

## INDICATOR RESULTS FACT SHEET

### ENV09: AXIS' CROSSINGS WITH SURFACE WATERS

#### DEFINITION - OBJECTIVE

The indicator records the number and density of the national network crossings with surface waters, before and after the operation of the Egnatia Motorway, as an indication of the possible impacts on water resources through emissions or polluting substances that may contaminate surface waters (i.e. petroleum products). This indicator is aimed at identifying potentially sensitive spots, due to possible impacts of the axis on water resources.

#### RESULTS - ASSESSMENT

The average number of the Egnatia axis crossings with surface waters (permanent or occasional water flows, attenuations) amounts to 0.2 per km. Following the construction of the Egnatia Motorway, the density of the axis' crossings with surface waters of the National Road Network in Zone II, (permanent or occasional water flows, attenuations) amounts to 0.19 crossings per km, being the same as before the construction of the Egnatia Motorway.

At a project sector level, the indicator of the Egnatia Motorway axis crossings with the surface waters is higher in the West sector (0.27) and lower in the East Sector (0.15). By far the highest density of Egnatia Motorway crossings with surface waters is observed in the Prefecture of Trikala, followed by the Prefectures of Ioannina, Imathia and Xanthi. Regarding the national network crossings in general, including the Egnatia Motorway, the highest density in Zone IV is recorded in the Prefectures of Xanthi and Serres.

CROSSING OF EGNATIA MOTORWAY AXIS WITH SURFACE WATERCOURSES								
Sector	NUTS code	Prefecture	Crossings Density by Prefecture (crossings/km)			Crossings Density by Sector and Zone (crossings/km)		
			National RD Network without Egnatia	Egnatia	National RD Network with Egnatia	National RD Network without Egnatia	Egnatia	National RD Network with Egnatia
Western Sector	gr212	Thesprotia	0,09	0,03	0,08	0,17	0,27	0,18
	gr213	Ioannina	0,19	0,39	0,20			
Central Sector	gr144	Trikala	0,26	0,56	0,27	0,20	0,21	0,21
	gr131	Grevena	0,18	0,14	0,19			
	gr133	Kozani	0,16	0,13	0,16			
	gr121	Imathia	0,29	0,38	0,29			
	gr122	Thessaloniki	0,11	0,13	0,12			
	gr126	Serres	0,33	0,28	0,33			
Eastern Sector	gr115	Kavala	0,18	0,16	0,18	0,20	0,15	0,19
	gr112	Xanthi	0,34	0,30	0,33			
	gr113	Rodopi	0,15	0,13	0,15			
	gr111	Evros	0,17	0,10	0,16			
Rest of Zone IV	gr211	Arta	0,11		0,11	0,11		0,11
	gr114	Drama	0,36		0,36			
	gr141	Karditsa	0,20		0,20			
	gr132	Kastoria	0,29		0,27			
	gr123	Kilkis	0,18		0,18			
	gr142	Larisa	0,14		0,14			
	gr143	Magnisia	0,09		0,09			
	gr124	Pella	0,27		0,27			
	gr125	Pieria	0,15		0,15			
	gr214	Preveza	0,11		0,11			
	gr134	Florina	0,26		0,26			
gr127	Chalkidiki	0,17		0,17				
Zone II	znII	Zone II	0,19	0,20	0,20	0,19	0,20	0,20
Zone IV	znIV	Zone IV	0,19	0,20	0,19	0,19	0,20	0,19

