

Supply Chain challenges

Role of risk manager and insurance
company

May, 2023

Björn Hartong: Global Head of Marine RE



Agenda:

Short introduction

Zurich Resilience Solutions

Overall impact

Supply Chain Security

Risk Management

Q&A



Introduction

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Zurich Resilience Solutions, Corporate Center Head of Marine & Supply Chain Risk Engineering



TAPA EMEA: Board Member

ASIS International: Supply Chain & Transportation Community

Before



Who we are

Who we are

Our DNA



Risk Engineering
Employees

40



of countries we are
located in



Engineering Inspection
Employees in the UK

400



Employees trained in
relationship
management

- Our Risk Engineers bring real-world experience and technical expertise to help customers better understand and mitigate their risk.
- ‘Centres of Practice’ ensure that there are global information and technical expertise repositories that can be accessed by our employees to better support customer risk needs in specific industries and risks.
- Our Risk Engineering network operates on the same system on a global basis. This allows customers to compare common metrics across their businesses in countries where our Risk Engineering services are present.
- Our flexible global service approach enables for sharing of information and insights across countries and regions.

Who we are

Our centres of practice

Through over 60,000 risk assessments per year, we have built up experience in a number of industries. To ensure we retain expertise, and continue providing customers with insight, we have set up Centres of Practice to share expertise and keep at the cutting edge around emerging risks.



Business Resilience



Construction



Chemicals / Pharmaceuticals



Cyber



Employers Liability



Fixed Fire Protection



General Casualty



Health & Safety



Liability



Machinery Breakdown



Mining



Motor



**Natural Hazards
(inc. Climate Change)**



OGP



PowerGen



Property



Strategic Risk



Supply Chain



Workers Comp

What we do

What we do

Services beyond risk transfer

It would be challenging to list all the services that we provide to our customers. Below you will find some highlighted services that explain how we work with customers provide services beyond risk transfer.

Deepen customer engagement	▶	• Loss statistics	• Industry topics	• Training
Risk assessment	▶	• Risk grading	• Benchmarking	• Scenarios
Risk identification	▶	• Exposure mapping	• Self-assessment	• On-site assessment
Risk impact / occurrence reduction	▶	• Zurich recognised controls	• Crisis preparedness testing	• Risk improvement actions
Risk monitoring	▶	• Risk alert definitions	• Telematics solutions	• 3 rd party data scanning
Alert risk realization	▶	• Risk alert generation	• Hotline	
Manage risk realization	▶	• Crisis management reports	• PR response	• Recovery services

= Customer Engagement |
 = Risk Assessment |
 = Risk Solution |

The Zurich Risk Engineering Methodology is our approach to the risk assessment process, based on the dimensions of RISK. It provides context for our existing deliverables.

Exposures

People, assets, or profits, i.e. values at risk, subject to injury or damage due to hazards.

Exposures will vary based upon the peril being assessed.

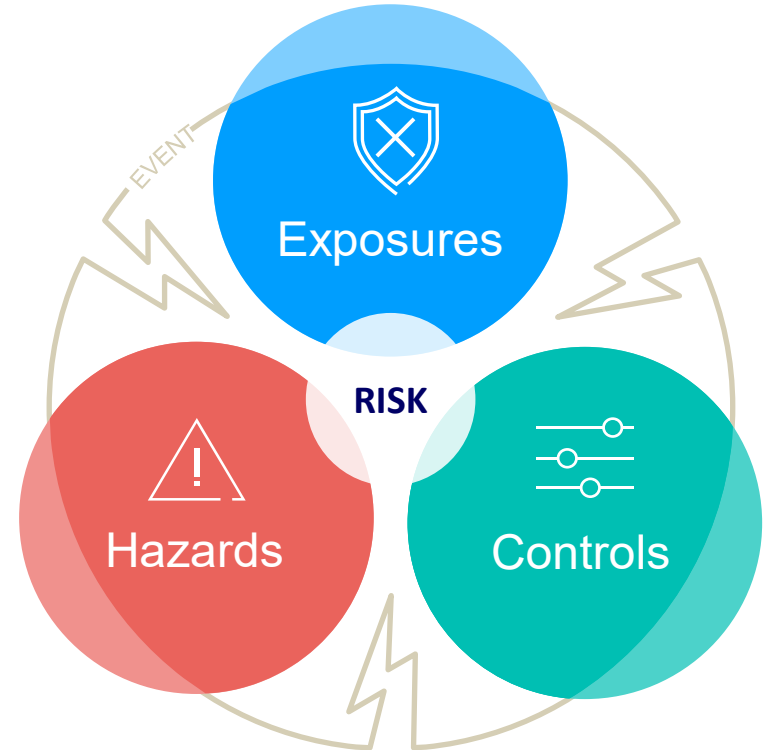
Hazards

Potential sources of damage.

Controls

Controls are measures intended to reduce risk.

The quality of controls is evaluated for its availability, reliability, and fitness for purpose.



