

TRANSPORT
INFRASTRUCTURE AND TRANSPORTATION MEANS
Metadata

National Bureau of Statistics of the Republic of Moldova (NBS)

1. Contact Information

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2. Metadata Update

2.1. Last certification of metadata

21.01.2015

2.2. Last update of metadata

21.01.2015

3. Statistical Presentation

3.1. General description

At the different stages of statistical data collecting, generalization, and dissemination process, there is cooperation in different forms with the economic units, institutions involved directly or indirectly in the transport sector so as to produce and disseminate better and more extended statistical data.

Exhaustive statistical surveys specific for every mode of transport – railway, road, air, fluvial, and gas pipelines represent the main tools for determining statistics on: length of public roads, railway lines, and trolleybus lines, inland waterways, and gas pipelines, as well as the transportation means in the enterprises' inventory existing on December 31.

Data regarding the number of registered transport means existing at the end of the calendar year are presented by the Ministry of Information Technologies and Communications.

Hence, the exhaustive statistical surveys regarding the length of transportation ways and transportation means registered in the inventory, as well as the administrative data sources are used to collect statistical data meant to ensure the internal and external beneficiaries with statistical information in the area.

3.2. Concepts and definitions

3.2.1. Definitions

Road transport network – totality of roads opened for public circulation from the entire territory of the country.

Roads are ground communication ways especially built for vehicles and walkers' traffic.

Public roads are public utility objectives meant for road transport in order to meet the requirements of the national economy, of the population and of the country's defense and are administrated by another state body. The public roads are divided into national and local roads.

National roads – ensure the connection between the country’s capital and municipalities, towns, and other important localities, as well as with the neighboring countries.

Local roads – ensure the connections between the towns, communes, and villages from the district or the neighboring ones, as well as with other objectives outside the localities, and are not part of the national roads’ category.

Roads with rigid pavement include the modernized roads and the paved roads.

Modernized roads represent the roads with roadway covered with one of the following pavement: concrete – cement, asphalt, paving from chopped rock and hardened with hydro-carbon binders.

Paved roads represent the road with roadway covered with one of the following types of constructions: pavement from rubble stone or boulders, improved or simple paving.

Length of public roads is obtained by summing up the public roads represented by modernized roads, paved roads, and ground roads.

Railway is the communication way on tracks, meant exclusively for railroad vehicle use.

Railway lines represent the totality of special constructions composed of one or more railways with afferent installations, meant for goods’ and passengers’ transport with railroad vehicles. The railway line may be “in operation” or in conservation.

Length of public railway lines in operation includes only the lines opened to carry goods and passengers, where transportation is carried out based on travel IDs or documents accompanying the freight.

The length of the line with parallel ways to which for every direction are built more pairs of ways (double, triple, etc.) is established by measuring one single way.

Inland navigable waterway represents the surface of water – river, lake, stream, canal – which is not part of a sea, which by natural or man-made features is suitable for navigation, first of all for the ships meant for transport on inland waterways. The inland navigable waterway which constitutes the border between our country and other countries is included in the length of the way.

The length of streams, rivers, and canals is measured on their median.

Gas pipelines represent the ways which ensure, in general as a continuous action, the transport of gas between two or more localities.

Length of gas pipelines is determined by summing up the length of all the lines used to supply gas. It does not cover the length of the distribution network which supplies gas to consumers for their households’ needs.

Simple length of lines (km) represents the length in one direction of the gauge or the air network for electricity supply (for trolleybuses). The total simple length is calculated by summing up both directions of the double lines with the lines into one direction, including the length of the access lines from depots and return loops.

Length of trolleybus lines of general use in operation includes the effective distance between the axes of the terminus stations which serve for embarkation and debarkation of passengers in case of fee-based transportation or loading – unloading of goods from transportation means. The length of trolleybus lines of general use in operation is determined according to the axis of the highway (on the sectors with two or more ways – according to the axis with the smallest length).

Extended length of the line of a single way represents the sum of the length of highways, secondary ways (return) and other ways (lines), ramifications, crossing halts, junction arms, circular ways, and other, regardless of the fact if these lines are of general (passenger) or special use.

