



TT Club Loss Prevention

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On Risk

Inside:

- The importance of STCs
- Load boards
- Critical asset overview – reach stacker
- Lessons in managing risk across the temperature-controlled supply chain
- Innovation driving safer supply chains

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Broker bulletin

This bulletin aims to bring together the Club's supporting brokers with the aspiration of sharing insights and learning on all aspects of supply chain risk. It includes TT Club claims experience and other industry data to provide an insight into the current risks facing those tasked with managing supply chain activities.

The Club continually produces loss prevention reports and guidance related to supply chain risk. This bulletin includes a selection of recent content as well as highlighting collaborative work with like-minded organisations.

All TT Club's loss prevention guidance can be found at www.ttclub.com/loss-prevention. Please email us at riskmanagement@ttclub.com or get in touch with your usual contact if you have any queries, ideas or suggestions.

Foreword

As the transport and logistics sector continues to adapt to increasing operational, regulatory and commercial complexity, the need for clear, practical and evidence-based risk insight has never been greater. For brokers supporting clients across the global supply chain, understanding risk is not simply about recognising what can go wrong, but appreciating how contractual arrangements, operational behaviours, asset management, technology and human decision-making combine to shape liability, resilience and loss outcomes.

This second edition of *On Risk* continues TT Club's commitment to providing our broker partners with concise, relevant and practical intelligence drawn from our claims experience, Member engagement and collaboration with the wider industry. In this edition, we explore several areas where risk can develop quickly if not properly understood or controlled. We consider the importance of Standard Trading Conditions and their effective incorporation into contracts, the growing security and liability concerns associated with load boards, and the critical role of reach stackers within container handling operations. We also look at innovation, reefer claims and guidance, the continuing development of our Under 35's Technical Seminar Series, and wider industry initiatives that support safer and more resilient supply chains.

A common theme runs through each of these topics: effective risk management depends on clarity. Clarity of contractual responsibility, clarity of operational process, clarity of communication and clarity around the controls required to prevent small weaknesses becoming significant losses. For brokers, this insight is valuable because it supports more informed conversations with clients, helps identify exposures that may otherwise remain hidden and strengthens the quality of risk presentation to insurers.

At TT Club, our role extends beyond providing insurance protection. We are committed to helping brokers and Members make sense of complex risk issues and convert that understanding into practical action. I hope this edition provides useful perspective, prompts constructive discussion and reinforces the value of proactive engagement between brokers, clients and TT Club's Loss Prevention team. Together, we can continue to reduce loss, improve resilience and support a safer, more secure and more sustainable global supply chain.



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The importance of STCs

Standard terms and conditions (STCs), often referred to as standard trading conditions, are one of the most important risk management tools available to supply chain stakeholders. Whether a business is engaged in freight forwarding, road or rail carriage, warehousing, terminal operations or stevedoring, STCs help establish a fair allocation of risk between the operator and its customer. However, STCs only provide protection if they effectively form part of the contract between operator and customer.

Why STCs are important

STCs provide the contractual framework under which operators deliver services to customers. They define the rights, obligations and liabilities of the parties and provide a consistent basis upon which business can be conducted.

Liability limits often receive the most attention, but they are only one aspect of STCs. STCs commonly define when an operator will be liable, how liability will be assessed and how claims must be brought. They may also provide rights and protections that would not otherwise be available.

STCs are intended to allocate risk fairly between cargo interests and supply chain operators. An operator may earn only a small fraction of the value of the cargo it transports, handles or stores. It is therefore neither commercially realistic nor intended that the operator should assume unlimited liability for the full value of those goods in every circumstance. STCs commonly limit liability by reference to weight or other formulae, helping to keep liability proportionate to the services provided.

“The strongest evidence of incorporation is express agreement.”



STCs also play an important role in supporting the insurance risk-transfer arrangements on which many operators rely. Typically, liability insurance policies provided to operators offer coverage conditional upon the use and incorporation of approved STCs. If an operator fails to incorporate its STCs, it may be exposed to liabilities which exceed the claim recoverable from its insurer. Such uninsured liabilities could be significant and will certainly exceed the profit for the job.

It is also important to recognise that STCs do not operate in isolation. Certain legal regimes and international conventions may override contractual provisions. For example, CMR may apply to certain international road transport operations regardless of the parties' contractual intentions. Operators should ensure that their STCs are appropriate for the services they provide and the jurisdictions in which they operate.

How to incorporate STCs

The requirements for incorporating STCs vary between jurisdictions, and operators should seek local legal advice. However, the underlying principles are often similar. Under English law, a party seeking to rely on its STCs must generally bring them to the attention of the other party before the contract is concluded. Terms introduced after a contract has already been formed are unlikely to be effective.

