

RESULTS FACTSHEET

INDICATOR SET06: ACCESSIBILITY OF TRANSPORT MODES

DEFINITION - OBJECTIVE

This indicator records data on the airports, railway stations and ports located in the Regions of the Egnatia Motorway Impact Zones, and more specifically: (a) their location, (b) their position in an official rating according to their significance, (c) the volume of passenger and commercial traffic they serve, and (d) their distance and time distance from the closest Egnatia Motorway junction.

The indicator monitors the impact of the Egnatia Motorway on the accessibility of other types of transport modes. The optimum connection between the motorway and other transport modes constitutes a basic parameter in developing an integrated system of combined transport.

RESULTS - ASSESSMENT

The results presented in this factsheet mainly derive from the “Study on the accessibility indicators of special interest areas and public transport in the zone of the regions crossed by the Egnatia Motorway”, which was conducted for the Observatory of “EGNATIA ODOS A.E.” in 2009. This study recorded 44 public transportation infrastructure locations in the Egnatia Motorway *Impact Zone IV*¹, out of which 26 are railway stations, while 9 are ports and 9 are airports. 14 infrastructures are located in the Region of Eastern Macedonia and Thrace, 12 in the Region of Central Macedonia, 8 in the Region of Thessaly and 5 in the Regions of Western Macedonia and Epirus.

The distance and time distance of each public transport infrastructure location from the closest Egnatia Motorway IC is presented per Region in the following tables.

¹ Impact Zone IV concerns the motorway impacts in the Zone of the Regions crossed by the Egnatia Motorway, i.e. the Regions of Eastern Macedonia and Thrace, Central Macedonia, Western Macedonia, Thessaly and Epirus. For the Egnatia Motorway Impact Zones go to: http://observatory.egnatia.gr/02_indicators/02_5_impact_zones.htm

Distances and time-distances of other transport modes locations from the closest Egnatia motorway and its vertical axes' junctions, 2009

Code	Transport mode place / station	Coordinates (EGSA '87)		Direction towards	Closest junction	Distance (km)	Time-distance (min)	Average speed (km/h)	Time-distance at peak (min)	Average speed at peak (km/h)
Region of East Macedonia and Thrace (Anatoliki Makedonia, Thraki)										
M.1.1.1	Alaxendroupolis airport	663716	4524431	West	Alexandroupoli I/C	Not preferable				
				West	Exit to Alexandroupolis airport	6.80	7.65	53.33	-	-
				East	VIPE Alexandroupolis I/C	10.00	10.97	54.71	-	-
M.1.1.2	Kavala airport	552200	4530047	West	Perni I/C	8.20	8.42	58.46	-	-
				East	Chrysoupoli I/C	12.50	12.67	59.21	-	-
M.1.2.1	Alexandroupolis port	658052	4522871	West	Alexandroupoli I/C	4.25	8.75	29.14	8.75	29.14
				East	VIPE Alexandroupolis I/C	13.30	17.18	46.44	17.18	46.44
				East	Makri I/C	11.30	14.33	47.30	14.33	47.30
M.1.2.2	Kavala port	534538	4531273	West	Agios Syllas I/C	4.70	9.29	30.35	10.98	25.69
				East	Aspra Chomata I/C	6.69	9.38	42.80	10.86	36.94
M.1.2.3	Keramoti port	558789	4522757	West	Perni I/C	18.75	19.79	56.84	-	-
				East	Chrysoupoli I/C	23.05	24.04	57.53	-	-
M.1.2.4	Nea Peramos port	526290	4521847	All	Agios Andreas I/C	3.50	4.88	43.08	-	-
M.1.3.1	Alexandroupoli rail station	658203	4522985	West	Alexandroupoli I/C	4.45	9.48	28.17	9.48	28.17
				East	VIPE Alexandroupolis I/C	13.10	16.47	47.73	16.47	47.73
				East	A/K Μάρκης	11.50	14.92	46.26	14.92	46.26
M.1.3.2	Orestiada rail station	711597	4597410	North	North entrance from Ardanio-Ormenio vertical axis	3.00	5.25	34.29	5.25	34.29
				South	South entrance from Ardanio-Ormenio vertical axis	2.20	3.47	38.08	5.08	25.97
M.1.3.3	Dydimoticho rail station	710004	4580663	North	North entrance from Ardanio-Ormenio vertical axis	2.20	3.37	39.21	4.92	26.85

Distances and time-distances of other transport modes locations from the closest Egnatia motorway and its vertical axes' junctions, 2009

