health and the environment. It pollutes our landscapes, oceans, air, and bodies. We ingest or inhale these substances daily. And, increasingly, plastics are a source of litigation.

Plastic-related pollution: a lingering liability

A report by the Minderoo Foundation indicates 2022-2030 is likely to see a wave of plastic-related corporate litigation. This could reach \$20bn-plus in the US alone, it estimates³. Produced in partnership with Praedicat and law firm Clyde & Co, The Price of Plastic Pollution notes litigation is mainly expected to affect the petrochemical industry. Still, claims could be brought against major consumer companies.

Arthur Lu, Head of Environmental Impairment Liability at Allianz Global Corporate & Specialty (AGCS), says companies must prepare:

"Depending on where your company sits on the spectrum of the plastics industry, it could be at risk of claims from human health exposures to chemical additives, environmental damage or human health exposures to 'MNP'." These are microplastics, less than 5mm or one fifth of an inch in length, and nanoplastics, which measure around 1nm to 1mm (4e-8 to 0.04 inches). They can enter the environment through industrial processes, plastic waste, cosmetic products, or degradation.

"Another potential area of legal action lies with directors and officers who 'greenwash' their sustainability claims," adds **Lu**.

The first warning shots have been fired. Last year, an American coffee company settled in the US and Canada with a consumer and regulator respectively, after being challenged on claims about the recyclability of its disposable coffee pods. Earth Island Institute, a California-based environmental group, has also filed three separate lawsuits against producers of plastic goods. It made a name for itself by suing renowned brands for creating a plastic pollution 'nuisance.'4

In January this year, three NGOs filed a lawsuit against a food company in France, claiming the firm's failure to set a plastic phaseout strategy goes against France's 2017 corporate duty of vigilance law. The NGOs are not seeking damages but to force the company to assess its plastics use and update its vigilance report with a plastics strategy.

"This is one example of litigation moving from the petrochemical industry to other downstream sectors, such as food and beverage," says **Lu**.

The 1 minute dialogue

- ➤ Most plastic ends up in landfill or the environment, where it can take decades or centuries to decompose, causing pollution and potential harm to human and animal health.
- ➤ For businesses, risks vary depending on whether they manufacture resins, use plastics on a large scale in their production or supply chains, and how rigorous their risk management is.
- ➤ Companies need to identify where the plastics pathways connected to their processes could cause pollution and how these could be eliminated.
- ▶ Plastics litigation is on the rise. The petrochemical industry is the main target but other sectors could be impacted. Exposure is likely to depend on the type of plastic and where it is used, with food-contact materials, clothing, cosmetics, and children's toys the most exposed areas.

450

The years a plastic bottle can take to decompose in a marine environment

"There have not yet been any large losses in judgments or payouts. But the risks companies are exposed to will vary depending on if they manufacture resins, use plastics as a large part of their products or packaging of products, how prevalent they are in the consumer supply chain, and how rigorous their risk management is when it comes to reporting, communication, compliance and transparency."

The chemical romance that soured

Before the Second World War, the petroleum and chemical industries began forming alliances driven by the desire to use waste material from processing crude oil and natural gas. During this period, polyethylene (polythene), Teflon and nylon were developed. Nylon stockings sold four million pairs in four days on their release in the US in 1940. But plastic production really ramped up after the war. Malleable plastic began to replace more expensive paper, glass and metal used in throwaway items, such as consumer packaging. Plastic appeared in polythene bags, polystyrene food containers, PET (polyethylene terephthalate) bottles, and toys.

 $^{^{\}scriptscriptstyle 3}$ Minderoo Foundation, The Price of Pollution: Social Costs and Corporate Liabilities, 2022

⁴ The Guardian, Rush of lawsuits over plastic waste expected after 'historic' deal, March 9, 2022



Allianz joins UN finance group to tackle plastic scourge

In March 2022, United Nations member states agreed to negotiate a legally binding global treaty by the end of 2024 to end plastic pollution⁷. Allianz was invited to join the UN Finance Leadership Group on Plastics as a founding participant and its first insurance carrier.

"Along with other leading financial institutions, our participation means Allianz will have a voice in the finance sector to express our expectations of the treaty," says **Arthur Lu**, **Head of Environmental Impairment Liability at AGCS**. "Our objective is to inspire others in the sector to take action on reducing plastic pollution and production. The group will gather feedback from a range of stakeholders, including governments, the private sector and other parties, to develop a perspective on the future agreement, offering input to the Intergovernmental Negotiation Committee.

"The insurance industry can be one of the influential parties in the group to reduce plastic pollution and move our global economy into a more circular one. Our participation will reinforce Allianz efforts to bring about the changes we all need to end plastic pollution."

Plastic that is not adequately disposed of can find its way into the wider environment. An estimated 30mn tonnes of plastic waste is now in the seas and oceans and 109mn tonnes in rivers⁵. The properties that make plastic so useful and durable also make it difficult to dispose of. A plastic bottle can take 450 years to decompose in a marine environment, a plastic drinks holder with six rings can take 400 years, and a plastic bag 20 years⁶. Some plastics take thousands – even tens of thousands – of years to decompose in landfills. Degradation is also a problem. UV radiation, oxidation and friction break plastic down into microscopic particles that pollute our ocean, air and ecosystems.

Andreas Merkl, Senior Advisor to the Minderoo Foundation and a report author, notes the health implications of microplastics in our bodies are not yet fully known.

"Many people noticed the post-war plastic production boom accompanied a parallel rise in human health disorders ranging from autism and ADHD to certain autoimmune diseases, obesity, declining reproductivity success, and development disorders. They wondered, was this correlation or causation?" Merkl said at the report's launch.

