"Container block trains in Central Asia: Theory and practice"

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International Transport & Logistics Expert
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- A new block train route
Block Trains: Fashion or a myth

10 days

20 days
Who operates Containers?

Shipping Lines
Global Forwarders
Shippers

Containers Market

7 – 9 days
Containers Market

Volkswagen Block Trains

Map showing the route from Brest to Kaluga.
Containers Market

DB Block Trains

Peking-Hamburg-Container-Express
9–24 January 2008

Hamburg 9,992 km
Frankfurt (Oder) 9,611 km
Moscow 7,919 km
Warsaw 9,220 km
Brest 9,011 km
Minsk 8,661 km
Novosibirsk 4,576 km
Ulan Bator 1,606 km
Peking
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
An Integrated Time Schedule
An Integrated Time Schedule
An Integrated Time Schedule

Time Schedule Scenarios

<table>
<thead>
<tr>
<th>Scenarios concerning the Optimal Time Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Starting time and day</strong></td>
</tr>
<tr>
<td><strong>Arriving at Spezand (Quetta-Taftn section starts)</strong></td>
</tr>
<tr>
<td><strong>Arriving at Zahedan</strong></td>
</tr>
<tr>
<td><strong>Arriving at Van lake (loading included)</strong></td>
</tr>
<tr>
<td><strong>Starting trip for Elazig</strong></td>
</tr>
<tr>
<td><strong>Reach Elazig</strong></td>
</tr>
</tbody>
</table>
An Integrated Time Schedule

<table>
<thead>
<tr>
<th>Country</th>
<th>Kilometers</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan</td>
<td>1990</td>
<td>106 hours and 30 minutes</td>
</tr>
<tr>
<td>Iran</td>
<td>2570</td>
<td>139 hours</td>
</tr>
<tr>
<td>Turkey</td>
<td>2006</td>
<td>81 hours and 59 minutes</td>
</tr>
<tr>
<td>TOTAL</td>
<td><strong>6566</strong></td>
<td>327 hours 29 minutes (13 days and 15 hours and 29 minutes)</td>
</tr>
</tbody>
</table>

**Sum of the old proposed**

<table>
<thead>
<tr>
<th>Kilometers</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan</td>
<td>5354.97 (1211 km less!)</td>
</tr>
<tr>
<td>Iran</td>
<td>2345</td>
</tr>
<tr>
<td>Turkey</td>
<td>1994.97</td>
</tr>
<tr>
<td>TOTAL</td>
<td><strong>5354.97</strong></td>
</tr>
</tbody>
</table>

**Sum of the new proposed**

<table>
<thead>
<tr>
<th>Kilometers</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan</td>
<td>1015</td>
</tr>
<tr>
<td>Iran</td>
<td>96 hours and 35 minutes</td>
</tr>
<tr>
<td>Turkey</td>
<td>1994.97</td>
</tr>
<tr>
<td>TOTAL</td>
<td>210 hours and 32 minutes (8 days and 18 hours and 32 minutes!)</td>
</tr>
</tbody>
</table>
Pool of Containers

FCL / LCL

I.T.I express

FCL / LCL
Economics of Block Trains
The Tariffs / Economics

Relationship of Price and Duration

Price per TEU

Air

Air/Sea

Rail

Sea

5 days 10 days 15 days 20 days 25 days 30 days 35 days

5.000 $ 10.000 $ 15.000 $ 20.000 $ 25.000 $ 30.000 $

5 days 5 days 10 days 10 days 15 days 15 days 20 days 20 days 25 days 25 days 30 days 30 days 35 days

Rail: -47%  -29%  +233%

Air: +129%  +214%

Air/Sea: +233%  -83%  +129%
<table>
<thead>
<tr>
<th>Corridor Functions</th>
<th>Operation and maintenance of public Infrastructure and facilities</th>
<th>Provision of Transport and Logistics services</th>
<th>Regulation of trade and transport</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management’s role is to guide the planning and procurement of these assets. Its goal is to insure that these assets are:</td>
<td>its objective should be to promote more efficient services, usually by 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.</td>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>
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!

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