



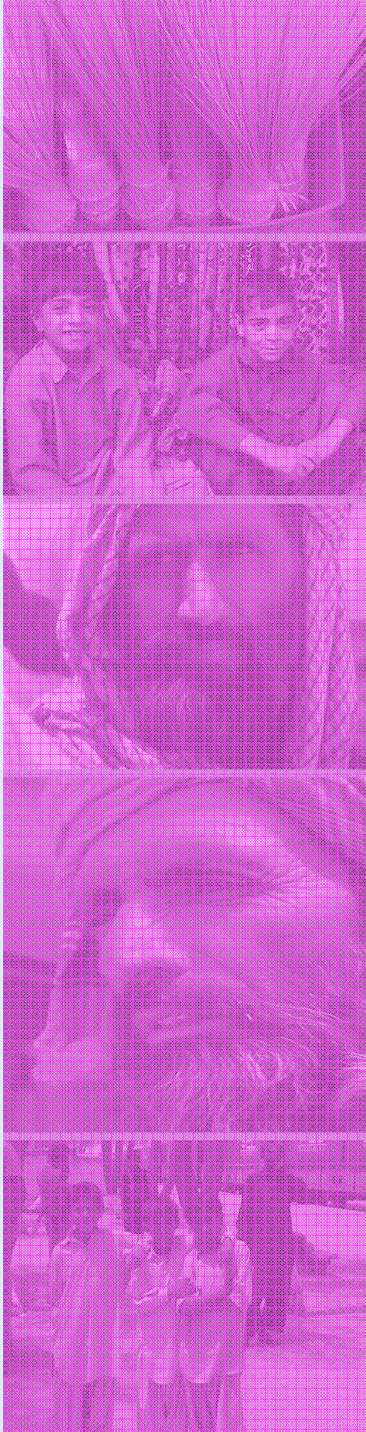
Euro-Asian Transport Links (EATL) workshop: 11-13 November 2009, Istanbul

**“Container block trains
in Central Asia:
Theory and practice”**

**Constantinos Chr. Alexopoulos
International Transport & Logistics Expert**

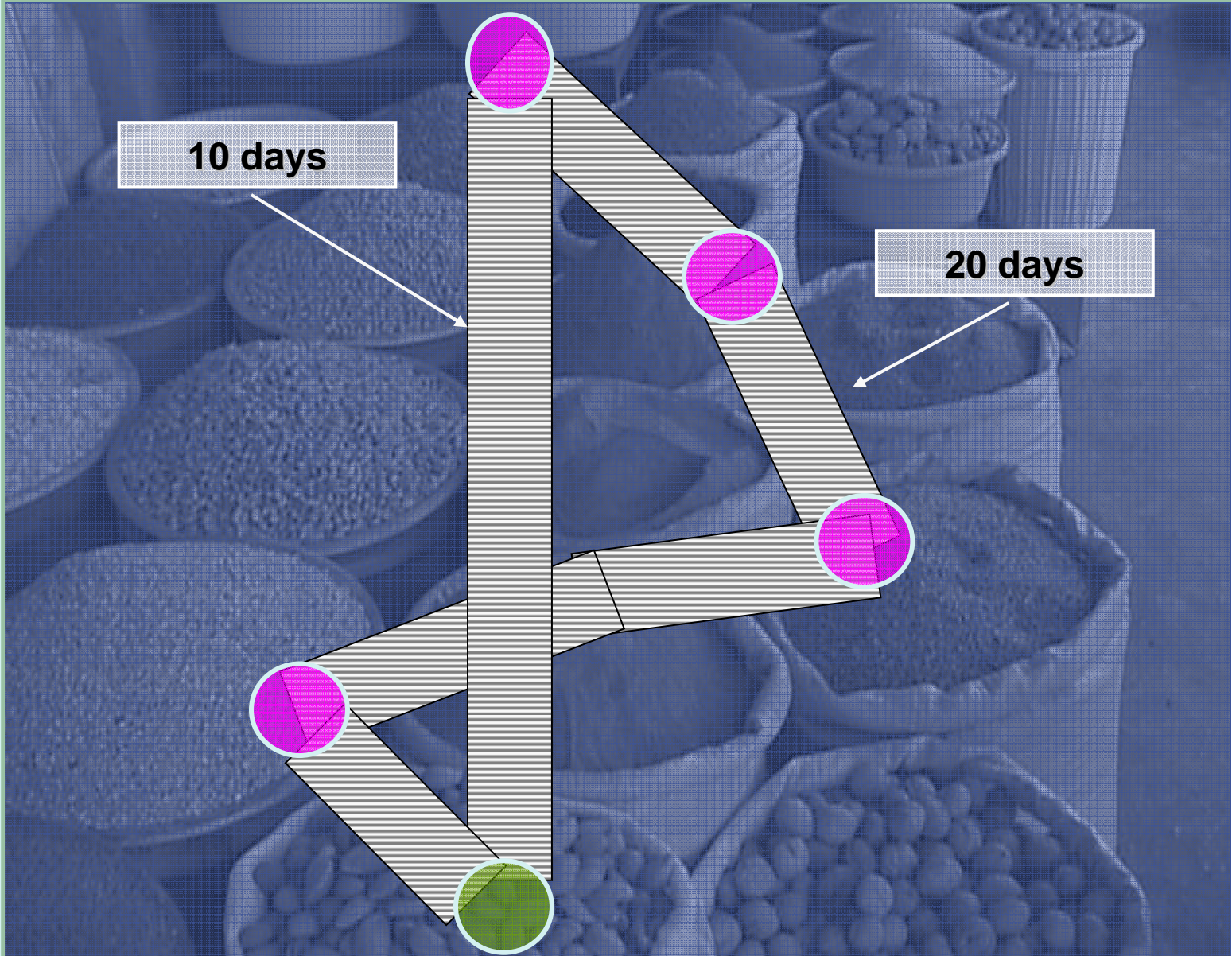
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Block Trains: Fashion or a myth