391mn

Global plastic production (tonnes) in 2021

"The synthesis and analysis we conducted, which involved the review and meta-analysis of thousands of scientific papers, shows the causation link is no longer in doubt. Plastic is contributing significantly to the rise in these human health disorders."

Claudia Donzelmann, Global Head of Regulatory and Public Affairs at Allianz, served on the advisory board for the report. "As

served on the advisory board for the report. "As an insurer, we take on risks, so we need to understand what risks are emerging and what it means for us, our clients and other stakeholders. What can we do as an insurance company to help solve an important social challenge? There has been a massive voluntary engagement by the insurance industry on net zero, and our interest is how we can achieve the same with plastics." [See panel.]

The lasting threat of 'forever chemicals'

The chief danger is the chemicals routinely added to ensure plastics remain pliable and strong. Many of the most hazardous chemicals – phthalates, bisphenols, and fluorinated compounds – are found in bottles, food packaging, consumer packaging, wires, cables, tubes, hoses, fabrics, and construction materials.

Exposure to bisphenol A (BPA) and phthalates is linked to potential health impacts, including disruption of human hormones. Then there are PFAS (per- and polyfluoroalkyl substances), or 'forever chemicals'. Not found in nature, PFAS barely degrade in the natural environment.

⁵ OECD, Plastic pollution is growing relentlessly as waste management and recycling fall short, February 22, 2022

⁶ Our World in Data, Decomposition rates of marine debris items, 2018

Onited Nations Environment Assembly of the United Nations Environment Programme, Resolution adopted by the United Nations Environment Assembly on 2 March 2022

They have been found in drinking water and the blood and breastmilk of humans and wildlife worldwide.

A 2021 study⁸ found PFAS are used in disposable food packaging from takeaway restaurants and supermarkets. They are also found in non-stick cookware, cosmetics, textiles and electronics.

Lu says the sectors most exposed to litigation will vary according to the plastics used. "It could include companies in the consumer goods sector that use chemicals in food-contact materials, clothing, cosmetics or toys," **Lu** explains.

"For MNPs, it could include companies that add microplastics to products, such as personal care products. Other sources of MNPs can arise from the breakdown of macroplastics [larger than 5mm] during use or disposal, such as the wearing down of rubber tires."

Plastic pathways must be identified

Liability risks are likely to be first evident in bodily injury claims sought by workers. Precedents exist in employers' liability litigation, particularly in the US, where public nuisance law could provide a basis for claims, as was seen in recent opioids litigation.

Liability risks are likely to be first evident in bodily injury claims sought by workers

"Plastics are ubiquitous," says **Lu**. "With many companies involved in the production chain, potential implications are high. But identifying source points or responsible parties for alleged damages or injuries will be challenging."

Lu advises companies to protect themselves by identifying how the plastics pathways connected to their processes could cause pollution and how they can be eliminated, including in product design, R&D, waste and chemical management.

"Mitigation should also include looking to transition to sustainable alternatives, particularly for MNPs. For companies involved in the chemical side, it's stopping the use of substances tied to adverse health effects." However, **Lu** adds that substitution with alternative materials could incur higher costs and the possibility of knock-on effects such as higher greenhouse gas emissions, so finding a one-size-fits-all solution is not straightforward.



The toxic truth about plastic production

	200

\$600bn Value of global plastics market



4x

Plastic consumption has quadrupled in the past 30 years



1,254

Additives/processing agents in plastic production identified as of high concern



50%

Plastic waste ends up in landfill



22%

Goes in to uncontrolled dumpsites, is burned in open pits, or ends up in the environment



19%

Plastic waste is incinerated



9%

Plastic waste is recycled



800

Marine and coastal species affected by plastic pollution



2/3

Two thirds of plastic waste is from plastics with lifetimes of under five years



1.8**G**t

Greenhouse gas emissions generated by plastics in 2019, 3.4% of global total

Source: Minderoo Foundation, OECD, Secretariat of the Convention on Biological Diversity

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⁸ CHEM Trust, PFAS in food packaging: New European wide investigation, May 20, 2021



Entertainment: raising the curtain on risks in 2023

After a torrid couple of years, the entertainment sector is enjoying happier times, but what are the latest trends affecting the sector's outlook and risk profile? Experts from the entertainment team at Allianz Global Corporate & Specialty (AGCS) share their insights.

If 2020 was the year when the music stopped, the theaters went dark, and soccer players scored goals to deafening silence or recorded cheers, the entertainment sector is hoping 2023 will be the year it can finally reclaim the collective experience of full houses, packed movie theaters, and booming arenas.

"We had a very positive year in 2022 and a welcome recovery is underway," says Michael Furtschegger, Global Head of Entertainment at AGCS. "But we're not out of the woods yet. In the three years since the coronavirus first hit headlines, the world has changed. The sector must continue to evolve with new technologies, proliferating platforms, and seismic shifts in

patterns of consumption, as well as changes in the public mood, particularly among the younger generation."

Meanwhile, economic and geopolitical pressures wait in the wings.

Despite the headwinds, consumers are heading back to their favorite entertainment venues or platforms in encouraging numbers. Global box office hit \$25.9bn¹ in 2022, reports Gower Street Analytics, a 27% gain on 2021, but still 35% behind the average for the three years before the pandemic (2017 to 2019). Live music revenue is expected to exceed pre-pandemic levels in 2024, with digital music streaming subscriptions fueling

¹ Gower Street, Gower Street estimates 2022 global box office hit \$25.9bn, January 5, 2023

growth in recorded music, where revenues are projected to reach \$45.8bn in 2026, up from \$36.1bn in 2021, according to PwC². Live theater is also staging a comeback. The Society of London Theatre³ reports attendance in 2022 was up by 7.21% and capacity by 7.9% compared to 2019, although box-office revenue fell by 1.1% in real terms, while Broadway shows grossed \$51.9mn⁴ during the 2022 holiday week, compared to \$26.3mn for the comparable week the year before.

