



When catastrophe strikes

How to manage natural disaster
risks to your overseas operations

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disaster costs
spiralling



“Between 1980 and 2018, the US experienced 230 billion-dollar weather events.”

At US\$344 billion, 2017 was the costliest year ever recorded for weather disasters.¹ Events included hurricanes Harvey, Irma and Maria; wildfires in California; flooding in Sierra Leone, Bangladesh and China; earthquakes in Mexico; and drought in Somalia. Approximately 10,000 people died as a result of natural disasters during the year.²

The diversity of incidents and locations shows that, no matter where you have operations in the world, your organisation could be exposed to natural catastrophe risks. And when a catastrophe does strike, it can severely impact your physical assets, your people and the running of your business. The costs involved in recovering from natural disasters are often huge; between 1980 and 2018, the US alone experienced 230 billion-dollar weather events.³

Reducing your exposures

The good news is that companies can take substantial practical measures to prepare for natural catastrophes to minimise damage when they do occur. Technology can play a significant role in this; for example, using drones or geospatial mapping to carry out initial risk assessments of unsafe sites, or monitoring social media to find out the most pressing issues in the aftermath of a disaster.

While insurance can mitigate your natural catastrophe risks, insurance alone cannot guarantee recovery. In fact, many businesses do not survive a natural disaster; loss of customers, goodwill and market share can all cause a company to fail. That's why being proactive in managing your risks can make the difference between staying in business and not.

Managing risks remotely

As serious natural disasters tend to happen abroad, UK risk managers responsible for overseas operations face challenges around managing these risks remotely.

In this whitepaper, we outline a range of practical ways that UK companies can:

- **Prepare** for natural disasters abroad
- **Prevent** their operations being affected, where possible
- **Mitigate** the impact when a disaster occurs
- **Restore** their business to full operational capacity

A range of considerations

Many companies focus on protecting their physical assets and minimising business interruption when it comes to natural disasters, but there are a large number of human aspects to consider – from the immediate safety of your people to longer term issues such as ensuring employees are getting paid.

Reputation is another key consideration. How a company handles a disaster situation can significantly shape how the public perceives it – particularly if serious injuries or fatalities are involved. But if you get it right, you can actually enhance your brand and standing in the community.

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Prepare

In addition to ensuring you have appropriate insurance cover in place to protect your people and your physical assets, there are a wide range of ways in which you can reduce your exposure to natural catastrophe risks.

Identify your risks

The first step in preparing for natural catastrophes is to carry out a thorough assessment of your risks, identifying the types of event that could threaten your facilities.

While some types of natural disaster may seem more likely than others, it is useful to consider the likelihood of a wide range of events, including earthquakes, hurricanes, wildfires, mudslides, floods, tornadoes, tsunamis and severe winter storms.

As part of your planning, you should identify your most important locations, processes and people, and map out what would happen if you lost one or more of them. Bigger businesses should consider what the rest of your organisation could do to mitigate the loss of a facility. For instance, could you re-route orders and fulfil them from another location?

You should also consider where your servers are and how you could protect them, so that if you are hit by a catastrophe you could still pay wages, log on to computer systems and so on.

“As part of your planning, you should identify your most important locations, processes and people – and map out what would happen if you lost one or more of them.”

Formulate an emergency response plan

The second step is to formulate a plan for what your company will do before, during and after a natural catastrophe.

Your emergency response plan should cover seven core elements:

- 1 Policy** – your organisation’s position on the handling and documentation of crises.
- 2 Procedures** – how crises will be handled, with specific actions clearly outlined.
- 3 Role definitions** – who does what, where and when during a crisis.
- 4 Communications** – how to notify employees and families of a crisis.
- 5 PR** – who your media spokesperson is and what information will be disclosed, and to which outlets.
- 6 Professional resources** – internal and external resources available to assist before, during and after a crisis.
- 7 Physical plan** – how your organisation will handle issues such as setting up a crisis management area to work from and carrying out repairs.

The most important element of your emergency response plan should be ensuring the safety of employees. All companies have a duty of care to their employees, and companies in sectors such as leisure and tourism often have a duty of care to their customers as well.

You should create and practice evacuation plans for employees, as well as for emergency response personnel. Also ensure that employee and client contact details are up to date and plan for how to account for employees after an incident – something that may be challenging if you lose mobile phone coverage or the internet.

“Carrying out routine maintenance – such as clearing guttering and roof drains, and cutting back trees and foliage – is also vital for making sure your property is protected.”

Assemble an emergency response team

A key part of the planning process is forming an emergency response team to make managerial decisions when there is a catastrophe.

