



IMPROVING SECURITY THROUGH VISIBILITY

Demonstration of supply chain visibility
in real-life settings

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MSC NAPOLI, January 2007 Hurricane Kyrill





- UK Maritime and Coastguard Agency examined the stowage, segregation and securing of the cargo.
 - Checked 600 Containers
 - 137 of 600: Overweight
 - Most of the 600: mis-declared goods
- International conventions and current practices:
Sea Carrier of cargo: not in the best position to provide accurate information relating to the goods being carried.
- The Consignor holds much of the data that everyone needs

- European Importers: Buy Free on Board
- Container loading is done under supervision of:
 - Exporter or manufacturer
 - Local freight forwarder or logistics provider
- Information on loading list or container manifest
 - In local language
 - Uses hard copy documents

- Many importers in Europe cannot clearly say:
 - Where their goods are coming from
 - Which factory
 - Which city
 - Through which port
 - Which local freight forwarder was involved
 - What was on the export declaration?

Data entry

How is data managed from origin to entry?

Data transfer

How can we share data?

Data quality check

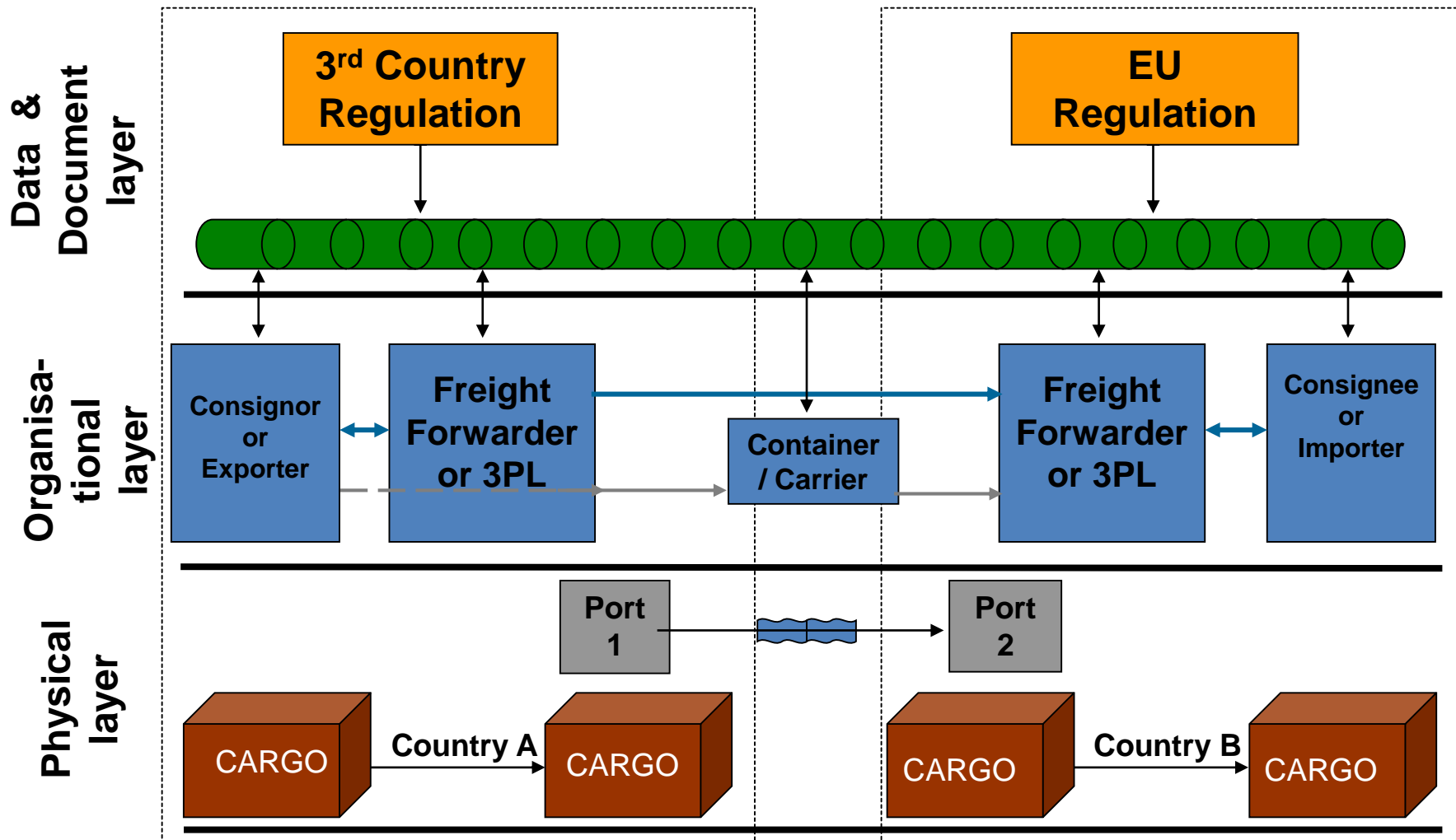
How can we verify data quality?

