Analysis of selected routes of interest to SPECA countries using the UNESCAP Time/Cost-Distance Methodology
The Time/Cost-Distance Methodology

- Transport to border
- Wait at border
- Cross/Change transport mode
- Transport to sea port
- Wait at sea port

<table>
<thead>
<tr>
<th>Time</th>
<th>Point of Origin</th>
<th>Transport to border</th>
<th>Wait at border</th>
<th>Cross/Change transport mode</th>
<th>Transport to sea port</th>
<th>Destination</th>
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<tbody>
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<td>Day 1</td>
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<td>Day 4</td>
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</tbody>
</table>
Selected routes of interest to SPECA countries

1. Western China – SPECA countries – Port in Europe
   Urumqi (China) – Hamburg (Germany)

2. Port in China – SPECA countries – Central Europe
   Shenzhen (China) – Pardubice (Czech Republic)

3. Port in China – SPECA countries
   Lianyungang (China) – Asaka / Ulugbek (Uzbekistan)

Joint UNESCAP/ OSJD Projects

- Operationalization of Euro-Asian rail routes with particular reference to landlocked countries in Asia and Caucasus (Phase II – Kazakhstan).
- Planning and organization of demonstration runs of container block trains along the Trans-Asian Railway Northern Corridor.
Demonstration run: railways of
- China,
- Kazakhstan,
- Russian Federation,
- Latvia
- 25 April 2008
- 96 containers
- Cargo: Tomato paste
Route 1. Urumqi (China) – Hamburg (Germany)

Distance and time breakdown:
- **Urumqi**: Start point
- **3,000 km**: Day 1 – Dostyk - Alashankou: 4 hrs. 28 min.
- **5,000 km**: Day 2 – Petropavlovsk: 24.6 km/h
- **6,000 km**: Day 3 – Zilupe: 38.5 km/h
- **10 day 20 hrs 46 min**: Total trip duration

Average speed: 534 km/day
Route 2. Shenzhen (China) – Pardubice (Czech Republic)
Customs inspection:
3 days 13 hrs. 50 min.

Border: 15 hrs. 27 min.

Average speed
21.5 km/h
(516.7 km/day)

Day 10
Dostyk – Alashankou

Day 20

Day 25
23 day 20 hrs 12 min

Pradubice

Chop

Bryansk-Lgovsky (10145 km)

Iletsk

Border: 6 hrs. 40 min.

Border: 15 hrs. 27 min.

Waiting for 4 delayed railcars: 2 days

Shenzhen (0 km)

Yanhu (4524 km)

Dostyk - Alashankou

12,360 km

Route 2. Shenzhen – Pardubice (March–April 2008)
Route 2. Shenzhen – Pardubice (March–April 2008)

Average speed
21.5 km/h
(516.7 km/day)

Distance

Ave Speed (km/day)

Average speed

21.5 km/h
(516.7 km/day)
Route 3. Lianyungang (China) – Asaka/ Ulugbek (Uzbekistan)

- Cargo: Automobile spare parts
- Origin: Republic of Korea
- Destination:
  - UzDaewooAuto Factory in Asaka, Uzbekistan
  - Samarkand Automobile Plant, Uzbekistan

- Lianyungang – Dostyk – Saryagash - Asaka
  - 9 months of 2005 – 14 container block trains
  - 8 months of 2008 – 27 container block trains
    - 1360 containers (221 – 20F, 1139 – 40F)
    - 1581 TEU
    - Average 58 TEU / train

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. The dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties.
Route 3. Lianyungang (China) – Asaka/ Ulugbek (Uzbekistan)

34 hours 15 min

1:30 5 August 2008
36 containers

11:45 6 August 2008
12 containers

30 July 2008
48 containers

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Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties.
Route 3. Lianyungang – Ulugbek (July – August 2008)

- **Lianyungang (0 km)**
- **Dostyk (4,182 km)**
- **Saryagash (6,013 km)**
- **Ulugbek**

- **Average speed**
  - 24.1 km/h (578.8 km/day)
  - 28.7 km/h
  - 23.3 km/h
  - 31.0 km/h

- **Time at border**
  - 3 hrs. 01 min.
  - 23 hrs. 46 min.
  - 2 days 10 hrs. 01 min.
  - ≈11 days
  - ≈8.5 days
  - ≈7.5 days
  - ≈6 days

- **Distance**
  - 6,385 km
Lianyungang – Almaty (April 2004)

Transit speed / day
- China: 763 km
- Kazakhstan: 751 km

Transshipment
- 3 hrs. 30 min. (5.5 min. per box)

Border-crossing (Overall - Customs + railways)
- China: 7 hrs. 15 min.
- Kazakhstan: 10 hrs. 50 min.
Route 3. Lianyungang – Ulugbek (July – August 2008)

Distance vs. Cost

- China
- Kazakhstan
- Uzbekistan

Cost:
- $5,044.69 (6,385 km)
- $2,821.26 (3,000 km)
- $2,037.68 (2,000 km)
- $2,491.97 (5,000 km)
- $4,452.41 (4,000 km)
- $5,044.69 (7,000 km)

Distance:
- 1,000 km
- 2,000 km
- 3,000 km
- 4,000 km
- 5,000 km
- 6,000 km
- 7,000 km

Cost Range:
- $5,044.69 - $2,037.68
- $4,452.41 - $2,821.26
- $5,044.69 - $2,037.68

Location:
- Lianyungang
- Ulugbek
- Kazakhstan
- Uzbekistan
Route 3. Lianyungang – Ulugbek (July – August 2008)

Cost per km
- 20 F
- 40 F

China
- USD 0.87 (0.49)
- USD 0.45 (0.25)

Kazakhstan
- USD 0.79 (0.44)
- USD 0.84

Uzbekistan
- USD 1.50

Distance:
- 1,000 km
- 2,000 km
- 3,000 km
- 4,000 km
- 5,000 km
- 6,000 km
- 7,000 km
Route 3. Lianyungang – Asaka (July – August 2008)
Route 3. Lianyungang – Asaka (July – August 2008)

Distance

1,000 km
2,000 km
3,000 km
4,000 km
5,000 km
6,000 km
7,000 km

Cost per km

20 F
40 F

China

Kazakhstan

Uzbekistan

Tajikistan

Cost per km

USD 0.82 (40 F)
USD 0.46 (20 F)

0.87
0.49
0.45
0.25