The sports sector is proving particularly resilient. Fitch forecasts a 'mild recession' in the US for Q2 2023 but reckons teams will maintain growth in attendance and revenue⁵. "Compared to other entertainment sectors, the global sports industry enjoys a relative degree of certainty provided by media rights, sponsorship deals, and a calendar of fixed international sporting events and tournaments," says **Furtschegger**.

So what are the trends driving growth and shaping the risk landscape for the entertainment industry as it continues its recovery? Here, AGCS entertainment experts share their insights for the sector going forwards.

Inflation retains top billing

"Our entertainment clients are still feeling the effects of inflation, with increased production and live-event costs, but it's less of a shock," says Furtschegger. "However, staffing costs have increased following the skills shortage that took hold in the wake of the pandemic, when many left the industry. We haven't yet seen much drop in demand from audiences, despite the pressure many must be feeling on their back pockets. However, venues are scarcer than they were because there are still many shows postponed from the pandemic in the pipeline in addition to new shows and festivals. Bigger events are thriving, while smaller events are more challenged by the costs of venue hire, transport and energy. I expect to see more consolidation in the industry, as smaller, struggling production companies and venues are bought by the larger operators."

Quality not quantity

The sheer volume of content that is now being created and distributed makes quality a key differentiator in a crowded market. "With only so many venues and facilities available and personnel resources under pressure, how long can the industry ride this wave before the volume of content flattens out?" asks **Furtschegger**. Technology has lowered barriers to entry for



The 1 minute dialogue

- ➤ Consumers are returning to live venues or online platforms in encouraging numbers, with live music expected to exceed pre-pandemic levels in 2024 and the sports sector remaining resilient.
- ➤ The entertainment sector is feeling the effects of inflation and facing increased costs for production, staffing and live events.
- ► A drive towards quality is increasing production costs and exposures, as higher costs could be reflected in any insurance loss.
- ESG concerns such as sustainability, diversity and inclusion, and climate change all present emerging risks for the sector.

\$26bn

Global box office in 2022, a 27% gain on 2021

content creators now that almost anyone can upload to TikTok, YouTube or Instagram, while at the other end of the scale, major studios and tech firms are launching their own platforms.

"AGCS has been a part of Hollywood history since the early 20th century," says **Furtschegger**. "This year we insured five out of the 10 nominees in the Academy Award Best Picture category. We've been on a long journey with the film industry, from silent comedies to immersive modern epics. High quality content doesn't come cheap, and where production costs increase, so, too, do exposures."

Businesses need to know they have sufficient insurance cover for sophisticated productions because the costs are higher with each day of shooting, and this could be reflected in any insurance loss. "We're still suffering the aftereffects of pandemic-related postponements and that is putting industry resources – including human resources – under pressure. It can make any rescheduling following an interruption more challenging," adds **Furtschegger**.

In a world of endless streaming options, the big studios are playing it safe for the moment – in 2022, nine out of the top 10 highest-grossing films at the global box office were sequels or

² PwC, Global entertainment & media revenues surge to \$2.3 trillion; virtual reality sees 36% growth as gaming and esports are on pace to become a \$324 billion business: PwC, June 20, 2022

³ The Society of London Theatre, Box Office 2022 Data: London Theatre's ticket pricing stays consistent, despite rising costs, February 10, 2023

⁴ The Hollywood Reporter, 'The Lion King' grosses \$4.3M as Broadway sees holiday rebound, January 3, 2023

⁵ Street & Smith's Sports Business Journal, Fitch issues neutral outlook for global sports industry in 2023, December 13, 2022



Blockbusting international shows can have complex insurance needs

part of a franchise⁶. "Cinemas are adapting their offerings in response to fewer films and moviegoers moving through their premises," adds **Wanda Phillips, Regional Head of Entertainment, North America, at AGCS**. "Membership schemes and luxury seating with dine-in options can entice audiences back to enjoy the full moviegoing experience, which is not only visual but audio too."

Getting vigilant about ESG

This year's Oscars ceremony saw green dresses on the red carpet as the Academy partnered with the women-led sustainability organization RCGD Global to encourage a more responsible approach to awards-season fashion. It reflects the growing influence of ESG, or environmental, social, and governance, on the sector. British band Coldplay has pledged to halve the carbon emissions associated with its current Music of the Spheres World tour, compared to 2016-2017, and has made a raft of sustainable commitments, including paying a surcharge for aviation fuel, sourcing ethical, sustainable merchandise, and planting a tree for every ticket sold.

"The younger generation is particularly concerned about sustainability, and festival organizers are responding to this," says

Furtschegger. "Live Nation entertainment company has a Green Nation charter with a target of reducing carbon emissions by 50% by 2030. AEG Presents also has an initiative called Climate Positive Touring, a team of industry

professionals aiming to reduce the emissions associated with live tours."

The sector continues to face criticism about slow progress on diversity and inclusion, however, in particular the film industry. The Inclusion in the Director's Chair⁷ report by USC Annenberg (January 2023) reveals that of the 111 directors hired to make the 100 top-grossing films of 2022, just 10 were women and only 20.7% were from an underrepresented racial/ethnic group.

The rise of intimacy coordinators on film sets reflects a growing understanding of the need to safeguard the wellbeing of actors filming intimate scenes, particularly in the wake of the MeToo movement.

The virtual future

With streaming now fundamental to the entertainment and media landscape, **Furtschegger** sees virtual conferences as a particular growth area. The global virtual events market size was valued at over \$114bn in 2021 and is expected to grow at a CAGR of 21.4%8 from 2022 to 2030.

