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INLAND TRANSPORT COMMITTEE

Working Party on Rail Transport

Sixty-second session
Geneva, 18-20 November 2008
Item 8 of the provisional agenda

PRODUCTIVITY IN RAIL TRANSPORT

Report by the secretariat

1. At its sixty-first session, the Working Party asked the secretariat to prepare a summary document on productivity in rail transport for its sixty-second session, on the basis of the information received from international sources and collected from member countries. This document is submitted for consideration by the Working Party in compliance with that mandate.

2. Following the request of the Working Party at its sixty-first session (ECE/TRANS/SC.2/208, para. 32), the secretariat is reproducing below the productivity indicators calculated on the basis of a statistical update provided by the UIC in July 2008. The indicators adopted by the Working Party in 2000 (TRANS/SC.2/194, para. 23) are as follows:

- (a) Labour productivity: (distinguishing between high-speed and conventional rail transport)
- employees/km of network in use
net tonne-km + passenger-km employee.

(b) Productivity of freight transport:

per km: gross tonne-km/km of network
 net tonne-km/km of network
per employee: gross tonne-km/employee
 net tonne-km/employee.

(c) Productivity of passenger transport: (distinguishing between high-speed and conventional rail transport)

per km: passenger-km/km of network
per employee: passenger-km/employee.

(d) Productivity of traffic: (distinguishing between high-speed and conventional rail transport)

net tonne-km + passenger-km/km of network.

(e) Productivity of locomotives: (distinguishing between high-speed and conventional rail transport)

gross tonne-km/locomotive.

(f) Productivity of wagons:

net tonne-km/wagon.

(g) Productivity of lines: (where necessary only on railway lines to be determined)

(passenger train km + freight train km)/km of network.

(h) Energy consumption (for traction power):

MJ/1000 gross tonne-km.

3. The 2007 data submitted by the UIC were incomplete for a number of countries. Gaps in time series of national data seem to be related to the privatization and liberalization of the rail sector, resulting in a growing number of rail operators. This presents a considerable challenge of creating consistent updates by country. Countries have been grouped according to the following sub-regions: European Union + EFTA; South-Eastern Europe; Eastern Europe, Caucasus and Central Asia; other countries.

RATIOS DES CHEMINS DE FER – RAILWAY RATIOS – 1975-2007

Année	Main d'oeuvre Staff		Transport fret Freight		Transport voyageurs Passengers		Trafic Traffic		Matériel Rolling stock	Lignes Lines	Energy Energie
	Agents par Km de ligne	VK+TK par agent	TK par Km de ligne	TK par agent	VK par Km de de ligne	VK par agent	VK+TK par Km de ligne		TK par wagon	Trains-km par km	MJ par
Year	Employee s per km of line	Pkm+Tkm per employee	Tkm per km of line	Tkm per employee	Pkm per km of line	Pkm per employee	Pkm+Tkm per km of line	Gross- tonne-km ¹ per locomotive	Tkm per wagon	Train-km per km of line	MJ per gross ton-km
	en unités units		en milliers thousands								
	(a1)	(a2)	(b1)	(b2)	(c1)	(c2)	(d)	(e)	(f)	(g)	(h)

UNION EUROPÉENNE + AELE/EUROPEAN UNION + EFTA

	(a1)	(a2)	(b1)	(b2)	(c1)	(c2)	(d1)	(e)	(f)	(g)	(h)
Allemagne/Germany											
1975	14.8	265	2,391	161	1,535	103	3,926		219	20.1	
1980	13.3	322	2,784	210	1,489	112	4,272		262	20.8	
1985	12.7	350	2,890	227	1,563	123	4,453		259	20.7	
1990	11.8	336	2,469	210	1,489	127	3,958		244	20.9	
1995	7.1	441	1,666	236	1,451	205	3,116		283	20.6	
1996	6.3	504	1,663	264	1,507	240	3,170		282	20.8	
1997	6.1	567	1,889	311	1,551	256	3,439		324	21.8	
1998	5.5	636	1,930	351	1,565	285	3,494		358	22.9	
1999	7.5	513	1,891	253	1,941	260	3,832		377	25.1	
2000	5.0	832	2,099	424	2,023	408	4,122		405	26.9	
2003	6.9	576	2,052	297	1,931	279	3,982	62,674	615	24.5	226.7
2004	6.6	643	2,236	338	2,016	305	4,251	73,791	431	20.7	208.0
2005	6.6	715	2,572	392	2,120	323	4,692	89,279	498	26.3	183.0
2006	6.7	718	2,628	392	2,190	326	4,818	103,783	862	26.3	...
2007	6.8	716	2,685	393	2,205	323	4,890	89,420	952	26.5	...
Autriche/Austria											
1975	12.7	212	1,599	126	1,103	87	2,703		235	15.5	
1980	12.4	253	1,878	152	1,260	102	3,138		284	17.0	
1985	12.3	262	1,958	159	1,264	103	3,223		300	18.0	
1990	11.9	294	2,162	182	1,334	112	3,496		354	20.8	
1995	10.8	353	2,307	214	1,503	139	3,810		452	23.0	
1996	10.1	379	2,313	230	1,495	149	3,808		484	21.7	
1997	9.7	400	2,455	253	1,435	148	3,890		530	22.5	
1998	9.4	418	2,526	269	1,403	149	3,929		594	24.4	
1999	9.3	433	2,611	281	1,417	152	4,028		598	24.8	

