



Questionnaire

Part II

**Information provided by the Government of the Republic of Moldova
to the Questionnaire of the European Commission**

CHAPTER 21: TRANS-EUROPEAN NETWORKS

May 2022

The European Union policy concerning Trans-European networks for transport (TEN-T) and energy (TEN-E) is based on three cornerstones: the legal basis for TENs, Articles 170-172 of the Treaty on the Functioning of the European Union, the Regulation (EU) No 1315/2013¹ on Union guidelines for the development of the trans-European transport network in transport and energy– until the formal adoption of its repealing regulation,, and the Regulation (EU) 2021/1153² establishing the

Connecting Europe Facility and repealing Regulations (EU) No 1316/2013 and (EU) No 283/2014. This framework sets out the objectives of EU policy for the trans-European network policy, which encompasses the transport and energy networks and aims at adapting and developing networks and ensuring their interconnections and interoperability. The TEN-T and TEN-E policies have undergone a substantial revision. The Connecting Europe Facility (CEF) has been revised, and the TEN-T and TEN-E guidelines are also under revision. The aim of establishing and developing Trans-European networks and promoting proper interconnection and interoperability of national networks is to take full advantage of the internal market and contribute to economic growth and job creation in the European Union.

As far as **transport networks** are concerned, the Trans-European network contributes to a sustainable and multimodal development of transport and to the elimination of bottlenecks. In this regard, transport networks play a significant role in ensuring a sustainable mobility, combining Europe's competitiveness with the welfare of its citizens while securing the transports of good and passengers in Europe.

In order to ensure the best development of the Trans-European transport network, the guidelines are revised. The envisaged guidelines are to align the development of the TEN-T to the European Green Deal objectives and the climate targets of the EU Climate Law and to modernize its governance. The trans-European transport network should be gradually developed in three steps with the overall aim to realise a multimodal and interoperable European wide network of high quality standards, while respecting the overall Union climate neutrality and environmental objectives: the completion of a core network by 2030, of an extended core network by 2040 and of the comprehensive network by 2050. Next to the deadlines of 2030 and 2050 that have already been introduced under Regulation (EU) 1315/2013, an intermediary deadline of 2040 for the compliance of the network with this Regulation is proposed be added for the extended core network that is part of the European Transport Corridors.

Given the level of investments needed to complete and increase the Trans-European transport network and bearing in mind the estimated growth in traffic between Member States, a corridor approach is used as an instrument to coordinate different projects on a trans-national basis and to synchronise the development of the corridor and thereby maximising network benefits. The core network corridors are defined through the pre-identified projects listed in Part 1 of the Annex to the Regulation (EU) 2021/1153, which will constitute the priority for co-funding under the CEF.

Directive (EU) 2021/1187 of the European Parliament and of the Council of 7 July 2021 on streamlining measures for advancing the realisation of the trans-European transport network - referred to as the Streamlining Directive³ was adopted to support the timely delivery of the TEN-T network. The Directive, which is in force since August 2021, aims

¹ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1440489851396&uri=CELEX:32013R1315>

² <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32021R1153>

³ Directive (EU) 2021/1187 of the European Parliament and of the Council of 7 July 2021 on streamlining measures for advancing the realisation of the trans-European transport network (TEN-T), OJ L 258, 20.7.2021, p.1

to ensure that procedures applicable to TEN-T core network projects are better coordinated.

Trans-European **energy networks** cover the transport and storage facilities of gas as well as the electricity transmission and make a significant contribution to the electricity and gas market. However, the new Regulation to be adopted would not support any fossil gas infrastructure – focus will be given to infrastructure needed to the development of renewable energy. TEN-E respond to the growing importance of securing and diversifying the EU's energy supplies, incorporating the energy networks of the Member States and candidate countries, and ensuring the coordinated operation of the energy networks in the EU and in neighbouring countries. The security of energy supply, ending of energy isolation and the functioning of the internal energy market are key policy goals.

It is worth noting that as from 2017, all measures adopted under (EU) Regulation 347/2013 of 17 April 2013 on guidelines for trans-European energy infrastructure, are binding for Moldova and applicable to all infrastructure with PEGI (Projects of Energy Community Interest) status. Moreover, only those projects that fulfil the criteria set by that Regulation shall be granted PEGI status.

I. TRANSPORT NETWORKS

A. Transport infrastructure

1. How is the distribution of competences defined between the authorities across this policy area?

The Ministry of Infrastructure and Regional Development is the central specialized entity, which promotes the state policy in the field of transport infrastructure and carries out its activity in accordance with the Constitution and laws of the Republic of Moldova, Parliamentary Decisions, acts of the President of the Republic of Moldova, Government decisions and provisions.

Road Infrastructure

The implementation of the policy regarding the development of the transport infrastructure is carried out through (S.E.) State Road Administration (SRA) which aims at the following:

- maintenance, repair, rehabilitation, development, modernization and administration of national public roads, as well as other elements of road infrastructure defined by law, in order to ensure safe, smooth and continuous road traffic, Law No. 509/1995 of roads⁴, Law No. 720/1996 of roads found⁵;
- implementation of unitary development programs of the national public road network in accordance with the Transport and Logistics Strategy for the years 2013 - 2022⁶, Government Decision No. 827/2013, and according to the requirements of the national economy. SRA is responsible for the efficient management of the financial resources allocated from the State Budget, the Road Fund and external sources for the rehabilitation, development, modernization and maintenance of the national public road network of the Republic of Moldova, Government Decision No. 690/2017 on the organization and operation of Ministry of Infrastructure and Regional Development⁷.

⁴ Law No. 509/1995 of roads, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=122880&lang=ro

⁵ Law No. 720/1996 of roads found, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=118925&lang=ro

⁶ Government Decision No. 827/2013 on the adoption of the Transport and Logistics Strategy for the years 2013 - 2022, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=55092&lang=ro

⁷ Government Decision No. 690/2017 on the organization and operation of Ministry of Infrastructure and Regional Development, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=127649&lang=ro#

Maritime transport

In the field of naval transport, the state administration is carried out by the specialized central body through the Naval Agency of the Republic of Moldova, in accordance with the provisions of art. 5 of Law No. 599/1999 for the approval of the Code of Commercial Maritime Navigation of the Republic of Moldova⁸. The normative act that regulates the mission, functions, rights and responsibilities of the Naval Agency is the Government Decision No. 706/2018 on the creation of the Naval Agency of the Republic of Moldova⁹.

Railway transport

State Enterprise „Calea Ferata din Moldova” the main railway transport company in Moldova, according to Railway Transport Code No. 309/2003¹⁰, is in charge of managing the production and financial activity of the autonomous structural subdivisions that practice rail transport, as well as coordinates the work of other enterprises, organizations and institutions of railway transport that ensure its operation.

In 2022, the Parliament adopted the new Railway Transport Code no. 19/2022¹¹. Thus, with the entry into force of the new Code, the Railway Authority is designated as the institution responsible for the implementation of state policies in the field of railway transport and railway safety. The institution acts as a railway safety authority, has control powers, issues rail transport permits, safety permits, safety certificates and train driver's licenses.

Air transport

The Civil Aviation Authority of the Republic of Moldova in accordance with the Civil Aviation Code nr. 301/2017¹² is designated as the administrative authority responsible for the implementation of civil aviation policies, certification and oversight. The activity of the Civil Aviation Authority is regulated by the

⁸ Law no. 599/1999 for the approval of the Code of Commercial Maritime Navigation of the Republic of Moldova, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=129114&lang=ro

⁹ Government Decision no. 706/2018 on the creation of the Naval Agency of the Republic of Moldova, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=125207&lang=ro

¹⁰ Railway Transport Code no. 309/2003, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=130025&lang=ro

¹¹ Railway Transport Code no. 19/2022, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=129962&lang=ro

¹² Civil Aviation Code nr. 301/2017, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=79683&lang=ro

Government Decision No. 133/2019 on the organisation and operation of the Civil Aviation Authority¹³.

Safety in the fields of air, rail and maritime transport

In order to prevent the occurrence of transport events, to improve safety in the fields of air, rail and maritime transport and to establish rules on the timely availability of information on all persons and dangerous goods on board an aircraft, ship or rolling stock involved in a transport event, the Parliament of the Republic of Moldova adopted Law No. 213/2021 on the investigation of accidents and incidents in transport¹⁴.

The **Bureau of Accident and Incident Investigation in Transportation**, the central administrative authority, subordinated to the Government, is designated to organise the technical investigations on safety in order to determine the causes and circumstances in which the events occurred in transport and to issue safety recommendations. The organisation and functioning regulations of the Bureau of Investigation of Accidents and Incidents in Transport are planned to be approved by the Government by June 2022¹⁵.

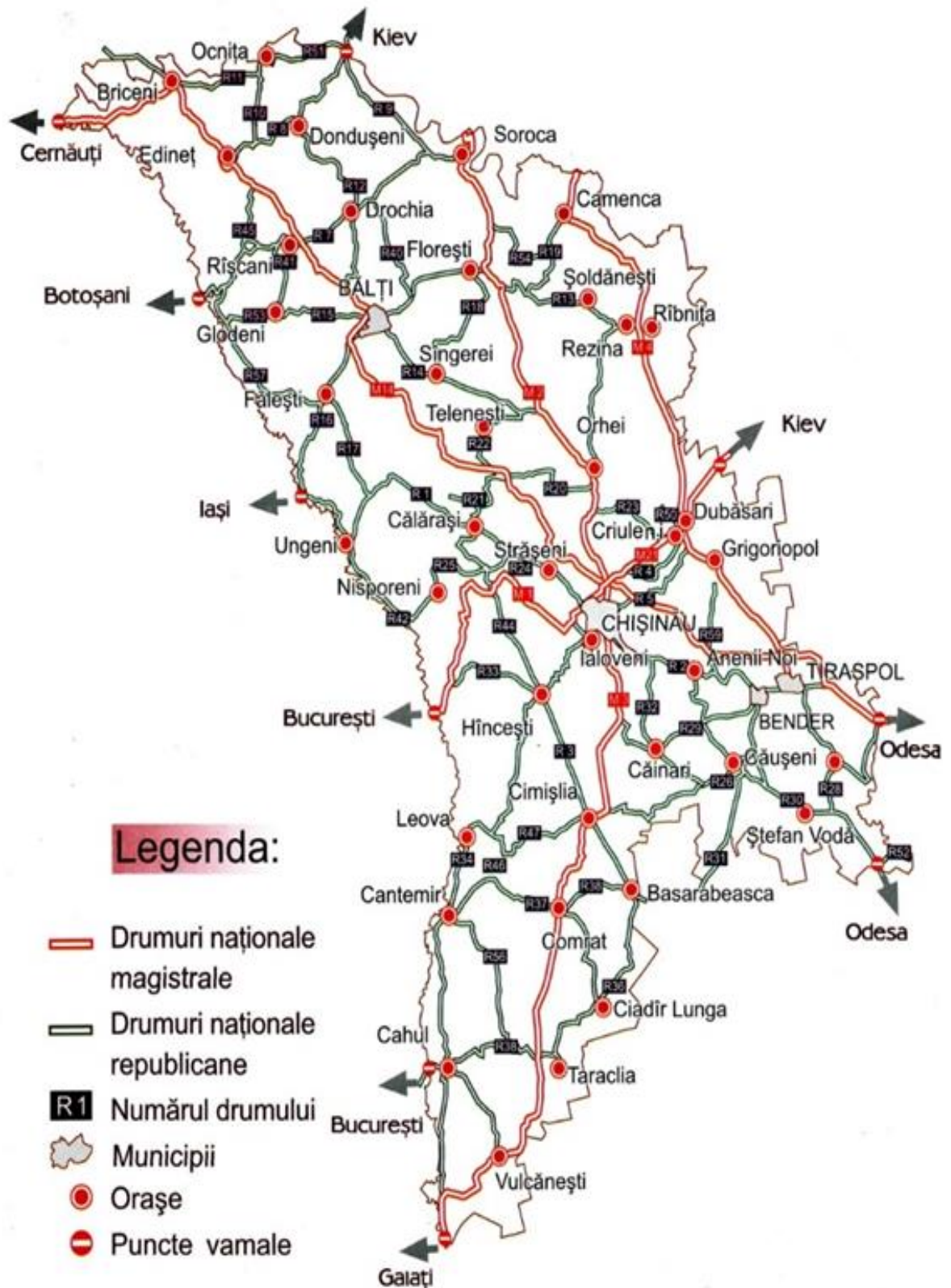
¹³ Government Decision Nr. 133/2019 on the organization and operation of the Civil Aviation Authority, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=125208&lang=ro

¹⁴ Law No. 213/2021 on the investigation of accidents and incidents in transport, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=129193&lang=ro

¹⁵ Draft Law on the investigation of the accidents and incidents in transport, available in Romanian at: <https://cancelaria.gov.md/ro/content/pentru-aprobarea-proiectului-de-lege-cu-privire-la-investigarea-accidentelor-si-incidentelor>

2. Please present the state of the transport road, railway and inland navigation networks.

Public road network Map



Roads classification

1) **European roads** - international roads passing through the Republic of Moldova according to the European Agreement on major international roads (AGR) to which the Republic of Moldova has acceded;

2) **National roads** - roads that provide the main international road connections, the connection between the country's capital and the cities of residence, municipalities and objectives of republican importance, as well as the connection between them, and which can be: motorways, express roads, republican roads and regional roads;

3) **Local roads**, which are divided into national roads, communal roads and streets.

A. Length of public roads - 10,680 km, including:

A.1. National Roads, administered by S.E. „State Road Administration” - 5,902 km;

Of which: Express Roads - 602 km

Republican Roads - 1,996 km

Regional Roads - 3,304 km

A.2. Local roads of rational / municipal interest - administered by the Local Public Administration of level II - 3,708 km;

A.3. Public roads located on the left bank of the Dniester - 1,070 km.

