Reference metadata on methodology and quality

Rail Market Monitoring Report¹



A Data description (metadata)

Describe the main characteristics of the data set in an easily understandable manner, referring to the main data and indicators disseminated. The users should understand this short description immediately and easily.

Monitoring the railway markets is necessary in order to inform policy choices, both at EU and national level. Since 2007, the Commission has collected data on rail market developments in Member States via RMMS Questionnaires. The data collected is disseminated in form of a biennial report, accompanied by a detailed staff working document and, for the last three editions, by the underlying excel data files. The seventh edition of the report has been published in 2021.

The Rail Market Monitoring Report provides information on the main developments in EU rail markets. The main indicators are: evolution of railway services (both for passenger and freight transport), state of the railway network (infrastructure governance, capacities and limitations, expenditure, funding and financing), evolution of framework conditions in the rail sector (rail transport services covered by public service contracts, licensing and degree of market opening, development of employment) and the quality of rail services.

Data description

The report draws mainly on the reporting questionnaire set out in the Commission Implementing Regulation (EU) $2015/1100^2$ on rail market monitoring ('the RMMS Regulation').

The first five RMMS reports drew on Member States' voluntary responses to the RMMS questionnaire. The Seventh Report is the second report to actually draw on the mandatory data collection set out in the Commission Implementing Regulation (EU) 2015/1100 for rail market monitoring ('the RMMS Regulation') applicable from 1 January 2016.

In addition to RMMS data submitted by the Member States, the United Kingdom (until 2020) and Norway, this report also draws on contributions from the statistical pocketbook EU transport in figures³, reports from the European Union Agency for Railways⁴, Eurostat⁵, and statistics collected by various sectoral organisations, presentations and studies.

The RMMS data is transmitted by the Member States using the TRAMOS (Transport Monitoring System) application.

Describe the target statistical population (one or more) which the data set refers to, i.e. the population about which information is to be sought.

Statistical population

The main statistical population consists of railway undertakings and infrastructure managers covered by the scope of the Directive 2012/34/EU as amended by Directive (EU) 2016/2370.

The railway undertaking is defined as: any public or private undertaking licensed
according to Directive 2012/34/EU, the principal business of which is to provide
services for the transport of goods and/or passengers by rail with a requirement
that the undertaking ensure traction; this also includes undertakings which
provide traction only; railway undertakings which only operate urban, suburban

¹This document is based on a template provided by Eurostat and based on the SIMS standard for reporting on reference metadata and quality of statistical products. The content is the sole responsibility of the publisher.

² https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX:32015R1100

³ https://transport.ec.europa.eu/media-corner/publications_en

⁴ https://www.era.europa.eu/

⁵ https://ec.europa.eu/eurostat/web/main/data/database

or regional services on local and regional stand-alone networks (as referred to in Article 2(1) of Directive 2012/34/EU) are excluded.

Where a railway undertaking operates in more than one Member State, it shall provide the national authorities with separate data for each Member State in which it operates.

• The infrastructure manager is defined as any body or firm responsible, in particular, for establishing, managing and maintaining railway infrastructure, including traffic management and control-command and signalling, as well as responsible for participating in railway infrastructure development as determined by the Member State within the framework of its general policy on development and financing of infrastructure.

Reference period

Statistical variables refer to specific time periods, which can be a specific day or a specific period (e.g. a month, a fiscal year, a calendar year or several calendar years). When there is a mismatch between the target and the actual reference period, for instance when data are not available for the target reference period, the difference should also be highlighted.

Data is collected on an annual basis.

The frequency with which the data is disseminated should be mentioned (e.g. monthly, quarterly, yearly). The frequency can also be expressed by using the codes released in the harmonised code list available for the European Statistical System.

Frequency of dissemination

Article 4 of Directive stipulates that the Commission shall report every two years to the European Parliament and the Council on the evolution of the rail market. The 7th RMMS Report was published in January 2021 and presents data up to 2018. The 8th RMMS Report should be adopted in Q1 2023.

At European level: The geographical area covered by the data set disseminated (e.g. EU Members states, EU regions, USA, Japan, etc. as well as aggregates such as EU-27, EEA). At national level: the country, the regions and aggregates covered by the data set disseminated.

Geographical reference area

All current EU Member States are covered, except Cyprus and Malta, as they have no railways.

