



# The Value of Cargo Breach Detection Technologies

## Providing Benefits for Businesses and Society

Cargo breach detection solutions offer a comprehensive approach to supply chain management by actively preventing cargo theft, loss, or damage. These solutions employ a wide array of advanced technologies, such as IoT sensors, GPS tracking, and machine learning algorithms, to consistently monitor cargo across the entirety of the supply chain, from its origin to its destination.

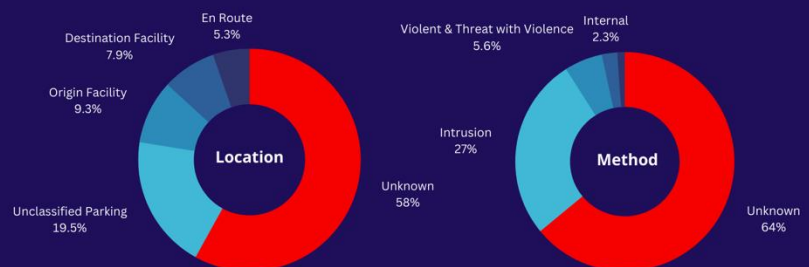
These innovative solutions facilitate real-time cargo monitoring, ensuring stakeholders receive instant alerts in instances of unauthorized or unexpected container opening or cargo tampering. This enables swift responses and immediate corrective actions to mitigate potential risks and losses.

Moreover, the benefits of implementing cargo breach detection solutions go far beyond simple risk management. They contribute significantly towards enhancing operational efficiency and transparency across the supply chain. They also promote better compliance with regulatory requirements, as real-time data tracking and monitoring can help meet the stringent guidelines set by regulatory bodies.

Thus, cargo breach detection solutions offer an all-encompassing approach to managing the complexities of the supply chain. They not only assure clear visibility and total control over the goods' movement but also contribute to cost reduction and overall customer satisfaction enhancement. This multi-faceted approach truly empowers businesses by providing a robust and efficient solution for their supply chain management needs.

