

Improving European Railways

Competitiveness of the RETRACK Rail Freight Service – Outcomes from the first year

Delft, September 2008
Kjell Werner Johansen
& Johanna Ludvigsen,
TØI, Norway



retrack

An Integrated EU-Project

Competitiveness of RETRACK VENTURE

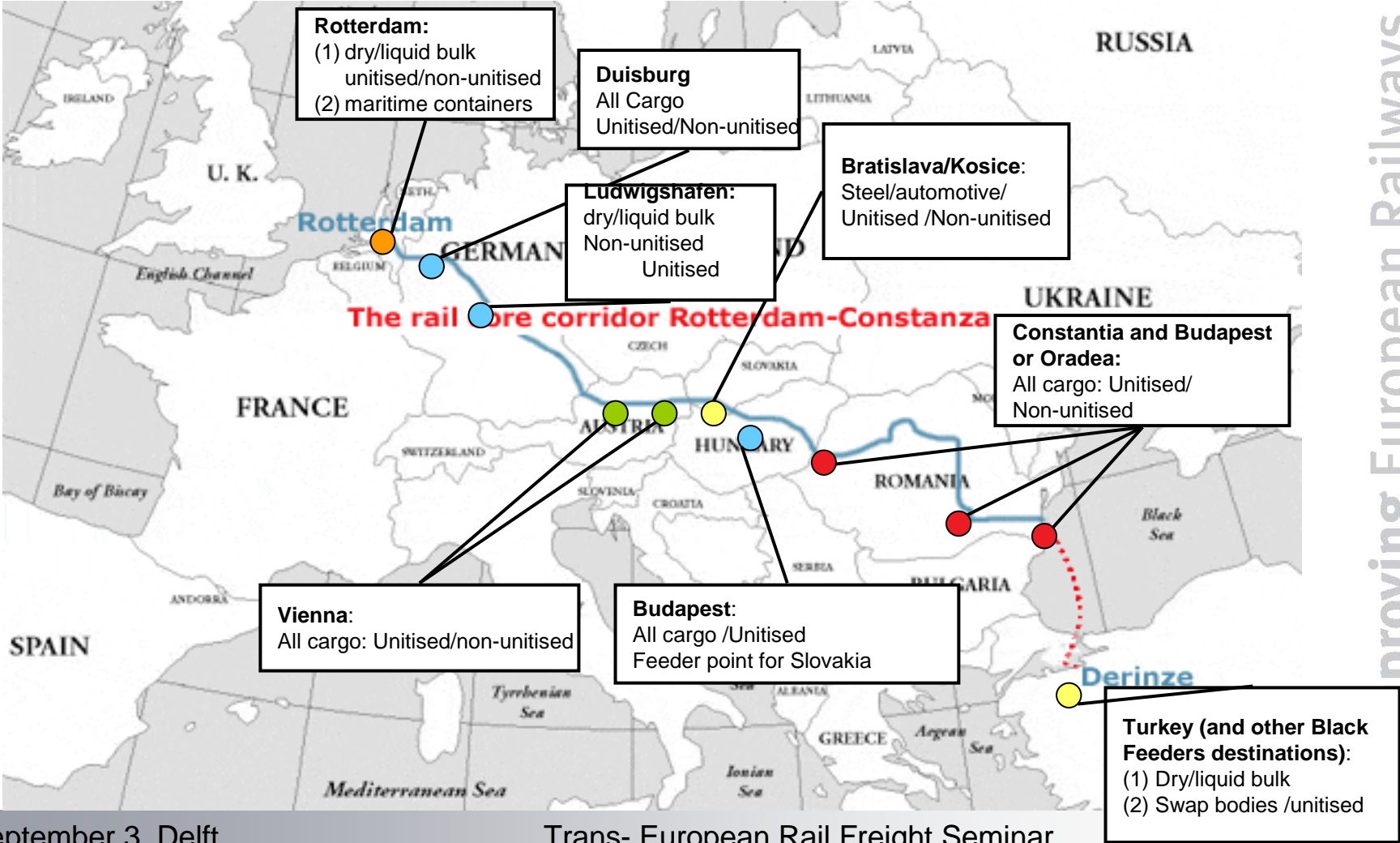


Service working definition:

- ▶ RETRACK venture offer a container train
- ▶ RETRACK train has fixed timetable for freight movement between Duisburg –Vienna –Timisoara–Pitesti– Constantia
- ▶ RETRACK venture offers two additional callings:
Ludwigshafen–Vienna–Budapest, and
Ludvigshafen–Vianna Timisoara–Pitesti