Norway participates in the RMMS but is not a Member of the European Union. Therefore, Norwegian data are shown in graphs per country but are not included in EU27 totals and EU27 averages.

Data for the United Kingdom is presented throughout the Seventh Report and the accompanying staff working document as during the reference period until 2018 the country was still participating in the RMMS as an EU Member State.

No regional breakdowns are available.

The units of measures used for the data set disseminated should be listed (units of measures are e.g. Euro, %, number of persons). Also the exact use of magnitude (e.g. thousand, million) should be added.

Unit of measure

The questionnaire covers different aspects, therefore the statistical unit varies.

The volume and activity of rail freight traffic are measured in tonnes (mass) and tonne-kilometres. Passenger transport by rail is measured in the number of passengers and in passenger-kilometres.

Information on the rail network is available in line-kilometers.

Traffic flows on the rail network are measured in number of trains.

Financial data is expressed in EUR.

Depending on the indicators, both absolute number and percentages are presented.

Describe in short the main statistical variables provided. The definitions and types of variables provided should be listed.

The main indicators reflect the topics listed in Article 15(4) of Directive 2012/34/EU establishing a single European railway area:

- the evolution of the internal market in rail services: volumes and revenues, both for freight and passenger
- services to be supplied to railway undertakings (as per Annex II to the Recast Directive): distance between rail stations, number of stations per passenger, number of freight terminals, number of maintenance facilities, number of refuelling facilities, etc.
- the framework conditions:
 - infrastructure charging: access charges for different train categories;
 - capacity allocation and congestion
 - infrastructure expenses and infrastructure funding;
 - quality of rail transport services: rail accidents, punctuality of regional and local passenger services; punctuality of long distance and high-speed passenger services; reliability of regional and local passenger services; reliability of long distance and high-speed passenger services, etc.
 - rail transport services covered by public service contracts (PSCs) award, volumes and compensation;
 - licensing: number of licences, average fee, average time to obtain a licence, etc.
 - degree of market opening: competitors market share in the rail freight market, and in the rail passenger markets (subsegments commercial and PSO);
 - development of employment, socio-demographic structure of the rail market;
- the state of the Union railway network: length of national networks by type.

For data gathered directly from Member States the definition are clarified in the Regulation 2015/1100 and further explained in the Tramos Glossary available in the TRAMOS tool dashboard to registered TRAMOS users

(https://webgate.ec.europa.eu/tentec/policy/tramos). Definition of data taken from other sources (Statistical Pocketbook, Eurostat, European Union Agency for Railways) are available in the relevant pages of their websites and publications.

List all classifications, which are used for the data set produced (with their detailed names).

Classifications used In principle, the classifications used follow closely those used in the "Glossary for transport statistics (Eurostat/UNECE/ITF)". The definitions and scope used are based on the Directive 2012/34/EU.

> Legislative measures or other formal procedures which prevent unauthorised disclosure of data that identify a person or economic entity either directly or indirectly.

The Member States submit the data to the Commission using the TRAMOS application. The information transmitted does not contain personal or identity data.

Statistical Confidentiality

Member States are aware (and reminded every time the annual data gathering exercises begin) that if for any reason they have confidentiality issues concerning a specific indicator, they can always provide it in aggregated/anonymous form or specify that they cannot share the information due to confidentiality issues in specific sections within TRAMOS (the "Additional Comments").

According to Art 3 (7) of the Regulation 2015/1100, Member States and the Commission shall respect the commercial confidentiality of information provided to them.

