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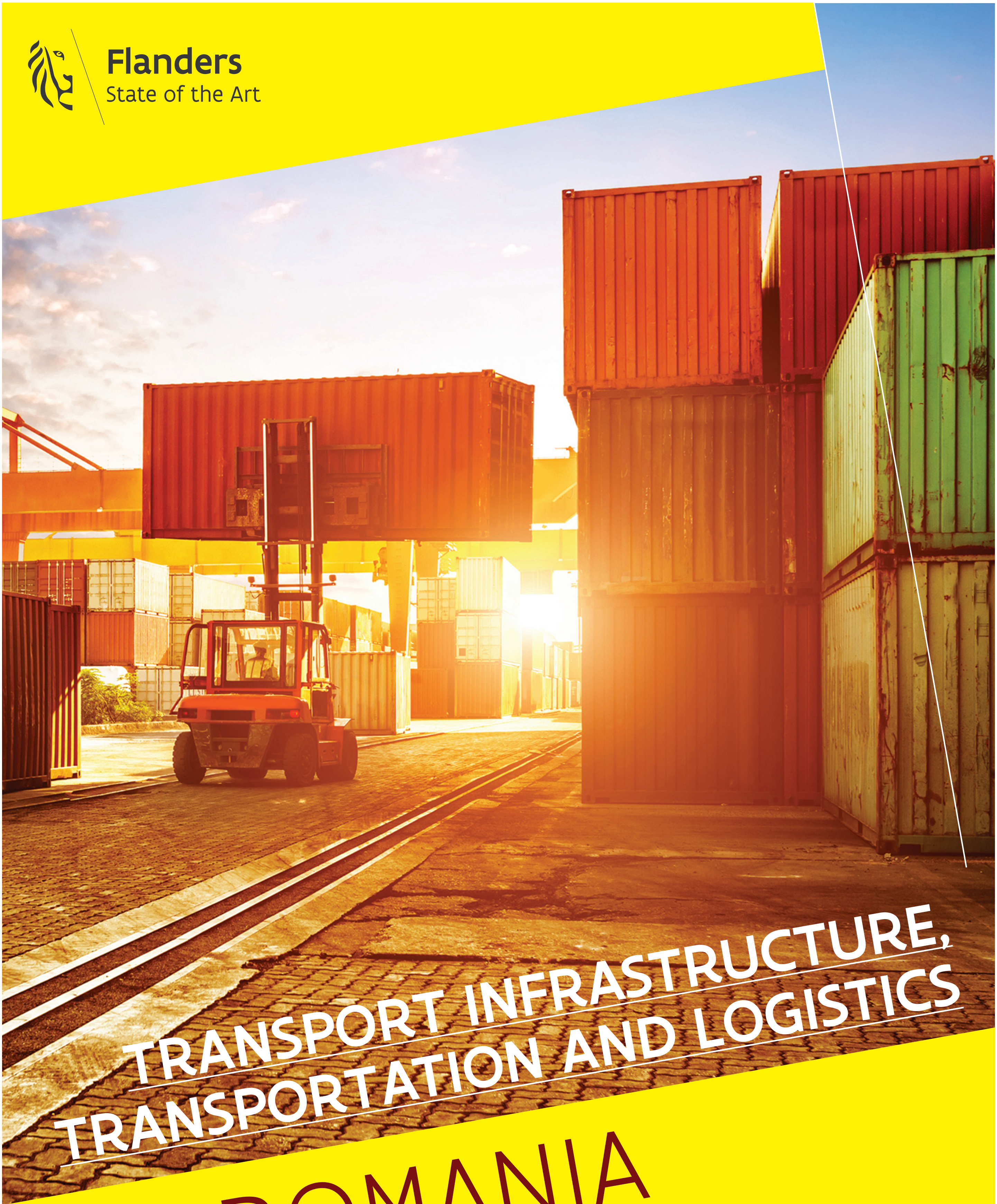

# TRANSPORT INFRASTRUCTURE, TRANSPORTATION AND LOGISTICS

# IN ROMANIA

**FLANDERS** INVESTMENT & TRADE MARKET SURVEY

Flanders
State of the Art

# Transport Infrastructure, Transportation and Logistics in Romania

December 2016

FLANDERS INVESTMENT & TRADE
Economic & commercial representation of Flanders
for Romania and Moldova

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FLANDERS INVESTMENT & TRADE

## Inhoudstabel

# 1. General economic overview

## Current situation and forecast

Over the last decades Romania has made considerable progress in developing for a market economy. Joining the European Union in 2007 was a driving force for reform and modernization.

Romania was one of the fastest-growing economies in Europe in the mid-2000s, producing a 6.3% GDP growth in 2007 and 7.3% in 2008. The global economic downturn revealed Romania's structural weaknesses and imbalances, resulting into GDP contractions both in 2009 and 2010 by 7.1%, and respectively 1.9%.

The period 2011-2012 marked a slowly recovery, turning form previous negative readings to positive ones with GDP growth by 2.5% in 2011, but only by 0.7% in 2012 as the difficulties of the economic environment were amplified by the internal political situation, generating tensions and uncertainty regarding the general economic policy adopted by the government.

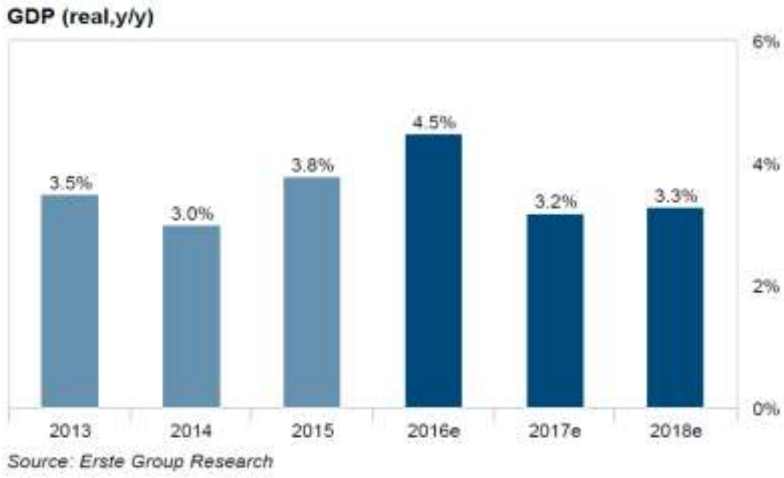
However, despite several governmental and institutional changes, Romania has continued to produce economic growth in the years to come. The real GDP growth in 2013 exceeded expectations, going up 3.5% with industry and agriculture having the largest positive impact. 2014 registered a GDP growth of 3%, mainly driven by communication and industry.

After years of growth, during 2015 and 2016 the Romanian government has taken certain measures concerning fiscal relaxation (lowered the VAT rate to 20% from 24%, to 9% from 24% for food, lowered the income-withholding tax rate, removed a controversial "special construction" tax, simplified deductibles, exempted certain dividends from corporate income tax, and introduced some fiscal incentives in fields such as: research, development and innovation), which cumulated with a robust wage growth (19% increase in the minimum wage as of May 2016) and resulted into a rebound in investment and an increase of private consumption.

| Annual | 2014 | 2015 | 2016e | 2017e | 2018e |
|---|---|---|---|---|---|
| GDP real | 3.0% | 3.8% | 4.5% | 3.2% | 3.3% |
| CPI (y/y) | 1.1% | -0.6% | -1.4% | 1.4% | 2.0% |
| Private Consumption | 3.7% | 5.9% | 8.0% | 5.0% | 3.9% |

*Source: Erste Group Research*

In this context Romania witnessed a GDP growth of 3.8% in 2015, and a GDP growth of 5,2% in the first half of 2016, which has been the highest economic growth in Europe.

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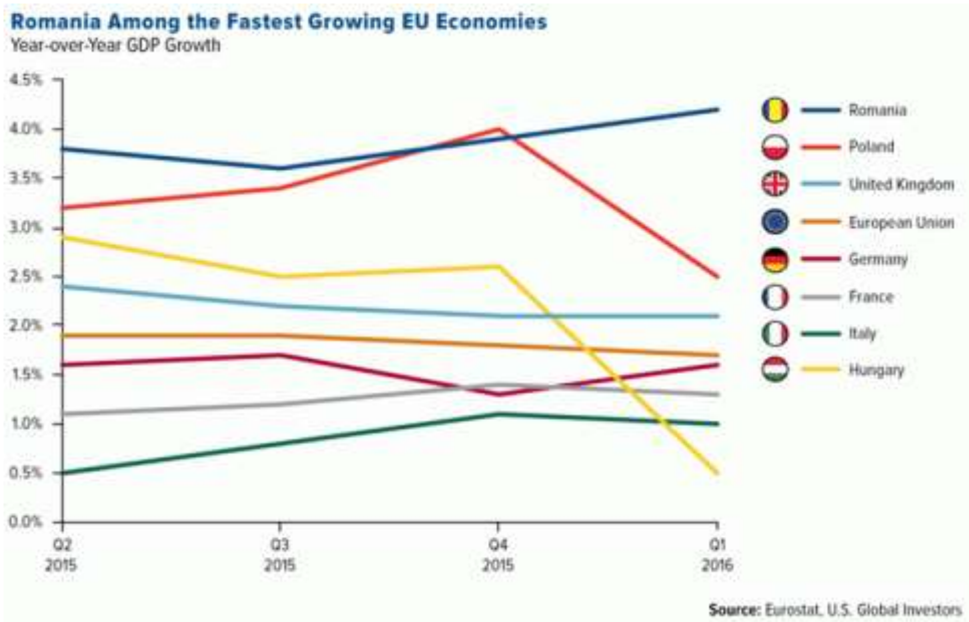



The growing economy in Romania has generated new working places and the unemployment rate has witnessed a decreasing trend. The unemployment rate is projected to fall from 6.8% in 2015, to 6.7% this year. The distribution of employment by activity sector of the national economy has shown a significant increase in the number of people employed in information and communication technology, education, public administration and defense, administrative activities, and transportation and storage.

| Unemployment rate % | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016* |
| 6,9 | 7,3 | 7,4 | 7,2 | 7,1 | 6,8 | 6,8 | 6,7 |

*: forecast

Source: Romanian National Institute of Statistics

Inflation rate declined in recent years, reaching record lows (negative) in 2015. This downgrade has been mainly influenced by the evolution of food prices, which have declined after June 1st 2015 when the VAT rate decreased from 24% to 9%.

| | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|
| **Consumer price indices (%)** (previous year = 100) | | | | |
| **Total** | **103.33** | **103.98** | **101.07** | **99.41** |
| Food goods | 101.89 | 102.96 | 98.37 | 96.20 |
| Non-food goods | 103.77 | 105.19 | 102.45 | 100.93 |
| Services | 105.07 | 103.19 | 103.16 | 102.04 |
| **Monthly average inflation rate (%)** | | | | |
| **Total** | **0.4** | **0.1** | **0.1** | **-0.1** |
| Food goods | 0.5 | -0.2 | 0.0 | -0.5 |
| Non-food goods | 0.4 | 0.3 | 0.1 | 0.2 |
| Services | 0.3 | 0.3 | 0.2 | 0.2 |
| **Average exchange rate in December** | | | | |
| lei / Euro | 4.4895 | 4.4633 | 4.4591 | 4.5040 |
| lei / USD | 3.4240 | 3.2581 | 3.6185 | 4.1390 |

Source: Romanian National Institute of Statistics

The budget deficit calculated according to the European methodology went down by 3.3% in 2011-2013, namely from 5.4% in 2011 to 3.7% in 2012 and 2.1% in 2013, which were lower compared to Eurozone and EU. As of 2013, Romania got out from under the EU excessive deficit procedure. During 2014-2015 Romania's budget deficit dropped to 0.9% and 0.7% respectively.

However, due to the broad fiscal easing and higher wages in the public sector enforced by the government starting 2015, it is expected that the budget deficit could soar to around 3% in 2016, as the country's economy is seen growing at its potential rate.

| Budget deficit (% of GDP) | | | | | |
|---|---|---|---|---|---|
| 2011 | 2012 | 2013 | 2014 | 2015 | 2016* |
| 5,4 | 3,7 | 2,1 | 0,9 | 0,7 | 2,9 |

*: estimates

Source: Erste Group Research

Romania has achieved economic growth as of 2011 onwards, however the challenge is to turn this economic growth in real development as there are certain regional gaps among regions in Romania, gaps between the rural and urban areas, and development economic gaps among various categories of population. Moreover the economic growth based mostly on private consumption (the current main engine of growth in Romania) cannot be sustainable on long term due to trade deficits (Romania consumes substantially what others produce).

In order to bridge the existing gaps and achieve sustainable economic growth and development, the Romanian Government needs to increase the efficiency of state action in relation with business sector and in relation with citizens.

In this respect there have been taken measures to continue fiscal consolidation, so that the public deficit would follow a downtrend, to encourage the business environment by funding for various state-aid schemes, by introducing fiscal measures and incentives, by curbing bureaucracy, by simplifying and clarifying legislation, also measures to reform the public investment through a substantial increase of funds allocated to co-financing the European projects within the two European frameworks (2007-2013 and 2014-2020), and measures to stimulate the consumption at the same time with providing social-protection to low-income categories of population.