Data use

How can we make clever use of this data to reduce costs, improve operations, risk assessment...?

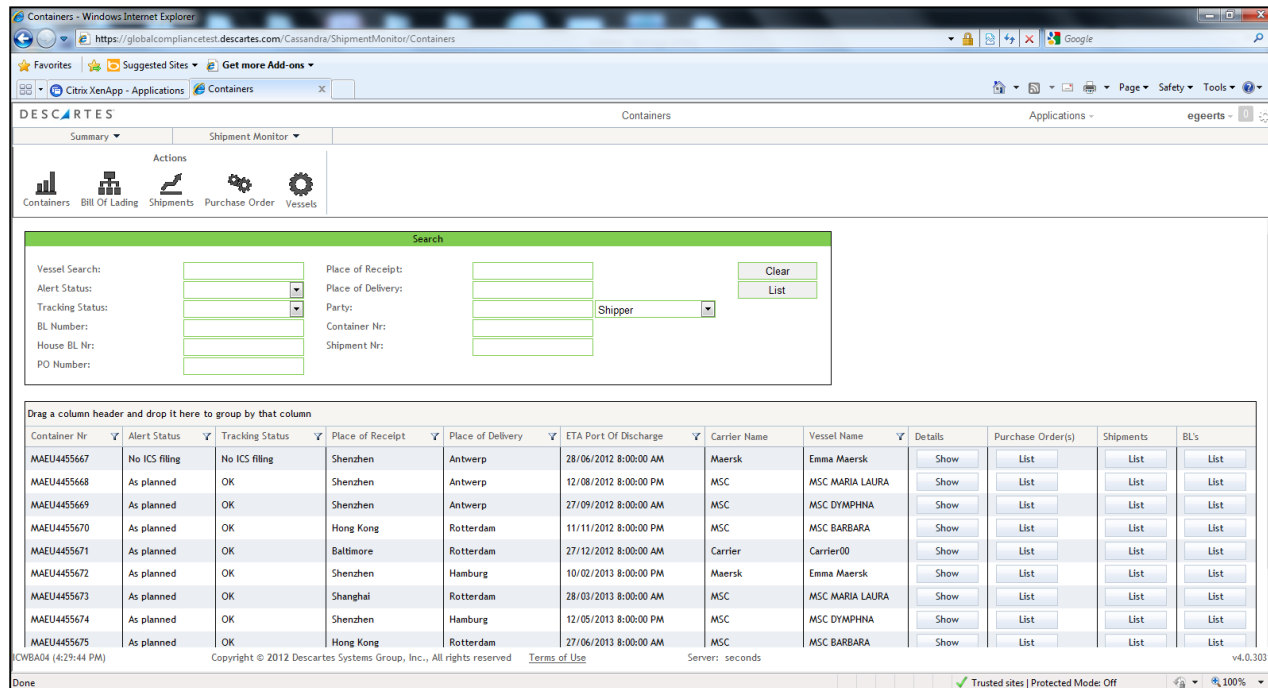
- Data from the source (of the process) varies from paperwork to RFID scanning
- Capture data digitally and make it available to the Cassandra data pipeline
- Data on the consignment
- Data on parties
- Data on logistics