	(a1)	(a2)	(b1)	(b2)	(c1)	(c2)	(d1)	(e)	(f)	(g)	(h)
Autriche/Austria (suite/continued)											
2000	9.1	485	2,927	322	1,474	162	4,401		681	26.9	
2003	8.0	567	3,106	388	1,437	179	4,543	53,710	1,105	24.4	128.8
2004	8.0	593	3,308	411	1,462	182	4,770	55,012	1,084	24.3	123.3
2005	8.2	538	2,951	358	1,485	180	4,436	55,436	1,072	23.0	130.5
2006	7.7	617	3,259	421	1,513	196	4,772	62,153	1,133	23.6	...
2007	7.6	635	3,265	430	1,556	205	4,821	57,164	1,041	24.1	...
Belgique/Belgium											
1975	14.0	249	1,576	113	1,913	137	3,489		143	19.9	
1980	16.5	228	2,024	122	1,753	106	3,777		187	24.0	
1985	15.8	256	2,257	143	1,792	113	4,049		214	25.8	
1990	13.0	329	2,401	185	1,880	145	4,281		275	26.5	
1995	12.4	335	2,164	174	2,006	161	4,170		359	26.4	
1996	12.2	341	2,143	176	2,008	165	4,151		370	26.8	
1997	11.7	360	2,181	186	2,040	174	4,221		396	26.6	
1998	11.5	367	2,190	190	2,045	177	4,235		406	27.1	
1999	11.9	372	2,211	185	2,228	187	4,438		406	28.7	
2000	11.9	372	2,211	185	2,228	187	4,438		406	28.7	
2003	11.9	396	2,359	198	2,347	197	4,706	59,113	568	28.5	159.9
2004	11.2	415	2,175	195	2,454	220	4,628	61,693	571	28.8	150.5
2005	10.5	464	2,295	218	2,583	246	4,879	59,955	637	27.6	171.5
2006	10.4	500	2,449	236	2,745	264	5,194	64,046	815	27.9	...
2007	10.9	493	2,415	222	2,944	271	5,359	65,554	811	29.2	...
Bulgarie/Bulgaria											
1975	13.4	433	4,031	301	1,764	132	5,795		553	13.7	
1980	16.9	338	4,073	242	1,625	96	5,698		474	10.8	
1985	17.3	349	4,229	244	1,812	105	6,041		429	14.5	
1990	19.1	268	3,289	173	1,814	95	5,102		333	13.4	
1995	13.4	232	2,002	150	1,093	82	3,095		221	11.1	
1996	11.4	258	1,751	154	1,180	104	2,931		202	10.5	
1997	12.8	242	1,725	135	1,371	107	3,097		203	10.6	
1998	10.0	254	1,425	143	1,105	111	2,530		179	9.6	
1999	10.8	195	1,214	112	890	82	2,104		166	9.5	
2000	9.0	231	1,282	142	804	89	2,086		186	8.4	
2003	8.0	226	1,221	153	583	73	1,804	28,422	378	8.4	164.0
2004	7.8	236	1,224	157	617	79	1,841	28,356	405	8.2	166.6
2005	8.1	225	1,243	153	575	71	1,818	32,331	426	...	146.3
2006	8.1	232	1,301	160	584	72	1,885	33,547	440	8.9	...
2007	8.5	224	1,302	153	602	71	1,904	26,070	419	9.1	...
Danemark/Denmark											
1975	10.8	265	984	91	1,876	174	2,860		197	22.0	
1980	11.0	245	803	73	1,887	172	2,691		235	23.9	
1985	8.8	291	708	81	1,840	210	2,548		298	20.3	
1990	8.7	324	738	85	2,071	239	2,809		373	22.3	

	(a1)	(a2)	(b1)	(b2)	(c1)	(c2)	(d1)	(e)	(f)	(g)	(h)
Danemark/Denmark (suite/continued)											
1995	6.7	430	845	126	2,036	304	2,881		482	24.7	
1996	8.1	337	748	93	1,967	244	2,715		490	23.8	
1997	4.9	636	888	181	2,230	455	3,119		546	25.9	
1998	4.7	679	909	193	2,280	485	3,189		717	26.9	
1999	5.8	524	838	144	2,213	380	3,051		836	26.2	
2000	6.2	586	1,020	164	2,629	422	3,648		933	29.7	
2003	5.0	636	831	167	2,332	469	3,162	...	...	24.9	...
2004	5.2	648	918	177	2,437	471	3,355	...	88	25.5	...
2005	5.0	495	...	...	2,468	495	2,468	...	...	26.6	...
2006	...	...	...	...	...	641	...	...	...	...	...
2007	5.1	525	...	...	2,684	525	2,684	...	...	26.6	...
Espagne/Spain											
1975	4.8	383	694	144	1,151	239	1,844		239	8.4	
1980	4.8	344	702	145	966	199	1,668		264	8.9	
1985	4.7	415	799	169	1,167	246	1,965		277	10.7	
1990	3.7	530	777	211	1,171	319	1,949		292	13.1	
1995	3.1	618	741	238	1,180	380	1,922		334	12.8	
1996	3.0	642	723	241	1,201	400	1,925		336	12.7	
1997	3.0	717	829	280	1,292	437	2,121		381	13.4	
1998	2.9	764	839	294	1,338	469	2,177		408	13.4	
1999	2.8	855	926	330	1,473	525	2,398		432	13.7	
2000	2.7	892	938	342	1,509	550	2,446		436	13.6	
2003	2.4	989	984	403	1,432	587	2,416	65,096	821	13.7	620.2
2004	2.4	934	825	347	1,395	587	2,220	65,124	694	13.7	688.2
2005	...	...	782	...	1,455	...	2,236	...	713	...	739.5
2006	2.2	1,010	797	355	1,469	655	2,267	105,832	767	13.5	...
2007	2.2	989	746	339	1,431	650	2,177	298,461	9,017	13.5	...
Estonie/Estonia											
1975			5,769	1,390			7,159				
1980			6,561	1,564			8,125				
1985			6,389	1,634			8,023				
1990			6,800	1,472			8,272				
1995	8.1	484	3,500	433	412	51	3,913		476	7.9	
1996	7.9	524	3,818	486	303	39	4,121		501	7.4	
1997	7.4	708	4,975	671	271	37	5,246		598	8.3	
1998	6.6	940	5,990	903	244	37	6,234		733	8.8	
1999	6.3	1,188	7,252	1,149	246	39	7,498		1,107	9.4	
2000	5.9	1,410	7,997	1,364	270	46	8,267		1,322	9.6	
2003	4.0	2,446	9,600	2,399	188	47	9,788	100,978	2,545	9.5	...
2004	3.6	2,808	9,976	2,753	200	55	10,176	156,760	2,708	9.3	95.5
2005	...	...	...	...	...	...	...	...	...	...	87.2
2006	...	...	...	...	...	...	...	...	...	...	...
2007	3.5	2,539	8,475	2,456	284	82	8,759	176,628	2,486	9.5	...