Code	Transport mode place / station	Coordinates (EGSA '87)		Direction towards	Closest junction	Distance (km)	Time-distance (min)	Average speed (km/h)	Time-distance at peak (min)	Average speed at peak (km/h)
				South	South entrance from Ardanio-Ormenio vertical axis	4.15	5.75	43.30	7.37	33.80
M.1.3.4	Dikaia rail station	691014	4619402	South	SE entrance from Ardanio-Ormenio vertical axis	Δεν μετρήθηκε, καθώς κρίνεται ότι στην πράξη οι χρήστες προτιμούν ως επί τω πλείστον τη διαδρομή μέσω της νέας χάραξης του Κάθετου Άξονα, και όχι από την έξοδο του προερχόμενοι από Νοτιοανατολικά (μέσω μεγαλύτερου μήκους της παλιάς εθνικής οδού).				
				West	West junction of Ardanio-Ormenio vertical axis	1.40	2.45	34.29	-	-
M.1.3.5	Pythio (cross-border) rail station	719097	4582824	All	Asimenio I/C, Ardanio-Ormenio vertical axis	10.00	12.20	49.18	-	-
M.1.3.6	Komotini rail station	616918	4551662	East	East Komotini I/C	4.52	6.79	39.90	7.58	35.62
				West	West Komotini I/C	3.98	5.98	39.97	6.67	35.85
M.1.3.7	Xanthi rail station	574773	4552634	West	West Xanthi I/C	9.04	11.01	49.25	11.01	49.25
				East	East Xanthi I/C	6.94	9.69	42.97	8.85	47.01
M.1.3.8	Drama rail station	512212	4554087	South	Agios Syllas I/C	32.33	35.81	54.16	35.81	54.16
				East	Strymonas I/C	51.51	48.92	63.18	50.15	61.63
Region of Central Macedonia (Kentriki Makedonia)										
M.2.1.1	Thessaloniki Airport	413268	4486126	All	Efkarpia I/C	26.34	20.53	76.99	21.60	73.15
					Efkarpia I/C	25.10	23.02	65.44	23.79	63.32
M.2.2.1	Thessaloniki port	409797	4498549	East	Efkarpia I/C	14.15	17.78	47.73	18.64	45.55
				West	Kalochori I/C	9.02	9.43	57.40	9.28	58.30
M.2.3.1	Serres rail station	460930	4546792	All	Serres entrance from Serres-Promachonas vertical axis	5.70	5.95	57.48	-	-
M.2.3.2	Promachonas (cross-border) rail station	446404	4579805	All	South entrance from Serres-Promachonas vertical axis	0.10	0.50	12.00	-	-

Distances and time-distances of other transport modes locations from the closest Egnatia motorway and its vertical axes' junctions, 2009

Code	Transport mode place / station	Coordinates (EGSA '87)		Direction towards	Closest junction	Distance (km)	Time-distance (min)	Average speed (km/h)	Time-distance at peak (min)	Average speed at peak (km/h)
M.2.3.3	Kilkis (Kritsoni) rail station	403639	4534518	All	Lagadas-Serres I/C	30.60	25.45	72.14	-	-
M.2.3.4	Eidomeni rail station	375433	4552953	East	Axios I/C (PATHE)	77.50	61.16	76.03	-	-
				West	Ioania-Diavata I/C	74.05	63.13	70.38	-	-
M.2.3.5	Thessaloniki rail station	409332	4499508	East	Efkarpia I/C	13.89	19.24	43.32	20.16	41.35
				West	Kalochori I/C	8.76	10.89	48.30	10.80	48.67
M.2.3.6	Veria rail station	348582	4488908	All	Veria I/C	5.80	6.95	50.09	7.32	47.52
M.2.3.7	Alexandreia rail station	368036	4497509	All	Niselio I/C	5.05	6.45	46.98	-	-
M.2.3.8	Naousa rail station	342005	4498142	All	Veria I/C	17.75	18.68	57.01	-	-
M.2.3.9	Edessa rail station	335396	4519054	East	Ioania-Diavata I/C	79.27	73.58	64.64	73.88	64.38
				West	Veria I/C	52.82	59.98	52.84	60.28	52.58
				West	Axios I/C (PATHE)	82.72	71.61	69.31	71.91	69.02
				West	Levaia I/C, Kozani-Niki vertical axis	45.97	44.46	62.04	44.76	61.62
M.2.3.10	Katerini rail station	374969	4458322	All	Kleidi I/C	37.50	25.98	86.61	-	-
Region of West Macedonia (Dytiki Makedonia)										
M.3.1.1	Kastoria airport	268541	4480850	All	Argos Orestiok I/C, Siatista-Krystallopigi vertical axis	3.50	3.62	58.01	3.75	56.00
M.3.1.2	Kozani airport	316319	4461837	East	Kozani I/C	9.22	11.60	47.67	11.68	47.34
				West	Kalamia I/C	17.80	26.40	40.46	26.42	40.43
M.3.3.1	Kozani rail station	312263	4462529	East	Kozani I/C	8.75	13.29	39.52	13.13	40.01
				West	Kalamia I/C	10.91	12.92	50.70	13.02	50.28
M.3.3.2	Ptolemaida rail station	304431	4487246	South	South entrance fro the Kozani-Niki vertical axis	1.70	2.21	46.15	-	-