Density of communication ways – length of the communication ways in average per square kilometers of the country territory area.

Road vehicle represents a mechanical system which circulates on the road ways to carry goods and/or

passenger and provide services or works (military vehicles are excluded).

Registered road vehicles – vehicles which are registered in a registry of road transport vehicles, kept by an official body, regardless of the fact if the registration is accompanied or not by issuance of the registration plate.

Road vehicles for carrying goods – road motor vehicles designed exclusively or primarily to carry goods: *utility vehicles, specialized trucks, motor tractors, motor tow trucks.*

Utility vehicle – car designed to transport goods, without special equipment (trucks, vans); it is a rigid road vehicle designed exclusively or primarily to carry goods.

Specialised motor vehicle – a motor vehicle intended for transportation the goods, with special equipment (tipper, concrete mixer, isothermal tank, refrigeration tank, etc.).

Lorries represent specialized utility vehicles to carry goods, which have special equipment and dump trucks for automated discharge from behind or lateral part of the bodywork of goods transported in bulk. A lorry is a rigid road vehicle meant exclusively or primarily to carry goods.

Motor tractor is a road transport vehicle which does not have its own bodywork, but a coupling system (saddle) meant to haul semi-trailers.

Motor tow truck is the road motor vehicle meant exclusively for hauling vehicles and which has a platform for ballasting.

Road train – road vehicle for carrying goods which is coupled to a trailer; this category includes also an articulated vehicle which has one more trailer attached.

Articulated vehicle – a road tractor coupled to a semi-trailer.

Semi-trailer is the road vehicle for carrying goods, with no front axle, hauled and equipped with a system of joints with pivot and is coupled with the saddle of the road tractor.

Trailer is the road vehicle for carrying goods, which does not have its own propulsion system and which is meant to be hauled by a road motor vehicle. The trailers with one axle and those with loading capacity under 500 kg are excluded, as well as the trailers from agriculture, and living trailers.

Special purpose road vehicles represent the equipped road vehicles from construction with devices which are adequate for their destination (fire brigade vehicles, mobile cranes, ambulances, repair workshop vehicles, lab vehicles, dump vehicles, etc.)

Motor cars for passengers represent the road motor vehicles meant exclusively or primarily to carry one or more persons; including buses, minibuses, and motor cars.

Bus is a motor vehicle for carrying passengers with a capacity of more than 9 (nine) seats, including the seat of the driver.

Minibus is the bus with a transportation capacity of at most 22 passengers on seats, excluding the seat of the driver.

Motor car is the motor vehicle specially built and equipped for carrying persons, luggage and/or their goods, having at most 9 seats, including the driver's seat.

Railway vehicle is the mobile equipment running exclusively on rails: moving either under its own power (tractive vehicles) or hauled by another vehicle (coaches, railcar trailers, vans and wagons).

Locomotive – tractive railway vehicle with a power of at least 110 kW used for hauling the railway wagons. The diesel locomotive: represents a locomotive with the main power source in a diesel engine, regardless of the type of transmission installed.

Passenger wagons: railroad vehicles for passenger transportation joint to one or more railway engines.

Freight wagons: railroad vehicles meant for carrying goods, coupled to one or more railway engines.

Train represents one or more railway vehicles hauled by one or more railway engines, running under a certain number or with a certain destination between the initial fixed point to the destination fixed point.

A locomotive which travels all by itself is not considered to be a train.

Ships for inland navigable waterways – ships meant to carry goods and passengers on inland navigable waterways: ships for transportation of passengers, tow boats and pushers, self-propelled ships for goods' transportation, not-propelled ships for transportation of goods, technical ships, and duty ships.

Ships for inland navigable waterways represent the ships, **with or without self-propulsion**, which are built to carry goods on inland navigable waterways and which are registered as such. This category also includes the ships under repair and the ships for transportation on the inland navigable waterways which are also authorized to navigate on sea.

Ships for transportation of passengers – ships meant to carry more than 12 passengers.

Tow boats and pushers – ships meant to haul and/or push ships.