Even without a live audience, virtual conferences still carry risks, including transmission failure because of a weather event, natural catastrophe, fire affecting the broadcast unit, or network issues impacting broadcasting infrastructure. Rented equipment and studio space can also be vulnerable to property and casualty liabilities.

Reality and live content are also continuing to grow, facilitated by on-demand services and social media platforms. Virtual reality (VR) is the fastest-growing entertainment and media segment, reports PwC⁹, with global VR growth between 2021 and 2026 expected to bring the segment to \$7.6bn. Gaming is forecast to be 85% of total VR revenue by 2026.

In 2022, MTV introduced a new award category for the Best Metaverse Performance, which was won by South Korean K-pop band Blackpink for a performance hosted by the PUBG Mobile game. Fellow South Koreans, BTS, were nominated for the band's Minecraft concert experience, alongside Ariana Grande for her Rift Tour in Fortnite, among others.

"As the worlds of gaming, music and entertainment converge, gaming platforms such as Fortnite and Roblox are increasingly serving as entertainment

 $^{^{\}rm 6}\,$ Box Office Mojo, 2022 Worldwide Box Office

⁷ Inclusion in the Director's Chair: analysis of director gender and race/ethnicity across the 1,600 top films from 2007 to 2022, USC Annenberg Inclusion Initiative, January 2023

⁸ Grand View Research, virtual events market size, share & trends analysis report by event type, by service, by establishment size, by end user, by application, by industry vertical, by use case, and by region, and segment forecasts, 2022 – 2030

PwC, Global entertainment & media revenues surge to \$2.3 trillion; virtual reality sees 36% growth as gaming and esports are on pace to become a \$324 billion business: PwC. June 20, 2022

and social hubs, while gaming content is crossing over to social media and streaming platforms," says **Furtschegger**. HBO debuted The Last Of Us, a video-game adaptation set in a post-apocalyptic world, in January 2023 to critical acclaim. Meanwhile, video games continue to develop as a spectator sport, with the total number of esports viewers worldwide possibly exceeding 640 million by 2025¹⁰.

Phillips cautions that streaming particularly highprofile events, especially those with lucrative ancillary fan-based activities, heightens potential losses associated with transmission failure. "Viewing figures for some global events are immense – Blackpink attracted 15.7 million viewers – and if technical issues caused a failure in transmission, damages from a major outage could be immense too."

Emerging risks on the scene

"Now that we've experienced the Covid crisis, the industry needs to remain vigilant about its health and safety protocols," says **Furtschegger**. "We don't yet know if pandemics will occur more frequently or when the next one could strike."

Climate change is another cause for concern. "We're seeing more abnormal weather-related events – heavy storms in Europe and bushfires in California, for example. These inevitably cause havoc for live events, both in terms of cancellation exposure but also human safety, whether it's extreme heat or flooding."

Influencer marketing has become a multibillion industry since 2021 and it is estimated that influencer earnings exceeded \$16.4bn¹¹ in 2022 – a market that is expected to grow.

"Social media influencers, who are often entertainment celebrities, can wield massive power, but they can also be rogue," says **Phillips**. "Without hands-on management or due process governing their actions online, they could unwittingly share confidential information, reveal a movie spoiler or plot twist, slander a fellow star, infringe copyright, or simply post content that is deemed inappropriate, leaving a promoter or production company vulnerable to reputational damage or litigation."

The (stage) show must go on

"The Covid crisis hit the live theater world particularly hard, with theaters going dark practically overnight," says **Phillips**. "So we're really excited about the reopening of Broadway shows and recent audience figures. As more hit



How video monitoring can keep crowds safe

"Crowds carry inherent risks," says **Kurt Miner, Managing Director, Entertainment, at Allianz Risk Consulting, North America**. "But we're now better able to monitor large groups of people and keep them safe, as well as artists, with the use of real-time video monitoring. Safety experts can remotely monitor two or three events, which could each be taking place over 15 acres or more. They can spot things like blocked exits or damaged barriers they might miss if they were on site. They can also monitor social media to pre-empt gate-rushing and prevent stampedes, sending a security contingent to the location before the situation gets out of hand.

"Communication is vital, between staff on the ground and relevant authorities. Safety procedures should be constantly reviewed, using a standardized approach such as the Incident Command System or National Incident Management System. Clearly marking exits, keeping a close eye on weather forecasts, adequate staging, and secure storage of flammable materials are all essential.

"Slips and falls are the most common cause of claims from liveevent policies, so organizers should ensure medical staff and transport to local medical facilities are on site."

productions are rolled out in cities internationally, we are restructuring our theater policy to meet the needs of today's market. We have the ability as a global insurer to provide coverage for these blockbuster shows around the world."

Phillips is optimistic the entertainment sector will thrive if it adapts to the rapid pace of change it faces. "To remain relevant and sustainable, we must exploit what we have today, build upon it, grow it, and examine what that means for our development. We must serve the present but explore the future."

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 $^{^{10}\,}$ New Zoo, The esports audience will pass half a billion in 2022 as revenues, engagement, & new segments flourish

¹¹ Statista, Influencer marketing market size worldwide from 2016 to 2022, January 6, 2023



A serious breach can have a global impact

Cyber: dealing with a data breach

Data breaches are one of the most significant cyber threats organizations face, but when they occur, many businesses do not respond in a manner that reassures their clients or the regulators. What can companies do to ensure their response is robust in the crucial aftermath of an incident?

Following a cyber breach, there is a critical moment – perhaps only a few minutes or maybe an hour or two at most – when the decisions made will significantly influence the outcome. For this to be minimally damaging, there needs to be a thorough understanding of what is likely to happen and what is at stake.

So advises Robin Kroha, Chief Information Security Officer & Head of Global Protection and Resilience at Allianz Services. A company must be meticulously prepared for a serious breach, with a cyber incident response organization and plan in place. This includes exercising critical scenarios in advance and having a trained team who clearly understand their roles and responsibilities.