Market potentials

Fixed timetable for container trains



Improving European Railways

Competitiveness of RETRACK Venture



➤ Market segments

- Unitised railway goods
- High-value containerised goods
- Swap bodies with high-value goods

➤ Quality requirements

- Reliability
- Transit time
- Price

➤ Competitors

- Truck
- Short-sea shipping/barges
- Other railway services

Challenges for RETRACK Train Operations and Customer Service:



- Reliability, Punctuality and Time;
 - Several border-crossings
 - Infrastructure bottlenecks
- Operation in 5 countries;
 - Standardisation & Integration of ;
 - RUs/operators quality management
 - Safety and liability for cargo damages
 - ICT and management techniques
 - individual partners business processes
 - Fulfilment of EU legal and social requirements
 - Withstanding financial risk and competition pressure

Competitiveness of RETRACK Venture



New era for rail freight transport?



Improving European Railways

Choice of Network Business Model(s)

- ✚ Business model defines every company's specific role within such network
- ✚ Business model adopted by the network of RETRACK operators will define the division of responsibilities for the elements of the service
- ✚ Network companies operate at different layers:
 - ✚ First layer: A leader of the supply chain or a network integrator
 - ✚ Second layer: Strategic partners
 - ✚ Third layer: Operative partners
 - ✚ Fourth layer: Supporting partners

Competitiveness of RETRACK Venture



Four types of business models have been identified as applicable for RETRACK operators:

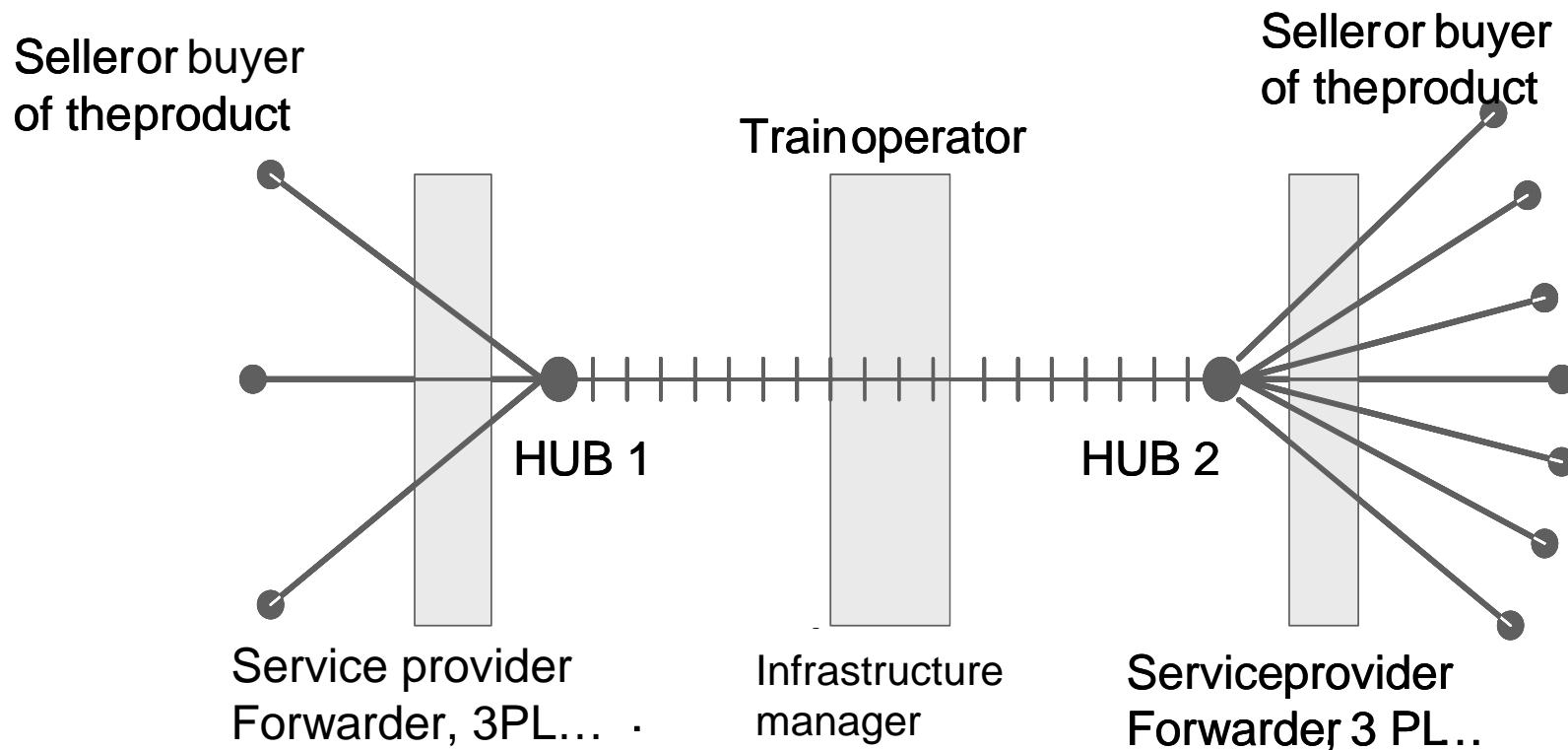
- 1) A Freight/train Operator–3PL Model
- 2) An Anchor Customer Model
- 3) An Agent Model, and
- 4) 3PL/4 PL Model

