

CNR EUROPEAN STUDIES

# Road freight transport in Croatia

## Abstract

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An Eastern Europe state in the heart of the Balkans, Croatia gained independence in 1991, following the break-up of Yugoslavia due to Slovenia's departure from the federation. It then became a democratic republic. With the signing of the peace agreements in 1995, which put an end to years of conflict with Serbia, Croatia embarked on a process of transition to a market economy and integration into the European Union (EU). In July 2013, Croatia became the 28<sup>th</sup> EU Member State.

The post-war political stabilisation allowed the Croatian economy to embark on a profound transformation boosted by its openness to foreign investors, the redistribution of wealth and the privatisation of industry. However, while the Croatian economy enjoyed macroeconomic stability until 2008, the country was hit hard by the global economic crisis. It was not until 2015 that Croatia emerged from the recession which lasted more than six years.

In 2017, Croatian road freight transport (RFT) remained stable. Among the European flags, Croatia ranked 26<sup>th</sup> in terms of total activity, but 20<sup>th</sup> when it came to international activity. Cross-trade international activity plays an important role and cabotage has also been growing, particularly since the country's accession to the European Union.

In order to better understand the place of the Croatian sector in the European context, the CNR carried out a study on the Croatian RFT sector in 2018. The complete version can be viewed on the CNR website at: [www.cnr.fr](http://www.cnr.fr), in the CNR/Europe Publications section. This document provides a summary of the main points and draws a comparison with the French RFT sector. For all further information, please contact CNR's European studies department.

### Economic framework and transport infrastructure

With 4.11 million inhabitants, Croatia is highly dependent on foreign trade, the volume of which is equivalent to 100 % of its GDP. In 2017, almost 65 % of Croatian exports went to the European Union, especially to Italy, Germany and Slovenia while 78 % of its imports came from the European Union. Other countries from the former Yugoslavia remain important economic partners.

The growth of its GDP (+2.9 % in 2017, +2.6 % in 2018) remained above the European average after six years of recession during the economic crisis. The unemployment rate reflects the growth rate. It has been decreasing steadily since 2014, reaching 8.4 % by the end of 2018. The forecasts for 2019 also look good, with the Croatian economy gradually returning to competitiveness within the European Union.

In terms of infrastructure, Croatia has a well-developed road network and modern, safe and recently built motorways. In the 2000s, the country built a large number of motorways. Improvement work is ongoing, but the main major roads in the network have been operational for some ten years. Maritime transport is conducted through various ports (i.e. Rijeka, Ploče, Split and Zadar), while inland water transport is mainly carried out on the Sava, the Danube and, to a lesser extent, the Drava. Croatia has 9 commercial airports, including seven international airports. Rail transport is quite developed, but network modernisation work is needed as 90 % of the railways are single-track lines and only 36 % of the lines are electrified.

## Evolution of the RFT sector in Croatia

In 2017, the total Croatian RFT sector had a one-year growth rate of 4.4 %, close to the average EU RFT growth rate of 4.7 %. Nearly 65 % of RFT activity is conducted internationally. The share of international activity has outstripped domestic activity since 2011. This phenomenon increased in 2013 with the integration of Croatia into the European Union.

RFT* evolution in France and Croatia											
Transport Total											millions of t.km
Pavillon	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Ratio t.km/GDP 2017
France	206,304	173,621	182,193	185,685	172,445	171,472	165,225	153,580	155,843	167,691	73
Croatia	11,042	9,426	8,780	8,926	8,649	9,133	9,381	10,439	11,337	11,834	242
Domestic Transport											millions of t.km
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Ratio t.km/GDP 2017
France	181,879	156,021	164,325	168,242	156,449	155,712	151,112	141,242	144,205	155,876	68
Croatia	6,445	5,125	4,547	4,375	4,145	4,284	3,931	4,055	3,986	4,199	86
International Transport											millions of t.km
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Ratio t.km/GDP 2017
France	24,425	17,600	17,868	17,443	15,996	15,760	14,113	12,339	11,638	11,815	5
Croatia	4,598	4,301	4,233	4,552	4,504	4,849	5,450	6,384	7,351	7,635	156

\* in EU + Norway + Switzerland + Liechtenstein

Source: Eurostat

Importantly, the emergence of cabotage in 2015, which went from being non-existent before entry into the EU (July 2013) to 161 million tonne-kilometres in 2017. The country in which the Croatian sector has the largest share is Germany. Cabotage in Germany accounted for nearly 70 % of Croatian cabotage in 2017.