The strongest evidence of incorporation is express agreement, whether through signed onboarding documentation, signed contracts or written confirmation that the STCs apply. Many businesses also successfully incorporate STCs through quotations, booking confirmations and trading documentation.

Regardless of the method used, operators should be able to demonstrate that the customer was given reasonable notice of the applicable terms before the contract was concluded.

Operators should ensure that there is a clear and consistent contracting process in place and that all relevant personnel

understand the steps required to incorporate the business's STCs. References to STCs should be clearly worded and customers should be directed to the applicable terms in a straightforward manner.

In practice, disputes concerning STCs frequently turn on the available evidence of incorporation. Businesses should therefore retain evidence demonstrating when and how STCs were brought to the customer's attention, as this may prove critical if incorporation is later challenged.

Pitfalls to avoid

One of the most common mistakes is assuming that simply referring to STCs somewhere within business correspondence automatically makes them binding. References within email footers, quotations and contractual documents may support incorporation in some circumstances, particularly where there is a clear route to the relevant terms. However, their effectiveness will depend on when the reference was made, how clearly the terms were identified and whether the customer was given a reasonable opportunity to review them.

Another common issue arises when multiple sets of STCs are referenced without clearly identifying which terms apply to which service. Many operators use different conditions for freight forwarding, haulage, warehousing or other activities. If customers are not clearly told which terms apply, uncertainty can arise and contractual protections may be undermined. Practical issues can also arise where customers are directed to a website containing numerous potentially applicable conditions, but are not given a clear route to the correct set. The easier it is for customers to locate and review the applicable terms, the stronger the incorporation position is likely to be.

Finally, businesses should ensure that employees involved in contracting with customers understand the importance of following agreed incorporation procedures. Well-drafted STCs offer little protection if commercial processes are inconsistent.

What does this all mean for brokers?

Insurance brokers can play an important role in helping clients understand and manage contractual risk. Whilst brokers do not provide legal advice, they can encourage clients to review both the content of their STCs and the procedures used to incorporate them.

A useful starting point is to ask four straightforward questions:

- What STCs does the business trade under?
- When were they last reviewed?
- How are they brought to customers' attention before contracts are concluded?
- Can the business demonstrate that process if challenged following a loss, damage or delay event?

Brokers are well placed to identify potential issues with STCs and incorporation during placement discussions and can deliver real value to clients by ensuring that contractual

A logistics operator referenced several sets of terms in its email footer (domestic road carriage, international freight forwarding and storage) but did not specify which applied to which service in the quotation. When a claim arose, the ambiguity led to a legal opinion that favoured the customer, as courts often interpret unclear contracts against the party that drafted them. This resulted in the operator being held to a greater liability than expected.

protections are robust, up to date, approved by the relevant liability insurer and properly incorporated into customer contracts, with suitable records retained. This will help minimise operators' liabilities and the potential for uninsured liabilities.

Conclusion

STCs are one of the most effective tools available to help allocate risk fairly between cargo interests and supply chain operators. They can help avoid disputes, create certainty when losses occur and prevent liabilities becoming disproportionate to the services provided. The effectiveness of any STCs will ultimately depend on whether they have been incorporated into the contract.

Operators should ensure that customers are given a reasonable opportunity to review the applicable terms before a contract is concluded and retain evidence showing how those terms were communicated. Clear communication, consistent contracting processes and well-drafted STCs can help reduce disputes and support the intended allocation of risk between customers and operators.

To find out more...

TT Club offers a range of operator-specific model conditions for Members. Please contact your local representative for further information.



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Load boards

Introduction

Load boards have become a defining feature of contemporary road freight brokerage. Their widespread use reflects the industry's continued drive for efficiency, market visibility, and flexible capacity. However, the same features that make these platforms attractive also introduce meaningful operational, [security](#), and liability risks. The increasing sophistication of criminal activity, particularly through the use of data scraping, artificial intelligence, and impersonation techniques, has magnified these concerns. Despite these risks, given the fast paced and dynamic nature of the modern supply chain, the use of load boards has become a necessity. This article examines how load boards function, why they have become so prevalent, and what measures organisations can take to mitigate the exposures that accompany their use.

The role of load boards in freight operations

Load boards, often referred to as freight exchange platforms, are digital marketplaces designed to match available shipments with available motor carriers. They originally emerged after deregulation in the 1980s, functioning as simple bulletin boards intended to reduce empty running miles and accelerate subcontracting. Today they form an integral part of the [North American](#) trucking ecosystem. An estimated 75–80% of shipments are now directed toward load boards, not only as a last resort but as a routine method of securing capacity.