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				North	North entrance fro the Kozani-Niki vertical axis	2.45	2.91	50.52	-	-
M.3.3.3	Florina rail station	281710	4517398	East	East entrance fro the Kozani-Niki vertical axis	11.35	12.20	55.82	-	-
				North	North entrance fro the Kozani-Niki vertical axis	12.14	13.98	52.11	13.73	53.04
Region of Epirus (Ipeiros)										
M.4.1.1	Ioannina airport	238811	4338266	All	Ioannina I/C	13.62	15.30	53.42	15.34	53.27
M.4.1.2	Aktio airport	219991	4313829	West	Igoumenitsa-Ladochori I/C	94.15	76.79	73.57	-	-
				East	Vasiliko I/C	81.85	69.75	70.41	-	-
				East	Ioannina I/C	103.43	92.48	67.11	-	-
M.4.2.1	Igoumenitsa port	178161	4377388	All	Igoumenitsa-Ladochori I/C	1.20	1.73	41.74	1.83	39.29
M.4.2.2	Preveza port	218755	4317337	West	Vasiliko I/C	81.55	71.79	68.16	71.79	68.16
				East	Igoumenitsa-Ladochori I/C	93.85	78.83	71.43	78.83	71.43
				East	Ioannina I/C	95.68	84.71	67.77	85.02	67.52
M.4.2.3	Parga port	189454	4354154	West	Igoumenitsa-Ladochori I/C	48.25	44.33	65.31	-	-
				East	Vasiliko I/C	35.95	37.29	57.85	-	-
Region of Thessaly (Thessalia)										
M.5.1.1	New Agchialos airport	393712	4342288	West	Kozani I/C	203.26	176.04	69.28	-	-
				West	Grevena I/C	216.69	178.43	72.87	-	-
				East	Kleidi I/C	189.25	146.61	77.45	-	-
M.5.2.1	Volos port	408877	4356974	West	Kozani I/C	192.56	176.53	65.45	179.28	64.45
				West	Grevena I/C	205.99	179.17	68.98	181.42	68.13

Distances and time-distances of other transport modes locations from the closest Egnatia motorway and its vertical axes' junctions, 2009

Code	Transport mode place / station	Coordinates (EGSA '87)		Direction towards	Closest junction	Distance (km)	Time-distance (min)	Average speed (km/h)	Time-distance at peak (min)	Average speed at peak (km/h)
				East	Kleidi I/C	178.55	147.49	72.64	149.47	71.68
M.5.3.1	Volos rail station	408301	4357442	East	Kleidi I/C	178.15	146.13	73.15	147.48	72.48
				West	Kozani I/C	192.16	175.17	65.82	177.29	65.03
				West	Grevena I/C	205.59	177.81	69.37	179.43	68.75
				West	Grevena I/C	205.59	177.81	69.37	179.43	68.75
M.5.3.2	Larissa rail station	364481	4387578	East	Kleidi I/C	122.51	115.39	63.70	116.83	62.92
				West	Panagia I/C	124.65	115.15	64.95	115.96	64.50
				West	Grevena I/C	144.50	131.07	66.15	131.88	65.74
				West	Kozani I/C	133.64	128.39	62.45	129.51	61.91
M.5.3.3	Karditsa rail station	320181	4357871	West	Grevena I/C	116.63	112.63	62.13	114.04	61.36
				East	Panagia I/C	96.78	96.71	60.04	98.12	59.18
				East	Kleidi I/C	192.40	162.14	71.20	162.97	70.84
M.5.3.4	Trikala rail station	307673	4379487	West	Panagia I/C	64.07	67.22	57.19	-	-
				East	West Grevena I/C	83.92	83.14	60.56	-	-
				East	Kleidi I/C	200.50	169.02	71.18	-	-
M.5.3.5	Kalambaka rail station	296270	4397210	West	Panagia I/C	42.25	43.00	58.96	-	-
				East	West Grevena I/C	62.10	58.92	63.24	-	-

CAPACITY AND TRAFFIC

Within the context of the aforementioned design, a research was conducted for **9 airports** located in the 5 Regions in question. These are the airports of Alexandroupoli, Kavala, Thessaloniki, Kastoria, Kozani, Ioannina, Preveza (Aktio), Volos and Skiathos. There follows a table presenting the airports, the Region they are located in and their ranking, according to the Hellenic Civil Aviation Authority.

Ranking of airports in Impact Zone IV				
Region	International	Statutory	Casual	Domestic only
East Macedonia, Thrake	Alexanroupoli "Dimokritos airport"			
	Kavala "Megas Alexandros airport"			
Central Macedonia	Thessaloniki "Macedonia airport"			
West Macedonia		Kastoria "Aristotelis airport"		
				Kozani "Phillipos airport"
Epirus		Ioannina "Vasilias Pyrros airport"		
		Preveza - Aktio airport		
Thessaly		Volos - Nea Agchialos airport		
			Skiathos "Alexandros Papadiamantis airport"	

Source: Hellenic Civil Aviation Authority

With regard to the volume of airport passenger traffic in the last 10 years, a decreasing trend is recorded for most airports, while a minor increase is observed at 3 of them. More specifically, the passenger traffic for each airport is as follows:

Alexandroupolis Airport: An increase in the number of passengers was recorded from 1999 to 2001, and, then, a decrease in 2002, and another increase in the time period until 2007. In 2008, a decrease by 10,000 passengers was observed.