	(a1)	(a2)	(b1)	(b2)	(c1)	(c2)	(d1)	(e)	(f)	(g)	(h)
Finlande/Finland											
1975	4.9	330	1,088	222	530	108	1,617		287	7.5	
1980	4.7	402	1,372	290	529	112	1,901		388	7.4	
1985	4.5	426	1,367	305	546	122	1,914		436	7.4	
1990	3.4	578	1,424	414	568	165	1,992		550	7.0	
1995	2.6	832	1,626	624	541	208	2,167		636	7.0	
1996	2.5	809	1,503	591	555	218	2,058		597	6.9	
1997	2.5	916	1,680	683	576	234	2,256		721	7.5	
1998	2.4	945	1,685	704	576	241	2,260		755	7.6	
1999	2.3	971	1,671	719	585	252	2,256		750	7.6	
2000	2.2	1,053	1,727	788	582	265	2,308		800	7.7	
2003	1.9	1,191	1,717	894	571	297	2,288	49,405	887	8.2	127.2
2004	1.9	1,237	1,760	929	584	308	2,344	50,084	883	8.5	128.1
2005	1.8	1,261	1,693	929	607	333	2,300	54,306	870	8.4	130.8
2006	1.7	1,426	1,873	1,075	611	351	2,484	60,127	1,008	8.6	...
2007	1.7	1,409	1,769	1,034	640	374	2,409	58,485	967	8.9	...
France											
1975	7.8	405	1,755	225	1,401	180	3,156		228	13.2	
1980	7.4	484	2,003	270	1,579	213	3,582		287	14.7	
1985	7.0	483	1,590	228	1,783	255	3,373		287	13.9	
1990	5.9	566	1,487	251	1,871	316	3,359		342	14.1	
1995	5.7	571	1,507	266	1,732	305	3,239		415	14.2	
1996	5.6	613	1,554	278	1,869	335	3,423		441	15.6	
1997	5.5	659	1,692	308	1,935	352	3,627		508	15.9	
1998	5.5	674	1,700	308	2,023	366	3,723		537	16.0	
1999	6.0	686	1,836	306	2,277	380	4,113		473	17.9	
2000	6.0	713	1,894	316	2,377	397	4,271		500	18.2	
2003	6.0	684	1,619	270	2,475	413	4,095	55,881	1,263	17.7	156.1
2004	5.9	703	1,585	271	2,531	432	4,116	57,479	1,236	17.8	159.6
2005	5.7	699	1,390	243	2,601	455	3,990	57,792	1,164	17.1	162.4
2006	5.6	723	1,426	252	2,656	470	4,081	60,883	1,285	16.9	...
2007	5.6	759	1,439	256	2,825	503	4,264	57,039	1,277	16.7	...
Grèce/Greece											
1975	5.0	250	368	74	874	176	1,242		89	7.1	
1980	4.9	188	331	67	595	121	926		75	6.1	
1985	6.1	164	298	49	704	115	1,002		69	6.6	
1990	5.4	194	245	46	796	148	1,041		56		
1995	5.1	149	118	23	634	125	752		26	7.4	
1996	4.7	178	136	29	708	149	844		30	7.8	
1997	4.7	187	127	27	753	160	879		37	7.4	
1998	4.7	172	137	29	675	143	812		118	7.3	
1999	4.6	181	142	31	689	150	830		92	7.3	
2000	4.2	242	185	45	820	197	1,006		123		
2003	3.7	228	189	51	652	177	841	21,514	131	6.8	664.2

	(a1)	(a2)	(b1)	(b2)	(c1)	(c2)	(d1)	(e)	(f)	(g)	(h)
Grèce/Greece (suite/continued)											
2004	3.5	265	242	70	681	195	923	...	170	7.2	...
2005	3.2	303	238	75	720	228	958	...	191	6.9	...
2006	3.1	322	263	86	722	236	985		209	7.6	...
2007	2.8	388	327	116	766	272	1,093	38,256	234	7.8	...
Hongrie/Hungary											
1975	18.5	239	2,844	154	1,566	85	4,410			13.7	
1980	17.6	259	3,093	176	1,467	83	4,560			14.2	
1985	17.2	232	2,783	162	1,220	71	4,003		311	14.2	
1990	16.5	199	2,102	128	1,168	71	3,270		254	13.4	
1995	9.0	192	940	105	779	87	1,720		195	12.8	
1996	8.6	193	851	99	803	94	1,654		205	12.0	
1997	7.7	227	922	121	815	107	1,738		273	13.0	
1998	7.4	239	926	125	851	115	1,776		279	12.9	
1999	7.3	240	890	122	856	118	1,745		287	12.3	
2000	7.1	302	933	131	1,216	171	2,149		317	12.0	
2003	6.9	284	1,005	147	939	137	1,945	28,599	434	12.4	221.8
2004	6.6	313	1,125	171	928	141	2,053	35,210	558	13.1	213.2
2005	5.8	348	1,133	194	897	154	2,030	32,142	538	12.6	204.7
2006	5.0	186	...	...	873	174	...	33,559	...	12.5	...
2007	5.7	319	1,046	182	784	137	1,830	53,375	686	15.7	...
Irlande/Rep. of Ireland											
1975	10.1	72	283	28	448	44	731		73	5.4	
1980	9.1	92	321	35	519	57	840		144	6.8	
1985	8.0	104	309	38	526	65	835		308	7.0	
1990	6.1	154	303	50	631	104	934		322	7.3	
1995	5.7	170	308	54	661	116	969		330	6.8	
1996	5.6	170	292	52	663	118	954		348	7.9	
1997	5.5	179	268	49	713	130	981		320	8.0	
1998		286	244		744		989		286	8.1	
1999	2.7	379	276	100	764	279	1,039		282	8.0	
2000	2.8	351	256	92	724	259	980		264	8.0	
2003	3.0	343	207	68	834	274	1,042	45,649	253	7.8	410.1
2004	2.9	357	207	72	824	285	1,031	48,825	...	...	386.4
2005	2.8	381	158	55	928	326	1,086	3,223	327	9.7	...
2006	...	...	...	...	976	...	1,062	1,766	179	9.5	...
2007	2.6	428	67	26	1,046	403	1,113	1,372	118	8.8	...
Italie/Italy											
1975	13.8	231	926	67	2,260	164	3,186		119	17.3	
1980	13.7	263	1,139	83	2,453	179	3,592		160	18.6	
1985	13.4	251	1,041	78	2,311	173	3,353		154	19.2	
1990	12.5	320	1,209	97	2,783	223	3,992		195	20.0	
1995	8.1	509	1,390	171	2,741	338	4,131		250	21.5	
1996	7.8	528	1,314	169	2,797	359	4,110		261	21.6	
1997	7.6	546	1,429	188	2,719	358	4,148		299	21.5	

