

CROATIA

NATIONAL REPORT 2007

I Network

The total length of motorway network, as completed by the end of 2007 in Croatia, amounts to **1163.5 km**.

In 2007, **75,9 km** of new motorways and **3,8 km** of semi motorways were built (as compared to 43 km that were built in 2006), and **15,7 km** of existing roads were upgraded to the full motorway profile:

On the Motorway A1: **Zagreb - Split - Ploče;**
Dugopolje-Bisko-Šestanovac Sections (**37 km**) - opened to traffic in full profile in 06/2007

On the Motorway A2: **Zagreb - Macelj**
Krapina-Macelj Section (17.2 km) -13,4 km was completed as full motorway and 3,8 km as semi motorway

On the Motorway A5: **Beli Manastir-Osijek-border with Bosnia and Herzegovina**
Sredanci-Đakovo Section (**23 km**) - opened to traffic as full motorway in 11/2007

On the Motorway A6: **Zagreb - Rijeka**
- on the Vrbovsko-Bosiljevo Section (8,44 km) - upgrade to the full motorway profile of the viaduct Zeceve Drage, tunnel Veliki Gložac, viaduct Osojnik and viaduct Severinske Drage together with corresponding motorway segments in 06/2007
- on the Oštrovica-Kikovica Section (7,25 km) - upgrade to the full motorway profile in 11/2007

On the Motorway A11: **Zagreb - Sisak**
On the Jakuševac-Velika Gorica South Section - completion of the interchange Velika Gorica South and 2,5 km of a motorway segment in 5/2007 and in 09/2007

In Croatia, motorways are operated by 4 companies, i.e. by *Hrvatske autoceste d.o.o.* (operates all toll motorways except for those in concession) and by three concession companies *BINA-ISTRA d.d. Pula* (operates the so called Istrian Upsilon - A8 and A9), *Autocesta Rijeka-Zagreb d.d.* (A6 and A7) and *Autocesta Zagreb-Macelj d.o.o.* (A2).

Note:

As of 01/09/2007 the operation of the Motorway A7: Rupa-Rijeka (16 km), and bridge Krk (1.5 km) on the D10 national road were handed out from the company Hrvatske autoceste to the company Autocesta Rijeka-Zagreb. ARZ now operates also Orehovica-Diracje section (10.5 km).

Number of motorway kilometres

	Company	2006 total	2006 not tolled	2007 total	2007 not tolled
1.	HAC d.o.o.	735,0	0	780,0	-
2.	ARZ d.d.	146,5	0	178,5	-
3.	BINA-ISTRA d.d.	145,0	0	145,0	-
4.	AZM d.d.	42,0	0	60,0	-
TOTAL		1068,5	0	1163,5	0

II Sections under Construction

On January 1, 2008, the works were in progress on the total of 90 km of new motorways, 36.9 km of the existing roads (upgrading to the full motorway profile), 9 km of access road and 11,46 km of the second tubes of the tunnels Mala Kapela and Sveti Rok:

Motorway A1: Zagreb - Split - Dubrovnik; Split-Ploče Sector (of total length of 102 km)
 Šestanovac - Zagvozd Section (13.4 km)
 Zagvozd - Ravča Section (26.9 km)
 second (left) tubes of the existing tunnels Mala Kapela (5,78) and Sveti Rok (5,68 km)

Motorway A3: Bregana - Zagreb - Lipovac
 rehabilitation of Ivanja Reka - Velika Kapanica Section (208.4 km)
 new interchange construction: Križ, Rugvica and Kosnica

Motorway A4: Zagreb - Goričan
 Section Goričan- border with Hungary (1,5 km) including the bridge over the river Mura

Motorway A5: Beli Manastir-Osijek-border with Bosnia and Herzegovina
 Osijek - Đakovo Section (33 km)

Motorway A6: Zagreb - Rijeka (upgrading of existing roads to full motorway profile 33.88 km) as follows:
 Oštrovica - Vrata Section (12.5 km)
 Vrata - Delnice Section (8.9 km)
 Delnice - Kupjak Section (7.9 km)
 Kupjak - Vrbovsko Section (from the start of the section to immediately after the Stara Sušica viaduct) (7.6 km)

Motorway A10: Mali Prolog-Ploče
 9 km of expressway connecting Ploče 1 Interchange to Ploče Harbour

Motorway A11: Zagreb - Sisak
 remaining part of the Section Jakuševac - Velika Gorica South (7,5 km)
 and section Velika Gorica South - Buševac (8 km)

In **2008**, the total of **41,5 km** of new motorways will be opened to traffic, **9 km** of expressway as well as **36.9 km** of existing roads upgraded to full motorway profile, as well as i.e.:

- on the Zagreb - Split - Dubrovnik Motorway the sections Šestanovac-Zagvozd (13 km) i Zagvozd-Ravča (27 km), the total of 40 km of motorways,
- on the Rijeka - Zagreb Motorway - upgrade to full motorway profile from Oštrovica to Vrbovsko section (36.9 km),
- on the Zagreb - Goričan Motorway - section to the border with Hungary including the bridge over the river Mura (1.5 km).
- on the Mali Prolog - Ploče Motorway - expressway connecting Ploče 1 Interchange to Ploče Harbour (9 km)

In **2008**, in addition to the continuation of the works started in previous year, the **construction work will start on 72 km** of new motorways and on **95 km** of roads to be upgraded to motorway profile:

Motorway A1: Zagreb - Split - Dubrovnik
Ravča - Ploče 1 Section (27 km)

Motorway A2: Zagreb - Macelj
Connecting road to the Macelj cross-border with Slovenia (800 m)

Motorway A5: Beli Manastir-Osijek-border with Bosnian and Herzegovina
Osijek-Beli Manastir Section (25 km)

Motorway A7: Rupa - Žuta Lokva
Construction of carriageway of the Rijeka by-pass and
Section from Orehovica interchange to Diračje interchange (total of 8,9 km)

Semi-motorway A8 and A9: Istrian Upsilon
A8 - Kanfanar - Rogovići - 18 km
A9 - Umag - Pula - 77 km

Motorway A11: Zagreb - Sisak
On the Section Velika Gorica South-Lekenik works will start on the Lekenik-Buševac sub-section (12 km)

III Financing and Investment

In 2007, the investments in new motorway construction amounted to the total of **5,207.08 millions of kunas** (€ 694.27 million), while **716.88 millions of kunas** (€ 95.58 million) were invested in the upgrade of existing sections.

in millions of kn (millions of €) (1EUR=7,5 kunas)

Company	Investment in 2007		Planned investment in 2008	
	new sections	existing sections	new sections	existing sections
HAC	3.390,26 (452,03)	505,86 (67,45)	2.032,04 (270,94)	486,68 (64,89)
ARZ	1.598,12 (213,08)	123,82 (16,51)	2.047,15 (272,95)	142,44 (18,99)
BINA ISTRRA	71,70 (9,56)	22,60 (3,01)	581,10 (77,48)	23,50 (3,13)
AZM	147,00 (19,60)	64,60 (8,61)	0	15,00 (2,00)
TOTAL	5.207,08 (694,27)	716,88 (95,58)	4.660,29 (621,37)	667,62 (89,01)

In 2007, the construction of motorways was mostly financed through loans and toll revenues, and the company Hrvatske autoceste d.o.o. also finances motorway construction through fuel tax revenues 0.60 kn per litre (€ 0,08).

IV Traffic

Number of vehicles in toll-collection zones

Company	2006		2007			
	Light vehicles (1st and 2nd category)	Heavy vehicles (3rd and 4th category)	Light vehicles (1st and 2nd category)	% (07/06)	Heavy vehicles (3rd and 4th category)	% (07/06)
HAC	26.132.792	4.001.357	27.468.537*	+ 5,11	3.908.210*	- 2,33
ARZ	11.152.446	1.746.766	12.069.014	+ 8,22	1.893.629	+ 8,41
BINA ISTRRA	3.992.150	412.949	4.502.102	+12,77	461.029	+ 11,64
AZM	5.547.567	712.747	5.848.134	+ 5,42	729.005	+ 2,28
TOTAL	46.824.955	6.873.819	49.887.787	+ 6,54	6.991.873	+ 1,72

Note: The above data do not include 915.246 vehicles (mainly LV) free of toll charging. Data do not include vehicles on the Rupa-Rijeka-Žuta Lokva motorway and bridge Krk from Sep.-Dec.2007 since the operation of this sections was handed over to ARZ company in Sept. 2007.

The total motor vehicle traffic operated on motorways increased in 2007 by 5.9 percent, when compared to the previous year.

GDP increase in 2006	Traffic increase in 2006	GDP increase in 2007	Traffic increase in 2007
4,8	5,6	5,5	5,6

In 2006, the network increased by 43 km, i.e. by 4.7 percent comparing to the previous year. In 2007, the size of network increased by 80 km, i.e. by 8.9 percent in comparison with the year 2006.

V Toll Rates

The motorway network in Croatia is still under construction. Both the closed and open system of toll collection are used at the moment, however, once the network is completed all motorways with multiple entry and exit points will operate a closed toll collection system.

