

**Documentation of statistics for  
Transport by Ferries and Passenger Ships 2020 Quarter 4**

## 1 Introduction

The purpose of the statistics on transport by ferries and passenger ships is to describe the transport of passengers and goods by ferries and passenger ships on domestic routes and in traffic between Danish and foreign ports.

The statistics are together with the other transport statistics used for analyses of the transport of passengers and goods. In the current form the statistics has been made since 1990.

## 2 Statistical presentation

The statistics on transport by ferries and passenger ships are a monthly and annual statistics on the transport of passengers and goods by ferries and by passenger ships between Danish ports or between Danish and foreign ports.

The most important variables used in the statistics are: Trips, passengers, vehicles, goods on road vehicles and other goods.

The statistics are published annually in *Nyt fra Danmarks Statistik* and in the Statbank.

The COVID19-pandemic haven't had any effect on neither data collection nor the quality of the statistics.

### 2.1 Data description

The statistics contain monthly and annual information on the transport of passengers and goods by ferries and by passenger ships between Danish ports or between Danish and foreign ports.

The statistics cover all routes with passenger transport performance (passenger-km) above 100,000 passenger-km or 10,000 vehicle-km annually. The statistics does not cover a number of smaller ferries and passenger vessels used on shorter route that mainly transport passengers and goods to small islands close to the mainland.

The most important variables used in the statistics are: Trips, passengers, vehicles, goods on road vehicles and other goods.

### 2.2 Classification system

Not relevant for these statistics.

### 2.3 Sector coverage

Transport by ferries.

## **2.4 Statistical concepts and definitions**

Vehiclekilometre: A measure representing the movement of one vehicle onboard a ferry over one kilometre

Journeys to and fro: Journeys to and fro

Goods by ferries: Goods transported by ferries. Either within another transport unit, e.g. truck or road train or as mixed cargo

Passengerkilometre: Passengerkilometre is the movement of one passenger over one kilometre

Tonnekilometre: Tonnekilometre is the movement of one tonne of cargo over one kilometre

## **2.5 Statistical unit**

The entity is the ferry route.

## **2.6 Statistical population**

Passenger and goods transport on passenger and ferry lines in Danish sea ports

## **2.7 Reference area**

Denmark.

## **2.8 Time coverage**

Annual statistics cover the period 1990 and forward whilst the monthly statistics cover the period from 2000 and forward.

## **2.9 Base period**

Not relevant for these statistics.

## **2.10 Unit of measure**

- passengers, cars, road goods vehicles, busses, etc. in thousands
- goods in 1,000 tonnes
- passenger transport performance in 1,000 passenger-kilometres

## **2.11 Reference period**

The reference period is the calendar year or calendar month.

## **2.12 Frequency of dissemination**

Quarterly and annually.

### **2.13 Legal acts and other agreements**

The Act on Statistics Denmark ([Lov om Danmarks Statistik](#)), Section 8, cf. Order no. 610 of 30 May 2018.

[Council Directive 2009/42/EC of 6 May 2009 on statistical returns in respect of carriage of goods and passengers by sea.](#)

### **2.14 Cost and burden**

The burden for data providers were for 2013 calculated to be 141,000 DKK in fixed 2004 prices.

### **2.15 Comment**

Additional information can be found at the subject page of the statistics or by contacting Statistics Denmark.

The COVID19-pandemic haven't had any effect on neither data collection nor the quality of the statistics.

## **3 Statistical processing**

Data for the statistics are collected through an electronic questionnaire. The statistics cover all ferry lines and passenger ships with goods or passenger traffic in route to or from Denmark.

The response rate is 100 percent.

Data are checked both automatically and manually at the time of data collection and in case of large deviations or missing reports the reporting company is contacted again. For a few operators the total freight weight is imputed based on the number of freight vehicles reported. The validated micro-data is aggregated and then checked for major fluctuations.

### **3.1 Source data**

Data are reported monthly by shipping lines covering transferred vehicles, passengers and goods.

