Multimodal Transport Management System

Sustainable reduction of transport- und process costs by a global multimode TMS

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July 2014
# Inet TMS

## Inet at a Glance

### Core Competencies
- Inet TMS: a leading global Transportation Management System platform for complex end to end logistics processes
- Global implementation of the Inet TMS including process optimization and change management
- Operation of Inet TMS (SaaS - Software as a Service)

### Facts and Figures
- Headquarters in Dornbirn (Austria), founded 1999
- 6 offices in Germany, Austria, Switzerland, Thailand, China
- > 120 employees, thereof 20 in Asia
- > 120 customers and more than 30,000 users worldwide
- > 60 million processed orders per year

### Industries
- Automotive, Chemicals/Pharmaceuticals, Consumer Goods, High-Tech, Logistics Service Providers (3PL/4PL)

### Ownership Structure
- Gebrüder Weiss GmbH
- Oswald Werle
# inet TMS

## Closing the loop – competence in each phase

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SCM TRENDS

Change in the ownership of supply chains

- sourcing-synchronisation - stockless production

- point-of-sales data (POS) - real-time link between demand and supply management

- expansion of the pull principle
  - for demand planning
  - for fulfilment

- high volatility of the supply chains

Consignees are taking over the supply chain ownership

ECR / CPFR
CR / VMI
JIT / JIS
SCM TRENDS

„the customer“ takes over the role of the supply chain captain

- SCM is rated as a core competence in many companies

- 3PL / 4PL Outsourcing concepts are facing challenges and limits
  - Promised cost reduction could not be achieved sufficiently
  - Increasing supply chain complexity driven by low-cost country sourcing and regulatory compliance could not be supported adequately
  - Expanding IT requirements could not be provided in high quality and in time

- Companies are building up their own regional and global SC control towers
  - Centraliation of supply chain planning, purchasing and execution (e.g. in Europe, Americas, Asia)
  - One IT-system to support process harmonisation and standardisation (global template approach)
  - Industrialisation of trucking – standardisation, automation and specialisation (Advanced Truckloads Firm operated by „the customer“)
  - Automatisation and optimisation done by integrated transport planning, load optimisation and shipment localisation tools
  - Horizontal collaboration (co-loading) - friendly companies bundle their shipments/loads
AUTOMOTIVE CASE (1/3)

Inbound & Packaging logistics between suppliers and production plants

- **Global setup**
  - multi mode - Road, Train, Air, Parcel, Short Sea, Deep Sea
  - Plants in Europe, Americas and Asia
  - Several regional cross docks
  - Thousands of suppliers worldwide
  - Millions of call offs p.a.
  - Hundred thousands of shipments p.a.
  - Hundreds of carriers
  - inbound fulls/returns; goods received (plant to terminal); integrated empties returns with quality returns
  - Millions of container movements p.a.
AUTOMOTIVE CASE (2/3)

Inbound & Packaging logistics between suppliers and production plants

**Inbound**

- Supplier
- Plant A
- Terminal
- Hub
- Plant B
- Plant C

**Outbound**

- OEM /1st tier / 4PL
- Supplier
- Terminal
- Plant A
- Plant B
- Plant C

- Quality returns
- Empties returns
AUTOMOTIVE CASE (3/3)

Inbound & Packaging logistics between suppliers and production plants

Goals
- management of inbound transports
- management of packaging materials and empties
- one collaboration platform for all process-stakeholders
- online status of all transports available – in-transit, delivery time
- carrier self billing - no manual freight cost control needed
- true service comparison possible
- transparent and valid data base for controlling and negotiations
- cost reduction due to efficient transport mode optimization and bundling
- cost reduction and frictionless flow of goods due to transparency of packaging materials
PROCESS OVERVIEW

Dynamic balancing as an important part of the integrated planning process

Inbound Logistics team (OEM / 1st tier / 4PL)

- Strategic planning
- Tactical transport optimization
- Route implementation
- Dynamic balancing
- Execution
- Freight management
- Reporting

Integrated transport management system

- Optimize overall network structure
- Optimize routes based on call-offs
- Agree on new routes with all involved parties
- Adapt transports to current demand
- Handle exceptions on indirect lanes
- Calculate freight costs and cost claiming
- Analyze and report costs and performance

- Yearly
- Monthly
- If required
- Daily
- Daily
- Daily
- Daily / Weekly / ...

