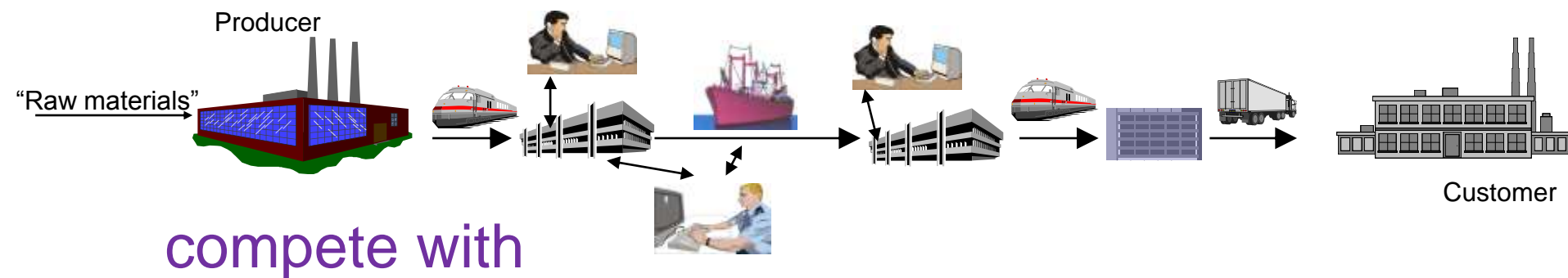


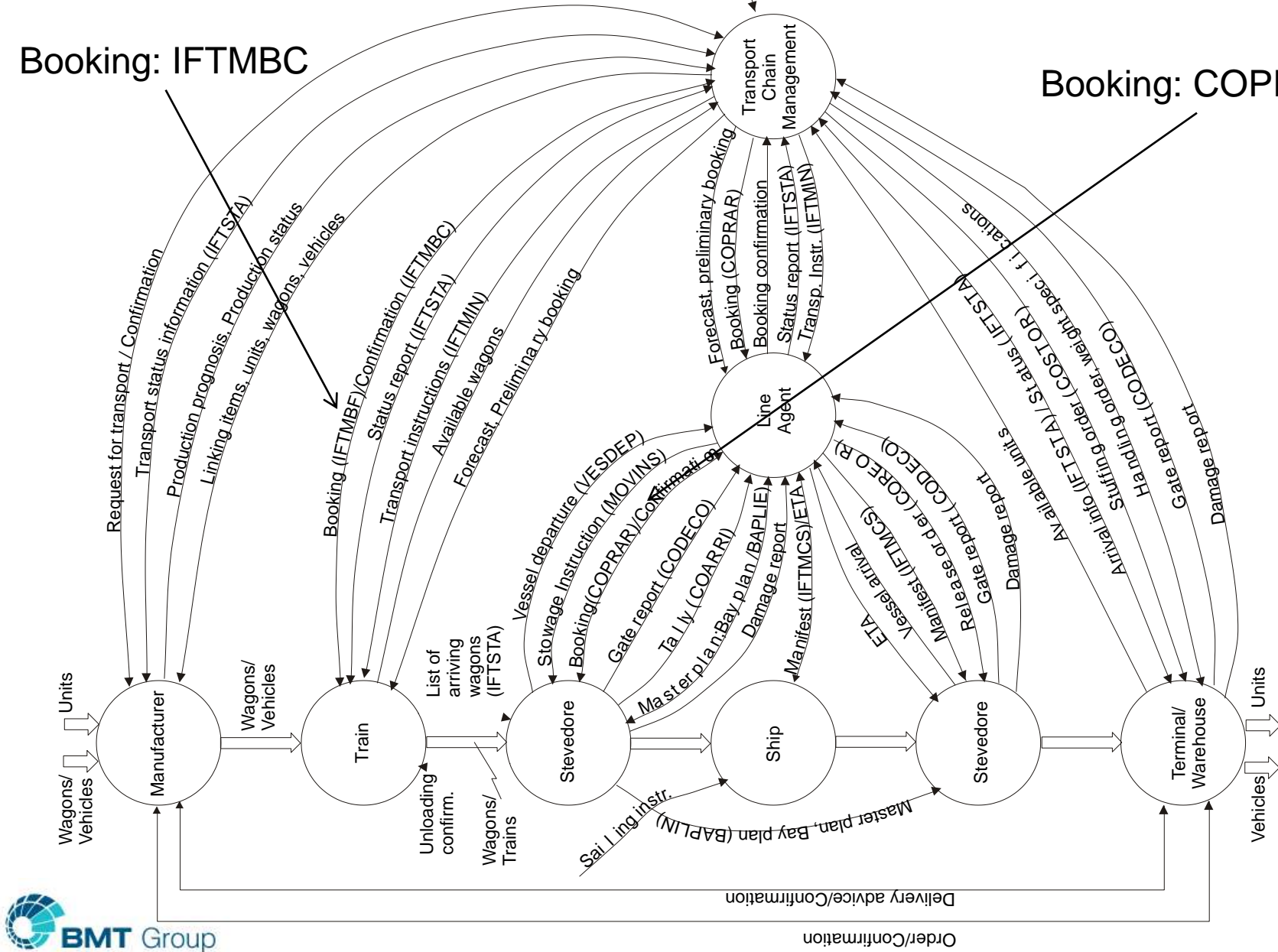
# Logistics Management ICT systems

Dr.ing. Jan Tore Pedersen

# EU Ambition

- Letting





## Internet for Travel

### Departure

From **Trondheim (Vaernes airport)** to **Newcastle (Newcastle Airport)**  
Departure/Arrival 13.00 Thu 1 Nov 2007 17.50 Thu 1 Nov 2007  
Via Amsterdam (Schiphol)

### Return

From **Newcastle (Newcastle Airport)** to **Trondheim (Vaernes airport)**  
Departure/Arrival 06.00 Sat 3 Nov 2007 12.20 Sat 3 Nov 2007  
Via Amsterdam (Schiphol)

[▶ Show details and price breakdown](#)

### Grand Hotel Kempinski Geneva



★★★★★ 9,4 fra 3 gjesteevalueringer

The Grand Hotel Kempinski Geneva is located in Geneva, Switzerland on the banks of lake Gene ...

• Familievennlig

[Full beskrivelse](#) | [Finn liknende hotell](#)

1,7 km til Sentrum



Byguide og kart  
Genève sentrum  
Geneve

- ✓ treningssenter
- ✓ Internett
- ✓ forretningssenter
- ✓ restaurant ...

Romtype ( <a href="#">se alle</a> )	ma	ti	on	to	fr	lø	sø	Gjennomsnittlig pris per natt
Standard Single Room			2 800	2 800				2 810 NOK <a href="#">Velg</a>

### Hotel Epsom



★★★★☆ 8,6 fra 18 gjesteevalueringer

The Manotel Epsom is a modern eight storey property located within 200 metres of Lake Leman an ...

[Full beskrivelse](#) | [Finn liknende hotell](#)

2,2 km til Sentrum

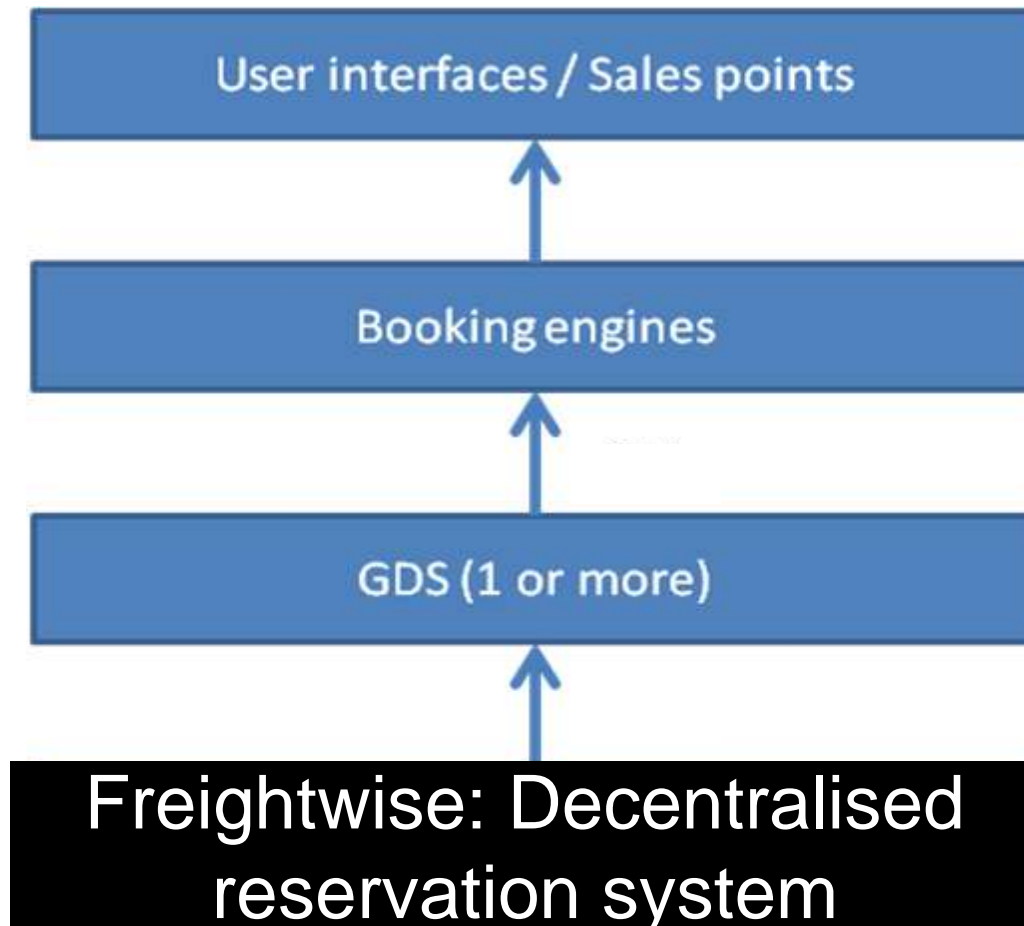


Byguide og kart  
Genève sentrum  
Geneve

- ✓ treningssenter
- ✓ Internett
- ✓ forretningssenter
- ✓ restaurant ...