Impact of ongoing logistics developments

Outlining the impacted long term trade growth and created erratic trends over the last 3 years



Current supply chain challenges

Globally the same challenges:

- Supply chain challenges
 - Supplier / location changes combined with internal re-organisations
 - Sanctions and parts of world economic not operating
 - “crisis” & poverty
- Less / no production due to change in product offering and or due to shortage of raw material and or staff
 - Transport costs less of an issue
 - No materials to produce / prioritization in production
 - No adequate staff to operate machines
- Lack of staff in logistics
 - Driver shortage
 - Port & Terminal Handling staff shortage
 - Governmental staff shortage (customs, border control)
- Criminal developments
 - Increased interest to create business models
 - All of the above makes it easier to get information and products

The mix of all discussed earlier is the perfect Criminal Enterprise Opportunity

- Have a global view
- The market is there
- The products are there
- The opportunity to infiltrate or get intelligence is there
- LEA is busy



Governmental Supply Chain Security Programs



Governmental Supply Chain Security Programs

Secure Supply Chain for legitimate trade



After the terrorist attack 9/11 in the USA governments realized that normal supply chains were used by terrorists and criminals causing harm to global trade.

Task:

- Implement security in the supply chain
- Without stopping each and every shipment for a security check
- Foster trade for the good shipments and increase deterrence for specific shipments

Solution:

- Start with secure shippers and loading locations
- Secure transport and cross dock locations
- Cover supply chain up to a certain point (after customs)
- Recognize, audit and validate legitimate partners in the supply chain and give them advantages
- Mutual recognition of countries governmental supply chain security program

Select target shipments for checks based on intelligence

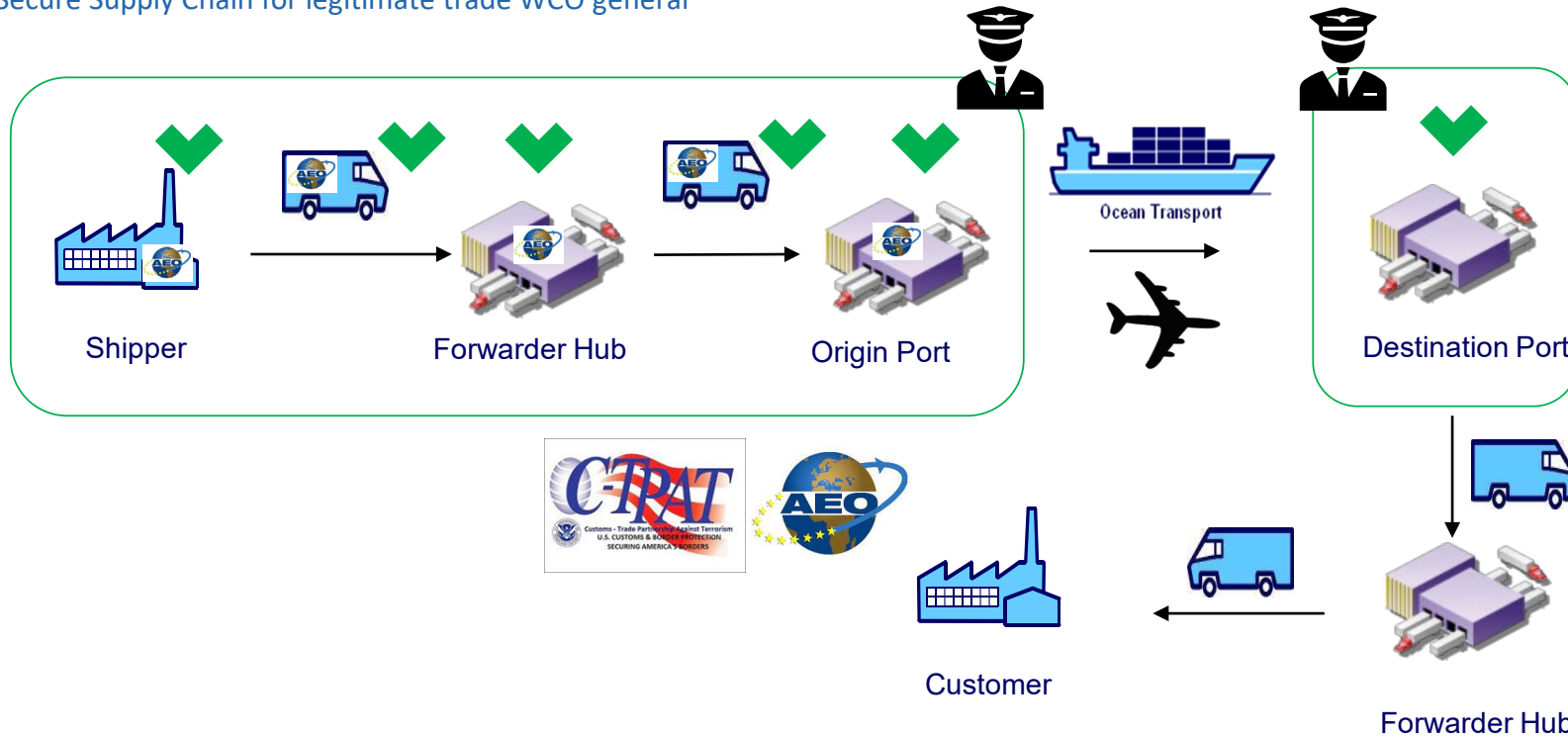
Governmental Supply Chain Security Programs