Aircraft – vehicle which moves in air to carry goods and passengers or for other purposes: aircrafts for transportation of passengers and mixed transportation, for transportation of goods, utilities, school, sport, with special destination, helicopters.

3.2.2. Unit of measure

Length and density of communication ways are registered in **km**; number of transportation means: road, railroad, river, air transport and trolleybuses are expressed in **units**.

3.2.3. Computation formula

Density of communication ways is calculated as an average measure as a division of the length of communication ways (respectively, public roads, railway lines, internal navigable ways, trolleybus lines) and area of the country's territory or that of the region to which it refers.

3.3. Used classifications

Used classifiers and nomenclatures:

Classifier of Ownership Forms in the Republic of Moldova (CFP - *Casificatorul formelor de proprietate din Republica Moldova, in Romanian*): approved via the Decision of the Standards, Metrology, and Technical Supervision Department No. 276-st dated 04.02.1997;

Classifier of Administrative-Territorial Units of the Republic of Moldova (CUATM - *Clasificatorul unităților administrativ-teritoriale al Republicii Moldova in Romanian*), approved via the Moldova-Standard Decision No. 1398-ST dated 03.09.2003; in force since 03.09.2003.

At the same time, a number of nomenclatures are used for the statistical surveys on transport:

- Nomenclature of motor vehicles types – created from the Registry of Vehicles Registration;
- Nomenclature of public roads categories;
- Nomenclature of railroad gauge types.

3.4. Scope

3.4.1. Sector coverage

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3.4.2. Statistical population

The statistical collectivity for the statistical surveys listed under point 4.1.1. is represented by:

- enterprises of public roads' operation (f.nr.3-drum);
- enterprises of railway transport (f.nr.2-cf Chapter I and II);
- enterprises having river ships (f.nr.6-nav.int. Chapter I and II) ;
- air operators, legal entities involved in civil aircrafts operation (f.nr.3-ac);
- JSC dealing with gas pipelines transport (f.nr.1-conducte);
- enterprises dealing with operation and service of urban electrical transport (f. nr. 1-trol. Chapter I and III);

- vehicles registered in State Registry of Transport Means (based on the data submitted by the Ministry of Information Technologies and Communications, in electronic format).
3.4.3. Geographical coverage
Information is developed and disseminated without covering the data of the enterprises and organizations from the left side of the River Nistru and Bender municipality.
3.4.4. Time coverage
Time series are available in NBS publications and web page: Annual series – starting with 2000, except for the data on registered motor vehicles – starting with 2004.
3.5. Disaggregation level
Data resulting from statistical surveys are <u>disaggregated</u> by: <i>Districts, municipalities, and ATU Gagauzia</i> (35), <i>economic development</i> regions (Chisinau mun., North, Center, South, ATU Gagauzia) (for length of public roads); <i>Categories of public roads</i> (total roads, including the national and local ones); <i>Types of railway gauge</i> (normal, narrow, and large); <i>Types of vehicles</i> : motor vehicles for transportation of passengers (passenger cars, including taxis, buses, and minibuses); motor vehicles for transportation of goods (lorries, motor tractors, and motor tow trucks); trailers and semitrailers. Data resulting from the statistical surveys listed in point 4.1.1. are disseminated by observing the confidentiality requirements. <u>Used symbols</u> : - the event did not exist; 0,0 small number of cases.
3.6. Dissemination frequency
Annually
3.7. Timeliness
The month of May following the year of reference.
3.8. Revision
Data are final when disseminated for the first time.
3.9. Period of reference
The period of reference of the variables collected through these statistical surveys refer to the existing situation as of December 31.

4. Data Collection and Processing
4.1. Data source
4.1.1. Statistical surveys
The exhaustive and annual statistical surveys on communication ways and transportation means are carried out based on the following reports: <ul style="list-style-type: none"> - Public roads at the end of the year (<i>f.nr.3-drum</i>); - Railway transport of general use and length of railway lines (<i>f.nr.2-cf</i>); - Internal naval transportation means at the end of the year (<i>f.nr.6 - nav. int.</i>); - Park of civil aircrafts at the end of the year (<i>f.nr.3-ac</i>); - Gas pipelines (<i>f.nr.1-conducte</i>).
4.1.2. Administrative sources
The administrative source for the vehicles registered in Moldova is the authority responsible for the motor vehicles registry under the Ministry of Information Technologies and Communications.