## Operating conditions and costs

In the framework of its international studies, the CNR organises interviews with local hauliers and drivers in order to evaluate operating conditions and costs and to observe the market. In 2018, CNR met face to face with ten representatives of companies and around twenty drivers with Croatian contracts in car parks outside the country.

First of all, it is worth mentioning a condition for RFT market access in Croatia (stipulated in national legislation (OJ 36/98 and OJ 83/02), in addition to EU law): a Croatian applicant must have sufficient parking to accommodate its entire fleet. This is a mandatory condition for obtaining a license.

The Croatian sector is distinguished by a relatively intensive use of its vehicles, averaging 134,000 km over 235 days of operation. In exceptional cases, the distance travelled can sometimes exceed 150,000 km according to some drivers interviewed.

Fuel consumption is monitored very closely by the companies which consider it as the main means of achieving their narrow operating margin. Average consumption is estimated at 28.4 l/100 km and is highly dependent on the countries crossed. Almost all the hauliers interviewed have refuelling contracts with distributors and take on fuel mainly in Croatia (50 % of them), in Hungary (30 %) as well as across the European road network. It is important to note that since 1<sup>st</sup> January 2019, Croatia has implemented a partial refund mechanism for excise duties, which allows hauliers to recover € 0.0832/litre, bringing the cost of fuel in the country to € 0.9685/litre. According to information provided by companies and the main countries of supply, CNR has estimated an average price of € 0.9576 per litre of fuel.

In addition, the annual cost of owning a vehicle remains lower than in France, due in particular to more intensive and longer vehicle use. In terms of vehicle financing, the majority of companies choose 48-month leasing contracts, while others prefer 36-month leasing contracts with no purchase option, which allows them to renew their fleets frequently. Others make use of the second-hand market, buying in particular very recent models (less than 4 years old) from Germany, which are 50 to 60 % cheaper than brand new trucks. For new vehicles, the average length of time they are kept is around 7 years, compared to 10 years for used vehicles.

Maintenance and repair costs are particularly low compared to those observed in France: € 4,600/year in Croatia compared to € 9,341/year in France. However, there are significant differences among the Croatian companies surveyed. These differences can be explained, in particular, by very varied vehicle purchasing policies. Thus, the

largest companies opting for a leasing contract without purchase option renew their fleet every 3 or 4 years and thus minimise their maintenance costs. Conversely, companies that prefer to buy used vehicles or keep their vehicles for as long as possible have very high maintenance costs compared to their colleagues.

Tyre costs vary widely among the companies surveyed and are very dependent on the choices made when purchasing vehicles (i.e. with or without a tyre contract) and the distances travelled. Based on expert opinion, CNR has settled on an annual figure of € 4,000 per vehicle. This amount is similar to the data transmitted by the most structured Croatian companies and takes into account the realities of the European market.

Moreover, according to the managers interviewed, the cost of insurance has been declining in recent years. Companies with a high negotiating capacity manage to reduce the average amount per rig to less than € 2,500 per year, while others incur costs of almost € 4,000 per year. The annual insurance cost for a 40-tonne vehicle set is thus estimated at € 2,900 for a typical company.

Finally, the axle tax (called the “special tax on motor vehicles” in Croatia) is specific to each model and depends on the purchase price, CO<sub>2</sub> emissions and engine size. The tax can be as high as 5 % of the price of the vehicle. Unlike in other countries, in Croatia this tax is paid one instalment at the time of vehicle registration. Thus, for a new tractor costing € 82,000, the tax may amount to € 4,100, i.e. € 586 per year based on a period of use of almost 7 years.