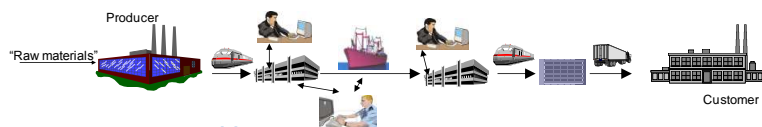
Romtype ( <a href="#">se alle</a> )	ma	ti	on	to	fr	lø	sø	Gjennomsnittlig pris per natt
Standard twin/double room			2 730	2 330				2 530 NOK <a href="#">Velg</a>

# OpenTravel Architecture



# Implications

- Letting



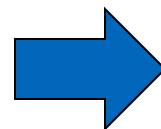
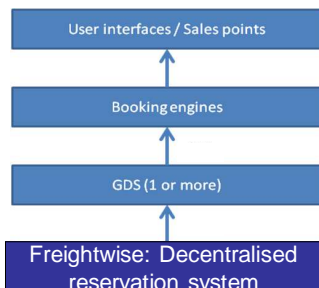
compete with



involving SMEs as users and service providers

Interoperability

## Freightwise "Architecture"



Need for standard  
definition of Transport  
service

# Terminology Confusion

English	
Superior roles	Detailed roles
Traveller	Scheduled Transport Passenger
	On-demand Transport Passenger
	<i>Crew</i>
	Crew in Transit
	Transport Network User
Public Purchaser	Public Purchaser
Transport User	Consignee
	Consignor
	<i>Traveller</i>
	Cargo owner
	Transport Consumer
Transport User Agent	Transport Organiser
	Importer
	Exporter
	Chamber of Commerce
	Declaration Agent
	Logistics Provider

Consignee

Consignor

Importer

Exporter

Chamber of commerce

Cargo owner

Transport organiser

Transport consumer

Freight Forwarder

3 PL

4 PL

Lead Logistics Provider

Trucking company

Shipping operator

Shipowner

Rail operator



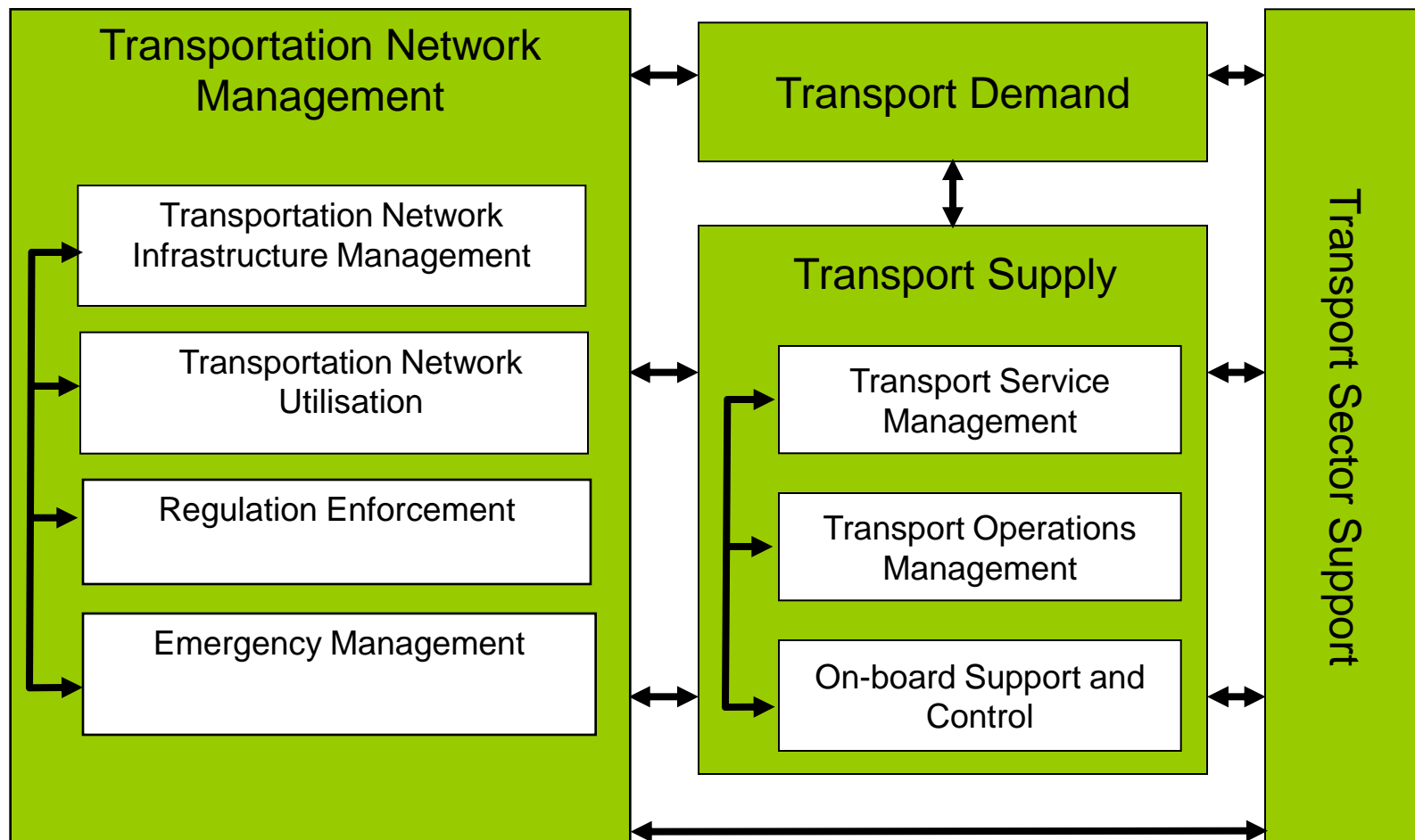
- A multimodal framework for transport
- A generic framework - independent of transport mode, technology, and organisation
- Interoperability



# Framework Requirements

- Support multimodality (co-modality)
- Be stable and easy to refine and expand
- Be independent of current solutions
- Provide a total picture (include freight and passenger transport)
- Facilitate hiding of complexity (abstraction, simplification)
- Focus on interoperability (not on inner parts of systems)
- Independent of technology

# Reference Model



# Roles



# Efficient Cooperation Between Roles



Transport User

## Transport demand

Specifies the need for transport and approves transport execution plan based on information of services (routes, terms and conditions).  
Monitors status decides corrective actions.



Transportation  
Network Manager

## Transport Network Utilisation and Infrastructure

Provides information about the current  
and foreseen situation of the network.  
Controls traffic in the transport network



Transport Regulator

## Transport Support and Regulation

Develops the regulatory framework.  
Ensures that transport is conducted  
accordingly



Transport Service Provider

## Transport Supply

Publishes services.(Routes, cargo types, etc)  
Proposes transport execution plan.  
Executes transport  
Reports transport status