Local public roads of communal interest and streets - administered by the Local Public Administration level I - about 30,000 km.

The structure of the national public road network

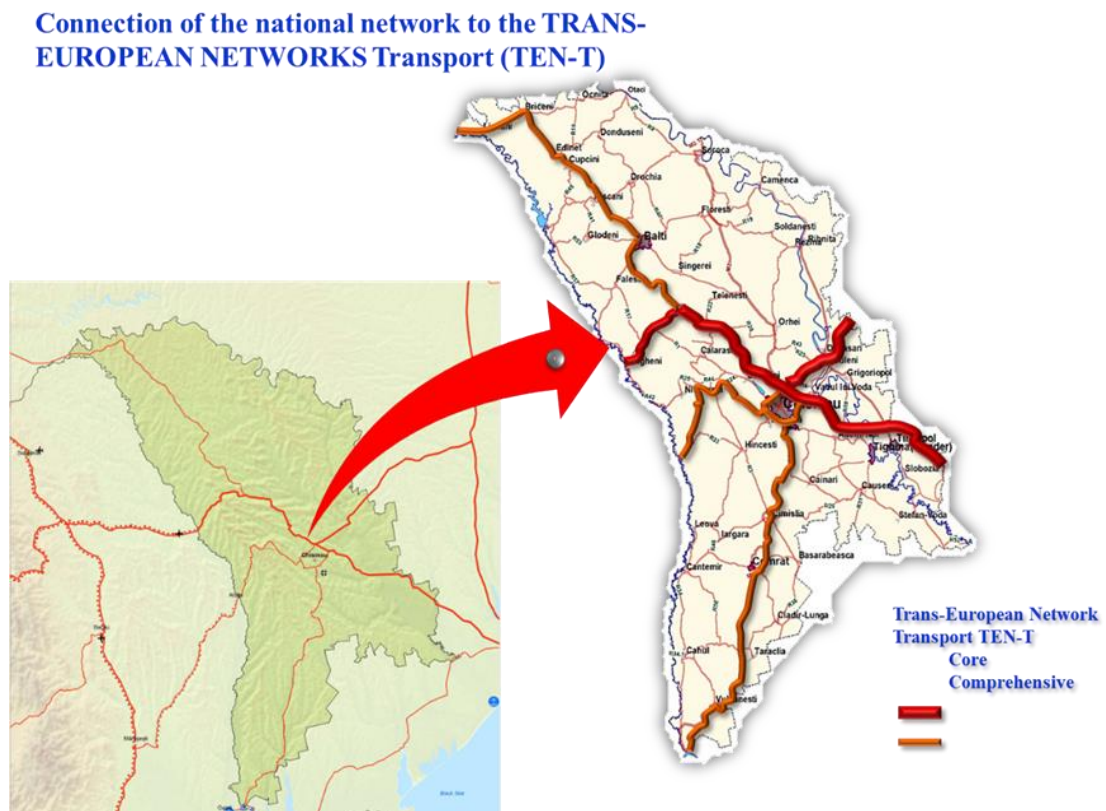
Type of road structures	Total		Including:					
			express roads		republican roads		regional roads	
	km	%	km	%	km	%	km	%
Total	5903	100	602	100	1996	100	3305	100
concrete roads	276	4	223	37	29	1	24	1
asphalt roads	4426	75	378	62,8	1935	97	2113	60
crushed stone roads	1154	20	1	0,2	32	2	1121	38

For a quantitative assessment of tread (pavement) quality, the „International Roughness Index” (IRI) is used, based on measuring the roughness of the road.

Road condition with IRI parameter value <2 equivalent to „very good”, 2-4 „good”, 4-6 „mediocre”, 6-8 „bad”, and > 8 „very bad”. In the road maintenance cycle this indicator sets the deadline and the type of work to be performed.

Currently, there is an apparent quantitative increase in roads in excellent and good condition of road pavement is due to the fact that in 2021 were completed rehabilitation works of about 210 km of national public roads, financed from external and budgetary sources. At the same time, the state of regional public roads has worsened.

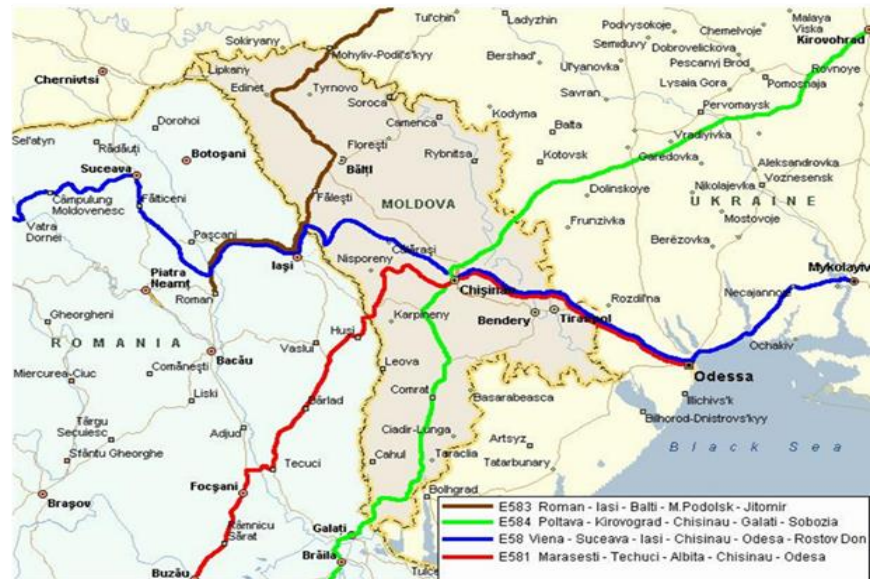
At the moment, about 26.15% of the national roads are in bad condition, 27.79% in very bad condition, 24.87% are in mediocre condition, and approximately 16.28% in good condition and 7.92% are in very good condition.



National Roads that are part of TEN-T Network are classified as Expressways and are 602 km long.

Infrastructure development and improving the connection with European Transportation Networks

E-Roads (AGR)



European Agreement on the great international roads (AGR) Republic of Moldova
Law nr. 17-XVI, 10.02.2006

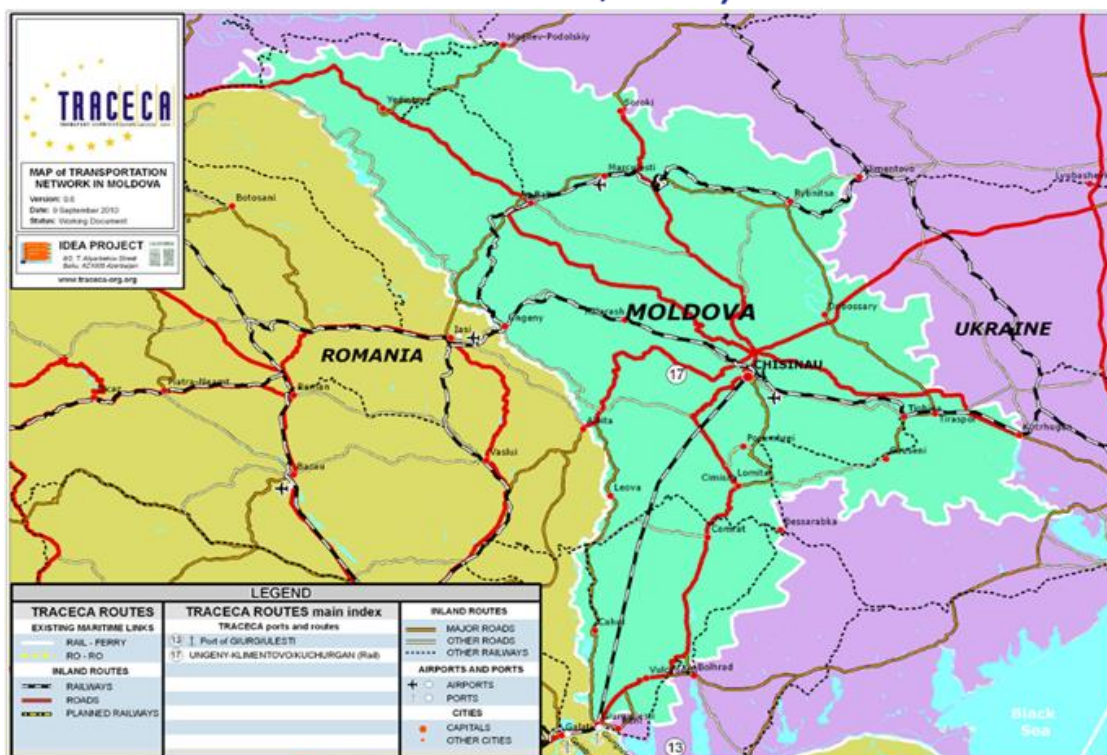
Pan European Network

- Corridor VII Danube River
- Corridor IX Helsinki-S.Peterburg-Pskov-Moscova-Kiev-Ljubase-Chişinău-Bucureşti-Dimitrovgrad-Alexandroupolis



Pan European transport conference, Crete 1994

MULTIMODAL CORRIDOR EUROPE - CAUCASUS - ASIA (TRACECA) – (Conference in Brussels, 1993)



Naval transport

In accordance with the European Agreement on Main Domestic Routes of International Importance, done at Geneva on 19 January 1996 (ratified by Parliament Decision No. 1431/1997¹⁶), as routes of international importance:

- E 80 - 07 - Prut River, from estuary to town. Ungheni (407.0 km) - partly navigable. Requires interventions to maintain the waterway;
- E 90 - 03 - Dniester River from the port of Belgorod-Dnestrovsk (Ukraine) to the port of Vinita (228 km), including 2 Moldovan ports of international importance - partly navigable. Requires interventions to maintain the waterway;
- P 80 - 62 - Giurgiulești port (133 km) as a port complex on the Danube River.

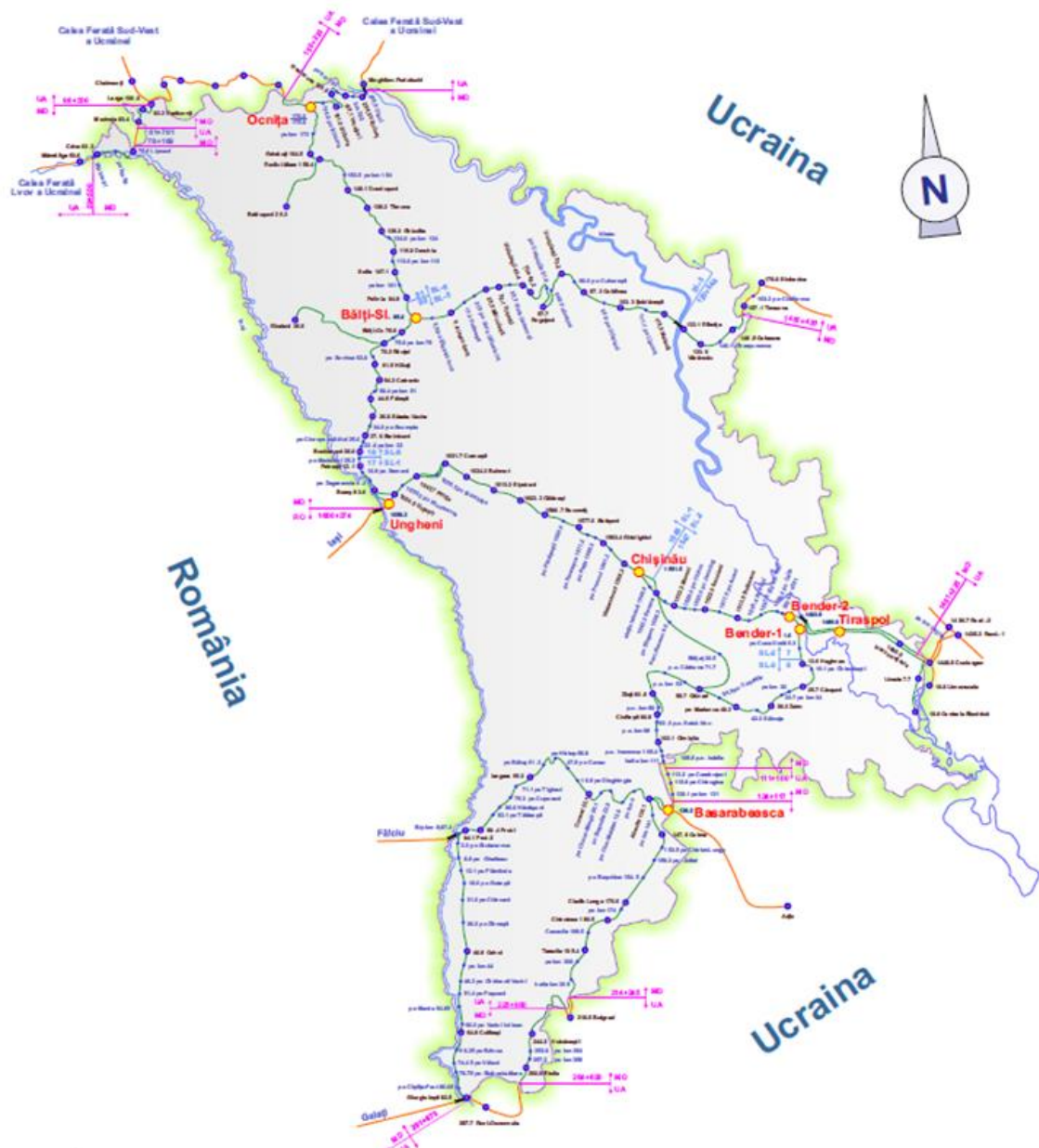
¹⁶ Parliament Decision No. 1431/1997 on ratification of the European Agreement on the Main Domestic Routes of International Importance, available in Romanian at:
https://www.legis.md/cautare/getResults?doc_id=61242&lang=ro

Railway Transport

The structure of the railway network:

The national railway network of the Republic of Moldova consists of 1076 km of non-electrified main lines (of which about 40 km are double track) with 78 stations and 648.5 km of siding and stabling tracks.

