Traceable Intermodal Transport, A sustainable business?

Mats Björkqvist, GS1 Sweden
12 october 2015
Sweden – Where is it?
A small country, but larger than you might think!

449,964 km²
fourth largest in Europe

1 million

1570 km

8 million
Freight Volume Q2 2015 in Sweden

Volume on Rail
16 133 000 000 ton

Volume on Road
108 602 000 000 ton

Volume through Ports
42 236 000 000 ton

Source: Trafikanalys
Major Transport Infrastructure

- Sea
- Rail
- Road
Traceable Intermodal Transport
Traceable Intermodal Transport - a Sustainable Business Opportunity?

Facilitated by: LearningWell

- Real need for traceability
- Real demand for sustainable transport
- Correlation price/sustainability/quality
- Prerequisites for traceable intermodal transports
- Business benefits
- Existing barriers
Focus area Västerås/Eskilstuna
High interest from many stakeholders

Transport buyers
- ABB
- ICA
- Uponor

Carriers
- DHL
- Thor Shipping

Terminal / Port
- Eskilstuna logistik
- Mälarhamnar AB

Regional gov and organisations
- Västerås City
- Länsstyrelsen i Västmanland
- Västmanlands-läns Landsting
- Handelskammaren Mälardalen
- Järnvägsklustret

National organizations
- GS1 Sweden
- Trafikverket

Academia
- KTH
- SICS
Sustainable transport

- Environmental impact – CO2, NOX, particles, congestion etc
  - Air
  - Road
  - Rail
  - Sea
- Fuel, engine, fill rate
- Intermodal
Benefits of sustainable transport

- Fulfil climate goals
- Infrastructure
- Create jobs

- CSR
- Attract customers
- Demand/supply

- CSR
- Marketing
- Cost/benefit

Regional Government
Transport operator
Transport buyer
Barriers to sustainability

- Cost/Price
- Politics
  - regulations, lack of long term "thinking"
- Knowledge
- "No" demand
- Existing infrastructure
- Competition
- Culture
Traceability in Transport

Flow of goods:
- Supplier
- Transport
- Store
- Transport
- Harbor
- Customs
- Transport
- Consumer

Flow of information:
- Supplier
- Transport
- Store
- Transport
- Customs
Benefits of traceable transport

- “Those with most information wins”
- Faster reaction to delays
- Identify “who owns the problem”
- Identify bottlenecks
- Prioritize important goods
- Hazardous materials control
- Goods receiving and handling in terminals/ports
- Berth planning
- Automation

- Returns
- Route optimisation
- Planning of resources
- Cost of capital
- Quality
- Reliability
- Customer satisfaction
- and more...
Barriers to Traceability in Intermodal

- Requires collaboration between operators in the transport chain – usually operators with small margins

- Requires common open global standards for identifying and marking of goods and load carriers to facilitate communication between operators

- Requires a technical information infrastructure that facilitates real-time capturing and sharing of data in a standardized way between operators
Next step

- Pilot
  - Goods is traced
  - Different modes of transport
  - Real-time data capture and sharing

- In order to “show in real life”
  - to operators, transport buyers, regional government etc
  - for some flow of goods
  - traceable intermodal transport is a long-term sustainable solution
Intermodal information sharing

1. **WHERE ARE MY GOODS?**
2. **WHERE IS THE TRAIN CART?**
3. **WHERE IS THE PALLET?**
4. **WHERE IS MY ORDER?**

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**EPCIS**

- **LOAD CONTAINER**
- **TRAIN DEPARTURE**
- **ARRIVAL AT TERMINAL**
- **LOAD TRUCK**
- **ARRIVAL AT DEPOT**
- **COLLECT DELIVERY**
- **RECEIVE GOODS**
Thank You

ON THE ROAD TO SUCCESS, THERE ARE NO SHORTCUTS.