# Changing Roles

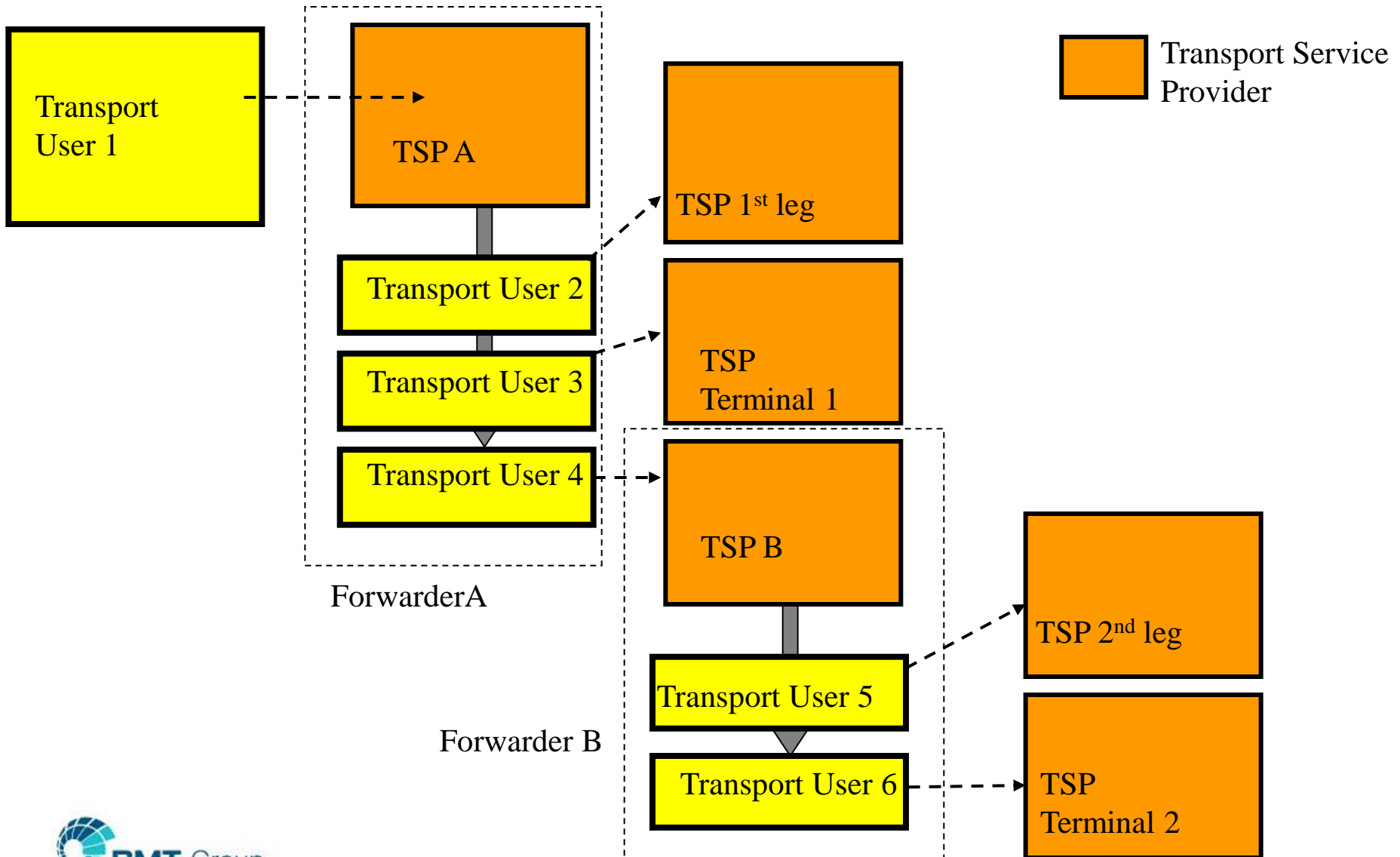
**Step 1:**

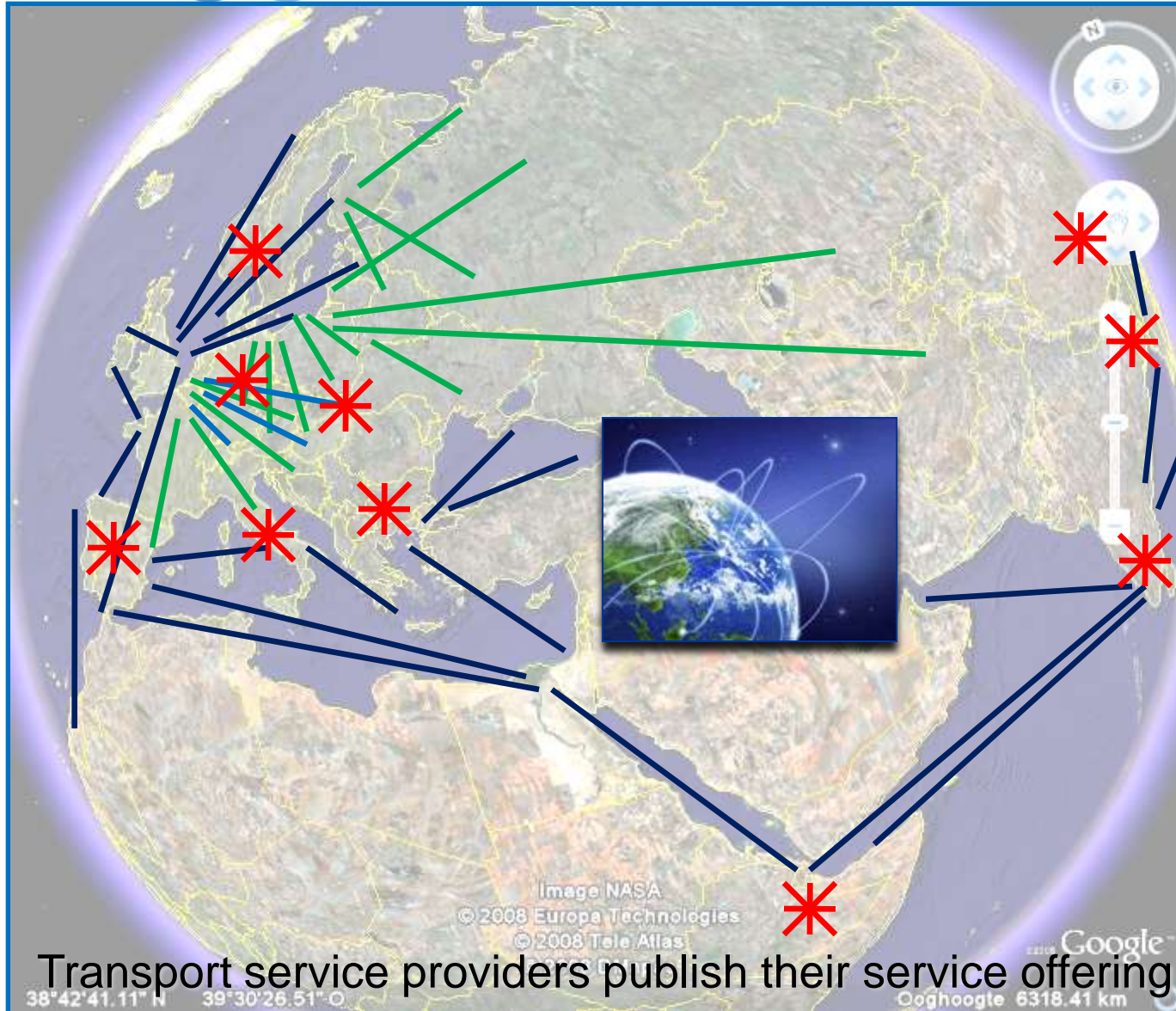
**Step 2:**

**Step 3:**

 Transport User

 Transport Service Provider





Marketing

Planning

Execution

Completion





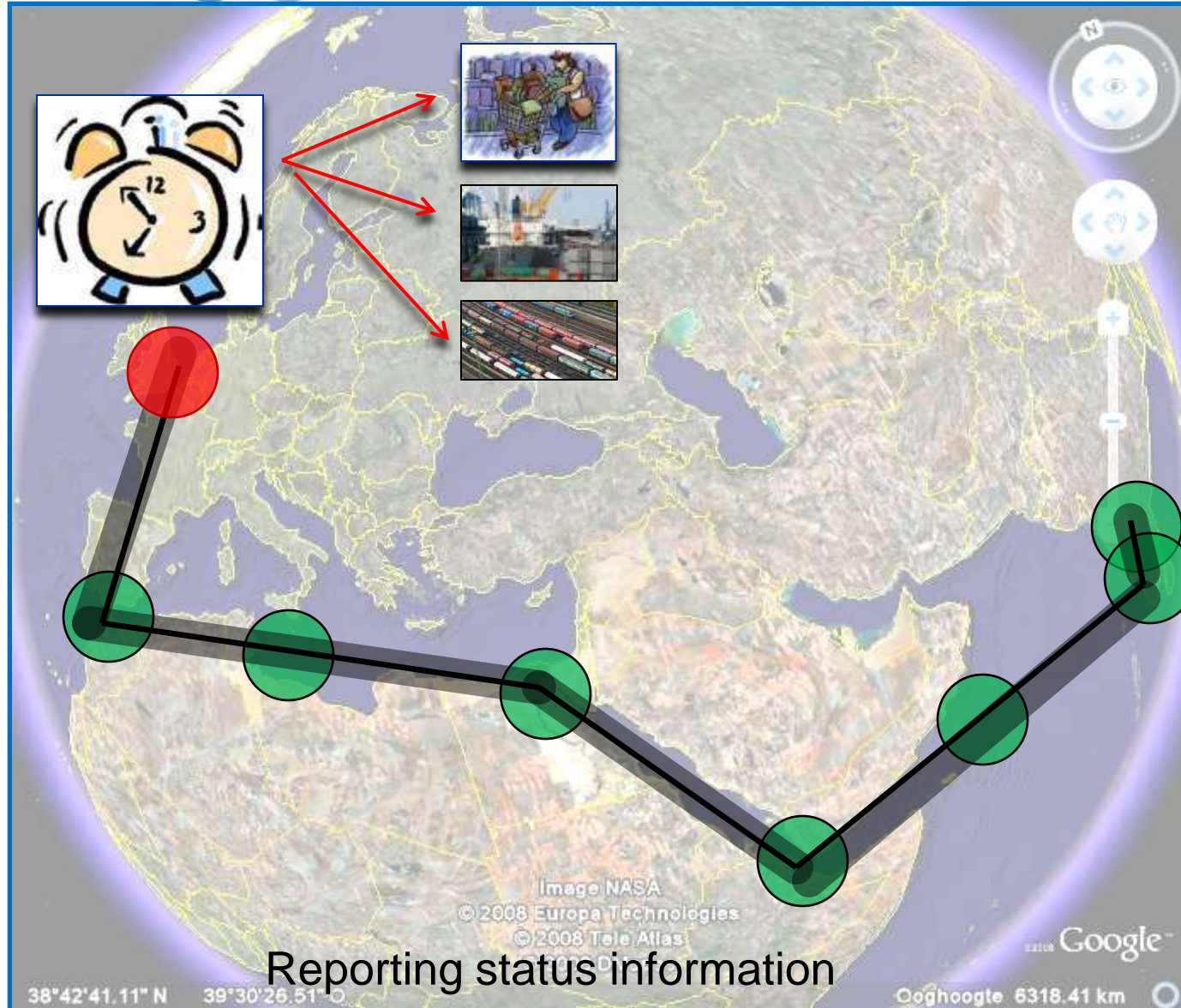
Planning integrated freight operations

Marketing

Planning

Execution

Completion



Marketing

Planning