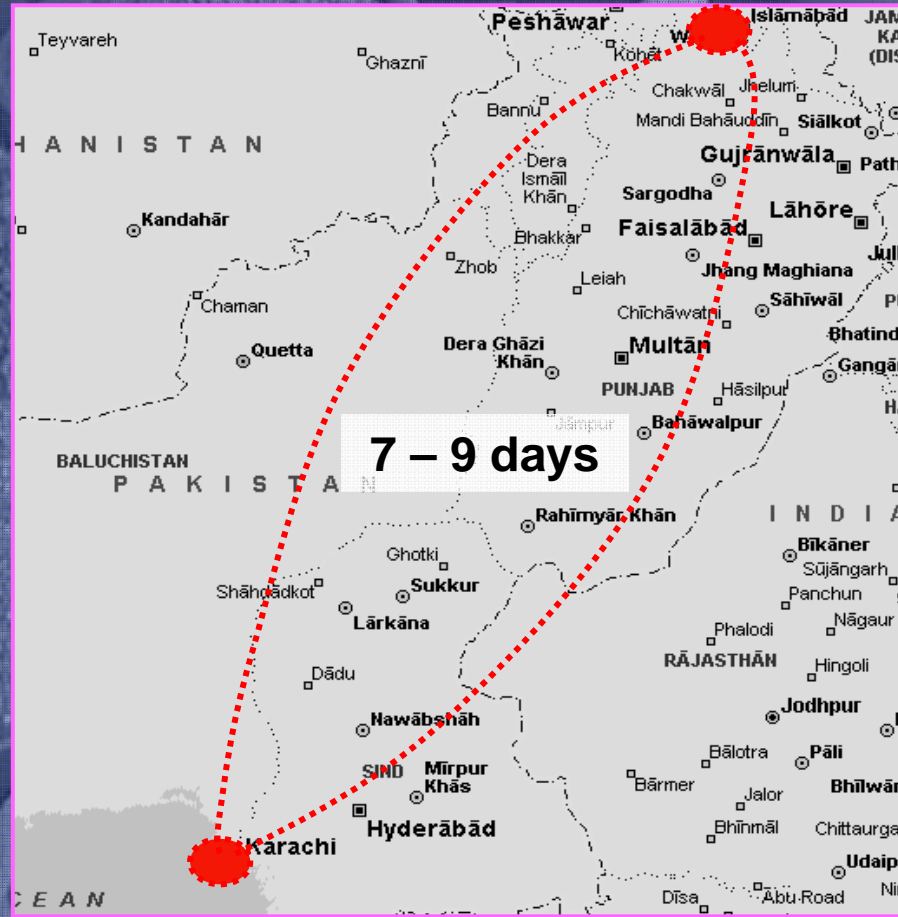
Block Trains: Fashion or a myth



Containers Market

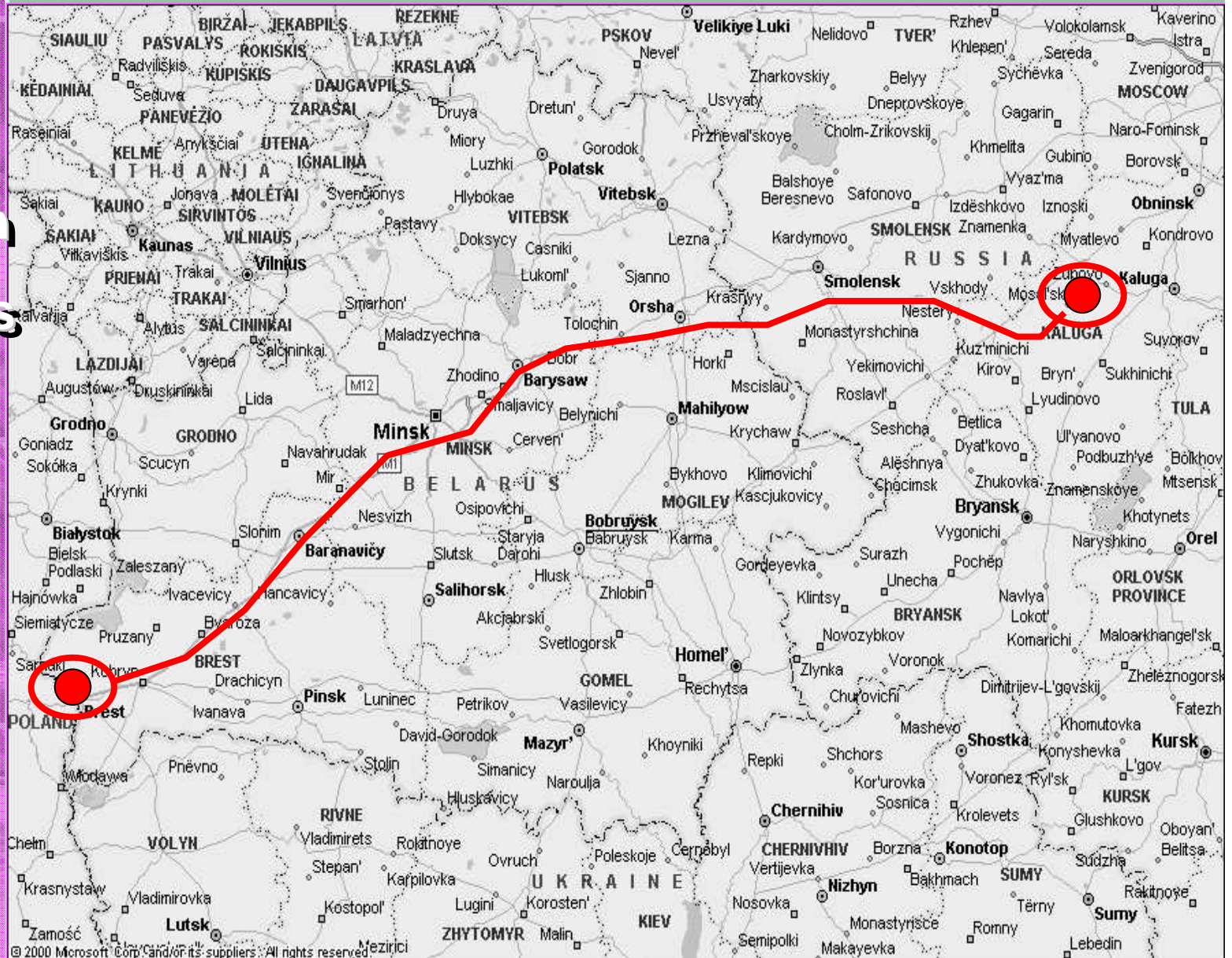
Shipping Lines

Who operates Containers?
Shipping Lines
Global Forwarders
Shippers



Containers Market