## Forecasts

| Annual | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016e | 2017e | 2018e |
|---|---|---|---|---|---|---|---|---|---|
| Real GDP growth | -1.1 | 1.1 | 0.6 | 3.5 | 3.0 | 3.8 | 4.5 | 3.2 | 3.3 |
| Inflation (CPI, avg) | 6.1 | 5.8 | 3.3 | 4.0 | 1.1 | -0.6 | -1.4 | 1.4 | 2.0 |
| Unemployment rate (avg) | 7.0 | 7.2 | 6.8 | 7.1 | 6.8 | 6.8 | 6.7 | 6.8 | 6.7 |
| | | | | | | | | | |
| Retail sales growth | -7.0 | -1.2 | 4.1 | 0.5 | 7.0 | 8.9 | 11.0 | 5.0 | 5.0 |
| Industrial output growth | 5.6 | 5.6 | 0.0 | 7.8 | 6.1 | 2.7 | 2.0 | 2.8 | 3.1 |
| | | | | | | | | | |
| Private consumption growth | 0.2 | 1.4 | 1.5 | -2.4 | 3.7 | 5.9 | 8.0 | 5.0 | 3.9 |
| Fixed capital formation growth | -1.8 | 7.7 | 3.8 | -3.3 | -3.5 | 8.8 | 5.0 | 4.0 | 4.5 |
| | | | | | | | | | |
| Percent of GDP | | | | | | | | | |
| Trade balance | -7.5 | -7.3 | -7.2 | -4.0 | -4.0 | -5.2 | -6.5 | -7.2 | -7.7 |
| Current account balance | -4.6 | -4.6 | -4.5 | -0.8 | -0.5 | -1.1 | -2.2 | -2.5 | -2.7 |
| Foreign direct investment | 1.8 | 1.4 | 1.6 | 1.9 | 1.6 | 1.9 | 2.0 | 2.0 | 2.0 |
| Budget balance | -6.7 | -5.4 | -3.7 | -2.1 | -0.9 | -0.7 | -2.9 | -3.0 | -3.0 |
| Public debt | 29.9 | 34.2 | 37.3 | 38.0 | 39.8 | 38.4 | 40.4 | 41.8 | 42.3 |
| External debt, gross | 72.9 | 74.0 | 74.4 | 68.0 | 63.1 | 56.7 | 53.1 | 50.1 | 46.6 |
| | | | | | | | | | |
| FX, money market | | | | | | | | | |
| USDLCY average | 3.18 | 3.05 | 3.47 | 3.33 | 3.35 | 4.00 | 4.05 | 3.96 | 3.94 |
| EURLCY average | 4.21 | 4.24 | 4.46 | 4.42 | 4.44 | 4.45 | 4.47 | 4.50 | 4.49 |
| EURLCY eop | 4.26 | 4.32 | 4.43 | 4.48 | 4.48 | 4.52 | 4.51 | 4.50 | n.a. |
| | | | | | | | | | |
| (percent) | | | | | | | | | |
| CB policy rate (avg.) | 6.67 | 6.22 | 5.34 | 4.84 | 3.34 | 1.75 | 1.75 | 1.75 | 2.00 |
| 3m interbank offer rate (avg.) | 6.75 | 5.82 | 5.34 | 4.22 | 2.55 | 1.34 | 0.72 | 0.65 | 0.83 |
| 2Y Yield (average)* | n.a. | n.a. | n.a. | n.a. | 2.92 | 1.64 | 1.28 | 1.10 | 1.28 |
| 5Y Yield (average)* | 7.30 | 7.20 | 6.10 | 4.98 | 3.54 | 2.58 | 2.41 | 2.25 | 2.43 |
| 10Y Yield (average)* | n.a. | n.a. | n.a. | 5.41 | 4.40 | 3.69 | 3.14 | 2.85 | 3.03 |

*Source: Erste Group Research*

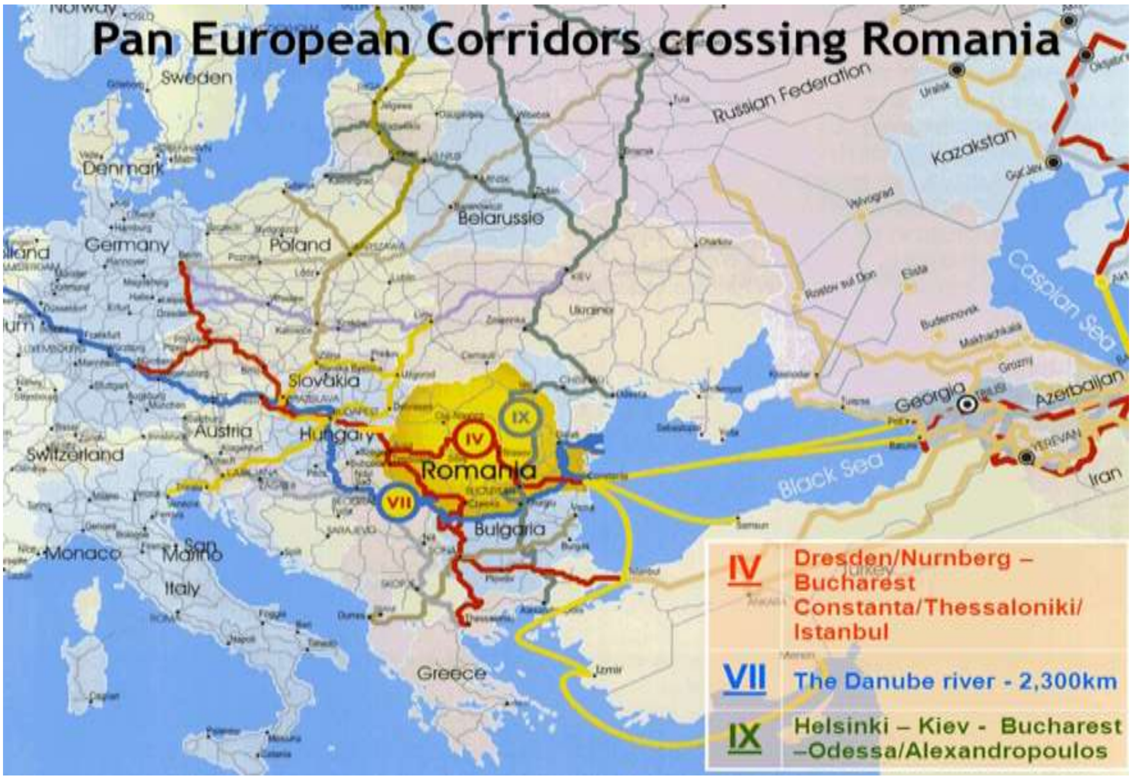
Note:
*Information on past performance is not a reliable indicator for future performance. Forecasts are not a reliable indicator for future performance.

*Source: Erste Group Research, October 2016*

## 2. Transport infrastructure and transportation

### Current situation and expected evolution

Romania is not only a strategic point in Europe with a large market potential in terms of size (238 391 square km, the 9th in EU) and population (about 20 million inhabitants, the 7th in EU), but also, as an EU member, a gateway to three major markets: the single EU, the CIS and the Middle East, at the junction of three Pan-European transportation corridors: IV (which links Europe from West to East) – VII (inland water transportation on the Danube) – IX (links Europe from North to South).




Romania enjoys a wide range of transportation options: road (86,080 km), rail (approximately 20.000 km in total, the 7th largest network in the EU, out of which 10,770 km in use), naval (32 ports – on the Black Sea, mainly through Constanta port, and along Danube River 1075 km) and air (14 airports), however the infrastructure is amongst the least developed in Europe. Although there have been some major transport investments, Romania continues to experience accessibility and connectivity constraints due to poor quality of infrastructure.

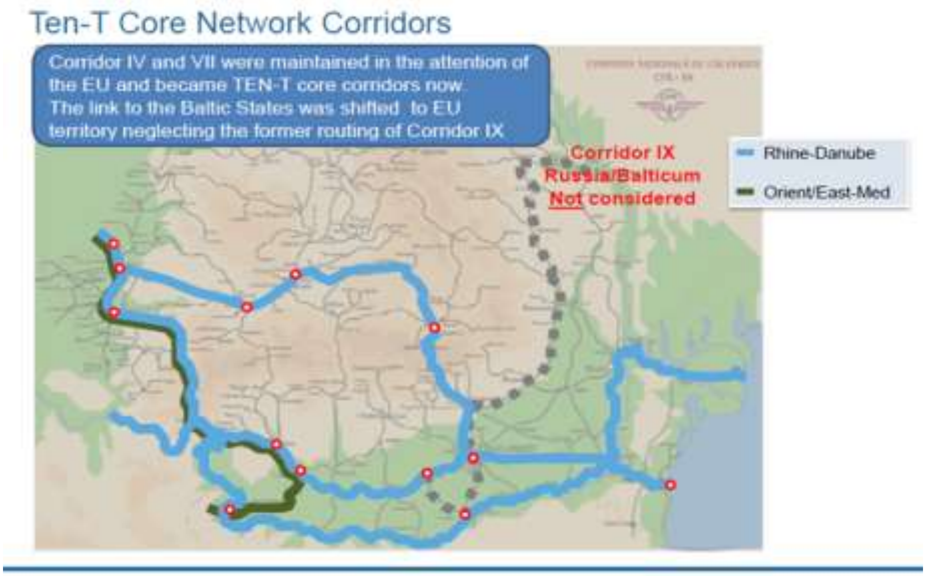
Transport infrastructure quality in Romania, in 2014

| Indicators | Ranks | Note Min/Max | Average |
|---|---|---|---|
| Quality of overall infrastructure | 88 | 2,0/6,64 | 3,8 |
| Quality of roads | 121 | 1,92/6,61 | 2,8 |
| Quality of railroad infrastructure | 59 | 1,13/6,70 | 2,9 |
| Quality of port infrastructure | 104 | 1,28/6,81 | 3,4 |
| Quality of air transport infrastructure | 105 | 2,11/6,76 | 3,6 |

Notes: There were evaluated 144 countries and the marks were given on a scale of minimum 1 and maximum 7
Source: World Economic Forum, The Global Competitiveness. Report 2014-2015 September 2014, p.319

Through European Infrastructure Programs, Romania will benefit from a modernization and extension of its road, rail and naval capabilities in the framework of development of the Trans-European Transport Network (TEN-T) and the pan-European Transport Corridors in terms of network completion. Availability of EC funding from the structural funds (Cohesion Fund, European Regional Development Fund, Connecting Europe Facility) and Private-Public Partnership will support the development of Romania's infrastructure. Recently the Romanian Government adopted the Transport Infrastructure Master Plan (MPGT) a strategic document, prior condition for EU funding, setting priorities for the development of the transport sector in Romania for the next 20 years and identifying projects and policies that are required in order to meet the Romanian transport needs.

This is an important step towards building a robust and sustainable infrastructure wherein remove of main transport bottlenecks, reduce of travel time, decrease of number of road fatalities, and improve of energy-efficiency play a significant role. However strong support from authorities and political parties is needed to ensure a long-term development, from project initiation till project completion, which shall aid the economic development of Romania, but also the development of the Pan-European Corridors and the Trans-European Network (TEN-T).



Source: COM 2011/650; KombiConsult analysis

Despite the week infrastructure, the transportation market has registered growth in recent years due to the overall business development in Romania. Consumption has been on the rise, but also the production as companies have been in favour of regional production due to country's positioning, a more stable economic environment, more friendly fiscal environment and low costs (especially in the automotive sector, but other industries as well), therefore both international and domestic trade have increased, which has resulted into an upward development rate of both transportation and storage in order to cope with the market demand.

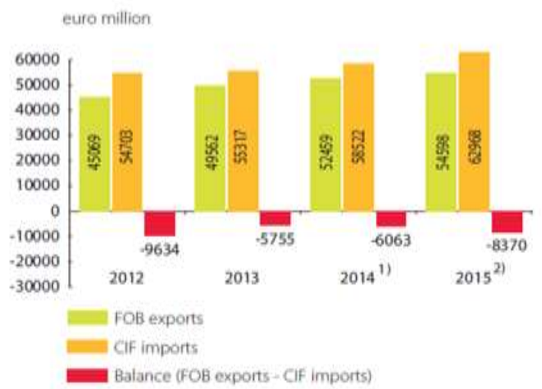
In Romania there are around 70 industrial parks (most significant located in the North-West, Center and South Romania), wherein economic, scientific research, industrial production activities and services are carried out under a regime of specific facilities, and 6 free Trade Zones, considered to be the best tools for the supply chain through promoting international trade and encouraging new technologies.

As a European Union (EU) member state, Romania enjoys the free trade relations with a large number of countries, including EFTA, CEFTA and Mediterranean countries. Romania adopted the EU Common Trade Policy and accepted the European Commission as a collective negotiating body for important international trade-related matters, particularly negotiations within the World Trade Organization (WTO). Also Romania applies the Community Customs Code (CCC) and the European Commission provisions for implementation of CCC from the accession date (January 1st 2007).

According to the National Institute of Statistics, Romania's volume of international trade in goods (both exports and imports) increased in 2015 as against 2014, however imports were higher than exports. Exports amounted to EUR 54.598 million (+4,1% ) and imports amounted EUR 62.968 million (+7,6%) with a trade balance of EUR -8.370 million.

Main partner countries in terms of trade in goods were Germany, Italy, France, Hungary, Poland and UK, the most predominant mode of transport being represented by road.

**Exports, imports and balance of international trade in goods operations**




[1] Semi-final data.
[2] Provisional data

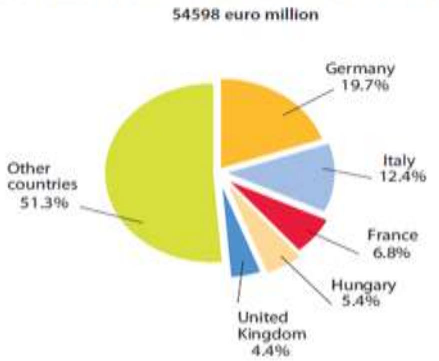
**International trade in goods, by mode of transport**

euro million

| | 2012 | 2013 | 2014[1] | 2015[2] |
|---|---|---|---|---|
| **FOB exports by mode of transport** | | | | |
| **Total** | **45069** | **49562** | **52459** | **54598** |
| of which: | | | | |
| Road transport | 31597 | 33457 | 36230 | 39134 |
| Maritime transport | 8955 | 10769 | 10806 | 10162 |
| Railway transport | 1965 | 2411 | 2459 | 1975 |
| Air transport | 852 | 836 | 1019 | 1050 |
| Inland waterway transport | 541 | 378 | 349 | 361 |
| **CIF imports by mode of transport** | | | | |
| **Total** | **54703** | **55317** | **58522** | **62968** |
| of which: | | | | |
| Road transport | 38759 | 40710 | 43374 | 47449 |
| Maritime transport | 9237 | 8414 | 8940 | 8584 |
| Railway transport | 1724 | 1527 | 1436 | 1508 |
| Air transport | 2004 | 1830 | 1980 | 2178 |
| Inland waterway transport | 393 | 289 | 280 | 385 |

[1] Semi-final data
[2] Provisional data

**(FOB) Exports with the main partner countries, in 2015[1]**




[1] Provisional data.