The team should include representatives from the management team, HR, operations, communications, infrastructure/maintenance and production, as a minimum.

If you are managing your company’s response from the UK, some of the team members should be based in the UK and some should be in the affected location.

Take steps to protect yourself now

Once you have assessed your risks and formulated your strategy, you will have identified a range of proactive measures that you can take to reduce the risks that natural catastrophes pose to your operations.

These may include signing up for weather alerts, which give you early warnings and enable you to take steps to ensure the safety of your people and your property. Also make sure that your people understand the weather alerts that are used in your area; these can differ quite significantly by region.

Understanding whether buildings comply with local building codes can provide crucial information about structural resistance to nature. Building codes are frequently updated to reflect lessons learned from past disasters. You should understand what, if any, upgrades have been undertaken since the original build and consider further improvements to meet current codes.

In addition, you should evaluate how effective existing protective features are likely to be and consider installing additional features. For example, shutters can protect glass from flying debris; lightning-protection systems may reduce exposure to thunderstorms; and seismic bracing can reduce equipment and shelving ‘tip over’. The proper construction, installation and maintenance of protection systems often determines whether a building will survive a natural disaster.

Carrying out routine maintenance – such as clearing guttering and roof drains, and cutting back trees and

foliage – is also vital for making sure your property is protected.

Stocking materials to support your emergency response plan – such as generators, pumps, lanterns, weather radios, sand bags, shovels, ladders and water – is also useful. Make sure that you check all equipment regularly to ensure it will work in the event of a crisis.

As a natural disaster will not be isolated to your facility, everyone in the area will be attempting to access the limited recovery resources available. Therefore, think about what equipment you might need if one of your sites is hit by a natural disaster. This may lead you to buy items such as dehumidifiers, or set up a hire contract with a local supplier that guarantees you will take precedence over other businesses.

Finally, make sure you ask your insurer how prepared they are for the impact of natural disasters on their own operations.

Steps you can take as a catastrophe approaches

If you know that a natural disaster is approaching, and it is safe to do so, you can take certain final measures to reduce the likelihood of damage to your site.

These will have been identified as part of your planning process, and may include:

- Shutting down key equipment safely and turning off electricity for non-critical equipment.
- Securing all doors and boarding up windows to protect against flying debris.
- Putting out sandbags and positioning flood boards.
- Moving equipment inside or to higher floors, if there is a risk of flooding.
- Filling the fuel tanks on your emergency generator and fire pumps, as well as your vehicles.
- Checking that your fire protection equipment is working.
- Making sure your important records are protected — or moving them offsite.

In more serious situations, you may decide to evacuate employees and customers – if this is deemed to be safer than staying put.

A close-up, low-angle shot of a man with dark skin and a beard, wearing a grey textured sweater. He is sitting at a desk, looking down intently at a document he is writing on with a pen. The background is blurred, showing what appears to be an office or laboratory setting with some equipment. The lighting is soft and focused on the man's face and hands.

Prevent

“If you are thinking about building or leasing a new facility, ask your insurer or broker for advice about the risk of that location being affected by a natural disaster.”

When you are considering moving or expanding your operations, it pays to plan well ahead and consider the risk of natural catastrophes at the very start of the process.

Choose new sites carefully

Careful site selection – particularly for new construction projects – is critical. You should also assess the surrounding areas; a site may be appropriate, but if, for instance, you are reliant on a local highway that floods at certain times of year, that could present major problems.

If you are thinking about building or leasing a new facility, ask your insurer or broker for advice about the risk of that location being affected by a natural disaster. At Travelers, our in-house catastrophe modelling capabilities allow us to calculate the likelihood of a wide range of different disasters and give advice on how to lessen the risks involved.

Sometimes, that means choosing a different site altogether. Other times, it might mean taking precautions such as ensuring the roof is tied down if a building is in a hurricane zone; signing up for local government flood alerts; or moving vehicles to higher ground when the weather gets bad.

Such measures may be crucial because locating operations away from natural disaster zones is not always possible or desirable. This is particularly true in the US as people tend to live on the coast, which is where the worst weather often occurs. Therefore, companies need to weigh up the benefits of basing themselves in a less catastrophe-prone area vs basing themselves near their customers.

Avoid concentrating key assets in one location

Having all of your key equipment and people in one location is something that organisations should try to avoid when planning for natural catastrophe risks.

For example, if a site is exposed to hurricane or earthquake risks, it may not be advisable to have all of your most important production equipment there. Likewise, if all of your key people or everyone that specialises in a certain role are in one office, what would you do if they were unable to work for weeks or months after a disaster?