Secure Supply Chain for legitimate trade



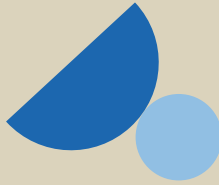
Governmental Supply Chain Security Programs

Secure Supply Chain for legitimate trade WCO general



Standards to prevent something to be put in the cargo

Industry Supply Chain Security Program



Industry Supply Chain Security Programs

Secure Supply Chain to protect against theft



BUSINESS ALLIANCE FOR SECURE COMMERCE

BUSINESS ALLIANCE FOR SECURE COMMERCE

Argentina - Colombia - Costa Rica - Ecuador - El Salvador - United States
Honduras - Guatemala - Mexico - Panama - Paraguay - Peru - Dominican
Republic - Uruguay - Venezuela

A mix of a governmental program turned into an industry standard in business between USA and 10 countries in central and south America

Members have to implement the BASC Security and Control Management system after which they will be audited by an external party.

Industry Supply Chain Security Programs

Secure Supply Chain to protect against theft



Transported Asset Protection Association

Global Minimum Security Standards:

FSR:

Facility Security Requirements

Levels A, B, C

TSR:

Truck Security Requirements

Levels 1, 2, 3

Regional Minimum Security Standards:

GSR: (APAC)

Guarding Security Requirements

PSR: EMEA

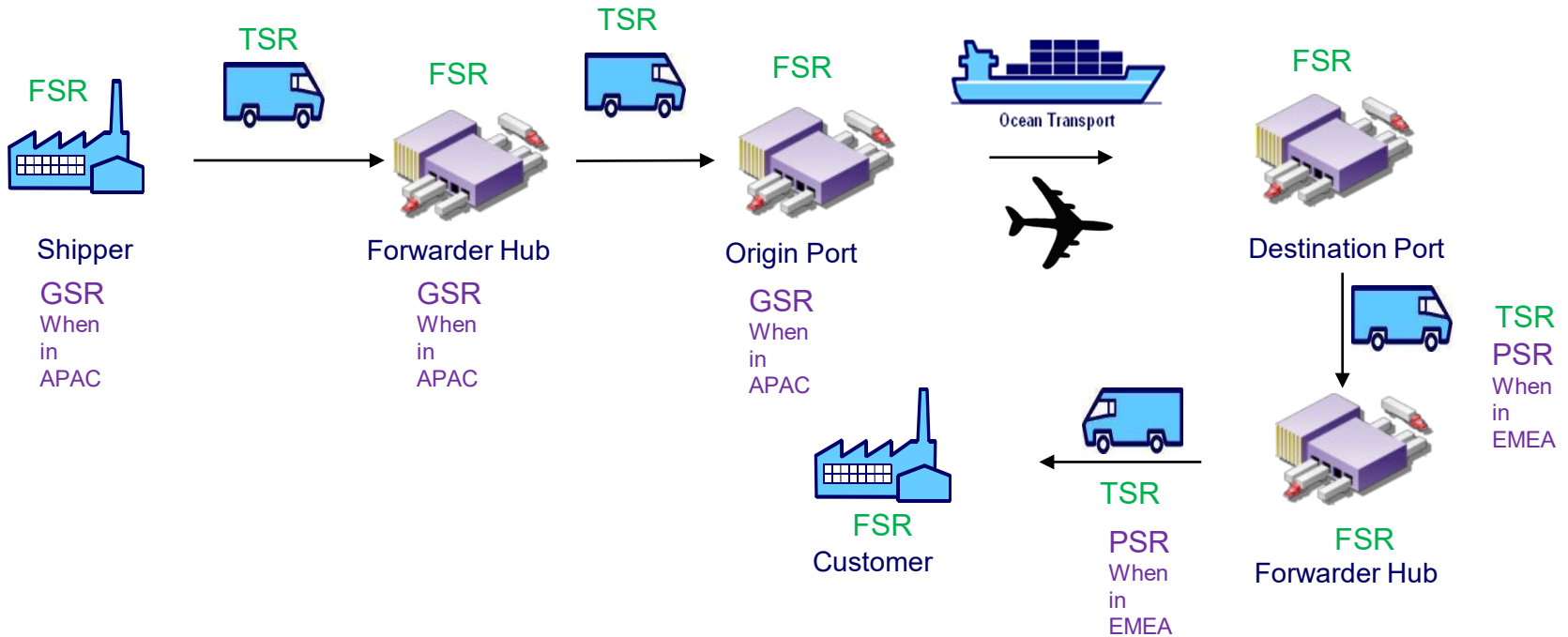
Parking Security Requirements

Levels 1, 2, 3

ALL standards are full mandatory standards and need to be audited by an Approved Auditor (level 3 only) or an Independent Audit Body.