4.1.3. Estimations

Not applicable.

4.2. Characteristics of the statistical survey

4.2.1. Objective and background

The statistical surveys listed in point 4.1.1. have the following objectives:

- to collect annual data and to create annual databases regarding the transportation means in inventory, registered vehicles, length of public roads and railway lines, and the network of gas pipelines;
- to process data and to obtain qualitative statistics;
- to ensure information for the database;
- to harness the results of the statistical surveys through studies and analyses;

Starting in 1999, the statistical tools are re-designed and implemented for statistics referring to railway transport, internal naval and air transport, so as to adjust the statistical development to the European standards.

Prior to 1990, the citizens of the country practically did not have lorries and buses, and data regarding the number of motor vehicles were resulting from the exhaustive statistical survey of legal entities, which are carried out until present time, with some adjustments.

Starting in 2004, the data regarding the vehicles (number of buses, minibuses, passenger cars, goods road motor vehicles) registered in the country at the end of the calendar year are disseminated.

4.2.2. Statistical unit

See p.3.4.2.

4.2.3. Circle of units covered in the survey

Number of surveyed units according to the statistical surveys:

- f.nr.3-drum - 1 unit ("State Administration of Roads" SE);
- f.nr.2-cf - 1 unit ("Moldova Railroad" SE);
- f.nr.6 - nav. int. - 2 units;
- f.nr.3-ac - 1 unit (Ministry of Transportation and Road Infrastructure);
- f.nr.1-conducte - 1 unit ("Moldovagaz" JSC).

4.2.4. Survey frequency

Annually

4.2.5. Data collection

The data from the questionnaires of the exhaustive statistical surveys (*f.nr.3-drum; f.nr.2-cf; f.nr.6 - nav. int.; f.nr.3-ac; f.nr.1- conducte*) are collected and sent by the persons appointed by the reporting statistical units through the self-registration method and cover the data for the surveyed year regarding the main indicators mentioned under point 3.2.1. Only in case of collecting the data regarding the registered road vehicles, the statistical information is sent in electronic format.

Period of reference for registration of statistical data refers to the situation as of December 31.

Period of registration for the statistical surveys refers to the date following the reported year until:

- March 01 - f.nr.3-drum;
- April 10 - f.nr.2-cf;
- January 25 - f.nr.6 - nav.int.;
- January 18 - f.nr.3-ac;
- January 22 - f.nr.1- conducte.

4.3. Data processing and compilation

4.3.1. Data validation

Data are verified and analyzed from quality point of view, especially the internal coherence, temporal coherence as well as coherence with other data. The results of the statistical surveys are specified as statistical indicators referring to totals, percentages, and average values.

Control methods allow verifying:

- integrity of the data filled in the report;
- compliance of the identification data;
- observance of logical conditions for data correlation.

4.3.2. Compilation/extrapolation of data

Not applicable.

4.3.3. Adjustments

No adjustments are made.

4.3.4. Quality assurance

The quality of statistical data is ensured by observing the fundamental principles of official statistics approved by the UN Economic Commission for Europe in 1992 (and Statistical Commission/UN in 1994), as well as those set forth in the Republic of Moldova Law on Official Statistics.

In its activity of producing statistical information, NBS pays huge importance to ensuring high quality of data. In this respect, a number of measures for quality assurance are carried out at every stage of the statistical process: organization of statistical surveys, collection, processing, and development of statistical information.

Important efforts are undertaken to ensure the plenitude and quality of data presentation by the respondents included in the statistical surveys.

Errors, inconsistencies, and suspicious data are brought to light so as to be verified and corrected.

The primary data are verified and analyzed from internal coherence point of view (within the questionnaire), temporal coherence (with data from previous periods), with data of other similar units, as well as with data available from other statistical surveys and administrative data sources. The missing or inconsistent data are imputed, if needed.