Basic statistical concepts and definitions

	Describe the degree to which statistical information meets current and potential need the users. Through its policies and legislation, the EU aims to make rail more efficient, affordable innovative to the benefit of rail individual and business consumers alike and of the wasociety. • With the European Green Deal, the European Commission has proposed to GHG emissions by at least 55% by 2030, and to achieve climate neutrality by 2050. To achieve climate neutrality, a 90% reduction in overall transport emissions by 2050 compared to 1990 levels is needed. This is one of the matching of the Control of
Relevance	 objectives of the Sustainable and Smart Mobility Strategy. To meet this chal rail will have to take up a bigger share of the transport system. Directive 2012/34/EU on establishing a single European railway area aimed improving the efficiency of the railways system by fostering the developme the Union railways, setting out broad principles for granting licences to railw undertakings and coordinating arrangements in the Member States governi allocation of railway infrastructure capacity and the charges made for the ust thereof. The fourth railway package adopted in 2016 completed a truly integrated European Railway Area, removing the remaining institutional, legal and tech obstacles. A reliable monitoring of the rail market is fundamental to understanding market developments and taking informed policy decisions. The Commission works with Me States to improve rail market monitoring. For the purposes of monitoring the market developments in Union rail transport, Art 15(5) of Directive 2012/34/EU (as amended by Directive (EU)2016/2370) put an oblig on Member States to provide to the Commission on an annual basis the necessary information on the use of the networks and the evolution of framework conditions in rail sector to support the Commission in its reporting obligation.
Timeliness	Indicate the length of time between data availability and the event or phenomenon to describe. According to Regulation 2015/1100, by the 31st December of the year T Member Statemust make available to the Commission annual data for the year T-1. The Commission then disseminating the indicators in the RMMS report, but only every two years. As an example: by 31st December 2019, Member States made available to the Commithe data 2018; the Commission adopted its 7th RMMS report (covering data until the 2018) on 13th January 2021). By 31st December 2020, Member States made available the Commission annual data for 2019: these data will be disseminated (together with 2020) when the 8th RMMS report is due, i.e. early 2023. Source data: Indicate if the data set is based on a survey or on administrative data sources. If sample surveys are used, some sample characteristics should also be given gross and net sample size, type of sampling design, reporting domain etc.). If administrative registers are used, the description of registers should be given (source, primary purpose, potential deficiencies and solutions to address them, etc.)

reliability

"Member States may obtain the necessary data from a combination of the following sources: (a) mandatory surveys; (b) administrative data, including data collected by statistical offices and other authorities; (c) statistical estimations, while explaining methods used; (d) data supplied by relevant industry organisations or other concerned parties; and (e) ad-hoc studies."

In order to gather data for the RMMS to upload in TRAMOS, Member States typically use administrative sources or statistical estimations (in this case explaining in the "Additional Comments" section the methods used). Surveys have never been mentioned as a source

of TRAMOS data.

Member States have until 31 December of each year to submit in TRAMOS-Rail the data from the RMMS questionnaire for the previous year. DG MOVE then reviews the consistency of inputs from each Member State in January, asking for additions or clarifications if needed. The process is closed by the end of the first quarter. Every 2 years, when preparing the biennial report, DG MOVE performs more in-depth data checks across countries and years to verify the coherence and consistency of the RMMS database. Estimates or other reliable data sources are used in case of data gaps. Finally, time series are checked against data published in the previous RMMS report and other similar (though not fully comparable) data in order to identify and explain any major deviation. Estimates, alternative sources and discontinuities are duly reported in the relevant parts of the accompanying staff working document.

Data collection and methods used: Describe the method used to gather data from respondents (e.g. postal survey, CAPI, on-line survey, etc.). Some additional information on questionnaire design and testing, interviewer training, methods used to monitor non-response etc. should be provided here.

Member States provide their input to the Commission through the webtool TRAMOS. Each Member State designated one or more representatives authorised to fill in the RMMS questionnaire in TRAMOS, including at least one Administrator who can formally submit the replies online to comply with the legal obligation.

Data reported in TRAMOS are originally administrative data collected by ministries or other national authorities. Each country has its own national system. The original data collection is the responsibility of each country's administration.

Publications: Regular or ad-hoc publications in which the data are made easily available to users.

The RMMS Report is published on DG MOVE website:

https://transport.ec.europa.eu/transport-modes/rail/market/rail-market-monitoring-mms_en

The Report is accompanied by a detailed staff working document, the underlying excel data files, as a well as an infographic.

The instructions on the use of the TRAMOS tool are available in the User Manual available at https://webgate.ec.europa.eu/tentec/policy/tramos, for registered users.

The definition clarifications are accessible in the <u>TRAMOS Glossary</u>, available in TRAMOS for registered users (Member States representatives filling in the questionnaire).

Accessibility and clarity

Quality documentation: Documentation on procedures applied for quality management and quality assessment.