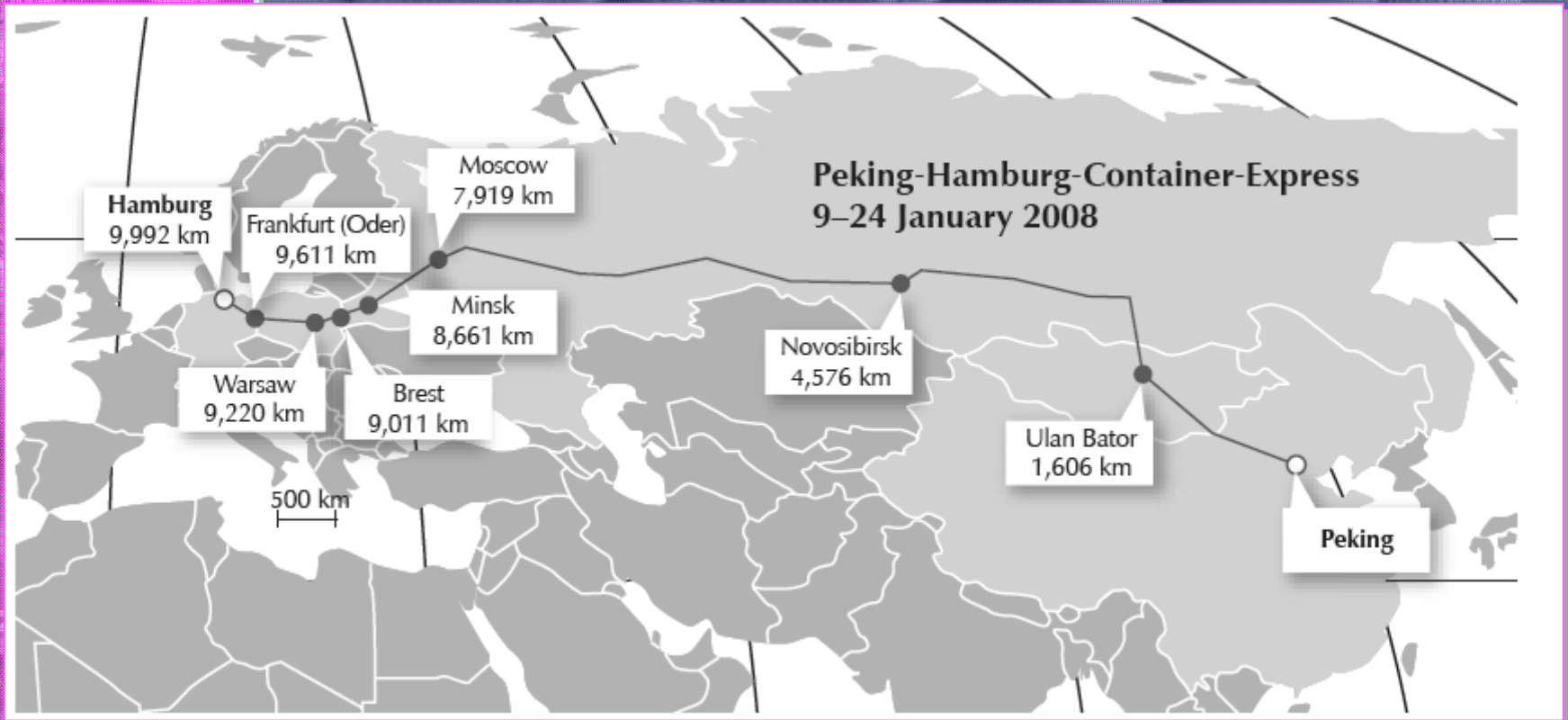
Volkswagen
Block Trains

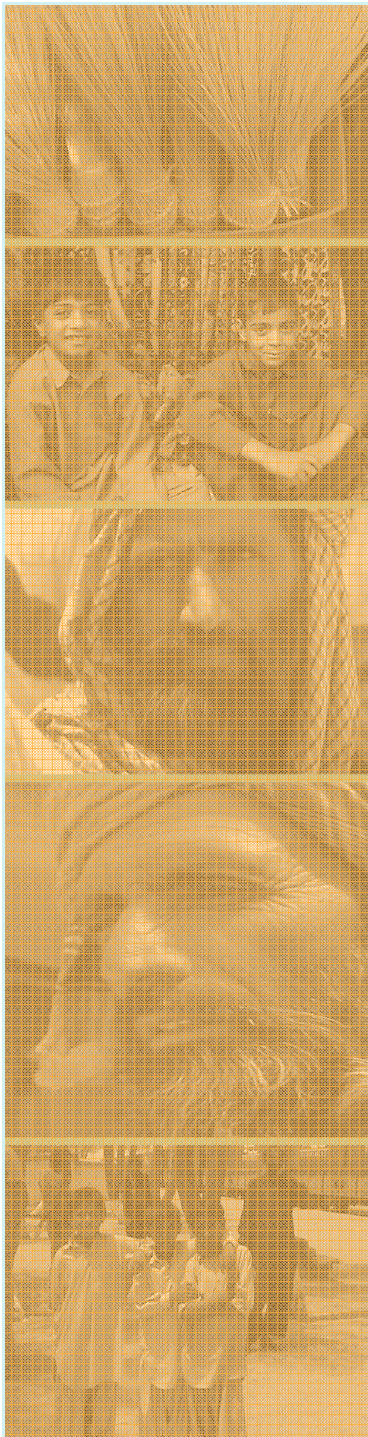


Containers Market

DB

Block Trains





The big Challenge for Railways



The big Challenge for Railways

- How economies of scale are going to be created for the Market?