Execution

Completion





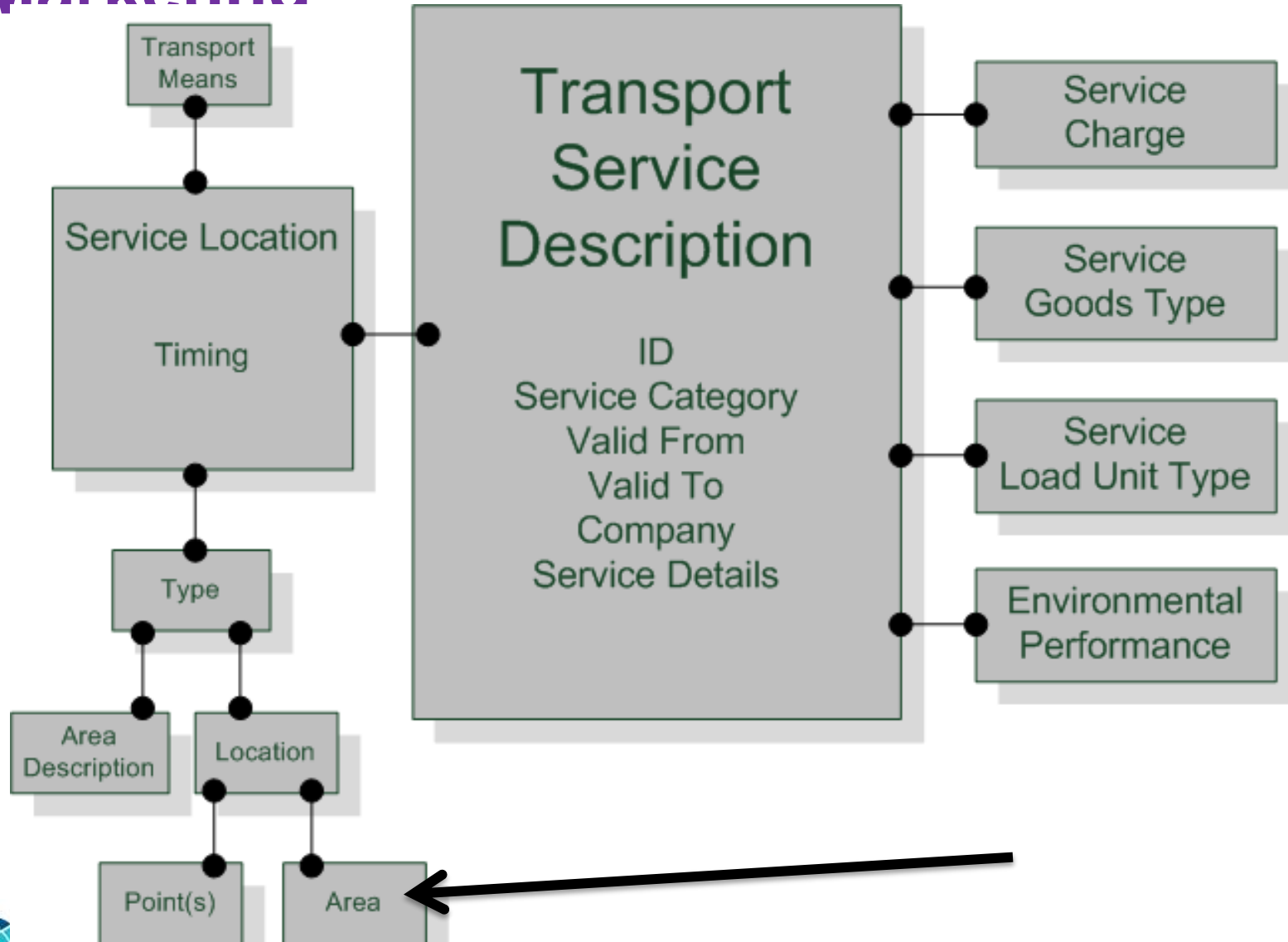
Marketing

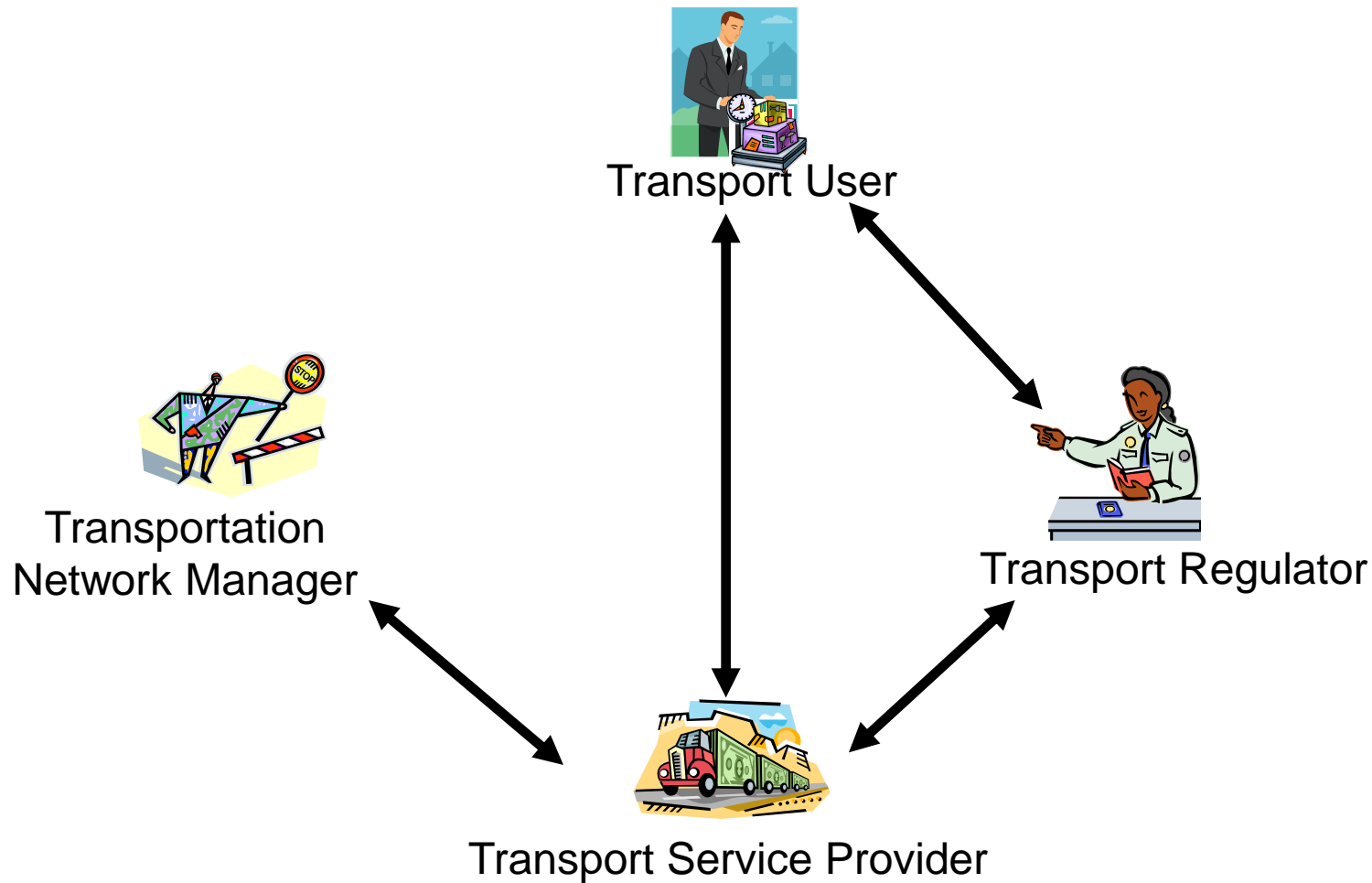
Planning

Execution

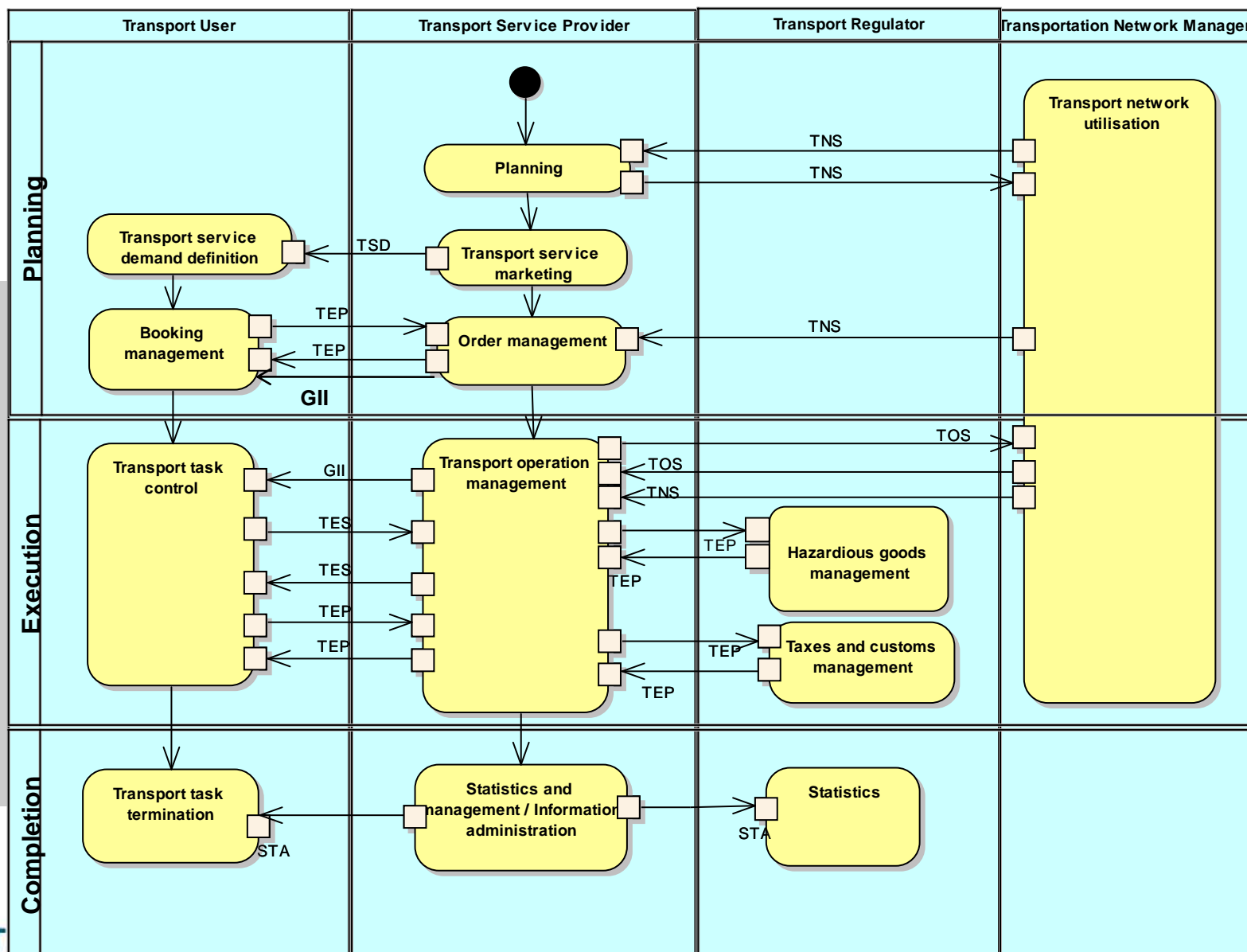
Completion

# Marketing





# Processes

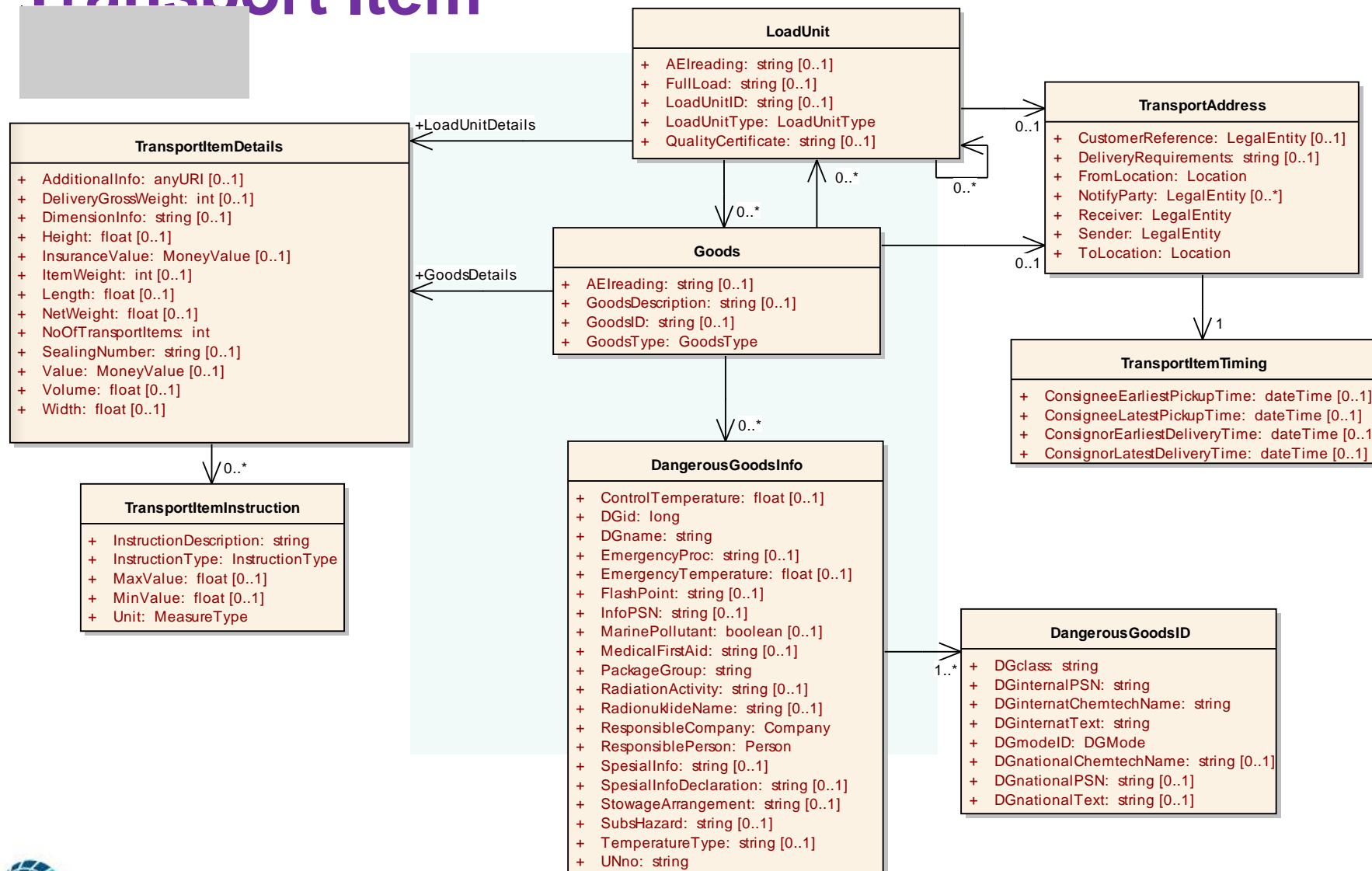


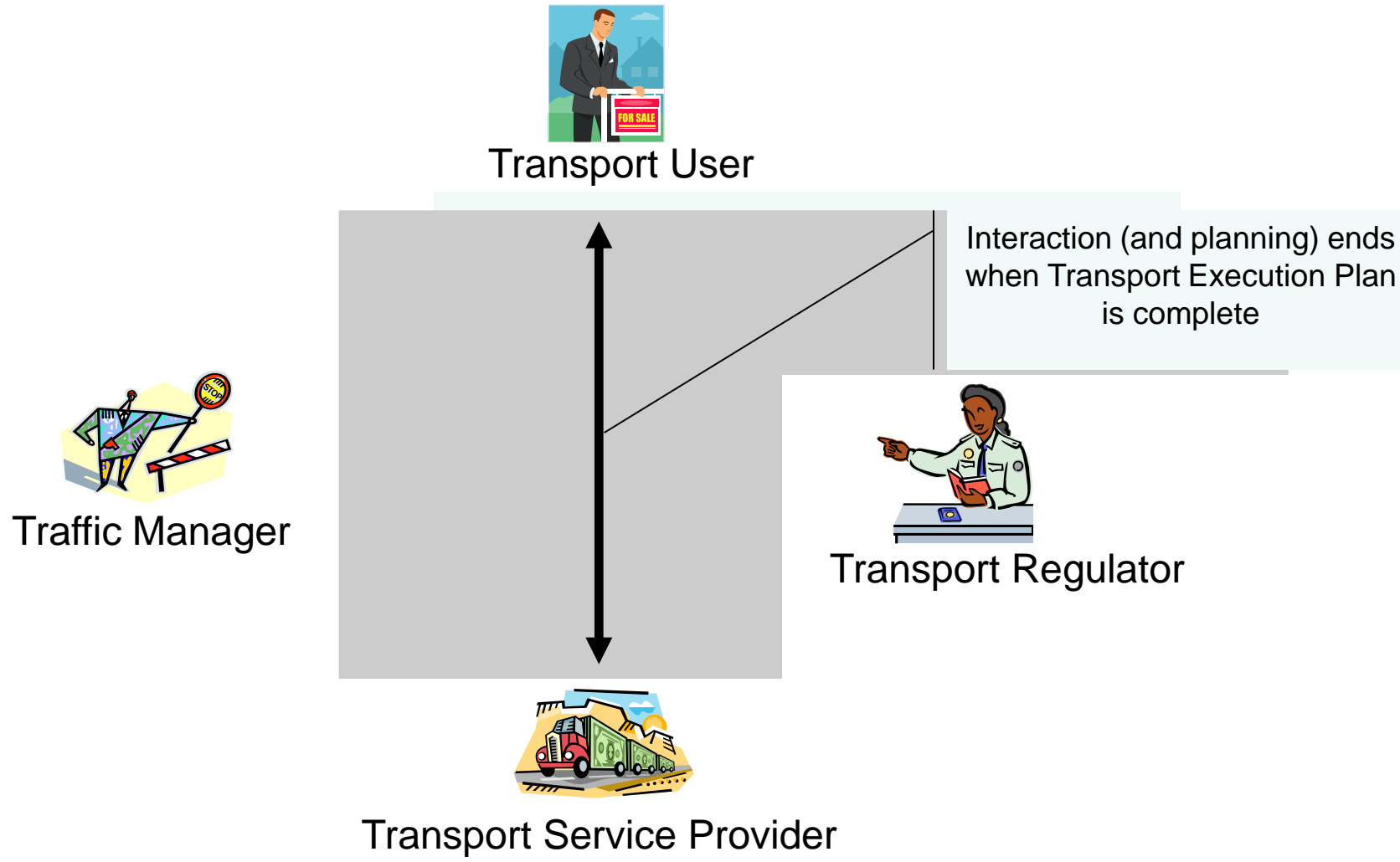
# Transport Item



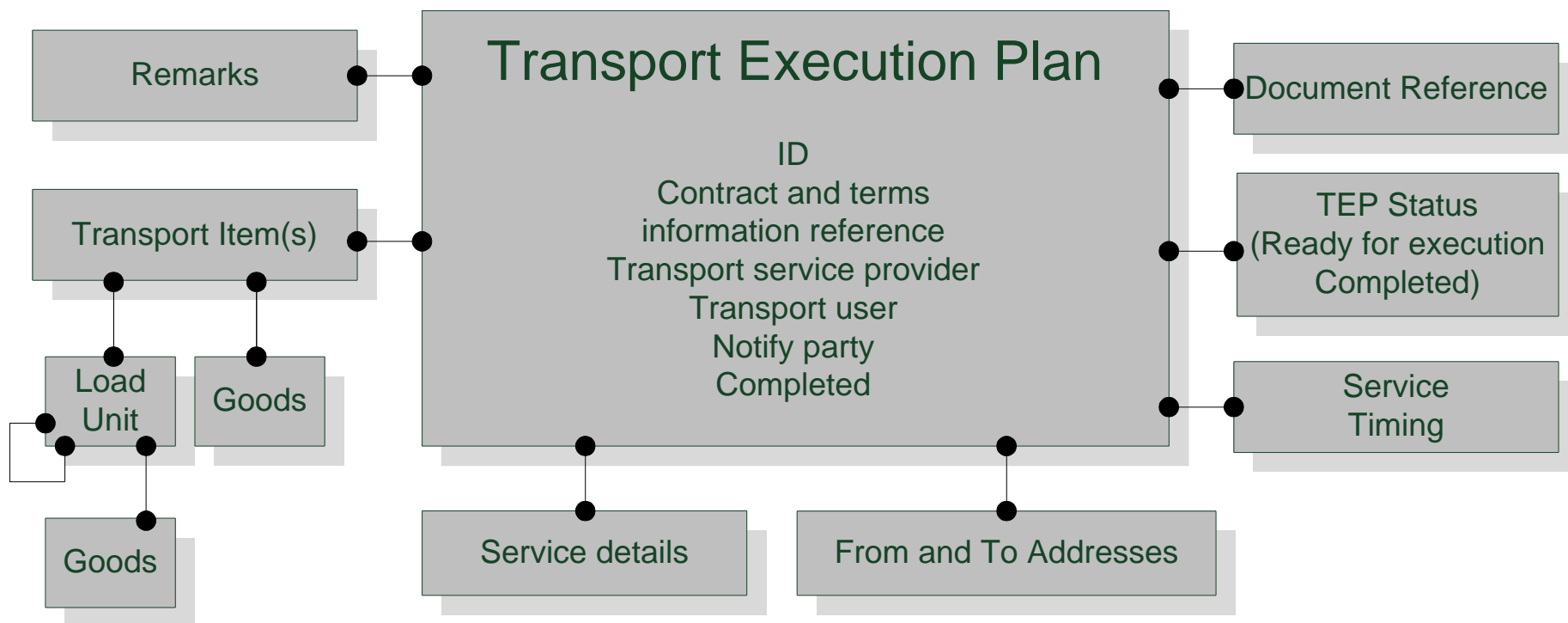