1,043.7 km of the main lines are 1,520 mm gauge and 32.3 km of lines in the stations are 1,435 mm gauge and are located at the border crossing areas of Ungheni and Giurgiulesti (these figures do not include the Cahul-Giurgiulesti line with a length of 49.9 km which is not officially put in service). 472.1 km of tracks are equipped with automatic locking systems.



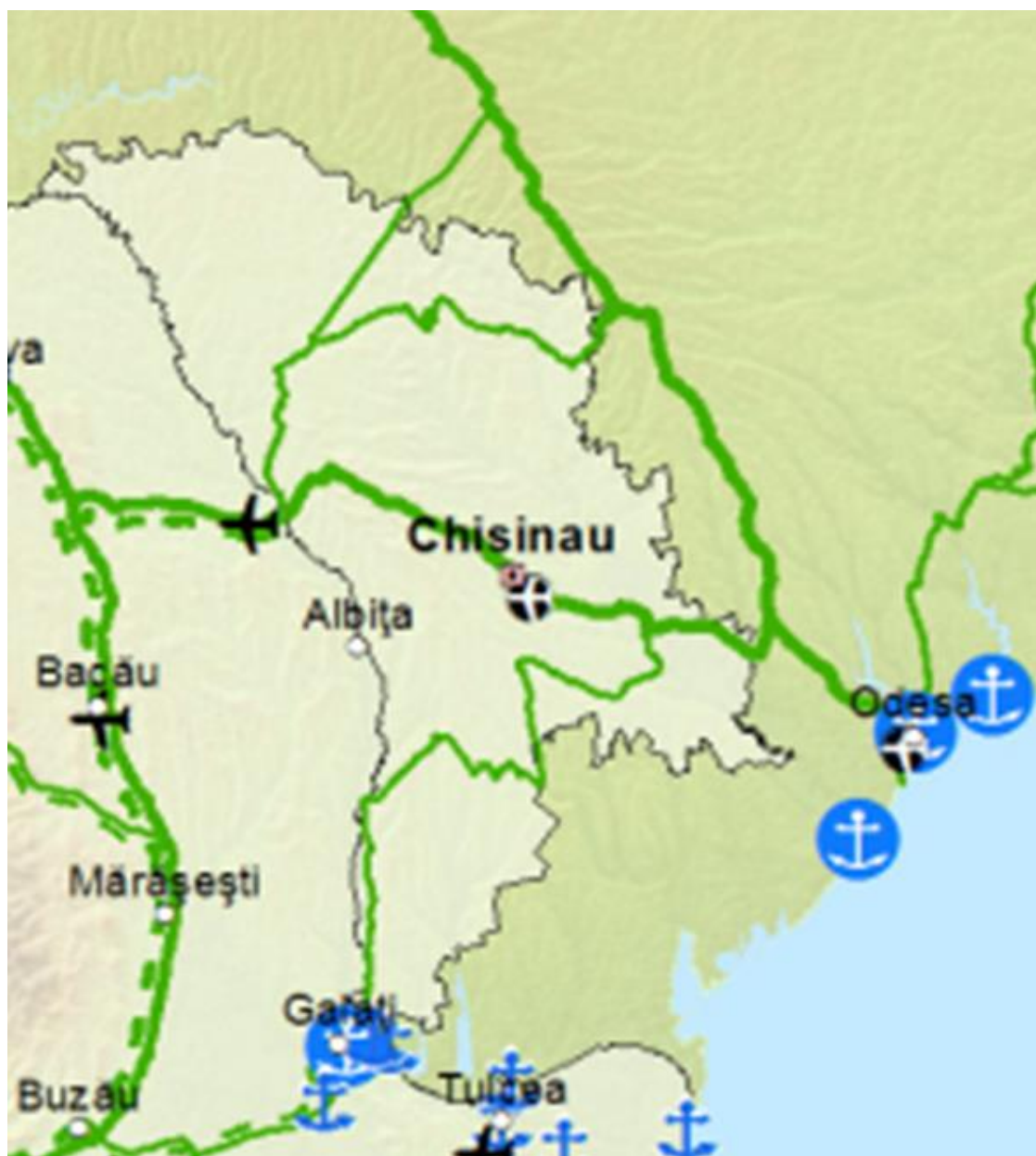
State Enterprise „Calea Ferata din Moldova” network includes 1711.1 km of telephone and telegraphic communication lines, 225.2 km of them are fiber-optic lines, 153.9 km - overhead communication lines and 1332.0 km - cable lines.

Also State Enterprise „Calea Ferata din Moldova” has 1243.5 km of overhead power lines and 575,1 km of lines of low and medium voltage power, located along the main lines.

The network includes 226 level crossings, 181 of them with automatic signaling.

39 of the crossings are fitted with railway barriers and other 37 with guarded rail signaling.

Moldovan Railway included in TEN-T



3. Present the state of international airports in Moldova in terms of their physical condition and their compliance to safety and capacity requirements.

There are 2 international airports in the Republic of Moldova: Chisinau and Marculesti.

International airport Chisinau:

ICAO code: LUKK (INTL)

Aerodrome / airport's operator certified by Civil Aviation Authority (CAA) according to national implementing rules [approved by Government Decision No. 653/2018¹⁷, is a national implementation of the EC Regulation 139/2014 and corresponding parts of the Commission Regulation (EC) No 216/2008 (Basic Regulation)].

Airdrome area – 364 ha, 399.0 Ft above sea level

Aerodrome Reference Code – 4D, VFR and IFR

Terminal capacity - 750 passengers per hour (arrival stream) and 750 passengers per hour (departure stream)

Open 24/7

Runway (main) 08-26: Dimension (m) 3590 x 45, type of surface concrete, Strength of runway pavement - PCN 51 R/C/W/T

Runway 09-27 (reserve): Dimension (m) 2383 x 45, type of surface concrete, Strength of runway pavement - PCN 55 R/C/W/T

Taxiway system – with taxiways A1, A2, B, L1, L2, L3, L4, L5, C1, C2, D and E

Aprons area with 43 aircraft parking places, cargo/passenger pads, small repair and maintenance area, firefighting station etc.

Aerodrome category for firefighting (RFF) - corresponds to the Category 7 of 10 - that permits to perform fire rescue and extinguishing for aircraft with a total length between 39-49 m, and maximum fuselage width of 5 m.

Aerodrome fully complies with applicable requirements including safety.

International airport Marculesti:

ICAO code: LUBM (INTL)

¹⁷ Government Decision No. 653/2018 on approval of the Regulation on Administrative Procedures for Aerodromes, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=108784&lang=ro

Aerodrome / airport's operator certified by CAA according to national implementing rules [approved by Government Decision No. 737/2020¹⁸)

is a national implementation of the ICAO Annex 14 Vol. I, ICAO DOC 9981 and ICAO DOC 9774.

Airdrome area – 262 ha, 331 Ft above sea level

Aerodrome Reference Code - 3C, VFR only

Operational - Day only, Cargo operations only

Runway 07-25: Dimension (m) 2512 x 40, type of surface – reinforced concrete, Strength of runway pavement - 80 R/B/W/U

Taxiway system – with taxiways A, B, C, D and E

Aprons area with 14 aircraft parking places, cargo pads, repair and maintenance area, firefighting station.

ANS/Handling/Customs and immigration – Prior Permission Required

Aerodrome category for firefighting (RFF) - corresponds to the Category 5

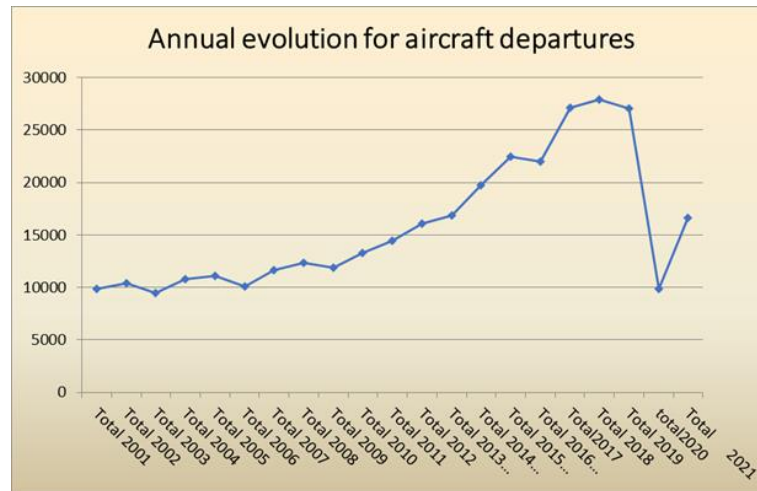
Aerodrome fully complies with applicable requirements including safety.

Additional information:

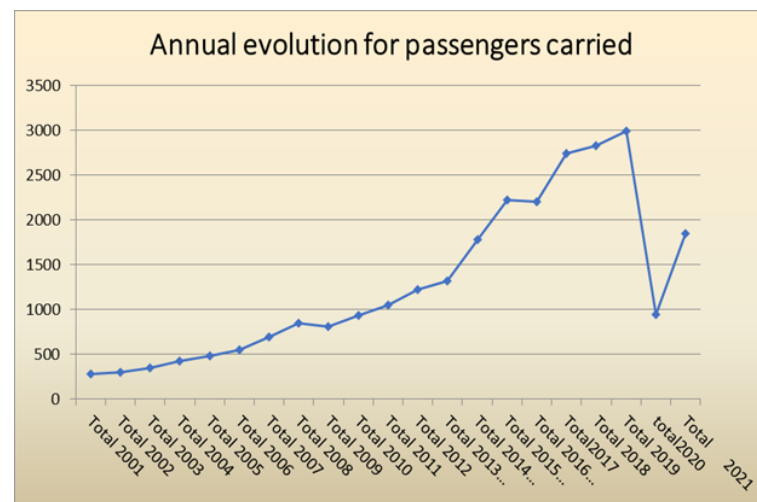
The summary conclusions of the last ICAO USOAP (26.01-07.02 2022) of the Republic of Moldova - Effective Implementation by area AGA =86.40% (according to EUR/NAT average value = 74.45% in the AGA domain).

Annual evolution for aircraft departures (total):

¹⁸ Government Decision No. 737/2020 on approval of the Regulation on administrative requirements for certain categories of aerodromes, available in Romanian at:
https://www.legis.md/cautare/getResults?doc_id=123734&lang=ro



Annual evolution for passengers carried (total):



4. Present the state of ports in Moldova in terms of their physical condition and their capacity and their connections to the rail and road network.

The Republic of Moldova has one Port Complex, the Giurgiulesti Port Complex, which consists of the Giurgiulesti International Free Port and the Giurgiulesti Passenger and Cargo terminal. The first terminal in the Giurgiulesti Port Complex was put into operation in 2006. The Giurgiulesti port complex has connections with the 1520 and 1435 rail gauge, and connections with the road and river transport network.

The Giurgiulesti International Free Port has the following port facilities serving maritime vessels

- Oil Products Terminal;
- Grain terminal (Danube);
- Grain terminal (Prut);
- Vegetable oil terminal;
- Bulk Cargo Terminal;

- RORO ramp (under construction);
- Container and General Cargo Terminal.

The Giurgiulesti Container and General Cargo Terminal has a single berth for sea-river vessels carrying general cargo and bulk cargo.

The port of Giurgiulesti is the only port in the Republic of Moldova accessible to seagoing ships, located at km 133.8 (72.2 nautical miles) of the Danube River, in the south of the country, being bordered by Romania and Ukraine. The port enjoys a location on international trade and transport routes, such as the Rhine-Main-Danube waterway, which connects the Black Sea, 14 European states and the North Sea; European and Russian standard railway systems, as well as the international road network. The owner, operator and general investor of the Giurgiulesti Free International Port is the company „Danube Logistics” SRL. The port was put into operation on October 26, 2006, after 10 years of construction.

The port of Giurgiulesti consists of the oil terminal, the cargo and passenger port and an industrial area. The oil terminal was built from foreign investment worth 35 million US dollars. The berth can receive seagoing vessels and river barges with a draft of up to 6.5 m and can unload or load up to 3 different types of petroleum products at the same time. The total storage capacity is over 63 thousand cubic meters of petroleum products, and the maximum transshipment capacity will be over 2 million tons per year. Port passenger terminal. The cruise ship *Princessa Elena* is anchored in the foreground. The passenger port (investment of 10 million US dollars) has a capacity of about 300 passengers per day. Through this port, the Republic of Moldova is positioned at a more advanced level in the field of shipping, which, in the opinion of investors, will lead to the development of tourism and the southern region of the country, will ensure a safe, cheap and environmentally friendly way of transport. The grain terminal (US \$ 12 million investment) is used to transport grain by sea to and from Moldova, if needed. It has a capacity of 3,000 tons of grain per day by road and rail and a loading capacity of maritime transport units of up to 7,000 tones, with a loading speed of 300 tones per hour. It has an export processing capacity of up to 500 thousand tons of grain. As inconveniences, the development of the port of Giurgiulesti and the maneuvers of the ships in its right, are embarrassed by the narrowness of the Moldavian bank of the Danube (only 340 meters), because the proposed territorial exchange with Ukraine was not possible.

5. Present the number and state of major multimodal/intermodal terminals in Moldova in terms of their physical condition and their capacity.

Giurgiulesti International Free Port

1. Oil Terminal

- Berth is a jetty construction at the Danube River suitable for maritime vessels up to 7 m draft and river barges for transshipment of diesel, gasoline, liquid fertilizer and ethanol as well as export of vegetable oil;
- Storage facilities:
 - diesel, gasoline: capacity of 45,000 tons;
 - ethanol, liquid fertilizer: capacity of 3,000 tons;
 - vegetable oil: capacity of 6,000 tons currently in extension;
- Truck loading facility for simultaneous loading of up to 4 trucks;
- Transshipment capacity of around 1 million tons p.a.;
- Condition: terminal opened in 2007, fully operational;
- Railway terminal for unloading and loading of diesel and gasoline on both wide and standard railway gauges.