Choice of business model is depending on market conditions. Each model puts different requirements on the leader of a given network as regards risk– taking for service, sales and fulfillment of the venture’ contractual obligations.

Model no 1: A Freight/train Operator–3PL Model



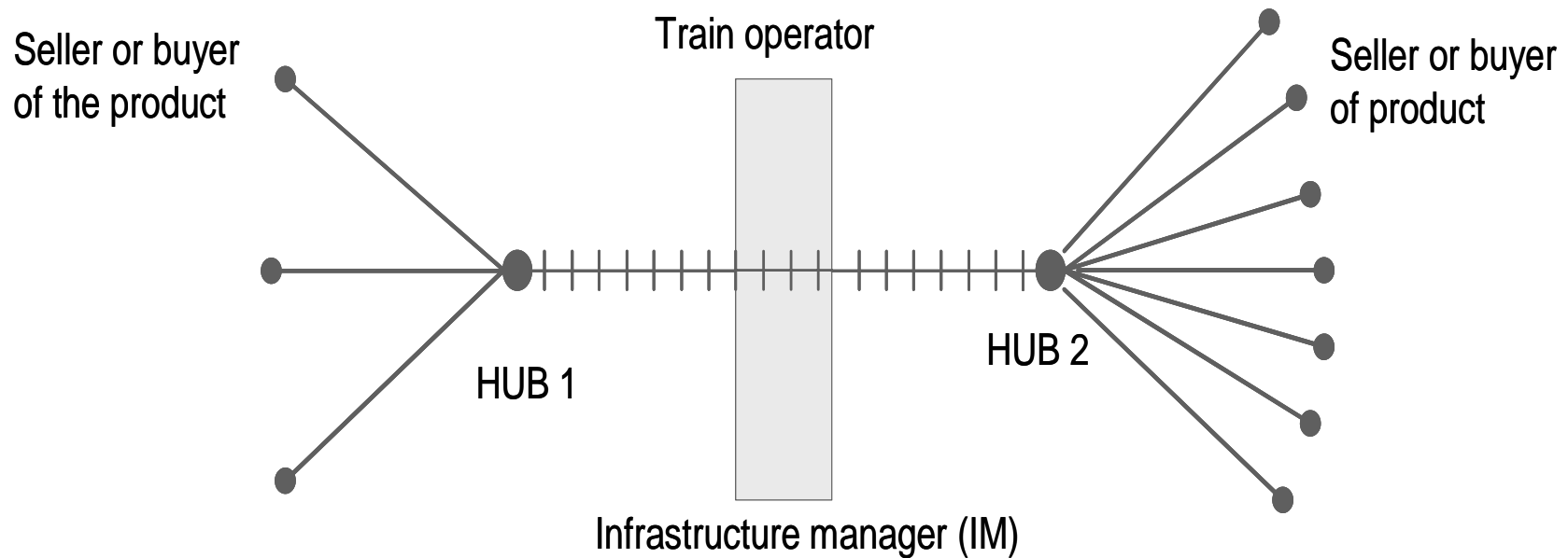
Train Operator and a 3PL Provider cooperate but, 3PL/4 PL concludes contracts with clients



Improving European Railways

Model no 2: An Anchor Customer Model

”Anchor Customer Model ”where one train operator concludes contract with clients (shippers or consignees) on behalf of the venture