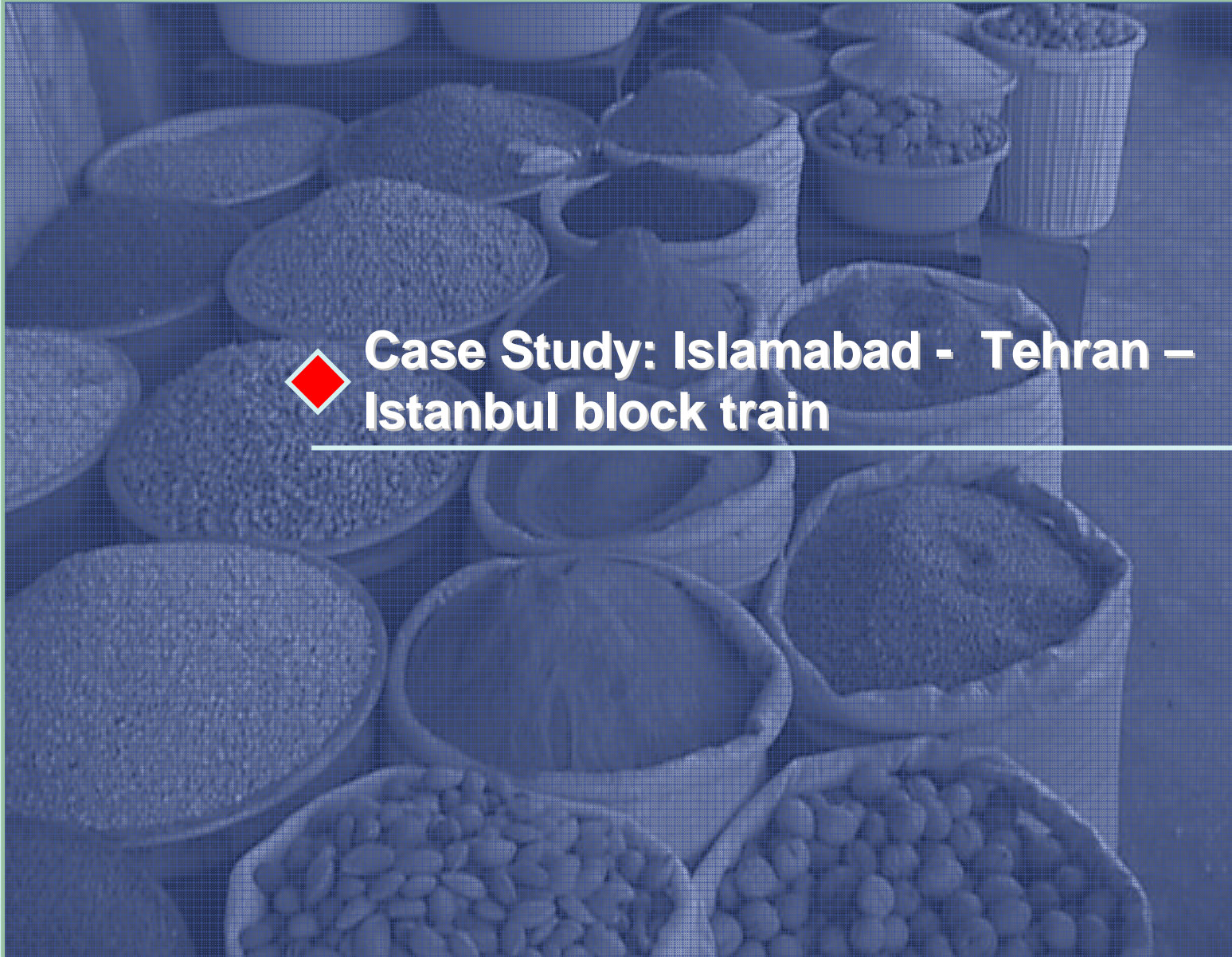
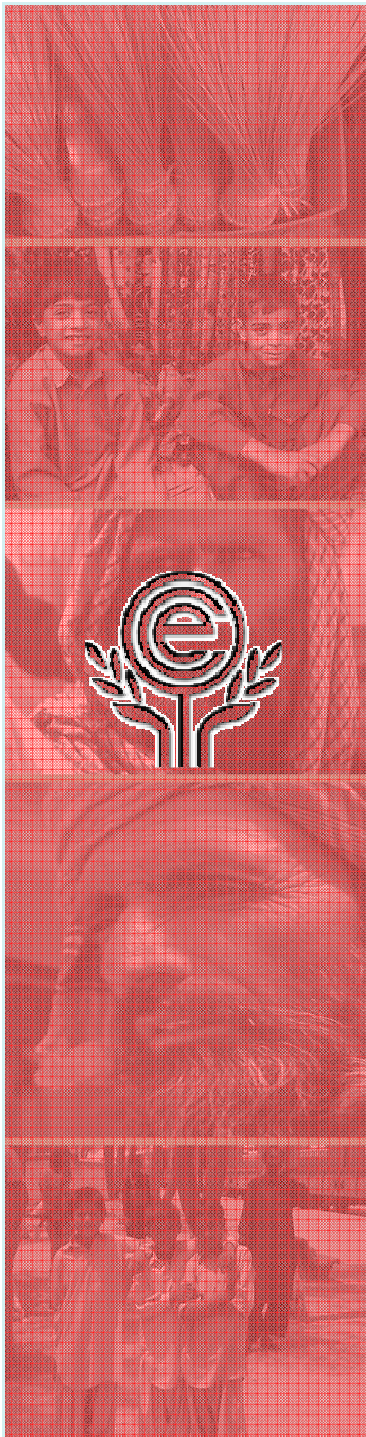
**STATE RAILWAYS HAS A
ROLE TO PLAY!**

- How, small forwarders and shippers are going to be competitive, offer more value added services or take

the courage to export even one pallet?

- How, economies of the landlocked countries or of countries in Central Asia are going to be developed?

Be competitive? Increase their exports and visibility to the global market?