"Plans are important," **Kroha** acknowledges.
"But exercises are critical because even the best plans cannot replace a well-prepared team.
Plans must be practiced to ascertain their effectiveness in a real-life incident."

The growing number of cyber incidents remains the most significant concern of companies for a second year in succession, according to the annual Allianz Risk Barometer. "In the 2023 report, 34% of the responses from more than 2,700 experts around the world ranked cyber incidents as the greatest risk their companies face¹," says Michael Daum, Global Head of Cyber Claims at Allianz Global Corporate & Specialty (AGCS). "In particular, we are seeing increasing cases of data breaches, either with ransomware attacks or stand-alone."

According to **Allianz Risk Barometer** respondents, a data breach is the exposure that concerns companies the most (53%). Data privacy and protection is a critical risk that is intensifying – IBM's The Cost of a Data Breach Report states the average cost from such incidents reached an all-time high in 2022 of \$4.35mn and is expected to surpass \$5mn in 2023.²

Regulatory pressure ramps up

Regulators are getting tougher on companies with insufficient security measures to protect data. In 2019, British Airways received a £183mn (\$222mn) fine from the UK's Information Commissioner's Office (ICO) after data on 500,000 passengers were stolen. The fine was reduced in 2020 to £20mn³ on appeal.

Last year, two cases in the US sent a warning to directors and senior executives who fail to deal adequately with cyber breaches. In October, a former chief security officer of a mobility firm was found guilty of trying to cover up a cyber security incident⁴. This is believed to be the first time a US company executive has been criminally prosecuted over a cyber breach. The executive faced a prison sentence of up to eight years for obstruction of justice and deliberate concealment of a felony.

Also in October, the Federal Trade Commission (FTC) announced action against the CEO of an online drinks delivery business over security failures that led to a cyber breach exposing personal information on 2.5mn customers.⁵

With regulators and prosecutors becoming more stringent, large companies are boosting investments in cyber security. Enhanced

- ¹ Allianz Risk Barometer 2023, January 2023
- ² IBM, The Cost of a Data Breach Report 2022, July 2022
- ³ BBC, British Airways fined £20m over data breach, October 2020
- ⁴ The Guardian, Former Uber security chief found guilty of concealing data breach, October 6, 2022



The 1 minute dialogue

- ➤ Cyber incidents is the number one business risk for companies around the world, according to the Allianz Risk Barometer 2023, with data breaches the cyber exposure of most concern.
- ➤ Regulators are exerting pressure on businesses to tighten data security, with large fines or even prison sentences facing those who fall short.
- Businesses need to draw up, test and practice cyber incident response plans, including consulting specialist third parties.
- Crisis communications should be part of your preparedness, ensuring timely information can be communicated to stakeholders and authorities.



Average cost of a data breach in 2022, an all-time high

security is forcing hackers to seek victims in smaller and mid-sized companies, where weaker controls can make them easy targets.

When the unthinkable happens

Once a personal data breach occurs, the clock starts ticking. Under the European General Data Protection Regulation (GDPR), companies must report a breach within 72 hours of becoming aware of it. The ICO imposes the same timeframe in the UK.

In the US, it has been less clearcut with a patchwork of jurisdictions meaning, in some cases, data breaches could be reported within 60 days. However, last year President Biden signed new federal data-breach reporting legislation⁶. This could tighten the notice to report such incidents to the Department of Homeland Security to within 72 hours after one occurs.

The US FTC advises on the critical steps companies should take after discovering a data breach, as does the UK ICO. The EU provides guidelines for who needs to be notified and when, including other affected companies and individuals [see panel, page 24].

- ⁵ FTC Takes Action Against Drizly and its CEO James Cory Rellas for Security Failures that Exposed Data of 2.5 Million Consumers, October 2022
- ⁶ Security Intelligence, What CISOs should know about CIRCIA incident reporting, December 8, 2022

Crisis communications checklist

As well as your legal reporting requirements, timely and transparent communication with stakeholders after a breach is essential if you want to limit damage to your business activities and reputation.

According to **Haydn Griffiths, Chief Information Security Officer at AGCS**, a crisis communications plan should be part of your cyber incident response plan, comprising a list of contacts, urgent tasks and appointed people to oversee them – including a senior communications spokesperson – with pre-prepared statements drafted (and tested) for several scenarios. Here's a checklist of what to consider when compiling a cyber crisis communications plan:



Who do you need to inform? As well as relevant authorities, this could be your customers, shareholders, employees, external contacts, the public, media, your lawyers, professional organization, insurer. Establish various communications streams to help steer target groups towards regular updates.



What is the purpose of the communication?

It could be to provide reassurance, information on remedial measures, an apology, or a statement to pre-empt inaccurate coverage elsewhere.



How can you allay customers' fears? Show victims of the breach empathy and a readiness to offer solutions. When you are able to, communicate mitigation steps you are taking and keep customers informed. Give them guidelines on how they would have been accessed by the breach and what action they can take to protect themselves, such as password changes or checking emails for malware.



How can you reassure employees?

Communicate quickly on multiple channels to put their minds at rest and arm them with the actionable information they need. Keep them updated. Similarly, provide any details that might be needed by your suppliers, consultants, investors, and staff representatives or unions.



How should you communicate with business partners? Time is of the essence to allow them to take action to protect themselves. This could involve regular calls and updates so partners can ask questions or delve into details. Consider dedicating named staff to critical business partners to ensure they are kept fully informed.



What are the best platforms or channels?

Consider the regional, national or international press, trade journals/websites, email, social media, printed letters, webcasts.



