MixMoveMatch.com Connecting Hinterland Logistics to Maritime

GS1 Standards providing Interoperability across Pan-European network for 3M

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One in four trucks is driving around Europe completely empty. And those that are actually carrying something are only a third to half full.
The average truck looks like this. It’s a huge waste of space and money.

52% average load factor
Co-operative networks are a powerful way to tackle these efficiency and sustainability challenges.
Providing a comprehensive set of tools, enabling shippers, hubs and carriers to operate in the physical internet.
The physical internet
The biggest retailer in Portugal
Now has full visibility over their distribution process to stores
• Deploying Zero Emission Smart City Hub Solutions
• Providing Optimized Last Mile Bundled Freight Flows
More than 100 organisations have joined (carriers, parcel/express operators, shippers, retailers, suppliers)

**Benefits**
- Cost savings:
  - Range: 8%-15%
- CO2 emissions
  - Range: 6%-13%
- Distances travelled
  - Range: 6%-15%

Smart City distribution
"3M reduced transport costs by 35% and CO2 emissions by 50% since the MixMoveMatch.com system was launched"

Patrick Van De Vyver
3M’s EMEA logistics operations
3M Exports from Europe to Asia

Overview

• Several 3M facilities Across Europe ship goods having it’s final destinations in Asia via CEVA in port of Antwerp

• These goods are cross-docked across 3M’s multi provider hub and spoke network, combined with inland-bound goods.

• Across each Hub, because all loading units are identified with an SSCC, consolidation is preformed, by rebuilding optimized loading units according to the next transportation leg.
Information Flow

- GS1 Transport instruction, with all relevant information, including ADR, service levels, delivery address, etc.
Hub Operation

Optimized Cross-Docking

• Incoming transports are transmitted to each MixMoveMatch.com hub from 3M’s TMS containing detailed information on the box level.

• Using MixMoveMatch.com, hubs combine information from multiple inbound transports into handling waves, maximizing the potential consolidation

• Reconstruction may be manual using portable devices, or using sorting equipment’s

• The new consignments resulting from the cross-docking are also reported back to TMS as a TI

Decision on the handling of each Loading Unit taken at the hub, identifying the unit by it’s SSCC and using the information received in the transport instruction, including, ADR, service levels, delivery address, etc.
Outbound Loading

Loading Units are scanned into the container

- At the final hub before the maritime leg, cross docking is performed by final receiver, commercial invoices are also taken into account, so that custom documents remain valid.

- Upon completion of container stuffing, accurate information is immediately available regarding the goods, enabling CEVA handle all formalities.

Stuffing is performed with PDA support, ensuring that all loading units are confirmed to the correct container.
Conclusions

Main Benefits

• Increased Efficiency
  • *Process of stuffing containers, is streamlined and the use of GS1 Identifiers ensures all information required to manifest a container is accurate and available.*

• Cost Savings
  • *Consolidation of Extra-EU loading units with EU, results in a better utilization of transport costs*

• increased transparency
  • *from shipment to packing hierarchy. **Know what is expedited, how it is packed, where it is now, when it will arrive**
Conclusions

Challenges

• The manifest of the containers, still needs to be translated to specific port community / customs mostly (IFCSUM) formats. This is an expensive process, that could be avoided if logistic standards were widely adopted across ports.

• Tracking of the container once it leaves the logistic facilities, is also far from perfect, to a great extent due to the lack of Port/terminal interfaces to logistics
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