**(CIF) Imports with the main partner countries, in 2015[1]**


[1] Provisional data

Due to the high extension of the retail sector, determined by the consumption's rise, domestic trade registered growth amounting to LEI 199902.7 million (approx. EUR 44422.8 million) at the end of 2014, as per information released by the National Institute of Statistics.

**Retail[1], by group of goods**

lei million current prices

| CANE Rev. 2 | 2012 | 2013 | 2014[2] |
|---|---|---|---|
| **Total** | **184880.7** | **186435.2** | **199902.7** |
| Food goods | 61691.0 | 63176.2 | 66696.2 |
| Non-food goods | 72374.1 | 74250.2 | 81889.1 |
| Retail of fuels | 50815.6 | 49008.8 | 51317.4 |

***Note:*** *Data resulting from the Structural Business Survey.*
*Data on **2015** will be available in November **2016**.*

[1] *Excluding the sale, maintenance and repair of motor vehicles, motorcycles and the retail of fuels.*

[2] *Provisional data.*

The goods transportation sector in Romania (including road, railway, maritime, inland waterways and air transportation segments) reached 328,4 million tonnes of transported goods in 2015. The biggest percentage of the goods transportation sector in 2015 was represented by road freight transport (60,4%), followed by railway freight transport (16,8%), then by maritime freight transport (13,5%) & inland waterway transport (9,1%), while the lowest percentage was represented by air freight transport.

**Goods transport, by mode of transport**

MU – thousand tonnes

| Mode of transport | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|
| Railway transport | 55755 | 50348 | 50739 | 55307 |
| Road transport | 188415 | 191486 | 190932 | 198638 |
| Inland waterways transport | 27946 | 26858 | 27834 | 30020 |
| Maritime transport | 39454 | 43552 | 43707 | 44485 |
| Air transport | 29 | 32 | 32 | 34 |
| **Total** | **311599** | **312276** | **313244** | **328484** |

Source: National Institute of Statistics

According to data released by the National Institute of Statistics, year-on-year, in the first quarter of 2016, road freight increased by 32.9% in terms of volume. Out of the total 42.5 million tonnes reported volume, 77.7% represents domestic transport. Rail and sea freight registered single digit drops.

The modal choice of freight transport depends on various factors. In Romania each mode of transport has its own advantages and disadvantages relating to price, speed, safety, weight and reliability. Transport by water is the lowest cost carrier, but also the slowest mode and operates shipments with lowest value while transport by air is the fastest, but the most expensive and operates shipments with highest value. Concerning freight weight, water transport facilitates the highest weight while air transport can operate only the lowest weight.

In between there are the other two transport modes, road and rail, transport by road facilitating shipments with high value and low weight while transport by rail facilitates shipments with low value and high weight.

Road and rail transport, as intermodal, facilitates shipments with range of weight and value, rail being competitive with road over longer distances.

Romania's transportation market reached 7 billion euros in terms of goods freighted and 2 billion euros in passenger transportation and it is in its seventh year of growth.

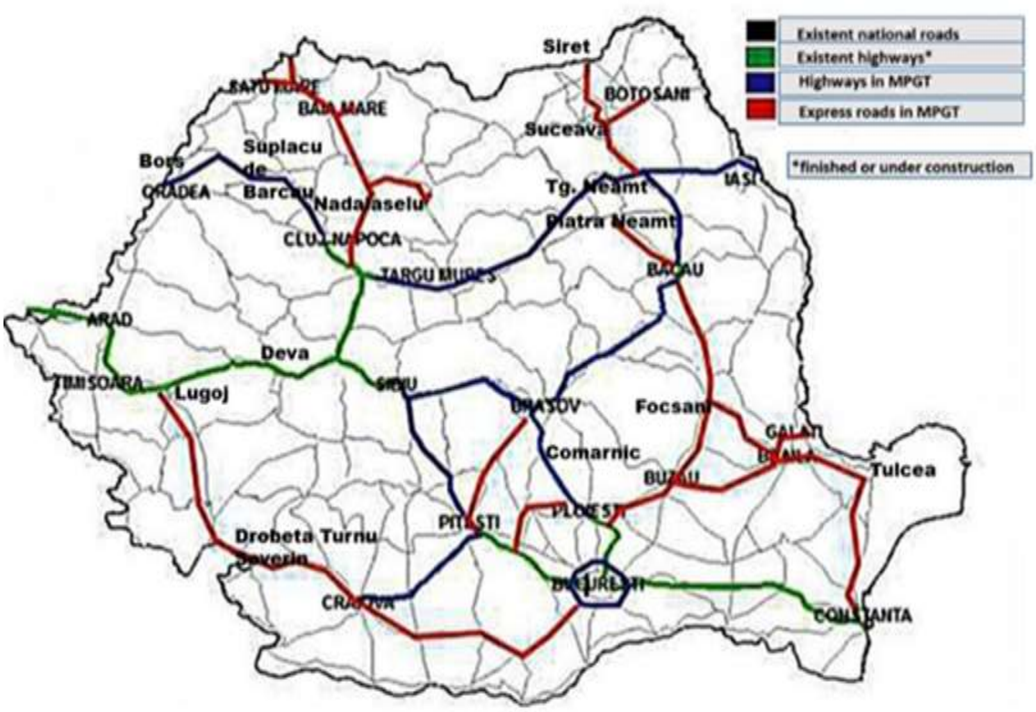
Transport and storage, together with retail and wholesale trade, repair of motor vehicles and motorcycles, hotels and restaurants have been constantly developed and contributed 18% to the GDP formation, with an activity volume up 13.1% (INSSE, Q1 2016).

Development of sectors like e-commerce, retail, FMCG, automotive and construction is expected to speed up and, as a consequence, transportation and storage would witness more development as well. Transport companies are expected to invest in trucks and storage facilities and, at the same time, to go global, expanding their activity towards Western Europe and Asia.

However, building a strong infrastructure (a highway network inter-connected to the European transport corridors, a modern and more-efficient railway network, a better connection of the Constanta port with the hinterland, a better facilitation of traffic in the ports of Danube) would both give Romania the real possibility to become an international hub and would increase the efficiency of the local freight transporters.

## 2.1. Road

Current status and proposal Master Plan General Transport (MPGT)




Ministry of Transport, MPGT 2015

The road network in Romania is classified into different categories: national roads (motorways A, European roads E, and main national roads DN), county roads DJ, and communal roads DC.

At the end of 2015, the road infrastructure had around 86,000 km, the motorway and the national road network accounting for just 20% of the entire network.

| Length of road network by category | | |
|---|---|---|
| **Road type** | **Kilometers** | **Percentage** |
| National roads (A/E/DN) | 17,606 | 20,5 |
| County roads (DJ) | 35,316 | 41 |
| Communal roads (DC) | 33,158 | 38,5 |
| **Total** | **86,080** | **100** |

Source: Romania Journal / INSSE

Out of the total national roads (A/E/DN), 35.2% (6,193 km) were European roads, 4.2% (747 km) motorways, 1.6% (281 km) 3 lane traffic roads, 10.3% (1,807 km) 4 lane traffic roads and 0.1% (22 km) 6 lane traffic roads.

From the point of view of the pavement, the structure of public roads network registered 37.9% modernized roads, 24.6% light cover roads and 37.5% stone and ground roads. As to the technical status of the public roads, 41.5% of the modernized roads and 51.2% of the light cover roads had overrun service duration.

A1 Motorway Bucharest – Nadlac is a partially built motorway in Romania (63%) planned to connect Bucharest with the Western part of the country. 385 km (sections: Bucharest – Pitesti / Sibiu – Deva / Lugoj – Timisoara – Nadlac, reaching the Hungarian motorway) out of 576 km are currently in operation while 72 km (section: Deva – Lugos) are under construction and the rest is under planning.

A2 Motorway Bucharest – Constanta (Sun Motorway) is a fully operational motorway of 203 km length in Romania connecting Bucharest with the South – Eastern part of the country (Constanta, a city-port on the shore of the Black Sea).

A3 Motorway Bucharest – Bors, reaching the Hungarian motorway, (Transilvania Motorway) is a partially built motorway in Romania (18%) planned to connect Bucharest with the Transilvania region and the North – Western part of the country. 107 km (sections: partially Bucharest – Ploiesti and Campia Turzii – Gilau) out of 603 km are currently open, 13% is under construction and the rest of 69% under planning.

A4 Motorway is a motorway of 21,8 km length, which serves as a By-Pass for the City of Constanta connecting with the A2 motorway.

Projects concerning construction of motorway connecting Bucharest with the Eastern part of the country, Iasi – Ungheni, are under planning.

The road infrastructure is obviously underdeveloped and outdated, the level of motorway provision being very law comparing to the rest of Europe. The lack of highways along the main routes of transit makes traffic difficult, crowded, and with relatively low commercial speeds. At the same time there are no express roads in Romania.

Road safety and pollution are also reasons of concern. Romania is still amongst the countries reporting the highest road fatality rates in EU with more than 90 dead per million inhabitants (exceeding the EU average of 51 /source: ETSC, 2015), while more than 13% of the greenhouse gas emissions come from the transport sector, 96% of them being caused by road transport.

Achievement of a high-performance infrastructure in order to ensure efficiency, durability, flexibility and maximum safety conditions of persons and goods is considered a top priority in the context of Romania's development plans. Road projects involving the development of new transport corridors (motorways and expressways) or extending existing roads (modernization projects) in order to increase the road connectivity between Romanian economic growth poles and to improve the travel conditions between regions are currently proposed by the Romanian Government for the next period.

Although the road infrastructure is poor, the transport by road, which is the predominant transportation mode in Romania, shows a slightly ascending trend in terms of freight volume, 2015 totaling an amount of 199 million tonnes, representing 60,4% of the total freight transport.

| | M.U. | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|
| **Road transport** | | | | | |
| Transported freight | million tonnes | 188 | 191 | 191 | 199 |
| Distance covered by freight | billion tonnes-km | 30 | 34 | 35 | 39 |
| National and international passenger transport[4)] | million passengers | 262 | 274 | 282 | 276 |
| Distance covered by passengers[4)] | million passengers-km | 16901 | 17082 | 18339 | 17471 |

4) data on bus and microbus transport, excluding local public transport

Source: National Institute of Statistics

Under the current business environment, with fast development rate in terms of production and consumption, road freight is expected to grow with an average 3.1% per year between 2016 and 2020, which is a quicker growth rate than the other freight modes.

Over 1000 trucks run daily on the Romanian roads transporting to modern retail in order to cope with the market demand. However the trucking sector in Romania is competitive, from the entire Romanian fleet, a high percentage of trucks provides services to the European market.

According to market sources, a Romanian highway network interconnected to the European transport corridors could increase the efficiency of the local freight road transporters by up to 20%. Transilvania highway that will link the Centre and the Western regions of the country could lead to an expenditure decrease by 10-12% for the local freight transporters that perform international expeditions.

Main players in road transport sector:

Top – the biggest road transporters of goods
(turnover mil. EUR – profit mil. EUR – no of employees)

Topul celor mai mari transportatori rutieri de mărfuri

| Companie | Cifră de afaceri (mil.euro) | Profit (mil.euro) | Număr de angajați |
|---|---|---|---|
| AQUILA PART PROD COM | 134,1 | 1,4 | 1.839 |
| CARRION EXPEDITION | 85,1 | 2,5 | 1.125 |
| TRANSCONDOR | 72,3 | 0 | 723 |
| DUVENBECK LOGISTIK | 56,6 | 2,6 | 641 |
| TOTAL N S A | 44,3 | 0,5 | 368 |
| INTERNATIONAL LAZĂR COMPANY | 42,3 | 0,9 | 461 |
| DUNCA EXPEDIȚII | 41,0 | 2,4 | 630 |
| DUMAGAS TRANSPORT | 38,6 | 0 | 548 |
| ARCESE TRANSPORT | 33,6 | 0,4 | 337 |
| BALADEI THIRDWAY TRANSPORT | 31,4 | 0 | 415 |
| HARTL CARRIER | 30,6 | 1,1 | 47 |
| J.T. GRUP OIL | 30,6 | 1 | 41 |
| DIANTHUS COMPANY | 30,1 | 3,6 | 290 |
| HOEDLMAYR-LAZĂR ROMÂNIA | 30,0 | 0 | 149 |
| RAVITEX | 29,1 | 1,5 | 382 |
| COM DIVERS AUTO RO | 28,9 | 0,5 | 380 |
| TRANS BITUM | 28,8 | 0,3 | 266 |
| TIR EXPRESS | 28,5 | 0,07 | 244 |
| H ESSERS (Belgium) | 28,3 | 0,2 | 450 |
| INTERNAȚIONAL ALEXANDER | 26,5 | 1,1 | 379 |

Sursă: ONRC

Source: Financial Newspaper (Transport & Logistics 2016)

Romanian authorities in road sector:

- Romanian National Company of Motorways and National Roads
  Dinicu Golescu 38, sector 1, Bucharest
  +4021 264 32 47
  office@andnet.ro
  www.cnadnr.ro

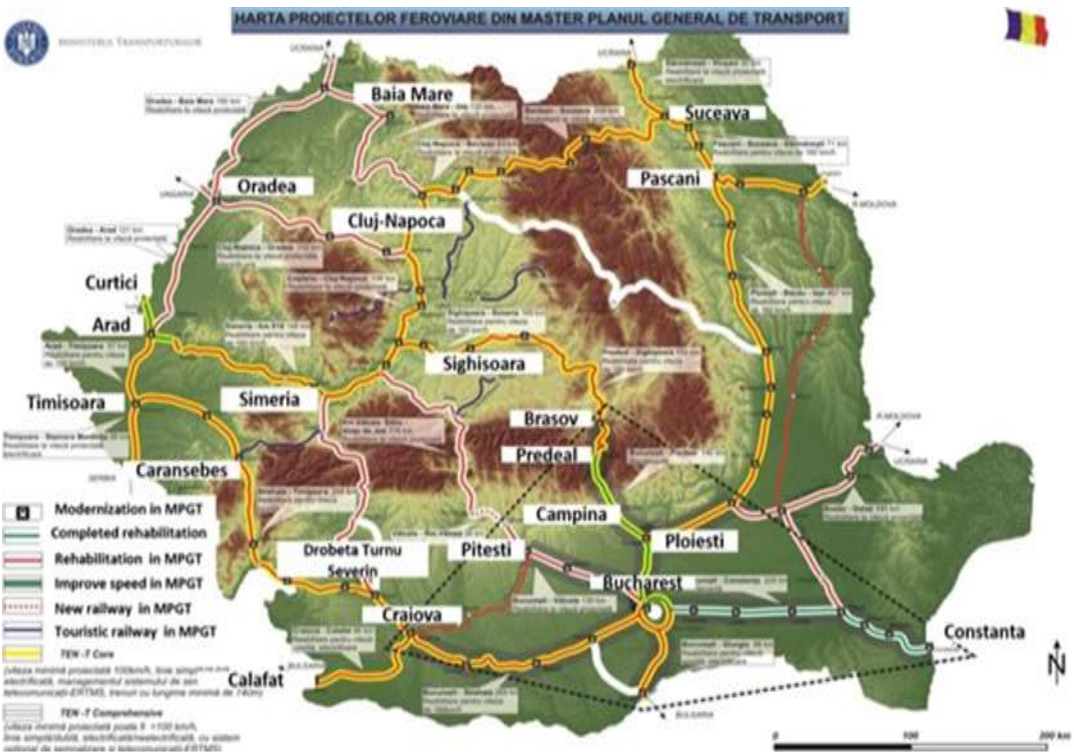
- Romanian Automotive Register
  Calea Griviței, no. 391A, sector 1, Bucharest
  +4021 202.70.00
  www.rarom.ro/en/

- Romanian Road Authority
  Dinicu Golescu 38, floor 8, sector
  1, Bucharest
  +4021 312.15.19

arutiera@arr.ro
http://www.arr.ro/

## 2.2. Railway

Current status and proposal Master Plan General Transport (MPGT)




The total rail Romanian route network under exploitation amounts at about 11,000 km (the 7th largest in the EU), out of which about 8000 km (72%) is single track, while the average in the EU is 59%, and about 3000 km (27%) is double track. It comprises about 1000 stations, 200 tunnels and 4000 bridges. Only 37% of the rail network is electrified comparing to the EU average of 54%.