Who should the communication come from? It could be the CEO, the chief information officer, chairman, head of IT, or customer services director.

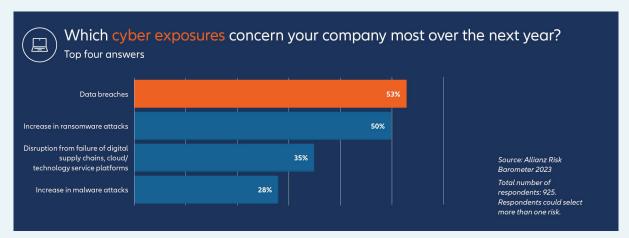


What kind of language should you use?

Keep the tone of your notifications friendly, non-alarmist and factual; decide how many languages you need to communicate in.



What will you do if your digital channels are unavailable? Consider keeping preprepared materials in cloud-based back-ups or even hard copies of statements.



Further information

- European Commission Newsroom, Guidelines on Personal Data Breach Notification
- Federal Trade Commission, Data Breach Response: A Guide for Business
- The ICO Personal Data Breaches

Mobilize the breach response team

However, within these steps, a flurry of complex actions must be taken. The most critical is to mobilize the cyber incident response plan. "A cyber crisis is one of the toughest incidents to deal with," says **Daum**. "It is not like a natural disaster or when a factory burns down. If you are hit by an encryption and ransomware attack, you can suffer a business interruption that is global. Also, you are dealing with criminals and their specific behavior is hard to predict."

"If you are hit by an encryption and ransomware attack, you can suffer a business interruption that is global"

The application of double extortion has become widespread, which expands the dimensions of complexity further, adds **Daum**. Double extortion combines the encryption of data, systems, or back-ups with the threat to release sensitive data.

Kroha says one of the most important things a company should do is secure expert assistance – both after and before a cyber attack.

"It is increasingly difficult for companies to have the expertise necessary to handle a cyber crisis in-house," **Kroha** explains. "The shifting nature of the crime creates a dynamic threat environment that can be difficult to stay on top of. While many large and mid-sized companies are often well prepared for traditional risk scenarios, some have never properly thought through a cyber crisis management plan."

A significant breach would mean a company will want to call on their cyber security cover, so insurance contacts should be looped in as soon as possible. External experts can then provide specialist advice depending on the nature of the incident. AGCS has a global network of partners that offer assistance to insureds when a cyber incident occurs. These include incident response services such as IT forensic services, forensic accounting, public relations, crisis communications, response advice on cyber extortion, and breach coach or legal services. A breach coach is typically an attorney who specializes in data privacy and cyber security. Often companies are overwhelmed by the situation, and a breach coach can help steer them through the crisis in a structured manner to limit damage.



Clear communication is key

Rishi Baviskar, Global Head of Cyber Risk Consulting at AGCS, says: "Each cyber attack is unique." According to Baviskar, one essential component a response team must oversee is a comprehensive communications plan that reaches all affected audiences – employees, customers, investors, business partners, and other stakeholders [see panel, page 24]. Such a plan needs to anticipate questions people will ask.

"Mishandling communications around a breach can contribute significantly to the reputational fallout around an incident, including a plummeting share price," says **Baviskar**.

Norsk Hydro, one of the world's largest aluminum producers, suffered a cyber attack in March 2019 after ransomware encrypted files stored on all systems. Hackers demanded bitcoins to unlock the data. Yet, despite the severity of the breach, the share price of Norsk Hydro rose in the following weeks as the company battled to rectify the damage.

"Norsk Hydro refused to pay," **Baviskar** explains. "What was appreciated by the market was the transparency and openness of the company because it contrasted starkly with the secretive responses of many companies after being hacked. Trust was maintained, and the share price increased in response to the incident."

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D&O you know about Delaware?

When the US state of Delaware allowed captives to be used to cover certain Side A liabilities in directors & officers insurance, it sparked a collaboration between tech giant Meta, its broker, and Allianz Global Corporate & Specialty (AGCS) that innovated a flexible policy solution.

With long-standing connections to its most famous adopted son, President Joe Biden, Delaware is home to around one million people – just 0.3% of the US population – yet more than 60% of Fortune 500 companies are incorporated in the second smallest state in the union.

Delaware-incorporated companies, which include many global brands, could now have more options when it comes to D&O (directors & officers) insurance, following changes to the state's corporate law in February 2022.

The changes relate to the purchasing and maintaining of Side A D&O insurance, which covers

liabilities incurred by an individual in their capacity as director or officer when they cannot be indemnified by their company. With a few caveats for edge cases, such as knowing violations of law or fraud, this can now be purchased by a company's 'captive' – a licensed (re)insurance company that is set up and managed in order to serve the insurance needs of its parent company.

Captives have boomed in recent years, with around 6,000 active globally¹, and they are an increasingly popular option for companies seeking to retain risk and reduce their exposure to rate increases and capacity constraints in the insurance market.

¹ Business Insurance, Captive Insurance Special Report, March 2022. Ranked by the number of captive licenses at year-end 2021. Numbers do not include microcaptives, series captives, or individual cells or cell members in protected cell companies



60% of Fortune 500 companies are incorporated in the state of Delaware

Adapting to a changing D&O market

In the past, Delaware corporations were not permitted to use their own balance sheet assets to indemnify directors for the settlement of derivative lawsuits. So they bought Side A D&O insurance from commercial insurers to cover their non-indemnifiable exposures. This was relatively inexpensive as it tended to be used only in the case of bankruptcy if a company's balance sheet could not fund a class action settlement. However, in recent years, the plaintiff's bar has raised the stakes when it comes to large derivative settlements, which has significantly increased the costs of Side A insurance for many companies. Corporations are increasingly exploring what other options are available to them.