### The problem was elusive, until now...

Almost two-thirds of cargo-related incidents are a mystery



### Number of reported cargo infringement incidents



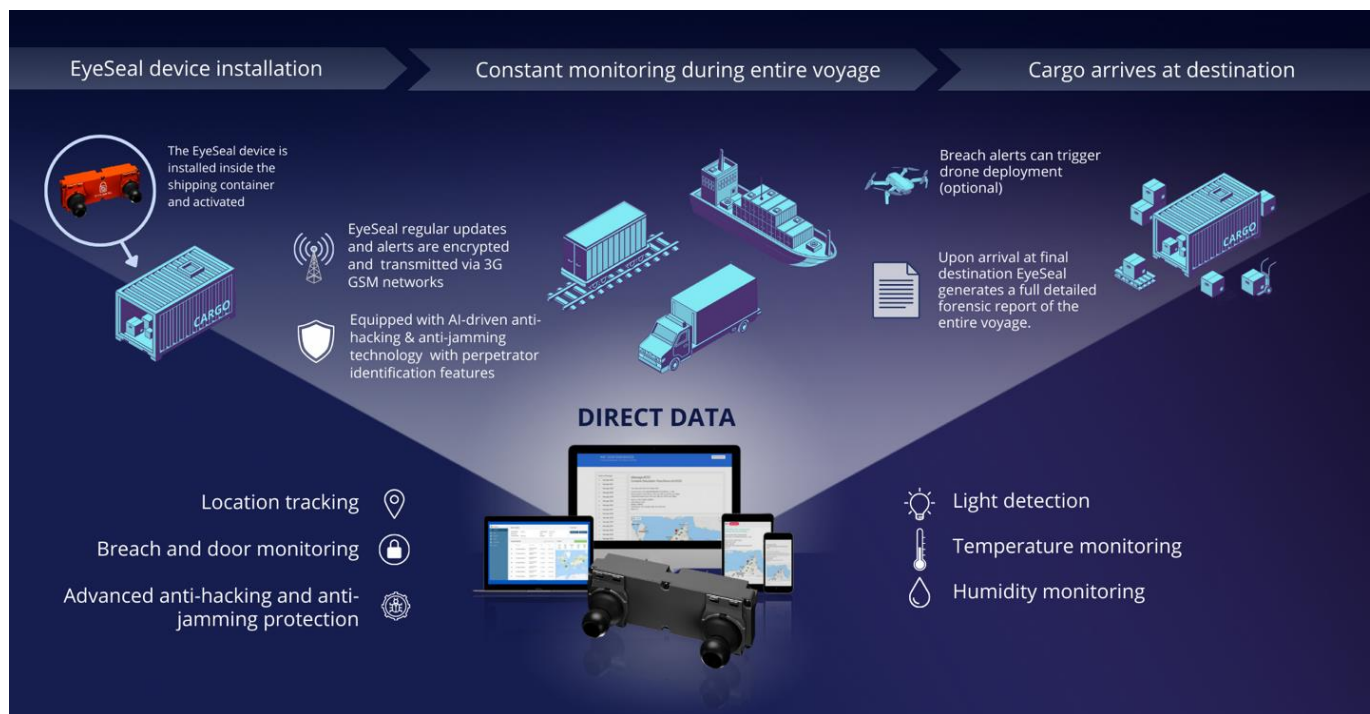


The following article will explore how theft detection and prevention technologies, such as cargo breach detection:

- benefit businesses and society by reducing losses.
- deter criminal activity.
- enhance security.
- generate revenue.
- protect brands/reputations.
- improve customer satisfaction.

We will also examine the use case benefits that each ecosystem participant could realize when these technologies are deployed. By understanding the value of theft detection and prevention, businesses and individuals can take proactive steps to protect themselves and contribute to a safer and more secure society.

## USE CASES – Delivering Value



### Theft Detection and Prevention:

Shippers and cargo owners benefit from theft detection and prevention services. By utilizing cargo tamper and breach detection solutions, they can reduce the risks of theft and loss during transportation. This not only protects their merchandise and inventory but also helps maintain their reputation and relationships with customers.



Shippers and cargo owners also benefit from increased efficiency, saving time and resources as they quickly identify and isolate flagged containers for further inspection. Overall, theft detection and prevention services can provide significant value to businesses and society by promoting safety, security, and efficiency.

By preventing theft, businesses can create a safer and more secure environment, which can lead to improved productivity and profitability. Additionally, preventing theft can reduce the need for increased security measures, saving companies both time and money.



### **Deterrence of Criminal Activity**

Beyond theft, cargo tampering and the insertion of drugs and other contraband into shipments are major concerns for businesses and society. These criminal activities can pose serious risks to public health and safety, even national security.

By detecting and preventing these crimes, businesses and law enforcement can reduce the flow of illegal drugs and other dangerous materials into communities and prevent the distribution of counterfeit goods that can harm both consumers and legitimate businesses.

Electronic breach detection solutions can play a crucial role in detecting and preventing these criminal activities. Advanced technologies such as Eye-Seal's cargo breach detection systems can identify and alert authorities to the risk of tamper and foreign objects and substances being introduced into cargo shipments.

This assists law enforcement agencies in intercepting and further investigating illegal activities before they can cause harm to individuals or businesses.



Furthermore, the successful detection and prevention of these crimes acts as a powerful deterrent to criminal activity, discouraging the smuggling of drugs and/or other contraband.

