STATISTICS DENMARK

Documentation of statistics for Rail Transport 2019 Quarter 1

Statistics Denmark
Sejrøgade 11
DK 2100 København Ø

STATISTICS DENMARK

1 Introduction

Rail transport statistics covers transport of goods and passengers by rail, investments in rail infrastructure and vehicles, rail traffic and accidents.

2 Statistical presentation

Rail transport statistics are collected from the operators on the Danish rail network and from infrastructure managers. It contains information on passenger and goods transport on Danish rail network irrespective of the nationality of the operator, information on railway infrastructure and rolling vehicle stock, investments in infrastructure and rolling vehicles, and rail accidents.

2.1 Data description

Rail transport statistics contain information on

- *Passenger and goods transport by rail*: the number of passenger and weight and type of goods
- *Railway infrastructure and rolling vehicle stock*: the length of rails and network characteristics, e.g. interlocking or train stops, and number of locomotives and wagons
- *Investments in railway infrastructure and rolling vehicles*: Investments in rail network and service buildings etc. and investments in locomotives and wagons
- *Rail Accidents*

2.2 Classification system

Classifications specified in the EU legislation are used. Primarily it is the classification of the type of goods according to NST2007 and the classification on dangerous goods.

2.3 Sector coverage

Rail transport in Denmark.

STATISTICS DENMARK

2.4 Statistical concepts and definitions

Centralised traffic control: Length of lines in kilometre with centralised traffic control. A system that controls railroad interlockings and traffic flows.

Country: Country of origin or destination for international transport

Crossings: Crossings where roads cross train tracks

Electrified lines: Electrified lines

Gross weight of goods: Gross weight of goods in ton excluding packing

Intermodal transport unit: Intermodal transport unit (e.g. container unit) used for a given goods transport

Investments: Investments in moving and fixed capital in mill. kroner

Load capacity in 1,000 tonnes: Load capacity in goods wagons in 1,000 tonnes

Multiple-track lines: Lines with multiple parallel tracks

Passenger-kilometre: Passenger-kilometre is a unit that measures the total distance travelled of all passengers

Passengers: Number of passengers transported including non-fare paying passengers

Railway lines: Railway lines is a single or multiple track route between two point. Railway lines are in the statistics subdivided primarily based on the infrastructure manager. The primary railway lines are subdivided based on location.

Region: Regions by NUTS2-level. Region of origin or destination of national transports

Seating: Available seating in passenger wagons

Speed and train stop control: Lines with speed and train stop control

Stations or halts: Places where a train can stop and load/unload goods or embark/disembark passengers, i.e. stations or halts

Tonkilometer: A measure of the transport production. It is measured in tonkm as a combination of the weight of the goods and the distance travelled.

Train: Train is a locomotive or tractive vehicle combined with passenger or goods wagon. One or several coupled trainsets are considered a train. A tractive vehicle (locomotive) alone is not a train.

Train-kilometre: Train-kilometre is the distance travelled by a train

Trainset: A trainset is a indivisible block of railcar(s) and railcar trailer(s) or locomotives(s) and passenger railway vehicle(s)

Type of goods: Categorisation of the type of goods

Type of transport: Type of transport, national or international

STATISTICS DENMARK

2.5 Statistical unit

The unit used in dissemination is the railway stretch.

2.6 Statistical population

Passenger and goods transport on Danish rail network

2.7 Reference area

Railways in Denmark.

2.8 Time coverage

1997-

2.9 Base period

Not relevant for this statistics.

2.10 Unit of measure

- Passenger transport in number of persons and in passenger-kilometer (number of passengers times performed distance, passenger-km)
- Goods transport in tonnes and tonnes-kilometer (tonnes times performed km)
- vehicle kilometer in vehicle-km (train times performed km)
- Investments in DKK (Danish Kroner) in current and fixed prices

2.11 Reference period

01-01-2019 - 31-03-2019

2.12 Frequency of dissemination

Goods and passenger transport are compiled quarterly. Other parts of the statistics are compiled annually.

2.13 Legal acts and other agreements

Data collection is authorised by the Law on Statistics Denmark, section 8, cf. order no. 610 of 30 May 2018.

Statistics on rail transport are compiled according to European Parliament and Council regulation 91/2003 of 16 December 2002 on Statistics on railway transport.

2.14 Cost and burden

The administrative burden on reporting enterprises are very low.

2.15 Comment

Additional information can be found at the statistic's subject page.