<b>Comparison of operating conditions and costs excluding overhead costs, for a 40-tonne HGV operated on long distance international routes, 2018 conditions, cost values updated in 2019</b>			
	unit	France <i>Statistics</i>	Croatia <i>Simulation</i>
Yearly mileage of vehicle	km	115,320	134,000
Number of operating days	days/yr	229	250
Semitrailer/tractor ratio		1.44	1.16
Driver cost	€/yr	49,019	21,099
Driver/tractor ratio		1.05	1.04
Yearly cost of vehicle financing and possession	€/yr	15,673	12,098
Average consumption per 100 km	litres	31.40	28.40
Unit fuel price, 2019 average (1)	€/litre	1.0211	0.9576
Fuel cost	€/yr	36,975	36,442
Tyres	€/yr	3,114	4,000
Maintenance-repair	€/yr	9,341	4,600
Tolls	€/yr	10,033	12,000
Insurance (vehicle)	€/yr	2,367	2,900
Axle tax and other vehicle taxes	€/yr	516	586
<b>Synthesis – cost price (except structural costs)</b>		<b>129,488</b>	<b>94,484</b>
Cost/mileage ratio per annum	€/km	1.120	0.705
Base 100 France		100	63

(1) after partial recovery of excise duties in France and Croatia

Source : CNR European studies

### **Employment conditions and driver employment costs**

Like most Eastern European countries, there is no collective agreement in the Croatian RFT sector. However, a minimum wage is set at the national level and applies to the RFT sector. On 1 January 2019, it stood at € 506 gross per month.

According to the Croatian entrepreneurs interviewed, the sector has no shortage of customers. They hope that the price of transport per kilometre will increase significantly in line with the dramatic increase in labour costs in Eastern Europe. The minimum wage has reached the threshold of € 500 gross per month in most Eastern European countries, with the exception of Bulgaria. In Slovenia, the gross minimum wage has risen to more than € 840. As a result, drivers, who are becoming increasingly difficult to find, often put pressure on their employers to increase the official and declared portion of their monthly pay. It should be noted that drivers in Western

Croatia can earn on average € 100 to € 150 gross more than their colleagues in the East, doubtless due to the influence of more attractive salaries on offer in Slovenia, which is located just a few kilometres away.

To compensate for the lack of drivers, Croatian companies have no hesitation in hiring drivers from Bosnia–Herzegovina, Serbia or North Macedonia.

The standard schedule for a driver under Croatian contract working internationally consists of two weeks of travel abroad followed by a 3- to 4-day period at base. The proximity of the North Italian and Austrian markets also allows certain drivers to consistently return to base after 5 to 6 days spent abroad. During these trips, a typical Croatian driver receives between € 50 and € 70 in travel allowances for each night spent abroad (this figure applies to most countries in which Croatian hauliers operate). This represents between € 1,100 and € 1,400 in additional income from travel allowances, which is therefore not subject to social charges and taxation. These amounts, which are very high for a country in Eastern Europe, approach or even exceed the compensation scales in Western Europe, such as in France.

It should also be noted that bonuses are extremely rare. They are paid to barely 10 % of drivers and the amount does not exceed € 200 to € 300, which is often paid at the end of the year to the most reliable and most fuel-efficient drivers.

Comparison between the cost of drivers in France and Croatia, values 2018 updated in 2019			
	unit	France <i>Statistics</i>	Croatia <i>Simulation</i>
Gross salary (miscellaneous bonuses and overtime included), subject to social contributions and to income tax	€/an	31,080	6,480
Travel allowances and other elements of remuneration not subject to social contributions nor to income tax	€/an	9,920	13,530
Employer contributions (after deduction of state aids)*	%	25.8%	16.8%
Employer contributions in absolute terms	€/an	8,019	1,089
Annual cost total	€/an	49,019	21,099
Number of actual working days per year	j/an	218	220
Working time per year	h/an	1,602	1,980
Annual mileage		109,829	129,250
Cost of one hour's work	€/h	30.60	10.66
Base 100 France		100	35
Cost per kilometre	€/km	0.45	0.16
Base 100 France		100	37

\*after Fillon deductions in France

Source : CNR European Surveys

According to CNR calculations, the cost of an hour of driving by a Croatian driver is around € 10.66, or equal to 35 % of the cost of a French driver. The share of employer contributions is lower in Croatia than in France: 16.8 % versus 25.8 %, but this represents only € 1,089/year in absolute terms versus € 8,019/year for a French driver. Overall, the full cost of operating a Croatian international HGV per kilometre is very low, around 63% of that of a French HGV.

The Croatian RFT sector has maintained its position with respect to other European sectors and is continuing to grow internationally. The competitive advantages of the sector, namely a relatively low cost per hour of driving, € 10.66/hour all inclusive, and high annual mileage per vehicle, mean that the Croatian MRT is well equipped for further expansion in Europe.