Kavala Airport: A significant increase in the number of passengers from 1999 to 2000 was recorded, and, then, a decrease in the time period until 2008, with the exception of 2007, when a minor increase was observed in relation to 2006.

Thessaloniki Airport: An increase in the number of passengers from 1999 to 2000 was recorded, and, then, a decrease in the time period until 2003, when numbers started to rise again up until 2008.

Kastoria Airport: An increase in the number of passengers throughout the examined time period is observed reaching an annual average number of passengers of 7,000. A noteworthy drop of numbers first was observed in 2007.

Kozani Airport: Decreasing trends in the passenger traffic are recorded in the time period up until 2005, an increase in 2005 and 2006, and another decrease in 2007, which is followed by an increase in 2008.

Ioannina Airport: Fluctuations in the passenger traffic are observed, with an interesting increase in 2007 (approximately 20,000 more passengers than in 2006). From 2007 to 2008, decreased numbers were recorded.

Preveza Airport: Following an increase in the number of passengers in 2000, fluctuations are also recorded with an annual average of 300,000 passengers.

Volos Airport: From 1999 to 2002, the number of passengers is increased, then it is gradually decreased until 2007, and, in 2008, the number is almost duplicated.

Skiathos Airport: From 1999 to 2002, the number of passengers is increased, and then a continuous decreasing trend is recorded.

With regard to the airports' commercial traffic, except for the Airports of Kastoria and Kozani, which do not service any commercial traffic but only mail, some is recorded at the Airports of Ioannina, Preveza and Skiathos, and no commercial traffic is recorded at Volos Airport. Thessaloniki Airport is characterized by intense fluctuation in the volumes of trafficked goods (to give an example, these volumes almost tripled in the years 2007 and 2008), while the Airports of Kavala and Alexandroupoli present an increase in the years 1999-2000 and a subsequent gradual decrease in the following years. The following tables present the passenger and commercial traffic per Prefecture and per Region.

Airport passengers traffic by Prefecture and Region, 1999-2008

region	NUTS 2	Prefecture	NUTS 3	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	1999 - 2008
East Macedonia, Thrake [Anatoliiki Makedonia, Thraki]	gr11	Evros	gr111	218,068	223,809	276,354	234,000	244,000	269,000	261,000	277,919	305.132	295.318	2.604.600
	gr15	Kavala	gr115	323,000	403,000	375,000	367,000	356,000	337,000	301,000	320,165	344.563	321.926	3.448.654
	total			541.068	626.809	651,354	601,000	600,000	606,000	562,000	598,084	649,695	617,244	6.053.254
Central Macedonia [Kentriki Makedonia]	gr12	Thessaloniki	gr122	3,187,000	3,548,000	3,431,000	3,257,000	3,501,000	3,647,000	3,670,000	3,802,854	4.168.557	4.171.154	36.383.565
	total			3.187.000	3.548.000	3,431,000	3,257,000	3,501,000	3,647,000	3,670,000	3,802,854	4,168,557	4,171,154	32.212.411
West Macedonia [Dytiki Makedonia]	gr13	Kastoria	gr132	8,000	8,000	6,000	4,000	4,000	5,000	5,000	5,376	3.840	5.311	54.527
		Kozani	gr133	8,000	8,000	6,000	4,000	4,000	4,000	5,000	6,608	2.809	1.897	50.314
	total			16.000	16.000	12,000	8,000	8,000	9,000	10,000	11,984	6,649	7,208	104.841
Epirus [Ipeiros]	gr21	Ioannina	gr213	119,000	176,000	146,000	126,000	136,000	148,000	130,000	126,239	141.001	131.218	1.248.240
		Preveza	gr214	242,000	300,000	302,000	329,000	298,000	293,000	301,000	288,555	319.476	328.119	2.673.031
	total			361.000	476.000	448,000	455,000	434,000	441,000	431,000	414,794	460,477	459,337	3.921.271
Thessaly "Thessalia"	gr14	Magnisia	gr143	292,000	321,000	365,000	373,000	342,000	291,000	274,000	266,781	269.245	271.576	2.794.026
	total			292.000	321.000	365,000	373,000	342,000	291,000	274,000	266,781	269,245	271,576	2.794.026
Impact zone total				4.397.068	4.987.809	4.907.354	4,694,000	4,885,000	4,994,000	4,947,000	5,094,497	5,554,623	5,526,519	45,085,803

Row data source: Greek Statistics Agency, Hellenic Civil Aviation Authority, airport authorities, 2009