In Delaware, a number of companies, including Meta, formed a coalition to work towards changing the law and enable captives to self-insure Side A. The change they contributed to bringing about allows Delaware corporations to buy Side A insurance through their captive, including indemnifying D&Os whether or not the corporation itself would have the ability to indemnify them.

"The D&O market was pretty tough for a lot of insureds, and companies that buy large limits



The 1 minute dialogue

- Captives are increasingly popular with companies seeking to retain risk and reduce their exposure to rate increases and capacity constraints in the insurance market.
- ▶ A recent change in corporate law now allows Delaware-incorporated companies to cover certain Side A liabilities in directors & officers (D&O) insurance through a captive.
- The new legislation permits captives to cover almost all exposures they normally would with D&O insurance but there are a few exceptions.
- Allianz Global Corporate & Specialty worked closely with Meta and its broker to create a solution to cover gaps created by these edge cases – the "Laser DIC" [difference in conditions].

had very little negotiating power," said Janaize Markland, Director of Business Risk and Insurance at Meta, in a discussion recorded for the Global Captive Podcast. "That put us in a potentially tough position from a coverage sustainability perspective. We had moments in our renewal when we weren't certain we were going to get the coverage we needed, and that made everyone extremely nervous."

Plugging the coverage gap with a 'Laser DIC'

After the subsequent change in corporate law, Markland had to be sure the coverage that was being secured was equivalent to what had previously been sourced from the commercial market. The new legislation permitted captives to cover almost all exposures they normally would with D&O insurance, but there were a few exceptions. Meta and its broker Woodruff Sawyer needed to make use of the commercial market to cover the gaps created by these "remote edge cases", as Lauri Floresca, Senior Vice President, Management Liability and Cyber Liability, at Woodruff Sawyer, described the exclusions. Floresca named the resulting policy the "Laser DIC" [difference in conditions]: "We really think it accurately reflects the way the policy provides very specific coverage just for those differences," **Floresca** told the podcast.

Meta worked closely with AGCS and its **Manager** of Global Captive Fronting, Nick Troxell, on the Laser DIC solution. "Delivering an innovative solution like this called for collaboration between

The captive world

This map highlights the locations of 25 of the top domiciles around the globe*



Guernsey 192 captives Luxembourg 192 captives South Carolina 183 captives 12 Nevada 161 captives 13 153 captives Tennessee Arizona 149 captives Nevis 122 captives **District of Columbia** 112 captives 102 captives 17 Montana 18 Isle of Man 99 captives 19 Singapore 84 captives Anguilla 77 captives 20 21 Turks & Caicos Islands 71 captives Dublin 22 68 captives 23 Labuan 63 captives

670° captives

661 captives

620 captives 384 captives

313 captives

257 captives 253 captives

251 captives

57 captives

57 captives

"Coptive numbers compiled by Business Insurance, Coptive Insurance Special Report, March 2022 edition. Ranked by the number of captive icenses at year-end 2021. Numbers do not include microcaptives, series captives, or individual cells or cell members in protected cell companies Additional source: Statista

*estimate from Business Insuranc

Alabama

Georgia

Bermuda

Vermont

Barbados Hawaii

Utah Delaware

Cayman Islands

North Carolina

Delaware is one of the top captive domiciles in the world

the insured, the broker, and the insurer," **Troxell** tells **Global Risk Dialogue**. "We had a full steering committee working on this project, with in-house experts from claims, legal, financial lines, distribution, and risk consulting. It was vital to establish a strong rapport from the outset so we could respond with agility to the clients' needs and support them through this process."

Troxell was also a guest on the Global Captive Podcast, where he noted that AGCS could be adaptable on policy wording: "We could utilize the Laser DIC product that Woodruff has. We also have our own wording experts because not all Side A policies have the same type of language, so there could be some manuscripting needed. So we can follow on and we just know at the end of the day, providing that equal equivalent coverage through a captive is necessary to make the solution work."

The advantage of cell captives

Meta decided to convert its existing Hawaii captive into a protected cell company, as Markland told the podcast: "Creating two cells that were separate, one for D&O and then one for everything else, provided an additional layer of comfort to our directors and officers that if in fact a claim did need to be paid, those assets were ready to be deployed and were for them only," said Markland. "So that was an important

6,000

Approximate number of captives active alobally

consideration for us and we did that structurally."

Troxell believes similar innovations to the Laser DIC could be tailormade to suit other large corporate companies for whom this type of risk transfer may be appropriate – those that are multinational, well capitalized, and sophisticated in the way they manage risk. "AGCS is an all-in solution for corporate clients with a captive. We can call upon our extensive fronting expertise if required, implement the front end structure, as well as provide the DIC capacity for portions of insurance that the captive cannot cover. We certainly have an appetite to explore this kind of approach further in the future."

Listen to the full Global Captive Podcast here.

Our expert

Nick Troxell | nick.troxell@agcs.allianz.com



Dogger Bank – a sea change in offshore wind

The largest multi-field offshore wind farm in the world, Dogger Bank Wind Farm is moving closer towards generating 'first power' this year, with the capacity to supply 5% of the UK's electricity demand by the time it is completed in 2026. Allianz Global Corporate & Specialty (AGCS) has been on board as lead insurer since its early stages.

Summer 2023 in the UK is expected to see the first phase of the Dogger Bank Wind Farm come into operation, a milestone moment for this immense development under construction off the coast of north-east England.