Map your supply chain risks

This type of location assessment and planning should be applied to your whole supply chain - in our experience, it is very often suppliers that let companies down in the event of a crisis.

When you put together your emergency response plan, it should not only cover your organisation but also your suppliers and, in turn, their suppliers to ensure that you could keep your business going in the event of a disaster.

In 2011, the production of hard drives was severely affected when Japan suffered an earthquake and tsunami, and then Thailand – another big producer of hard drives – was hit by serious flooding.⁴ This illustrated the importance of understanding the risks in your supply chain and having more than one alternative production arrangement in place, if possible.

Mitigate



“A key priority should be employee safety, ascertaining where all of your staff are and whether they need emergency assistance.”

How you react in the first 24-48 hours after a catastrophe can go a long way towards minimising the impact on your operations.

Put your plan into action

In the immediate aftermath of a disaster, your emergency response team should assemble and start executing your emergency response plan. Immediate priorities will include calling the emergency services, trying to clear access to the site and getting power back.

The team should also contact your broker and/or insurer to let them know what has happened and talk through what support you need in the short term.

Prioritise safety

A key priority should be employee safety, ascertaining where all of your staff are and whether they need emergency assistance. While focusing on employee safety is the right thing to do, making sure your employees are safe and able to work also helps you to reduce your business interruption losses.

It is crucial to communicate with employees promptly about what they should do and whether they should try to come in to work. Communication can pose serious challenges if the mobile network and/or internet are down. During your planning phase, you should have identified various ways of communicating with employees in this situation, such as providing a helpline for them to call, sharing updates on social media or using text alerts.

Use technology to start assessing the damage

You should start assessing the damage to your operations as soon as is practical. Technology can be very useful for doing this remotely and quickly.

For example, companies can pay **geospatial imaging** companies for high-quality imagery that shows your site before and after an incident. The images are similar to those seen on Google Earth and allow you to zoom in and look at the site from different angles, so they can be very useful for initial assessments.

Some insurers in the US are starting to train their loss adjusters to use **drones** – which can only be flown with Federal Aviation Administration (FAA) approval – to assess damage. They can be deployed quickly and provide a safe alternative to people having to check buildings and particularly roof areas that may be hazardous after an incident.

Data and analytics are also becoming more sophisticated and providing valuable data about weather patterns; what has happened, where exactly has been affected, and what is needed to help people on the ground.

Social media is becoming increasingly useful for assessing immediate priorities in the aftermath of a disaster. By monitoring what users are talking about in the affected area, companies can determine what the most pressing issues are – such as lack of water or mobile phone coverage. This provides a useful contrast to weather monitoring services which only provide technical data.

Prevent further damage

Sometimes, more damage occurs after a disaster than during the actual event.

For example, open roofs can allow rainwater to enter; fires can occur due to disturbed propane tanks, broken gas lines or spilled flammable liquids; weakened walls can fall when exposed to strong winds; and looting can occur at unsecured premises.

Therefore, it is vital to secure your premises against looters and assess whether there are any ‘quick fix’ measures that you can safely take to protect your buildings and equipment – such as covering damaged roofing and boarding up broken windows.

You can also start clearing up areas of the site – perhaps clearing roads to enable vehicle access or pumping water out of flooded basements with portable pumps.

A blurred office scene with people working at computers. The word "Restore" is overlaid in white cursive script.

Restore

“It is crucial that organisations learn from what happens during a natural disaster.”

Restoring your operations is about getting your facilities and production back to where you were before the catastrophe hit.

Put your business continuity plan into action

After you have dealt with the immediate emergency response, it is time to start deploying your longer-term business continuity plan (BCP) and getting your business back to normal as quickly as possible.

A common misconception is that business continuity and emergency response planning are the same thing. However, business continuity planning focuses on maintaining the long-term financial viability of your organisation, while emergency response planning deals with protecting and restoring buildings, equipment and processes in the immediate aftermath of an event.

Reinstating your operations

Companies should work closely with their insurers and brokers to assess the damage, plan repairs, appoint contractors and project manage the rebuilding of facilities, as well as restoring all power and services to their site. Their insurer may be able to provide interim claim payments to help get their company up and running quickly.

Rebuilding or reinstating your operations should not necessarily be done to the same specifications as previously if you can identify room for improvement. For example, if your window glazing proved ineffective in a hurricane, consider replacing it with glazing of a higher standard.

Learn from what happens

It is crucial that organisations learn from what happens during a natural disaster. You should assess what elements worked and what did not in your emergency response plan, and identify ways to improve the plan for next time.