Airport cargo traffic (tn) by Prefecture and Region, 1999-2008

Περιφέρεια	NUTS 2	Νομός	NUTS 3	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	1999-2008
East Macedonia, Thrace [Anatoliki Makedonia, Thraki]	gr11	Evros	gr111	916	1,391	1,346	1,067	1,029	1,039	1,165	0	0	810	8.763
		Kavala	gr115	710	930	722	323	346	579	519	7	6	1.001	5.143
	total			1.626	2.321	2,068	1,390	1,375	1,618	1,684	7	6	1,811	13,906
Central Macedonia [Kentriki Makedonia]	gr12	Thessaloniki	gr122	7,967	6,154	10,466	7,178	6,376	4,966	9,284	3,766	3,284	8,299	67,740
	total			7.967	6.154	10,466	7,178	6,376	4,966	9,284	3,766	3,284	8,299	67,740
West Macedonia [Dytiki Makedonia]	gr13	Kastoria	gr132	4	4	12	3	1	1	1	0	0	0	26
		Kozani	gr133	4	5	2	1	1	0	0	0	0	0	13
	total			8	9	14	4	2	1	1	0	0	0	39
Epirus [Ipeiros]	gr21	Ioannina	gr213	36	31	18	16	16	22	39	0	0	3	181
		Preveza	gr214	5	5	0	0	0	0	0	1	0	0	11
	total			41	36	18	16	16	22	39	1	0	3	192
Thessaly "Thessalia"	gr14	Magnisia	gr143	11	9	3	2	1	2	2	0	0	0	55
	total			11	9	3	2	1	2	2	0	0	0	55
Impact zone total				9.653	8.529	12.569	8,590	7,770	6,609	11,010	3,774	3,290	10,113	81,932

Row data source: Greek Statistics Agency, Hellenic Civil Aviation Authority, airport authorities, 2009

Regarding **port infrastructure**, there are two ports in the Region of East Macedonia & Thrace (Kavala and Alexandroupoli), one in Central Macedonia (Thessaloniki), one in Epirus (Igoumenitsa and three smaller ports in Preveza, Parga and Sagiada) and one in Thessaly (Volos).

Ranking of ports in impact zone IV		
Region	National port	Regional port
East Macedonia, Thrace [Anatoliki Makedonia, Thraki]	Alexandroupoli	
	Kavala	
Central Macedonia [Kentriki Makedonia]	Thessaloniki	
Epirus [Ipeiros]	Igoumenitsa	
West Macedonia [Dytiki Makedonia]		Volos
Source: Ministry of Shipping		

The total number of the passengers transported through the 5 ports was increased in the period 2007-2008. The highest number of passengers both in 2008 and in the overall period of 2000-2008 is recorded at the port of Igoumenitsa. It should be noted that no data are available for this specific port and for domestic routes in 2000, neither for international routes in 2004.

The main conclusions for passenger traffic per port are the following:

Alexandroupoli Port: A decrease in passenger traffic is recorded just for the years 2004 and 2006. In the time period 2000-2008, passenger traffic was increased by 10%.

Kavala Port Authority Ports (Kavala, Keramoti, Peramos): In general, increasing trends are recorded in the period 2000-2008, the overall passenger traffic in this period having been increased by 31%.

Thessaloniki Port: A significant decrease in passenger traffic was recorded from 2006 onwards, and increasing trends were observed in the following two years (2006-2008).

Igoumenitsa Port: The port data that are considered to be complete are those on the period 2005-2008. According to this data, Igoumenitsa port presents an increase in passenger traffic per year.

Volos Port: Fluctuations in passenger traffic are recorded on an annual basis in the period 2000-2008; however, throughout this period, a significant percentage increase is recorded (18%).

Passengers traffic by port, 2000-2008										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	ΣΥΝΟΛΟ
Igoumenitsa *	1,241,916	2,536,841	2,552,499	2,447,969	1,352,369	2,419,803	2,504,370	2,508,446	2,687,297	17,564,213
Kavala **	1,380,409	1,390,512	1,445,901	1,454,229	1,386,653	1,448,099	1,636,328	1,853,931	1,808,044	13,804,106
Volos	368,643	366,722	356,669	382,417	364,916	377,358	406,283	440,441	434,935	3,498,384
Thessaloniki	248,429	231,580	218,032	201,282	209,066	217,538	129,684	150,202	163,502	1,769,315
Alexandroupolis	157,422	158,146	159,452	168,800	168,604	178,203	155,756	(***)	172,928	1,319,311
TOTAL	3,396,819	4,683,801	4,732,553	4,654,697	3,481,608	4,641,001	4,832,421	4,953,020	5,266,706	20,391,116

(*) No data available for domestic traffic in 2000 and for international traffic in 2004

(**) Includes the domestic ports of Nea Peramos and Keramoti

(***) No data available

Row data sources: Port authorities, February 2009 and April 2010

Based on the aforementioned data, Igoumenitsa Port clearly prevails as far as passenger traffic is concerned, while Thessaloniki Port presents the lowest passenger traffic numbers.