## METADATA

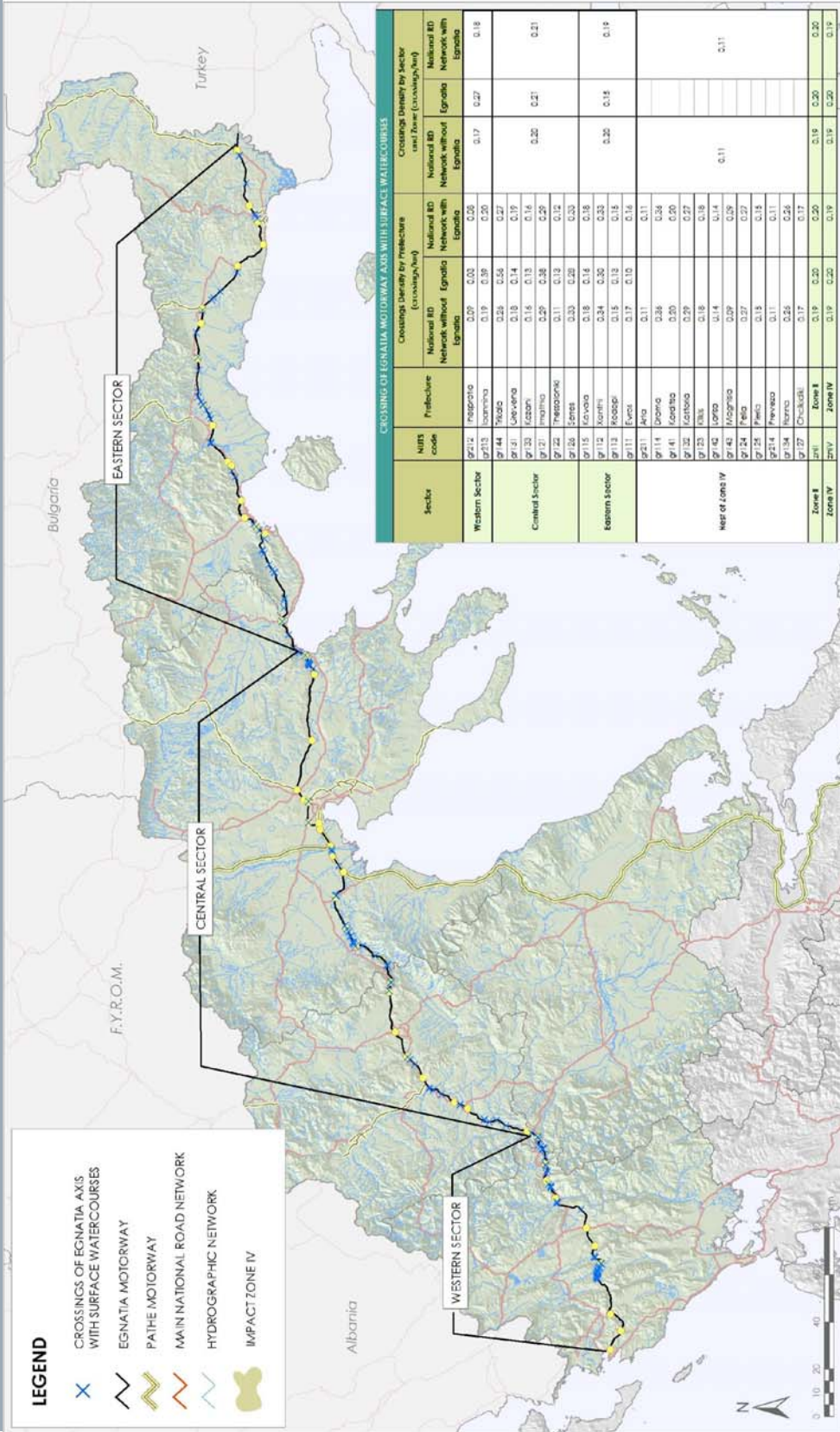
### *Sources*

To calculate the indicator, the hydrographic network of Zone IV is used, as shown in the topographic diagrams 1:50,000 of the Hellenic Military Geographic Service, combined with the road network of the geographical database developed and updated by the Observatory have been used.

### *Methodology*

In the Geographical Information System and by the coverage of the two factors (G.I.S., and National Network without Egnatia) the positions of the intersection points of the two levels, have been calculated and then counted and distributed to the Prefectures they belong to. The density of crossings have been calculated, in combination with the respective length of the updated road network. The procedure has been repeated with the inclusion of the Egnatia Motorway axis, so that the conditions before and after the construction of Egnatia Motorway are recorded.

Map 1: Axis crossings with surface waters



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