In practice, load boards support operational efficiency by providing immediate access to a national carrier pool. They offer visibility into prevailing capacity and rates, and they allow brokers to resolve urgent capacity shortages when a planned carrier falls through. Their convenience has made them ubiquitous, yet it has also normalised their use in circumstances for which they may not be appropriate.

Internal and public load boards: different risk profiles

A central distinction lies between private, internal load boards and public platforms. Large [logistics operators](#) have developed proprietary systems that admit only vetted and pre-approved carriers. These closed environments allow for tighter administrative control, closer monitoring, and the application of established management processes. The restricted participant pool inherently limits exposure to fraud, identity theft, and cargo theft.

Public load boards operate under a very different model. Platforms are accessible to a far broader audience, including unvetted motor carriers and potentially fraudulent actors. Subscription based access creates a low barrier to entry,

“Beyond theft, fraudulent carrier impersonation has become a major concern.”

which expands market reach but also increases anonymity. This openness has made public load boards a focal point for impersonation schemes, double brokering, and [targeted cargo theft](#). As a result, organisations must define when such platforms may be used, what information may be disclosed, and what categories of goods are prohibited from being posted.

How risk emerges in load board use

The rapid growth of digital freight exchange has coincided with new avenues for exploitation. Criminal networks increasingly employ data scraping tools, machine learning, and cargo profiling methods to identify shipments of interest. Loads collected from well-known distribution centres are particularly vulnerable. A posting that identifies a high-value origin, even in generic form, can serve as a signal to organised thieves. Specific cargo descriptions or precise location details compound this risk.

Beyond theft, fraudulent carrier impersonation has become a major concern. Criminals may spoof phone numbers, steal motor carrier identifiers, or create convincing email domains to secure a load. Once a fraudulent party succeeds in collecting a shipment, the cargo may become untraceable in a matter of hours.

Double brokering represents another exposure, particularly when communication occurs outside formal channels. When a load is re-brokered without authorisation, brokers lose visibility and control, and customers face heightened uncertainty. Payment disputes and regulatory breaches often follow. The language used in instructions can also influence legal outcomes. Communications structured as “the customer requires” or “the shipper requires” may appear to create distance from operational control, yet they also risk drawing those parties into litigation should an accident occur.

Evaluating the rationale for posting a load

Given the risks, brokers must consider the underlying rationale before deciding to post on a public load board. The nature, value, and attractiveness of the cargo should be assessed alongside customer expectations, time constraints, journey distance, and prevailing market conditions. For high-value or high-risk goods, load boards should seldom be the default solution. Instead, established, pre-vetted carriers may offer a safer and more controlled alternative. Without such assessment, inappropriate load board use can expose both brokers and their customers to unnecessary and avoidable threats.

Managing information to reduce exposure

The most significant mitigation strategy lies in careful control of the information disclosed. While accuracy is required for safety and operational clarity, brokers should avoid providing unnecessary detail. Sensitive locations should be described in general terms without becoming misleading. Cargo descriptions should remain neutral, particularly where goods have high theft appeal. Categories such as

freight-all-kinds, hard goods, soft goods, or perishable goods provide sufficient clarity for legitimate carriers while avoiding specific references that may attract criminal attention.

Declared weight offers another opportunity for discretion. Using a safe but generic weight, consistent with compliance requirements, may reduce the specificity of the cargo profile. While equipment type and pallet counts often need to be disclosed, these details should not be supplemented with avoidable commentary or operational notes that could reveal more than necessary.

Communication controls and identity protection

Communication practices play a pivotal role in reducing exposure to identity fraud. Using a single, centralised channel for all inbound and outbound correspondence allows for tighter monitoring, easier verification, and clearer audit trails. Organisations benefit from ensuring, so far as reasonably practicable, that communication between brokers and motor carriers occurs within the load board platform itself. Attempts to shift conversations to private phone numbers or personal email addresses may constitute a red flag and should be approached cautiously.

Software tools that validate carrier identifiers, insurance status, and safety ratings can provide additional protection. When layered with fraud detection features, they help identify mismatched contact details and mitigate impersonation attempts before they escalate.

Training and organisational governance

The effectiveness of risk management depends heavily on personnel competence. Staff who interact with load boards require training that enables them to recognise suspicious behaviour, validate carrier identities, and understand which information is sensitive. A clear escalation procedure is essential for situations that deviate from expectations or raise concerns. Without such structure, even small anomalies in communication or cargo handling may go unchallenged.