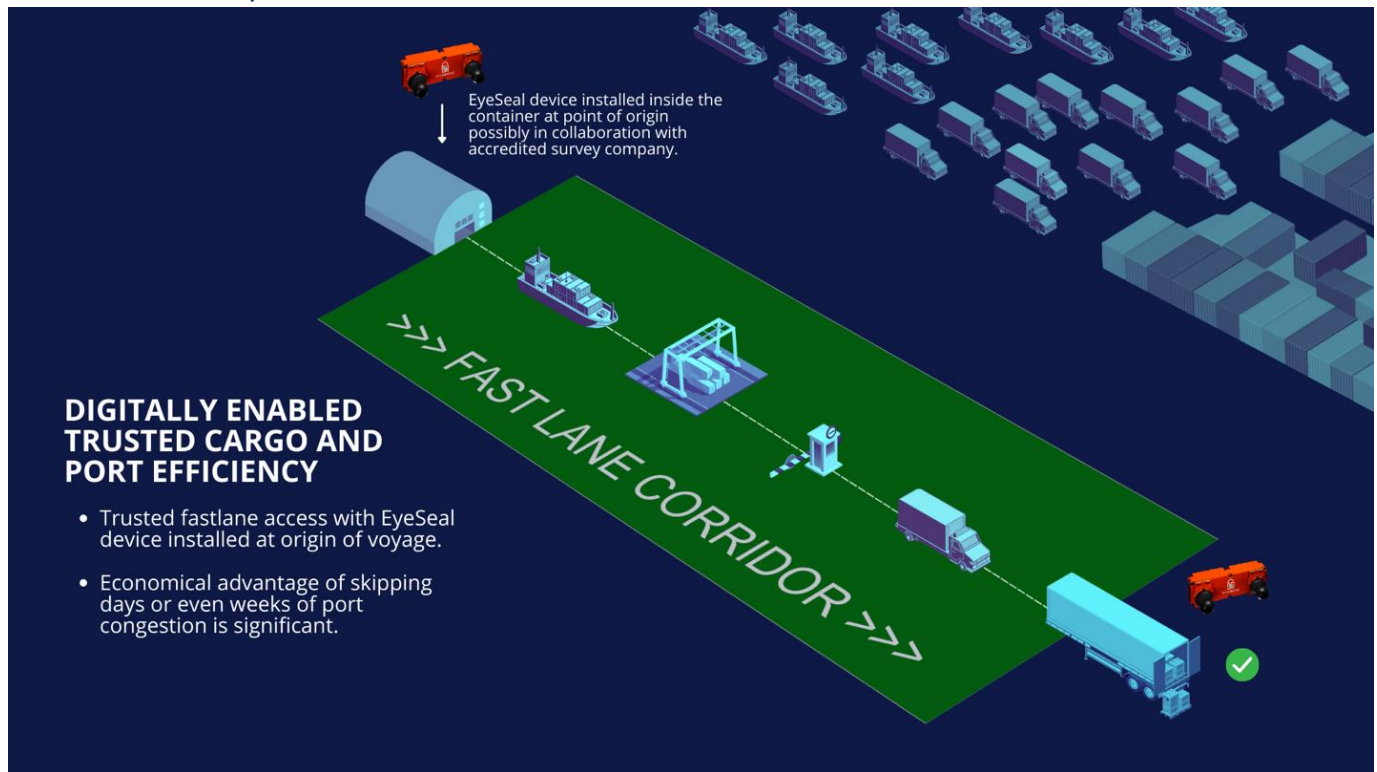
Overall, deterring criminal activity through cargo breach detection solutions is a critical aspect of protecting businesses and society from the harmful effects of illegal activities.

By leveraging these advanced technologies, businesses can work together with law enforcement agencies to reduce the overall rates of drug trafficking and other illegal activities in order to create a more secure environment and prevent the flow of illegal goods and substances into communities.





## Increased Efficiency



By implementing effective theft detection and prevention measures, businesses can ensure that their cargo is safe and secure, helping to streamline operations and optimize their supply chain. In addition to reducing the risk of theft, utilizing cargo tamper and electronic breach detection services help shippers and cargo owners save time and money by facilitating faster border clearance.

When cargo is flagged due to a breach detection alert, customs officials can focus their inspection efforts on that shipment, allowing other legitimate cargo to pass through more quickly. This can help reduce delays and avoid unnecessary costs associated with extended wait times, such as demurrage fees, which eat into profits.

## Increased Trust and Confidence

Cargo and container breach detection solutions play a significant role in enhancing security and creating a secure environment for individuals and businesses. By utilizing these technologies, businesses can create a safer environment, which leads to improved productivity, profitability, trust.