Condition: terminal opened in 2014, fully operational;

Capacity extension planned.

2. Cargo Terminal Prut

- Berth is a quay wall construction at the Prut River suitable for maritime vessels with a draft of 5 m and more depending on the water level as well as for river barges;
- Russian gauge railway line alongside the quay enables direct transshipment from vessel to railway;
- Import and export of dry bulk (grain, construction material, coal), general cargo (big bags, metal, scrap metal) and containers;
- Transshipment capacity of around 500,000 tons p.a. depending on cargo;
- Condition: terminal opened in 2011, fully operational;
- Railway terminal for general cargo and containers for both wide and standard railway gauges

Condition: built in 2014, operational.

3. Grain Terminal Prut

- Berth is a jetty construction at the Prut River suitable for maritime vessels with a draft of 5 m and more depending on the water level as well as for river barges;
- Storage facilities for grains and seeds of around 50,000 tons are connected to loading facilities at berth via conveyor belt;
- Russian gauge railway line connected to storage facilities;
- Transshipment capacity: estimated 750,000 tons p.a.;
- Condition: terminal opened in 2009, fully operational.

4. Grain Terminal Danube

- Berth is a jetty construction at the Danube River, suitable for maritime vessels with a draft up to 7 m and river barges;
- Storage facilities for grains and seeds at the berth of around 10,000 tons, connected to a conveyor belt-based loading system at the berth.

The storage facilities of the Grain Terminal Prut are connected to the Grain Terminal Danube via a pneumatic pipeline system;

- Russian gauge railway line connected to storage facilities;
- Transshipment capacity: estimated 1,250,000 tons p.a.;
- Condition: terminal opened in 2016, fully operational.

5. RoRo Ramp

- The RoRo ramp is located at the Prut River and designed for maritime vessels with a draft of 5 m and more depending on the water level as well as for river barges;
- Condition: construction of the RoRo ramp is completed with 90% and it is not operational as RoRo ramp;
- The RoRo ramp is currently used for unloading of dry bulk cargo (construction material).

6. Cargo Terminal Danube

- It is planned to construct a new berth which will be a quay wall construction at the Danube River suitable for maritime vessels with a draft of up to 7 m as well as for river barges;
- Russian gauge railway line alongside the quay will enable direct transshipment from vessel to railway;
- Status: design stage; start of operation envisaged for 2nd half of 2023;

Transshipment capacity: 750,000 tons.

6. Are there any deficiencies of the Core Network, or capital bottlenecks or cut-offs affecting functionality and efficiency of the Core Network, or severely reducing its performance?

Currently, there are no major deficiencies. There are small traffic deficiencies because the contracts M3 Road, Porumbrei - Cimislia km 0 + 000 - km 19 + 010, M3 Road, Comrat bypass, km 0 + 000 - km 18 + 263, M3 bypass Slobozia Mare, km 0 + 000 - km 18 + 290, M3 Chisinau - Giurgiulesti, km 96 + 800 - km 171 + 290; km 179 + 650 - km 190 + 750, M2 bypass Chisinau km 0 + 000 - km 6 + 550. The deadline for completion of works on the above-mentioned sectors is the end of 2022. The construction and rehabilitation of these road sections are carried out with the support of the EBRD and the EIB.

There are also sectors for which the necessary financial sources are not identified, namely bypass or. Vulcanesti, detour or. Cimislia and the sectors respectively (see the list of sectors in answer no. 8 of Chapter 21) which are currently proposed for negotiation to the International Financial Institutions.

Given the fact that some routes in the TEN-T network cross the Transnistrian region, the ministry will come up with proposals which will include changing the direction of the corridor bypassing Transnistria. At the same time, changes will be proposed to make traffic more efficient, in the context of signing the agreement between the Republic of Moldova and Ukraine that will allow the construction of the Cosauti - Yampol road bridge.

Railway transport

The Central Railway Corridor of the Republic of Moldova (sector Ungheni-Chisinau-Tighina) part of the TEN-T Core Network is in poor shape, registering outstanding repairs/overhaul on more than 180 km. On 28 sections of this sector totaling 42 km speed and weight restrictions apply. The average speed on the sections is 37.4 km/h and the weight is restricted to 3 000 tons. This leads to low efficiency, accelerated wear of locomotives and increased fuel consumption.

In 2019, the Government of Republic of Moldova and the Government of France signed a Letter of intent for the rehabilitation and modernization of the Ungheni – Chisinau sector. The project is in the preparatory phase. The necessary financial resources for the rehabilitation of the outstanding part of the sector (Chisinau-Tighina) have not been identified yet.

Also, amendments to the TEN-T Comprehensive network map are necessary, and in this regard the responsible authorities will come up with the relevant proposal.

7. What is the country's strategic framework for the development of transport infrastructure including terminal infrastructure? Is it further translated in the list of concrete activities to be undertaken to implement the strategy? Are those actions prioritised?

The main document for the development of transport infrastructure is the Transport and Logistics Strategy for 2013-2022, Government Decision No. 827/2013¹⁹, - which aims to transform the transport and logistics sector into - a factor that allowed the development of the economy of the Republic of Moldova and trade, by supporting the continuous process of harmonization of the legislation of the Republic of Moldova in the transport sector with the corresponding EU standards, legislation and regulations. The Strategy draws up a prioritized list of infrastructure projects, including the road sectors that need to be built. A new Strategy - Mobility Strategy 2023-2030 is to be developed in 2022, with the aim of supporting Moldova in the development of the new mobility strategy, in line with national

¹⁹ Government Decision No. 827/2013 on the adoption of the Transport and Logistics Strategy for the years 2013 - 2022, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=55092&lang=ro

development objectives and those of the EU's Eastern Neighborhood Policy, regional programs and bilateral EU agreements for connectivity and, in particular, for mobility.

In the field of railway transport

The Action Plan of the Transport and Logistics Strategy for 2013-2022 has not been implemented, being only ensured the partial harmonisation of the *acquis communautaire*. Currently, actions are undertaken in order to restructure the State Enterprise „Calea Ferata din Moldova” and to establish the safety authority, the accident and incident investigation authority, and the market regulator in order to liberalise the market. These actions will be completed by August 2024. Regarding the rehabilitation of the railway infrastructure, the works on project design for rehabilitation of the southern section of the Giurgiulesti-Etulia-Basarabeasca-Causeni-Bender railway have just started. The estimated investment cost needed for implementation of the Action Plan of the Transport and Logistics Strategy for 2013-2022 is about 1.2 billion Euros.

Currently, the railway needs about 5,000 new freight cars, 10 new passenger trains, 50 shunting locomotives and to rehabilitate the railway infrastructure, the required investment is about 1.5 billion Euros.

In the field of maritime transport

In the field of naval transport, the Action Plan of the Transport and Logistics Strategy for 2013-2022 has been partially implemented. Thus, in the Action Plan of the Strategy, 2 specific objectives were outlined, one related to organisational and institutional measures, and another regarding investments in infrastructure and equipment.

Referring to the first objective, the Republic of Moldova is at the stage of implementation and transposition of the relevant EU acts, including the development of institutions, according to the provisions of these acts. In this context, measures are being taken to exclude the Republic of Moldova from the blacklist of the Paris Memorandum of Understanding on Port State Control. In this sense, have been approved modifications to the provisions of art. 7 of the Code of Commercial Maritime Navigation no. 599/1999²⁰, where the supervision on the technical condition of the ships and their classification will be carried out by the classification societies, recognized by the European Commission. Thus, these legislative changes will raise the safety standards of ships registered under the flag of the Republic of Moldova, which will lead to the exclusion of the Republic of Moldova from the blacklist of the Paris Memorandum of Understanding on Port State Control.

²⁰ Law no. 599/1999 for the approval of the Code of Commercial Maritime Navigation of the Republic of Moldova, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=108662&lang=ro

The objective of investing in infrastructure and equipment has not been achieved, as the Republic of Moldova does not have sufficient financial resources to dredge the inland waterways, in order to ensure safe inland navigation. Due to the insufficiency of financial resources, the objective of equipping the ports with equipment specific to the field was not achieved.

In field of air transport

The National strategy for transport and mobility includes the Action plan for the civil aviation domain, being planned two main measures as:

- Organisational and Institutional with the actions regarding market liberalisation and EU Acquis implementation into national regulatory framework and sector privatisation;
- Infrastructure and equipment investment with actions related to expansion of the Chisinau International Airport terminal and construction of a cargo terminal.

The implementation of the strategy has some delays in terms of extension of existing passenger terminal and construction of cargo terminal. The financial resources come from the Concessionaire Company. Regarding the International Airport Marculesti modernization the state is seeking for the appropriate solution involving the private sector.

In field of road transport

The strategy is focused in particular on two main issues: increasing road safety and strengthening institutional capacity in the field of road transport.

As a result, the objectives were achieved through the reorganisation of the National Agency of Road Transport by giving to the authority the competence to control and supervise compliance with national and international legislation in the field by road transport operators.

In the case of road safety, the focus is on drivers working and rest time. As a result, in the Road Transport Code No. 150/2014²¹, was introduced the obligation to equip vehicles with tachographs and speed limiters, as well, was approved the timetable for the implementation of these provisions.

In field of road infrastructure

In the sector of road infrastructure, the Transport and Logistics Strategy Action Plan for 2013-2022 has been partially implemented. Thus, the main priorities outlined in the strategy for this sector are the development of the road network are the continuous reduction of total road transport costs, ensuring rehabilitation, modernization, repair and proper maintenance, ensuring year-round access to the

²¹ Road Transport Code no. 150 of 17.07./2014, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=129130&lang=ro#

road network. local roads, reducing the number of road accidents by 50%, ensuring the legal and institutional framework for planning, operation and maintenance of the road network, promoting the development of the road network of the Republic of Moldova in the European network, ensuring the transport of goods and passengers safely.

Currently, about 26.15% of the national roads are in bad condition, 27,79% in very bad condition, 24.87% are in mediocre condition, approximately 16.28% in good condition and 7.92% are in very good condition. For these reasons, investments are primarily needed in the priority road sectors that are included in the TEN-T network, as follows:

Road Construction, Rehabilitation and Modernization:

- M5 road, Balti - Radeni sector (modernization works), km 133 + 000 - km 189 + 000 without estimated cost;
- Road sector (intersection of road R1 to road M5 (new construction), km 0 + 000 - km 21 + 000 Estimated cost - 21.0 million EURO;
- M5 road, Radeni sector to Chisinau (modernization), km 189 + 000 - km 258 + 000 without estimated cost;
- M5 road, Chisinau to Budesti (4th century from the Chisinau ring road) 14 + 750 Estimated cost - 31.0 million EURO
- Chisinau ring road, Road M2 section 3 (modernization), km 15 + 750 - km 24 + 900 Estimated cost - 19.5 million EURO
- Chisinau ring road, M2 road, sections 5 and 6 (new construction) Approximately 49 km Estimated cost - EUR 130.4 million
- M3 road, detour or. Cimislia (new construction), km 0 + 000 - km 7 + 200 Estimated cost - 11.5 million EURO
- M3 road, Chisinau sector to Porumbrei (rehabilitation), Approximately 33 km without estimated cost
- M3 road, Cimislia sector to Comrat (rehabilitation), Approximately 13 km Estimated cost - 18.0 million EURO;
- Road M1, Chisinau to Leuseni (modernization), 0 + 000 - km 75 + 000 Estimated cost - 80.0 million EURO
- Road M1, Chisinau to Dubasari (rehabilitation), 0 + 000 - km 44 + 000 without estimated cost
- Rehabilitation of the Odessa-Chisinau-Ungheni road sector, with connection to the European road sector Iasi-Targu-Mures-Budapest-Vienna-Munich.

In addition, to develop adequate road infrastructure it is necessary to finance the bypass roads of Vulcanesti and Cimislia, improve Road Safety, implementation of the project on weighing-in-motion, construction of Logistics Centers in Chisinau, Balti and Giurgiulesti and respectively to elaborate feasibility studies and technical documentation for other priority road sectors.

8. Concerning road network, what is the country's main development priority? What are the foreseen dynamics of potential financing and the cost of activities to address such priority intervention?

The priorities for the development of the road network are: the continuous reduction of total road transport costs, ensuring rehabilitation, modernization, repair and proper maintenance, further implementation of the Action Plan for the reform of the public road maintenance system, ensuring year-round access to the road network, local roads, reducing the number of road accidents by 50%, ensuring the legal and institutional framework for planning, operation and maintenance of the road network, promoting the development of the road network concept of the Republic of Moldova in the European network, ensuring the transport of goods and passengers safely.

In accordance with the indicative TEN-T investment action plan, priority projects have been defined, namely the construction, rehabilitation and modernization of national roads in the TEN-T network with a length of approximately 600 km with an estimated value of 700 mln. Euro (which will include and the elaboration of the technical documentation as well as the supervision of the construction works. At the same time, the development of Road Safety through the application of European practices is a priority, implementation of the project on weighing-in-motion, Construction of Logistics Centers in Chisinau, Balti and Giurgiulesti.

In March 2022, a financing Agreement was signed between the Government of the Republic of Moldova and the EIB, which is intended for the rehabilitation and modernization of the M5, Criva - Balti road sector, which is 133 km long, and for carrying out feasibility studies for priority roads in the TEN-T Network. The total value of the Agreement is 150 million EURO.

At the same time, according to the list of priority sectors, currently the ministry negotiates with the EBRD a Financial Agreement for the further implementation of the program in the road sector and for the improvement of local roads.

9. Concerning railway network, what is the country's main development priority? What are the foreseen dynamics of potential financing and the cost of activities to address such priority intervention?