In addition, organisations benefit from establishing formal policies governing load board usage. These policies should define permitted platforms, categories of goods eligible for posting, required internal approvals, and rules regarding the content of postings. By ensuring consistency and accountability, governance frameworks transform load board use from an ad hoc operational tool into a controlled process aligned with broader risk appetite.

A shared responsibility

Responsibility for managing load board risk cannot rest with brokers alone. Platform providers increasingly support vetting, verification, and fraud detection, and this active role brings a clear expectation of accountability. More broadly, effective prevention depends on shared responsibility across the transport chain. Carriers, consignees, forwarders, platforms and shippers all influence risk through their decisions and due diligence processes, with shippers having a prominent role for instance in setting expectations and safeguarding cargo, rather than assuming risk sits solely downstream.

“Responsibility for managing load board risk cannot rest with brokers alone [...] effective prevention depends on shared responsibility across the transport chain. Carriers, consignees, forwarders, platforms and shippers[...].”

Familiarisation

For insurance brokers, understanding the risks associated with load boards is important because their use can materially change the risk profile being presented to insurers. A broker who fails to understand these exposures may inadvertently place a risk that is inadequately described, poorly controlled, or outside an insurer's appetite.

Load board activity often sits at the intersection of carrier, broker, and logistics operations. If contractual arrangements are unclear, liabilities can become blurred following a loss. The use of subcontractors sourced through load boards may also create recovery challenges and raise questions around contractual risk transfer.

Conclusion

Load boards remain a critical component of the freight transportation landscape. They promote efficiency, support market flexibility, and facilitate rapid problem solving. Yet their inherent openness creates exposure to sophisticated criminal activity, impersonation, and operational breakdown. The combination of prudent information management, communication controls, structured training, and clear organisational policy forms the strongest basis for safe and effective utilisation.

Used thoughtfully, load boards can continue to support operational efficiency without compromising security. Used without adequate oversight, they can expose brokers, customers, and cargo to substantial operational, financial, and reputational harm.



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Critical asset overview – reach stacker

Reach stackers are among the most versatile and productive pieces of equipment operating within container terminals, inland depots and intermodal facilities. Their ability to rapidly move, stack and transport laden containers makes them a critical asset for many cargo handling operations.

Unlike larger quay cranes or rubber-tyred gantries, reach stackers offer flexibility and mobility, allowing operators to handle containers across multiple areas of a terminal. However, this versatility introduces a unique range of operational, maintenance and safety risks. Due to their high lifting capacities, elevated centres of gravity and rear-wheel steering configurations, incidents involving reach stackers frequently result in significant equipment damage, cargo losses and operational disruption.

For these reasons, terminal operators should understand the key characteristics of reach stackers, the hazards associated with their operation and the controls required to manage risk effectively.

Key attributes

Modern reach stackers are substantial pieces of equipment, typically weighing between 60 and 90 tonnes and capable of lifting loads between 10 and 80 tonnes. Depending on configuration, they can stack containers up to four to six rows deep, providing a reach of approximately 10 to 15 metres. Units may be powered by conventional diesel engines or increasingly by electric drive systems as terminals seek to reduce emissions.

With acquisition costs commonly ranging between US\$400,000 and US\$500,000 and service lives of 10 to 15 years, reach stackers represent a significant capital investment for terminal operators. Long procurement lead times can also create operational challenges when replacement assets are required following a major incident.

Critical components

The most important structural and operational elements of a reach stacker include:

- Telescopic boom
- Hydraulic rams
- Spreader assembly
- Movable operator cab
- Rear-wheel steering system
- Front axle and wheel assemblies carrying significant load concentrations

These components are subject to substantial dynamic loading during operation and therefore require robust inspection, maintenance and monitoring regimes. Particular attention should be paid to hydraulic systems, boom structures and wheel assemblies, as failures can rapidly escalate into serious incidents.

Safety features

Manufacturers continue to incorporate advanced safety systems to help reduce operational risks. Typical features include fire detection and suppression systems, anti-collision technology, load monitoring alarms, seat belt systems and telematics platforms capable of monitoring equipment utilisation and operator behaviours.

Battery management systems are increasingly common on electric reach stackers, while camera-based visibility aids and proximity sensors seek to reduce collision risks in busy terminal environments. Spill kits should also be readily available to mitigate environmental impacts resulting from hydraulic hose or fuel system failures.

Risk areas and typical claims

TT Club's claims experience across the ports and terminals sector highlights several recurring loss trends involving reach stackers.