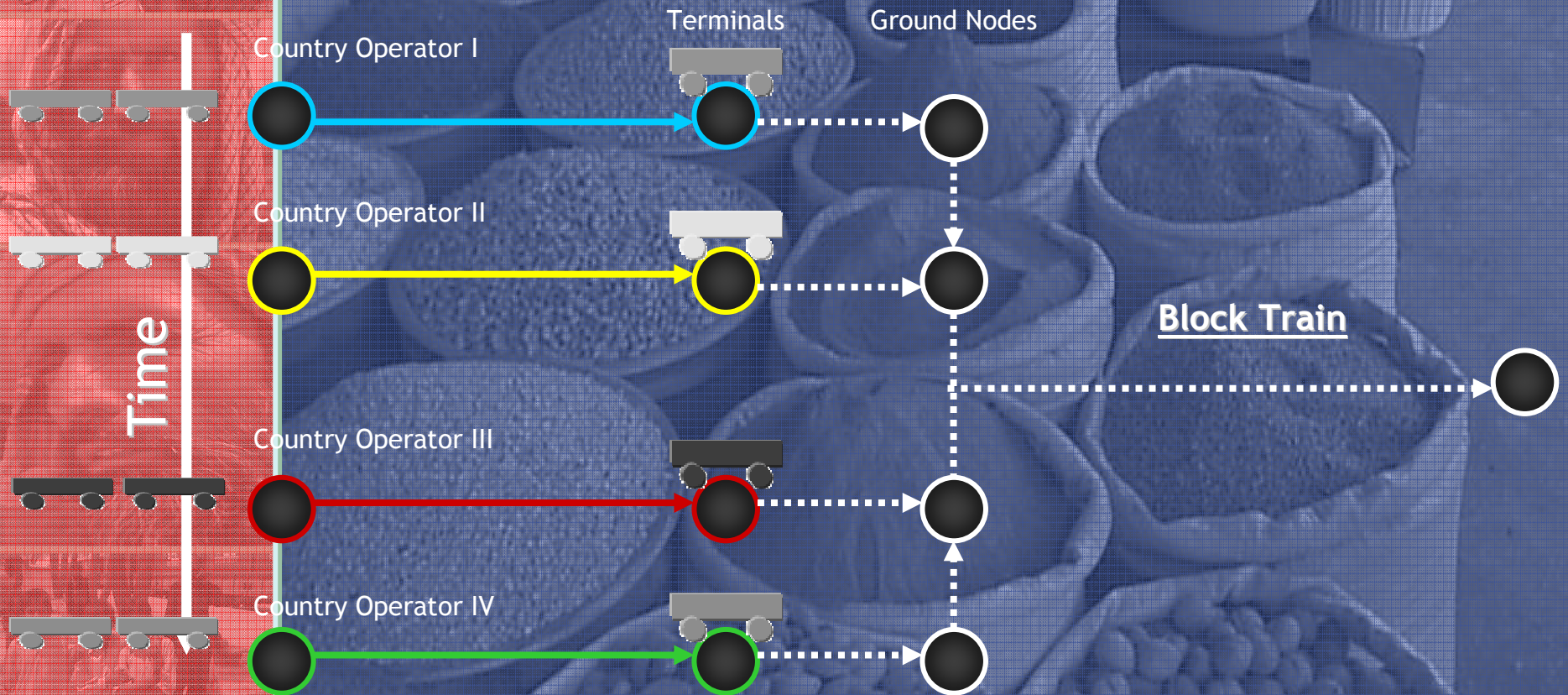
Case Study: Islamabad - Tehran – Istanbul block train

What are the main decisions?

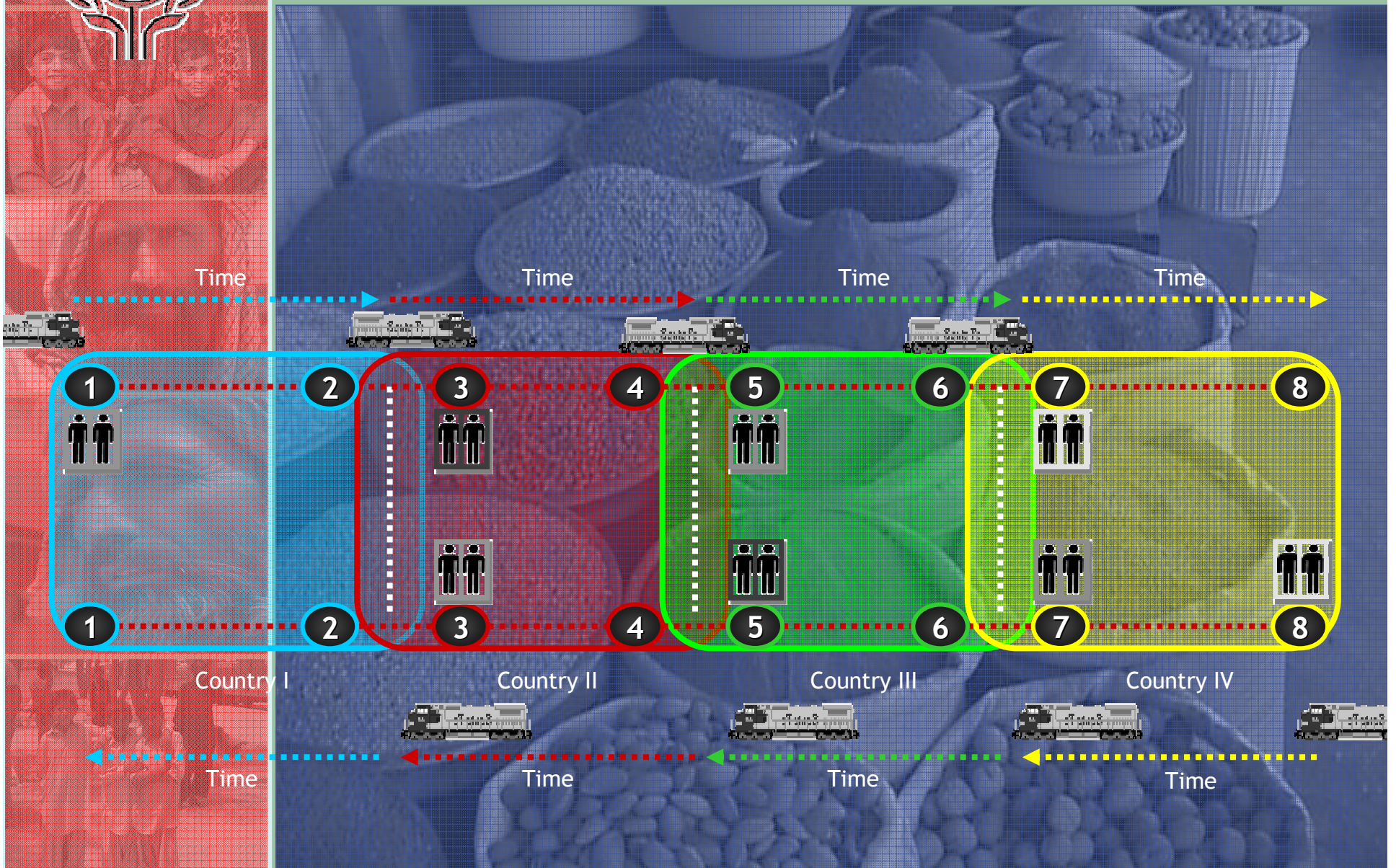
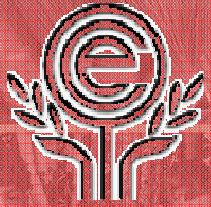
- ✓ Train origins, destinations, and routes
- ✓ Train days of operation and train times
- ✓ Train block-to-train assignment by day of the week
- ✓ Trip plans for all cars
- ✓ Locomotive assignment
- ✓ Crew assignment