Industry Supply Chain Security Programs

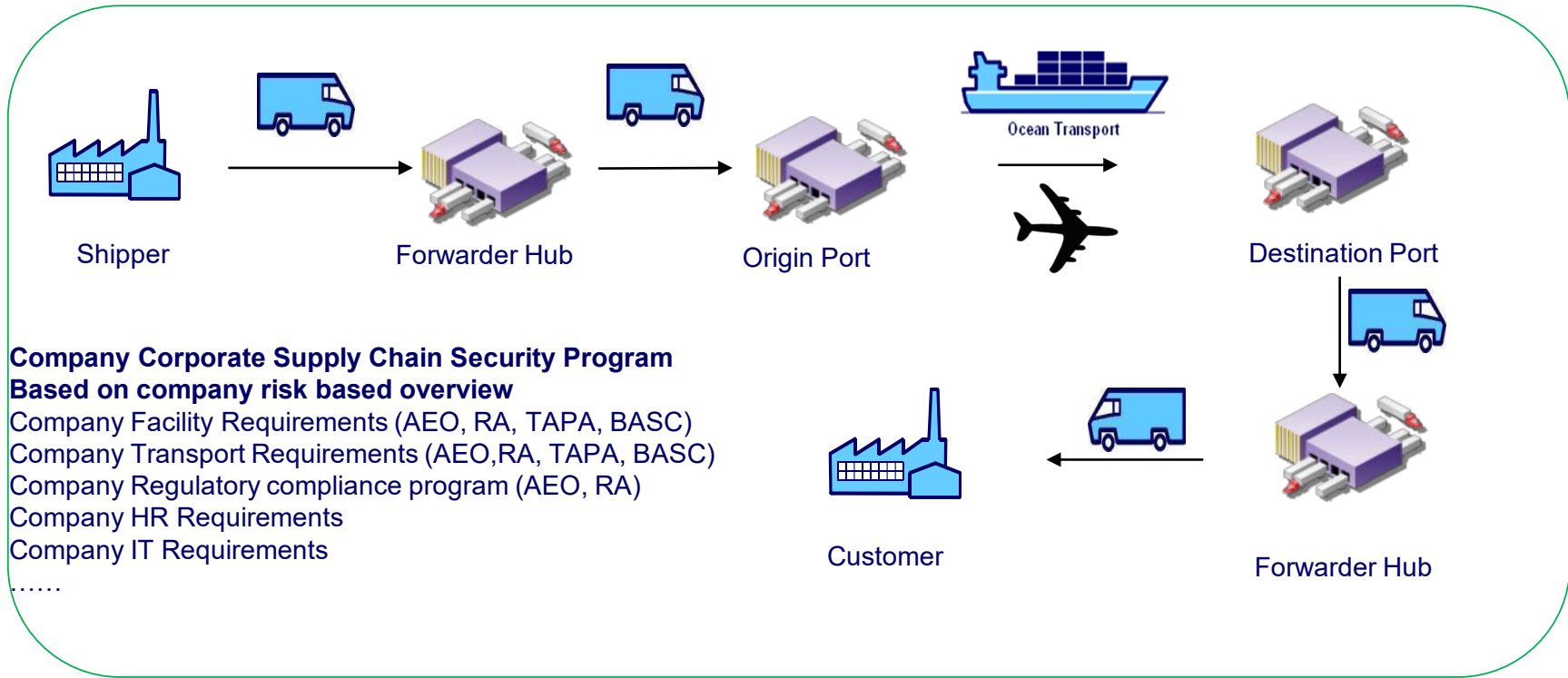
Secure Supply Chain protection against theft



Standards to prevent something being taken out of the cargo

Company Supply Chain Security Program

Secure Supply Chain to protect company's interest



Company Corporate Supply Chain Security Program
Based on company risk based overview
Company Facility Requirements (AEO, RA, TAPA, BASC)
Company Transport Requirements (AEO, RA, TAPA, BASC)
Company Regulatory compliance program (AEO, RA)
Company HR Requirements
Company IT Requirements
.....

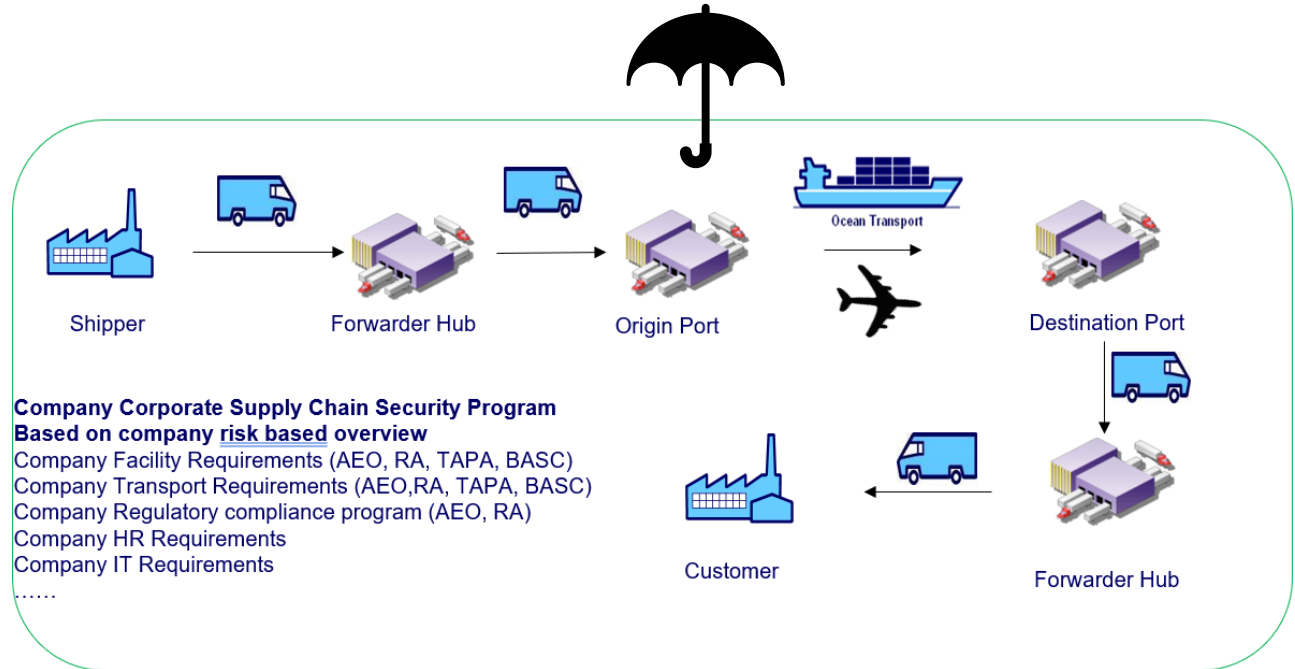
Scope and contents [\[edit\]](#)