Collisions remain one of the most common causes of loss, often involving other terminal vehicles, stationary structures or containers. Restricted visibility, congested operating areas and excessive speed are common contributing factors.

Fires can originate from engine compartments, braking systems or hydraulic equipment. Poor maintenance, fluid leaks and overheating components frequently increase exposure.

Overturning incidents represent some of the most severe losses. Reach stackers routinely operate near the limits of stability when lifting heavy containers at extended boom reaches, due to the fact the centre of gravity of the vehicle moves as the boom is extended. Ground conditions, operator error, excessive speed, poor container packing and dynamic loading can all contribute to loss of stability.

Cargo and container damage often results from misalignment of spreaders, sudden movements, dropping loads or inadequate stacking practices.

Overloading and misuse place excessive stress on structural and hydraulic components, increasing the likelihood of equipment failure.

Additional risks arise from the machine's rear-wheel steering characteristics, which can create unexpected vehicle movements, and from the very high axle loads carried by the front wheels, which may contribute to pavement deterioration if not properly considered during infrastructure design and asset management.

Environmental incidents are also encountered, particularly where burst hydraulic hoses or equipment failures result in oil spills and contamination.



Key considerations for risk managers

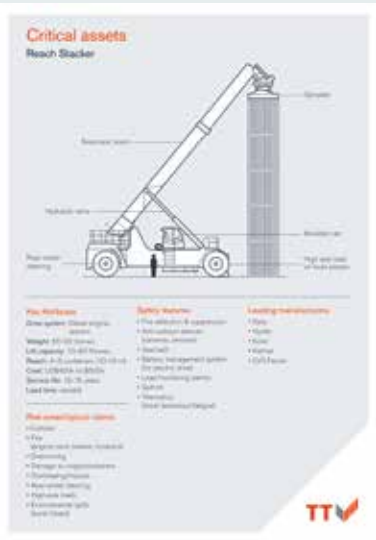
Effective risk management should focus on:

- Operator training and competency assurance.
- Strict adherence to safe load charts and operating limits.
- Pre-use inspections and planned preventative maintenance.
- Routine inspection of booms, hydraulic systems and spreaders.
- Management of traffic interfaces and pedestrian exclusion zones.
- Monitoring operator behaviour through telematics systems.
- Verification that pavement structures are suitable for high axle loads.
- Emergency response arrangements for fires and hydraulic spills.

A structured asset management approach can significantly reduce the likelihood of catastrophic equipment failures while improving operational reliability and extending service life.

Conclusion

Reach stackers are indispensable assets for many container handling operations, offering exceptional flexibility and productivity. However, their size, lifting capability and operating environment expose operators to significant safety, operational and financial risks. By understanding the equipment's critical components, implementing robust maintenance programmes and ensuring effective operational controls, terminals can improve reliability while reducing the frequency and severity of losses.



Find it here:



Lessons in managing risk across the temperature-controlled supply chain

The global supply chain is carrying an ever-increasing volume of temperature-sensitive cargo. From pharmaceuticals and vaccines to fresh produce, seafood, dairy products and frozen foods, the value of many temperature-controlled shipments extends far beyond the cargo itself. A single temperature excursion can trigger product spoilage, regulatory intervention, destruction orders, contractual disputes and reputational damage that far exceed the immediate cargo value. TT Club's claims experience demonstrates that the risks are both significant and persistent.

Analysis reveals an important and perhaps uncomfortable truth: the majority of losses are not driven by catastrophic events. Instead, they arise from preventable failures in process integrity, operational discipline and communication. While refrigeration technology continues to evolve, many of the underlying causes of loss remain stubbornly familiar.

Process Failure Disguised as Equipment Failure

At first glance, temperature-controlled cargo losses are often attributed to refrigeration failures. However, deeper analysis paints a different picture.

The largest primary cause category identified within the claims data was incorrect temperature settings or set-point errors, accounting for approximately 24% of all analysed incidents. Airflow, ventilation and door-related issues represented a further 18% of cases, while reefer equipment and mechanical failures accounted for 16% of incidents. Power interruptions and unplugged containers contributed another 10% of cases.

More tellingly, claims narratives repeatedly highlighted human and process failures such as incorrect booking data, missed electrical connection orders, containers being treated as dry units rather than reefers, failure to respond to alarms, and incorrect temperature instructions.

The lesson is clear: temperature-control risk is often less about refrigeration technology and more about ensuring that every participant in the supply chain consistently follows the correct procedures.

Small Mistakes, Major Consequences

The most common cause of loss identified in the claims data was incorrect temperature management. Examples included cargoes shipped at +20°C instead of -20°C, frozen products carried under chilled settings and temperature instructions amended incorrectly during transit.