When cargo and container breaches are detected and prevented, individuals and businesses feel more secure.

Trust in security results in increased customer loyalty and attracts new customers who value reputations that are identified with providing secure and safe environments. Ultimately, increased trust and confidence can lead to economic growth and social stability.

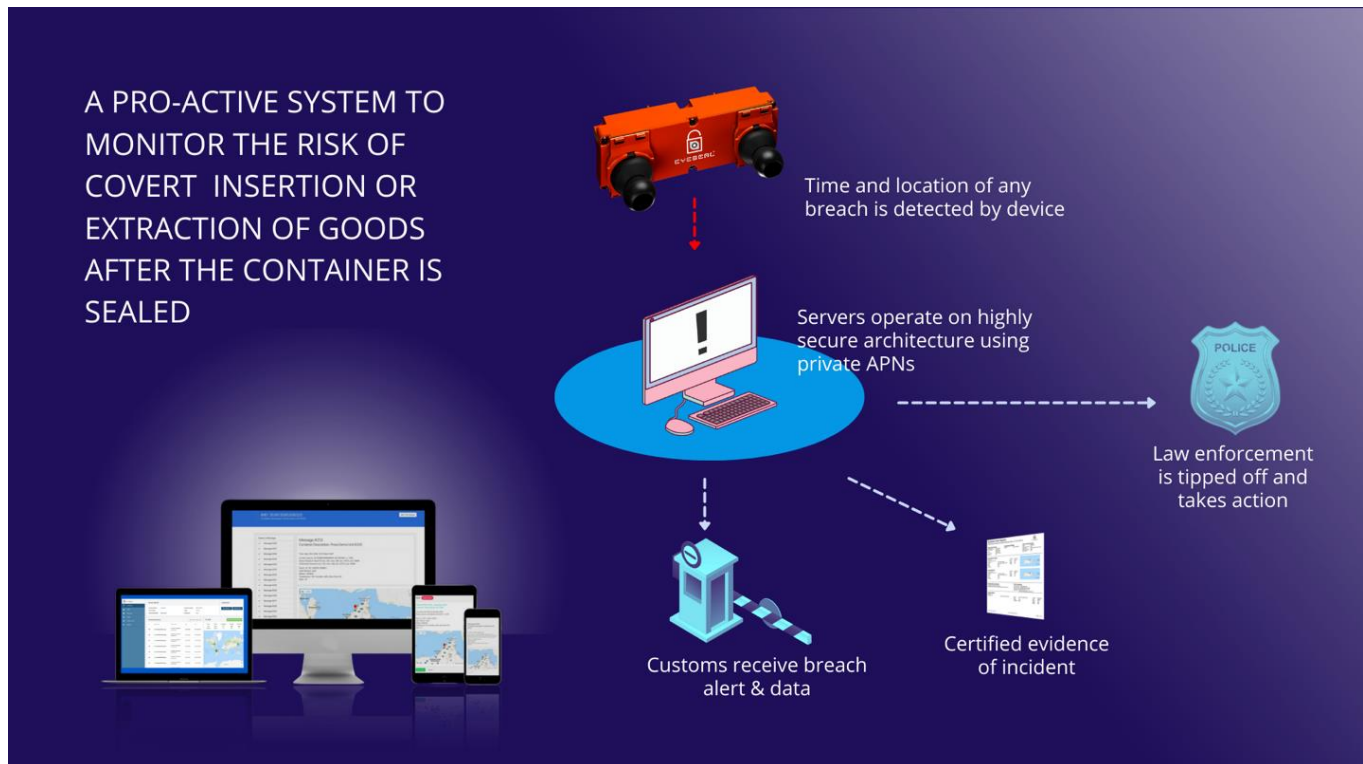




### Enhanced Customs Controls- Security

Customs and border controls play a critical role in preventing the entry of individuals and materials that pose a security threat to a country.

To this end, Customs Border Patrol organizations that leverage advanced breach detection technologies also improve the safety and security of the general population within a country or region. Illicit goods, such as drugs or weapons, pose a significant threat to public safety and security.