**Rail Infrastructure Statistics**

| **Length of rail network** | **10,818 km** | **Number of level crossings (number of which are automatic)** | **5,119 (1,082)** |
|---|---|---|---|
| Double track | 2,909 (27%) | Number of points/switches | 20,868 |
| Single track | 7,771 (72%) | Train control (signalling) infrastructure: | |
| Electrified (overhead 25 Kv) | 4,002 (37%) | Electronic interlocking systems | 28 |
| Non-electrified | 6,816 (63%) | Relay interlocking systems | 618 |
| Number of stations | 965 | Installations without interlocking | 354 |
| Number of tunnels | 177 | Automatic line block: | |
| Length of tunnels | 6,809 | Number of installations | 577 |
| Number of bridges | 4,216 | | |
| Number of culverts | 13,961 | | |

*Source: CFR SA: CFR Network Statement*

According to the National Institute of Statistics, at the end of 2015, the density of rails per 1,000 km territory was 45.2‰. The highest densities were registered in Bucharest-Ilfov (153.2‰) region, West region (58.9‰) and in the South-East region and in the North-West region (48.8‰).

Currently only a small proportion of the total railway network is rehabilitated: Predeal – Campina / Campina – Ploiesti – Bucharest / Bucharest – Constanta and HU-RO Border - Curtici – Arad km 614 km. Some railway routes are under execution: Simeria – Coslariu / Coslariu – Sighisoara, some others are under tender procedure or under preparation. Modernization of 35 railway stations are finalized while modernization of 47 railway stations are in preparation.

The rail system in Romania is in an advanced state of disrepair due to a chronic lack of maintenance, which has led to low speeds, poor frequency and ineffective operations. Despite a fully open market, the period between 1990 -2010 was marked by strong declines (-80%) in terms of volume of rail transport both for passengers and goods.

However for the period 2010–2015 the market for rail stabilized, the transport by rail even showing a slight positive evolution. At the end of 2015 the volume of freight transport by rail amounted to 55 million tonnes, which represented 16,8% of the total freight transport (2nd place after road transport).

| | M.U. | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|
| **Railway transport** | | | | | |
| Railway engines | number | 1796 | 1795 | 1779 | 1795[1)] |
| Waggons | thou waggons | 44 | 40 | 35 | 34[1)] |
| Carriages | number | 4232 | 4025 | 4001 | 3928[1)] |
| Transported freight | million tonnes | 56 | 50 | 51 | 55 |
| Distance covered by goods | billion tonnes-km | 13 | 13 | 12 | 14 |
| National and international passenger transport | million passengers | 58 | 57 | 65 | 66 |
| Distance covered by passengers | million passengers-km | 4571 | 4411 | 4976 | 5149 |

1) provisional data

Source: National Institute of Statistics

Under current growing trend in exports (especially agricultural goods and heavy machinery) the rail freight will continue to see a good year in 2016 and beyond. Moreover, Romania being a relatively large country, is suited to rail transport. Goods that have to be transported large distances could be transported more economically by rail than by road. For the coming period Romania will focus on increasing the competitiveness of rail transport on the domestic market and the integration of the Romanian railway system in the Single European Railway Area. Therefore some of the freight flows would be relocated from road to rail.

The high growth potential of transport by rail can be achieved only through sustained investments in infrastructure. Rail projects focused on upgrading the rail infrastructure, in particular the TEN-T network sections on the Romanian territory and the integration in the European network of high-speed rail transport, projects for connecting Bucharest with the largest industrial centres in the South of Romania, are to be carried out in the next programming periods (2015-2020 and 2020-2036): modernization of conventional railway lines, electrification, rehabilitation of bridges and tunnels, safety projects, development of cross-border railway lines together with acquisition of new rolling stock & locomotives.

The TEN-T network covers about 20% of the total Romanian railway routes length (the Rhine-Danube corridor and the Orient/East Med corridor) and accommodates about 50% of the total rail traffic by volume.

Top – the biggest rail transporters of goods
(turnover mil. EUR 2014 – profit mil. EUR 2014 – no of employees 2014
turnover mil. EUR 2013 – profit mil. EUR 2013 – no of employees 2013)

Topul celor mai mari 10 transportatori de marfă pe calea ferată (mil. euro)

| Companie | Cifră de afaceri 2014 | Profit 2014 | Nr. angajați 2014 | Cifră de afaceri 2013 | Profit net 2013 | Număr angajați 2013 |
|---|---|---|---|---|---|---|
| CFR Marfă | 208,6 | -6,1 | 7.622 | 209 | -59 | 8.767 |
| Grup Feroviar Român (GFR) | 157,5 | 7,0 | 2.133 | 166 | 8 | 2.201 |
| Unicom Tranzit SA | 56,1 | 2,3 | 811 | 49 | 1,2 | 879 |
| Rofersped SA | 41,6 | 1,1 | 33 | 45 | 0,4 | 31 |
| Transferoviar Grup | 38,6 | 0,3 | 625 | 36 | 0,6 | 540 |
| DB Schenker Rail România | 36,1 | 3,0 | 434 | 29 | 0,9 | 337 |
| Unifertrans SA* | [illegible]A | N/A | N/A | 21 | 14,6 | 436 |
| Trans Expedition Grup | 11 | 0,6 | 269 | 16 | 0,6 | 473 |
| Trade Trans Raillogistics | 9,5 | -0,05 | 25 | 17 | -0,04 | 26 |
| Servtrans Invest | 12,6 | -4,1 | 223 | 15 | 27,3 | 347 |

*cele mai recente date ale companiei sunt valabile pentru anul 2012
Notă: Firmele care apar în top au cod CAEN 4920 - transport de marfă pe calea ferată.
Sursă: Ministerul Finanțelor

Source: Financial Newspaper (Transport & Logistics 2016)

*CFR SA – state-owned Romanian national operator for passengers (CFR Calatori) and goods (CFR Marfa), also responsible for the maintenance of the rail network.

The rail passenger market and the rail private market have been open to private undertakings since 2004, and respectively 2001. In 2012 the passenger public operator (CFR Calatori) had about 90% of the market, the rest being covered by private operators, while the freight public operator (CFR Marfa) had a market share of 55%. The freight public operator (CFR Marfa) was to be privatized by the end of 2016 at the request of International Monetary Fund, however the Romanian Government postponed the process till the first term of 2018.

Romanian authorities in rail sector:

- Romanian National Rail Company
  Dinicu Golescu street, no. 38, sector 1, Bucharest
  +4021 225.11.12

office@cfrmarfa.com
www.cfrmarfa.cfr.ro

- Romanian Railway Authority
  Calea Grivitei, Nr.393, sector 1, Bucharest
  +4021 307.79.00
  www.afer.ro

## 2.3. Maritime and inland waterways

Current status and proposal Master Plan General Transport (MPGT)


The maritime and inland waterway infrastructure comprises 32 river and sea ports, on the Black Sea, on the waterway navigable canals, and along the Danube River together with the secondary navigable branches of the Danube.

The maritime transport is provided by the direct access to the Black Sea through the three maritime ports: Constanta, Mangalia and Midia (the Port of Constanta being the main Romanian port, among the first ten European ports). The inland waterway transport, focused on the Danube river (1075 km along Romania), is provided through 29 inland waterway ports, the largest being the ports of Galati, Braila and Tulcea, located on the maritime section of the Danube. They are part of the TEN-T Network and a series of ports on the river Danube, the largest of which are Giurgiu, Oltenita, and Droberta Turnu Severin.

The navigable canals have been developed between the Danube and the Black Sea, including the main canal, Danube-Black Sea Canal which ends in Constanta Sea Port, and Poarta Alba-Midia

Navodari Canal which links the main canal with the Midia Port. The Danube-Black Sea Canal offers access to both the Black Sea and the North Sea through the Rhine-Main-Danube Trans-European Waterway, connecting the Port of Constanta and the Port of Rotterdam. A third canal is Bega Canal and traverses Romania and Serbia, discharging through Tisa in the Danube River.

The Port of Constanta, located on the Western coast of the Black Sea, is the most important commercial sea and river port in Romania (3,926 ha, out of which 1,313 ha land & 2,613 ha water; 140 operating berths) and has a handling capacity of over 120 million tonnes/year. Its geo-strategic position, at the crossroads of the trade routes, is enhanced by connections with all transport modes: road, rail, inland waterway and air. The importance of the Port of Constanta is emphasized by the connection with the Pan-European Transport Corridors: IV-VII-IX, playing a major role in the development of inland transport of goods coming from Far East towards destination in Central Europe.

The Ports of Galati, Braila and Tulcea, located at the intersection of the maritime and fluvial Danube, are the largest inland ports (Galati – 864,131 sqm, 56 operating berths; Braila – 389,630 sqm, 25 operating berths; Tulcea – 82,764 sqm, 41 operating berths) and altogether have a handling capacity of about 34 million tonnes/year, out of 52 million tonnes/year, the total handling inland waterway capacity in Romania.

Although there have been performed some modernization works in the recent years, the Romanian port infrastructure like dams, berths, stone packing, port basins and port areas faces with an advanced state of physical degradation due to very old infrastructure in some ports, intensive and longtime exploitation, without realizing the maintenance and repairing works, and also no sufficient links with other transport modes. Regarding the waterway transport there are many sectors with navigation bottlenecks in Romania generated by insufficient water depths during dry seasons, lock size or clearance under bridge.

According to the National Institute of Statistics,  the volume of loaded and unloaded goods both in the maritime ports and inland ports has lately increased, at the end of 2015 amounting to 44,5 million tonnes relating to maritime and 30 million tonnes related to inland. The vast majority of the goods transported by water in Romania are bulk goods. The Danube carries 3 types of traffic: domestic, transit and import/export, at the end of 2015 totaling 13,2 million tonnes for domestic, 5,5 million tonnes for transit and 11,2 million tonnes for international.

**Harbour freight transport**

thou tonnes

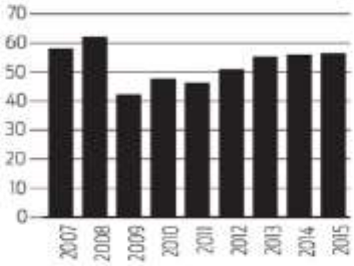
| | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|
| **Maritime transport** | **39520** | **43577** | **43753** | **44533** |
| - loaded goods | 21199 | 26765 | 25349 | 24954 |
| - unloaded goods | 18321 | 16812 | 18404 | 19579 |
| **Inland waterway transport** | **27946** | **26858** | **27834** | **30020** |
| - international | 9423 | 9798 | 8985 | 11216 |
| - national | 13292 | 12848 | 14421 | 13246 |
| - transit[1] | 5231 | 4212 | 4428 | 5558 |

[1] *It includes data on the transport between the Bulgarian harbours (transit transport for Romania), in accordance with the European legislation.*

Source: National Institute of Statistics

Due to Romania's position relative to the Danube, the proportion of total inland freight in Romania transported by water is the second highest in the EU. However Romania compares unfavourably to Holland which has a similar position relative to the Rhine, the key difference between the countries being the lack of modern facilities in Romania.

The Port of Constanta, the major maritime and river port in Romania, is the most developed and offers the widest range of facilities. The total traffic in the Port of Constanta was of 56,3 million tonnes in 2014, showing a slightly increasing trend, and was generated mostly by dry bulk and cereals (over 64%), followed by liquid bulk, and then by general cargo. Constanta handles over 70% of the total freight in the Romanian ports.




Port of Constanta

In addition the Port of Constanta is a major regional container port (but not one of the top 20 container ports by volume in Europe), the modal share of containers leaving Constanta (excluding transiting) being estimated as currently: 56% - road, 41% - rail, 3% - barge. Constanta has a large hinterland and acts as a transshipment point for many goods, however there is much potential to expand its throughput as long as the road, rail and water links are improved.

Romania may play a leading role in connecting Central Asia and Central Europe through the Danube river and the Port of Constanta, which sum up an excellent transport system. Improvements of the infrastructure of both maritime and inland waterway would add benefits for the entire economy of Romania in an European context. Infrastructure projects focused especially on TEN-T ports (Primary Economic Network) are under preparation.