A document describing the procedures applied for the quality management and assessment has been developed by DG MOVE.C3. The document focuses on the data gathering process under Regulation 2015/1100 (via TRAMOS-Rail) and is available at: https://transport.ec.europa.eu/transport-modes/rail/market/rail-market-monitoring-mms en . A restricted version is available to all TRAMOS registered users on the dashboard of the webtool TRAMOS.

Since 2016, Member States' reports have been submitted electronically and validated through exchanges with the Commission using the TRAMOS-Rail (Transport Monitoring System – Rail) web tool.

Since its Sixth edition the RMMS Report therefore benefitted from better-defined data requirements, a mandatory collection process and a validation review, which has gradually led to more consistent and coherent data after the end of the transitional period in 2018.

Geographical: Describe any problems of comparability between countries or regions. The reasons for the problems should be described and as well the order of magnitude of the effects of the main sources of errors.

Data have a good level of comparability between countries, with few notable exceptions. For example the indicator "Number of trains arriving on time" considers as on time trains having a delay of 5 minutes or less. However, in the past a limited number of Member States reported figures based on delays of more than 5 minutes. The same happens with the indicator "Number of trains arriving on time", which should consider as being on time only trains having a delay of 15 minutes or less.

The definition of service facilities different from stations is also not clearly specified in the RMMS, with the result that data on the number of freight terminals, marshalling yards, maintenance facilities, maritime and inland port facilities connected to rail services and refuelling facilities are not really comparable between Member States.

Currently, the issue is mitigated by the clarifications provided by Member States in the Additional Comments subsections and reported in the RMMS report. In each Section of TRAMOS a subsection called "Additional Comments" allows Member States to specify if for any reason their input for the year is not in line with what is required in the Section. In the near future, the revision of the Regulation 2015/1100 should address specifically these few cases of imperfect comparability.

Coherence and comparability

Over time: Provide information on the length of comparable time series, reference periods at which series breaks occur, the reasons for the breaks and treatments of them.

Since 2007, the Commission has collected data on rail market developments in Member States via RMMS Questionnaires. The data have been collected based on a 'gentlemen's agreement' which means that gaps in data availability were possible as well as methodological discrepancies. Nevertheless, relatively good response rates have allowed the Commission to publish the RMMS reports every two years since then.

The Recast of the first Rail package (Directive 2012/34/EU) finally created a legal base for RMMS reporting and data harmonisation. Article 15 of Directive 2012/34/EU states that the Commission shall make necessary arrangements to monitor technical and economic conditions and market developments in Union rail transport. This must include the use of networks as well as the evolution of framework conditions such as infrastructure charging, capacity allocation, investment in railway infrastructure, prices, quality of services, use of public service contracts, market opening, degree of harmonisation, licensing, employment and related social conditions.

As data reporting became mandatory in 2015, the trends assessed in the 7th RMMS report are for the period 2015-2018 to ensure data comparability. Data from sources other than TRAMOS (ex. modal shares and rail safety indicators) may cover a longer period depending on data availability in the original sources.

С	Contact and update	
		The name of the contact organisation for the data or metadata.
	Contact organisation	DG MOVE Unit C3 – Single European Rail Area Unit
		The name of the contact points for the data or metadata.
	Contact name	As above
		E-mail address of the contact points for the data or metadata.
	Contact email address	Carla.Pace@ec.europa.eu

The date on which a metadata element was inserted or modified in the database/on the website.

Metadata update

08/03/2022

Sources used to compile:

- Information on the homepage: Rail Market Monitoring (RMMS) (europa.eu)
- The 7th RMMS Report and the accompanying Staff Working document, available at: Rail Market Monitoring (RMMS) (europa.eu)
- $Glossary for transport statistics (Eurostat/UNECE/ITF)" \\ \underline{https://ec.europa.eu/eurostat/documents/3859598/10013293/KS-GQ-19-004-EN-N.pdf/b89e58d3-72ca-49e0-a353-b4ea0dc8988f?t=1568383761000$
- Directive 2012/34/EU establishing a single European railway area: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32012L0034
- Directive (EU) 2016/2370 amending Directive 2012/34/EU as regards the opening of the market for domestic passenger transport services by rail and the governance of the railway infrastructure: EUR-Lex 32016L2370 EN EUR-Lex (europa.eu)
- Implementing Regulation (EU) 2015/1100 on the reporting obligations in the framework of rail market monitoring: https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX:32015R1100