# Transport Item



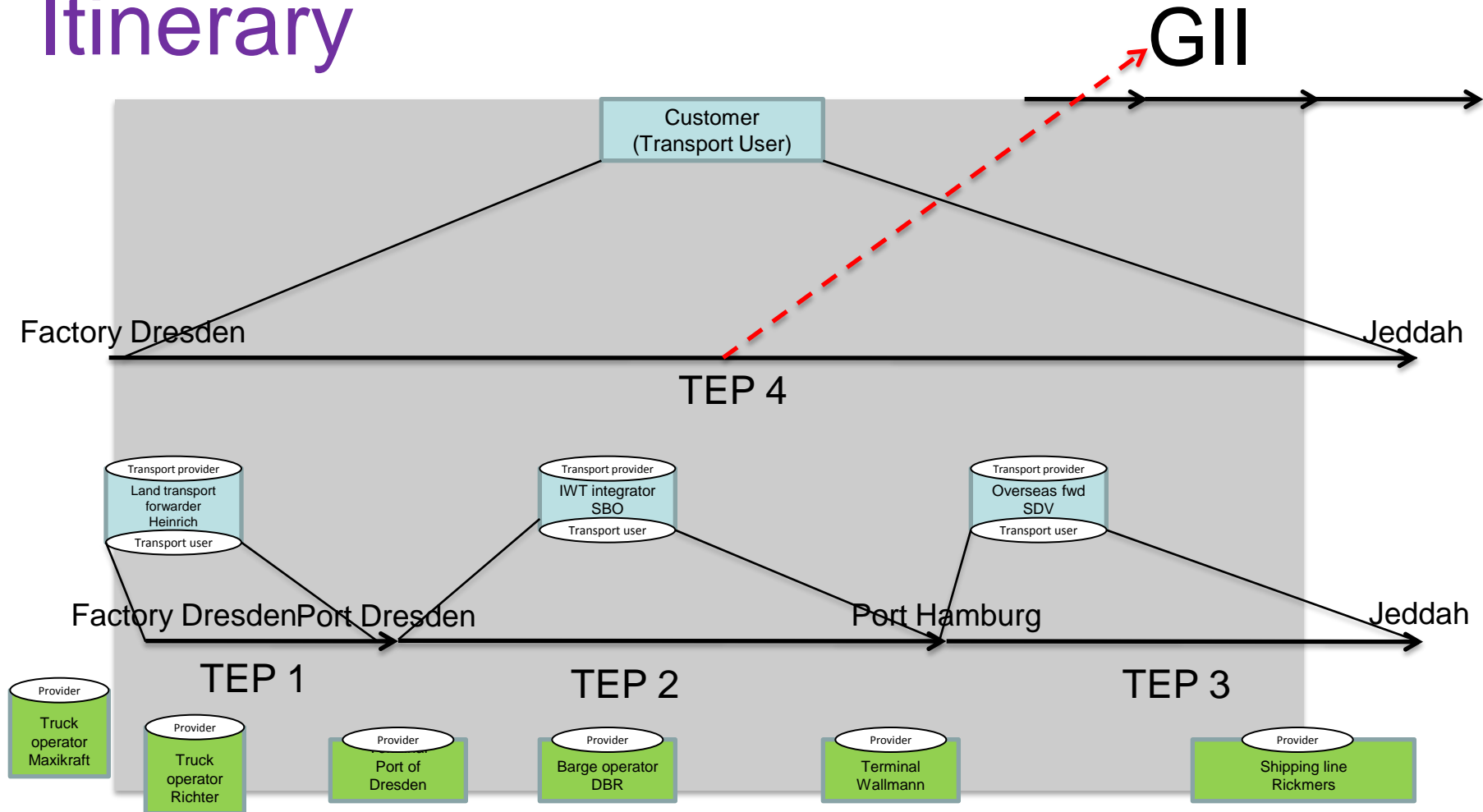


# Transport Execution Plan -TEP

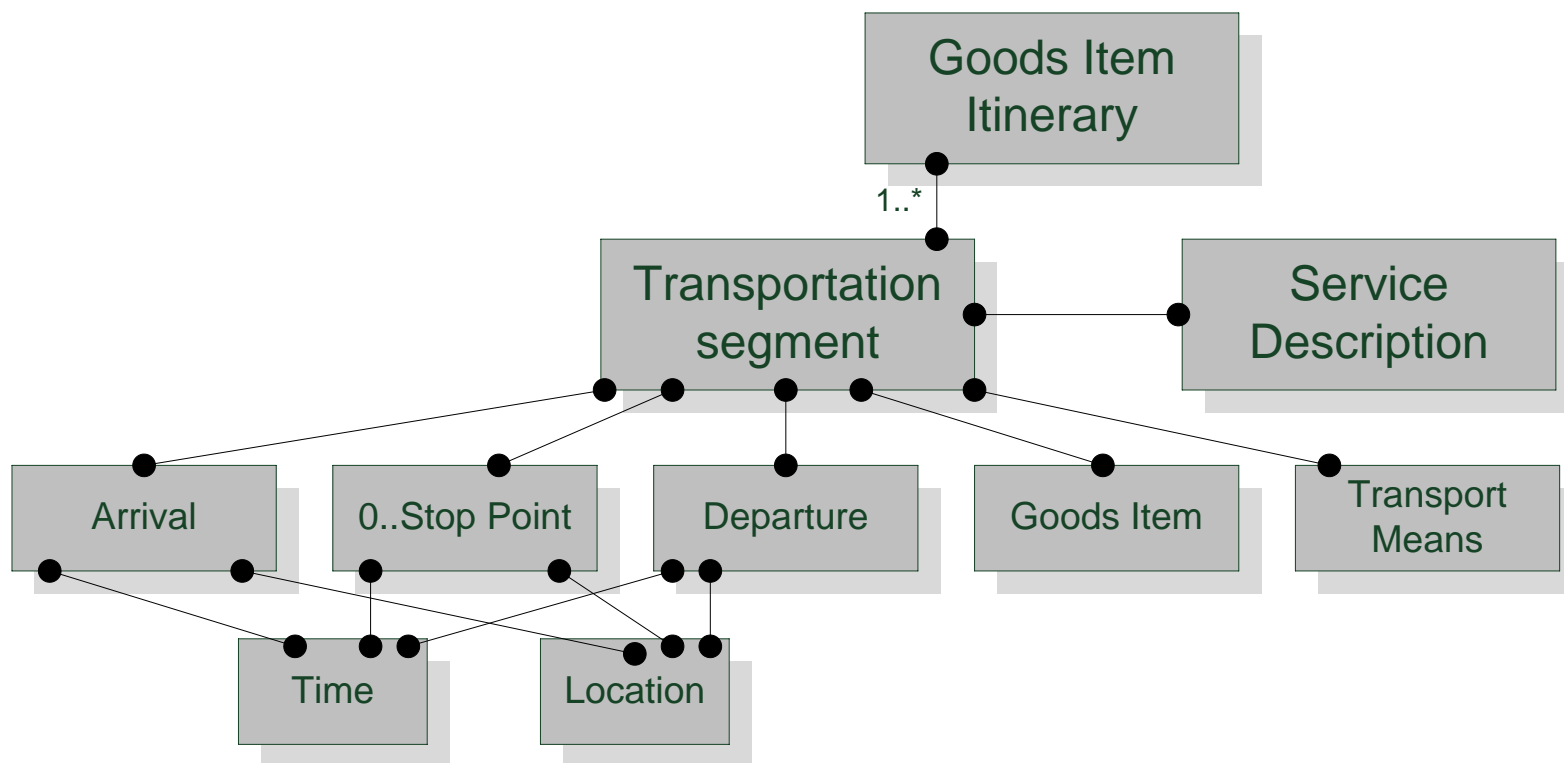


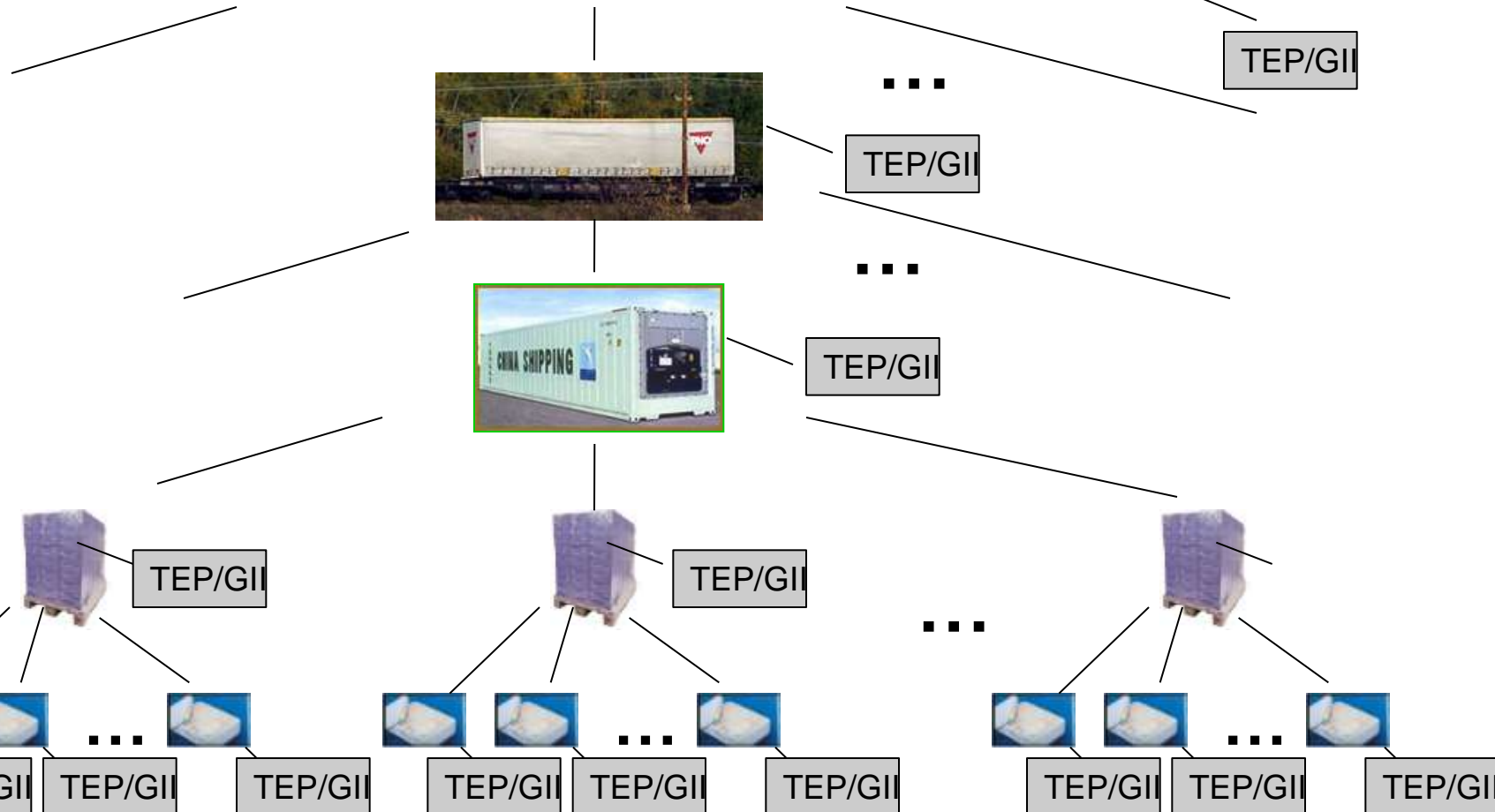


# Itinerary

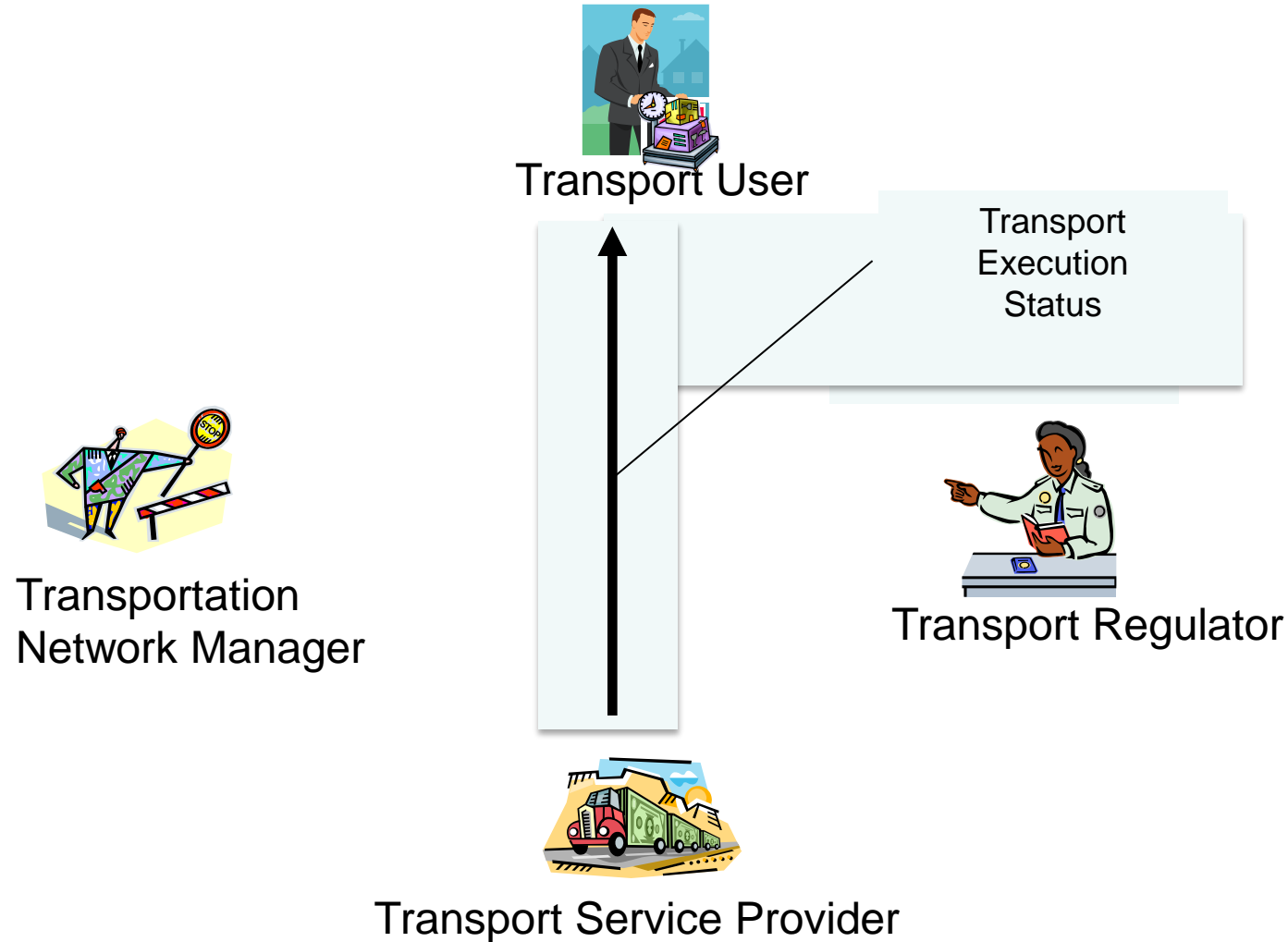


# Goods Item Itinerary

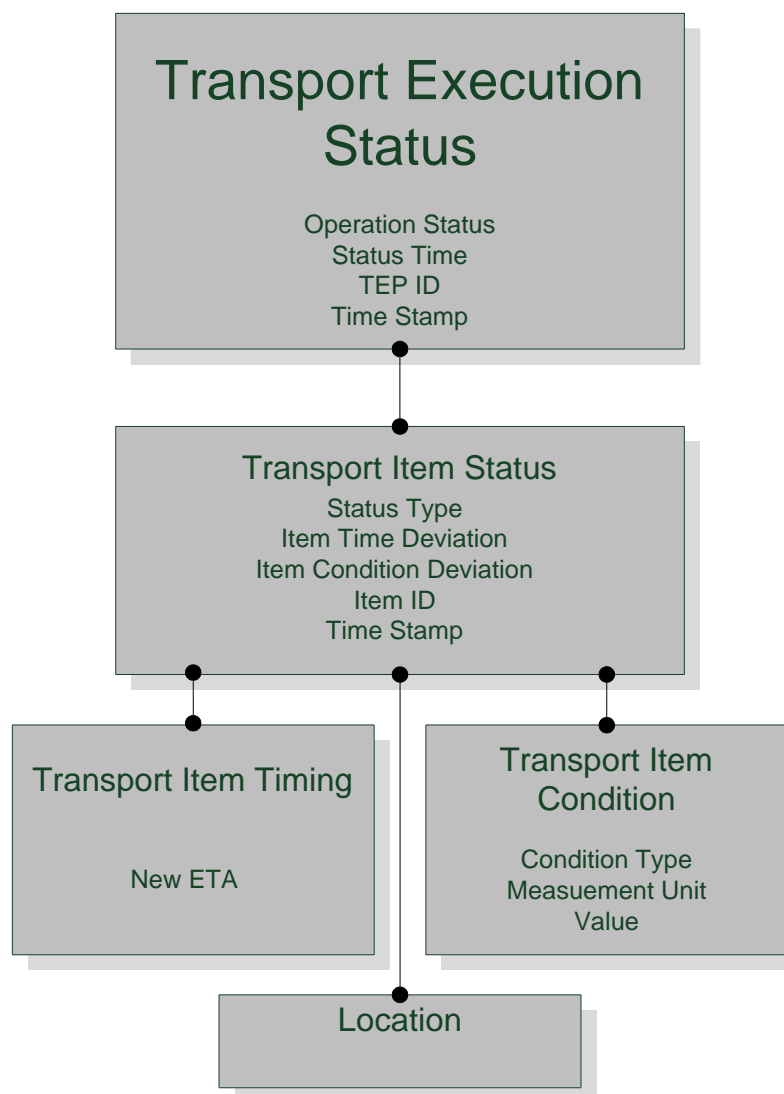




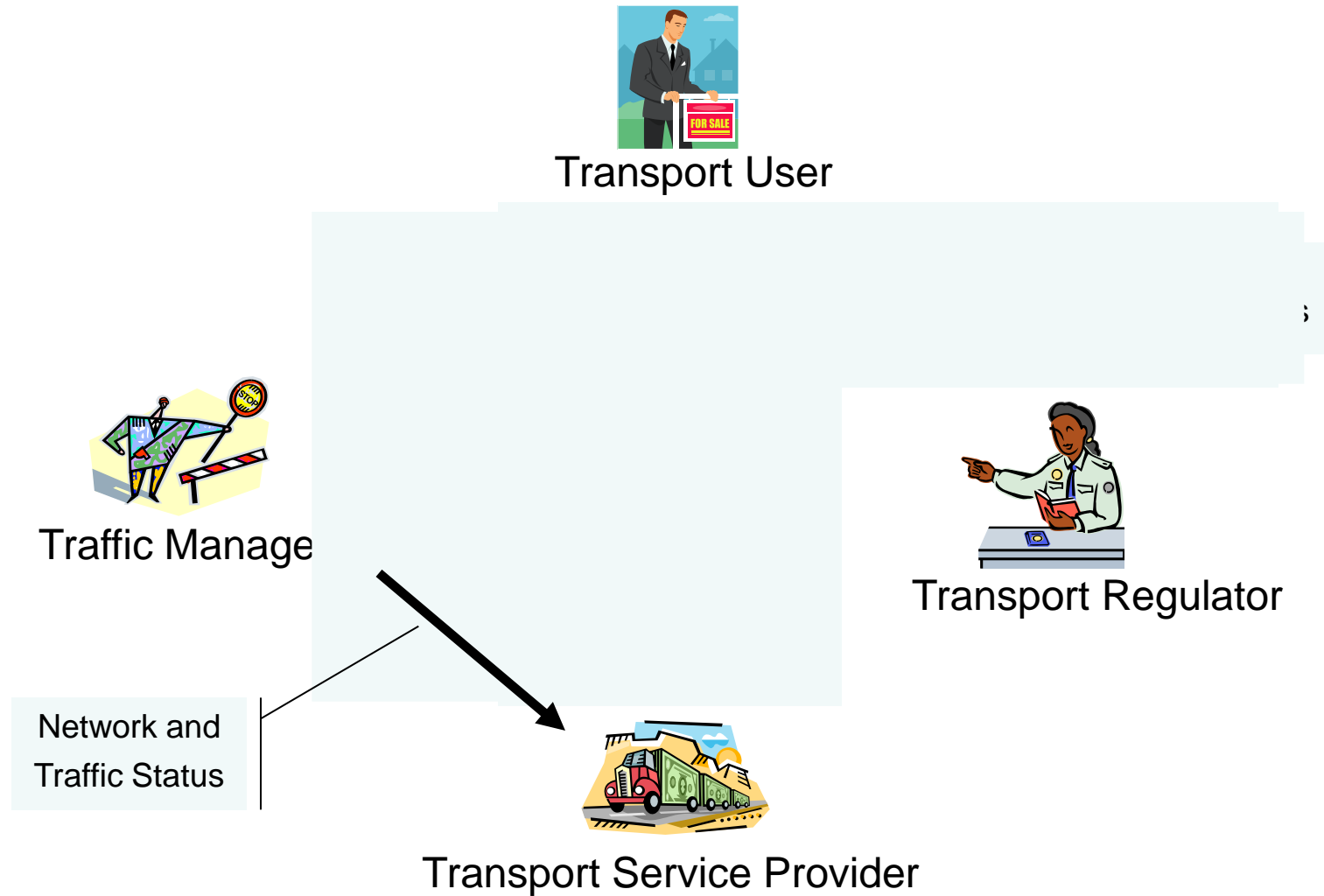
# Execute



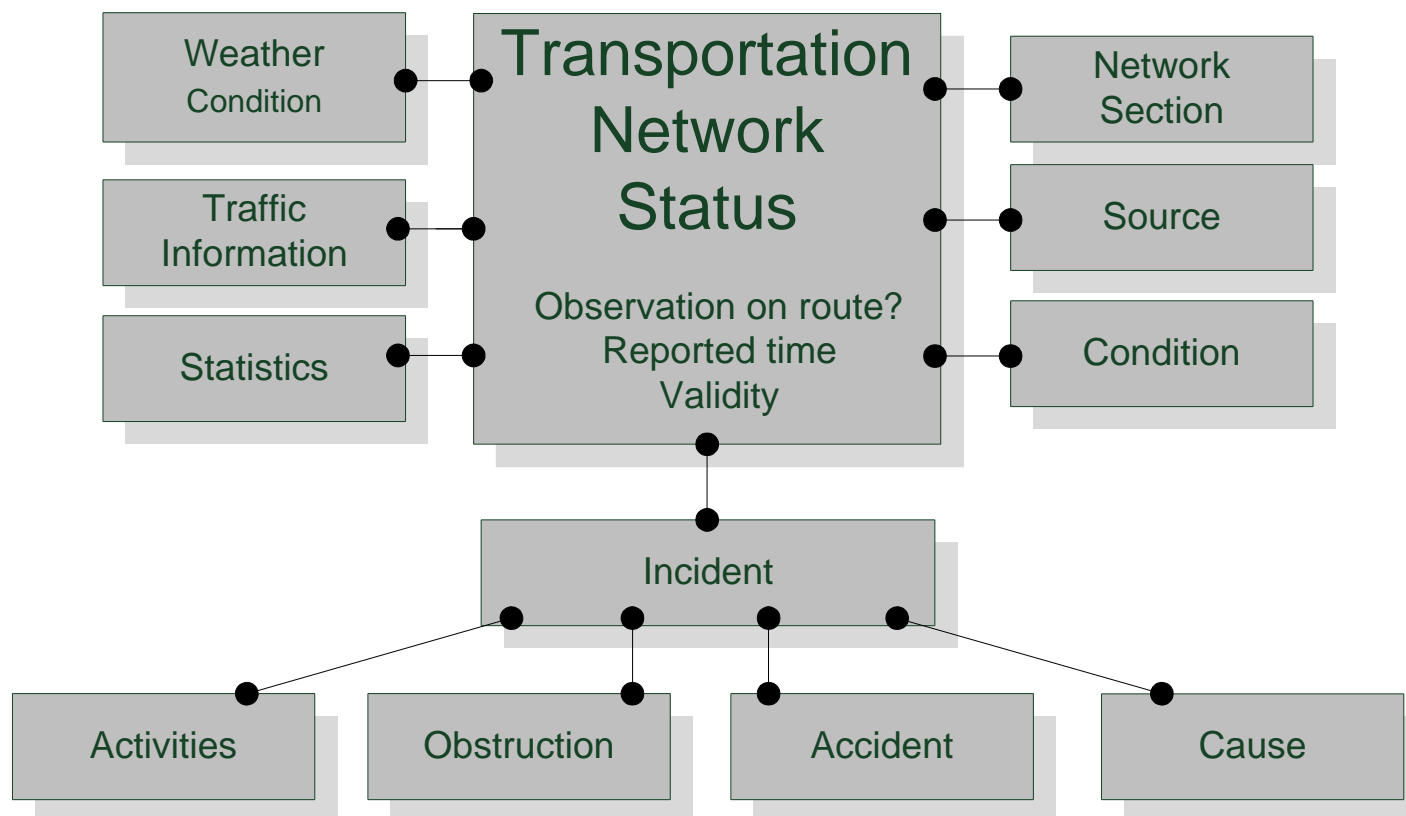