Port operators

(turnover mil. EUR 2014/2013 – profit mil. EUR 2014/2013 – no of employees 2014/2013 – shareholders)

Piața serviciilor portuare

| Companie | Cifră de afaceri | | Profit net | | Număr salariați | | Acționari |
|---|---|---|---|---|---|---|---|
| | 2014 (mil. euro) | 2013 (mil. euro) | 2014 (mil. euro) | 2013 (mil. euro) | 2014 | 2013 | |
| CN ADMINISTRAȚIA PORTURILOR MARITIME | 62,3 | 60,0 | 15,9 | 14,7 | 870 | 881 | Min. Transporturilor, FP, Consiliul Local Constanța |
| CONSTANȚA SOUTH CONTAINER TERMINAL | 4,5 | 38,8 | 12,6 | 10,2 | 459 | 476 | DP World (Dubai) |
| OIL TERMINAL | 24,3 | 5,3 | 0,1 | 0,0 | 1016 | 1.025 | AVAS |
| NORTH STAR SHIPPING | 22,1 | 25,4 | 4,8 | 5,9 | 151 | 149 | Liviu Ghebaur, Ioan Vasile, Alfred C. Toepfer |
| CHIMPEX | 24,2 | 23,1 | 6,2 | 6,0 | 245 | 250 | Azomureș |
| UNITED SHIPPING AGENCY | 18,2 | 14,6 | 6,4 | 4,4 | 290 | 246 | Cătălin Trandafir, Mihai Felescu |
| COMVEX | 16,0 | 39,3 | 2,1 | 1,6 | 210 | 235 | Solidmet SRL, Arcelor Mittal |
| SOCEP | 14,3 | 12,3 | 1,7 | 0,8 | 450 | 397 | Celco Constanța, Stere Samara |
| MINMETAL | 10,4 | 12,4 | 0,4 | 1,5 | 188 | 189 | North Star Shipping |
| ROMPORTMET | 6,0 | 6,0 | 0 | 0,6 | 63 | 174 | ArcelorMittal |

Sursa: Ministerul Finanțelor

Source: Financial Newspaper (Transport & Logistics 2016)

Romanian authorities in maritime and inland waterway sector:

- National Company Maritime Ports Administration SA Constanta
  Incinta Port Constanta, Gara Maritima
  +40241 611 540
  dirgensec@constantza-port.ro
  www.portofconstantza.com

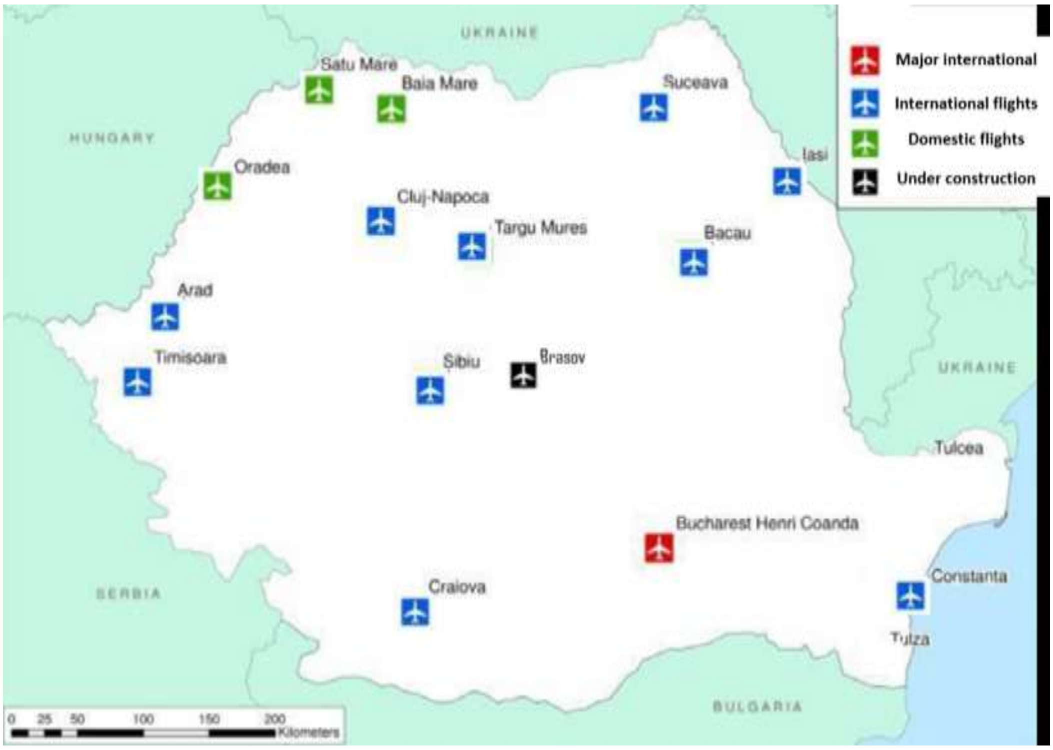
- National Company Maritime Inland Port Administration SA Galati
  34 Portului street, Galati
  +40236 460 140
  apdm@apdmgalati.ro
  www.romanian-ports.ro

- National Company Fluvial Inland Port Administration SA Giurgiu
  Sos. Portului 1, Giurgiu
  +40246 213 003
  secretariat@apdf.ro
  http://www.apdf.ro/

- Administration of the Navigable Canals
  1 Ecluzei street, Agigea
  +40241 738 505
  compania@acn.ro
  www.acn.ro

## 2.4. Air

Current status and proposal Master Plan General Transport (MPGT)




Currently the air infrastructure in Romania consists of 14 airports permanently open for traffic. They offer more than 130 direct flights to 76 destinations in 31 countries and also ensure a strong internal connection providing easy access to every region in the country. One airport is under construction, namely the one in Brasov (Center Romania) which, once finished, would enhance business development in the region. The most important airports are the ones in Bucharest (major international airport), Timisoara and Constanta (big international hub airports) and are operated by the Romanian government, while the others are operated by local counties.

During the years, the air infrastructure in Romania has been involved in strategic programs for development, financed both from EU structural funds and domestic funds. Romania has significant infrastructure capacity given current air traffic demand, which has been witnessed significant growth year by year both for passengers and goods. At the end of 2015, according to the National Institute of Statistics, 34,3 thousand tonnes of goods were transported by air.

Airport passenger and freight transport

| | M.U. | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|
| Passengers | thou passengers | 10728 | 10706 | 11592 | 13273 |
| Freight (including mail) | tonnes | 29334 | 31629 | 32194 | 34320 |
| Aircraft movements | number | 138744 | 127743 | 129509 | 138598 |

Source: National Institute of Statistics

However, airports still need to be modernized and equipped in order to respond to international standards of safety and security. At the same time, upgrading of the air infrastructure, developing cargo handling facilities and extension to the runway, terminals, signaling systems etc. becomes top priority in order to cope with the upcoming demand. Expansion of manufacturing (especially manufacturing companies requiring complex or rapidly moving supply, such as electronics and pharmaceuticals) coupled with the increase of higher value consumer goods make freight transport by air be an important mode transport, fostering trade and commerce. Moreover the poor development of the highway infrastructure in Romania, determine the big freighters to offer the solution to combine airfreight with trucking.

The modernization and development of the Romanian airports, with a special focus on improving the TEN-T connectivity of landlocked territories and the promotion of regional economic development are the main objectives for the next programming period in Romania.

Further air infrastructure modernization projects are under preparation stage as proposed in the Master Plan General Transport.

Taking into consideration the amount of traffic and general airport activity, Bucharest is and remains the centre of the airfreight market, Bucharest Henri Coanda airport being the most active airport and also home to the major carriers, such as Tarom (Romanian Airline), British Airways, Lufthansa, Austrian Airlines. Recently Romania has experienced significant market penetration from low-cost carriers (higher than 40%), including Wizz Air, Blue Air, Ryanair, however Tarom continues to be the only carrier providing services to some ten destinations in the country, in addition to multiple destinations overseas.

While Italy is number 1 as country destination, followed by Germany, UK, Spain, and France, Belgium has witnessed the most significant growth in weekly capacity, 65% or an additional 2,345 seats, due in part to Ryanair adding daily flights between Bucharest and Charleroi. Nonetheless, Blue Air has also contributed to the increase, as it introduced twice-weekly flights from Bacau to Brussels.

Romanian authorities in air sector:

- National Company Airline Transport Tarom
  224F Calea Bucurestilor, Otopeni, Ilfov
  +4021 201 47 00
  secrgen@tarom.ro
  www.tarom.ro

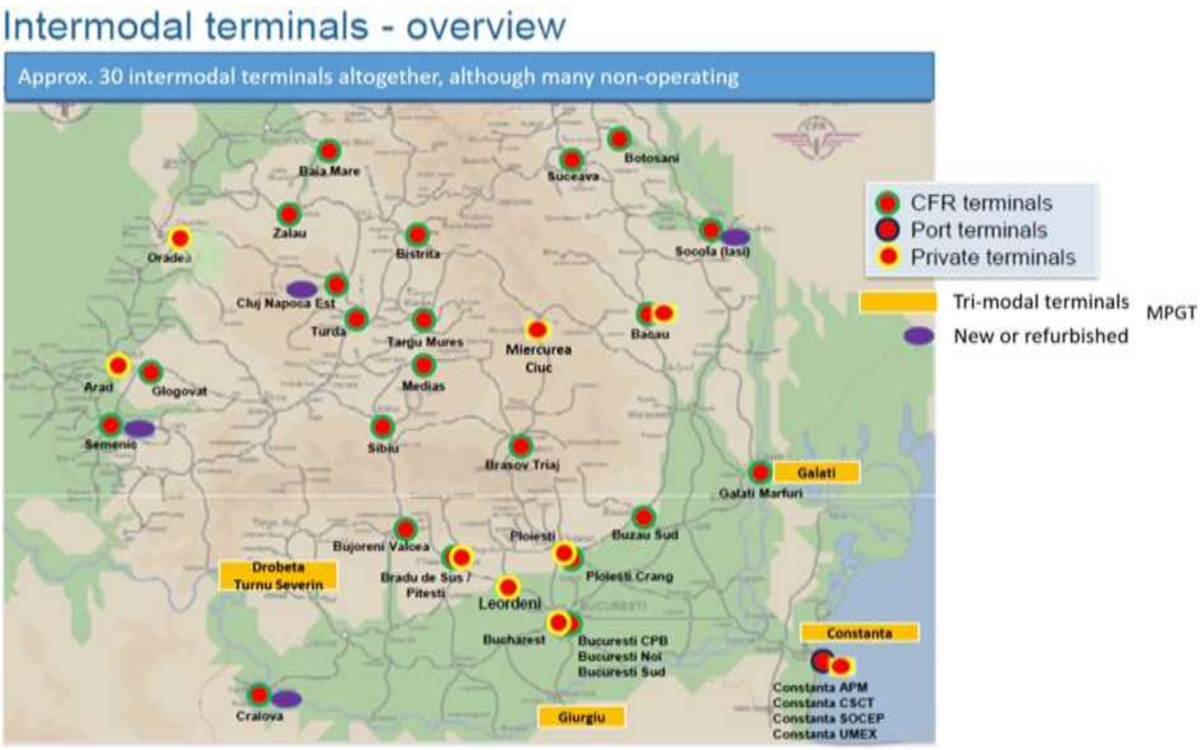
- Romanian Civil Aviation Authority
  38-40 Bucharest-Ploiesti ave, sector 1, Bucharest
  +4021 208 15 08
  www.caa.ro/

- Romanian Air Traffic Services Administration

10, Ion Ionescu de la Brad blvd, sector 1, Bucharest
+40 21 2083 100
romatsa.office@romatsa.ro
www.romatsa.ro/en

## 2.5. Intermodal

Current status and proposal Master Plan General Transport (MPGT)




Source: KombiConsult / intermodal-terminals.eu / MPGT

Intermodal transport, meaning road/rail and water/rail where the trunk haul is made by rail, represents the future for modern rail freight transport. Romania is aiming at increasing rail transport competitiveness on the domestic market and is focusing on shift to rail of freight road transport.

Currently the Romanian transport sector provides for various forms of logistics concepts including combined transport operators for rail/road and even barge/road transport.

There are more than 30 intermodal terminals in Romania, out of which about 25 are owned by CFR Marfa (National Romanian Freight Rail Transport) and some others are private. Most of the terminals owned by CFR Marfa are in poor condition due to lack of maintenance or improper usage, and actually non-operating.

| Operating CFR Terminal (out of a total of about 25) | | Operating Private Terminal* (*not exhaustive) | |
|---|---|---|---|
| **Location** | **Terminal Operator** | **Location / name** | **Terminal Operator** |
| Suceava | | Ploiesti Alianso Terminal | Alianso Terminal (BE) |
| Bacau | | Bucharest Intermodal Terminal | Tibbett Logistics |
| Brasov Triaj | Rofersped | Bucharest Sud | Rocombi |
| Zalau Nord | | Leordeni Center Tea&Co Terminal | TTD Timber |
| Turda | | Constanta Port | APM Terminals |
| Bucuresti Progresu | | Constanta South Container | DP World |
| Bucuresti Sud | | Arad Railport Container Terminal | Railport Arad |
| Cluj-Napoca Est | | Miercurea Ciuc | Rail Container |
| | | Oradea | *Intermodal Vest (joint-venture P&O Ferrymaster and Transmec)<br>*Intercarpatia |
| | | Bacau | Rail Container |
| | | Suceava | Rail Container |
| | | Ploiesti | Rail Container |
| | | Arad Trade Trans Terminal | Trade Trans Terminal |

The bad condition of rail infrastructure in Romania, characterized by lack of maintenance, small proportion of electrified lines and reduced speeds, coupled with a law degree of containerization caused by lack of investment in inland terminals, lack of modern supply chain, lack of modern rail wagons designed for efficient container operations, make the use of intermodal transport in Romania, although following an increasing trend in recent years, be far below its potential.