	(a1)	(a2)	(b1)	(b2)	(c1)	(c2)	(d1)	(e)	(f)	(g)	(h)
Italie/Italy (suite/continued)											
1998	7.3	543	1,396	191	2,574	352	3,971		294	21.2	
1999	7.1	569	1,339	189	2,698	380	4,038		284	20.5	
2000	7.1	582	1,413	199	2,710	383	4,123		325	20.4	
2003	6.4	664	1,408	220	2,847	444	4,255	26,191	466	20.3	246.9
2004	6.3	658	1,296	207	2,818	451	4,115	26,897	429	21.0	229.3
2005	6.1	676	1,286	210	2,844	465	4,130	27,740	472	20.5	225.1
2006	6.1	691	1330	220	2,850	471	4,180	29,981	488	20.9	...
2007	5.9	705	1,340	227	2,827	478	4,167	36,369	507	20.7	...
Lettonie/Latvia											
1975			7,224		1,781		9,006				
1980	12.3	762	7,389	602	1,969	160	9,358			11.7	
1985	12.1	869	8,361	689	2,187	180	10,548			12.2	
1990	9.9	1,007	7,734	781	2,239	226	9,972		1,672	12.1	
1995	8.8	523	4,044	459	569	65	4,613		806	8.1	
1996	8.3	679	5,144	621	476	58	5,620		1,064	8.5	
1997	7.7	817	5,789	755	478	62	6,268		1,320	8.9	
1998	7.5	780	5,385	721	439	59	5,824		1,243	8.3	
1999	6.9	797	5,060	738	408	59	5,468		1,312	7.6	
2000	6.6	916	5,710	869	307	47	6,017		1,455	7.8	
2003	6.3	1,281	7,755	1,227	336	53	8,091	152,101	3,292	8.3	104.3
2004	6.6	1,184	7,435	1,130	357	54	7,792	152,756	3,165	8.1	111.3
2005	6.1	1,288	7,546	1,227	376	61	7,922	167,888	3,388	8.0	107.4
2006	5.9	1,156	6,433	1,085	418	70	6,851	148,455	2,923	7.2	...
2007	6.0	1,301	7,375	1,229	433	72	7,809	160,635	3,184	7.8	...
Lituanie/Lithuania											
1975			8,324		1,294		9,618				
1980			9,082		1,623		10,705				
1985			10,391		1,697		12,087				
1990	9.4	1,219	9,595	1,025	1,814	194	11,409				
1995	8.7	477	3,606	412	564	65	4,171				
1996	8.6	529	4,058	473	478	56	4,535				
1997	8.4	563	4,315	513	421	50	4,737				
1998	8.5	536	4,137	488	400	47	4,537		637	7.8	
1999	8.8	514	4,120	469	391	45	4,511		579	7.7	
2000	8.2	610	4,681	571	321	39	5,002		678	8.0	
2003	7.1	943	6,458	908	244	34	6,702	95,702	1,231	8.4	136.0
2004	6.6	1,022	6,530	985	249	37	6,779	97,587	1,258	8.0	133.3
2005	6.4	1,138	7,030	1,100	242	38	7,271	103,371	1,338	8.2	128.6
2006	6.1	1,231	7,282	1,191	243	40	7,525	104,753	1,374	7.9	...
2007	6.0	1,403	8,139	1,364	232	39	8,370	116,247	1,515	8.5	...
Luxembourg											
1975	15.2	228	2,393	158	1,064	70	3,457		172	15.8	
1980	15.6	216	2,459	157	911	58	3,370		184	16.1	
1985	14.1	218	2,219	158	848	60	3,067		209	16.1	