# Transport Execution Status - TES



# Plan



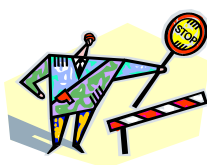
# Transportation Network Status



# Transport Operation Status



Transport User



Traffic Manager

TOS



Transport Regulator

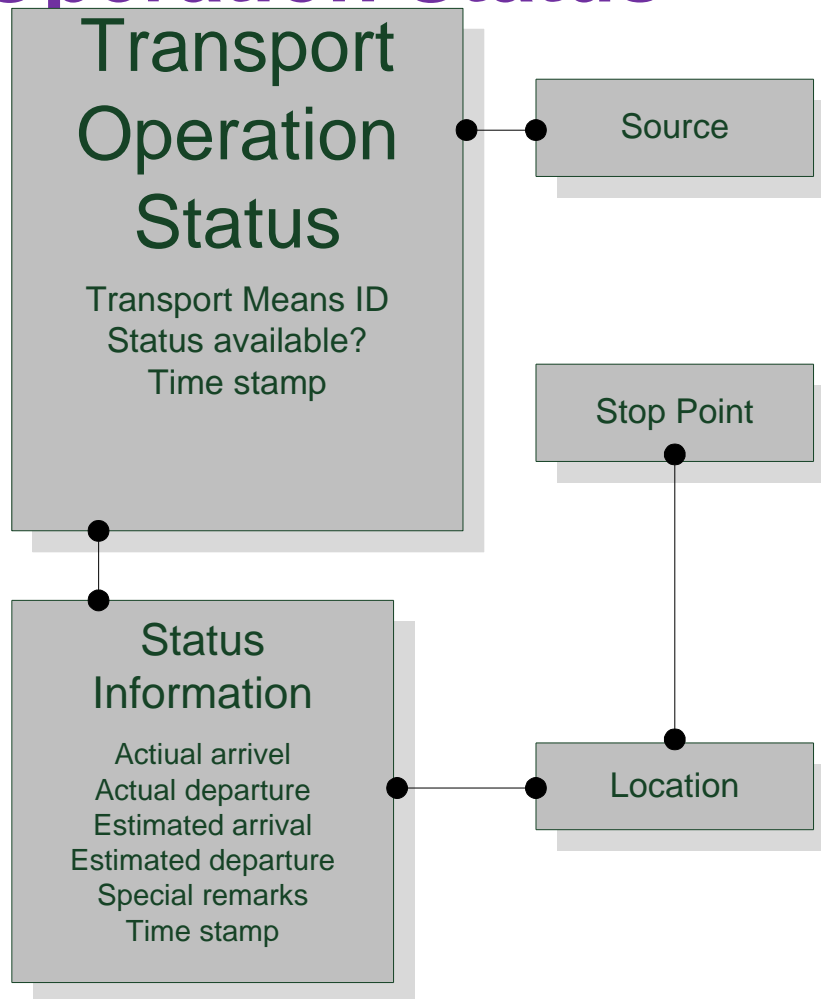
Transport  
Operation Status



Transport Service Provider



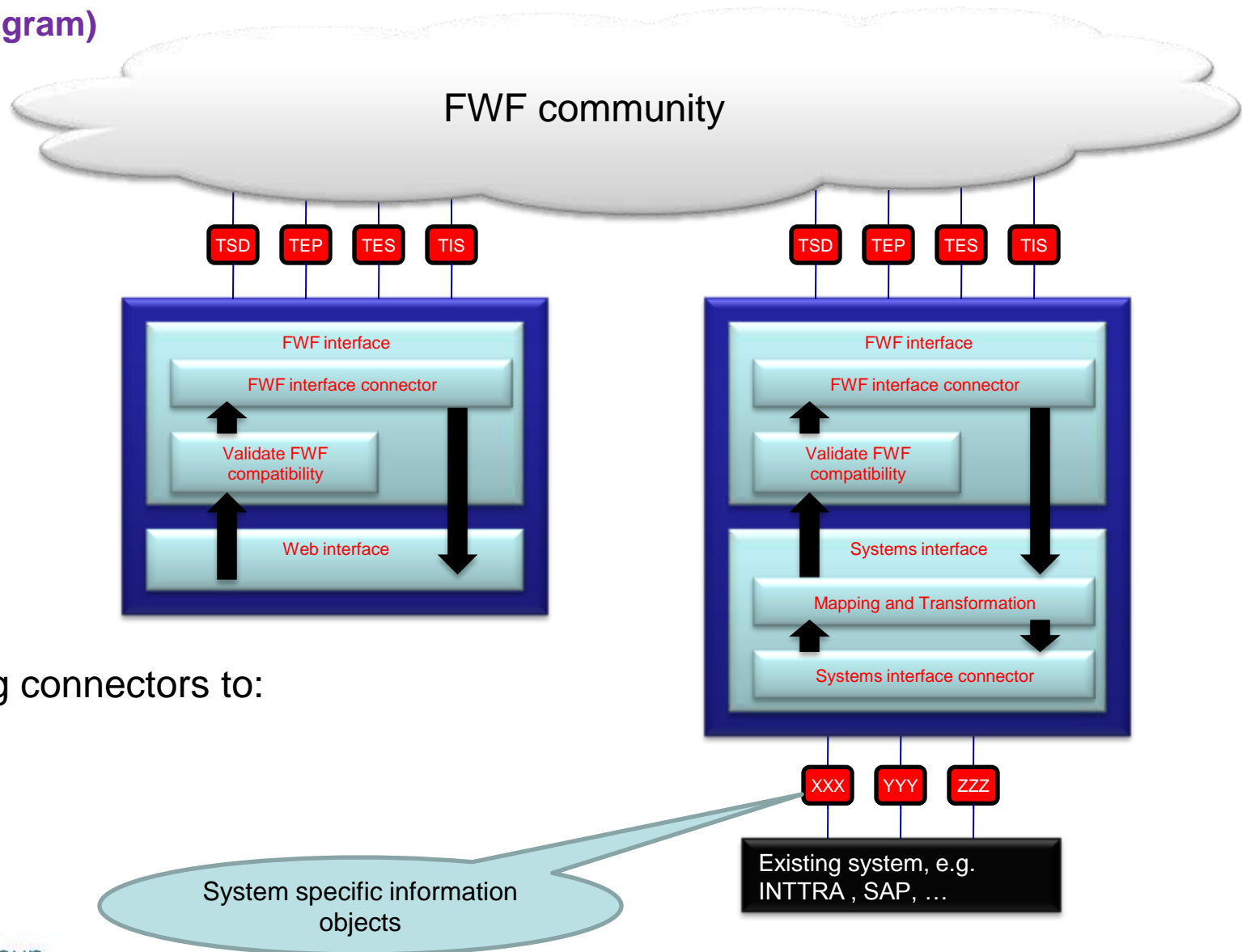