The toll for light (category I) vehicles in the closed toll collection system is 0.043 EUR/km (0.33 kn/km), and 0.038 EUR/km (0.29 kn/km) in the open toll collection system.

The toll fee ratio between light (category I) vehicles and heavy (category IV) vehicles is 1:4.

HAC did not increase toll rates in 2007, and offers a 10% discount on SMART card toll subscription all year round. A new service for ETC users was introduced in July - toll payment by standing order using credit cards (Diners, Visa, American, Mastercard). A new TOUCH&GO service was introduced for SMART card users beginning with December 1 2007, using the system of external readers on entry and exit lanes on toll plazas of all HAC managed motorways. ETC was introduced for category III and IV vehicles (not yet for category II). A discount of 10% is given on ETC toll subscription all year round. A seasonal discount of 23.5% is given in the winter season between November 1 and March 31.

BINA ISTRA did not increase toll rates for either the Učka tunnel or the Mirna viaduct, and runs an open toll collection system.

ARZ did not change its toll rates in 2007. A 10% discount is offered for smart card subscription all year round. A seasonal discount of 23.5% is offered in the winter season between November 1 and March 31. ETC was introduced in addition to other payment methods in 2006, as well as payment by INA cards.

AZM did not increase toll rates in 2007. However, new distance-related toll rates were introduced for the newly opened section Krapina-Macelj.

VI Toll Revenues (not including VAT)

1 € = 7.5 kn

Company		2006		2007		% (06/05)
		kn	EUR	kn	EUR	
1.	HAC	1.113.192.788	148.425.705	1.230.509.256	164.067.901	+10,54
2.	ARZ	380.405.106	50.720.681	423.273.303	56.436.440	+11,26*
3.	BINA-ISTRA	120.675.524	16.090.069	134.125.037	17.883.338	+11,15
4.	AZM	87.754.303	11.700.573	151.282.568	20.171.009	+72,40*
TOTAL		1.702.027.721	226.937.028	1.939.190.164	258.558.688	+10,76***

* As of September 1, 2007 HAC handed over to ARZ the Rupa-Rijeka motorway and the bridge Krk
 ** the percentage is not comparable since the Krapina-Macelj section was open to traffic only in 2007
 *** the data do not comprise AZM increase in revenues

Without taking into account the data from ARZ which are not comparable toll revenues increased by 10.76 percent compared to the previous year. This is principally due to traffic increase, opening of new toll motorway sections, introduction of new toll collection methods, and to some smaller price corrections on certain motorways in Croatia.

VII Traffic Safety

Number of accidents:	2006					2007				
	HAC (735 km)	BINA ISTRA (145 km)	ARZ (146 km)	AZM (42 km)	TOTAL (1068km)	HAC (780 km)	BINA ISTRA (145 km)	ARZ (178 km)	AZM (60 km)	TOTAL (1163 km)
- fatal accidents	21	5	15	2	43	42	4	21	1	68
- accidents with injuries	291	15	116	25	437	266	25	101	22	414
- accidents with material damage	1528	177	434	118	2257	1436	132	440	125	2133
Total number of traffic accidents	1840	197	555	145	2737	1744	161	562	148	2615
Total number of fatalities	32	11	22	2	67	51	4	27	1	83

The total of 2615 traffic accidents, with 83 fatalities, was registered in 2007. Out of this total, the number of accidents with injuries was 414.

The number of traffic accidents decreased by 4.5 percent when compared to the previous year, whilst the number of kilometers of the motorway network in 2007 increased by 8.9 percent.

VIII Medium and Long Term Forecasts and Tendencies

According to the Transport Development Strategy devised for the Republic of Croatia and adopted by Croatian Parliament, the Croatia is to have 1,365 km of motorways by the year 2013.

Technical properties of motorways and other toll facilities, and specific features of financial operations in this sector, made it necessary to put in place a specific organizational structure for the operation of these facilities. In addition to ensuring continuity of maintenance and further construction of sections and facilities on which work has already started, an intensive activity must be promoted in the next planning period in order to improve organization of routine maintenance, to further automatise toll collection, and to enhance quality of roadside service facilities on motorways.

IX Important actions initiated or completed in 2007 and objectives for 2008

AZM

The focus in 2007 was on the following activities:

- reduction of toll payment queues by promotion of SMART cards
- benefits for frequent and local users
- increased traffic safety, organization of own fire-fighting unit
- acceptance of private companies' credit cards

Most important objectives in 2008 :

- introduction of interoperability with other operators
- environment protection

BINA -ISTRA d.d.

