Enhancement of Containerisation in Asia

Mukul Saran Mathur
Head UIC Asia Regional Office,
New Delhi
ms.mathur@gmail.com
mathur@uic.org
GRFC-2010.St Petersburg
### ADB Asian Development Outlook 2010

<table>
<thead>
<tr>
<th>Region</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Asia</td>
<td>2.7</td>
<td>4.7</td>
<td>5.9</td>
</tr>
<tr>
<td>East Asia</td>
<td>5.9</td>
<td>8.3</td>
<td>7.7</td>
</tr>
<tr>
<td>South Asia</td>
<td>6.5</td>
<td>7.4</td>
<td>8.0</td>
</tr>
<tr>
<td>South East Asia</td>
<td>1.2</td>
<td>5.1</td>
<td>5.3</td>
</tr>
</tbody>
</table>

### IMF latest projections indicate:
- Within 5 years Asian economies will be 50% larger and will account for one third of Global output comparable to US and Europe economies.
- By 2030 Asia GDP will exceed G7.
Increasing Trade

- Asia’s Share in world merchandise grew from 21% in 1990 to 36% in 2007
- Bilateral Trade between China – India grew from US$2.3 billion in 2000 to US $56 billion by 2008
- China-ASEAN trade grew at 22% from US$40 billion in 2000 to US $230 billion in 2008
- India –ASEAN trade since 1998 grew at 27% from US$6 billion to US $38.4 billion
Regional Share in Asian Exports

WTO Statistics 2008

- North America: 17.8
- South and Central America: 2.9
- Europe: 18.4
- CIS: 2.5
- Africa: 2.8
- Middle East: 4.5
- Asia: 50.1
Potential of Container Traffic on Asia – Europe and Intra-Asia routes

Container traffic flows
2007 (TEUs)
15.5 million/16 million

Container traffic flows
2025 (TEUs)
41 million/57 million
Potential of Container Traffic on ASEAN

Container traffic flows 2007 (TEUs)
8.9 million TEU

Container traffic flows 2025 (TEUs)
22.8 million TEU
Potential of Container Traffic on South Asia

Container traffic flows 2007 (TEUs)

2.5 million TEU

Container traffic flows 2025 (TEUs)

13.8 million TEU
Potential of Container Traffic on North East Asia

Container traffic flows 2007 (TEUs)
21.5 million TEU

Container traffic flows 2025 (TEUs)
73.1 million TEU
Potential Traffic Growth on CIS

Container traffic flows 2007 (TEUs)
2.8 million TEU

Container traffic flows 2025 (TEUs)
10.6 million TEU
Potential of Container Traffic on West Asia

Container traffic flows 2007 (TEUs)
3.4 million TEU

Container traffic flows 2025 (TEUs)
9.8 million TEU
## International container traffic with Europe and other Asian regions (including intra-regional trade)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ASEAN</td>
<td>8.9</td>
<td>22.8</td>
<td>3.85%</td>
<td>7.42%</td>
<td>4.72%</td>
<td>5.36%</td>
<td>60</td>
</tr>
<tr>
<td>South Asia</td>
<td>2.5</td>
<td>13.8</td>
<td>7.81%</td>
<td>12.88%</td>
<td>9.09%</td>
<td>9.89%</td>
<td>80</td>
</tr>
<tr>
<td>North-East Asia</td>
<td>21.5</td>
<td>73.1</td>
<td>4.71%</td>
<td>9.62%</td>
<td>6.90%</td>
<td>7.03%</td>
<td>73</td>
</tr>
<tr>
<td>CIS</td>
<td>2.8</td>
<td>10.6</td>
<td>5.34%</td>
<td>10.70%</td>
<td>6.93%</td>
<td>7.75%</td>
<td>25</td>
</tr>
<tr>
<td>West Asia</td>
<td>3.4</td>
<td>9.8</td>
<td>4.39%</td>
<td>7.99%</td>
<td>5.62%</td>
<td>6.02%</td>
<td>75</td>
</tr>
</tbody>
</table>
### Projections 2025

#### Inter-regional & Intra-regional expected container traffic in '000 TEUs amongst Asian sub-regions

<table>
<thead>
<tr>
<th></th>
<th>ASEAN</th>
<th>South Asia</th>
<th>North-east Asia</th>
<th>CIS</th>
<th>West Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2007</td>
<td>2025</td>
<td>2007</td>
<td>2025</td>
<td>2007</td>
</tr>
<tr>
<td>ASEAN</td>
<td>1,549</td>
<td>3,793</td>
<td>489</td>
<td>2,244</td>
<td>4,485</td>
</tr>
<tr>
<td>South Asia</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>750</td>
</tr>
<tr>
<td>North-east Asia</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>6,457</td>
</tr>
<tr>
<td>CIS</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>187</td>
</tr>
<tr>
<td>West Asia</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Container traffic flows in ‘000 TEUs between Asian and European sub-regions