Moreover, the use of container breach detection technology helps countries meet international security and safety standards. Many countries have implemented regulations and guidelines for container security. By adhering to these standards and regulations, countries demonstrate their commitment to global security and safety initiatives, which in turn strengthens their relationships with other nations.

In summary, enhanced customs controls, particularly in inbound cargo and transport container breach detection, can provide numerous benefits to countries and regions.

These benefits include protecting national security, improving public safety and security, meeting international security and safety standards, and building trust and confidence among trading partners. By investing in advanced breach detection technologies, countries take proactive steps to ensure the safety and security of their citizens and promote economic growth and stability.

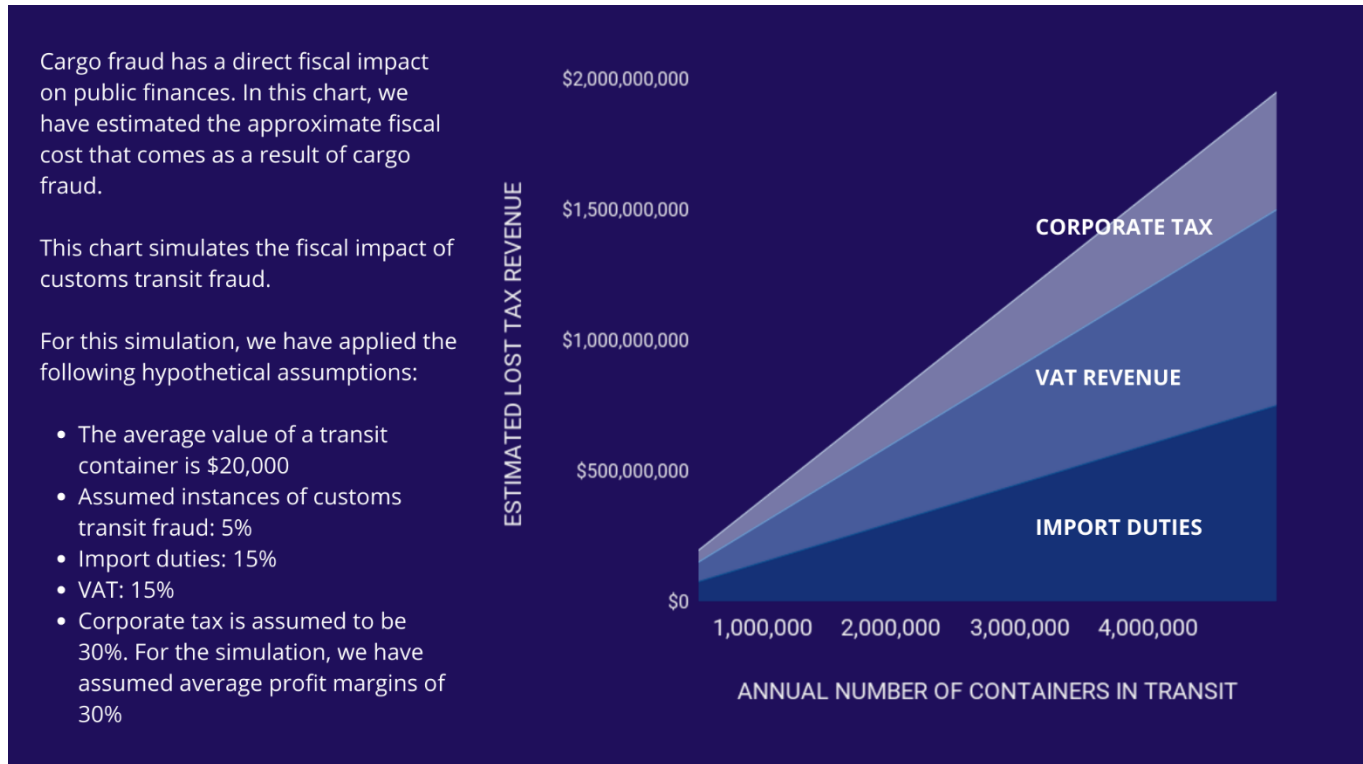
### Revenue Generation

One way that countries leverage cargo breach detection systems to increase revenue generation is by using these technologies to identify instances of non-reported or illegal imports of valued or classified goods. By detecting the



importation of hidden or undeclared items, customs officials can ensure that the appropriate taxes and duties are collected.