ISO 28000:2007 was developed to codify operations of security within the broader supply chain management system. The PDCA management systems structure was adopted in developing ISO 28000:2007 to bring the elements of this standard in congruence with related standards such as ISO 9001:2000 and ISO 14001:2004.^{[4][5]}

The scope of the revised document will be changed only in so far as its new wording will be in conformity to today's way of writing standards: "[The standard] specifies requirements for a security management system, including those aspects crucial to security assurance of the supply chain".^[3]

ISO 28000 includes the following main clauses:^[6]

1. Scope
 2. Normative references
 3. Terms and definitions
 4. Security management system elements
- General requirements
 - Security management policy
 - Security risk assessment and planning
 - Implementation and operation
 - Checking and corrective action
 - Management review and continual improvement



Risk Management

A change in view of company risk



Insurance / Risk appetite

An option in risk management but what is covered.



Property insurance

- Covers damage or loss of property
- Based on declared values
- Generally higher own deductible compared to Marine
- Larger companies have captives



Business interruption Insurance

- Add on from property insurance
- Covers loss of income when a property loss occurred. (listed and valued)
- Can even be 3rd party location.
- Generally, does not cover BI as a result of theft
- Generally, hi own deductibles and again captives



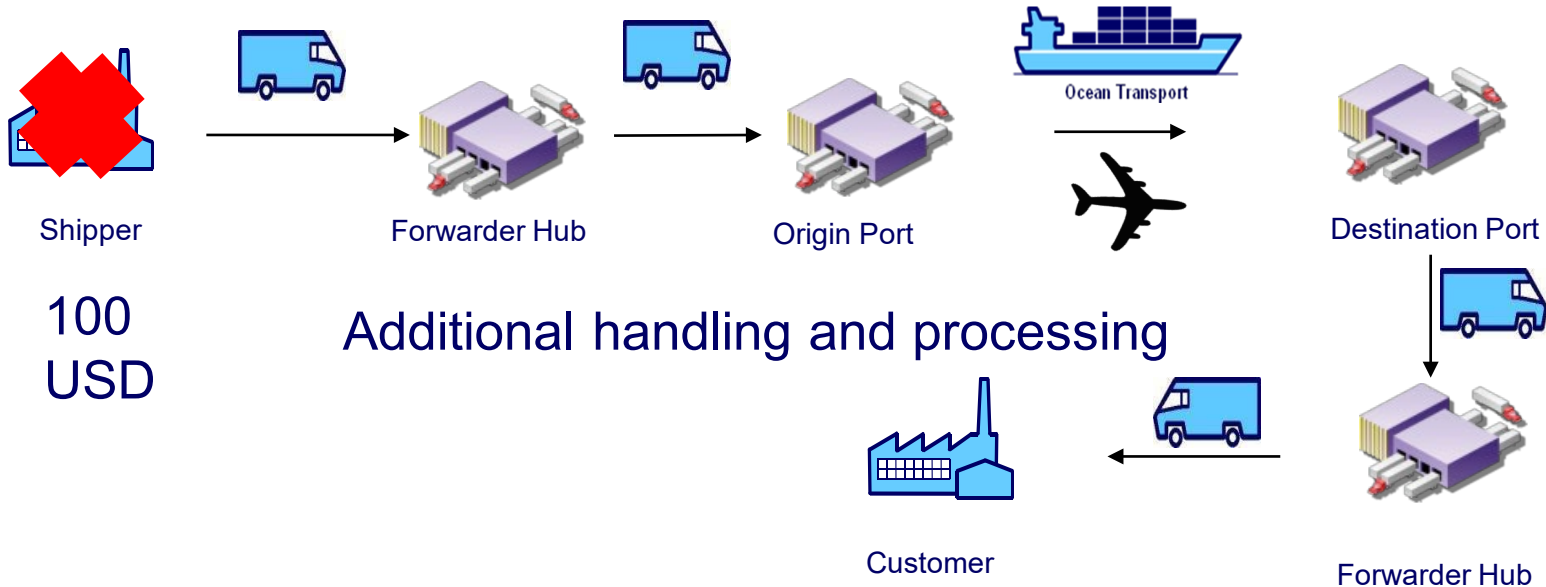
Marine Insurance

- Covers damage or loss of goods in transit and or storage
- Low own deductible
- NO interruption coverage

