

# Documentation of statistics for Pipeline Transport 2016



#### 1 Introduction

The purpose of the pipeline statistics is to shed light on the trunk pipeline network and transport of oil and natural gas by pipelines.

The statistics were published for the first time in the theme publication *Transport 2000*. For the reference year 2001 and onwards statistics on pipeline transport is published annually.

# 2 Statistical presentation

The statistics describe the pipeline network and transport of oil and natural gas in pipelines.

#### 2.1 Data description

The statistics shows the development in transport of oil and natural gas in pipelines in the overall distribution network in Denmark as well as investments in infrastructure.

Information is collected from the enterprises operating the Danish pipelines, primarily from the Danish oil and gas fields in the North sea to either Danish mainland or abroad. The main variables are the transported amount of oil and gas and the length of and investments in the network.

# 2.2 Classification system

Not relevant

## 2.3 Sector coverage

**Transport** 

#### 2.4 Statistical concepts and definitions

Pipelines: Pipelines are transportation oil and gas pipelines designed to bring product from platforms to processing plants on land or between countries. The pipelines are designed to withstand a pressure of at least 80 bar.

Tonnekilometre: Unit of measure representing transport of one tonne of goods by pipeline over one kilometre

# 2.5 Statistical unit

The statistical entity is the network of oil and gas pipelines

#### 2.6 Statistical population

Enterprises with transactions in the Danish oil and gas network.



## 2.7 Reference area

The Danish exclusive economic zone (EEZ).

# 2.8 Time coverage

2000-

# 2.9 Base period

Not relevant

#### 2.10 Unit of measure

The units of measure used are

- amounts measured in metric tonnes
- transport performance measured in million tonnes-kilometres

# 2.11 Reference period

Transport in pipeline is annually.

The length of the pipeline network refers to 31 December.

# 2.12 Frequency of dissemination

Annually.

## 2.13 Legal acts and other agreements

The Act on Statistics Denmark (Lov om Danmarks Statistik), Section 8, cf. Order no. 599 of 22 June 2000.

The data collection is not based on an EU legislation.

#### 2.14 Cost and burden

Insignificant.

### 2.15 Comment

The statistics has a theme page.



# 3 Statistical processing

The statistics on pipelines are collected annually from enterprises with transport activities in pipelines. Validation if done by checking for significant fluctuation in comparison to previous reported data as well as deviations compared to the production of oil and natural gas.

#### 3.1 Source data

Data is reported by the enterprises that owns, controls or operates oil and gas pipelines in Denmark.

#### 3.2 Frequency of data collection

Annually

#### 3.3 Data collection

Data is collected electronically through the Danish public sector data collection portal, Virk.dk.

#### 3.4 Data validation

The data is checked for major fluctuations compared to previous reported data as well as reported production in the oil and gas fields. The main effect to the final statistics is elimination of overlapping reports from different enterprises.

## 3.5 Data compilation

Data is collected electronically in aggregated form from data providers. No imputation are done. Correction of oil quantities are made to account for water content in the oil.

#### 3.6 Adjustment

Adjustment for oil for water content is performed in order to calculate crude oil excluding water. It is assumed that the water content is 3 per cent.

#### 4 Relevance

The statistics is relevant in order to complete the transport statistics and monitor transport by all modes. The statistics covers the same overall variables as other transport statistics: transport performance, infrastructure and investments.



#### 4.1 User Needs

The ministries, business associations and enterprises as well as international organisations.

The statistics are mostly used for monitoring the market and deciding transport policies.

Transport in pipelines is part of the overall transport statistics that covers transport by various modes of transport.

#### 4.2 User Satisfaction

Information on user satisfaction is not collected systematically. Rare feedback from users shown satisfaction with the statistics.

# 4.3 Data completeness rate

The statistics covers the main elements of transport statistics: transported volumes, infrastructure and investments and is comparable to other transport statistics.

# 5 Accuracy and reliability

The statistics is based on an exhaustive census with few and large enterprises and has 100 percent response rate. The transported amounts are coherent with the production of oil and natural gas.

Revisions in published data is rare.

# 5.1 Overall accuracy

The statistics are assessed to be reliable since, on the one hand the statistics are completely covered, i.e. all relevant enterprises report and on the other hand, the transported amounts correspond in volume and development with the production of oil and natural gas, cf. <u>The Danish Energy Agency</u>.

# 5.2 Sampling error

Not relevant

#### 5.3 Non-sampling error

There is a small possible error in calculating transported oil excluding water since water content is based on an average estimate.

### 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 statistics is based on reports from a few and very large enterprises working within an sector with extensive legislative control. The reported data show a large degree of consistency.

Partly because of the above and partly because a great consistency between transported quantities and produced quantities, cf. <u>Danish Energy Agency</u>, the overall quality is assessed to be high.

Calculations are made on transport performance (tonnes-kilometres) and crude oil excluding water.

Transport performance is calculated based on reported quantities of high quality and travelled distance. The latter can be connected with uncertainty as it is typically an average transport distance. In the case of pipelines the uncertainty on travelled distance is very small and information about transport performance is thus considered of high quality.

Calculation of crude oil excluding water is calculated based on the assumption that water content in average is 3 percent. The water content can vary and there is an uncertainty in this calculation. It is assessed to be quite small.

### 5.7 Data revision - policy

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

#### 5.8 Data revision practice

Only final figures are published.

#### 6 Timeliness and punctuality

The statistics are published between 250 and 300 days after end of reference year.

Since 2011 the statistics has been published at the preannounced time.

## 6.1 Timeliness and time lag - final results

The statistics are published annually between 250 and 300 days after the end of the reference year.



# 6.2 Punctuality

The statistics is published annually without delay compared to the preannounced time.

# 7 Comparability

The statistics are compiled in accordance with EU guidelines.

A consistent time series exists since 1982.

#### 7.1 Comparability - geographical

Eurostat publishes comparable on transport in pipelines for countries that report the statistics.

## 7.2 Comparability over time

Statistics from 1982 and onwards are comparable.

#### 7.3 Coherence - cross domain

Comparable transport statistics are not available.

## 7.4 Coherence - internal

Not relevant

# 8 Accessibility and clarity

The statistics are published annually as tables in <u>Statbank.dk</u>.

Selected tables are published in Statistical Yearbook and Statistical 10-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.



#### 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

There is no news release in connection to the data.

#### 8.5 Publications

Transport in pipelines is part of other transport statistics in tables in <u>Statistical Yearbook</u> and <u>Statistical Ten-year review</u>.

#### 8.6 On-line database

The statistics are published in the StatBank under the subjects <u>Transport of goods by pipeline</u> <u>Pipelines</u> in the following tables:

- ROR1: Pipeline network by pipelines and time
- ROR2: Investments in the pipeline network by pipelines, unit and time
- ROR11: Transport in pipelines by product, unit and time

#### 8.7 Micro-data access

Micro-data can be made accessible through Statistics Denmarks researcher-access.

#### 8.8 Other

Not relevant

#### 8.9 Confidentiality - policy

The statistics follows the principles in Statistics Denmarks Confidentiality policy.

# 8.10 Confidentiality - data treatment

However, due to the small number of reporters complete confidentiality cannot be guaranteed. It is seen as acceptable since there already is a high degree of publicity with regard to the exploitation of oil and natural gas in reports from e.g. The Danish Energy Agency.

# 8.11 Documentation on methodology

A paper on the applied methodology is under development and will be presented at the transport subject page when available.

## 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 this statistics is in the division of Short term statistics. The responsible person is Peter Ottosen, tel. +45 3917 3025, e-mail: pot@dst.dk

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