Goods traffic (tn) by port, 2000-2008, 2000-2008										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	ΣΥΝΟΛΟ
Thessaloniki	6,476,466	5,497,793	5,349,416	5,480,272	6,354,788	6,892,413	6,743,697	8,466,459	16,041,842	67,303,146
Kavala.*	1,050,505	1,175,245	1,115,240	1,081,675	1,721,496	1,054,195	1,947,199	1,478,005	1,537,837	12,161,397
Volos	1,061,311	1,070,464	1,161,332	1,264,297	1,097,235	1,091,057	1,042,506	1,407,047	1,615,244	10,810,493
Alexandroupolis	298,493	281,329	289,327	500,281	652,331	346,870	355,650	(**)	376,912	3,101,193
TOTAL	8,886,775	8,024,831	7,915,315	8,326,525	9,825,850	9,384,534	10,089,052	11,351,511	19,571,835	93,376,229

(*)Includes the domestic ports of Nea Peramos and Keramoti

(**)No data available

Row data sources: Port authorities, February 2009 and April 2010

With regard to the commercial (goods) traffic of ports, except from Parga port, which is a purely touristic one, rates per port are the following:

Alexandroupoli Port: Commercial traffic presents fluctuations in the period 2000-2008. A significant increase in commercial traffic is recorded in the period 2001-2004. In 2005, commercial traffic drops to the half, and, since then, increasing trends are observed.

Kavala Port Authority Ports: Commercial traffic abruptly increases in the years 2004 and 2006, and, in the following years, rates are decreased. In total, commercial traffic in 2008 was increased by 50% in relation to the year 2000.

Thessaloniki Port: A decrease every year is recorded for the years 2000-2002, an increase every year in the years 2003-2005, and a significant increase in the period 2006-2008. The total weight of the transported goods more than doubled in 2008 in relation to 2000.

Preveza Port: An increase in commercial traffic was recorded in the years 1999-2000, a decrease in 2001, a radical increase in 2002, and a decrease in 2003, which was followed by an increase in 2004. In the years 2005 - 2007, the volume of transported goods was reduced and then increased again in 2008.

Volos Port: Commercial traffic at Volos Port was almost stable in the period 2000-2006, and noticeably increased in 2007 and 2008. The weight of the transported goods in 2000-2008 was increased by almost 60%.

As far as the goods transported through Igoumenitsa Port are concerned, no data had been recorded by the competent Port Authority; no data had been recorded either for the goods transported through Alexandroupoli Port in 2007. Thessaloniki Port overwhelmingly prevails, as far as the weight of transported goods is concerned, and, in the time period 2000-2008, it presents the most significant increasing trends, the most noticeable being the one recorded in the period 2007-2008. In general, in the time period 200-2008, ports in Zone IV present an increase in the weight of transported goods by 32%.

The national **railway network** serves 16 out of the 24 Prefectures in Zone IV. The areas not served are the Region of Epirus, and the Prefectures of Kavala, Halkidiki, Grevena and Kastoria.

During the period 2004-2008, the number of transported passengers via the railway stations of Zone IV has increased in the majority of the Prefectures in the Egnatia Motorway Impact Zone. A significant increase is recorded in the Prefectures of Kozani, Florina, Pella, Trikala and Karditsa, while a decrease is noted in the Prefectures of Thrace, as well as in the Prefectures of Drama, Kilikis and Serres.

With regard to the railway stations of major urban centers, in the period 2004-2008, it is worth noting that overall passenger traffic was increased at the railway stations of Ptolemaida, Kozani, Florina, Edessa, Trikala and Karditsa. A decrease was recorded at the railway stations of Nea Orestiada, Kilikis, Alexandroupoli, Drama, Komotini and Xanthi.

Rail passengers traffic by Prefecture, 2004-2008						
Νομός	2004	2005	2006	2007	2008	2004-2008
Evros	568,230	542,865	477,252	463,297	316,019	-44.4%
Xanthi	151,765	169,311	168,899	187,250	144,588	-4.7%
Rodopi	164,998	186,839	182,329	193,537	146,967	-10.9%
Drama	137,488	156,944	156,422	159,023	126,117	-8.3%
Imathia	750,009	903,877	981,001	1,067,679	964,293	28.6%
Thessaloniki	2,574,251	2,940,449	3,020,877	3,277,542	2,787,160	8.3%
Kilikis	191,563	196,488	184,217	178,936	104,020	-45.7%
Pella	169,597	303,149	375,615	435,441	386,320	127.8%
Peria	426,593	449,164	459,663	523,958	540,562	26.7%
Serres	333,071	364,814	355,212	331,825	229,218	-31.2%
Kozani	6,664	7,382	6,679	45,788	37,401	461.2%
Florina	71,952	84,444	97,411	252,388	222,219	208.8%
Karditsa	89,933	112,244	139,880	180,403	170,330	89.4%
Larissa	1,384,314	1,425,493	1,412,826	1,521,378	1,470,155	6.2%
Magnisia	484,636	507,181	483,181	531,523	507,362	4.7%
Trikala	107,006	137,185	165,645	233,831	221,858	107.3%
TOTAL	7,626,912	8,504,466	8,683,611	9,583,799	8,374,589	9.8%