Allocation of Wagons per Country



Crew Scheduling



An Integrated Time Schedule

Pakistan



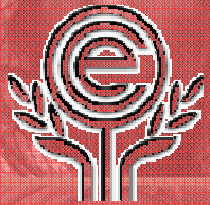
An Integrated Time Schedule

Iran



An Integrated Time Schedule

Turkey

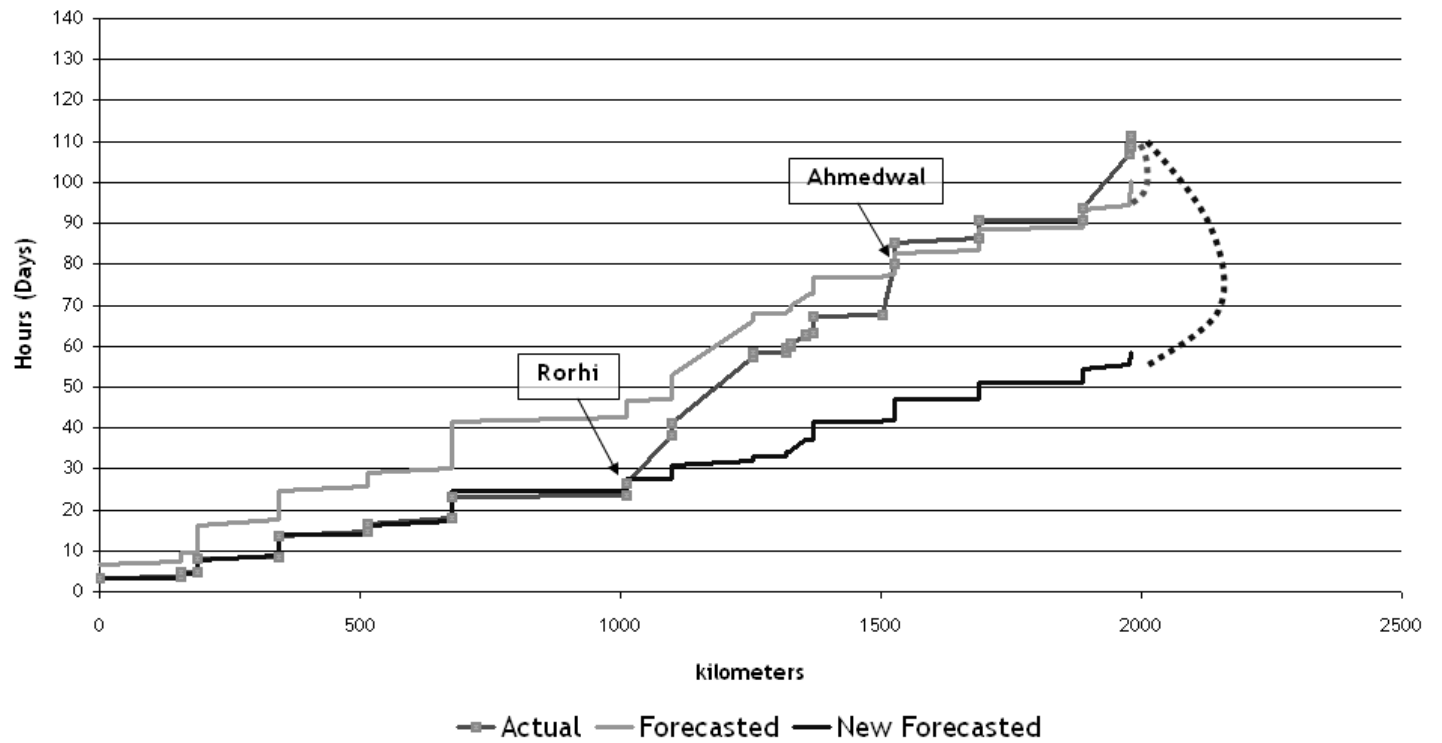


Containers Market

Pakistan



Pakistani Timeschedule



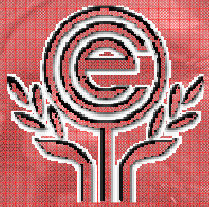
An Integrated Time Schedule

Time Schedule Scenarios

Scenarios concerning the Optimal Time Schedule

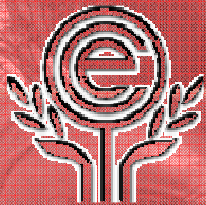
Starting time and day	<u>Wednesday</u> at <u>17:00 a.m</u>	<u>Wednesday</u> at <u>07:00 a.m</u>	<u>Wednesday</u> at <u>10:00 a.m</u>	<u>Wednesday</u> at <u>13:00 p.m</u>	<u>Wednesday</u> at <u>20:00 p.m</u>
<i>Arriving at Spezand(Quetta-Taftn section starts)</i>	Thursday 05:27 a.m	Wednesday 19:27 p.m	Wednesday 22:27 p.m	Thursday 01:27 a.m	Thursday 08:27 a.m
<i>Arriving at Zahedan</i>	Thursday 01:30 a.m	Thursday 15:30 p.m.	Thursday 18:30 p.m.	Thursday 21:30 p.m.	Friday 04:30 a.m
<i>Arriving at Van lake (loading included)</i>	Tuesday 13:30 p.m	Tuesday 03:30 a.m	Tuesday 06:30 a.m	Tuesday 09:30 a.m	Tuesday 16:30 a.m
<i>Starting trip for Elazig</i>	Tuesday 18:30 p.m	Tuesday 08:30 a.m	Tuesday 11:30 a.m	Tuesday 14:30 p.m	Tuesday 21:30 p.m
<i>Reach Elazig</i>	Wednesday 07:48 a.m	Tuesday 21:30 p.m	Wednesday 0:50 a.m	Wednesday 03:48 a.m	Wednesday 10:48 a.m