The consequences can be severe. Pharmaceuticals may become unusable if product integrity cannot be demonstrated. Food cargoes may be rejected by health authorities even when visible deterioration appears limited.

The prevention measures are straightforward but require discipline. The guidance contained within the [temperature-controlled cargo StopLoss](#) emphasises the importance of verifying transport temperatures before departure and ensuring clarity over temperature units and positive or negative values.

Claims experience suggests operators should strengthen controls through:

- Formal verification of commodity requirements before shipment.
- Two-person verification of temperature entries.
- Structured change-control procedures for any amendment during transit.
- Clear documentation and retention of all temperature instructions.

In many cases, the wrong temperature can be more damaging than the absence of refrigeration itself.

Power Continuity

One of the most striking patterns evident in the claims data is the recurring number of losses caused by reefers being left without power.

Containers were reportedly left unplugged in terminals, depots, railheads, truck yards and transshipment facilities, sometimes for hours and in some cases for several days. Many incidents resulted in cargo rejection, destruction or total loss.

The risk is particularly acute because reefer equipment is fundamentally designed to maintain temperature rather than recover cargo from a significant excursion. As the StopLoss guidance explains, many cargoes require continuous power throughout the transport chain and may depend on generators during road and rail movements.

Effective controls include:

- Mandatory plug-in and unplugging checklists.
- Physical verification following handovers.
- Dedicated reefer yard inspections.
- Escalation procedures for power outages.
- Monitoring systems that immediately identify abnormal power disconnections.

Power continuity failures accounted for more than 10% of all analysed claims, suggesting that this remains one of the industry's most preventable causes of loss.

When the reefer works but the cargo fails

Another significant finding from the claims analysis is the prominence of airflow, ventilation and door-related issues. While representing around 18% of primary causes,

airflow-related factors were mentioned in more than 36% of recorded claims when contributory causes were considered.

This is an important distinction. Cargo damage can occur even when the refrigeration machinery is operating correctly.

The StopLoss guidance repeatedly stresses the importance of maintaining proper airflow. Blocked T-bar floors, obstructed ventilation channels, cargo stowed above load lines, damaged door seals and poorly configured packaging can all create uneven temperatures within the load.

Claims examples identified cartons loaded against evaporator outlets, blocked airflow channels, incorrect ventilation settings and warm air ingress through damaged seals.

Operators can significantly reduce these losses through:

- Commodity-specific loading plans.
- Verification of ventilation settings.
- Inspection of doors, gaskets and seals.
- Ensuring airflow routes remain unobstructed.
- Photographic verification of packing arrangements.

As claims experience repeatedly demonstrates, a well-functioning reefer cannot compensate for poor stowage practices.

The Rise of Predictive Monitoring

Although process failures dominate the dataset, reefer equipment and mechanical breakdowns remain a major source of severe losses.

Mechanical failures accounted for approximately 16% of all incidents and generated some of the highest incurred claim values. Compressor failures, refrigerant leaks, faulty sensors, controller failures, condenser damage and evaporator issues featured repeatedly throughout the claims sample data.

The StopLoss guidance highlights the importance of preventative maintenance and robust pre-trip inspection (PTI) processes. Equipment that fails inspection should not enter service, while regular maintenance of refrigeration components remains essential to minimise operational failures.

Technology is increasingly changing the equation. Modern reefer fleets now support remote monitoring, connected sensors, real-time condition reporting and AI-enabled analytics. These systems can identify abnormal power disconnections, monitor door openings and support predictive maintenance programmes before failures occur.

While the claims data cannot conclusively prove that these technologies have reduced claims frequency, there is evidence that improved monitoring and data visibility can shorten response times, improve incident investigation and reduce the consequences of developing failures. Claims repeatedly show that delayed alarm responses and missing temperature records frequently amplify losses that might otherwise have been mitigated.



Technology Alone Is Not Enough

A recurring theme throughout both the claims experience and the StopLoss guidance is that technology delivers the greatest value when combined with competent people and robust procedures.

Real-time monitoring systems may identify a power interruption, but someone must respond. Temperature sensors may indicate an excursion, but personnel must understand the significance of the alert. Predictive maintenance tools may identify deteriorating equipment, but maintenance programmes must be properly implemented.

The claims data consistently demonstrates that monitoring failures, communication breakdowns and inadequate documentation frequently convert manageable incidents into costly claims.

Building a more resilient cold chain

The findings from the claims analysis are ultimately encouraging because they point towards risks that are largely controllable.