Railway Network development priorities

The main development priorities concerning the railway network are:

In the field of passenger transportation

- Connecting the railway network of the Republic of Moldova to High-Speed Lines (HSL) network, by establishing a high-speed connection Chisinau - Bucharest, with potential further extension to Odesa and Kiev.

In the field of cargo transportation

- Connecting the railway network of the Republic of Moldova to Rail Freight Corridors (RFC);
- Enhancing the transit capacity from Ukraine to Romanian ports on the Danube River and the Black Sea.

Modernization of Moldavian Railways requires several investment projects in order to maintain and increase the transport capacity, to improve the speed for cargo and passenger trains, at the same time improving energy efficiency and maintaining rail safety. Within the Moldovan Railways Restructuring Project jointly financed by EU, EBRD and EIB, the rehabilitation works on the sector Tighina-Basarabeasca-Etulia-Giurgiulesti are about to begin.

A list of important projects and their estimated costs, which represent the first steps towards achieving the priorities, is presented below, but for a proper evaluation of investment needs, several feasibility studies should be performed/updated. The priorities No.1 and No.2 are vital to be launched in the next two years in order to ensure the continuity of operational activity. IFI financing is considered for all projects.

A. Modernization of the infrastructure of the Central railway corridor

Railway central corridor Ungheni-Chisinau-Tighina, the investment cost is about 100-110M Euro. For the section Ungheni-Chisinau, the Government of France agreed to provide a 50M Euro loan for partial refurbishment of infrastructure and acquisition of some Infrastructure maintenance equipment. Another 50-60M euro for rehabilitation of the outstanding section (Chisinau-Tighina-Cainari) needs to be identified.

B. Rehabilitation of the infrastructure of the North railway corridor

For rehabilitation of rail lines and rail systems of the North railway corridor, which consists of Ungheni-Balti-Ocnita and Balti-Ribnita sections (~390 km of railway), the estimated investment cost is about 150M euro. Following the latest regional events, the North corridor is highly important in ensuring freight transport from/to Ukraine.

C. Railways infrastructure modernization - connecting airports of 3 cities in 3 countries (Iasi, Chisinau, Odesa) that will include:

- Restoration and overhaul of Basarabeasca - Berezyno and Berezyno - Artsyz sectors, both on 1520 gauge. It is the first step of the project, necessary for the initiation of the other parts (estimated costs 21M euro);
- Construction of a modern logistics center in Chisinau, with state-of-the-art warehouses and free customs warehouses,
- Enlarge the freight processing capacities in Ungheni, to improve the transit potential between the European Union, Moldova and Odessa region,

- Assuring the railway connection for the airports of Iasi, Odesa and Chisinau.

For rehabilitation of Basarabeasca-Artsyzy, SE „Calea Ferata din Moldova” (CFM) and Ukrzaliznytsa estimated a necessary investment cost of about 20 M Euro investment cost.

Estimated cost for the railway connection with Chisinau Airport is about 5 million Euro, which include the construction of 3.5 km of new railway line and an underground pedestrian crossing near airport to facilitate the passengers transfer from Chisinau railway station to the airport.

10. Concerning maritime transport, what is the country's main development priority, in particular regarding motorways of sea?

The Republic of Moldova ratified the BSEC Charter by Parliament Decision No. 361/1999²². In this regard, the Republic of Moldova is oriented towards strengthening the interaction with BSEC Member States in the field of maritime transport, in order to implement projects in the field, strengthen intergovernmental economic cooperation and develop a wider Black Sea region. The main priority is to improve communications with the outermost regions and thus to improve the maritime transport network with the BSEC countries.

Motorways of the Sea will thus improve access to markets throughout Europe, and bring relief to our over-stretched European road system. For this purpose, fuller use will have to be made not only of our maritime transport resources, but also of our potential in rail and inland waterways, as part of an integrated transport chain.

The concept was introduced with the 2001 Transport White Paper- European transport policy for 2010: time to decide. The European Commission proposed the development of “Motorways of the Sea” as a “real competitive alternative to land transport. The White Paper also defined that the Motorways of the Sea should be part of the trans-European network (TEN-T) and funds should be made available for its development.

11. Concerning inland navigation, what is the country's main development priority?

The Republic of Moldova has two inland waterways (Dniester River and Prut River) which are classified in accordance with the European Agreement on the Main Inland Waterways of International Importance, concluded at Geneva on 19

²² Parliament Decision No. 361/1999 on the ratification of the BSEC Charter, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=59144&lang=ro

January 1996 (Parliament Decision No.1431/1997²³), as routes of international importance:

E 80 - 07 – Prut River, from the estuary up to Ungheni (407.0 km);

E 90 - 03 - Dniester River from the port of Belgorod-Dnestrovsk (Ukraine) to the port of Bender (228 km).

These inland waterways, which have direct access to the Black Sea (Dniester), and the maritime sector of the Danube River (Prut River) provides the opportunity to develop an economically advantageous and environmentally friendly shipping.

The main priorities for the development of the inland shipping involve, but are not limited to, the following measures:

1. Improving inland navigation conditions, taking into account the prospect of developing the market for inland shipping services and increasing security requirements, including:

- the rearrangement of the internal waterways and the improvement of the operating parameters of hydro-technical constructions;
- increasing the length of the internal waterways with the guaranteed depths of the channel and their signaling;
- the creation of conditions for the transshipment of the goods from the upstream part of the Dubasari dam, on the sector downstream of the Dniester river;
- modernization of the technical fleet and increasing the intensity of their use in order to improve the parameters of the waterways;
- research of inland waterways and development of pilot maps with indication of all navigation signals, in accordance with European navigation rules, and implementation of modern navigation and traffic management systems;
- development of inland waterway infrastructure for transport on international transport corridors and development of tourism, water sports and leisure conditions;
- ensuring the development of inland waterways and infrastructure in accordance with the purposes and needs of the country transport infrastructure development in general;

2. Development of the transport fleet in accordance with the market requirements, including:

- ship renovation, repair and modernization of the fleet at shipyards;
- replenishing the fleet by purchasing new and modern ships;

²³ Parliament Decision No.1431/1997 on the ratification of the European Agreement on the Main Inland Waterways of International Importance, concluded at Geneva on 19 January 1996, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=61242&lang=ro

- the scrapping of floating structures that cannot be rebuilt and the prohibition of the operation of ships with too high a level of wear and tear that can create emergency situations;

3. Reconstruction of ports and reform of port activities, including:

- improving the technical condition of the docks in the ports;
- endowment, modernization and replacement of obsolete transshipment means and other technical means and equipment;
- construction of new quays and terminals for the processing of containers, mineral fertilizers, chemical goods;
- repairing and ensuring the car and railway access roads to the quays;
- the construction and priority development of the quays located on the international transport corridors.

In this regard, the Republic of Moldova intends on the basis of Government Decision No. 453/2008²⁴ on the approval of the Concept for the development of shipping in the Republic of Moldova, to develop the Strategy for the development of shipping in the Republic of Moldova, and action plan to implement the said strategy, including the creation of a Committee to oversee the implementation of said plan.

12. In the area of civil aviation, specifically concerning international airports, what is the country's main development priority?

In the area of civil aviation, the main development priorities are to establish two international airports with commercial passenger air traffic, in order to ensure the healthy and competitive scheme for airport services.

These 2 airports are located in the northern part of the country, and their development will improve the logistic and infrastructure for agriculture and commercial activities, as long as in the nearest proximity there are important infrastructure objectives - railway, agriculture fields, national roads, factories and plants.

Respectively, the Marculesti International Airport is foreseen to be the major cargo hub, and the second airport from the northern part - a regional passenger hub.

The improvement of the airport infrastructure will allow it to provide better services and ensure a high access for commercial development.

The modernization process will also include the purchase of equipment, technical means to secure passenger access and transport. At the same time, it is worth mentioning that Marculesti International Airport has a great potential that can be

²⁴ Government Decision No. 453/2008 on approval of the Concept of naval transport development in the Republic of Moldova, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=22516&lang=ro

exploited. In this context, investments are needed for the reconstruction of existing buildings and the construction of a passenger terminal and a bus station.

13. Is there a database on infrastructure standards of the network for road, rail and inland waterways?

In accordance with Government Decision No. 913/2016 on the approval of the Technical Regulation on the minimum requirements for the marketing of construction products²⁵, available on, starting with January 1, 2021 for the price services and construction work, rehabilitation and modernization of roads will be applied only European Standards.

The regulations in construction are available on the website

The list of standards by domain is available on the website

There is no such database in respect to railway infrastructure.

In the field of shipping, there is no database on waterway infrastructure standards.

The regulations in construction are available on the website²⁶.

The list of standards by domain is available on the website²⁷.

There is no such database in respect to railway infrastructure.

In the field of shipping, there is no database on waterway infrastructure standards.

14. What are the procedures to be followed by project promoters for large scale infrastructure projects (permit granting procedures)?

Large scale infrastructure projects are mainly funded with the support of financial resources allocated by external donors. The process of including and approving these resources in the state budget is regulated by the Law No. 181/2014 on Public Finance and Budgetary-Fiscal Responsibility²⁸ and the Order of the Ministry of

²⁵ Government Decision No. 913/2016 on the approval of the Technical Regulation on the minimum requirements for the marketing of construction products, available in Romanian at:

https://www.legis.md/cautare/getResults?doc_id=110395&lang=ro

²⁶ The electronic portal of the regulations in constructions, available in Romanian at: www.ednc.gov.md

²⁷ The electronic database of standards, available at: https://shop.standard.md/en/standard_domains

²⁸ Law no. 181/2014 on Public Finance and Budgetary-Fiscal Responsibility, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=126152&lang=ro

Finance No. 209/2015 on the approval of the Methodological Set on the elaboration, approval and modification of the budget²⁹.

The resources are managed on the basis of the above-mentioned Law, the normative framework regarding the regulation of the institutional framework and the mechanism of coordination and management of external assistance (Government Decision No. 377/2018)³⁰ as well as in accordance with the provisions of the agreements signed with external donors.

At the same time, the budgeting of the respective projects is examined / discussed during the budget negotiations that take place at the Ministry of Finance in the process of elaborating the draft state budget for the respective year.

From the internal resources of the state budget is financed the maintenance of national and local roads through the Road Fund approved annually in the state budget law and managed by the Ministry of Infrastructure and Regional Development.

After the sources of financing have been identified, the stage of elaboration of the Feasibility Study follows, where it is necessary to act in accordance with Law No. 86/2014 on environmental impact assessment³¹. This law is an organic law adopted by Parliament. This law partially transposes Directive 2011/92 / EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment (codified text), published in the Official Journal of the European Union No. L 26 of 1 January 2012. The purpose and object of the law (1) The purpose of this law is to establish a legal framework for the functioning of the environmental impact assessment mechanism of some public and private projects or of some planned types of activity, in order to ensure the prevention or minimization, at the initial stages, of the negative impact on the environment and population health. (2) The object of this law is the procedures and modalities applied in the process of assessing the environmental impact of some public and private projects or of some planned types of activity that may have a significant impact on the environment in the Republic of Moldova or in other states.

In accordance with the legal procedures, the Beneficiary is responsible for the elaboration of technical documentation (Construction Drawings) respectively in accordance with the Law No. 163/2010 on the authorization of the execution of construction works³² it is necessary to issue the Urbanism Certificate for design,

²⁹ Order of the Ministry of Finance No. 209/2015 on the approval of the Methodological Set on the elaboration, approval and modification of the budget, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=105131&lang=ro

³⁰ Government Decision No. 377/2018 on the adoption of the on the regulation of the institutional framework and the mechanism for coordinating and managing external assistance, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=117564&lang=ro

³¹ Law No. 86/2014 on environmental impact assessment, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=106006&lang=ro

³² Law No. 163/2010 on the authorization of the execution of construction works, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=120524&lang=ro

which requires the following and is issued on the basis of the application, indicating the location of the construction/land area and to which are attached, in original and in copies, the following documents:

- registration certificate;
- the technical expertise report, in case of reconstruction, restoration, modification or consolidation of the existing building, elaborated by certified technical experts;

In accordance with Law No.163/2010 on the authorization of the execution of construction works regulates the authorization, approval and verification of the construction design, execution or demolition of constructions and arrangements in accordance with the documentation and landscaping by applying the system of normative documents in constructions for ensuring transparency and publicity when issuing administrative acts and creating favorable conditions for the business environment.

At the same time, for the organization of tenders for execution of infrastructure projects, the Promoter must comply with Law No. 131/2015 on public procurement³³. The tender procedures regarding the implementation of the Contracts financed with the support of the International Financial Institutions, are imposed by the financier, namely for the auction the Guidelines of the Financing Banks (EBRD, EIB, World Bank and others International Financial Institution) and for the contractual provisions (Works and Supervision Contracts) the FIDIC Red Book is used. The International Federation of Consulting Engineers (FIDIC) Red Book is the standard, and most commonly used, construction contract form in all projects where the design is provided by the Employer, following the traditional procurement route of Design, Bid and Build. Building permits are also issued in accordance with Law No. 163/2010 on the authorization of the execution of construction works and the quality of the works is verified in accordance with Law No. 721/1996 on quality in constructions³⁴.

B. Public expenditure and investments

15. Please provide data on public expenditure and investments.

Private investment:

Giurgiulesti International Port

The total value of private investments in the Giurgiulesti International Port, during its entire activity since 2007, is about 100.7 million US dollars, of which 34.4

³³ Law No. 131/2015 on public procurement, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=131046&lang=ro

³⁴ Law No. 721/1996 on quality in constructions, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=120454&lang=ro

million US dollars have been invested in the last 5 years, including 23,4 million US dollars invested to „Danube Oil Company” SRL in the construction of a refinery for the production of vegetable oil.