In addition, cargo breach detection systems are used to prevent smuggling and other forms of illegal trade, which can undermine a country's revenue collection efforts. By implementing robust detection technologies at ports and border crossings, countries deter smugglers and other criminals from attempting to evade taxes and duties on imported goods.



Countries use cargo breach detection technologies to increase revenue generation by implementing value-added tax (VAT) systems. These systems allow countries to collect taxes on each stage of the supply chain, from the manufacturer to the retailer. By using breach detection technologies to monitor the movement of goods through the supply chain, countries ensure that VAT taxes are being collected at each stage.

Cargo breach detection technologies are powerful tools for countries looking to increase revenue generation and improve their economic and financial stability. By detecting hidden or undeclared goods, preventing smuggling, and implementing VAT systems, countries can collect the appropriate taxes and duties on imported goods and services, providing a significant source of income for the government.

### Facilitation of Legitimate Trade

Cargo breach detection solutions can play a critical role in facilitating legitimate trade by ensuring the smooth flow of goods. By screening and verifying cargo at ports and border crossings, these technologies can help identify and isolate suspect containers for further inspection, while expediting the processing of legitimate shipments.

This not only supports economic growth but also improves the overall efficiency and visibility of the supply chain. With faster and more reliable cargo screening processes, businesses avoid costly delays and disruptions. As a result,



countries that invest in advanced cargo breach detection solutions ensure security and gain a competitive advantage in the global marketplace.

### **Brand Protection**

Cargo container breach detection solutions help reduce concerns and liabilities related to brand protection by preventing the entry of counterfeit products into the supply chain. By implementing advanced technologies such as tamper-evident seals, cargo tracking systems, and remote monitoring devices, companies can ensure that their products are not tampered with or substituted during transit.

Moreover, cargo breach monitoring and tampering detection can help companies quickly identify and isolate any suspect container. This helps prevent the circulation of fake or altered products and protects the brand's reputation.

In addition to preventing counterfeit products, cargo, and container breach detection solutions also help companies detect and prevent trademark infringement and other illegal activities. By ensuring the integrity of their supply chain, companies can maintain customer trust and loyalty, increase their market share, and protect their brand's value.

### **Increased Efficiency and Reduced Fraud in Insurance Mitigation and Subrogation**

Container breach detection can play a crucial role in improving efficiency and reducing fraud in insurance mitigation and subrogation. By leveraging breach detection technologies, insurers can quickly identify and isolate the containers that have been compromised, reducing the time and resources required to process claims. This can lead to faster claims processing times and increased customer satisfaction.

Moreover, advanced breach detection technologies can provide insurers with irrefutable evidence of a breach, reducing the likelihood of fraudulent claims. Knowing the location and time of a container breach helps insurers avoid paying out on fraudulent claims and protect their bottom line. By minimizing fraudulent claims and reducing the time and costs associated with investigating and processing claims, insurers improve their efficiency and profitability, ultimately benefiting their customers.

Insurance can help limit liability and prevent financial impact. Processing claims quickly and accurately allow insurers to ensure that their customers receive the full funds they need to cover any losses they've experienced due to damaged or lost cargo.



## PARTICIPANT VALUE – Understanding Ecosystem Benefits



Cargo breach detection is an essential component of supply chain management. It plays a critical role in ensuring the security and safety of goods during transportation. With the increasing complexity of supply chains and the growing number of potential threats to cargo security, the need for effective cargo breach detection solutions has become more pressing than ever.

A wide range of participants in the supply chain ecosystem, including shippers, 3PLs, transportation providers, law enforcement and port authorities, insurance companies, survey and certification companies, container manufacturers and leasing companies, warehousing providers, digital trade market participants, consultancies, and sustainability organizations benefit from such solutions.