Optimization tools and features

- Map visualization
- Route planning
- Performance analysis
- Cost claiming
- Reporting tools
INBOUND PROCESS (EXAMPLE)

OEM / 1st tier / 4PL
- send call offs (forecast next 4-6 weeks)
- actual call offs (next week)
- prepare goods receipt based on ASN
- receive goods & verify transport order
- accept freight costs (self billing/credit note)

ITMS
- optimal routing per supplier and plant*
- generate transport order*
- dynamic balancing*
- schedule transport orders & assign load
- verify / update transport order
- calculate freight costs (self billing/credit note)
- view generated transport forecast (weekly plan)*

Supplier
- verify / update transport orders
- print / send documents (delivery note, label)
- dispatch transport orders
- prepare goods receipt based on ASN
- receive / accept load
- pick up & perform transport
- enter transport & status information
- clear freight costs (self billing/credit note)

Carrier
- view generated transport forecast (weekly plan)*
- receive / accept load
- pick up & perform transport
- enter transport & status information
- clear freight costs (self billing/credit note)

* ITMS planning

Optionally GTN, SSCC labels, delivery notes, ASN, etc. can be created by ITMS.
Multi-leg billing: transport and freight cost units

Rating unit pre-carriage
Carrier A

[supplier A]

BillingCase Leg 1.1

TM: milkrun pre-carriage with two shipments

BillingCase Leg 2.1

[supplier B]

Rating unit main run Carrier B

DELFOR1 4711 ▶ 1.1
DELFOR2 4712 ▶ 1.2
DELFOR3 4713 ▶ 1.3

TM: Shipment1 from Supplier A – Plant 1

BillingCase Leg 1.2

[Hub 1]

BillingCase Leg 1.3

[Hub 2]

Rating unit on-carriage to
plant 1 / Carrier C

[plant 1]

BillingCase Leg 2.1

CC 1.1
CC 1.2
CC 1.3

BillingCase Leg 2.2

TM: Transport main run with two shipments

Rating unit on-carriage to
plant 2 / Carrier D

[plant 2]

BillingCase Leg 2.3

CC 2.1
CC 2.2
CC 2.3

TM: Transport on-carriage with one shipments

TM: Shipment2 from Supplier B – Plant 2

DELFOR4 4714 ▶ 2.1
DELFOR5 4715 ▶ 2.2
DELFOR6 4716 ▶ 2.3

DELFOR1
DELFOR2
DELFOR3
DELFOR4
DELFOR5
DELFOR6
IT-LANDSCAPE

Integrated Transportation Management

- Transport Planning
- Transport Generation
- Transport Scheduling
- Transport Ordering
- Transport Invoicing

[Plants / Suppliers]
- call offs, orders, deliveries, transports
- status information, freight costs

[Carriers]
- transport requests, transport orders, freight costs
- status information, freight costs

[EPM/WMS systems]
- Transport Analytics
- Dock Management
- Container Management
- Telematics

SAP Certified Integration
Sustainable cost reduction through

- network optimization
- ideal transport structures
- fewer transports
- appropriate logistics service providers
- flexible rates
- increased utilization
- fewer ad hoc transports
- spot sourcing
- reduced effort for freight cost auditing
- compliance with regulations
- transparent and valid data base for controlling and negotiations

Planning, execution and optimization with one global integrated solution.
PEAK PERFORMANCE CALLS FOR A PERFECT GRIP