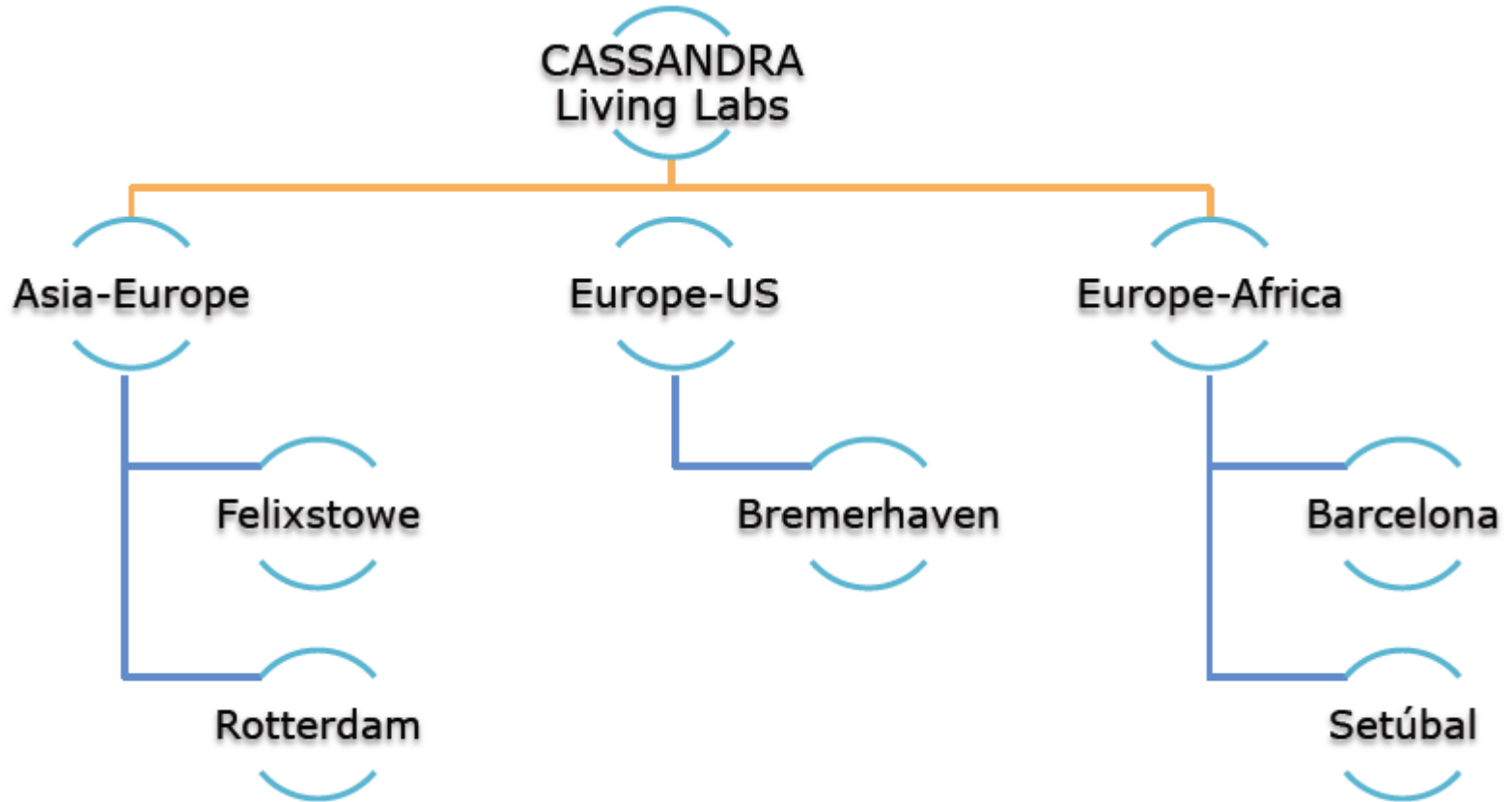
- Taking into account:
 - How was the data generated?
 - Were there data and process controls in place?
- Getting data directly from the source - improve quality
- Improve quality by cross-validation of data from different sources
 - Event message from shipping line & terminal & PCS
 - Usage of devices (e.g. RFID, CSD)
- Auditing of the source of the data (e.g. AEO)