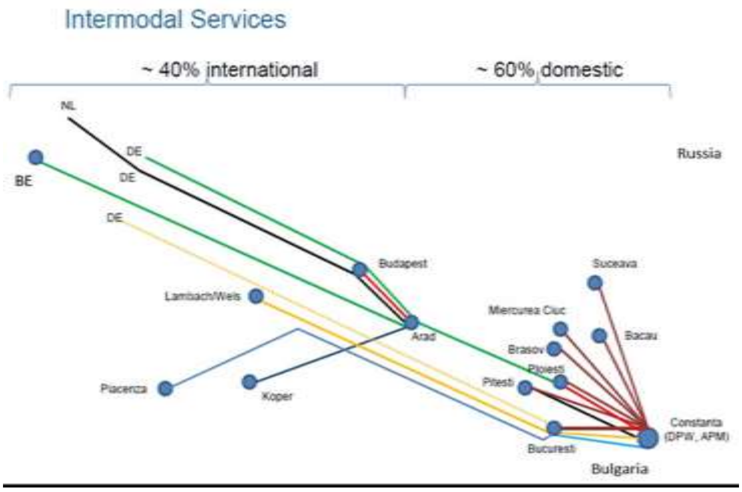
After a dramatic drop of total freight intermodal transport volume in 2010 due to the global economic crises, -44% comparing to 2008, the intermodal freight transport has recovered since 2011 and continued to raise. The annual railway transport of goods (containers and swap bodies) in intermodal transport units registered 2,61 million tonnes in 2011, the percentage of total rail freight containers being 4,6%. Romania has significantly low levels of freight in containers which is transported by rail compared to other European countries. The growth of intermodal transport in Romania is directly depending on the country's own economic performance and not generated by transit traffic. However Romania being a rather large country with a geo-strategic location could enhance transit traffic.

The Black Sea Port of Constanta is home to the largest container port in the Black Sea and is strategically situated at the mouth of the Danube Black Sea Canal which feeds freight into the heartland of Central and Eastern Europe. The container hinterland transport from and to Constanta is the biggest part of intermodal transport in Romania. The modal share of containers leaving Constanta (excluding transiting) is estimated as currently at 56% road, 41% rail, and 3% barge.

In Romania domestic services, the backbone of intermodal transportation represent ±60% of total intermodal freight transport, while the international services, mainly focused on Western Union, in particular Belgium, represent ±40%.

*Genk – Curtici / Genk - Oradea

*Zeebrugge – Curtici / Zeebrugge – Oradea




Source: KombiConsult

The Master Plan General Transport incorporates proposals to rehabilitate and modernize the railway infrastructure, in particular the TEN-T network sections, and also to develop intermodal/multimodal terminals in certain identified core-locations: 4 major tri-modal terminals located at Constanta and the major river ports (Galati, Giurgiu, Drobeta Turnu Severin), together with 10 more terminals across the country, which may be either refurbishments of existing terminals or new builds with modern facilities.

The operation of intermodal terminals is closely integrated with the logistics industry, which is 100% privately run. Future intermodal developments will be most probably designed, built and operated by the private sector in order to fully exploit their potential.

**Railway undertakings with focus on intermodal transport**

- CARGO TRANS VAGON
- CFR Marfa S.A.
- DB Schenker Rail Romania
- Grup Feroviar Roman (GFR)
- Rail Cargo Romania
- Servtrans Invest S.A.
- Transferoviar Grup (TFG)
- UNICOM TRANZIT
- VEST TRANS RAIL
- VIA TERRA SPEDITION

Source: KombiConsult; Club Feroviar

**Intermodal Operators with "regular" services**

- Adria Kombi
- Adria Transport d.o.o.
- CFR Marfa
- Eurolog Srl
- Hupac
- IFB
- Kombiverkehr
- Rail Container S.R.L.
- RCO (Hungária Intermodal Kft)
- Rocombi
- Rom-Rail
- Tibbett Logistics

Source: 2012 Report on Combined Transport in Europe; KombiConsult analysis

While road freight currently dominates the transport mix in Romania, its freight transport sector is more diversified than most, with inland waterways also having great potential. Thanks to the

Danube and the Port of Constanta, inland waterways will continue to play a vital role in the freight mix and is forecast to account for about 10% over the next few years.

Location of ports and intermodal operations (MPGT)

| No. | Terminal | Location | Operator |
|---|---|---|---|
| 1 | Port of Constanta | Constanta | DP World Constanta South Container Terminal |
| | | | APM Terminals |
| | | | SOCEP |
| | | | UMEX |
| 2 | Port of Galati | Galati | S.C Port Bazinul Nou S.A Galati |
| | | | S.C Port Docuri S.A Galati |
| | | | S.C Romportmet S.A Galati |
| | | | S.C Trans Europa S.A Galati |
| | | | S.C Trans Europa Port SRL Galati |
| | | | S.C Unicom Oil Terminal S.A Galati |
| 3 | Port of Tulcea | Tulcea | S.C Deltanav S.A Tulcea |
| | | | S.C Frigorifer Tulcea |
| | | | S.C Navrom-Delta S.A Tulcea |
| 4 | Port of Braila | Braila | S.C Hercules S.A Braila |
| | | | S.C Trans Europe Port SRL Galati |
| | | | S.C Cerealcom S.A Braila |
| | | | S.C Romanel S.A Braila |
| 5 | Port of Giurgiu | Giurgiu | C.N. A.P.D.F. S.A. Giurgiu |
| 6 | Port of Calarasi | Calarasi | C.N. A.P.D.F. S.A. Punct Lucru Calarasi |
| 7 | Port of Oltenita | Oltenita | C.N. A.P.D.F. S.A. Punct Lucru Oltenita |
| 8 | Port of Corabia | Corabia | C.N. A.P.D.F. S.A. Punct Lucru Corabia |
| 9 | Port of Drobeta Turnu Severin | Drobeta Turnu Severin | C.N. A.P.D.F. S.A. Drobeta Turnu Severin |
| 10 | Port of Calafat | Calafat | C.N. A.P.D.F. S.A. Agentia Calafat |
| 11 | Port of Orsova | Orsova | C.N. A.P.D.F. S.A. Punct Lucru Orsova |

*Source: AECOM Analysis*

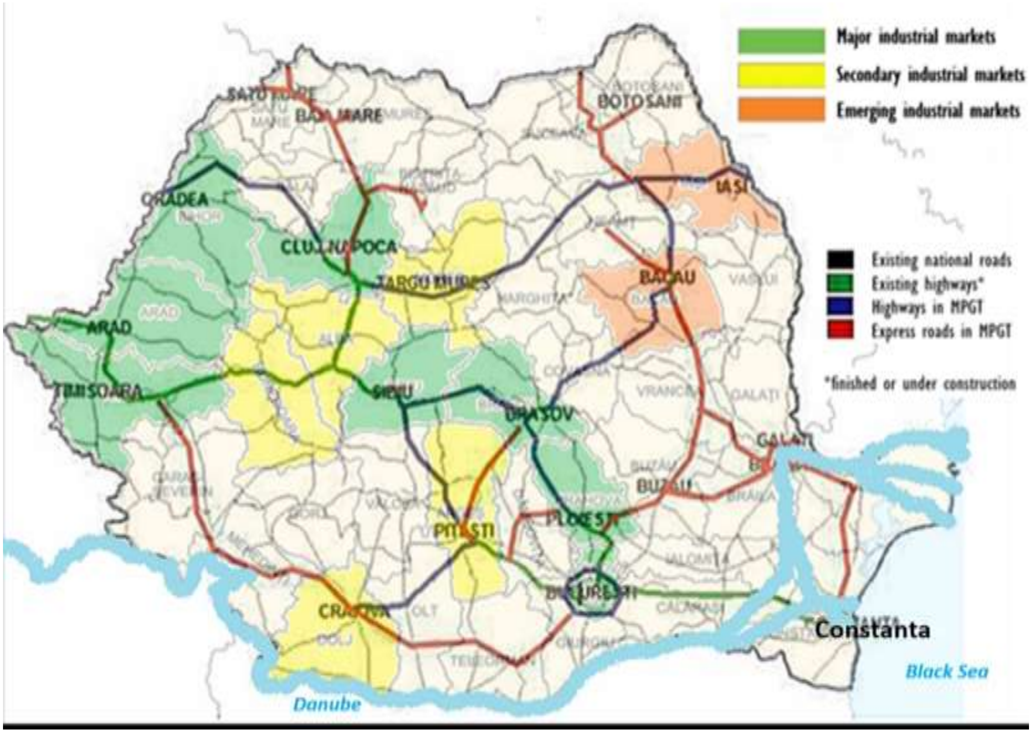
Romanian authorities in intermodal sector (infrastructure manager):

- Romanian National Rail Company
  Dinicu Golescu street, no. 38, sector 1, Bucharest
  +4021 225.11.12
  office@cfrmarfa.com
  www.cfrmarfa.cfr.ro

- Romanian Railway Authority
  Calea Grivitei, Nr.393, sector 1, Bucharest
  +4021 307.79.00
  www.afer.ro

# 3. Logistics and industrial market

## Current situation and mid-term expected evolution




Romania has the potential to position itself as a strategic regional trade and logistics hub for Central and Eastern Europe due to its geo-strategical location at the crossroads of the main trade routes between Western Europe and Asia, between South Europe (the Mediterranean) and Northern Europe. The Danube-Black Sea Canal facilitates river and sea navigation and offers access to both the Black Sea and the North Sea through the Rhine-Main-Danube waterway, connecting the Port of Constanta and the Port of Rotterdam.

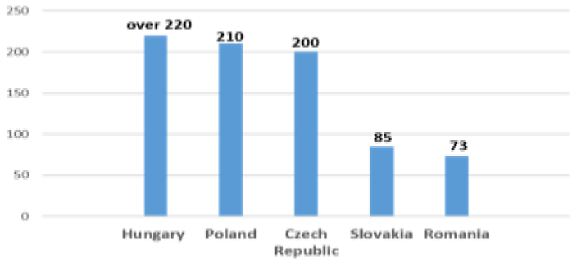
Romania's trade-related infrastructure consists of roads, railways, inland waterway transport, ports, airports and warehousing & trans-loading facilities.

The logistics and industrial market in Romania started to grow particularly after Romania's accession to the European Union (January 2007), due to market penetration of foreign investors in various production segments (mainly automotive), attracted by lower costs, and also due to some retail expansion (especially in Bucharest).

The logistics sector slowed down during and after the crisis years, however since 2015 it has come under spotlight. Measures taken by the Romanian government concerning fiscal relaxation and incentives, along with the wage raise for the population have triggered a rebound in investments and an increase of private consumption, which have led to production/exports growth and retail expansion. Booming investments in manufacturing and retail, coupled with the presence of numerous automotive companies, have resulted into an increased demand for logistics facilities.

The most attractive locations for the industrial and logistics centres in Romania have been the 3 highways: A1 (Bucharest-Nadlac/West Romania), A2 (Bucharest-Constanta/South-East Romania) and A3 (Bucharest-Bors/North-West Romania), due to the good connections with the rest of Europe, however other regions in the country are being targeted as well.

Romania currently has 73 industrial parks, placed under both private and public ownership, which offer access to utilities and particular benefits packages, however it stands far behind its potential and also behind some other countries in Central and Eastern Europe.



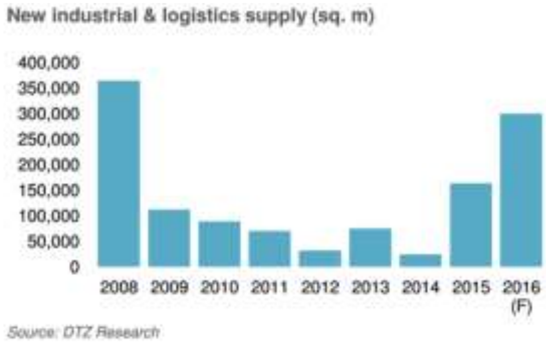

Under the current business and economic development in Romania (output/exports growth, consumption's rise, which translate into a constant GDP growth as well) the logistics sector is very promising. Companies active in logistics/distribution and retail sectors are looking for options to expand their operations, which implies also the need of new logistics spaces. Developers of industrial and logistics parks are exempted from land, building and urban planning taxes as well as for land destination changing.

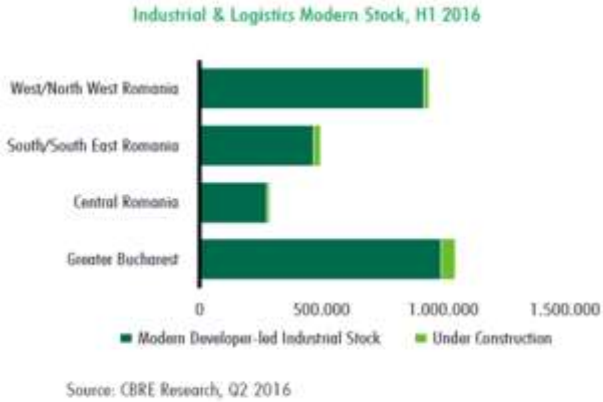
In 2015 the highest level of new supply of industrial and logistics spaces is noticeable since 2008, namely 164,000 sqm new delivery, an increased transactional activity, the net take-up being higher by 44% comparing to previous year, and a deep decrease of vacancy rate, reaching 5%. The most dynamic occupiers were companies active in the retail sector (37%), followed by distribution & logistics (30%) and production sector (26%). The upward trend has been followed also in 2016 with more than 300,000 sqm new delivery expected, a robust transactional activity and an overall tendency of decrease of vacancy rate.

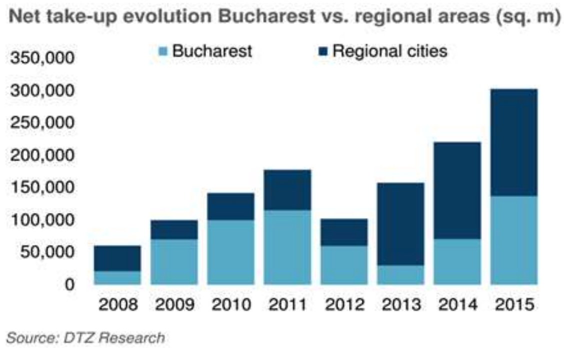
At the end of H1 2016, Romania's modern industrial and logistics stock amounted 2.3 million sqm.

