How's the weather?

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The climate is changing and increasingly so towards more extreme weather events. It necessitates greater awareness of weather-related risks in the global supply chain. Let us then look at some of the considerations cargo handling facilities should contemplate in anticipating climatic events and mitigating their potential consequences. In addition, using TT Club's past claims data, let's highlight the extent of wet damage exposure.

Everyone is well aware of weather conditions in their locality; those responsible for operating cargo facilities are likely to be acutely conscious of changes in local climatic conditions. Many have seen tidal surges and wind microbursts, while unprecedented rainfalls are becoming increasingly common. Such operators need to keep 'fresh' their assessment of the changing risk profile concerning climate experience to protect personnel, operations, equipment, fixed property and infrastructure, and importantly – customers' goods.

Meteorological comprehension is advancing, and related risk management assistance technologies are equally widely available. The capability to monitor, record and predict weather patterns will continue to develop. None of this will physically protect operations, but when utilised as an integral component of ongoing risk assessments, they may inform decision-making, such as where to position equipment, how best to stack empty containers, and strengthen procurement specifications.

Lovely weather for ducks...

Whilst many storm events are considered geographically seasonal – such as those in the Tropics – the entire supply chain industry must take adequate steps globally to prepare for isolated severe weather events.

Typically wind strength is most ferocious in coastal areas. Yet, the surge and flood risk can often cause greater problems, both on the coastline and further inland. The occurrence of extraordinary volumes of rainfall over short periods in various parts of the globe is increasing, resulting in flash flooding and causing significant damage, including to warehouses and cargo stored within them. However, the fact that more rain fell on a particular day than any other in recorded history does not assure legal defence if a claimant can demonstrate deficiencies in the operator's risk assessment or inadequacies in the steps taken in advance of the weather event.

The associated losses of such incidents can be far-reaching; water can penetrate the tiniest cracks and is unforgiving in damage it causes. Furthermore, flood water is inevitably dirty, increasing damage and in many instances creating health challenging situations. Our claims data from the last three years suggest that inland operations were subject to damage in 32% of cases, illustrating (unsurprisingly) that operations positioned on or near a coast are more susceptible to weather-related incidents (68% of cases). Some 16% of claims notified through the period involved heavy rainfall that overwhelmed drains and guttering, subsequently flooding buildings and storage facilities. Property damage through strong winds and microbursts was featured in 74% of weather-related claims throughout the period.

Extreme weather events can be challenging to predict – and even accurate forecasting may only provide a matter of hours for the respective operators to react. It is essential to ensure that adequate risk assessments are undertaken across the full breadth of the operations to understand the various risks thoroughly and, where appropriate, develop mitigating actions and controls, together with an effective continuity plan (for further

reading, kindly check TT Club's ***Windstorm II: Practical risk management guidance for marine & inland terminals***).

Don't make the weather any heavier

While not necessarily related to extreme weather conditions, claims resulting from wet damage to cargo are all too frequent under more ordinary climatic circumstances. Many of these can be avoided entirely with a robust pre-loading condition checking procedure. While humidity and condensation are inevitable challenges through the supply chain, pre-existing damage to a cargo transport unit (CTU) should be an easy check.

As TT Club regularly articulates, around 65% of cargo damage incidents are attributable in part to the way that goods are packed within the CTU. The CTU Code and the more recent ***CTU Code – a quick guide*** and complementary container packing checklist published by the Cargo Integrity Group provide supply chain actors with invaluable risk mitigation guidance.

Pre-packing unit condition checks are critical in protecting the cargo during its journey. Controlling for signs of **pests**, dust, debris, transferable stains, and odours is vitally important. So too are checks for physical damage, holes, evidence of repairs and items such as rust or water trails that might indicate water ingress. TT Club's claims data for 2020 suggest that 25% of wet cargo damage notifications were caused by water ingress to the CTU through pre-existing damage that probably should have been identified as part of the cargo packing process.

Once the cargo has entered the intermodal supply chain, our data suggest that a further 17% of wet damage claims stem from impact damage to the unit during transportation. Of course, there are many touchpoints throughout the intermodal transit (at the road, rail and maritime terminals) where damage might occur. Road traffic accidents may also expose the shipment to the elements.

The intelligence we gathered indicates the maritime mode poses the most significant risk, accounting for 65% of reported claims. It can be partly explained by the length of time that the cargo is in transit – extending the period of exposure – in addition to the different climatic zones through which the load moves. Road transit was the next most prominent mode at 14%, where shorter journeys, fewer intermodal changes and operator owned units likely influence the better experience. Wet damage arising under air carriage accounted for only 7% of TT Club's 2020 data reported claims, reflecting shorter transit periods and different handling parameters. Data suggest that the primary exposure, unsurprisingly, rests in-between the airside warehouse and the physical loading to or unloading from the aircraft.


Photo: Canva

Perhaps less expected, incidents where the cargo was wet-damaged while in storage accounted for 13% of reported claims. Causation varies but includes damage occurring to or within the storage facility itself and, with increasing frequency, the incidence of flooding. Some 31% of these incidents followed sudden heavy rainfall that overcame drain provisions. This latter point highlights the importance of routine maintenance to ensure that drains and drain pipes are clear and undamaged and indicates the prudence of periodic risk assessments to ensure that original building design parameters remain appropriate.

Poor operational practices also attribute to losses, with incidents of cargo temporarily stored entirely unprotected, the shipment being transported on flatbed trailers/flat rack containers with insufficient coverings, and loads being 'cross-stuffed' during periods of rainfall. In too many instances, cargo had been unstuffed from units for customs inspection – laid out on the facility's ground. Rainfall occurring whilst the goods stand unprotected awaiting examination inevitably causes damage.

Pragmatic yet mindful

While this analysis was limited to 2020 incidents, it was triggered by a deteriorating trend, which indicated a potential increase in risk exposure.

In many instances, fortuitous circumstances resulted in a disproportionate monetary consequence. While the outcomes are necessarily cargo-specific, it is noteworthy that numerous consignments were eventually accepted by the beneficial cargo owner (BCO) with an element of rework, reducing the potential cost of the loss. While such solutions are pragmatic for all concerned, it is clear that all actors in the supply chain need to be mindful of the risks.

While there may be contractual defences to wet damage claims, such as where the bill of lading is noted 'shipper load, stow and count,' there are inevitable consequences when damage is incurred in this way. Having entrusted their cargo into your care, custody and control, the BCO might be expected to be aggrieved when part or all of their valuable cargo has suffered wet damage – regardless of fault. Reputational damage can be extremely challenging to repair. ■

TT Club specialises in the insurance of intermodal operators, non-vessel owning common carriers, freight forwarders, logistics operators, marine terminals, stevedores, port authorities and ship operators. The company also deals with claims, underwriting, risk management as well as actively works on increasing safety through the transport & logistics field. Please visit **www.ttclub.com** for more info.