Row data source: Greek Rail Organisation (OSE), 2009-2010

Rail passengers traffic by urban centre, 2004-2008						
Πόλεις	2004	2005	2006	2007	2008	2004-2008
Alexandria	195,443	220,274	215,012	286,232	276,813	42%
Alexandroupolis	207,760	215,448	207,727	218,419	170,860	-18%
Veria	179,082	235,704	272,411	263,546	237,974	33%
Volos	439,507	456,478	422,337	464,766	450,875	3%
Drama	130,056	143,286	140,809	140,579	111,431	-14%
Edessa	92,380	178,359	206,133	231,689	216,502	134%
Thessaloniki	2,463,864	2,832,197	2,918,963	3,182,287	2,719,696	10%
Karditsa	68,753	87,060	112,616	145,883	138,554	102%
Katerini	195,696	209,523	221,162	249,860	202,817	4%
Kilkis	92,806	101,315	90,768	91,427	58,701	-37%
Kozani	3,936	4,480	4,452	22,575	21,129	437%
Komotini	160,312	182,528	178,332	190,547	144,727	-10%
Larissa	1,223,936	1,265,849	1,264,434	1,366,376	1,321,420	8%
Nea Orestiada	116,516	106,311	90,627	80,524	50,770	-56%
Naousa	93,383	134,406	159,827	152,344	121,732	30%
Xanthi	127,740	145,254	143,767	157,852	123,492	-3%
Ptolemaida	2,719	2,890	2,215	22,828	16,034	490%
Serres	142,625	158,504	152,119	146,785	116,468	-18%
Trikala	71,391	93,633	112,150	160,456	152,996	114%
Florina	47,271	57,289	57,276	163,973	147,141	211%
TOTAL	6,055,176	6,830,788	6,973,137	7,738,948	6,800,132	12%

Row data source: Hellenic Railways (OSE), 2009-2010

The Hellenic Railways (OSE) data on commercial traffic at railway stations show abrupt fluctuations per year and station. These fluctuations are due to changes in the timetables, as well as in the lack of data on specific stations, as explained in the methodology section herein. For this reason, the analysis of commercial traffic through railway stations is limited to the main conclusions drawn from the available reliable data. What can be noted is the fact that commercial traffic through railway stations presents an increase in the majority of the Prefectures examined in the period 2004-2008. A significant increase was recorded in the Prefectures of Thessaloniki, Rodopi and Xanthi. At the major urban railway stations, an impressive increase was recorded in the Prefectures of Pella, Pieria, Magnesia, Thessaloniki, Larissa and Xanthi, while a reduction was noted only at the railway stations of Florina, Karditsa and Trikala.

METADATA

Sources

The data presented in this Results Fact Sheet mainly derive from the “Accessibility indicators study on the special interest areas and public transportation in the zone of the regions crossed by the Egnatia Motorway”. This study-research was conducted, following an international competition, by a consortium formed by the following design offices: (a) Giannetaki Georgia, (b) AKKT-Consulting Engineers, and (c) Miltiadou Marios, under the supervision of the EGNATIA ODOS A.E. Observatory Team members (V. Fourkas and Ath. Giannakou). This results fact sheet contains just a short description of the sources and methodology followed; their fully detailed presentation can be found in the design documents and the final deliverable report.

The data on the locations of ports and airports derive from the Regional Frameworks of Spatial Planning for the Regions of East Macedonia & Thrace [Greek Government Gazette (GGG) Volume 1471B’/9-10-2003], Central Macedonia (218 B’/6-2-2004), West Macedonia [Greek Government Gazette (GGG) Volume 1472B’/9-10-2003], Epirus [Greek Government Gazette (GGG) Volume 1451B’/6-10-2003] and Thessaly [Greek Government Gazette (GGG) Volume 1484 B’/10-10-2003]. The rating of the airports comes from the Civil Aviation Authority (YPA), while ports are rated by the Ministry of Mercantile Marine.

The data on passenger and commercial traffic at airports originated from the Hellenic Statistical Authority (EL.STAT.), the Civil Aviation Authority (YPA) and the distinct airports. With regard to commercial traffic at the Airports of Kavala and Alexandroupoli, the EL.STAT. data appear to have some problem (extremely limited data for years 2006 and 2007), which, nevertheless, could not be clarified.

Primary data on the volumes of passenger and commercial traffic through ports were provided by the corresponding Port Authorities, December 2008 and April 2010.

Primary data on the volumes of passenger and commercial traffic through railway stations were provided by the Hellenic Railway Organisation, February 2009, December 2009 and April 2010.

Comments on the data concerning passenger traffic through railway stations are based on clarifications given by TRAINOSE S.A. (Passenger and Goods Railway Transport Services SA - General Directorate for Passengers) by its document dated 15/03/2009.

Methodology

The measurement of travel times from the closest Egnatia Motorway junction or vertical axis was conducted by application of the floating car method. Capacity data were collected by using recording sheets, a method that facilitates the research and, mainly, ensures data homogeneity.