- Advanced supply chain monitoring and control:



Container Nr	Alert Status	Tracking Status	Place of Receipt	Place of Delivery	ETA Port Of Discharge	Carrier Name	Vessel Name	Details	Purchase Order(s)	Shipments	BL's
MAEU4455667	No ICS filing	No ICS filing	Shenzhen	Antwerp	28/06/2012 8:00:00 AM	Maersk	Emma Maersk	Show	List	List	List
MAEU4455668	As planned	OK	Shenzhen	Antwerp	12/08/2012 8:00:00 PM	MSC	MSC MARIA LAURA	Show	List	List	List
MAEU4455669	As planned	OK	Shenzhen	Antwerp	27/09/2012 8:00:00 AM	MSC	MSC DYMPHNA	Show	List	List	List
MAEU4455670	As planned	OK	Hong Kong	Rotterdam	11/11/2012 8:00:00 PM	MSC	MSC BARBARA	Show	List	List	List
MAEU4455671	As planned	OK	Baltimore	Rotterdam	27/12/2012 8:00:00 AM	Carrier	Carrier00	Show	List	List	List
MAEU4455672	As planned	OK	Shenzhen	Hamburg	10/02/2013 8:00:00 PM	Maersk	Emma Maersk	Show	List	List	List
MAEU4455673	As planned	OK	Shanghai	Rotterdam	28/03/2013 8:00:00 AM	MSC	MSC MARIA LAURA	Show	List	List	List
MAEU4455674	As planned	OK	Shenzhen	Hamburg	12/05/2013 8:00:00 PM	MSC	MSC DYMPHNA	Show	List	List	List
MAEU4455675	As planned	OK	Hong Kong	Rotterdam	27/06/2013 8:00:00 AM	MSC	MSC BARBARA	Show	List	List	List

- In addition: Risk assessment, compliance, reporting...



- BAP trade lane (China-Felixstowe)
 - Mainly: Cross checking data, upstream
 - *"It is the upstream data which is invaluable [...], and it proves to be far more accurate than data we have seen previously"*
 - 11044 containers captured in the dashboard
- Seacon trade lane (Malaysia-Rotterdam)
 - Complete transformation of upstream data capture
- DHL trade lane (Shanghai-Rotterdam)
 - Partial CSD piloting
- Customs
 - Dashboard: Able to access data on BAP and DHL trade lanes (Seacon data will follow)

- Europe to US via Bremerhaven
- K+N trade lane
 - From Graz (A), via Bremerhaven and New York, to Chicago
 - Pharmaceutical products, 2 containers per week
- DHL trade lane
 - From Frankfurt (Main), via Bremerhaven, to Norfolk (Baltimore) and New York
 - Pharmaceutical products, 4 containers per week
 - Partial CSD piloting

■ Port Authorities

- Port Authority responsible for dangerous cargo in port
- Containers with dangerous cargo, but not flagged as DC
- No data transfer between German Customs and port authority
- Making data accessible for port authority
- Ruletree supports identifying DC container

- Additional data for Customs (Germany)
 - German Customs
 - Customs Criminological Office (ZKA)
 - Dashboard:
 - Additional data
 - Data from different source
 - Cross-Check

- Additional data for Customs (US)
 - CSI Bremerhaven
 - Dashboard:
 - Detailed information on consignor and consignee

- Tradelane Barcelona – Egypt
 - Data from shipper via Portic (adding status and trace)
 - Data from freight forwarder
 - Data from Egypt will follow later
- 2nd tradelane is still in development
 - Starting from Setúbal
 - Focus on Portuguese side
 - Involve Portuguese shipper to feed real data
 - Evaluate with shipper and Portuguese customs

CASSANDRA Data sharing

Risk assessment

Supply Chain benefits

Reduction of administration costs and errors

Improved insight in performance and supply chain risks

Improved SC operational performance

Customs benefits

Improved data for risk assessment

Better identification of secure and safe supply chains

Improved efficiency

More focus on high risk flows

Improved effectiveness

General (Society) benefits

Corporate Social Responsibility: Trade facilitation, Carbon footprint, fair trade, ...

Thank you for your attention.

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