	(a1)	(a2)	(b1)	(b2)	(c1)	(c2)	(d1)	(e)	(f)	(g)	(h)
Pologne/Poland											
1975	13.4	475	4,775	356	1,604	119	6,379		538	15.7	
1980	13.4	492	4,878	365	1,704	127	6,582		573	15.6	
1985	14.0	452	4,400	315	1,924	138	6,325		586	15.0	
1990	12.8	393	3,118	243	1,921	150	5,038		637	14.3	
1995	10.0	371	2,844	283	874	87	3,717		711	12.2	
1996	9.9	374	2,878	289	846	85	3,724		684	12.4	
1997	9.7	387	2,901	299	854	88	3,755		662	12.5	
1998	9.4	374	2,625	280	886	94	3,511		697	12.2	
1999	8.9	375	2,406	270	940	105	3,346		574	12.2	
2000	8.1	403	2,394	296	873	108	3,268		415	11.8	
2003	6.9	485	2,382	343	987	142	3,369	37,241	595	11.9	161.2
2004	6.9	495	2,444	356	951	139	3,396	36,672	623	11.2	164.6
2005	6.5	492	2,350	361	854	131	3,204	32,134	613	9.9	175.2
2006	6.5	474	2,195	339	874	135	3,069	34,219	575	10.2	...
2007	6.4	491	2,243	353	880	138	3,122	34,064	589	10.1	...
Portugal											
1975	7.1	182	210	30	1,077	152	1,288		107	8.3	
1980	6.8	287	277	41	1,684	246	1,961		171	9.6	
1985	6.0	318	332	55	1,589	263	1,921		216	11.0	
1990	7.2	322	476	66	1,849	256	2,325		319	11.0	
1995	4.6	523	708	155	1,687	368	2,396		512	14.8	
1996	4.6	488	652	142	1,580	345	2,231		442	15.5	
1997	4.6	513	787	169	1,598	344	2,384		530	17.1	
1998	4.7	508	733	156	1,647	351	2,380		479	16.4	
1999	4.5	513	775	172	1,539	341	2,314		480	13.9	
2000	4.4	468	776	176	1,291	292	2,066		525	14.1	
2003	3.6	568	867	240	1,185	328	2,051	47,697	696	12.9	275.6
2004	3.2	628	800	251	1,199	376	1,999	56,711	690	12.8	267.8
2005	...	...	853	...	1,202	...	2,055	...	...	...	250.5
2006	2.8	746	856	305	1,238	441	2,094	...	822	13.2	...
2007	2.7	801	911	334	1,272	467	2,183	...	984	13.7	...
République slovaque/Slovakia											
1995	14.4	339	3,752	260	1,146	79	4,898		376	17.6	
1996	14.3	299	3,234	227	1,026	72	4,261		375	16.4	
1997	13.5	313	3,375	250	844	63	4,219		431	17.0	
1998	13.5	301	3,206	238	850	63	4,056		432	16.1	
1999	13.4	262	2,693	202	810	61	3,504		329	15.6	
2000	12.8	302	3,068	240	784	61	3,851		416	15.4	
2003	11.4	299	2,766	243	633	56	3,400	24,205	579	12.9	26.7
2004	10.7	305	2,643	248	609	57	3,252	24,362	593	12.8	33.3
2005	...	...	2,549	...	592	...	3,141	...	570	12.7	48.0
2006	9.4	345	2,652	281	600	64	3,252	25,697	621	12.6	...
2007	9.3	339	2,571	276	592	64	3,163	25,570	609	13.0	...

	(a1)	(a2)	(b1)	(b2)	(c1)	(c2)	(d1)	(e)	(f)	(g)	(h)
République tchèque/Czech Republic											
1995	10.9	297	2,400	219	851	78	3,251		303	16.9	
1996	10.7	302	2,367	222	860	81	3,226		304	16.3	
1997	10.3	293	2,199	214	818	80	3,016		283	15.3	
1998	9.7	276	1,939	200	742	77	2,682		262	14.5	
1999	9.5	262	1,757	184	740	78	2,497		255	14.5	
2000	9.2	284	1,839	200	776	84	2,615		294	14.9	
2003	8.3	300	1,797	217	682	83	2,479	22,685	479	15.6	164.7
2004	7.8	287	1,540	198	687	88	2,227	15,785	418	15.6	164.0
2005	6.9	322	1,509	220	697	102	2,206	22,589	415	16.2	166.7
2006	6.2	394	1,718	277	726	117	2,444	24,741	488	15.6	...
2007	5.8	432	1,788	308	722	124	2,510	27,743	517	16.2	...
Roumanie/Romania											
1975	16.0	451	5,195	324	2,027	126	7,223			14.2	
1980	17.0	465	5,834	342	2,090	123	7,924		449	15.1	
1985	17.7	480	5,726	323	2,777	157	8,504		413	14.0	
1990	21.8	320	4,297	197	2,695	123	6,992		294	13.5	
1995	13.1	289	2,113	162	1,660	127	3,773		151	10.8	
1996	12.2	305	2,122	173	1,612	132	3,734		245	11.0	
1997	11.9	280	1,936	163	1,388	117	3,324		220	10.8	
1998	9.2	295	1,547	168	1,181	128	2,728		114	9.8	
1999	9.3	256	1,290	139	1,083	117	2,373		104	8.7	
2000	9.2	268	1,443	157	1,024	111	2,467		139	8.6	
2003	7.2	296	1,346	187	781	109	2,127	27,021	241	8.8	223.9
2004	6.4	327	1,315	204	796	123	2,111	27,185	258	8.9	245.0
2005	6.2	335	1,348	217	738	119	2,086	30,362	266	8.9	207.6
2006	3.7	331	776	211	442	120	1,219	24,257	267	5.0	...
2007	6.2	316	1,265	204	697	112	1,962	22,886	253	8.7	...
Royaume-Uni/United Kingdom											
1975	14.0	202	1,157	83	1,670	119	2,827		89	24.0	
1980	13.7	204	1,000	73	1,797	131	2,796		125	24.4	
1985	10.7	260	958	90	1,815	170	2,773		278	23.5	
1990	8.2	363	964	118	2,001	245	2,965		465	26.1	
1995	6.2	414	785	127	1,769	287	2,554			24.6	
1996					1,937						
1997					2,063						
1998			1,042		2,167		3,209				
1999			1,102		2,261		3,363				
2000			1,113		2,364		3,477			29.1	
2003	1.2	3,113	1,172	1,006	2,453	2,106	3,625	...	32,502	26.4	...
2004	1.1	3,358	1,253	1,108	2,545	2,250	3,798	...	...	27.8	...
2005	2.0	1,565	1,018	506	2,130	1,059	3,148	...	...	29.3	...
2006	1.8	1,325	...	...	2,349	1,325	2,349	...	...	...	...
2007	2.3	1,915	1,308	573	3,062	1,342	4,370	28,150	6,897	28.9	...