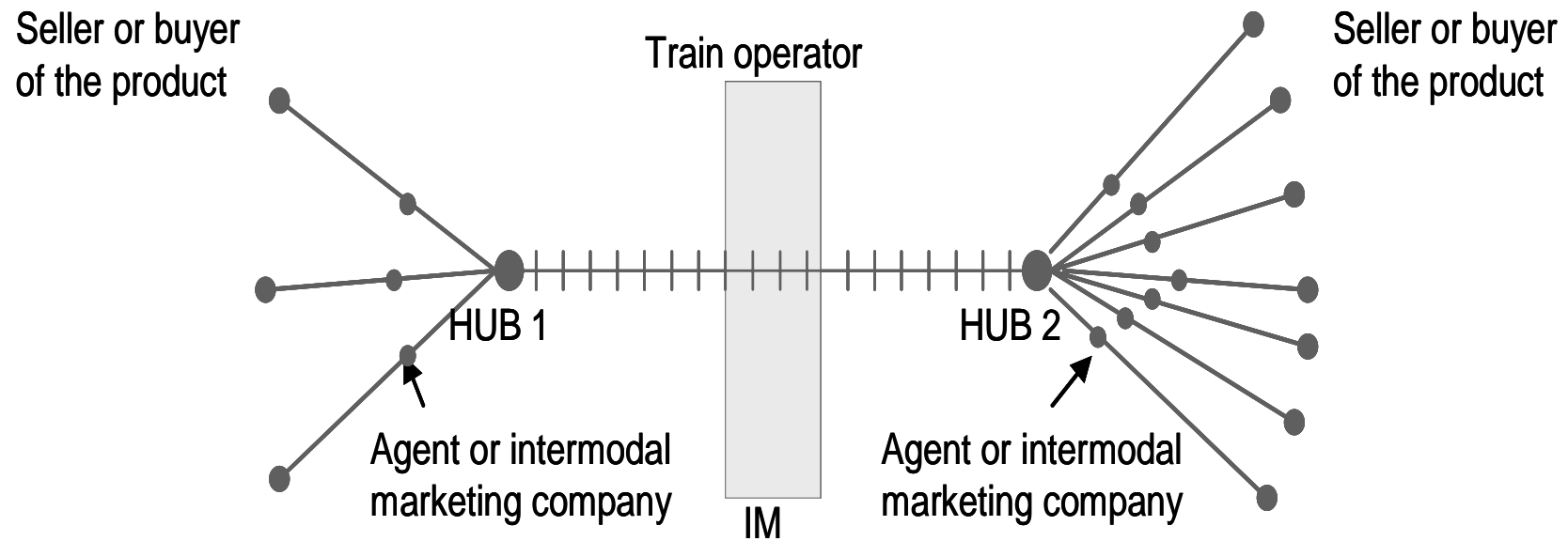


Model no 3:

An Agent Model



Agents/Brokers act on behalf of train operator(s), make deals with clients and receive commission based on capacity sold or value of freight forwarded

