Rail and Multi-Modal Operations

A Logistics Business Perspective

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End to End Solutions in Logistics: Always Multi-Modal

- End to solutions in logistics are always multi-modal
- There is always a road component to air/sea/rail cargo
- Increasingly a mix of sea-rail or even air-rail is becoming popular as customers juggle cost and transit time (detailed discussion on this follows later)

- What logistics operators want in terms of operating environment are ALWAYS the same;
  - Efficient and cost effective trunk infrastructure and services
  - Efficient and costs effective gateways (nodal port/airport/rail-yard) and ease of multi-modal transfers related to these gateway transit points
  - Minimum stoppage and procedural complexity at international borders/gateways
Multi-Modality of Eurasian Rail Network
Eurasia Rail-Air Solution: Serving Peak Season and Special Needs Customers
Multi-modal Extension to South East Asia: Network of Services

RAIL
- Suzhou-Warsaw
- Zhengzhou-Hamburg
- Chengdu-Lodz
- Lianyungang/Chengdu-Istanbul

ROAD
- South-East Asia Road network
Business Parameters: What Makes Multi-modal Solutions Attractive

### Chengdu to Frankfurt-Door to Door**

<table>
<thead>
<tr>
<th>Mode</th>
<th>Transit Time</th>
<th>Cost (X times ocean freight)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Definite Air (TDI)</td>
<td>1-2</td>
<td>16-22</td>
</tr>
<tr>
<td>Air</td>
<td>3-5</td>
<td>11</td>
</tr>
<tr>
<td>Rail Air via MidEast hub</td>
<td>10-12</td>
<td>8.5</td>
</tr>
<tr>
<td>Sea Air</td>
<td>26-28</td>
<td>9</td>
</tr>
<tr>
<td>Rail</td>
<td>16-18</td>
<td>1.6</td>
</tr>
<tr>
<td>Ocean</td>
<td>45</td>
<td>1</td>
</tr>
</tbody>
</table>

**Number are approximate; numbers based 1 FEU (15.3 ton) shipment. These numbers do not reflect DPDHL figures.

### Time Cost Factor
For a shipment valued at USD 100k

<table>
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<tr>
<th>Interest p.a. (assumed)</th>
<th>6000 (@6%)</th>
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<tbody>
<tr>
<td>Interest per day</td>
<td>16.43</td>
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</table>

- Logistics solution is about a range of options with different transit times, time assurance, and costs.
- Customers have trade-offs; for e.g. using the interest time cost factor, rail saves about USD 480 per 100k shipment. For a large integrated supply chain savings in terms of time cost per container and reduction in working capital could be very substantive.
- Multi-modal approach provides solutions for different aspects of the same supply chain; for e.g. addressing seasonal demand, urgent repairs, or inventory management of higher value parts and components.
Cater to all types of Cargo

- Less than Container Load (LCL):
- Garments on Hangar
- Reefers and Temperature Control (real time monitoring and remote adjustment)
- Car racking systems
- Open top containers
- Specialized bulk cargo needs

Tracking and Security

- Containers enabled with GPS
- E-locks and in-container CCTV

Customs Clearance and Gauge transfer management

- Management of customs and all other regulatory and transport related documentation
- Operational management of transfer of containers at borders
Operational Priorities: Support from Rail and Other Authorities

- Cost Management: Cost effective access to modern rail logistics park/rail yard for private partners

- Strategic Pricing: Rail operators need to ‘right price’ services to allow the product to develop. There is a long-term vision to develop alternative trade-lane

- Right partners: Find partner(s) that are willing AND able to support this vision, and are also committed for the long haul. Would not happen if large global operators are not convinced of the intent of railway authorities to support this vision

- All stakeholders would need to understand that business would take time to pick-up as the market ‘internalizes’ gains from savings and gets convinced about operational and security aspects. Getting private sector LSPs on board critical. Getting a ‘champion’ customer is a big plus

- Modern and automated container transfer mechanism: Gauge change is not a show-stopper

- The focus must be on finding solutions that resolve operational and regulatory challenges rather than re-inventing the wheel. However, such solutions would have to cost efficient

- Never forget it is MULTI-MODAL: The rail operational solutions must build on that
Customs Facilitation: Minimize Physical Inspection and Interface

- Customs sealed container is not physically inspected, **and is allowed transit across modes with just seal integrity check**
- A common customs bond can be executed for the entire journey
- Container trains are not intercepted more than once at a border (i.e. both countries do a single physical inspection for security and customs related procedures)
- Use of an universal declaration for both rail authority and customs purposes
- Harmonized documents (for e.g. a single common consignment note) that does not require translation
- Advance electronic cargo information submission system is available
- Use of x-rays and minimal physical inspection, based on RMS (and 99% of sealed containers are not opened, less than 10% are x-rayed)
- Transit cargo is not made subject to PGA related procedures
- Some of these features are available in the Eurasian China-EU network, at the Alashankou-Dostyk (West Corridor)
India’s Best Options

- Link to Bangladesh: Padma Bridge (would be limited to IN-BD tradelane development, with extension to BBIN). Bangladesh RMG centered supply chain would be focused on air and sea options in mid-term.
- IN-EU and Central Asia multi-modal development: Sea-Road-Rail Link Bandar Abbas (eventually Chah Bahar).
- Customs Facilitation: Sealed container facilitation (multi-modal).
- Business development initiative: Get global operators/LSPs involved in the conceptualization stage. Work to identify and get a ‘champion’.
- Regular services direct (sea) between Bandar Abbas and major west coast ports: GoI to take call on making this a strategic long-term investment.
- Regular services (rail between Iran and Europe—both NSTC and via Istanbul): Services exist, but frequency very poor. Again longer term commitment and ability to invest in the risk would be critical.
- Strategic pricing: Initial pricing needs to focus on market development.
- Special focus on bulk: IN-Central Asia and IN-IR would have significant demand of bulk cargo. NSTC would see investments in industries that require a bulk goods supply chain.
Thank You

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