	(a1)	(a2)	(b1)	(b2)	(c1)	(c2)	(d1)	(e)	(f)	(g)	(h)
Slovénie/Slovenia											
1975	18.2	247	2,963	163	1,522	84	4,485			21.6	
1980	19.4	258	3,640	188	1,357	70	4,997			23.0	
1985	20.7	272	4,057	196	1,576	76	5,633			24.6	
1990	17.8	265	3,522	198	1,196	67	4,718		484	21.3	
1995	8.2	353	2,399	293	495	60	2,894		339	15.9	
1996	8.1	304	1,951	241	510	63	2,461		310	15.3	
1997	7.8	344	2,184	279	513	65	2,697		353	15.3	
1998	7.6	358	2,192	288	537	70	2,729		359	15.0	
1999	7.5	353	2,140	284	519	69	2,658		403	15.1	
2000	7.5	366	2,162	288	587	78	2,749		415	15.4	
2003	6.9	477	2,664	386	632	92	3,296	47,566	759	15.8	149.7
2004	6.7	476	2,561	383	626	93	3,186	49,157	773	16.2	149.4
2005	6.6	497	2,643	401	633	96	3,275	52,993	822	16.1	151.1
2006	6.6	515	2,747	417	646	98	3,393	49,298	844	15.9	...
2007	6.5	556	2,934	454	661	102	3,595	50,799	911	16.1	...
Suède/Sweden											
1975	3.5	516	1,319	374	499	142	1,818		291	8.7	
1980	3.3	605	1,399	424	597	181	1,995		347	8.7	
1985	3.2	655	1,538	475	585	180	2,123		445	9.3	
1990	2.6	862	1,707	648	563	214	2,270		671	9.1	
1995	2.2	1,144	1,896	856	636	287	2,531		919	10.5	
1996	2.2	1,102	1,832	819	633	283	2,465		920	10.7	
1997	1.9	1,080	1,387	730	666	351	2,053		790	9.9	
1998	1.8	1,149	1,416	771	695	378	2,111		828	10.1	
1999	1.8	1,241	1,457	818	752	423	2,209		748	10.5	
2000	1.0	2,133	1,551	1,535	604	598	2,154		804		
2003	1.3	1,407	1,300	996	535	410	1,835	82,864	1,511	8.8	254.9
2004	1.3	1,414	1,326	1,018	515	396	1,842	...	1,704	...	361.3
2005	...	...	...	...	...	...	...	...	...	...	320.4
2006	1.0	...	...	...	570	578	...	299,065	...	4.4	...
2007	1.4	1,351	1,171	865	658	486	1,829	59,590	1,643	4.4	...
Suisse/Switzerland											
1975	13.5	319	1,695	125	2,621	194	4,315		157	29.8	
1980	12.7	426	2,413	190	2,986	235	5,399		241	32.2	
1985	12.1	436	2,265	187	3,014	249	5,279		245	35.1	
1990	12.3	508	2,700	219	3,552	289	6,252		318	40.2	
1995	10.9	573	2,648	242	3,624	331	6,272		413	38.6	
1996	10.6	578	2,408	227	3,735	351	6,142		355	40.1	
1997	10.5	642	2,690	257	4,024	385	6,714		408	39.2	
1998	10.3	677	2,897	280	4,095	396	6,992		454	41.8	
1999	9.8	750	3,178	324	4,179	426	7,358		490	41.0	
2000	9.3	815	3,432	370	4,136	446	7,568		550	43.0	
2003	8.9	815	3,296	371	3,957	445	7,253	26,934	862	46.1	231.6
2004	8.4	784	2,745	329	3,806	456	6,552	30,656	812	46.6	201.2

	(a1)	(a2)	(b1)	(b2)	(c1)	(c2)	(d1)	(e)	(f)	(g)	(h)
Suisse/Switzerland (suite/continued)											
2005	8.6	971	3,784	439	4,593	532	8,377	31,609	1,055	51.1	208.5
2006	8.4	949	3,512	418	4,463	531	7,975	50,388	1,071	52.7	...
2007	7.6	1,179	4,625	607	4,358	572	8,982	49,394	1,514	48.0	...

EUROPE DU SUD-EST/SOUTH-EASTERN EUROPE

	(a1)	(a2)	(b1)	(b2)	(c1)	(c2)	(d1)	(e)	(f)	(g)	(h)
Albanie/Albania											
1975			1,055		1,423		2,478				
1980			1,415								
1985											
1990	866.0		1,156	2,022							
1995	7.1	52	78	11	292	41	371		26	1.7	
1996	7.8	60	94	12	376	48	470		20	2.3	
1997	6.7	39	51	8	213	32	264		11	1.6	
1998											
1999	0.0		59		274		333				
2000	0.0		59		274		333				
2003	5.0	60	69	14	235	47	304	3,879	38	2.2	5,391.6
2004	...	...	...	...	...	...	...	...	...	...	...
2005*	4.9	45	58	12	163	33	221	3,172	32	2.0	4,473.8
2006	4.9	56	85	17	189	38	274	3,379	44	2.2	...
2007	4.7	52	125	26	120	25	244	3,614	74	1.9	...
Ex-Rép. yougoslave de Macédoine/The former Yugoslav Republic of Macedonia											
1980	7.6	210	1,058	140	532	70	1,590		312	8.0	
1985	8.1	252	1,437	177	603	74	2,041		418	8.7	
1990	8.7	187	1,105	128	510	59	1,615		316	7.5	
1995	7.1	47	241	34	93	13	334		69	4.1	
1996	6.3	89	388	62	171	27	559		111	4.6	
1997	6.3	96	401	64	202	32	602		115	4.0	
1998	6.1	130	584	95	215	35	798		168	3.9	
1999	6.0	126	544	90	215	36	758		156	4.0	
2000	5.9	170	754	127	252	42	1,006		217	4.5	
2003	5.2	130	538	103	140	27	678	15,737	155	3.1	164.8
2004	...	...	621	...	136	...	757	...	...	...	154.0
2005	4.2	214	758	181	134	32	893	20,304	348	3.2	142.7
2006	4.1	250	878	213	150	36	1,029	23,411	395	3.9	...
2007	...	...	...	...	...	...	...	...	...	...	...
Bosnie-Herzégovine/Bosnia and Herzegovina											
1997	7.1	13	52	7	42	6	93			3.3	
1998	7.2	19	84	12	54	7	139			3.8	
1999	7.2	27	142	20	50	7	192		44	2.5	