The predominant part of the cumulative investments, from the moment of the establishment of the International Port until the end of 2021, is made by the General Investor, SCI "Danube Logistics" SRL, which invested 51.8 million US dollars (about 51.4% of the total value of investments made in the International Port).

Main investments were also made to SC „Trans Cargo Terminal” SRL in the amount of 14.9 million US dollars, in the construction of a cereal terminal.

Chisinau Airport

Chisinau International Airport was leased to LLC „Avia Invest” in 2013 for a period of 49 years.

By the end of 2021, the company has made investments in following:

Concessional works	Advances granted for concessional works, mil. Euro	Executed/ received concessionary works, mil. Euro
Terminal	17,660	17,583
Aerodrome	48,420	38,341
Infrastructure	12,139	5,415
Auto Parking	6,694	6,722
Energy supply	7,187	1,074
Other investment	1,306	1,427
Total	93,409	70,563

Public Roads expenditure and investments

Maintenance and reparation of national roads financed from State Budget (ROAD FOUND)

Year	2015	2016	2017	2018	2019	2020	2021	2022	Total, mln MDL
Planned	1500	1650	1815	1995	2195	2415	2655	2920	17145
Allocated	766	1000	1429	1422	1412	2300	2095	2031	12455

Rehabilitation, modernization and construction of national roads financed from external sources

Project Sources and Use of Funds Statement (in USD)

IDA Credit 5747-MD (World Bank)

Local Roads Improvement Project

	Cumulative
Loan Financing: sources of funds	
IDA	47 054 673,82
Repayment	0,00
Total Loan Financing	47 054 673,82
Less: Application of Funds by Components	
Component 1: Road Network Recovery	39 569 094,38
Component 2: Institutional support	4 293 296,66
Total Application of Funds	43 862 391,04
Loan Financing less Application of Funds	3 192 282,78
Add: Exchange Difference IDA	-12 718,86
Net change in Cash	3 179 563,92

No.	International Financial Institution (IFI)	Credit/Grant amount	Expenditures
			Cumulative to date
1. European Investment Bank (EIB)			
1.1.	Finance Contract FI N Serapis No.2006 0485 dated 28.06.2007	<u>30 000 000,00</u> EUR	<u>29 684 639,69</u> EUR
1.2.	Finance Contract FI N 25.852 Serapis No.2010-0154 dated 23.11.2010	<u>75 000 000,00</u> EUR	<u>66 614 305,79</u> EUR
1.3.	Finance Contract FI N 81.723 Serapis No.20110650 dated 25.06.2013	<u>150 000 000,00</u> EUR	<u>116 262 211,23</u> EUR
<u>Sub total EIB</u>		<u>255 000 000,00</u> EUR	<u>212 561 156,71</u> EUR

2. European Bank for Reconstruction and Development (EBRD)			
2.1.	Loan Agreement No.37671 dated 28.06.2007		
	Tranche A (cancelled on 06.02.2009)	<u>12 500 000,00 EUR</u>	n/a
	Tranche B	<u>17 500 000,00 EUR</u>	<u>17 464 645,34 EUR</u>
	Sub total 1	<u>17 500 000,00 EUR</u>	<u>17 464 645,34 EUR</u>
2.2.	Loan Agreement No.41442 dated 29.10.2010		
	Tranche 1	<u>27 000 000,00 EUR</u>	<u>26 991 271,77 EUR</u>
	Tranche 2	<u>25 000 000,00 EUR</u>	<u>12 438 544,20 EUR</u>
	Tranche 3	<u>23 000 000,00 EUR</u>	<u>15 991 190,90 EUR</u>
	Sub total 2	<u>75 000 000,00 EUR</u>	<u>55 421 006,87 EUR</u>
2.3.	Loan Agreement No.45094 dated 28.06.2013		
	Tranche 1	<u>63 000 000,00 EUR</u>	<u>30 005 209,83 EUR</u>
	Tranche 2	<u>40 000 000,00 EUR</u>	<u>10 025 031,50 EUR</u>
	Tranche 3	<u>47 000 000,00 EUR</u>	<u>16 381 469,36 EUR</u>
	Sub total 3	<u>150 000 000,00 EUR</u>	<u>56 411 710,69 EUR</u>
2.4.	Grant Agreement No.45094 dated 05.05.2015	<u>5 325 090,37 EUR</u>	<u>2 203 700,01 EUR</u>
	Sub total 5	<u>5 325 090,37 EUR</u>	<u>2 203 700,01 EUR</u>
Sub total EBRD		<u>247 825 090,37 EUR</u>	<u>131 501 062,91 EUR</u>
3. European Union (EC)			
3.1.	Financing Agreement No ENPI/2007/ 019549-MD-02 dated 09.12.2008	<u>12 000 000,00 EUR</u>	<u>11 576 552,10 EUR</u>
3.2.	Financing Agreement No ENPI/2011/265-548 dated 06.12.2011	<u>16 200 000,00 EUR</u>	<u>10 727 129,16 EUR</u>
Sub total EC		<u>28 200 000,00 EUR</u>	<u>22 303 681,26 EUR</u>
4. Road Fund (RF)			
4.1.	Co-Funding from Road Fund		<u>1 277 300,96 EUR</u>
Sub total RF			<u>1 277 300,96 EUR</u>
Component 1 (Road Rehabilitation Works and Supervision services)		<i>n/a</i>	<u>362 253 982,10 EUR</u>
Component 2 (Institutional Support)		<i>n/a</i>	<u>5 389 219,74 EUR</u>
TOTAL PROJECT SOURCES		<u>531 025 090,37 EUR</u>	<u>367 643 201,84 EUR</u>

For the Railway field, for the development of the Railway in the year 2020, 12 cargo locomotives were purchased, the cost of which is estimated at about 45 million EURO. The purchase was made with the support of EBRD, EIB and EC NIF.

16. Please provide information about the relevant national infrastructure planning and investment procedures (especially spatial planning, master plan, investment and implementation planning for the short, medium and long-term).

Infrastructure planning and investment are carried out on the basis of Spatial Planning Plans, the National Development Strategy, Sectorial Strategies and the Medium-Term Budgetary Framework.

The principles of urbanism and spatial planning are defined in Law No. 835/1996³⁵. The national spatial planning plan represents the synthesis of the medium and long-term sectorial strategic programs and establishes the guidelines for the organization and sustainable development for the entire territory of the country.

The National Development Strategy and Sectorial Strategies are the strategic vision documents in which the development directions of the country and of the respective sectors are identified, respectively.

The Medium-Term Budgetary Framework (MTBF) is the document that establishes the objectives of the fiscal-fiscal policy and determines the resources and expenditures framework of the national public budget and its components in the perspective of three years.

Law on public finances and budgetary-fiscal responsibility No. 181/2014³⁶ establishes the general legal framework regarding the elaboration and approval of the CBTM preparation and approval processes.

Annually, in accordance with the budgetary timetable, the Government approves the medium-term budgetary framework and submits it to Parliament for information.

The medium-term budgetary framework is elaborated by the Ministry of Finance, jointly with other responsible public authorities, in accordance with the budgetary-fiscal principles and rules established by the mentioned law.

17. What are the procedures applicable to the development of a transport infrastructure project? Are there differences according to the mode of transport concerned? Provide a list relevant legislation and regulations.

For the development of a transport infrastructure Projects it is necessary to perform the following procedures:

³⁵ Law No. 835/1996 on the principles of urbanism and spatial planning, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=120456&lang=ro#

³⁶ Law no. 181/2014 on Public Finance and Budgetary-Fiscal Responsibility, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=126152&lang=ro

- Identification of the project in the strategic development documents at National, Sectorial or Local level;
- Identification of the entity responsible for the specific field;
- Identification of the level of priority and presentation of the project for examination within the elaboration of the Medium-Term Budget Framework, where the source of financing is identified.

After approval, the project is included in the Budget Programs and sent for implementation to the responsible implementation units.

Road transport is regulated by the provisions of the Law No. 509/1995 on roads³⁷ and the Law No. 720/1996 on Road Fund³⁸ as well as Government Decision No. 1468/2016 on the approval of the lists of national and local public roads in the Republic of Moldova³⁹.

After the sources of financing have been identified, the stage of elaboration of the Feasibility Study follows, where it is necessary to act in accordance with Law No. 86/2014 on environmental impact assessment⁴⁰. This law is an organic law adopted by Parliament. This law partially transposes Directive 2011/92 / EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment (codified text), published in the Official Journal of the European Union No. L 26 of 1 January 2012. The purpose and object of the law (1) The purpose of this law is to establish a legal framework for the functioning of the environmental impact assessment mechanism of some public and private projects or of some planned types of activity, in order to ensure the prevention or minimization, at the initial stages, of the negative impact on the environment and population health. (2) The object of this law is the procedures and modalities applied in the process of assessing the environmental impact of some public and private projects or of some planned types of activity that may have a significant impact on the environment in the Republic of Moldova or in other states.

In accordance with Law No.163/2010 on the authorization of the execution of construction works regulates the authorization⁴¹, approval and verification of the construction design, execution or demolition of constructions and arrangements in accordance with the documentation and landscaping by applying the system of

³⁷ Law No. 509/1995 on roads, available in Romanian at:

https://www.legis.md/cautare/getResults?doc_id=122880&lang=ro

³⁸ Law No. 720/1996 on Road Fund, available in Romanian at:

https://www.legis.md/cautare/getResults?doc_id=129276&lang=ro

³⁹ Government Decision No. 1468/2016 on the approval of the lists of national and local public roads in the Republic of Moldova, available in Romanian at:

https://www.legis.md/cautare/getResults?doc_id=124343&lang=ro

⁴⁰ Law No. 86/2014 on environmental impact assessment, available in Romanian at:

https://www.legis.md/cautare/getResults?doc_id=106006&lang=ro

⁴¹ Law No.163/2010 on the authorization of the execution of construction works regulates the authorization, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=120524&lang=ro

normative documents in constructions for ensuring transparency and publicity when issuing administrative acts and creating favorable conditions for the business environment.

At the same time, for the organization of tenders for execution of infrastructure projects, the Promoter must comply with Law No. 131/2015 on public procurement⁴². The tender procedures regarding the implementation of the Contracts financed with the support of the International Financial Institutions, are imposed by the financier, namely for the auction the Guidelines of the Financing Banks (EBRD, EIB, World Bank and others International Financial Institution) and for the contractual provisions (Works and Supervision Contracts) the FIDIC Red Book is used.

The International Federation of Consulting Engineers (FIDIC) Red Book is the standard, and most commonly used, construction contract form in all projects where the design is provided by the Employer, following the traditional procurement route of Design, Bid and Build. Building permits are also issued in accordance with Law No. 163/2010 on the authorization of the execution of construction works and the quality of the works, as amended in 2020⁴³ and in accordance with Law No. 721/1996 on quality in construction, as amended in 2020⁴⁴.

18. What is the project cycle? How are authorities and the non-governmental sector associated with transport infrastructure projects?

The transport infrastructure is regulated by the provisions of the Law No. 509 /1995 on Road, the Law No. 720/1996 Road Fund and Government Decision No. 1468/2016 on the approval of the lists of national and local public roads in the Republic of Moldova.

For the development of a transport infrastructure Project, it is necessary to perform the following procedures:

- Identification of the project in the strategic development documents at National, Sectorial or Local level;
- Identification of the entity responsible for the specific field.

⁴² Law No. 131/2015 on public procurement, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=131046&lang=ro

⁴³ Law No. 163/2010 (amended in 2020) on the authorization of the execution of construction works and the quality of the works, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=120524&lang=ro

⁴⁴ Law No. 721/1996 (revised in 2020) on quality in construction, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=120454&lang=ro

Priority Identification

In accordance with these provisions, the Ministry of Infrastructure and Regional Development sets the priorities for the implementation of Infrastructure Projects. The next stage is the elaboration of pre-feasibility and feasibility studies in accordance with LAW No. 86/2014 on impact assessment. This law is an organic law adopted by Parliament. This law partially transposes Directive 2011/92 / EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment (codified text), published in the Official Journal of the European Union No. L 26 of 1 January 2012. Next step is elaboration of the Technical Documentation, which include the public consultations with the involvement of the local public authorities and respectively the non-governmental organizations. After the elaboration and expertise of the Technical Documentation, the tender is organized in compliance with Law No.131/2015 on public procurement (for local contracts) and for contracts financed from external sources, the auction is organized according to the Guidelines of Financing Banks (EBRD, EIB, World Bank and others).

The construction works start after the issuance of the Construction Permit in accordance with Law No.163/2010 on the authorization of the execution of construction works and the quality of the works is verified in accordance with Law No.721/1996 on quality in construction. For contracts financed from external sources, the contractual conditions are established in accordance with the FIDIC Red Book.

C. Transport research

19. Are there any public research programmes on transport technologies, infrastructures or operations, and if yes, what are their funding levels and priorities?

Currently, there are no Research programs in transportation technology.

