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Working Party on Rail Transport

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PRODUCTIVITY IN RAIL TRANSPORT

Addendum 1

Transmitted by the Governments of Bulgaria, Lithuania and Romania

NOTE: Following the decision of the Working Party at its fifty-sixth session (TRANS/SC.2/198, para. 13), the secretariat was asked to start collecting replies to a questionnaire containing a range of quality indicators of railway productivity for passenger and freight transport, as referred to in document TRANS/SC.2/2002/15, section IV. Earlier replies¹ are contained in documents TRANS/SC.2/2003/8 and TRANS/SC.2/2003/8/Add.1 and in Informal document No. 7 from 2003.

¹ Azerbaijan, Armenia, Croatia, Germany, Hungary, Republic of Moldova, Slovakia, Sweden, Switzerland and United States of America.

BULGARIA

**QUESTIONNAIRE ON QUALITATIVE INDICATORS OF PRODUCTIVITY
IN RAIL TRANSPORT**

| Indicator | Measure | Best practice* | Your reply |
|----------------------------|---|----------------|--------------------------------------|
| 1 | 2 | 3 | 4 |
| Efficient service delivery | Price (US\$ per freight ton km) | < 2 ¢ | 2.8 c |
| | Price (US\$ per passenger km) | | 1.5 c |
| Service quality | Average train speed (km/h) (urban, local, intercity, and for various types of freight trains) | | 60, 50, 120, |
| | % of arrivals less than 15 min. late | 95 % | 96.5% freight 94.5%, passenger |
| Safety | Train accidents (per million train km) | | |
| Accessibility | Network density (route km/km ²) | | 0.0384 |
| | Freight ton km /US\$ GDP (Purchasing Power. Parity - PPP) | | 0.2972 |
| | Rail share of rail + truck ton km | | 41.05% |
| | Rail passenger km as % of passenger km + ton km (%) | | 33.52% |
| Environment quality | Kj of energy per converted ton km | | 175 kj / gros tkm |
| Financial sustainability | % of costs covered from internal cash generation Real return on total gross assets (%) | > 100 USA | 102 % |
| Capital | Track operated under slow orders on track and structures | | |
| | - average maintenance | | 15% |
| | - renewal | | 53% |
| | - total | | 68% |
| | Km travelled per available locomotive/day | | 302 km /day |
| Management | Ratio of average passenger tariff to average freight tariff (based on US\$ per km) (%) | > 2.0 Europe | 1.8 % |
| | Average locomotive availability (%) | 90 USA | 66 % |
| | Average freight and passenger wagon availability (%) | >90USA/Europe | Freight 71 % Passenger 62% |

LITHUANIA

| Indicator | Measure | Best practice | Our reply |
|-----------------------------------|---|----------------------|------------------|
| 1 | 2 | 3 | 4 |
| Efficient service delivery | Price (US\$ per freight ton km) | | < 3 |
| | Price (US\$ per passenger km) | | < 5 |
| Service quality | Average freight train speed (km/h) (urban, local, intercity, and for various types of trains) | | 42.6 |
| | Average passenger train speed (km/h) (urban, local, intercity, and for various types of trains) | | 57.8 |
| | % of arrivals less than 15 min. late | | 98% |
| Safety | Train accidents (per million train km) | | 1.5 |
| Accessibility | Network density (route km/km ²) | | 0.0273 |
| | Freight ton km/US\$ GDP (Purchasing Power. Parity - PPP) | | not data |
| | Rail share of rail + truck ton km | | 47.0% |
| | Rail passenger km as % of passenger km + ton km (%) | | 3.67% |
| Environment quality | Kj of energy per converted ton km | | not data |
| Financial sustainability | % of costs covered from internal cash generation Real return on total gross assets (%) | | 3% |
| Capital | Track operated under slow orders on track and structures | | |
| | - route km | | 1782.5 |
| | - % total km | | 44.8% |
| | Km travelled per available locomotive/day | | 451.0 |
| Management | Ratio of average passenger tariff to average freight tariff (based on US\$ per km) (%) | | 142.2% |
| | Average locomotive availability (%) | | 74.1% |
| | Average freight and passenger wagon availability (%) | | not data |

ROMANIA**(Provisional results, 2004)**

| Indicator | Measure | Best practice* | Your reply |
|----------------------------|---|--------------------|--|
| 1 | 2 | 3 | 4 |
| Efficient service delivery | Price (US\$ per freight ton km) | < 2 ¢ | 3.08 eurocent per freight ton km |
| | Price (US\$ per passenger km) | | 1.62 eurocent per passenger km |
| Service quality | Average train speed (km/h) (urban, local, intercity, and for various types of freight trains) | | Average train speed total passenger trains: 46 km/h Intercity: 80 km/h Max. speed passenger trains: 160 km/h Average train speed total freight trains: 28 km/h Max. speed freight trains: 120 km/h |
| | % of arrivals less than 15 min. late | 95 % | NA; Estimated: >95 % |
| Safety | Train accidents (per million train km) | | 0 |
| Accessibility | Network density (route km/km ²) | | 0.045 km/km ² |
| | Freight ton km /US\$ GDP (Purchasing Power. Parity - PPP) | | 0.10 freight ton km/Euro GDP(PPP) |
| | Rail share of rail + truck ton km | | 31.3 % |
| | Rail passenger km as % of passenger km + ton km (%) | | 33.6 % |
| Environment quality | Kj of energy per converted ton km | | 9.8 ton fuel per million ton km |
| Financial sustainability | % of costs covered from internal cash generation Real return on total gross assets (%) | > 100 USA | NA |
| Capital | Track operated under slow orders on track and structures - route km - % total km | | - 575 km - 5.3 % |
| | Km travelled per available locomotive/day | | Passenger: - electric: 457 km/day - DMU: 344 km/day - diesel electric: 317 km/day Freight: - electric: 360 km/day - diesel: 280 km/day |
| Management | Ratio of average passenger tariff to average freight tariff (based on US\$ per km) (%) | > 2.0 Europe | 0.53 |
| | Average locomotive availability (%) | 90 USA | Passenger: 87 % Freight: 88 % |
| | Average freight and passenger wagon availability (%) | >90 USA/ Europe | Passenger: 88 % Freight: 90 % |