Travel times between special-interest locations and Egnatia Motorway or its vertical axes originated through combining the results of measurements conducted on distinct network sections, taking into account the origin of vehicles and all alternative routes that can be followed to access those special-interest locations.

Measurements are conducted for each distinct route, at both directions and in the same time period, under normal traffic conditions, while, on highly-congested routes (usually routes that cross urban centers), measurements are conducted both in peak and off-peak traffic hours. On the rest of the routes, measurements are conducted under normal (off-peak) traffic conditions.

The methodology followed for the collection and processing of data by airports, YPA, Port Authorities and the Hellenic Railways (OSE) is described in the “Accessibility indicators study on the special interest areas and public transportation in the zone of the regions crossed by the Egnatia Motorway”, Work Package 1, Chapter A. This study indicates that there are great differences between the capacity data published by the National Statistical Service of Greece (ESYE) on the public transport locations and the data published by the corresponding competent bodies.

In addition, insufficient capacity data and gaps in the data time series were indicated for various transport infrastructure locations. The relevant comments are grouped as follows:

• COMMENTS ON THE DATA ON PORTS PASSENGER TRAFFIC

1. As far as the Kavala Port is concerned, there are no data on the itineraries of Limnos, Mitilini, Samothrace, Piraeus, Rafina, Chios, Sigri and Agios Efstratios for the year 1998. Specifically for Samothrace, no data exist for the years 1999-2001, as well. Similarly, for the year 2001, no data exist for Mytilini and Limnos for July - December. For the years 2001-2005, data are also lacking on Piraeus, Rafina, Chios, Sigri and Ag. Efstratios.
2. For N. Peramos port, data are lacking on years 2002-2004.
3. No data exist on the years 1995-2000.

4. For Igoumenitsa port, data are lacking on the domestic itineraries for the year 2000, as well as on the international itineraries for the year 2004.

• **COMMENTS ON THE DATA ON RAILWAYS PASSENGER TRAFFIC**

1. Data on the railway stations in the Prefectures of Imathia, Pella, Kozani and Florina in the period 2004-2006 show steep increases due to the fact that certain railway stations were put into operation again in the examined period. In particular, due to the announcement of the execution of extensive infrastructure works on the railway line Thessaloniki - Platy - Alexandria - Veroia - Naousa - Skydra - Edessa - Amyntaio, Ptolemaida - Kozani/Florina, the operation of the line -except for Skydra station was suspended on 19-12-2000. The railway connection of Edessa was put back into operation in 2005, and the one of Amyntaio - Florina in 2007, a fact that explains the drastic increase in the total passenger traffic at the stations of Florina, Ptolemaida and Kozani in the time period 2006-2007, as well as the great increase in the total passenger traffic at the stations of Edessa and Naousa in the time period 2004-2005.
2. In the Prefecture of Evros, and, more specifically, on a section of the railway connection Alexandroupoli - Dikaia, routes were changed to facilitate the execution of works, thus resulting in a decrease in the passenger traffic at the railway station of Orestiada.
3. The increased passenger traffic in the Prefecture of Trikala is due to operation of Inter City routes between Kalambaka and Athens in 2005 and between Kalambaka and Thessaloniki in 2006.

• **COMMENTS ON THE DATA ON PORTS COMMERCIAL TRAFFIC**

1. For Keramoti port, data are lacking on the periods January - February and September - November 2004. Furthermore, according to the 2001-2002 data, the total weight per month is bigger than the total weight per product. The total weight per month was finally taken into account.
2. For N. Peramos port, there are no data on the loading or unloading for the period January - February 2004.
3. For N. Karvali port, there are no data on the loaded cargo for the years 2000, 2001, 2002, 2003 and 2005.
4. No data exist on the years 1995 - 2000 for any of the examined ports.
5. For Igoumenitsa port, no recorded data exist on the commercial traffic, since the transport of goods was performed by trucks and was not recorded by the competent Port Authority.

• COMMENTS ON THE DATA ON RAILWAY STATIONS COMMERCIAL TRAFFIC

1. For the years 2004, 2005 and 2006, there are no data available for the dispatch and arrival of goods between Thessaloniki and railway stations abroad, nor for the railways of Ptolemaida and Naousa.
2. For 2004, no data exist on the dispatches of goods from the railway stations of Veroia, Edessa and Florina, on the arrivals at the railway station of Katerini, nor for the railway stations of Trikala and Karditsa, and the central railway station of Alexandroupoli.
3. For 2005, no data exist on the dispatches and arrivals of goods through the railway stations of Veroia, Trikala, Karditsa and Florina, as well as on the dispatches from the railway station of Edessa.
4. For 2006, no data exist on the dispatches and arrivals of goods through the central railway stations of Alexandroupoli, Trikala and Karditsa, as well as on the dispatch of goods from the railway stations of Florina and Edessa.
5. For 2007, no data exist on the dispatches and arrivals of goods through the railway stations of Trikala, Florina and karditsa, as well as on the dispatches of goods through the railway station of Edessa.