The majority of passenger- and ferry routes in Denmark are covered by the statistics as on routes with less than 100.000 pkm and 10.000 vkm are excluded. There is less than 10 of these and their traffic are estimated to be less than 0.25 percent of the total traffic.

### **3.2 Frequency of data collection**

Data are collected monthly and published quarterly together with *Maritime transport on major ports*.

### **3.3 Data collection**

Data are collected through a web questionnaire through the reporting web portal, Virk Indberet, which is the Danish digital access point to the government.

### **3.4 Data validation**

Data are compared with previous reported data on both micro and macro level, On micro level each respondents information is compared to previous reported months and large deviations (individual assessment) will result in a new contact to the respondent to determine the reason for the development. A similar analysis is made at macro level to explain larger fluctuations.

Typical errors consist of mistyping and changes in the data sources or methodology used by the respondent. In the latter cases, the new data is assessed together with the respondent and if the new data is considered better and if so, comparable data are sought for as long a period back as possible.

The most frequent explanations are however natural fluctuations in traffic that does not result in changed reports.

### **3.5 Data compilation**

The primary data compilation is the validation.

In certain cases where information on the amount of goods is not collected by ferry lines, imputation of total amount of goods in tonnes is done based on the number of road goods vehicles transferred.

There is no missing data since there is 100 percent response rate. No correction is made for missing data. The smallest ferry lines are not part of the statistics. Their share of total transport of passengers and goods are estimated to be less than 0.25 percent of total. There is no correction for these in the final statistics.

### **3.6 Adjustment**

Not relevant for these statistics.

## **4 Relevance**

The statistics are used regularly by new media, consultancies, business associations, port enterprises, shipping lines and other enterprises as well as Eurostat for e.g. analyses of maritime traffic, investments in infrastructure, analyses of the maritime transport sector, economic development and environment.

### **4.1 User Needs**

The main users are the EU Commission, Danish ministries, business associations, port enterprises, shipping lines and other enterprises. The statistics are primarily used for monitoring the market and deciding transport policies

### **4.2 User Satisfaction**

No systematic information on user satisfaction is collected and feedback from users are rare.

The feedback that are received show that the statistics are broadly used among ferry operators, ports, news media, consultancies and ministries.

### **4.3 Data completeness rate**

The dissemination is in compliance with European legislation and guidelines.

## **5 Accuracy and reliability**

The statistics is assessed to be reliable as the main series are based on financial information from the reporters (ticket sale). Furthermore the reporters are obliged to monitor the number of passengers and vehicles onboard.

There is few and minor revisions and few errors are found in reported data.

The smallest ferry lines are not included in the statistics. Usually this is lines to the smallest Danish islands or crossing fjords.

In the main series uncertainty is largest for goods by goods motor vehicles that in some cases are estimated based on the number of goods motor vehicles.

### **5.1 Overall accuracy**

The statistics are in general reliable, taking due regard to the sampling error.

The overall accuracy on passengers is within a 2 percent range while the accuracy on goods is assessed to be larger among other things because the amount of goods in some cases are imputed.

The main reasons to less accuracy is

- the imputation of goods where the ferry lines does not weigh the transferred vehicles
- missing information on transferred bicycles

There is no sampling error since response rate is 100 percent.

### **5.2 Sampling error**

Not relevant for these statistics.

### **5.3 Non-sampling error**

The smallest ferry lines are not included in the statistics. They are assessed to cover less than 2 percent measured by number of passengers.

Partly missing data can occur where the data is not registered separately by the ferry lines, e.g. bicycles.

Imputation of missing data are done on amount of goods i cases where the ferry lines does not weigh the road transport vehicles. The imputation is done based on the number of road transport vehicles transferred.

## **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**

There has not been made a quality measurement of the statistics.

The statistics is assessed to be of good quality since it covers all major ferry lines and the response rate is high. On specific subcategories the quality might be lower.