	(a1)	(a2)	(b1)	(b2)	(c1)	(c2)	(d1)	(e)	(f)	(g)	(h)
Bosnie-Herzégovine/Bosnia and Herzegovina (suite/continued)											
2000	7.5	37	227	30	50	7	276		79	2.6	
2003	7.1	50	302	43	53	7	355	5,266	75	3.3	292.1
2004	...	...	612	...	53	...	665	...	...	...	...
2005	...	...	...	...	...	...	...	...	...	...	...
2006	...	227	...	121	...	106	...	...	...	...	...
2007	...	...	...	...	...	...	...	...	...	...	...
Croatie/Croatia											
1975	14.8	277	2,631	178	1,456	99	4,088		435	13.5	
1980	16.3	281	3,103	190	1,485	91	4,588		588	14.5	
1985	17.4	300	3,554	204	1,664	96	5,218		614	16.1	
1990	16.2	253	2,690	166	1,412	87	4,102		476	14.7	
1995	9.5	134	860	91	411	43	1,271		303	10.9	
1996	8.4	120	630	75	377	45	1,007		263	10.0	
1997	8.4	118	629	75	360	43	989		267	10.0	
1998	7.6	133	672	89	338	45	1,010		285	10.0	
1999	7.1	135	618	87	346	48	964		164	9.4	
2000	6.8	150	656	96	365	54	1,021		179	9.6	
2003	5.5	262	1,007	184	427	78	1,434	27,339	347	9.6	249.2
2004	5.4	251	915	169	445	82	1,360	28,362	338	9.6	256.5
2005	5.2	290	1,040	200	464	89	1,504	31,273	387	10.1	250.5
2006	5.1	339	1,214	240	500	99	1,715	34,033	485	10.6	...
2007	5.0	384	1,313	265	592	119	1,905	41,180	527	10.8	...
Montenegro											
2007	7.9	94	740	94	...	...	740	...	230	...	...
Serbie/Serbia											
2007	5.5	239	1,112	202	200	36	1,312	34,308	507	6.8	...
Turquie/Turkey											
1975	8.1	171	815	101	568	70	1,383		372	4.8	
1980	6.3	210	599	96	716	114	1,315		217	4.3	
1985	6.6	257	922	140	773	117	1,695		342	5.4	
1990	5.8	288	922	158	760	130	1,683		354	5.4	
1995	5.2	317	984	188	678	130	1,662		423	5.1	
1996	5.1	322	1,023	202	608	120	1,631		456	5.2	
1997	4.9	363	1,102	224	679	138	1,781		521	5.4	
1998	4.9	345	962	198	716	147	1,677		466	5.1	
1999	5.6	293	936	167	708	126	1,644		450	5.1	
2000	5.4	328	1,113	204	673	124	1,785		540	5.3	
2003	4.0	420	990	249	676	170	1,666	38,761	536	4.8	427.3
2004	4.0	424	1,075	272	602	152	1,678	40,758	584	5.3	348.6
2005	3.0	530	1,028	339	579	191	1,607	41,032	555	5.2	408.0
2006	3.3	512	1,085	328	607	184	1,692	42,166	578	5.1	...
2007	3.6	488	1,113	310	638	178	1,752	41,221	568	5.0	...

**EUROPE DE L'EST, LE CAUCASE ET ASIE CENTRALE /
EASTERN EUROPE, CAUCASUS AND CENTRAL ASIA**

	(a1)	(a2)	(b1)	(b2)	(c1)	(c2)	(d1)	(e)	(f)	(g)	(h)
Biélorussie/Belarus											
1975	17.2	761	11,446	665	1,652	96	13,098			14.1	
1980	18.0	781	12,134	673	1,948	108	14,082			15.0	
1985	16.9	945	13,417	796	2,515	149	15,932			16.0	
1990	16.1	1,047	13,744	856	3,071	191	16,815		1654	18.0	
1995	13.6	503	4,602	338	2,256	166	6,859		643	11.1	
1996	14.0	484	4,691	335	2,102	150	6,792			10.9	
1997	14.3	548	5,528	386	2,329	163	7,858			11.1	
1998	14.6	542	5,491	377	2,399	165	7,890			10.8	
1999	14.2	604	5,528	389	3,055	215	8,583			10.5	
2000	14.2	630	5,701	403	3,215	227	8,916			10.7	
2003	13.9	675	6,980	501	2,419	174	9,398	159,463	1,748	11.4	131.8
2004	14.1	697	7,336	519	2,527	179	9,862	161,222	1,758	...	135.6
2005	14.2	729	7,923	556	2,468	173	10,391	135,007	1,723	11.8	...
2006	...	...	...	...	...	...	...	...	...	...	...
2007	14.2	735	8,725	615	1,705	120	10,429	167,136	1,934	11.9	...
Fédération de Russie/Russian Federation											
1975	15.0	1,713	23,409	1,562	2,260	151	25,669				
1980	15.4	1,727	24,259	1,570	2,413	156	26,672				
1985	14.3	1,973	25,662	1,793	2,581	180	28,243				
1990	21.4	1,502	28,933	1,354	3,147	147	32,080				
1995	18.7	858	13,889	741	2,200	117	16,088			14.9	
1996	18.1	835	12,990	719	2,081	115	15,071		1,711	13.8	
1997	16.9	868	12,697	752	1,965	116	14,662		1,866	13.0	
1998	14.8	899	11,834	800	1,458	99	13,293		1,722	12.0	
1999	14.4	1,088	14,001	974	1,639	114	15,641		2,128	13.0	
2000	15.0	1,027	13,912	925	1,533	102	15,445		2,186	14.2	
2003	14.3	1,490	19,456	1,362	1,837	129	21,292	...	3,079	...	74.6
2004	...	...	...	...	...	...	...	...	...	...	68.5
2005	...	...	...	...	...	...	...	...	...	...	...
2006	...	...	...	...	...	...	...	...	...	...	...
2007	13.4	2,006	24,838	1,853	2,061	154	26,899	338,746	3,688	19.2	...
Géorgie/Georgia											
2007	4.3	1,250	4,877	1,126	535	123	5,412	46,217	578	...	...
Kazakhstan											
2007	7.0	2,068	13,459	1,930	958	137	14,418	211,508	2,113	...	...
Kyrgyzistan/Kyrgyzstan											
2007	11.9	164	1,803	152	145	12	1,947	31,438	321	...	...