20. Is there private funding available for transport research, and if yes, what are funding levels and priorities?

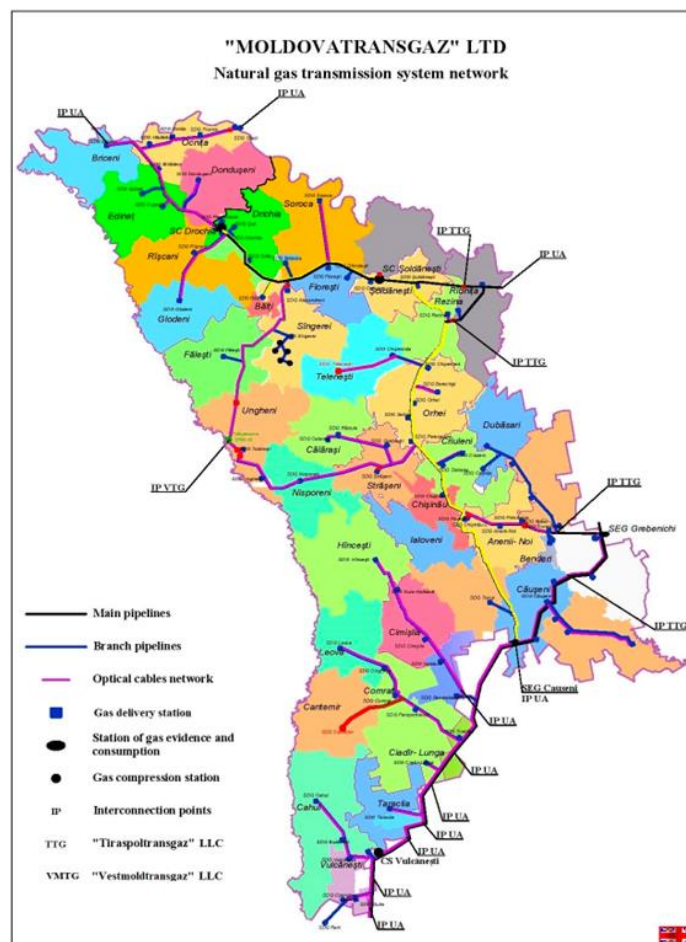
Currently, there is no funding for research in the field of transport.

D. Pipeline transportation

21. Please provide a description of the network, length and type of pipelines, quantities transported, capacities of existing installations, development policy, regional connections.

Length and type of pipelines

According to the submitted reports by the TSOs, the length of the gas transmission networks in the Republic of Moldova, as of January 1, 2022, is 1682.3 km. Among them, the main transmission network constituted 776.2 km (46.1%), and the branch networks - 906.1 km (53.9%). Of the total, 1299,4 km (77.2%) are owned by Moldovatrangaz, 122,6 km (7.3%) belong to Vestmoldtransgaz, 224,2 km (13.3%) belong to the central and local public administration authorities, and 36,2 km (2.2%) are the networks owned by private economic agents.



Map of Natural Gas transmission system (Moldovatrangaz)



Map of N.G. transmission system (Vestmoldtransgaz)

The total length of the natural gas networks in the Republic of Moldova (without the administrative-territorial units on the left bank of the Dniester), as of January 1, 2022, amounted to 27044.5 km, of which: 1682.3 km are transmission networks of natural gas, and 25362.2 km are distribution networks.

*Tiraspoltransgaz (Transdnistria) - total pipeline infrastructure 360 km.

Quantities transported by „Moldovatrangaz” LLC

No.	Indicators	Units of measurement	2019	2020	2021
1	The volume of transportation and transit of natural gas, incl.	mcm	11 414,1	2 064,7	1 911,3
1.1.	- for EU countries	mcm		890,6	400,9
1.2.	- for border cross consumers of Ukraine	mcm		99,5	99,5
1.3.	- for RM consumers	mcm		1074,6	1 233,1
1.4.	- for Tiraspoltransgaz consumers	mcm		160,6	177,8

The information about quantities transported by „Moldovatrangaz” LLC per month can be found by accessing the following link:

<https://moldovatrangaz.md/en/technicaldata/allocations>.

The structure of the TSO „Moldovatrangaz” LLC consists of 3 branches (Chisinau, Drochia, Vulcanesti), with a total staff of 625 people, carrying out a set of organisational and technical activities for the maintenance and operation of gas pipelines and their installations:

- Pipelines capacity:
 - ACB (Ananiev-Cernauti-Bogorodceni) - 9,1 bcm/year;
 - ATI (Ananiev-Tiraspol-Ismail) - 20 bcm/year;
 - RI (Razdelinaia-Ismail) and SDKRI (Sebelinka-Dnepropetrovsk-Krivoi Rog-Ismail) - 14,6 bcm/year.

- Gas compression stations (GCS):
 - GCS - Drochia with a total capacity of 31.5 MW;
 - GCS - Soldanesti with a total capacity of 24 MW;
 - GCS - Vulcanesti with a total capacity of 20 MW.
- Gas measuring station - GMS Causeni with a capacity of 80.0 mcm / day.
- Gas delivery stations - 81 units.
- Cable telecommunication lines – 2000 km.
- Cathodic protection stations – 222 units.
- The ATI, RI, SDCRI gas transmission pipelines and the Vulcanesti compression station ensure the transmission of natural gas to the countries of the Balkan region and the supply of gas to consumers in the southern region of the Republic of Moldova, both in standard and reverse mode.
- ACB gas pipeline and Drochia gas compression station ensure the transit of natural gas to the underground gas storage in Bogorodceani (Ukraine) and the supply of gas to consumers in the central and northern regions of the Republic of Moldova.
- Gas transmission pipeline „Tocuz - Cainari - Mereni" with a total length of 62.74 km, the construction of which was completed in 2007, reliably maintains of a constant pressure to supply gas to the city of Chisinau in autumn -winter, the period of maximum gas consumption, as well as ensures the possibility of gasification of the localities from Causeni, Ialoveni and Anenii-Noi districts.

Development policy:

- NAER Decision No 494/2019 of 20.12.2019 approved the Ten-Year Natural Gas Transmission Network Development Plan for “Moldovatrangaz”⁴⁵, the main document regarding gas transmission system development of Moldovatrangaz;
- NAER Decision No 225/2020 of 07.07.2021 approved the Ten-Year Natural Gas Transmission Network Development Plan for „Vestmoldtrangaz”⁴⁶, the main document regarding gas transmission system development of VestMoldTransgaz;
- Three-Year Natural Gas Distribution Network Development Plans for the DSOs were adopted in 2020⁴⁷.

Short term objectives

- Unbundling and certification;

⁴⁵ Ten-Years Natural Gas Transmission Network Development Plan for Moldovatrangaz, available in Romanian at: <https://www.moldovatrangaz.md/storage/app/media/uploaded-files/plan-de-dezvoltare-2020-2029-10-let-rom-181219anexa1.pdf>

⁴⁶ Ten-Years Natural Gas Transmission Network Development Plan for Vestmoldtrangaz, available in Romanian at: https://www.vmtg.md/images/Planul_de_dezvoltare_pentru_anii_2020-2029.pdf

⁴⁷ Three-Years Natural Gas Distribution Network Development Plans for the DSOs, available in Romanian at: <https://www.NAER.md/planuri-de-dezvoltare-3-333>

- Implementation of the balancing mechanisms;
- Implementation of cross border trading instruments (backhaul & short haul).

Interconnection Points (Firm Capacity):

- OLEKSHIVKA: UA-MD – 7,9 mcm/day and MD-UA – 12 mcm/day;
- ANANIIV: UA-MD – 7,9 mcm/day and MD-UA – 0,014 mcm/day;
- GREBENYKI: UA-MD – 36 mcm/day and MD-UA – 3,96 mcm/day;
- LIMANSKE: UA-MD – 0 mcm/day and MD-UA – 0 mcm/day;
- CAUSENI: UA-MD – 12 mcm/day and MD-UA – 36 mcm/day;
- UNGHENI: RO-MD – 4,89 mcm/day and MD-RO – 1,98 mcm/day.

An important aspect to be highlighted is the fact that all gas interconnections can function in reverse flow.

22. Is there a specific legal framework for pipeline transportation?

The transmission system operators provide services in a non-discriminatory manner for all the system users, in accordance with the following legal framework:

- The Law No. 108/2016 on natural gas⁴⁸ transposing the Directive 2009/73 concerning common rules for the internal market in natural gas;
- NAER Decision No. 421/2019 on Regulation on access to natural gas transmission networks and congestion management⁴⁹, transposing Regulation No. 715/2009 on the conditions of access to natural gas transmission networks;
- NAER Decision No. 420/2019 on Natural gas Network Code⁵⁰, transposing:
 - Regulation (EU) 2015/703 establishing a network code on interoperability and data exchange rules;
 - Regulation (EU) 2017/459 establishing a network code on capacity allocation mechanisms in gas transmission systems;
 - Regulation (EU) 2017/460 establishing a network code on harmonized transmission tariff structures for gas;
 - Regulation (EU) No 312/2014 establishing a Network Code on Gas Balancing of Transmission Networks.

⁴⁸ Law no 108/2016 on natural gas, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=129133&lang=ro

⁴⁹ NAER Decision No. 421/2019 on Regulation on access to natural gas transmission networks and congestion management, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=120010&lang=ro

⁵⁰ NAER Decision No. 420/2019 on Natural gas Network Code, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=124953&lang=ro

- NAER Decision No. 534/2019 on Natural gas market rules⁵¹;
- NAER Decision No. 422/2019 on Regulation on the quality of natural gas transmission and distribution services⁵².

Third party access is fully endorsed and guaranteed by the legislation and supervised by NAER.

23. What environmental rules are applied?

The environmental rules are applied as provided by the following legal framework:

- Law No. 1515/1993 regarding the protection of the environment⁵³;
- Law No. 1422/1997 on the protection of the atmospheric air⁵⁴;
- Law No. 851/1996 on ecological expertise and environmental impact assessment⁵⁵;
- Law No. 1540/1998 regarding the payment for environmental pollution⁵⁶;
- Law No. 1536/1998 regarding the hydrometeorological activity⁵⁷;
- Order of the Minister of Environment No. 110/2010 on the approval of the Instruction on the classification of enterprises into categories according to the level of impact on atmospheric air⁵⁸.

⁵¹ NAER Decision No. 534/2019 on Natural gas market rules, available in Romanian at:

https://www.legis.md/cautare/getResults?doc_id=120439&lang=ro

⁵² NAER Decision No. 422/2019 on Regulation on the quality of natural gas transmission and distribution services, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=120013&lang=ro

⁵³ Law No. 1515/1993 regarding the protection of the environment, available in Romanian at:

https://www.legis.md/cautare/getResults?doc_id=112032&lang=ro

⁵⁴ Law No. 1422/1997 on the protection of the atmospheric air, available in Romanian at:

https://www.legis.md/cautare/getResults?doc_id=130529&lang=ro#

⁵⁵ Law No. 851/1996 on ecological expertise and environmental impact assessment, available in Romanian at:

https://www.legis.md/cautare/getResults?doc_id=84380&lang=ro

⁵⁶ Law No. 1540/1998 regarding the payment for environmental pollution, available in Romanian at:

https://www.legis.md/cautare/getResults?doc_id=125113&lang=ro

⁵⁷ Law No. 1536/1998 regarding the hydrometeorological activity, available in Romanian at:

https://www.legis.md/cautare/getResults?doc_id=129377&lang=ro

⁵⁸ Order of the Minister of Environment No. 110/2010 on the approval of the Instruction on the classification of enterprises into categories according to the level of impact on atmospheric air, available in Romanian at: http://inseco.gov.md/wp-content/uploads/2010/06/Instruatiunea_aer.pdf

II. ENERGY NETWORKS

24. What is the country's strategic framework for the development of energy infrastructure?

The Energy Strategy of the Republic of Moldova until 2030 approved by Government Decision No. 102/2013⁵⁹ provides concrete guidelines for the development of the energy sector of the Republic of Moldova, with the main purpose of providing the necessary basis for economic growth and improved social welfare. Given its geographical position, regional transmission network configuration, and power generation potential, Moldova has always had a strategic advantage, which was not fully exploited in the last decade. Thus, the following priorities have been set:

- Strengthening the status of a transit country for electricity and natural gas through the enhancement of the bidirectional transmission connections;
- Building new electricity generation capacities and refurbishing the existing ones in order to fully consolidate trade and exploit domestic power generation capacity.

The strategic objectives of the Republic of Moldova for the period 2013-2020, according to the 2030 Energy Strategy which are still valid, were the following:

- To ensure the security of gas supply, by diversifying routes and sources of supply, types of carrier (conventional, non-conventional gas, LNG) and storage facilities, along with strengthening Moldova's role as a natural gas transmission corridor;
- To strengthen Moldova's role as an electricity transmission corridor, by building new interconnectors, connecting to the ENTSO-E system, and by consolidating the internal power transmission network; Since the power system of the Republic of Moldova has been successfully synchronized with the European Continental Grid of the ENTSO-E, starting with March 16, 2022, subsequent efforts are geared towards the implementation of the Catalogue of Measures under the Agreement on the conditions of the future interconnection of the power system of Ukraine and Moldova with the power system of the Continental Europe, signed in June 2017.
- To create a strong electricity and heat generation platform, through retrofitting, efficient district heating and advanced marketing;
- To improve the energy efficiency and increase the use of renewable energy sources (RES);
- To provide legal, institutional and operational framework for a real competition in electricity and gas markets, to effectively open the market, set up energy prices in a transparent and fair way, to integrate the Moldovan energy market into the EU internal energy market;

⁵⁹ Government Decision No. 102/2013, available in Romanian at: http://legis.md/cautare/getResults?doc_id=68103&lang=ro

- To provide a modern and competitive institutional framework for the energy sector development.

The specific objectives for the period of 2021-2030, according to the same Strategy, are the following:

- To ensure a greater use of renewable sources;
- To improve energy efficiency;
- To introduce intelligent power networks.

25. Please, provide information, also in the form of maps, on the current status and on the major needs for energy infrastructures in Moldova. What are the major gaps/concerns in terms of infrastructures to fulfil with the obligations of security of supply in the internal market?

There are no identified gaps/concerns in terms of infrastructures to fulfill the obligations of security of supply in the internal electricity market. The same is available for the current status on the major needs for energy infrastructures in Moldova.

TSO SE „Moldelectrica” has in operation:

- 183 electrical transformer substations (SS) 10 - 400 kV;
- 4733, 6 km of electrical overhead lines (OHL) 35 – 400 kV.