**Pakistan –
Iran –
Turkey**



An Integrated Time Schedule

**Pakistan –
Iran –
Turkey**



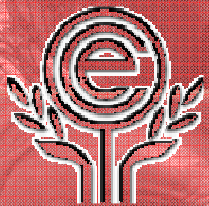
Sum of the old proposed

	Kilometers	Hours
Pakistan	1990	106 hours and 30 minutes
Iran	2570	139 hours
Turkey	2006	81 hours and 59 minutes
TOTAL	<u>6566</u>	327 hours 29 minutes (13 days and 15 hours and 29 minutes)

Sum of the new proposed

Kilometers	Hours
1015	36 hours and 40 minutes
2345	96 hours and 35 minutes
1994,97	77 hours and 17 minutes
<u>5354,97</u> <u>(1211 km less!)</u>	210 hours and 32 minutes (<u>8 days and 18 hours and 32 minutes!</u>)

**Pool of
Containers**



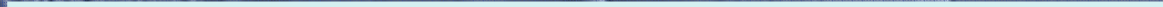
**I.T.I.
express**

FCL / LCL





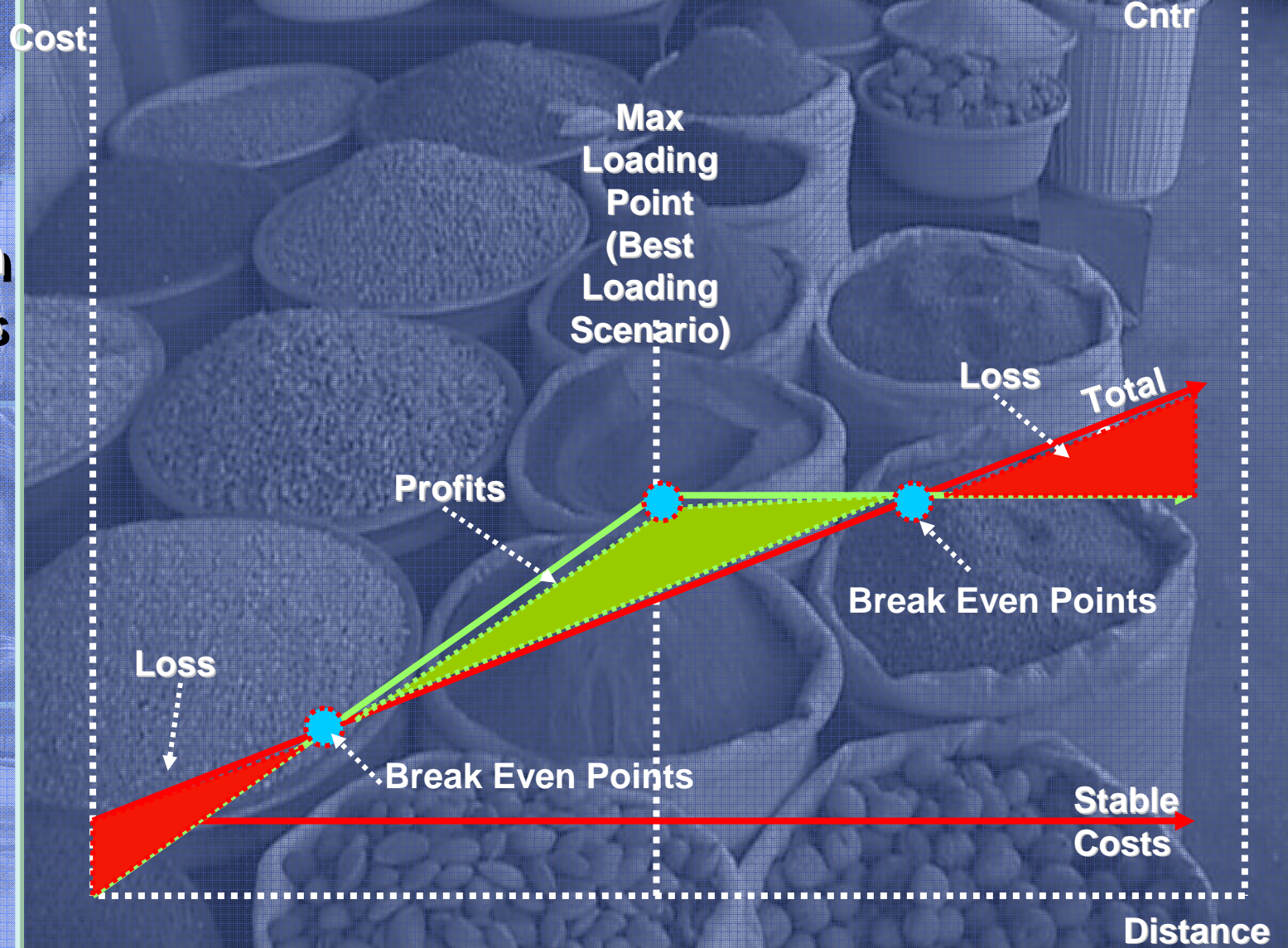
Economics of Block Trains



The Tariffs / Economics

$$\text{Revenue} = \text{Num Cntr} \times \text{Price per Cntr}$$

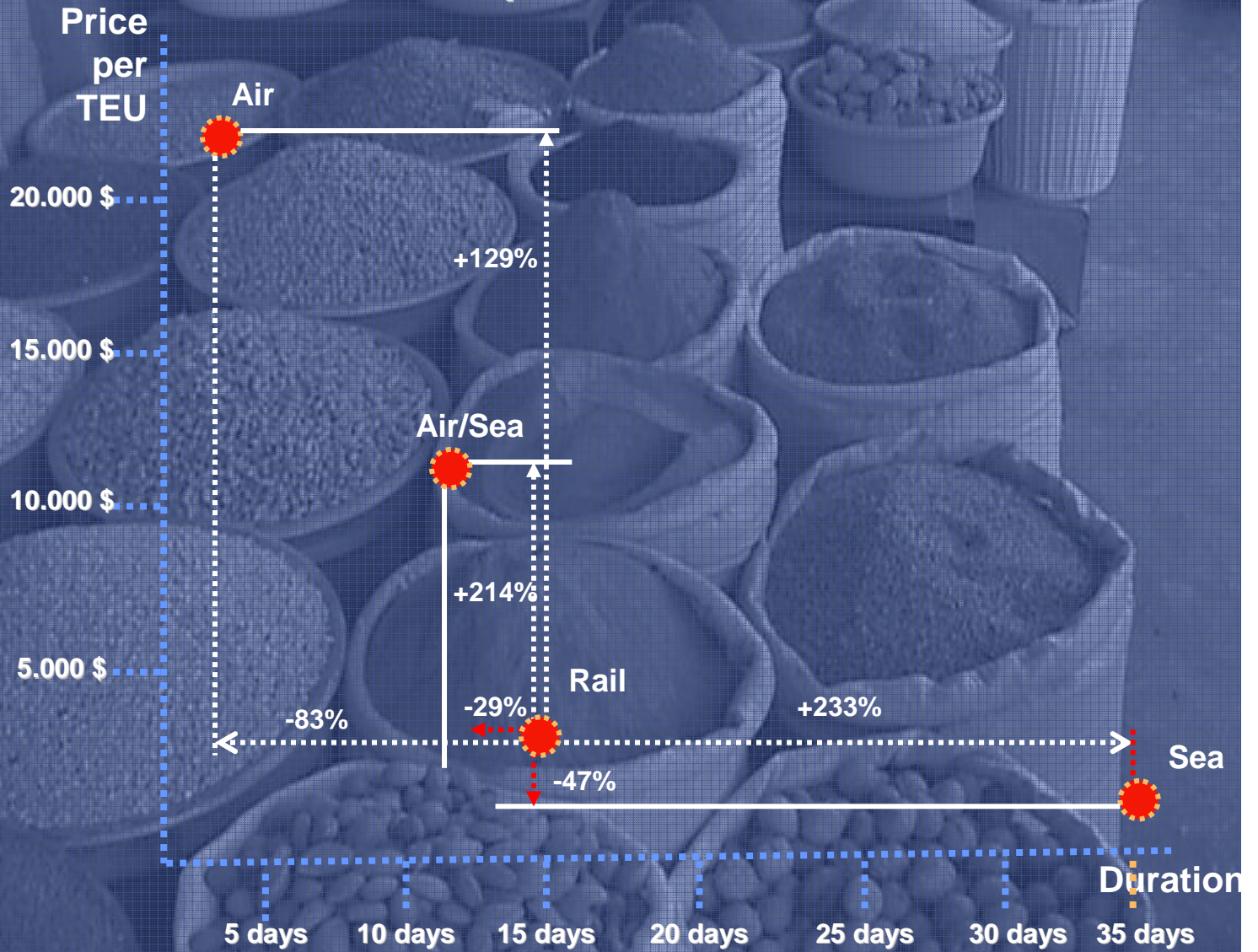
Block Train Economics



The Tariffs / Economics

Competition

Relationship of Price and Duration





◆ **Corridor Management Mechanism**

Corridor Management Mechanism

Corridor Functions

Operation and maintenance of public Infrastructure and facilities

Management's role is to guide the planning and procurement of these assets. Its goal is to insure that these assets are:

- designed to provide efficient movement of transport and cargo along the infrastructure and through the facilities constructed and maintained so as meet required standards, of sufficient capacity to meet projected demand, used efficiently and fully utilized.

Provision of Transport and Logistics services

its objective should be to promote more efficient services, usually be encouraging competition but often by allowing vertical and horizontal integration. Vertical integration offers advantages to shippers who want to contract for door-to-door services rather than a sequential series of services. Horizontal integration offers economies of scale in the marketing and information services necessary to achieve efficient utilization of transport equipment

Regulation of trade and transport

they perform an advocacy role discouraging excessive regulation and reforming regulation that leads to inefficiency in the movement of goods through the corridor especially unnecessary delays and informal payments.

Corridor Management Mechanism

Incubation

New
Operational
Unit by the 3
Rail
organizations

Isolated
from the 3 R.Os.
operational Unit

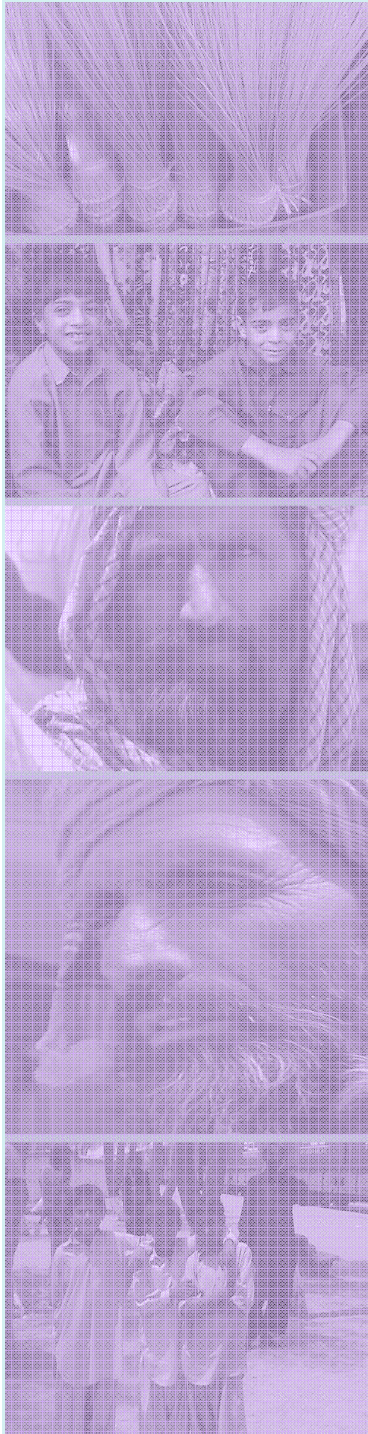
New legal entity
based on its
Profits and
losses

Neutrality!

Incubation Period (1 year)

Time

International Organization facilitates agreements, access to conventions, design of cooperation processes, ensure smooth operations of the train, ensures that the scheme runs with its own profits



◆ A new block train route

Route 5