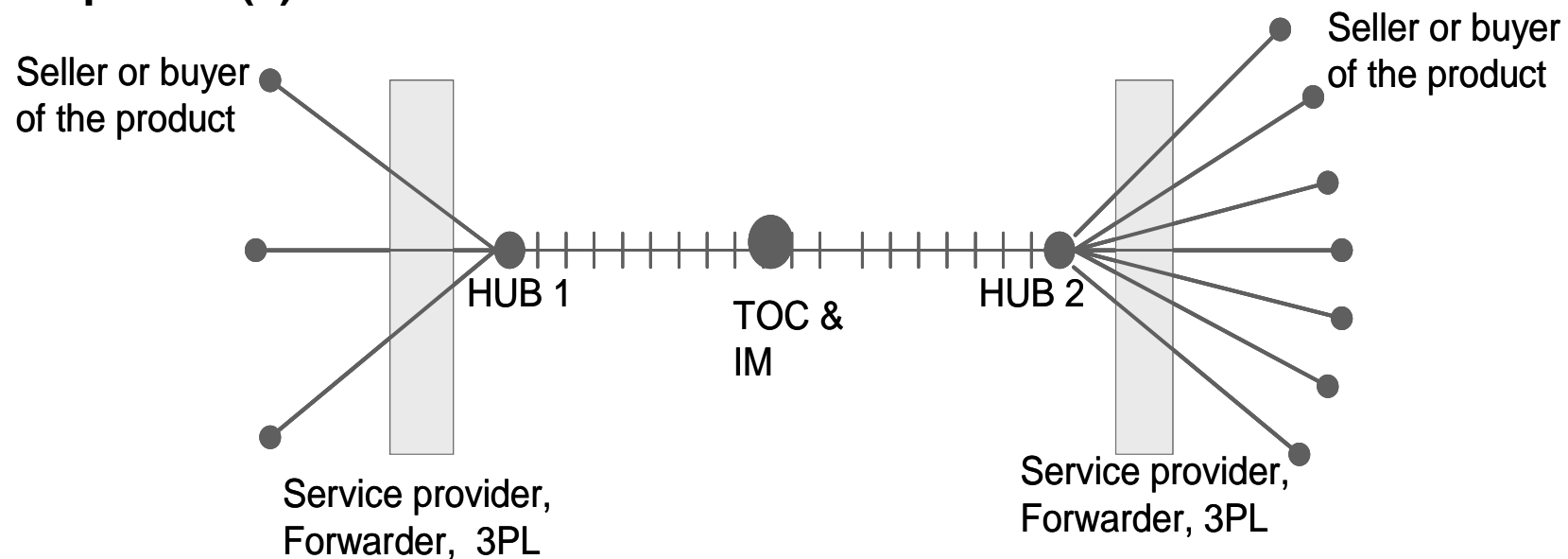


Improving European Railways

Model no 4:

3PL/4 PL Model

A Model where 3 or 4 PL Suppliers conclude contracts with customers as well as IMs and TOC, and may also own train operator(s)



Competitiveness of RETRACK Venture



Requirements to Network Business model:

- Set the service level/quality along the corridor
- Conclude contracts with client (shippers/ consignees)
- Collect service fees from clients
- Negotiate rates with operators/subcontractors
- Credit subcontractors for their shares of service provision
- Carry risk for sales and financing of supply
- Define and chooses client base
- Provide financial capital

Competitiveness of RETRACK Venture



Requirements to Network Business model:

- Provides equipment
- Integrate operators for joint service offering
- Define the level and types of ICT- solutions
- Define a set of services which meet quality requirements of different freight/shipper categories
- Schedule train operations and secures optimal utilisation of personnel and rolling stock
- Expand train operations/customers service to other geographic markets

Conditions for Network business model competitiveness;



- Reliability, Punctuality and Time;
 - Several border-crossings
 - Infrastructure bottlenecks
- Operation in 5 countries;
 - Standardisation & Integration of ;
 - RUs/operators quality management
 - Safety and liability for cargo damages
 - ICT and management techniques
 - individual partners business processes
 - Fulfilment of EU legal and social requirements
 - Withstanding financial risk and competition pressure

Thank you for your attention!

Contact:

Johanna Ludvigsen jl@toi.no

Kjell Werner Johansen kjo@toi.no

Challenges for RETRACK Train Operations and Customer Service:



 Revenues $>$ Cost ?

=> Business model

Evolution of Business Models



- Few or all four business models may be applied at the same time to serve different freight categories/ customer segments along the same corridor.
- One type of business model may be adopted for operation of container train, while another for wagon-loads.

Challenges for RETRACK Train Operations and Customer Service

1. Several border-crossings - threats to time, punctuality and reliability
2. Standardisation of individual operator's service quality
3. Dealing with infrastructure bottlenecks and high-cost of network fees
4. Transport safety, liability for cargo damages
5. Application of ICT technology for venture's service management
6. Efficient data exchange and commercial data security
7. Integration of individual partner's business processes
8. Fulfilment of European legal and social requirements
9. Dealing with financial risks and internal and external competition pressures

Competitiveness of RETRACK Venture: Empirical Examples of Business Models



| Model | EU | US |
|------------------------|--|---|
| Operator – 3PL model | UIRR companies (<50%) | JB Hunt + BNSF |
| Anchor customer model | All incumbent railway companies | All major railroads |
| Agent model | UIRR companies (>50%) DB Railion, | CSX Intermodal Triple Crown |
| 3/ 4 PL Supplier model | DHL Freight, Railion–Schenker (where Train Operators Owns 3 and 4 PL Supplier) | The Hub Group Schneider National |

Improving European Railways

Competitiveness of RETRACK Venture: Business Development Scenario 1



- A large industrial manufacturer establishes
 - Freight/Train Operators to forward freight from its industrial hubs to market destinations abroad
- Freight/Train Operator needs backhaul
 - Negotiate directly with independent clients or through intermediaries
- All participants benefit from lower freight rates and competitive edge.
- Competitors jump on bang wagon, but a single Freight/Train Operator cannot service all clients
- Refers to LSPs who links-up several operators with multiple shippers

Evolution of Business Models Scenario 2



- Big wholesaler/ global manufacturer contacts LSP because of
 - Need for more cost-effective intermodal service
- LSP plans and design service provision and negotiates with subcontractors including Freight/Trains Operators for provision of long-haul.
- LSPs contact other large customers
 - Freight volumes grow
- New companies offer service on the route and more complex Intermodal transport is demanded.