Company Risk & Security Management Program

Supply chain overview

Supply Chain impact under property insurance can be insured



100 USD

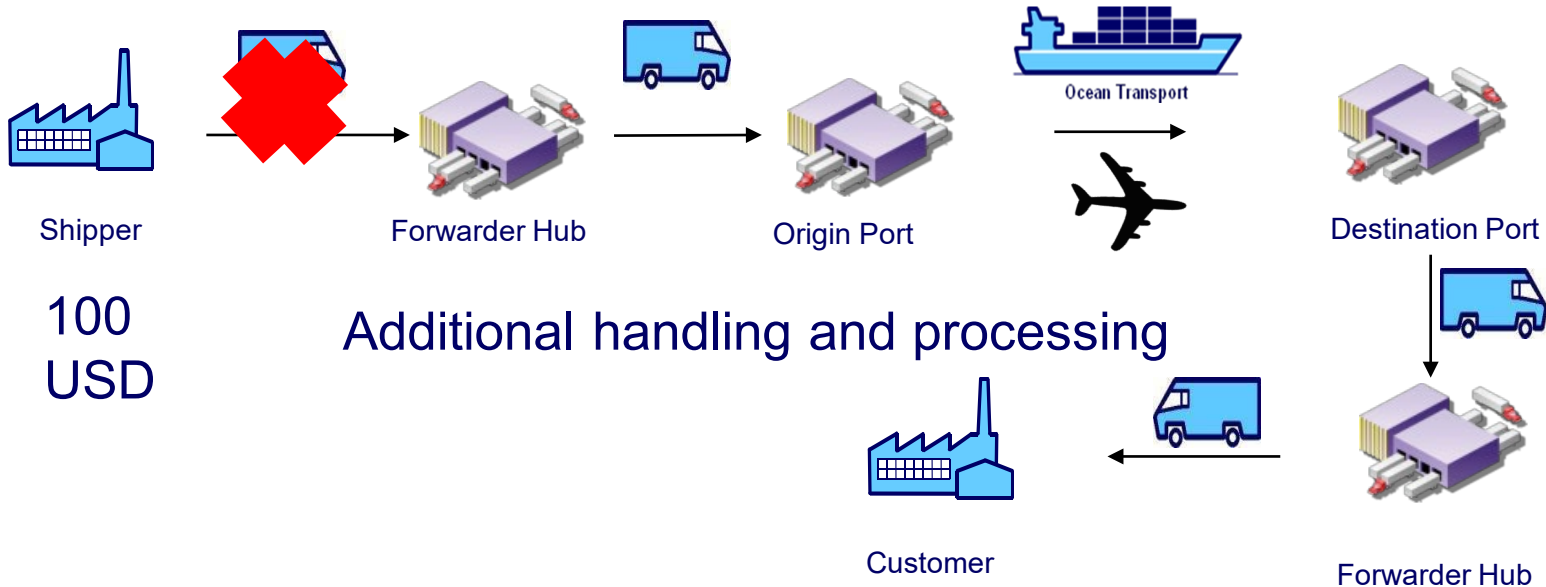
Additional handling and processing

500 USD

Property policy with BI coverage can cover the financial loss to the company. In this 100 USD plus 400 USD profit

Supply chain overview

Supply Chain impact under marine insurance is not insured



100 USD

Additional handling and processing

500 USD

Marine policy has no BI coverage. Value of shipment plus some expenses paid. 100 USD plus a bit. Loss of profit is for the company

Real cost of loss

Let's sum up what it takes to replace the stolen / damaged products and make them available for your customers:

- new forecast to be placed
- manufacture again in the factory → new raw material to be ordered
- storage costs at the factory → transport to the DC
- storage costs at the DC → transport to the customer
- Custom made product
- Destruction of damaged items
- Lost profit
- All administrative work around the production as well as the administrative work around the case
- Own deductible
- Increased premiums / missed premium reduction

Research shows that the actual cost of 1 USD loss can be 5-10 times more.