Leveraging advanced technology and best practices in cargo breach detection allows participants to minimize the risk of cargo theft, damage, and other security breaches while improving overall supply chain efficiency and resilience.

Electronic Cargo Breach Detection can provide benefits to a range of participants in the cargo shipping industry, including:

**Shipper and Cargo Owners:** By using cargo breach detection technology, shippers and cargo owners can better monitor and track their cargo during transportation, reducing the risk of theft, damage, or loss. It can also help them identify potential breaches and take immediate corrective action to prevent further damage.



**3PL's – Freight Forwarders & Customs Brokers:** Cargo breach detection can help 3PL's improve their service offerings by providing real-time visibility into the location and status of cargo, improving efficiency, and reducing the risk of liability.

**Transportation, Truck, Train, Marine, Air...** : By leveraging cargo breach detection, transportation companies can improve their cargo security and safety by identifying potential breaches, mitigating risks, and preventing cargo loss.

**Law Enforcement and Port Authorities:** Cargo breach detection technology can provide law enforcement and port authorities with real-time information about suspicious activities or potential security threats, allowing them to take prompt action to prevent cargo theft, illegal smuggling, or other criminal activities.

**Insurance / Re-Insurance:** Insurance and reinsurance companies can benefit from cargo breach detection technology by reducing the risk of cargo loss and damage, as well as by providing more accurate risk assessments, which can lead to better premiums and underwriting decisions.

**Survey and Certification Companies:** Survey and certification companies can use cargo breach detection to help their clients assess the safety and security of their cargo during transportation, providing an additional layer of protection against potential breaches.

**Container Manufacturers, Leasing & Sales Companies:** By integrating cargo breach detection technology into their products, container manufacturers, leasing, and sales companies can offer improved security and protection for their customers, potentially leading to increased demand for their products.

**Warehousing:** Warehousing companies can use cargo breach detection to track and monitor the movement of cargo within their facilities, ensuring that it is secure and protected at all times.

**Digital Trade Application and Cloud Providers:** – Companies like Enigio that operate digital trade platforms can use cargo breach detection to provide their customers with improved visibility and security, which can help to increase trust and confidence in their platforms.

**Consultancies and Thought Leaders:** Consultancy firms like Deloitte can provide expertise and guidance to companies looking to implement cargo breach detection technology, helping them to develop and implement effective solutions that meet their specific needs and requirements.

**Government - 190 country participants and 53 participants of Basel Convention – Sustainability and Traceability:** The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal aims to promote sustainable and traceable movements of hazardous waste. Cargo breach detection can help to ensure that hazardous waste is transported safely and securely, reducing the risk of environmental damage, and promoting sustainability.

In conclusion, cargo breach detection solutions offer significant value to all participants in the supply chain ecosystem, including governments, shippers, and other stakeholders. These solutions provide proactive measures to prevent cargo theft, loss, or damage while improving efficiency, transparency, and regulatory compliance. By leveraging real-time monitoring and advanced technologies such as EyeSeal Breach Detection Solutions, all stakeholders can receive alerts in the event of an unexpected or unauthorized opening of containers or tampering with cargo.



For governments, these solutions offer enhanced security and can deter criminal activity, leading to a safer and more secure society. In addition, cargo breach detection solutions can speed up the customs and immigration clearance process, providing a faster and smoother process for governments.

For shippers and other participants in the supply chain, these solutions provide better visibility and control over the movement of goods, reducing costs and improving overall customer satisfaction. By protecting brands and reputations, cargo breach detection solutions generate revenue and enhance the reputation of the entire supply chain ecosystem.

Overall, the adoption of cargo breach detection solutions can create a win-win situation for all stakeholders involved in the supply chain. The benefits of these solutions extend beyond risk mitigation, providing a holistic approach to supply chain management. By taking proactive steps to protect their goods and contribute to a safer and more secure supply chain, governments, shippers, and other stakeholders can realize significant value from the deployment of these technologies.