TOWARDS A SUSTAINABLE AND INTEGRATED EUROPEAN MULTIMODAL TRANSPORT SYSTEM

High-level Conference on European Multimodal Freight Transport, Sofia, Bulgaria 2018-03-20

Olle Isaksson
Principal Strategic Customer Engagements
Ericsson AB
ERI**C**SSON – A GLOBAL SHIPPER

| 50+ countries with Supply staff | 12 production sites | 1400 warehouses | 3M boxes shipped yearly | 100K tons shipped yearly | 1.5M sales orders yearly |

1 Radio Base Station unit every 15 second
EVERYONE IS CONNECTED
BUT NOT TO EACH OTHER

No overview

Fragmented low margin market

Shippers
Freight Forwarders
Carriers
Authorities
Ports & Terminals
Carriers
Ports & Terminals
Authorities
Carriers
Logistic Service providers
Forwarders
Last-mile delivery
Consignee

Everyone is connected
But not to each other
EVERYONE IS CONNECTED
BUT NOT TO EACH OTHER

Critical information to share:

- Track & Trace
- Digitalized document handling
- Optimize the Supply Chain
- Fill rate
- Content of box & shipments
- Register & Count
- Monitor Condition
- Vehicle status

No overview

Fragmented low margin market
Disadvantages...

- It’s complicated
- It’s expensive
- It’s outdated
- It’s slow
- It’s unreliable

The volume of paper shipped by Ericsson each year fills a 747 freighter.
TRANSFORMING TRANSPORTATION

CONNECTED

Connecting all assets of the transport system

COOPERATING

Enabling new multi-modal mobility services

AUTOMATED

Operating automated, shared and sustainable mobility services

Connecting all assets of the transport system

Enabling new multi-modal mobility services

Operating automated, shared and sustainable mobility services
# Digitalization Cross Industries

**From Silos to an Ecosystem of Ecosystems**

<table>
<thead>
<tr>
<th>Customer experience</th>
<th>Customer Experience Management</th>
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**IoT**

**4G/5G**
DIGITALIZATION CROSS INDUSTRIES
FROM SILOS TO AN ECOSYSTEM OF ECOSYSTEMS

Customer experience
Business models & processes
Applications & Value-added Services
Application platform
ICT infra: Cloud, Connectivity, Networks
Devices & Sensors
Assets: People, Things, Info:

Customer Experience Management
Business Model Innovation

IoT
4G/5G

Shared assets
DIGITIZATION
A DIGITAL REPRESENTATION OF THE REAL WORLD

temp
noise
air_quality
occupancy
energy
water

energy
water
waste
CO2_emission
machine_tear
production

location
occupancy
fuel
emissions
speed

vibration
temperature
traffic_intensity
surface_condition
noise_level
route_to_work

heart_rate
skin_conductance
calories
gesture
mood
position
movement

irrigation
luminosity
nutrition
moisture
pesticides
COOPERATION!!!
CROSS MODE, CROSS SECTOR, CROSS BORDER

Reference models for operational flows and inter- & intra-modal hand-overs

KPIs and measure points for commercial agreements and regulatory focus areas.

Integrated infrastructure
Transport + Energy + Digital
- Architecture and interfaces
- Operational models
- Business models and regulations

Data sharing prerequisites
- Semantics and ontology
- Unique identifiers
- Governance model
- Security, integrity and privacy
# A Challenge for Cross Mode Topics...

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- And many more

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Ericsson / Commercial in Confidence / Prolog 2018 Feb. 8
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#### Reference models for operational flows?

#### KPIs and measure points?

#### Integrated infrastructure: Transport + Energy + Digital?

#### Data sharing prerequisites?

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