Washing out uncertainty in international shipments

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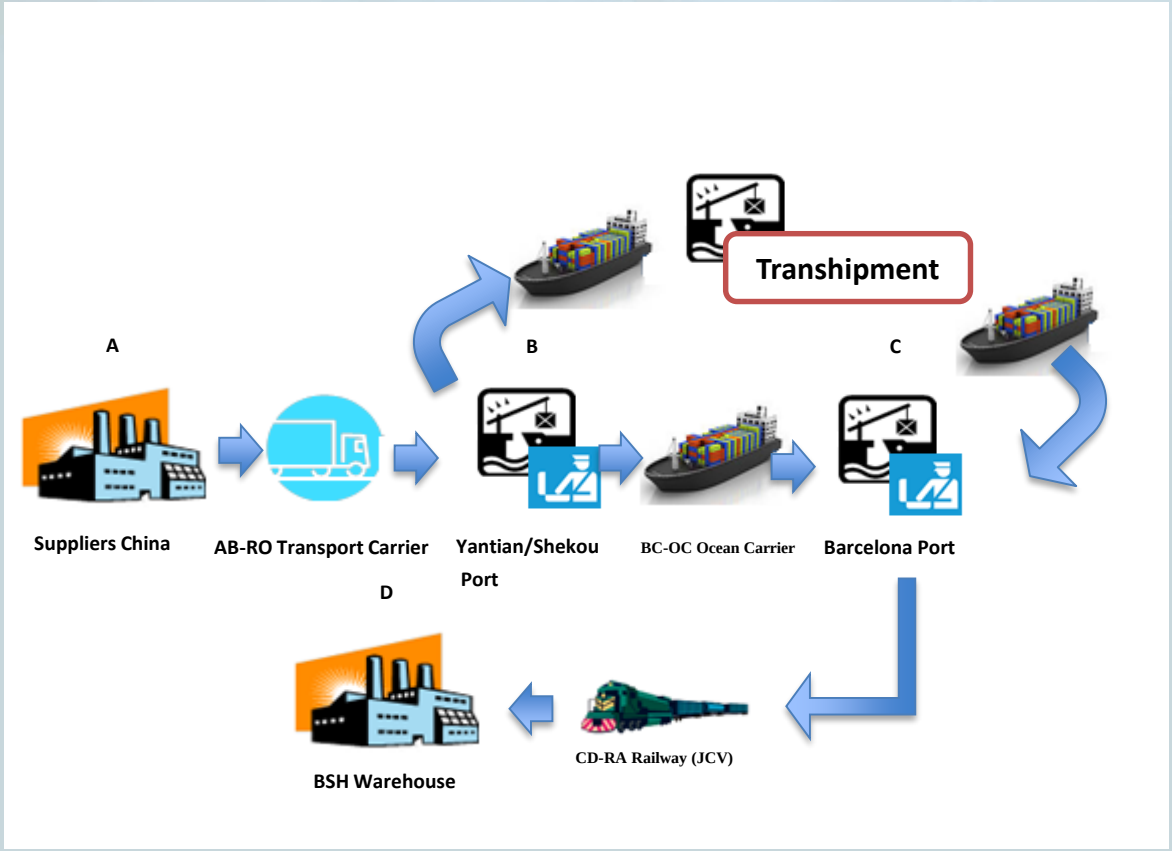
Agenda

- Problem and objectives
- The solution
  - Risk based ETA predictor
  - Automatic customs transit declarations
  - Global supply chain visibility tool
- Benefits and adoption willingness
- Next steps

BSH Tradelane



B/S/H/

Import Tradelane:
Port of Yantian/Shekou – Zaragoza Warehouse

Involved Stakeholders:
ZLC, BSH, ENIDE, PORTIC, Inlecom, FOI, CLMS

Cargo:
Containers with household appliances (e.g. washing machines)

