

**Documentation of statistics for
Port calls in Danish sea ports 2020 (experimental statistics)**

1 Introduction

This experimental statistics shows the activity in Danish ports measured by port calls. The statistics as an experimental statistics is not part of the official statistics program of Statistics Denmark. The statistics is experimental because it is the first time Statistics Denmark uses the large amounts of data in the AIS system (Automated Information System) and the methods for data treatment are still under development. The details in the presentation and the form of dissemination can change as Statistics Denmark receives feedback from users or during the continued development.

2 Statistical presentation

The statistics is an index of the number of port calls to Danish ports and covers freight and container vessels. The statistics is made based on ship position data (AIS data) made available by the Danish Maritime Authority. The statistics is only published in the Statbank.

2.1 Data description

Only in Danish. An English version will be uploaded as soon as possible

2.2 Classification system

Only in Danish. An English version will be uploaded as soon as possible

2.3 Sector coverage

Danish ports

2.4 Statistical concepts and definitions

AIS: AIS stands for Automated Information System and is an international safety system where ships are transmitting information on e.g. position, direction and speed in order to reduce the risk of collision. The data is collected in Denmark by the Danish Maritime Authority to monitor the ship traffic in Danish waters.

Port call: A port call is when a vessel arrives to a port. The arrival time is used to periodise the port call

2.5 Statistical unit

Only in Danish. An English version will be uploaded as soon as possible

2.6 Statistical population

Port calls by freight and container vessels in Danish sea ports.

2.7 Reference area

Denmark

2.8 Time coverage

2017-

2.9 Base period

2018 (average) = 100

2.10 Unit of measure

Only in Danish. An English version will be uploaded as soon as possible.

2.11 Reference period

Calendar month.

2.12 Frequency of dissemination

Monthly

2.13 Legal acts and other agreements

Only in Danish. An English version will be uploaded as soon as possible

2.14 Cost and burden

There is no response burden

2.15 Comment

Additional information can be acquired by contacting Statistics Denmark

3 Statistical processing

AIS data is received in a continuous stream and registered daily. The process starts with a data reduction after which a representative arrival and departure observation is selected. Afterwards the ports are defined from the AIS-data after which ports and arrival/departure pairs representing a port call is matched.

Finally tables, indices and seasonally adjustments are produced.

3.1 Source data

Only in Danish. An English version will be uploaded as soon as possible

3.2 Frequency of data collection

Only in Danish. An English version will be uploaded as soon as possible

3.3 Data collection

Only in Danish. An English version will be uploaded as soon as possible

3.4 Data validation

Only in Danish. An English version will be uploaded as soon as possible

3.5 Data compilation

Only in Danish. An English version will be uploaded as soon as possible

3.6 Adjustment

Seasonally adjustment is done

4 Relevance

The statistics provides faster data on the activity in Danish ports and the possibility to cover more types of vessels compared to existing maritime statistics. The statistics is experimental and a part of this concept is to reveal relevance and user needs. Industry organisations have however expressed interest in the statistics.

4.1 User Needs

Only in Danish. An English version will be uploaded as soon as possible

4.2 User Satisfaction

Only in Danish. An English version will be uploaded as soon as possible

4.3 Data completeness rate

Only in Danish. An English version will be uploaded as soon as possible

5 Accuracy and reliability

The precision of the statistics in terms of the development of the actual port calls in Danish ports and for freight and container vessels is relative high based on a comparison between the quarterly maritime statistics.

The statistics is at the moment assessed to have a medium reliability since no revision analysis has been performed yet.

5.1 Overall accuracy

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5.2 Sampling error

Only in Danish. An English version will be uploaded as soon as possible

5.3 Non-sampling error

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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

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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

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6 Timeliness and punctuality

The statistics is planned for publication approximately 10 days after the reference period.

6.1 Timeliness and time lag - final results

Only in Danish. An English version will be uploaded as soon as possible

6.2 Punctuality

Only in Danish. An English version will be uploaded as soon as possible

7 Comparability

Only few other countries uses AIS data to make maritime statistics since the statistics still is an experimental statistics without a fixed international methodology. A comparison with similar data from the maritime statistics is possible despite a number of differences.

7.1 Comparability - geographical

Only in Danish. An English version will be uploaded as soon as possible

7.2 Comparability over time

Only in Danish. An English version will be uploaded as soon as possible

7.3 Coherence - cross domain

Only in Danish. An English version will be uploaded as soon as possible

7.4 Coherence - internal

Only in Danish. An English version will be uploaded as soon as possible

8 Accessibility and clarity

The statistics is published in [Statbank](#) and on the subject page for [Harbours](#)

8.1 Release calendar

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

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.

8.2 Release calendar access

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

8.4 News release

Only in Danish. An English version will be uploaded as soon as possible

8.5 Publications

Only in Danish. An English version will be uploaded as soon as possible

8.6 On-line database

Only in Danish. An English version will be uploaded as soon as possible

8.7 Micro-data access

Only in Danish. An English version will be uploaded as soon as possible

8.8 Other

Not relevant

8.9 Confidentiality - policy

[Data Confidentiality Policy](#) for Statistics Denmark is applied.

8.10 Confidentiality - data treatment

Not relevant

8.11 Documentation on methodology

Not relevant for these 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

Administratively the statistics is located in the division of Short Term Statistics. Responsible person is Peter Ottosen, tel. +45 3917 3025, e-mail pot@dst.dk

9.1 Contact organisation

Statistics Denmark

9.2 Contact organisation unit

Short Terms Statistics, Business Statistics

9.3 Contact name

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N/A