Towards the end of 2007 BINA ISTRA Operation and Maintenance received the environmental protection certificate 14000, and continues activities in environment protection.

HAC

The Toll Collection Sector has set the following goals for 2008:

1. to increase turnover and growth of revenues from toll collection in 2008 by 5% compared to the year 2007;
2. to increase the level of services and the share of non-contact toll payment through ETC in the total turnover and toll revenue from 16% in 2007 to 30% in 2008;
3. to increase the sale of HAC products in toll collection and to focus on motorway users;
4. to provide a high service level in the toll collection system, maintenance of facilities and environment protection
5. safety of traffic and tellers

ARZ

In 2007:

- we joined the Croatian Business Council for Sustainable Development, which means increased efforts for coupling economic growth with social responsibility and care for the environment, as well as active implementation and support of this business orientation
- we obtained ISO 14001:2004 certificate
- we enabled all ETC and SMART card users to have access to their electronic toll payment account
- we signed the IV Agreement on Amendments to the ART Concession Agreement, by which the concession area of ARZ is extended to the motorway section between the intersection Orehovica and the border-crossing point Rupa and between the interchange

Orehovica to the interchange Križišće, including the access road between the interchange Draga and the city of Rijeka, and access road between the intersection Križišće and the island of Krk bridge, including the bridge to the island of Krk.

- since September 1 ARZ has taken over operation and maintenance of the Rijeka - Rupa motorway and the island of Krk bridge (total length 17.3 km)
- ARZ has also taken over from Hrvatske ceste d.o.o. operation of the detour between Diračje and Orehovica in the total length of 9.5 km. Once Hrvatske ceste d.o.o. completes the construction of the D-404 road and the section Sv. Kuzam - Križišće, these sections will also be transferred to ARZ.
- SAP project was implemented in September in all organizational units of ARZ. ARZ believes that SAP will help the company to implement the best business practice
- in December ARZ obtained the new ISO 9001:2000 certificate. Recertification audit in ARZ established improvement of business operation on all locations and in all processes, thus confirming the rights acquired through certification
- ARZ joined Global Compact, world's largest initiative in the area of socially responsible business operation. The aim is to promote business ethics and cooperation among companies with this aim. Business excellence we are aiming at is unthinkable without respect for human and labour rights, consumer i.e. service-user rights, environment protection, fight against corruption etc.
- ARZ started developing the project of a folklore village, i.e. accompanying facility Petehovac. This facility will be located between Delnice and Kupjak, at the section known for the first Croatian wild game motorway crossing at Dedin, the highest point of Rijeka- Zagreb motorway at the height of 860 m above sea-level.

In 2008:

- in cooperation with UNDP and HAK, ARZ is initiating a project for providing information and advice for drivers, with the aim to increase safety and promote environmentally efficient driving. Information to drivers will be available through a website, brochures, flyers, terminals, cards etc.
- cooperation is planned with public institutions for nature protection and eco-associations, and their promotion through our website and in other ways
- planned prevention activities for environmental protection through programs for:
 - monitoring transport of hazardous substances,
 - organization of drills,
 - updating of emergency situation protocols and communication procedures

KEY FIGURES 2007

CROATIA	2007
Total length of motorways network, km, as on January 1, 2008	1163,5
2 x 1 lane	208,8
2 x 2 lanes	929,4
2 x 3 lanes	25,3
2 x 4 lanes	0
Number of km opened to traffic in 2007	75,9 motorway 3,8 semi-motorway 15,7 (upgrade to full profile)
Number of km under construction as on January 1, 2008	90,0 motorway 9,0 semi-motorway 36,9 (upgrade to full profile)
Estimate of new sections to be completed and opened to traffic in 2008, km	41,0 motorway 9,0 semi-motorway 36,9 (upgrade to full profile)
Annual toll revenues in 2007, EUR	258.558.688
Permanent staff as on January 1, 2008	3.374
AADT, LIGHT VEHICLES	11.747
AADT, HEAVY VEHICLES	1.461
AADT, LV + HV	13.208
Total number of accidents	2.615
Number of accidents with injuries	414
Number of fatalities	83
Number of kilometers travelled (10 ⁶ x km)	5.874
Number of toll stations	70
Number of traffic lanes	492
Number of lanes destined to electronic toll collection	253
Number of electronic tolling system subscribers	22.740*
Number of rest areas (with filling stations)	71
Number of rest areas	115
Number of restaurants	16
Number of hotels	9

* HAC and ARZ companies have already introduced the interoperable electronic toll collection system, while this system is still not in place on motorways operated by BINA-ISTRA and AZM.