Length of lines on voltage levels (km of circuits)

No	Operating period, years	Length of lines on voltage classes (km) on circuits					
		35 kV	110 kV	330 kV	400 kV	Total	%
1	> 5	20,5	168,1	0	0	188,6	4,00%
2	6-10	0	0	0	0	0	0,00%
3	11-15	0	109,5	0	0	109,5	2,30%
4	16-20	25,9	99,1	0	0	125	2,60%
5	21-25	0	0	2	0	2	0,00%
6	26-30	35,3	34,8	0	0	70,1	1,50%
7	31-35	95,5	489,3	0	0	584,8	12,40%
8	36-40	102,5	664,4	55,3	0	822,2	17,40%
9	41-45	148,1	732,7	50,9	1,2	932,9	19,70%
10	46-50	150,1	616,8	107,4	53,5	927,8	19,60%
11	<51	229,8	430,5	161,8	148,3	970,3	20,50%
	Total:	807,70	3 345,20	377,40	203,00	4 733,20	100,00%



Electricity transmission network Moldova

Electric power systems interconnection

The interconnection of the electric power systems of Romania and the Republic of Moldova is performed by four 110 kV OHLs that are currently disconnected and one 400 kV OHL (Isaccea - Vulcanesti) that is operated synchronously.

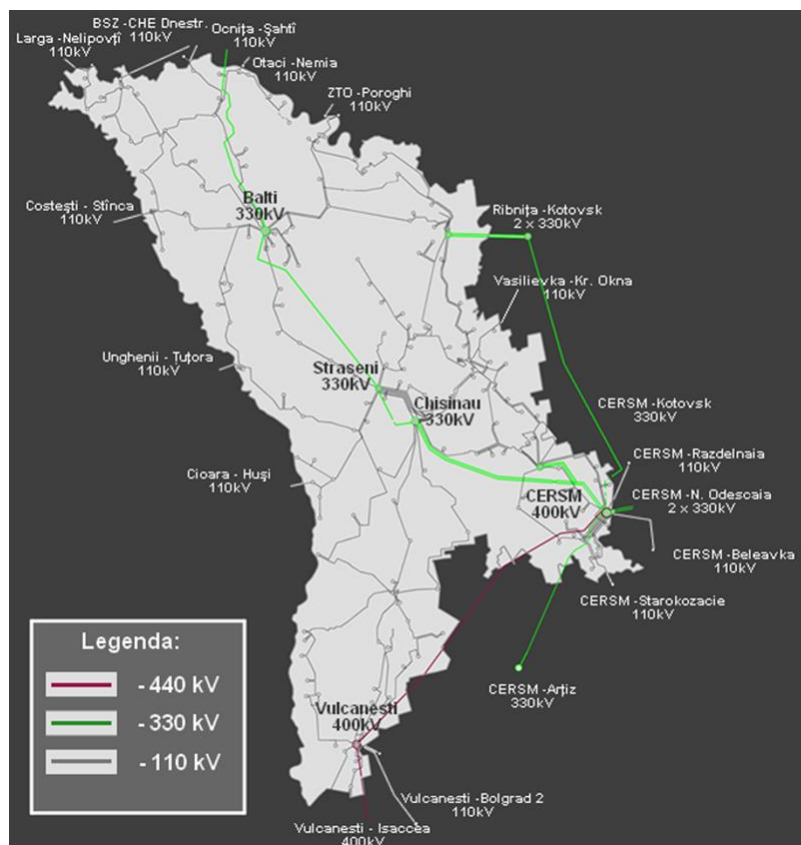
The OHLs of interconnection with the electric power system of Romania

Nominal voltage	OHL designation
400 kV	<u>Vulcanesti - Isaccea</u>
110 kV	<u>Costesti - Stinca</u>
110 kV	<u>Ungheni - Tutora</u>
110 kV	<u>Cioara - Husi</u>
110 kV	<u>Gotesti - Falcui</u>

At the same time the interconnection of the power systems of Ukraine and the Republic of Moldova is very wide, being performed by eleven 110 kV and seven 330 kV electric lines that are operated synchronously.

The OHLs of interconnection with the electric power system of Ukraine

Nominal voltage	OHL designation
South electric power system (Odessa)	
330 kV	CERS <u>Moldoveneasca</u> - <u>Novoodeskaia</u>
330 kV	CERS <u>Moldoveneasca</u> - <u>Usatovo</u>
330 kV	CERS <u>Moldoveneasca</u> - <u>Podolskaia</u>
330 kV	CERS <u>Moldoveneasca</u> - <u>Artiz</u>
330 kV	<u>Podolskaia</u> - <u>Ribnita 1</u>
330 kV	<u>Podolskaia</u> - <u>Ribnita 2</u>
110 kV	CERS <u>Moldoveneasca</u> - <u>Beleaevka</u>
110 kV	CERS <u>Moldoveneasca</u> - <u>Razdelinaia</u>
110 kV	CERS <u>Moldoveneasca</u> - <u>Starokazacie</u>
110 kV	<u>Vasilievka</u> - <u>Krasnie Okna</u>
110 kV	<u>Vulcanesti</u> - <u>Bolgrad 1</u>
110 kV	<u>Etulia</u> - <u>Nagornaia</u>
South-West electric power system (Vinita)	
330 kV	Balti - CHE Dnestrovsk
110 kV	UZ <u>Briceni</u> - CHE Dnestrovsk
110 kV	<u>Ocnita</u> - <u>Sahti</u>
110 kV	<u>Otaci</u> - <u>Nemia</u>
110 kV	<u>Larga</u> - <u>Nelipovti</u>
110 kV	<u>Poroghi</u> - <u>Soroca</u>
10kV	Mamaliga - <u>Criva</u>



Electric power systems interconnection

Overall, the cross-border electricity interconnections include 7 330 kV OHLs and 11 110 kV OHLs with Ukraine, 4 110 kV OHLs and 1 400 kV OHL with Romania.

The considered developments of energy infrastructures in Moldova:

- 400 kV overhead line (OHL) Vulcanesti-Chisinau (under construction);
- 400 kV OHL Vulcanesti-Isaccea (RO), 2nd circuit;
- 400 kV OHL Balti-Suceava;
- 400 kV OHL Romania-Ungheni-Straseni (optional).

The Ten Years Network Development Plan 2018-2027⁶⁰ of the TSO Moldelectrica includes as priority an additional 400 kV line from Balti (Republic of Moldova) to Suceava (Romania) that is meant to increase the transit through the internal electricity network. The construction of the 400 kV Balti - Suceava OHL, according to the TSO Ten Years Network Development Plan, is scheduled for 2025-2027.

⁶⁰ Moldelectrica Ten-Years Network Development Plan 2018-2027, available in Romanian at: https://moldelectrica.md/ro/network/perspective_plan



Scenarios regarding construction of interconnection lines

26. Indicate what is the status of implementation and planning of the axes for priority projects relevant to the Eastern Europe region in Moldova. In particular, indicate what is the level of development of the energy projects which are considered priority under the Energy Community process.

Project 1: 400 kV OHL interconnection Vulcănești (MD) - Isaccea (RO), extension with 400 kV OHL Vulcănești (MD) - Chișinău (MD) and Back-to-Back - BtB substation in Vulcănești

Status: ongoing

Objectives: The diversification of the electricity supply sources on the territory of the Republic of Moldova by interconnecting the national electricity system with Romanian one and the integration of the local electricity market into the EU regional energy market:

- Component 1: Installation of the BtB station in Vulcănești, on existing OHL 400 kV Vulcănești (MD) Isaccea (RO) - not needed anymore due to synchronous interconnection;
- Component 2: Construction of the new OHL Vulcănești (MD) Chișinău (MD) – ongoing;
- Component 3: Extension of existing Chișinău and Vulcănești (MD) substation – ongoing.

The project is expected to be implemented in the period of 2019-2024, with the financial support of the Development Partners - i) The financing contract

concluded between the Republic of Moldova and the European Investment Bank (EIB) - 80 million euros; *ii*) Loan agreement with the European Bank for Reconstruction and Development (EBRD) - EUR 80 million; *iii*) Loan Agreement between the Republic of Moldova and the International Development Association - IDA (World Bank Group)- 61 million Euros; and (iv) the EU-NIF Grant Agreement - EUR 39.94 million.

Component 1. Installation of 600 MW Back to Back station on existing OHL 400 kV Vulcanesti (MD) Isaccea (RO).

The Financing Agreement with the EIB entered into force on 30 October 2018, the Financing Agreement with the EBRD entered into force on 07 August 2019 and the Grant Agreement with the EU-NIF entered into force on 24 January 2020.

Status: The first stage of the ongoing auction.

The tender procedure, consisting of 2 stages (pre-qualification and two stages tender) is underway. Pre-qualification was completed, three companies were admitted to the pre-qualification stage. The first of the two-stage is ongoing, two out of three pre-qualified companies submitted their bids and the evaluation process has been launched.

Given the recent emergency synchronisation of the power systems of Ukraine and Moldova with the Continental European network of the ENTSO-E, achieved on March 16, 2022, the need for a BtB substation is under question. At the same time, the volume of unwanted electricity flows through the interconnection is relatively high, and there is a need for a dedicated high power electronic device to control electricity flows in the Vulcanesti substation. The Government of Moldova asked the assistance from the World Bank in identifying and assessing technical and economic benefits of the BtB substation at Vulcanesti considering the current state of the system (request from Moldelectrica), and to analyse additional options like STATCOM or Phase Shifting Transformers for minimizing the loop flows through Moldova identified after synchronization.

Component 2. Construction of a new 400 kV OHL Vulcanesti- Chisinau (the Electric Power System Development Project),

Status: contract implementation

The Electric Power System Development Project (PDSE) entered into force on March 24, 2020. The implementation process took longer than initially planned, due to the COVID-19 pandemic. The contract for construction of 400kV Vulcanesti-Chisinau single circuit OHL was signed on November 12, 2021 and entered into force on December 22, 2021. The implementation period is 42 months.

Component 3. Extension of the existing 330 kV Chisinau substation (the Electric Power System Development Project)

Status: contract implementation

The Electric Power System Development Project (PDSE) entered into force on March 24, 2020. The contract for extension of the existing 330 kV Chisinau substation was signed January 18, 2022 and entered into force on 22 February 2022. The implementation period is 32 months.

In April, 2022 the Parliament approved in the first reading the Law on Declaration the public utility of national interest of the construction works of Vulcanesti – Chisinau overhead power transmission power line and Vulcanesti Back-to-Back station. The 158 km 400 kV overhead power transmission line Vulcanesti – Chisinau will cross the territory of 35 localities from 9 regions of the country, including Gagauzia and Chisinau.

Project 2: Romania - Moldova Gas Interconnector

Status: finalised and operational

The overall objective of the project “Interconnection gas pipeline between the Natural Gas Transmission System of Romania and the Natural Gas Transmission System of the Republic of Moldova on the Iasi-Ungheni-Chisinau direction” is to ensure a high level of energy security of the Republic of Moldova and the North-East part of Romania by diversifying the sources of natural gas.

The construction of the first phase of the Project, a segment from Iasi to Ungheni of about 33km (10km on the territory of Moldova), was finalised in 2014.

The second phase of the Project, Ungheni-Chisinau segment, is the extension of the existing Romanian-Moldovan Interconnector Pipeline on the Moldovan territory to the main gas consumption centre. The construction of the pipeline with a length of roughly 110 km and a diameter of 600 mm was finalised in August 2020.

In October 2021, the works on the Romanian side, consisting of a new gas transmission pipeline with a diameter of 800 mm and a length of 165 km, Onesti – Gheraesti - Letcani, and two Gas Compressor Stations at Onesti and Gheraesti, each with 2 compressor units, one active and one in back-up there were also finalised.

Project 3: Bi-directional flow on the Trans-Balkan Corridor Moldova – Ukraine:

Status: finalised and operational

The reverse flow on the Trans-Balkan Corridor (T1 pipeline) Moldova – Ukraine is operational since December 2019. On the Moldovan side all works have been done. Moreover, the gas TSO Moldovatrangaz has signed the necessary Interconnection/Interoperability agreements and technical agreements with the TSO Ukrtransgaz (UA) and TSO Transgas (RO.)

27. What are the planning and authorisation procedures applicable to the development of an energy infrastructure project?

According to Law No.107/2016 on electricity⁶¹ and Law No.108/2016 on natural gas⁶², the TSOs are obliged to elaborate the development plan for the next 10 years, which will be submitted to the NAER for approval. At the elaboration stage, TSOs should take into account the Moldova's Energy Strategy of the Republic of Moldova, planned and actual supply and demand of electricity/gas, and other relevant elements. The Development plans might be revised each two years, if needed.

Development plan shall contain:

- Description of existing infrastructure, its technical conditions and the level of wear and tear, a list of interventions made during previous year, together with the outcome of the studies on electricity network development and intelligent metering equipment installation;
- Description of transmission networks/pipelines and associated assets which shall be built or modernized within the next 10 years.
- A list and timeframe of investment projects planned to be implemented within the next 10 years;
- An estimate of necessary capacities, generation evolution plan, including generation from renewable sources of energy, energy efficiency measures, planned quantities of consume and importation (for electricity);
- A description of the means and investments necessary to satisfy planned demand of electricity/natural gas;
- A description of investments which have been approved and shall be approved and made within the next 3 years, as well as a timeframe of these investment projects implementation;
- The objectives planned to be achieved through development plan implementations.

The Ten-Years Network Development Plans elaborated by TSOs should have a higher degree of details for investment in the first three years.

For DSOs the same legislation, Law No.107/2016 on electricity and Law No.108/2016 on natural gas, provides the obligation to elaborate development plans for three years.

Both the TSOs and DSOs, based on the Development plans, elaborates and submit to NAER for approval the yearly Investment Plan. Investments made according to the Investment Plans are recognized into the regulated transmission and

⁶¹ Law No.107/2016 on electricity, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=129837&lang=ro

⁶² Law No.108/2016 on natural gas, available in Romanian at: https://www.legis.md/cautare/getResults?doc_id=129133&lang=ro

distribution tariffs approved by NAER. At Government request, the Parliament can declare important infrastructure projects to be projects of public utility and national interest, facilitating by this their development.