3 Statistical processing

Rail Statistics are collected through the online data collection portal, http://www.Virk.dk quarterly from all rail operators with transport on the Danish rail network including private railways and light rail lines. Data are validated with regard to internal consistency in the report and the development in the time series on both micro (enterprise) and macro (aggregated statistics) level. No imputation, enumeration or seasonally adjustment are done.

3.1 Source data

The data source for passenger and goods data is questionnaires to train operators including private railways and light rail lines.

The data source for investments is partly the train operators and partly infrastructure managers.

Other data sources are the Danish Transport and Construction Agency.

3.2 Frequency of data collection

Passenger and goods data are collected quarterly. Other data are collected annually.

3.3 Data collection

Data from train operators and infrastructure managers are collected through a so-called upload solution via the public data collection portal, http://www.Virk.dk.

Data from other public authorities are in some cases collected through e-mails.

3.4 Data validation

The purpose of data validation is to ensure a correct statistics.

In each report, validation consists of

- **Internal consistency check**: Data are checked for internal consistency, i.e. coherence between different related pieces of information within the questionnaire, e.g. with reported number of passengers, passenger-km should also be filled.
- **Development**: The development in the times series for each data provider in particular from previous quarter and from the same quarter last year are checked in order to detect erroneous reports or get explanations on unusual events.

The compiled statistics are checked for **Development**: The development in the time series in particular from previous quarter and from the same quarter last year are checked in order to detect erroneous reports or get explanations on unusual events.

3.5 Data compilation

No additional data compilation are done besides data validation. There is no need for imputation or enumeration since data collection covers the full population and is complete.

3.6 Adjustment

No seasonally adjustments are made. The data are evaluated regularly to examine if stable seasonality exists and seasonally adjustment is possible.

4 Relevance

The statistics are used widely by e.g. news media, ministries and consultancies, and it is the impression that the statistics is of relevance to the users.

4.1 User Needs

Primary users are the European Commission and Danish ministries that use the data for policy making and assessment; the industry associations and enterprises that use data to analyse the development of the sector and research institutes that use the statistics for analyses and research into the transport sector.

4.2 User Satisfaction

Contact to users is done through a committee with representatives from major institutional users of transport statistics.

4.3 Data completeness rate

The statistics on rail transport covers all activity. The conditions for simplified reporting are not fulfilled by any operator in Denmark.

STATISTICS DENMARK

5 Accuracy and reliability

Uncertainty is estimated to be relative small since data collection covers all enterprises operating trains on the Danish rail network.

Passenger transport have larger uncertainty than goods transport since the statistics for passenger transport are based on the companies' models of total number of passengers.

Only minor revisions are done to the first preliminary publication.

5.1 Overall accuracy

It is the assessment that the precision of the main indicators of the statistics - transport of passengers and goods - are within a 5 per cent band.

The main uncertainty is within passenger transport that is based on the passenger models of the operators in which besides sold tickets, passengers with season tickets and passengers without tickets are estimated as well.

There is no reason to believe that there is systematic bias in the statistics.

5.2 Sampling error

Not relevant to this statistics.

5.3 Non-sampling error

No errors occur due to errors in coverage, measure, missing data, etc.

5.4 Quality management

Statistics Denmark follows the recommendations on organisation and management of quality given in the Code of Practice for European Statistics (CoP) and the implementation guidelines given in the Quality Assurance Framework of the European Statistical System (QAF). A Working Group on Quality and a central quality assurance function have been established to continuously carry through control of products and processes.

5.5 Quality assurance

Statistics Denmark follows the principles in the Code of Practice for European Statistics (CoP) and uses the Quality Assurance Framework of the European Statistical System (QAF) for the implementation of the principles. This involves continuous decentralized and central control of products and processes based on documentation following international standards. The central quality assurance function reports to the Working Group on Quality. Reports include suggestions for improvement that are assessed, decided and subsequently implemented.

5.6 Quality assessment

The quality is assessed to be high since all operators are included in the survey with a response rate of 100 percent. There is no need for imputation or enumeration.

Information on investments is assessed to be of very quality as the information originates from the financial statements of the enterprises.

Transport of goods are assessed to be of high quality. No major revisions are made and there is no bias in the revisions made.

Passenger transport are of good quality. In this area higher uncertainty exists since data are based on the passenger models of the operators that is based on ticket sale, sale of season ticket, ticket inspections and passenger counts. The models estimates all types of passengers including passengers without tickets. Data are often revised. No bias seems to be present.

5.7 Data revision - policy

Statistics Denmark revises published figures in accordance with the Revision Policy for Statistics Denmark. The common procedures and principles of the Revision Policy are for some statistics supplemented by a specific revision practice.