## **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**

Preliminary figures are published and revisions occur. Data are revised 4-8 quarters back in connection with dissemination of new quarterly data.

The revisions are usually of minor importance.

## **6 Timeliness and punctuality**

The quarterly statistics are published around 70 days after the end of the quarter. Since statistics for the first quarter 2012 the statistics has been published at the pre-announced date.

### **6.1 Timeliness and time lag - final results**

The statistics are published quarterly and annually.

Time lag between the reference quarter and dissemination for quarterly statistics is about 70 days and for annual statistics 130 days.

## **6.2 Punctuality**

The statistics has since 1st quarter 2012 been published without delay compared to the pre-announced schedule.

## **7 Comparability**

The statistics are comparable with other EU- and EFTA member states statistics published by Eurostat.

The time series is comparable from 1990 onwards. In its present form the statistics is consistent since 1990 for annual figures and 2000 for monthly figures. The statistics are processed according to common EU guidelines and therefore comparable with statistics from other countries published by Eurostat.

### **7.1 Comparability - geographical**

The statistics are compiled according to Eurostat guidelines and are comparable to similar statistics from other countries published by Eurostat.

### **7.2 Comparability over time**

The statistics are fully comparable since 1990 (annual figures) and 2000 (monthly figures).

### **7.3 Coherence - cross domain**

Statistics on transport through major ports and minor ports are related since they include freight transport with other vessel type than ferries and passenger ships and they include passengers on cruises. The three statistics complement each other and provides a complete picture of passenger and freight transport by sea vessels in Denmark. They are published combined as maritime transport statistics.

### **7.4 Coherence - internal**

The statistics consist of report from passenger and ferry lines that call upon Danish ports. With the exception of very few of the smallest routes all routes are included and answer same set of questions. Data are not combined with other sources. Thus no consistency problems arise between sources or in output.

## **8 Accessibility and clarity**

The statistics are published quarterly with figures in Statistikbanken in tables SKIB31, SKIB32, SKIB33 og SKIB34. Besides the figures are included in Statistical Yearbook up to 2017 and Statistical 10-year review. Annual data is published in an annual news release.

### **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 Calendar can be accessed on our English website: [Release Calendar](#).

## 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.

## 8.4 News release

The statistics are published in [Nyt fra Danmarks Statistik](#) annually.

## 8.5 Publications

Transport with ferries and passenger ships are together with other transport statistics included in [Statistical Yearbook](#) up to and including 2017 and [Statistical 10-year review](#).

## 8.6 On-line database

The statistics are published quarterly in the Statbank under the topic Business Sectors, Transport, passenger transport where the following tables can be found containing monthly figures:

- [SKIB33](#): Domestic ferry transport by ferry route and unit
- [SKIB34](#): International ferry transport by ferry route and unit

Besides the following tables contain annual figures:

- [SKIB31](#): Domestic transport by ferry by ferry routes and unit
- [SKIB32](#): International transport by ferry by ferry route and unit

## 8.7 Micro-data access

Access to Micro-data is available through the Researcher Services in Statistics Denmark.

From 1992 all reported data with regard to transport by Ferry and Passenger ships are stored electronically.

## 8.8 Other

The statistics are sent to Eurostat as part of Maritime transport statistics and are published in Eurostat's [database](#).

## 8.9 Confidentiality - policy

No confidentiality treatment are done.

### **8.10 Confidentiality - data treatment**

No confidentiality treatment are done.

### **8.11 Documentation on methodology**

For additional information, please refer to Eurostat's [Guidelines for Maritime 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**

The administrative placement of these statistics are in the division of Short Term Statistics. The person responsible is Peter Ottosen, tel. +45 39 17 30 25, e-mail: pot@dst.dk

Contact person: Heidi Sørensen, tel. +45 39 17 35 62, e-mail: hsn@dst.dk

### **9.1 Contact organisation**

Statistics Denmark

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Short Term Statistics, Business Statistics

### **9.3 Contact name**

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