The most effective loss prevention strategy should focus on five core areas: strong set-point governance, reliable power continuity, disciplined equipment maintenance, effective airflow management and robust operational procedures.

As temperature-sensitive cargoes continue to increase in value and regulatory scrutiny intensifies, the business case for investment in monitoring technologies, predictive maintenance and workforce training becomes ever stronger. The most resilient operators will be those that recognise a simple reality: successful temperature-controlled logistics depends not on refrigeration equipment alone, but on the intelligent integration of technology, process discipline and informed people throughout the entire supply chain.



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Innovation driving safer supply chains

Innovation is often associated with productivity gains, automation and efficiency. Yet some of the most valuable innovations emerging across the global transport and logistics sector are focused on a more fundamental objective: keeping people safe.

For TT Club, investment in innovation has long been synonymous with investment in safety. While advances in technology and operational processes can deliver commercial benefits, the greatest value is realised when innovation helps prevent injuries, reduce losses and create safer working environments throughout the supply chain.

This commitment was brought to life at TOC Europe in Hamburg earlier this year through the introduction of the Safety Village, an interactive demonstration area developed to showcase practical safety solutions and encourage meaningful conversations around risk reduction. Situated at the heart of the exhibition, the Safety Village provided a platform for ports, terminals, equipment manufacturers and technology providers to share innovative approaches to addressing some of the industry's most persistent safety challenges.

Rather than focusing solely on theory, the Safety Village highlighted real-world solutions already making a measurable difference in operational environments. From technologies designed to improve pedestrian safety and vehicle interaction, through to innovations supporting safer container handling, hazard awareness and workforce engagement, the initiative demonstrated how a culture of continuous improvement can be translated into tangible safety outcomes.

The strong level of engagement throughout the event reinforced an important message: while the transport and logistics industry faces constant pressure to improve productivity and manage costs, safety remains a critical enabler of sustainable business performance. Organisations that invest in safer operations are often rewarded not only with fewer accidents, injuries and disruptions, but also with improved operational resilience and customer confidence.

This philosophy sits at the heart of TT Club's long-standing Innovation in Safety Awards programme. For over a decade, the awards have identified and celebrated hundreds of examples of organisations taking proactive steps to improve safety across ports, terminals, logistics operations and the wider supply chain. Many of the innovations recognised through the programme have subsequently been adopted more widely across the industry, demonstrating how shared learning can help raise standards globally.

Importantly, the awards are not limited to breakthrough technologies. Previous winners and finalists have included practical process improvements, training initiatives, engineering solutions and cultural programmes that have significantly reduced risk and enhanced safety performance.



What links them all is a commitment to innovation that delivers meaningful and measurable safety benefits.

With the industry's safety challenges continually evolving, there has never been a greater need to identify, share and celebrate new ideas.

For this reason, TT Club is pleased to announce that submissions for the 2026/2027 TT Club Innovation in Safety Awards opened for submissions on 31 August and will close on 13 November. The programme offers organisations an opportunity to showcase their achievements, gain global recognition and contribute to industry-wide learning. For brokers, it also provides valuable insight into the innovations and risk management practices helping shape the future of safer supply chains.

As demonstrated by the success of the Safety Village in Hamburg, innovation has the power not only to transform operations but also to save lives. By recognising and sharing these advances, the Innovation in Safety Awards continue to play an important role in fostering a safer, more resilient and more sustainable transport and logistics industry.