5.8 Data revision practice

The statistics are revised for 4-8 quarters in connection to dissemination of new quarters. The revisions are due to revised figures from the operator.

In connection to major revisions of the passenger models, major revisions in data older than two years can occur occasional.

6 Timeliness and punctuality

The statistics are published 73-74 days after the reference period.

The statistics are always published at the pre-announced time.

6.1 Timeliness and time lag - final results

Timeliness for quarterly dissemination is around 75 days.

6.2 Punctuality

Punctuality is high. The statistics have been published at the pre-announced time from data for 1st quarter 2013 and forward.

STATISTICS DENMARK

7 Comparability

Comparable time series for all EU-member states and EFTA-member states are published by Eurostat.

There is no significant breaks in the existing time series. The time series for personkilometres for the Metro has a minor break between 2016 and 2017 due to changes in methodology.

7.1 Comparability - geographical

The statistics are published in the same way by countries within EU, EFTA and EU-candidate countries and Eurostat publishes comparable figures.

7.2 Comparability over time

The statistics are comparable over time.

The time series for personkilometres for the Metro has a minor break between 2016 and 2017 due to a change in the methodology for calculating journey lengths used for the calculation of personkilometres.

7.3 Coherence - cross domain

No related statistics exist.

7.4 Coherence - internal

Not relevant to this statistics.

8 Accessibility and clarity

The statistics are published yearly in Nyt fra Danmarks Statistik (Statistical news) , and all data is available in the online database of Statistics Denmark, http://www.Statbank.dk.

Selected series are publish in Statistical Yearbook and Statistical Ten-Year Review.

8.1 Release calendar

The publication date appears in the release calendar. The date is confirmed in the weeks before.

8.2 Release calendar access

The Release Calender can be accessed on our English website: Release Calender.

STATISTICS DENMARK

8.3 User access

Statistics are always published at 8:00 a.m. at the day announced in the release calendar. No one outside of Statistics Denmark can access the statistics before they are published. Theme publications etc. may be published at other times of the day. The National Statistician can decide that such publications may be released before their official publication time, e.g. to the media and other stakeholders.

8.4 News release

The statistics are published in New from Statistics Denmark (Nyt fra Danmarks Statistik) (in Danish only).

8.5 Publications

Goods and passenger transport by rail together with other transport statistics are included in tables in *Statistical Yearbook* and *Statistisk Tiårsoversigt (Statistical 10-year review)* (In Danish only).

8.6 On-line database

The Statbank contain various tables with Rail transport statistics.

A couple of examples are:

- Rail transport of passengers by unit and type of transport
- Rail transport of goods by unit, type of transport and type of goods.

8.7 Micro-data access

Micro-data is available through the research service provided by Statistics Denmark.

8.8 Other

Data on passenger and goods transport are provided to and published by Eurostat.

8.9 Confidentiality - policy

Due to the low number of operators and the structure of the sector as well as the public interest in the data, no active confidentiality is applied to the statistics. In particular within the transport of passengers, data identifiable on the main operators are published.

If the general rules of confidentiality of Statistics Denmark were applied, the low number of operators would result in no figures could be published.

STATISTICS DENMARK

8.10 Confidentiality - data treatment

There is no active confidentiality applied since the sector is characterised by a few operators which means that an application of the general rules of confidentiality of Statistics Denmark would result in no statistics could be published. Also the statistics are assessed to be of public interest. Finally operators that can be identified in the statistics are semi-public or receives significant public subsidies and are thus not covered by the general confidentiality rules.

8.11 Documentation on methodology

The guidelines of Eurostat for Rail transport statistics.

8.12 Quality documentation

Results from the quality evaluation of products and selected processes are available in detail for each statistics and in summary reports for the Working Group on Quality.

9 Contact

Rail statistics are within the division Short Terms Statistics.

Contact Inger Hansen, tel. +45 3917 3551, e-mail: iha@dst.dk

Responsible for the statistics is Peter Ottosen, Tel. +45 3917 3025, e-mail: pot@dst.dk.

9.1 Contact organisation

Statistics Denmark

9.2 Contact organisation unit

Division of Short Term Statistics, Department of Business Statistics

9.3 Contact name

Inger Hansen

9.4 Contact person function

Responsible for the statistics

9.5 Contact mail address

Sejrøgade 11, 2100 Copenhagen

9.6 Contact email address

iha@dst.dk

9.7 Contact phone number

+45 39 17 35 51

9.8 Contact fax number

+45 39 17 39 99