To ensure the quality of the primary data, meetings (seminars) are organized with respondents for explaining the definitions, the correct way to fill in the questionnaires, especially when they are modified or implemented.

4.4. Data accuracy

4.4.1. Non-response rate

There are no non-responses for the annual surveys mentioned in point 4.1.1.

4.4.2. Sampling errors

No sampling surveys are carried out; hence no sampling error is calculated.

The main sources of errors that may occur are the errors from processing and presenting the information received from administrative sources.

5. Comparability and Coherence

5.1. International comparability

International comparability is ensured by using:

- Glossary for statistics on transport – III edition, 2003, UN and EU;
- EU Regulation No. 1172/98 on statistical data in respect of the carriage of goods by road.

5.2. Comparability over the time

Comparability over the time of the main indicators is generally ensured – starting with 2000

5.3. Coherence with other statistics

Coherence with other statistics is ensured by the use of the same classifiers.

6. Institutional Mandate (normative-legal basis)

The NBS activity is based on respecting the Republic of Moldova Constitution, the Law on Official Statistics No. 412 dated 09.12.2004, other legislative and normative acts, NBS management decisions and orders.

The Law on Official Statistics regulates the organization and operation of the unique system of official statistics, establishing the general principles for collecting, processing, centralizing, diminishing, and stocking statistical information (art.1).

Art. 5 of the Law provides that the production of statistical information is based on respecting the following principles: impartiality, statistical deontology, relevance, transparency, confidentiality, cost-efficiency, coordination at the national level, and collaboration at the international level.

Being the central statistical body, the National Bureau of Statistics is an administrative authority created under the Government for leading and coordinating the activity in the statistics area.

In line with the Government Decision No. 1034 dated 29.12.11 on approval of the NBS Regulation and the Nominal Composition of the NBS Collegium, the National Bureau of Statistics:

- develops alone or jointly with other central administrative authorities and approves the methodologies for statistical surveys, as well as the methodologies for calculating statistical indicators, in line with the international standards, especially the EU standards, and with the advanced practice of other countries, and taking into account the peculiarities of the social-economic conditions of the Republic of Moldova;
- organizes, in line with the Program of Statistical Work, approved annually by the Government, statistics surveys regarding the economic, social, and demographic situation and development of the country, carrying out collection, processing, centralization, stocking, and dissemination of statistical data;

The legislative and normative acts ruling the activity of the NBS are available on its official page www.statistica.md , under About NBS (<http://www.statistica.md/pageview.php?l=en&idc=323&>)

The agreement concluded between the NBS and the Ministry of Information Technology and Communications refers to obtaining the electronic version of transportation means registered in the country.

7. Confidentiality

7.1. Principles

According to art. 9(2) of the Law on Official Statistics No. 412 dated 09.12.2004, the official statistical bodies shall protect the obtained individual data.

Chapter V of the above-mentioned law stipulates that the information collected, processed, and stored for the production of statistical information is confidential if it allows direct or indirect identification of either physical or legal persons and reveals individual data. The following information is not confidential:

- a) information that may be obtained from sources accessible to the public, according to the legislation;
- b) individual information about the address, telephone, name, type of activity, staff number of the legal and physical persons that carry out entrepreneurial activities;
- c) information about state owned enterprises, submitted at the request of the relevant central and local public authorities;
- d) information about the central and local public authorities, public health facilities, other public institutions, generalized at the unit level.

According to the Law on Official Statistics, art. 24, access to confidential information is granted to people who, according to their job duties, participate in the production of statistical information, to the extent to

which the confidential information is needed for the production of the aforementioned information.

The same article stipulates that the access to confidential information that does not lead to direct identification may be granted through the decision of the general director of the central statistical body for research projects, strategies, and programs of national importance, provided that there is not any obvious risk of breaking the individual data protection regime and interfering in people's private life.

Art. 25 of the Law stipulates that the statistical information shall not be spread to users if it contains confidential information. In this case, the generalized information shall contain data about at least 3 units, and the share of one unit shall be at most 85% of the generalized information.