# Transport Operation Status



# Deployment

- UN/CEFACT and UBL – Specifications and implementation guidelines
  - Leads to different interpretations
- Validation through business cases

## Freightwise connectors (sample diagram)

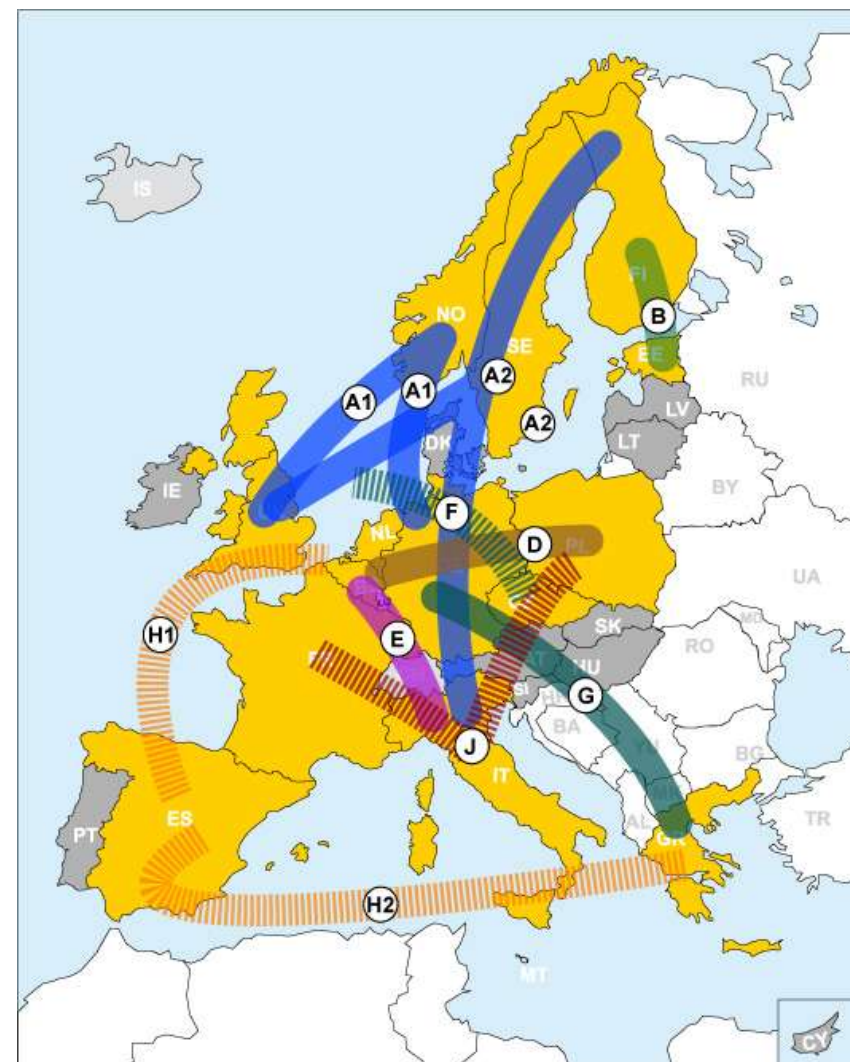


Providing connectors to:

- Intra
- Oracle
- SAP
- ...

# Verification Through 9 Business Cases

- A1 – ship and truck
- A2 – rail, ship, and truck
- B – rail, but focus on information related to "traffic management"
- D – all modes, linking several information service portals
- E – road, ship, with focus on planning road transport to avoid congestion
- F – inland waterway and intercontinental shipping
- G – rail and road
- H – rail, road, and ship
- J – rail and road



# Thanks