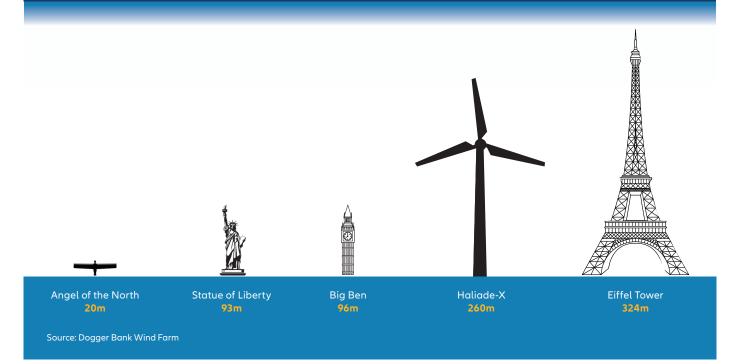
Situated on a sandbank in the North Sea, Dogger Bank is being built in three phases – A, B and C – and, when completed in 2026, will be the largest offshore wind farm in the world, generating enough electricity to power six million UK homes.

The location for the Dogger Bank Offshore Development Zone extends over 8,660km² (5,380 square miles) with water depths ranging from 18m to 63m (59-207 feet), making it ideal for fixed-bottom turbine installations. Power will be generated by 277 of one of the world's most powerful wind turbines, the GE's Haliade-X, and transmitted to shore via subsea cables. Each turbine blade measures 107m long (350 feet), or twice the wingspan of the Angel of the North, the towering contemporary statue that is a familiar sight to anyone traveling by road or rail in this part of the world. A single rotation can power one UK home for more than two days.

A joint venture between SSE Renewables, Equinor and Vårgrønn, the wind farm will have

Monuments in size and scale

Since 2000, the capacity of offshore wind turbines has increased from 2MW to 14MW, with the size of turbines scaling up to dizzy heights and diameters. Recent announcements suggest that 18MW turbines will soon be in production. Components for the Haliade-X wind turbines used at Dogger Bank will be loaded on to the world's largest specialist heavy-lifting jack-up vessel, the Voltaire, and shipped to the wind farm for installation and commissioning. With a lifting capacity of over 3,000 tonnes and a height of 325m (1,066 feet) at its highest extended point, the Voltaire is one meter, or three feet, taller than the Eiffel Tower, while the Haliade-X is nearly three times taller than the Statue of Liberty.



an installed capacity of 3.6GW. First power is expected in summer 2023 and summer 2024 for Dogger Bank A and B respectively, with commercial operations following around six months later, while turbine installation for Dogger Bank C will begin in 2025. AGCS has been lead insurer on Dogger Bank A and B since the projects were placed in late 2020 and also successfully secured the lead position on Dogger Bank C when it was placed in 2022.

Dogger Bank D proposal

Recently an exciting new fourth phase of development for the project was proposed by Equinor and SSE Renewables. Early scoping work is exploring two options for Dogger Bank D.

Under proposed plans, the first option would see power connected to an onshore grid connection in Lincolnshire, on England's east coast, where new network infrastructure is being installed in response to the UK government's plans to generate 50GW of offshore wind by 2030. The second option would use the electricity produced to generate green hydrogen at an electrolysis facility in the Humber – the UK's most carbon-intensive industrial region. If permissions are granted, this could become the country's largest green hydrogen development. The proposal could

add 1.32GW in fixed-bottom offshore wind capacity to the wind farm.

"AGCS is a market-leading insurer of global offshore wind projects and our long-standing relationship with the Dogger Bank development demonstrates our support of strategic assets that facilitate the energy transition," says Adam Reed, Global Leader – Offshore Renewables and Upstream Energy, Energy & Construction, at AGCS. "As part of our commitment to supporting the world's climate targets through expert underwriting and dedicated specialist risk engineering focused on ESG [environmental, social, and governance] concerns, we are working in close collaboration with our energy clients as we all transition towards net zero. Green hydrogen has exciting potential to propel us on this journey because it is created using renewable energy and produces only water when burned. It therefore represents a possible solution for decarbonizing 'hard-to-abate' carbon-intensive sectors like heavy industry and transport. We are eagerly awaiting the outcome of these latest proposals for Dogger Bank D."

Our expert

Adam Reed | adam.reed@allianz.com

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New risk outlooks for construction, financial services, and TMT sectors

At AGCS, our Global Industry Solutions (GIS) teams around the world support the construction, financial services, and technology, media and telecommunications (TMT) sectors with tailored solutions across all AGCS lines of business, as well as other Allianz units. A new series of short reports from the GIS teams highlights some of the key risk trends and future opportunities in each of these three sectors.



Global Industry Solutions Outlook Q8
Construction

Blanca Berruguete, GIS
Director for Construction
at AGCS, looks at future
growth drivers for the
sector, including some of
the opportunities presented
by the drive to net zero, and
discusses the main factors
and loss trends behind
customers' top risks.

Download the report



Global Industry Solutions Outlook Q8
Financial services

Martin Zschech, Global Head of Industry Solutions and Client Management at AGCS, and GIS Director for Financial Services, assesses the outlook and challenges for the sector and discusses some of the main factors and loss trends behind customers' top risks.

Download the report

Jody Yee, GIS Director for TMT at AGCS, assesses the outlook and opportunities for the sector and discusses the main factors and loss trends behind customers' top risks.

Download the report

Increased strikes, riots and civil commotion activity – new report from AGCS

In a global context of what some have called a 'perma-crisis', businesses are increasingly witnessing the impact of protest movements and civil unrest on their operations. As tensions around the world continue to rise, experts from AGCS discuss why and where incidences of unrest are likely to flare up in the future and what businesses can do to protect their property, people and assets.



Strikes, riots and civil commotion – a test of business resilience

In a new report, AGCS experts **Srdjan**

Todorovic, Head of Political Violence and Hostile Environment Solutions at AGCS, and Etienne Cheret, a Regional Practice Group Leader, Crisis Management, at AGCS, share their insights on five key drivers that are fueling civil unrest around the world.

Download the Strikes, riots and civil commotion – a test of business resilience report



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