<table>
<thead>
<tr>
<th></th>
<th>ASEAN</th>
<th>South Asia</th>
<th>North-east Asia</th>
<th>CIS</th>
<th>West Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2007</td>
<td>2025</td>
<td>2007</td>
<td>2025</td>
<td>2007</td>
</tr>
<tr>
<td>Western Europe</td>
<td>1,928</td>
<td>3,142</td>
<td>907</td>
<td>2,137</td>
<td>7,131</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>87</td>
<td>203</td>
<td>56</td>
<td>186</td>
<td>472</td>
</tr>
<tr>
<td>Northern Europe</td>
<td>135</td>
<td>274</td>
<td>76</td>
<td>269</td>
<td>687</td>
</tr>
<tr>
<td>Europe (Former USSR)</td>
<td>39</td>
<td>94</td>
<td>51</td>
<td>215</td>
<td>223</td>
</tr>
</tbody>
</table>
## Additional Containerisation

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2025 (Base)</th>
<th>2025 (Base with additional containerisation)</th>
<th>CAGR for 2007-25 (Base)</th>
<th>CAGR for 2007-25 (Base with additional containerisation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intra Asia Trade</td>
<td>15.9</td>
<td>57.0</td>
<td>77.9</td>
<td>7.78%</td>
<td>9.81%</td>
</tr>
<tr>
<td>Asia’s Trade with Europe</td>
<td>15.5</td>
<td>41.0</td>
<td>59.1</td>
<td>5.90%</td>
<td>8.22%</td>
</tr>
<tr>
<td>ASEAN Trade with Europe &amp; Asia</td>
<td>8.3</td>
<td>22.9</td>
<td>32.6</td>
<td>6.18%</td>
<td>8.44%</td>
</tr>
<tr>
<td>S. Asia Trade with Europe &amp; Asia</td>
<td>1.4</td>
<td>11.0</td>
<td>13.0</td>
<td>12.67%</td>
<td>13.84%</td>
</tr>
<tr>
<td>NE Asia Trade with Europe &amp; Asia</td>
<td>19.5</td>
<td>68.3</td>
<td>88.8</td>
<td>7.67%</td>
<td>9.35%</td>
</tr>
<tr>
<td>CIS Trade with Europe &amp; Asia</td>
<td>1.7</td>
<td>7.6</td>
<td>16.0</td>
<td>9.28%</td>
<td>14.20%</td>
</tr>
<tr>
<td>W Asia Trade with Europe &amp; Asia</td>
<td>1.0</td>
<td>4.2</td>
<td>5.5</td>
<td>8.57%</td>
<td>10.58%</td>
</tr>
</tbody>
</table>
Future Trade lanes

• Europe to North East Asia and South Asia
• Trans Siberian line for carrying traffic of approximately 3.9 million TEU by 2025 between Europe – Russia and North East Asia
• West Asia and East Europe for carrying 1 million TEU by 2025
• ASEAN-North East Asia
• ASEAN-South Asia
• China-India
• TAR: 106000 km with 8300 missing links and gauge changes at more than 10 locations
Enhancement in Containerisation – Key Enablers

Technological developments

• Development of Standard Container dimensions and specifications
• Development of Container Ships

Development of institutional arrangements

• Customs: Shift from enforcement to trade facilitation
• Liability regime: Lack of uniform liability instrument
• Information Exchange: schedules/tariff.booking/tracking/documentation
• Security: Cargo/documentation

Development of infrastructure

• Development of Ports
• Development of Railways
• Development of Roads and Highways
• Inland Multimodal Terminals
Challenges for Enhancing Railways Role

• Construction of Missing links
  – Encouraging participation of multilateral financial institutions, shipping lines and local industry
  – Development of container Transhipment facilities

• Availability of suitable rolling stock
  – Ownership issues need to be addressed for cross border movement
  – Development of wagon lease market

• Operational Issues
  – Common standards
  – Staffing and Inspection issues
Challenges for Enhancing Railways Role

• **Pricing and marketing**
  – Uniform Tariff on the international corridor
  – Single agency marketing the corridor
  – Reduce cost through double stacking /long haul

• **Coordinating and Regulating Agency for international traffic**

• **Specialised agency for handling container business**
Phases of Container Rail Transportation Business development

- Phase 1 - State Support
- Phase 2 - Hand Over Operations to Autonomous Entity
- Phase 3 - State Support Withdrawal
- Phase 4 - Consolidation
CONCOR : IR Success

- Formed in 1988 by IR for handling container business
- Initial support by IR: land on lease/rolling stock/manpower
- CONCOR gave haulage charges to IR and charged from customers its own tariff
- CONCOR procured own wagons and built its own small terminals
- In 2006 IR permitted other operators (15) in business
- Traffic handled grew from 0.9 million TEU in 199-2000 to 2.42 million in 2009-10
- 59 terminals
Thanks

ms.mathur@gmail.com
mathur@uic.org

GRFC-2010.St Petersburg