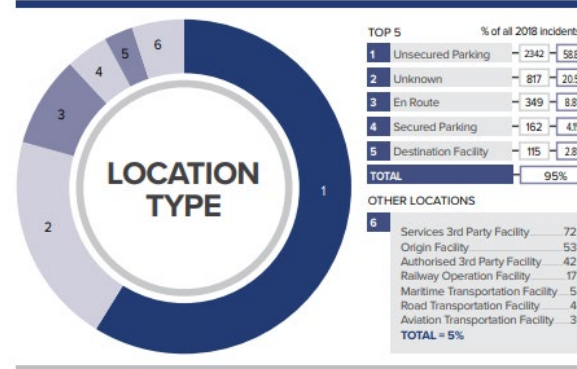
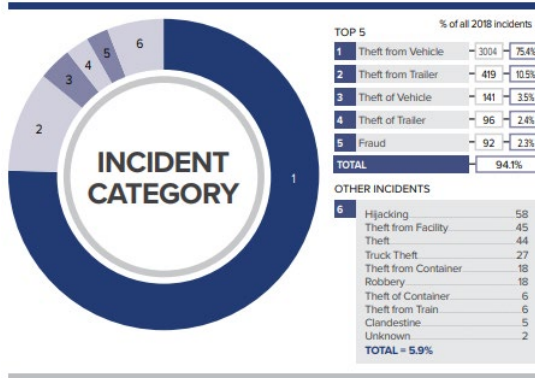
What is your real costs of loss?

Risk management and insight in the supply chain has become more relevant

Your company might not be the same!



Hazards? Figures EMEA

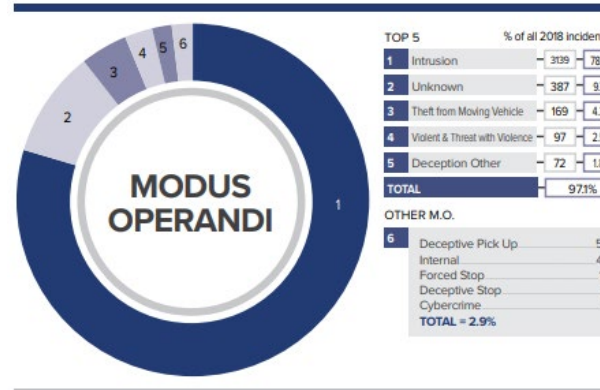


The risk:

Pilferage of cargo from trucks whilst parked (preferably nearby logistic locations or at gas station) most likely nights / weekends.

Initially executed by “local” criminals avoiding large police attention but now growing rapidly by organized crime organizations that are also infiltrating in logistic organizations to get intelligence.

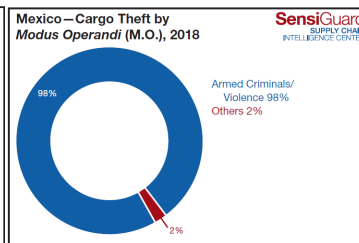
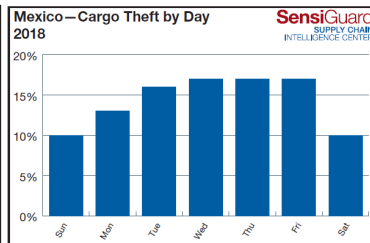
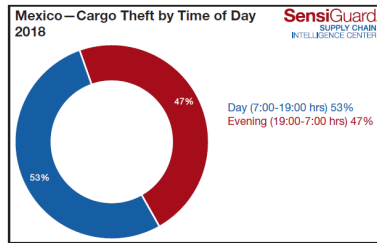
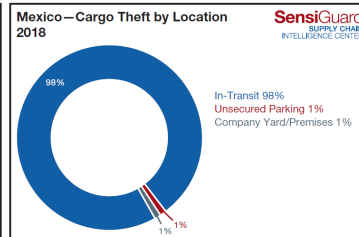
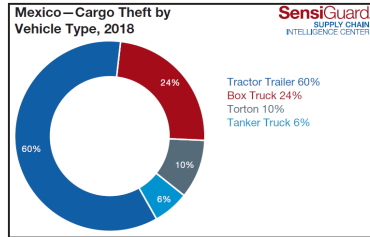
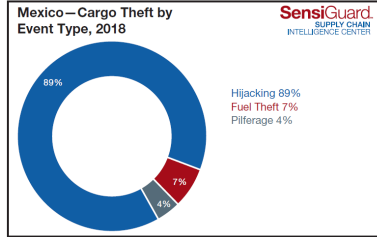
Target goods are items easy to trade.



Source: TAPA TIS

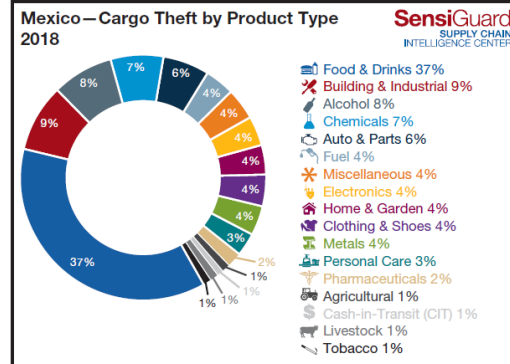
Data on road challenges for Mexico 2018

What is the risk in Mexico?