	(a1)	(a2)	(b1)	(b2)	(c1)	(c2)	(d1)	(e)	(f)	(g)	(h)
Moldova											
1995	15.4	197	2,265	147	768	50	3,033			5.9	
1996	14.4	192	2,100	146	665	46	2,765			5.4	
1997	13.1	208	2,131	163	597	46	2,728			4.4	
1998	13.4	202	2,176	162	538	40	2,714		188	4.4	
1999	9.3	148	1,081	116	301	32	1,382		103	3.3	
2000	10.8	151	1,350	125	277	26	1,627		132	3.2	
2003	13.3	227	2,700	203	317	24	3,017	41,951	344	4.4	83.4
2004	13.3	232	2,761	208	322	24	3,083	43,192	350	6.7	102.9
2005	...	...	...	...	...	...	...	...	...	...	...
2006	...	...	...	...	...	...	...	...	...	...	...
2007	11.8	262	2,679	227	406	34	3,085	47,799	378	3.2	...
Ouzbékistan/Uzbekistan											
2007	11.6	467	4,814	416	584	51	5,398	128,132	1,155	...	...
Turkmenistan											
2007	5.2	738	3,402	649	468	89	3,870	59,271	4,258	...	...
Ukraine											
1995	18.6	616	8,659	465	2,820	151	11,479		368	12.6	
1996	18.1	544	7,229	400	2,614	145	9,843		726	11.4	
1997	16.7	572	7,116	427	2,419	145	9,535		1446	10.7	
1998	16.6	560	7,050	426	2,218	134	9,268		794	10.5	
1999	16.4	554	6,957	425	2,118	129	9,075		679	10.4	
2000	16.9	597	7,750	460	2,321	138	10,071		931	10.9	
2003	16.8	748	10,204	606	2,380	141	12,584	...	1,313	...	71.9
2004	16.8	774	10,630	634	2,350	140	12,980	108,908	1,562	12.2	69.1
2005	16.7	751	10,180	608	2,393	143	12,574	105,926	1,491	12.8	69.9
2006	...	...	...	...	...	...	...	...	...	...	...
2007	16.8	799	11,000	654	2,432	145	13,432	190,407	1,217	9.8	...

AUTRES PAYS/OTHER COUNTRIES

	(a1)	(a2)	(b1)	(b2)	(c1)	(c2)	(d1)	(e)	(f)	(g)	(h)
Etats-Unis/United States of America											
1975	1.5	2,213	3,326	2,213	0	0	3,326		638	2.1	
1980	1.5	2,811	4,114	2,796	22	15	4,136		784	2.3	
1985	1.1	3,976	4,321	3,952	26	24	4,347		901	2.0	
1990	1.0	6,319	5,967	6,279	38	40	6,006		1,245	2.6	
1995	0.9	9,031	7,919	8,990	36	41	7,955		1,564	3.3	
1996	0.8	9,693	8,137	9,653	34	40	8,170		1,596	3.3	
1997	0.9	9,813	8,372	9,772	35	41	8,407		1,550	3.5	
1998	0.9	9,956	8,655	9,914	37	42	8,692		1,528	3.5	
1999	0.9	10,359	9,048	10,317	37	42	9,085		1,529	3.6	
2000	0.8	11,079	9,278	11,033	39	46	9,317		1,550	3.8	
2003	0.8	12,954	9,709	12,902	39	52	9,748	200,438	4,849	3.8	107.0

	(a1)	(a2)	(b1)	(b2)	(c1)	(c2)	(d1)	(e)	(f)	(g)	(h)
Etats-Unis/United States of America (suite/continued)											
2004	0.8	13,639	10,500	13,589	38	50	10,539	204,607	5,112	4.0	107.7
2005	...	...	...	...	...	...	...	...	...	...	117.3
2006	...	15,436	...	15,436	...	...	...	200,399	5,441	...	...
2007	0.9	16,828	14,705	16,828	...	...	14,705	200,399	5,932	4.7	...
Japon/Japan											
1975	20.2	608	2,164	107	10,121	501	12,285		366	32.0	
1980	19.4	556	1,733	89	9,058	467	10,792		355	31.0	
1985	13.3	791	1,029	77	9,498	713	10,527		490	29.9	
1990	9.6	1,364	1,323	138	11,729	1,226	13,052		888	37.6	
1995	9.6	1,422	1,229	129	12,367	1,294	13,596		1,067	38.8	
1996	9.2	1,483	1,223	132	12,492	1,351	13,715		1,178	38.5	
1997	9.0	1,496	1,206	134	12,275	1,362	13,482		1,211	38.7	
1998	8.8	1,503	1,124	128	12,038	1,375	13,163		1,203	38.6	
1999	8.5	1,528	1,107	130	11,941	1,398	13,048		1,269	38.3	
2000	7.8	1,671	1,081	139	11,937	1,532	13,019		1,238	38.3	
2003	7.1	1,848	1,126	158	12,018	1,689	13,144	227,525	2,491	38.5	...
2004	6.8	1,937	1,107	163	12,079	1,775	13,185	231,980	2,434	38.4	...
2005	...	...	...	...	...	...	...	...	...	...	...
2006	...	...	...	...	...	...	...	...	...	...	...
2007	6.6	2,093	1,154	176	12,598	1,917	13,752	244,203	2,553	38.8	...

1. Data are calculated on the basis of gross-tonne-km total.

2. TK = Tonnes-Kilomètres; Tkm = Tonne-kilometres.

3. VK = Voyageurs-Kilomètres; Pkm = Passenger-kilometres.

Sources: Statistique Internationale des Chemins de fer/International Railway Statistics, UIC, Paris; Energy balances of OECD and Non-OECD countries, IEA, Paris.