Problem and objectives

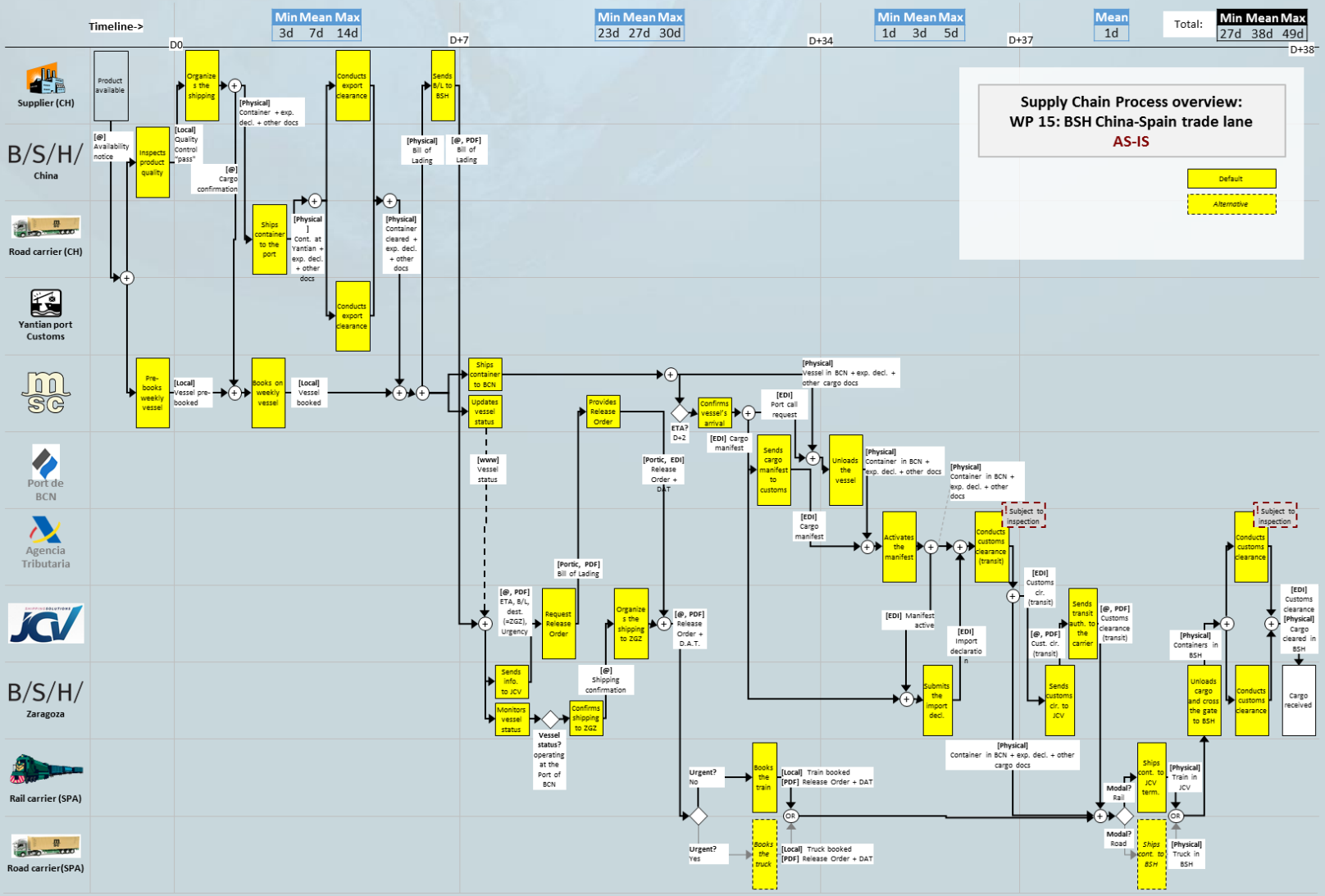
- The problem that BSH Electrodomesticos España experiences is that containers may be delayed or lost. Similarly, unexpected customs inspections increase delivery times variability, leading to delays in intermodal operations in Barcelona.

- This has two major economic consequences:
  - Unsatisfied customer demand (especially in correspondence of marketing campaigns, peak seasons or introduction of next generation machines)
  - Cost-efficiency of transport and scheduling activities.

- To establish a common IT platform where data is collected and reused to:

  - Automatically fill in customs transit declarations
  - Provide with more accurate ETAs

Business process analysis



Supply chain risk

Risk	Source	Process phase								Consequences
		I	II	III	IV	V	VI	VII.a	VII.b	
Inefficient communication	BSH supplier Quality Control	x								Inspection's delay; late arrival to port of departure. Sea vessel departure can be missed leading to increased lead-time
	Hapag Lloyd	x	x							Shipment delay due to breakdown of machines in the port. Necessary to stop in a transhipment hub. As a consequence containers may be lost or arrive late.
	Road carrier in China		x	x						Shipment delay due to traffic jams, increased lead-time. Cargo could be damaged. Security events like theft could appear.
	Forwarder		x		x					Export clearance delay due to lack of documentation increased lead-time
	Betwee HL and BSH					x	x	x	x	lack of coordination with logistics service providers in Spain, extra costs, increased lead-time
	Port of Barcelona					x	x	x	x	Unloading delay, lack of coordination with logistics service providers in Spain, increased lead-time, extra cost
	Between BSH and the customs						x	x	x	Import transit clearance delay (lack of documents or missing/wrong data), lack of coordination with logistics providers in Spain, increased

Taxonomy:

63 risks identified

Categorized on source/process phase and risk type

Security Certifications analysis

- Analysis of security certifications:
  - AEO
  - ISPS
  - TAPA EMEA
  - Companies' internal requirements

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Key Performance Indicators

CORE Ambitions	Innovation Agenda (KPIs)	Demonstrator	Target Values	Observations
Reliability	Transport lead time variability	WP15 BSH	5% reduction	Variability of transport lead time (coefficient of variation)
Responsiveness	On Time In Full (OTIF)	WP15 BSH	Increase up to 90-95% (current 94%)	Impact of improved ETA predictions on synchronization of transport activities
	Customs delays	WP15 BSH	Expected to be reduced by 1-2 hours	Time spent at customs posts waiting for clearance
Costs	Administration Cost	WP15 BSH	About 94% cost reduction per container	Cost spent for communicating, e.g. making phone calls, fax and even sending redundant Information multiple times
	Customs brokerage costs	WP15 BSH	5% reduction	Monetary benefits due to use of online service instead of customs brokers
	Personnel Cost	WP15 BSH	1 headcount less	Cost spent for administering documents controls and inspections
Asset Management	Inventory levels	WP15 BSH	Expected to be reduced by 5%	Reduced safety stock
	Pipeline inventory	WP15 BSH	Expected to be reduced 5%	Risk mitigation of delayed cargo (TRIMIT tool)

Benefits

- **BSH:**
  - Reliability
  - Responsiveness
  - Costs
  - Assets Management

- **Customs**
  - Risk management
  - Resource allocation

Adoption Willingness

Next steps

- Additional analysis and data feeding to the ETA predictor
- Data feeding from BSH automated.
- Run full scale and perform assessment.
- Disseminate and find additional partners.

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THANK YOU!

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