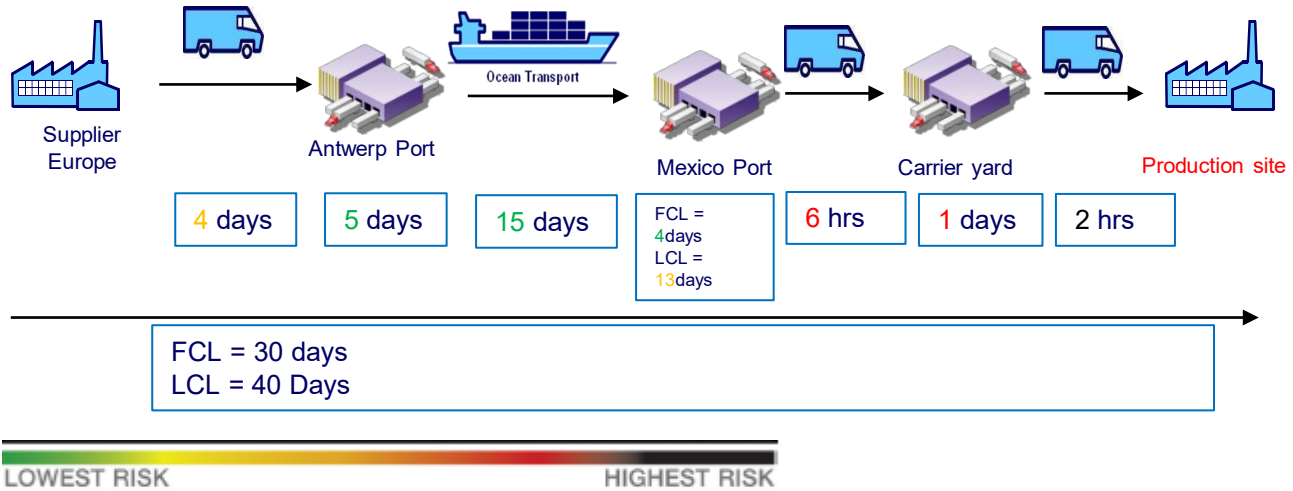
The risk:
Hijack of tractor trailer or box truck whilst in transit, regardless of the time of day and most likely during working week. Executed by armed criminals who use violence (a high level of violence).

Target goods are items easy to trade.



Supply Chain example

Ocean cargo from Europe to Mexico port

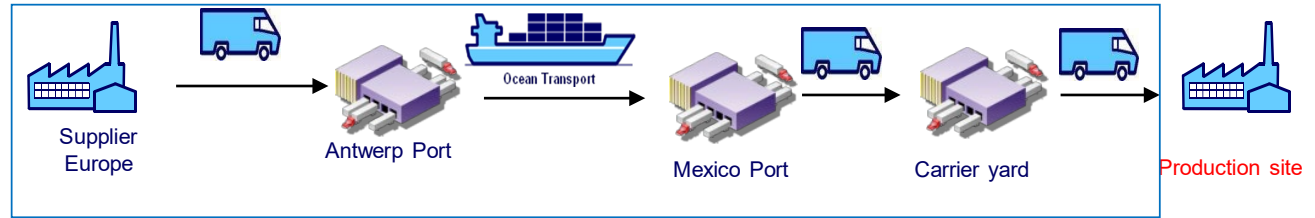


Is the scope of a Supply Chain Risk Management Program wider?

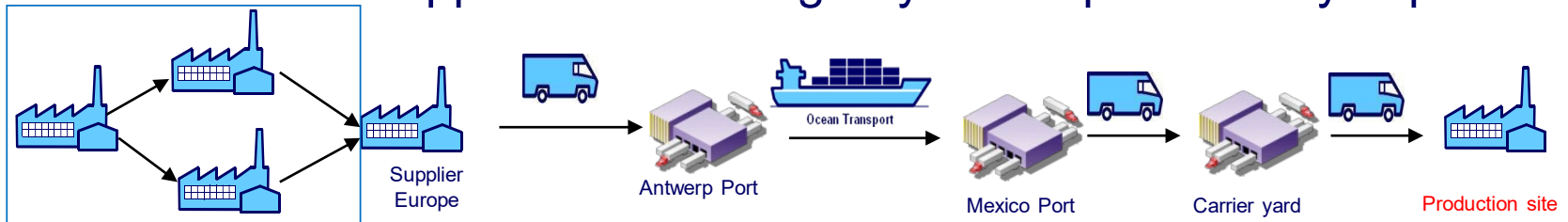


Supply Chain example

What is your scope to protect the company profitability?



Supplier is delivering to you. Proper security in place?



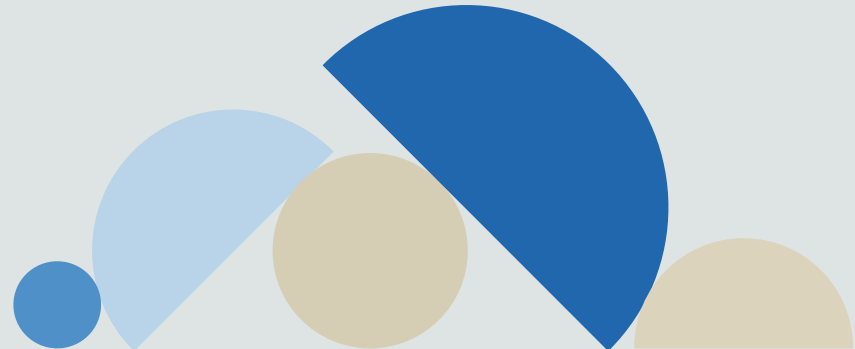
Two based supplier is actually only one

Risk Management

Who should be involved?



Q&A







Thank you



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