7.2. Practical assurance of confidentiality rules

To ensure the protection of confidential statistical data in compliance with the Law on Official Statistics No. 412 dated 09.12.2004, the National Bureau of Statistics undertakes all the regulatory, administrative, technical, and organizational measures to protect the confidential statistical information and prevent its disclosure.

In compliance with the above-mentioned law, the staff of official statistical bodies, reviewers, interviewers, and other people that, according to their job duties, have direct access to individual data, must keep the data confidentiality, not to reveal it in any form, including after leaving their positions – a fact that is provided in the agreement signed by every employee of the NBS.

Before being disseminated, the statistical data are verified if they meet the protection requirements set for confidential data. If the statistical data contain confidential information (see p. 7.1), they are not disseminated, but aggregated at the minimum available level which ensures the protection of data confidentiality.

8. Access to Information and Dissemination Format

8.1. Access to information

8.1.1. Release calendar

Quarterly, release calendar of the operative information and informative notes developed by NBS is drafted.

8.1.2. Access to the release calendar

The release calendar of the operative information and informative notes is placed on the NBS official page www.statistica.md.

8.1.3. Access to statistical data

According to the Law on Official Statistics No. 412 dated 09.12.2004, art. 9: the official statistical bodies must:

- a) spread the statistical information to users according to the volume, mode and deadlines established in the program of statistical works;
- b) provide all users with access to non-confidential statistical information on equal terms regarding the spreading volumes and deadlines;

The program of statistical work may be accessed on the web page www.statistica.md, under About NBS / legislative and normative acts (<http://www.statistica.md/pageview.php?l=en&idc=323&>)

The NBS web page www.statistica.md represents the most important information source for ensuring users' access to different statistical information and transparency about the NBS activity.

All the operative information, informative notes, time series, as well as the statistical publications developed by NBS are placed on its official web page.

8.2. Dissemination format

8.2.1. Operative information / Analytical notes

Operative information is not elaborated

8.2.2. Publications

Data are disseminated through the NBS database and publications: Statistical Yearbook and Statistical

pocket-book.

Access to publications:

- in electronic format, on NBS official page www.statistica.md, under Products and services / Publications (<http://www.statistica.md/pageview.php?l=en&idc=350&nod=1&>)
- or may be procured at the NBS office (more details at the address www.statistica.md, under Products and services / Publications (<http://www.statistica.md/pageview.php?l=en&idc=350&id=2219>))

8.2.3. Databases/time series

- **Statistical databank** <http://statbank.statistica.md> , under Economic statistics / Transport / Transport means
- **NBS official page:** <http://www.statistica.md> under: Press Release, Statistics by themes / Transport, Publications.

8.2.4. Questionnaires/data sent upon request from international organizations

International questionnaires:

annual – World Roads Statistics, International Road Federation;

annual – Common Questionnaire of Transport Statistics, International Transport Forum;

monthly – EEC/UN monthly questionnaire.

8.2.5. Requests for additional data

NBS makes available for users additional statistical information beyond the data presented in the statistical publications, informative notes, operative information, as well as the data placed on the official web page in the limits of available information, in line with the Law on Official Statistics. Request can be sent personally, by post, by e-mail or via online web form – www.statistica.md heading Products and services / Statistical data request (http://www.statistica.md/solicitare_informatii_statistice.php?l=en)

9. Useful References (links)

9.1. Accessibility of documentation on methodology

The methodology is available on the official page www.statistica.md , under Metadata (<http://www.statistica.md/pageview.php?l=en&idc=351&nod=1&>).

9.2. Accessibility of documentation on Evaluation Reports

The NBS assessment reports are available on the official page www.statistica.md , under About NBS / Assessments and Opinions on NBS / Assessment Reports (<http://www.statistica.md/pageview.php?l=en&idc=399&id=2739>).

9.3. Accessibility of information on user surveys

User surveys are available on the official page www.statistica.md , under About NBS / Assessments and Opinions on NBS / User Surveys (<http://www.statistica.md/pageview.php?l=en&idc=399&id=2740>).

9.4. Other useful references

EUROSTAT database	http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database
UN Economic Commission for Europe database	http://w3.unece.org/pxweb/Dialog/
International Road Federation database	
International Transport Forum database	