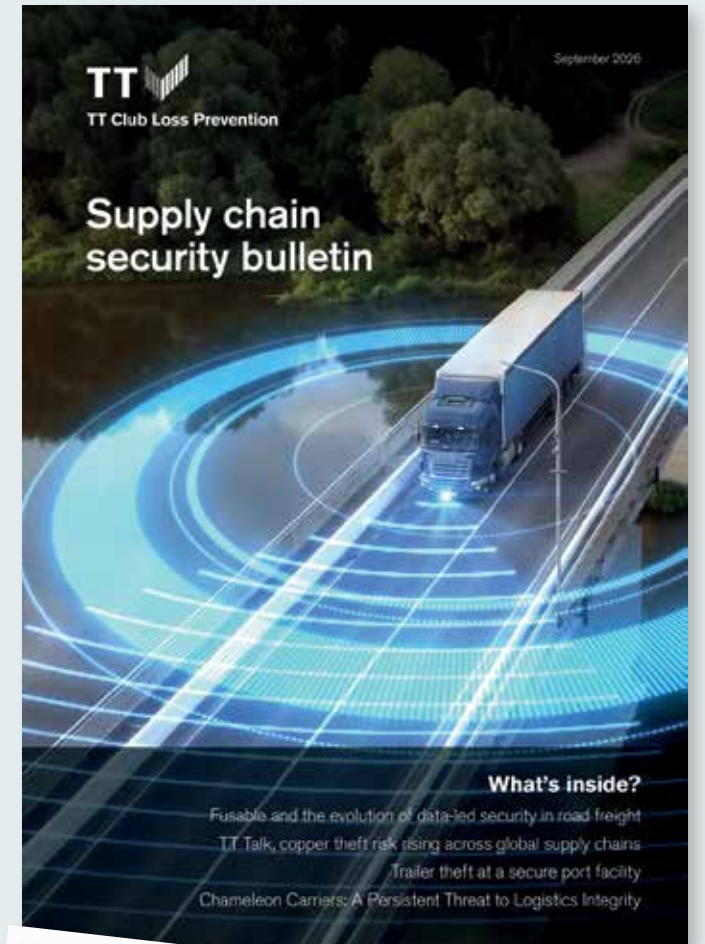
Neil Dalus
Risk Assessment Manager

Neil is a Risk Assessment Manager for TT Club's Loss Prevention Team. Neil joined TT Club in 2023 and has extensive experience managing port and port related infrastructure and assets, having 20+ years engineering experience, which includes Local Authority, Consultancy and 11 years in the Port Industry in various technical and engineering leadership roles.

Supply chain security bulletin

Supply chain security remains one of the most significant exposures facing transport and logistics operators. Cargo criminals are becoming increasingly organised, technologically capable and adept at exploiting weaknesses in both physical security measures and operational processes. As a result, effective risk management can no longer rely solely on fences, locks and tracking devices. It requires a layered approach that combines people, processes and technology, supported by a culture of continuous vigilance. These themes are explored throughout TT Club's latest TT Club Supply Chain Security Bulletin (September 2026), which brings together practical guidance, industry intelligence and real-world loss experiences to help strengthen supply chain resilience.

Among the articles featured is an analysis of the rising threat of copper theft, highlighting TT Club claims data that shows a significant increase in both the frequency and severity of incidents. The article examines how organised criminal groups are targeting high-value metal cargoes through both physical theft and fraud-enabled attacks, while outlining practical mitigation measures including enhanced due diligence, secure route planning and multi-layered tracking arrangements. The bulletin also includes a case study involving the theft of a high-value trailer from a secure port facility, demonstrating how criminals can exploit compromised shipment information, weak verification procedures and GPS manipulation to defeat conventional security controls. Together, these examples reinforce the importance of robust authentication processes, information security and effective operational discipline throughout the supply chain.



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Josh is a Logistics Risk Manager for TT Club's Loss Prevention department. Josh joined TT Club in 2023 having 15 years of experience in the logistics industry in various operational and project management roles. He is an International CPC qualified Transport Manager.



Two exceptional Clubs. One foundation. Stronger together.

TT Club and UK P&I Club are excited to be working together to unite two trusted, complementary mutuals into one strong, collaborative and market-leading collective to better serve the global shipping and transport industries.



Your TT Club Loss Prevention team

Highlighting risk, reducing exposure, advising insureds, serving the industry.

TT Club is the established market-leading independent provider of mutual insurance and related risk management services to the international transport and logistics industry. TT Club's primary objective is to help make the industry safer and more secure. TT Club's Risk Management team is committed to the ongoing development of advice and information underpinning this objective.

This includes:

- Providing support to reduce the risk of claims occurrence
- Promoting 'best practice' opportunities
- Helping to improve risk assessment, mitigation, and control



[Find out more](#)



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Together with the industry: upcoming engagements



Port Equipment Manufacturers Association (PEMA) Autumn meeting
Italy – 5–8 October 2026



International Federation of Freight Forwarders Association (FIATA) World Congress
Italy – 6–9 October 2026



Virginia Maritime Association – International Trade Symposium
Norfolk, Virginia – 13–15 October 2026



British Ports Association annual conference
Dover, UK – 20–22 October



TOC Americas
Columbia – 20–22 October



IAPH World Ports Conference,
London, UK – 3–5 November

Call to action

As global supply chain risks continue to evolve, TT Club remains committed to providing brokers with the intelligence, analysis and practical guidance needed to navigate complexity with confidence. We invite you to engage directly with our Loss Prevention team to explore existing, new or emerging risks relevant to your clients' operations. Whether you are seeking deeper insight into specific exposures, support with risk mitigation strategies or a fresh perspective on industry developments, our experts are here to collaborate. Together, we can strengthen resilience, reduce losses and deliver greater value across the global transport and logistics sector.