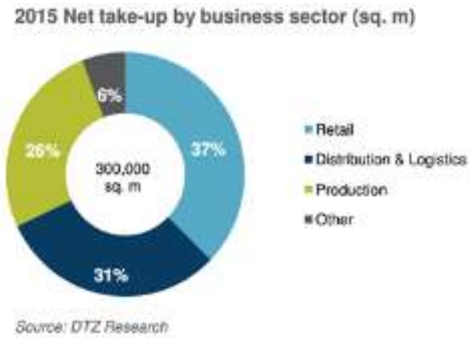
Bucharest dominates the country's industrial and logistics sector with a stock higher than 1 million sqm (45%), and it is popular due to its strategic location – 225 km from the Port of Constanta, 850 km from Budapest, and at the junction of two Pan-European Corridors.

The existing supply of industrial and logistics spaces outside Bucharest amounts 1.29 million sqm, the largest regional markets being Timisoara/West Romania, Ploiesti and Pitesti/South Romania, Cluj/North-West Romania and Brasov/Center Romania.




Bucharest is also home for the largest logistics park in the country (P3 Bucharest – 215,000 sqm), being followed by Ploiesti (Ploiesti West Park, 150,000 sqm), Timisoara (Timisoara Airport Park – 124,000 sqm) and Brasov (Industrial Park Brasov – 72,000 sqm).

The largest logistic parks in Romania
(project/location – surface sqm)

BE

Topul celor mai mari spații logistice ca suprafață în prezent

| Proiect /localitate | Suprafață (mp) | Proiect /localitate | Suprafață (mp) |
|---|---|---|---|
| P3 Bucharest | 215.000 | Timișoara Airport Park | 124.000 |
| Ploiesti West Park | 150.000 | A1 Business Park-București | 100.000 |
| CTP Bucharest West* | 142.000 | Incontro Park Timișoara | 100.000 |
| CTP Bucharest ** | 130.000 | Industrial Park Brașov | 72.000 |

*Fostele Prologis Park și Mercury Logistics Park, **fostul Bucharest West. Sursă: JLL

Source: Financial Newspaper (Transport and Logistics 2016)

The logistics market in Romania is divided between logistics and transport companies which build/rent warehouses to provide producers and importers with logistics solution (third-party logistics providers), logistics and industrial developers which build on demand/buys and afterwards rent logistics space, retailers which have their own warehouses, and also many producers which have not externalized their logistics activities.

Logistics services are becoming more and more complex as they have to adapt to technological and economic changes. Logistics is not only about transport and storage, but also about optimizing the whole supply chain: warehousing, loading, handling and transport. Moreover intermodal/multimodal starts playing a significant role. Logistics players on the Romanian market already take into consideration the newest market trends (e.g. dynamic evolution of e-commerce, preference for new concepts like 'green logistics' or 'sustainability') and provide with the best solutions and IT integration, making investments in mechanical handling equipment, fleet modernization, use of alternative fuel, new technology into warehousing operations (e.g. voice-picking), continuous training of personnel, putting in place programs aimed at growing their own pool of specialists, etc.

According to the Logistics Performance Index (LPI), a benchmarking tool published by the World Bank every two years that ranks countries on a scale of 1 to 5 according to their logistics 'friendliness', Romania went down from 3.26 in 2014 to 2.99 in 2016. In a ranking topped by Germany (4.23), Romania trailed most of its EU neighbors, such as the Czech Republic (3.67), Poland (3.43) and Hungary (3.43). Although Romania has witnessed some progress in infrastructure and customs department, its drop in the ranking is due to some regress in international shipments, logistics competence, tracking&tracing, and most of all in timeliness, as fewer shipments reached their destination within the scheduled or expected delivery time.

Thus, logistics remains a key challenge of the trade competitiveness agenda for Romania. Effective logistics and trade facilitation are of paramount importance in order to respond to deadlines and control costs with regard to both exports and imports to and from the EU. The government recognizes the need for efficient transport and trade facilitation logistics for realizing Romania's potential as a regional logistics hub, which will also enhance intraregional exports, and focusses on addressing the weaknesses in the sector.

Despite these deficiencies, transport and logistics players on the Romanian market are quite positive and confess that the sector is becoming more and more attractive as Romania offers opportunities that other, more established markets, do not.

Romania's transport and logistics industry is currently enjoying a smooth ride, as it is estimated to have been increasing by at least 10% in the last three years, mainly due to a more stable economic environment, a skilled labour force and a great positioning within Eastern Europe, having Constanta harbour as an asset. Moreover Romania has the potential to grow ten times in the following years and become an international hub.

Top logistic companies

(storage surface 2014 sqm – turnover 2013 mil. EUR – turnover 2012 mil. EUR)

| | Loc | Companie | Suprafață totală pentru depozitare 2014 (mp) | Cifră de afaceri 2013 (mil. euro) | Cifră de afaceri 2012 (mil. euro) |
|---|---|---|---|---|---|
| BE | 1. | H.Essers Logistics | 83.000 | 6,1 | 10,9 |
| | 2. | DB Schenker | 78.500 | 94,2 | 81,8 |
| | 3. | Tibbett Logistics | 78.000 | 16,3 | 15,1 |
| | 4. | Norbert Dentressangle Logistics | 73.000 | 5,8 | 6 |
| | 5. | Omsan Logistică | 65.000 | 6,7 | 8,6 |
| | 6. | DSV Solutions | 57.000 | 32,2 | 30,3 |
| | 7. | Ceva Logistics | 50.010 | N/A | 4,6 |
| | 8. | Geodis Calberson | 45.000 | 25,7 | 23,1 |
| | 9. | FM Logistic | 42.000 | 23,8 | 22,9 |
| | 10. | Aquila Part Prod Com | 40.714 | 128,1 | 118,4 |
| | 11. | KLG Europe Logistics România | 40.000 | 21,1 | 21 |
| | 12. | Lazăr Logistics | 34.000 | 1,6 | N/A |
| | 13. | Kuehne + Nagel | 30.479 | 34,5 | 37 |
| | 14. | OTZ Logistics | 30.000 | 2,2 | N/A |
| | 15. | Gebruder Weiss | 27.800 | 40,9 | 34,8 |
| | 16. | Cargo Partner Expediții | 20.000 | 20,4 | 18,6 |
| | 17. | Delamode | 17.000 | 16,2 | N/A |
| | 18. | Wim Bosman | 16.450 | 11,1 | 9,2 |
| | 19. | Quehenberger Logistics ROU | 15.750 | 13 | 10,9 |
| | 20. | Eurocooper | 14.000 | 4,4 | 3 |

SURSA: ARILOG, CBRE, MINISTERUL FINANȚELOR

Source: Financial Newspaper (Transport and Logistics 2016)

Top largest logistic developers in Romania

(company – surface sqm – country of origin)

| Compania | Suprafața deținută (mp) | Țara de proveniență a acționarului | Compania | Suprafața deținută (mp) | Țara de proveniență a acționarului |
|---|---|---|---|---|---|
| CTP | 350.000 | Olanda | INCONTRO PREFABBRICATI | 100.000 | Italia |
| P3 LOGISTIC PARKS | 215.000 | SUA | ICCO HELIOS | 72.000 | România |
| ALINSO | 150.000 | Belgium | PHOENIX | 60.000 | Cipru |
| VALAD | 130.000 | Australia | WDP | 58.000 | Belgium |
| GLOBALWORTH | 124.000 | Insula Guernsey* | | | |
| LOGICOR** | 100.000 | SUA | EQUEST | 55.000 | Marea Britanie |

Source: Financial Newspaper (Transport and Logistics 2016)

# 4. Funding, opportunities and projects

According to the officials at the Ministry of Transport in Romania, the Master Plan assures practically the construction of over 6,800 km of road, out of which over 1,500 km of highway and over 1,300 km of express road. At the same time, it assures the modernization of over 5,000 km of railway, 15 airports and 32 harbours. The total value of projects identified in the General Transport Master Plan amounts to EUR 45.451 billion. Various funding is available to launch, develop and complete projects in infrastructure: European funds (Cohesion Fund, European Regional Development Fund, Connecting Europe Facility), State budget funds and funds from other financial institutions.

The total amount of funding for road infrastructure sector in the 2014-2020 programming period, is 13.8 billion euros.

The Master Plan allocates up to EUR 14 billion for rail infrastructure investment.

For the naval sector, the Master Plan allocates EUR 3.395 billion, while for the aviation sector the total investment amounts EUR 1.327 billion.

For multimodal centres, the Master Plan allocates EUR 281.45 million.

Besides these projects of construction and modernization of the infrastructure in the general masterplan for transport, there are also projects of improvement of the services for the means of transport, which refers to the acquisition of new rolling stock for the railway, equipment and dredging vessels in the naval sector, and safety and security equipment in the air domain.

Transportation and logistics – need for technology and know-how covering the whole supply chain: warehousing, loading, handling and transport

Projects - Ministry of Transport, Master Plan General Transport (MPGT)

- Road infrastructure

**Highway projects list**

| No. Crt. | Project name | Estimated value (mil.Euro) | Length (km) | Implementation period |
|---|---|---|---|---|
| 1 | Sibiu - Pitești | 1673.57 | 116.60 | 2016-2022 |
| 2 | Comarnic - Brașov | 997.75 | 58.00 | 2016-2022 |
| 3 | Tg. Neamț - Iași - Ungheni | 1129.70 | 135.00 | 2016-2020 |
| 4 | Nădășelu - Suplacu de Barcău | 1002.55 | 93.30 | 2016-2018 |
| 5 | Sibiu - Brașov | 816.44 | 120.00 | 2016-2020 |
| 6 | Suplacu de Barcău - Borș (+ Oradea)* | 304.43 | 74.50 | 2016-2017 |
| 7 | Craiova - Pitești | 899.41 | 124.30 | 2017-2020 |
| 8 | Inel București (A0) | 1335.00 | 102.00 | 2018-2022 |
| 9 | Tg. Mureș - Tg. Neamț | 2942.57 | 183.80 | 2016-2026 |
| 10 | Ploiești - Comarnic | 306.77 | 51.30 | 2021-2024 |
| 11 | Brașov - Bacău | 1845.46 | 160.00 | 2021-2026 |

## Road Sector (4/4) Expressway projects list

| No. Crt. | Project name | Estimated value (mil.Euro) | Length (km) | Implementation period |
|---|---|---|---|---|
| 1 | Modernizare Centura Sud București - 4 lanes | 176,00 | 35,0 | 2016-2018 |
| 2 | Ploiești - Buzău | 254,80 | 65,0 | 2016-2020 |
| 3 | Bacău - Pașcani | 388,95 | 81,2 | 2016-2020 |
| 4 | Focșani - Bacău | 428,30 | 109,3 | 2016-2020 |
| 5 | Buzău - Focșani | 282,36 | 72,0 | 2016-2020 |
| 6 | Pașcani - Suceava | 289,99 | 60,5 | 2016-2020 |
| 7 | București - Craiova | 764,40 | 195,0 | 2026-2031 |
| 8 | Suceava - Siret | 196,20 | 41,0 | 2021-2024 |
| 9 | Buzău - Brăila | 384,16 | 98,0 | 2021-2023 |
| 10 | Legătura A3 - Aeroport Henri Coandă | 43,11 | 9,0 | 2017-2019 |
| 11 | Drobeta Tr.Severin -Lugoj | 1345,61 | 142,0 | 2025-2032 |
| 12 | Găești - Ploiești | 355,61 | 74,2 | 2021-2023 |
| 13 | Craiova - Dorbeta Tr.Severin | 615,16 | 104,0 | 2026-2032 |
| 14 | Focșani - Galați - Giurgiulești | 399,84 | 102,0 | 2021-2023 |
| 15 | Suceava - Botoșani | 124,54 | 26,0 | 2028-2031 |
| 16 | Bacău - Piatra Neamț | 239,12 | 61,0 | 2028-2031 |
| 17 | Constanța - Tulcea - Brăila (+ Dunăre bridge) | 1141,88 | 187,7 | 2016-2018 / 2028-2032 |
| 18 | Turda - Halmeu (+Bistrița, Baia Mare și Petea) | 1713,21 | 320,2 | 2028-2032 |
| 19 | Pitești - Brașov | 1224,10 | 124,0 | 2031-2036 |

- Railway infrastructure

| Rail Sector (5/7) | Railway projects list | | | |
|---|---|---|---|---|
| **No. Crt.** | **Project name** | **Estimated value (mil.Euro)** | **Length (km)** | **Implementation period** |
| 1 | Predeal - Brașov | 418.00 | 33.00 | 2017-2022 |
| 2 | Brașov - Sighișoara | 716.00 | 128.00 | 2016-2020 |
| 3 | Simeria - km.614 | 724.00 | 142.00 | 2016-2019 |
| 4 | Focșani - Roman | 588.00 | 147.00 | 2016-2019 |
| 5 | Pașcani - Dărmănești | 284.00 | 71.00 | 2021-2025 |
| 6 | Ploiești Triaj - Focsani | 572.00 | 143.00 | 2021-2025 |
| 7 | Roman - Iași | 527.00 | 116.00 | 2021-2025 |
| 8 | Buzău - Galați | 524.00 | 131.00 | 2021-2025 |
| 9 | București (Chitila) - Pitești | 249.40 | 99.00 | 2021-2025 |
| 10 | Coșlariu - Cp. Turzii | 241.00 | 55.00 | 2025-2029 |
| 11 | Sibiu - Vințu de Jos | 189.00 | 83.00 | 2021-2025 |
| 12 | București - Craiova | 836.00 | 209.00 | 2021-2025 |
| 13 | Caransebeș - Timișoara | 267.50 | 98.00 | 2025-2029 |
| 14 | Timișoara - Arad | 162.00 | 57.00 | 2025-2029 |
| 15 | Cp.Turzii - Cluj-Napoca | 321.00 | 51.00 | 2025-2029 |
| 16 | Pitești - Rm. Vâlcea Nord | 365.80 | 60.00 | 2021-2026 |
| 17 | Rm. Vâlcea Nord - Sibiu | 243.80 | 98.00 | 2021-2026 |
| 18 | Craiova - Caransebeș | 919.70 | 226.00 | 2026-2030 |
| 19 | Cluj-Napoca - Ilva Mică | 452.00 | 131.00 | 2025-2029 |
| 20 | Ilva Mică - Suceava | 687.20 | 191.00 | 2025-2030 |
| 21 | Oradea - Arad | 217.60 | 121.00 | 2025-2029 |
| 22 | Satu Mare - Baia Mare | 94.40 | 59.00 | 2031-2035 |
| 23 | Oradea - Satu Mare | 212.80 | 133.00 | 2031-2035 |
| 24 | Baia Mare - Dej | 260.60 | 134.00 | 2031-2035 |
| 25 | București - Aeroport Henri Coandă | 97.15 | 19.60 | 2016-2018 |