While only one of your sites may be affected by a particular natural disaster, it is useful to compile lessons learned and actions taken and disseminate that knowledge around your business.

Also talk to your insurer and broker about lessons that other clients have learned. Insurers and brokers have a wealth of information about experiences companies have had and ways to avoid them.

Try to continually improve

Finally, once your operations are up and running normally again, you must not forget about the importance of planning for natural disasters and working hard to minimise your risks.

This should be a continual risk management cycle. You should regularly reappraise your risks, refine your emergency response plan and incorporate lessons learned into it, train staff, maintain emergency equipment and practice your procedures.

“A common misconception is that business continuity and emergency response planning are the same thing.”

Leading by example

“We are one of the largest users of drones in the insurance industry, with more than 400 certified drone operators worldwide.”

As a global insurer, we like to lead by example when it comes to managing natural catastrophe risks and looking after our people and customers.

- The hub of our catastrophe response operations is the **Travelers Catastrophe Management Center** in Hartford, Connecticut, which makes use of the latest technology to track weather patterns and the potential impact on our customers. We have built powerful tools that aggregate millions of data points, including weather, satellite imagery and location information to help us understand the footprint of an event, how many customers will be impacted and the probable severity of losses. After an event, we use location analytics, aerial surveys and user-generated photos – as well as data from local and government agencies, news sites and social media – to understand the type and level of damage that has occurred.
- If we cannot access a site straightaway, we use **geospatial imagery** from before and after the event to identify which policyholders have been affected and assess the extent of the damage. This enables us to start the claims process more quickly, speeding up claim settlements.
- We are training many of our US loss adjusters to be FAA-approved **drone pilots**, so that they can assess damage remotely. This also allows us to inspect roofs more safely and efficiently when evaluating a claim in person. We are one of the largest users of drones in the insurance industry, with more than 400 certified drone operators worldwide.
- Travelers uses **social media** to help us understand public sentiment surrounding an event and give us local insight as to what is happening – and what people need urgently. We can simultaneously monitor more than 20 social media channels using key words.
- After a catastrophe, we send out our pioneering ‘**Cat Vans**’ to assist policyholders. They are custom-built RVs that act as mobile offices from which we can give advice, pay claims and provide practical support such as letting customers charge phones or access the internet.
- An important part of catastrophe response is **sharing information** with our customers, brokers, and agents before an event strikes. To do that, we share information on the emergency response pages on Travelers.com; share social media updates; and send very targeted emails to customers likely to be affected, which we identify using geospatial technology.

Find out more about how we respond to natural disasters at
www.travelers.com/claims/catastrophe-response

Ask the experts

As shown in this whitepaper, while the potential risks from natural catastrophes are significant – there is plenty that businesses can do to manage and reduce them.

Our team is here to help, offering in-depth expertise in both people- and property-related risks. And as a global insurer, we are used to helping our clients manage their risks all around the world.



Chris Wright
Lead Property Underwriter

Chris leads the mono-line Property team for Corporate Business at Travelers Europe. He is a highly experienced Property and Business Interruption underwriter; he has more than a decade of experience in the London insurance market and is ACII-qualified. His main area of focus is the design and implementation of compliant Property programmes for large clients with multinational exposures.



Joanne Stoffell
Corporate Client Manager

Joanne has worked in the insurance industry for more than 20 years. She is a technical claims specialist by background, with extensive experience in handling catastrophic losses. In 2014, she started working in client management, helping corporate clients to navigate the world of claims services. Today, she is responsible for the communication, marketing and delivery of products to Travelers customers.

For more information, visit www.travelers.co.uk/corporate

1 <http://thoughtleadership.aonbenfield.com/Documents/20180124-ab-if-annual-report-weather-climate-2017.pdf>

2 <http://thoughtleadership.aonbenfield.com/Documents/20180124-ab-if-annual-report-weather-climate-2017.pdf>

3 <https://www.ncdc.noaa.gov/billions/overview>

4 <https://www.theguardian.com/technology/2011/oct/25/thailand-floods-hard-drive-shortage>

About Travelers

Here is a comprehensive list of the covers we provide and the types of business we provide them for.

Products

Business Interruption
Crime
Criminal Protection Response
Cyber (1st & 3rd party)
Directors & Officers
Employers' Liability
Employment Practices Liability
Event Cancellation
Kidnap & Ransom
Personal Accident & Travel
Professional Indemnity
Property
Products Liability
Public Liability
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Educational services
Financial institutions
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Hotels
Legal
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Real estate
Technology
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