## Railway Sector (6/7)

### Railway projects list

| No. Crt. | Project name | Estimated value (mil.Euro) | Length (km) | Implementation period |
|---|---|---|---|---|
| | **Electrification and modernization of the railway projects** | | | |
| 1 | **București - Giurgiu Fr.** | **198.24** | 96.00 | 2016-2018 / 2021-2025 |
| 2 | Cluj-Napoca - Ep. Bihor | **477.40** | 158.00 | 2016-2020 |
| 3 | **Dărmănești - Vicșani** | **57.00** | 30.00 | 2021-2025 |
| 4 | **Timișoara - Stamora Moravița** | **106.40** | 56.00 | 2021-2025 |
| 5 | **Craiova - Calafat** | **182.40** | 106.00 | 2016-2019 |
| 6 | **Constanța - Mangalia** | **100.60** | 43.00 | 2021-2025 |
| | **Electrification and modernization of the economic railway projects** | | | |
| 1 | **Filiași - Tg.Jiu** | **275.50** | 76 | 2023-2025 |
| 2 | **Tg.Jiu -Petroșani** | **192.80** | 52 | 2021-2026 |
| 3 | **Petroșani - Simeria** | **385.00** | 80 | 2021-2025 |
| 4 | **Pitești - Craiova** | **227.20** | 142 | 2025-2029 |
| 5 | **Făurei - Fetești** | **356.00** | 89 | 2025-2029 |

## Railway Sector (7/7)

### Railway projects list

| No. Crt. | Project name | Estimated value (mil.Euro) | Length (km) | Implementation period |
|---|---|---|---|---|
| | **Electrification and modernization of the touristic railway projects** | | | |
| 1 | **Sibiu - Agnita** | **92.80** | 58.00 | 2017-2018 |
| 2 | **Tg. Mureș - Băile Sovata** | **118.40** | 74.00 | 2017-2018 |
| 3 | **Luduș - Măgheruș Șieu** | **150.40** | 94.00 | 2017-2018 |
| 4 | **Caransebeș - Subcetate** | **151.20** | 77.00 | 2017-2018 |
| 5 | **Turda - Abrud** | **217.80** | 93.00 | 2017-2018 |
| 6 | **Oravița - Anina** | **79.80** | 33.00 | 2017-2018 |
| | **Increased speed railway projects, hourly cadenced and rail services** | | | |
| 1 | **București - Giurgiu** | **25.50** | 88.00 | 2016-2017 |
| 2 | **Timișoara - Arad** | **22.80** | 57.00 | 2016-2017 |
| 3 | **București - Buzău** | **32.30** | 72.00 | 2016-2017 |
| 4 | **București - Brașov** | **29.85** | 166.00 | 2016-2017 |
| 5 | **București - Craiova** | **67.98** | 209.00 | 2016-2017 |
| 6 | **Pașcani - Iași** | **25.70** | 76.00 | 2016-2017 |
| 7 | **București - Constanța** | **32.13** | 225.00 | 2016-2017 |
| 8 | **București - Pitești** | **37.90** | 108.00 | 2016-2017 |

- Maritime and inland waterway infrastructure

**Port projects list**

| No. Crt. | Project name | Estimated value (mil.Euro) | Implementation period |
|---|---|---|---|
| 1 | Constanța* Port | 865,363,866 | 2016-2030 |
| 2 | Galați Port | 110,758,949 | 2016-2018 |
| 3 | Brăila Port | 6,000,000 | 2016-2018 |
| 4 | Drobeta Tr. Severin Port | 20,201,600 | 2016-2018 |
| 5 | Oltenița Port | 6,212,329 | 2016-2018 |
| 6 | Upgrading flood gate: Agigea, Cernavodă, Ovidiu, Galerii ape mari Ovidiu and Năvodari and pumping stations | 96,791,772 | 2016-2018 |
| 7 | Orșova Port | 8,716,169 | 2016-2018 |
| 8 | Cernavodă Port | 7,750,020 | 2016-2018 |
| 9 | Giurgiu Port | 111,447,178 | 2016-2018 |
| 10 | Corabia Port | 5,443,130 | 2016-2018 |
| 11 | Improve traffic safety by purchasing multifunctional and technical ships and specific equipment | 54,700,000 | 2016-2018 |
| 12 | Isaccea Port | 3,440,000 | 2016-2018 |
| 13 | Ovidiu Port | 16,200,000 | 2016-2018 |
| 14 | Calafat Port | 14,869,359 | 2016-2018 |
| 15 | Medgidia Port | 14,400,000 | 2016-2018 |
| 16 | Luminita Port | 21.600.000 | 2016-2018 |
| 17 | Basarabi Port | 4,000,000 | 2021-2024 |
| 18 | Tulcea Port | 30,000,000 | 2016-2018 |
| 19 | Hârșova Port | 2,600,000 | 2021-2024 |
| 20 | Bechet Port | 10,680,414 | 2021-2024 |
| 21 | Chilia Veche Port | 4,000,000 | 2021-2024 |
| 22 | Moldova Veche | 4,093,711 | 2021-2024 |
| 23 | Cetate Port | 7,163,563 | 2021-2024 |
| 24 | Măcin Port | 8,910,000 | 2021-2024 |
| 25 | Mahmudia Port | 6,000,000 | 2021-2024 |
| 26 | Tr. Magurele Port | 6,750,000 | 2021-2024 |
| 27 | Călărași Port | 8,257,496 | 2021-2024 |
| 28 | Şvinița Port | 2,942,467 | 2021-2024 |
| 29 | Baziaș Port | 7,148,770 | 2021-2024 |
| 30 | Zimnicea Port | 6,750,000 | 2021-2024 |
| 31 | Tişoviţa Port | 4,413,700 | 2021-2024 |
| 32 | Sulina Port | 11,250,000 | 2021-2024 |

| Port projects list | | | |
|---|---|---|---|
| No. Crt. | Project name | Estimated value (mil.Euro) | Implementation period |
| 1 | Improving navigation conditions on the Danube between Calarasi and Braila (km. 375 - km. 175) | 100,000,000 | 2016-2018 |
| 2 | Improving navigation conditions on the common sector of Romanian - Bulgarian Danube River (km. 845.5 - km. 375) | 205,000,000 | 2016-2018 |
| 3 | Making specific bank protection works on Sulina Channel | 45,000,000 | 2016-2018 |
| 4 | Water collection system rehabilitation, protection and consolidation on the high banks Danube-Black Sea Canal | 140,000,000 | 2016-2018 |
| 5 | Water collection system rehabilitation, protection and consolidation sides high on the Danube Gate Alba - Midia Năvodari | 49,000,000 | 2016-2018 |

- Air infrastructure

| Airport projects list | | | |
|---|---|---|---|
| No. Crt. | Project name | Estimated value (mil.Euro) | Implementation period |
| 1 | București airports | 1,093,866,270 | 2016-2018 |
| 2 | Cluj-Napoca airport | 125,302,039 | 2016-2018 |
| 3 | Timișoara airport | 136,056,891 | 2016-2018 |
| 4 | Sibiu airport | 54,741,374 | 2016-2018 |
| 5 | Bacău airport | 66,877,890 | 2016-2018 |
| 6 | Tg. Mureș airport | 50,089,442 | 2022-2024 |
| 7 | Iași airport | 102,639,202 | 2022-2024 |
| 8 | Craiova airport | 71,074,827 | 2022-2024 |
| 9 | Baia Mare airport | 20,872,500 | 2022-2024 |
| 10 | Tulcea airport | 20,421,500 | 2022-2024 |
| 11 | Suceava airport | 37,188,450 | 2024-2027 |
| 12 | Oradea airport | 33,069,000 | 2024-2027 |
| 13 | Constanța airport | 49,625,000 | 2024-2027 |
| 14 | Arad airport | 26,921,500 | 2024-2027 |
| 15 | Satu Mare airport | 19,121,500 | 2024-2027 |
| 16 | Aerodromes | 15,000,000 | 2016-2018 |

- Multimodal

| Multimodal platforms modernization list | | | |
|---|---|---|---|
| No. Crt. | Project name | Estimated value (mil.Euro) | Implementation period |
| 1 | București Multimodal | 47,945,000,0 | 2016-2017 |
| 2 | Timișoara Multimodal | 34,250,000,0 | 2016-2017 |
| 3 | Cluj-Napoca Multimodal | 34,250,000,0 | 2016-2017 |
| 4 | Bacău Multimodal | 21,440,000,0 | 2016-2017 |
| 5 | Oradea Multimodal | 21,440,000,0 | 2016-2018 |
| 6 | Suceava Multimodal | 21,440,000,0 | 2022-2023 |
| 7 | Iași Multimodal | 34,250,000,0 | 2022-2025 |
| 8 | Craiova Multimodal | 34,250,000,0 | 2022-2023 |
| 9 | Turda Multimodal | 10,720,000,0 | 2022-2023 |
| 10 | Giurgiu Multimodal | 0,0 | 2022-2023 |
| 11 | Brașov Multimodal | 34,250,000 | 2022-2023 |

# 5. Organizations, trade fairs and key-publications

## Organizations

Federation of Romanian Transport Operators (FORT)
20 Traian street, Otopeni
+40 726 741 053
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National Union of Road Hauliers from Romania (UNTRR)
60 Ienachita Vacarescu, sector 4, Bucharest
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Romanian Association for International Road Transport (ARTRI)
25 Marasti boulevard, sector 1, Bucharest
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www.artri.net

Professional Association of Roads and Bridges from Romania (APDP)
41 Dinicu Golescu, sector 1, Bucharest
+40 21 316 13 24

office@apdp.ro
www.apdp.ro/en/

Union of Romanian Inland Ports (UPIR)
34 Portului street, Galati
+40 236 460 660
office@danube-ports.ro
http://www.danube-ports.ro/

Romanian Logistics Association (ARILOG)
Alexandru Radovici street, sector 2, Bucharest
+40 740 199 919
office@arilog.ro
www.arilog.ro/en

## Trade fairs

Translogistica (International Transport and Logistics Expo)
www.translogistica.ro

Expo Traffic Romania
www.expotrafic.ro

## Key-publications

Intermodal and Logistics magazine (I&L)
www.intermodal-logistics.eu

Romanian Journal of Transport Infrastructure
http://rjti.rs.utcb.ro/

Tranzit magazine
www.traficmedia.ro

Warehouse info
www.warehouseinfo.ro

Transport and Logistics magazine
www.transport-business.ro

Ziua Cargo
http://www.ziuacargo.ro/revista

# 6. References

## Publications / press releases / market reports:

National Institute of Statistics
Erste Group Research
Ministry of Transport – master plan general transport
ARILOG
Port of Constanta
CFR – National Railway company
Cosmos Roundtable/KombieConsult – roadmap on intermodal transport in Romania (2013)
Financial Newspaper – transport & logistics market survey 2016
ADR West – trade and transport facilitation and logistics infrastructure (2013)
InvestinRomania
Intermodal & Logistics magazine
Business Review
The Diplomat
Nine O'Clock
Romania-insider.com
RomaniaJournal.ro
Railwaypro.com
CBRE
DTZ Echinox

# 7. Executive summary

1. General economic overview - Romania's accession to the EU in 2007 came after a laborious process that marked positive deep-going transformations in many of the country's economic and social areas. Romania has continued its progress and now has a stable macro-economic structure, being one of the fastest growing economy in Europe with an annual GDP growth of 3.5% - 4.5%. However Romania's economic growth needs to be channeled towards real development and the Romanian Government is doing considerable efforts to assure a durable economic growth through applying measures to bridge regional gaps among regions in Romania, gaps among various categories of population, and at the same time to maintain and encourage a stable, attractive and predictable business environment, making Romania one of the top destination in Europe for doing business.

2. Transport infrastructure and transportation - Romania, the 7th largest country in EU by population with about 20 million inhabitants, and the 9th largest country in EU by size with a surface of 238 391 sq km, benefits from a wide range of transportation means: road, rail, naval (maritime -Black Sea & inland waterway -Danube river), air, and also from an attractive geo-strategical location at the crossroads of three Pan-European corridors (IV-VII-IX), being a gateway to three major markets: the EU, CIS and the Middle East. In general, Romania's infrastructure is underdeveloped and outdated and suffers from connectivity and accessibility

constraints, although some transports investments have been made. Despite the poor infrastructure, the transportation market has witnessed growth in the past seven years due to an increase of international and domestic trade as a result of production/exports growth and consumption's rise. The transportation market has the potential to grow much more in the years to come and needs to be supported by an efficient transport and a modern infrastructure. Through European Infrastructure Programs, Romania will benefit from a modernization and extension of its infrastructure.

3. Logistics and industrial market - Romania has the potential to position itself as a strategic regional trade and logistics hub for Central and Eastern Europe due to its geo-strategical location at the crossroads of the main trade routes between Western Europe and Asia, between South Europe (the Mediterranean) and Northern Europe. The logistics market in Romania is not that much developed comparing to other countries in Europe. Bucharest is the main logistics hub in Romania and concentrates most of the logistics spaces as it enjoys a strategic location– 225 km from the Port of Constanta, 850 km from Budapest, and at the junction of two Pan-European Corridors. The largest regional markets outside Bucharest are Timisoara/West Romania due to its proximity to the Western border, followed by South Romania and then Center Romania. The logistics market is expected to grow fast going forward 2016 due to the constant GDP growth, production/exports rise and retail expansion, which will result in an increased demand for logistics facilities.

4. Funding, opportunities and projects - Through the recently adopted Master Plan General Transport (MPGT), the Romanian Government proposes projects, which benefits from both European funds and State budget funds, and assures practically the construction of roads, modernization of rail, ports, airports and multimodal centres. The total value of projects identified in the MPGT amounts to EUR 45.451 billion. The master plan also mentions about the need of acquisition of new rolling stock for the railway, equipment and dredging vessels in the naval sector, safety and security equipment in the air domain. For transportation and logistics there is need of technology and know-how covering the whole supply chain: warehousing, loading, handling and transport.