

Documentation of statistics for Internet, radio and TV 2019



1 Introduction

These statistics cover the consumption and turnover of electronic media in Denmark. For example, the figures show how may active internet subscriptions there are in Denmark, and the trend in advertising revenue on the internet. These statistics are based on information from the Danish Energy Agency and The Danish Media Association.

2 Statistical presentation

These statistics contain semi-annual estimates of the number of broadband subscriptions by type of broadband, as well as the number of active internet subscriptions for private and businesses. In addition, these statistics contain annual estimates for advertising turnover by different types of media, such as radio and television, and quarterly turnover estimates on the internet by type of advertising.

2.1 Data description

These statistics show the development in the number of broadband subscriptions and active internet subscriptions as well as advertising turnover, by type of media. The historical tables contain data on consumption and turnover of, and access to, other electronic media, such as radio and television.

The active Statbank tables are based on information from the Danish Energy Agency's Tele statistics, which is published twice a year, the market statistics from The Danish Media Associations Online Index, which is published four times a year, and the Advertising Consumption Survey from The Danish Media Association, which is published once a year. The historical Statbank tables are also based on several studies from TNS Gallup as well as figures from the trade organization Consumer Electronics and Copydan.

2.2 Classification system

Broadband subscriptions are grouped by **type of broadband**. Active internet subscriptions are divided by **private and business**. Business subscriptions are further divided by whether they are used by businesses or individuals. Advertising turnover is grouped by types of **media** and turnover from internet is grouped by **type of advertising**. No standard classifications are used for this statistic.

2.3 Sector coverage

Not relevant for these statistics.



2.4 Statistical concepts and definitions

Broadband: Broadband: Sold broadband subscriptions that have marketed a downstream speed of at least 144 kbit / s.

Used car trade: Trade in used vehicles, i.e. re-registration of used vehicles and ownership change of already registered vehicles.

Fixed wireless: Fixed wireless: Broadband based on e.g. WiMAX, WLL or WiFi, delivered wirelessly to a box or satellite dish mounted on the end-user's household / building. Fixed wireless broadband should not be confused with a router installed inside the house / building. The connection assumes free sight between the broadband company's antenna and the antenna of the end user. is dependent on the distance between them.

Fiber network: Fiber network: A connection where the signals are passed through optical fibers by means of light signals. Fiber network connections, unlike other broadband connections, often have as fast upstream speeds as downstream speeds. Fiber can provide very high speeds when downloading and uploading data.

Cable television networks: Cable TV networks: A connection where the cable TV network is used for broadband while broadcasting TV programs. Broadband speed depends on the number of concurrent users. Connections over the cable TV network often have much faster downstream speeds than upstream speeds.

LAN (Local Area Network): : LAN (Local Area Network): Consists of an internal wired or wireless local area network, for example, a housing association or a college, where the individual households / rooms share a common Internet connection. The connection to the property most often consists of an optical fiber (fiber-lan), but can also consist of other types of connections.

xDSL (Kobbernet):: xDSL (Copper Grid): A connection where the traditional telephone connection is used for broadband. The speed depends of the distance to the control center / microcontroller. xDSL connections often have much faster downstream speeds than upstream speeds.

Web banners: Graphic, audio-visual, text-based and / or interactive advertising products displayed in connection with Internet media products (for example, on a web page, in an email or on mobile platforms) - either as a fixed placement on the media product (sponsorship banners), on special parts of the media product (sections) or on all parts of the media product.

Market place: Inclusion of product and company information in searchable online directories (typically web pages, online or mobile applications), which is included as a third party between buyer and seller. The classic type of marketplace is classifieds services. The price of the recorded products may be negotiated or the deal can be closed directly in the marketplace (Auctions). Marketplace recordings are displayed as listing product or company information obtained through directory search or browsing through directory sites. Marketplaces also include price comparison services.

Partnerships: Advertiser paid content or services that are integrated in the form, content or function with the medium, such as a search service or a classifieds service. Therefore, it is not enough for a banner to be permanently placed on a page, for example, one year at a time to be included in Partnerships.

2.5 Statistical unit

Broadband subscriptions, active internet subscriptions and advertising turnover.



2.6 Statistical population

Private and commercial internet subscriptions in Denmark as well as the Danish market for advertising revenue in various media.

2.7 Reference area

Denmark.

2.8 Time coverage

Estimates for the number of broadband subscriptions by type of broadband (DIS122) are available from the second half of 2000 and onwards. Estimates for the number of active internet subscriptions by consumer group (DIS129) are available from the second half of 2002 and onwards.

Estimates for advertising revenue by media (VIR316) are available from 1999 and onwards and figures for internet revenue by type of advertising (VIR331) are available from the first quarter of 2000 and onwards.

In addition, there are a number historical tables in the StatBank, dating back to the 1990s.

2.9 Base period

For <u>turnover from internet by type of advertising</u> thee indices are published with the following base years:

- Banner ads and partnerships (2000Q1=100)
- Market place (2006Q1=100)
- Job (2003Q1=100)

2.10 Unit of measure

Number and market share, DKK and indices.

2.11 Reference period

The reference time vary from quarterly (VIR331), semi-annually (DIS122 and DIS 129) and yearly (VIR316). In addition, a few of the historical Statbank tables (DIS131 and DIS133) have the following periodic reference times: The first period covers weeks 1-12 / 13 (January-March), the second period covers weeks 13 / 14-25 / 26 (April-June), and the third period covers weeks 26 / 27-47 / 48 (July-November).

2.12 Frequency of dissemination

Yearly, semi-annual and quarterly.



2.13 Legal acts and other agreements

Statistics Denmark does not collect primary data for the compilation of these statistics. These statistics are not covered by EU regulation. However DIS122 and DIS129 are based on the Danish Energy Agency's telecommunications statistics, which are collected according to EU requirements from DG Connect / EU Commission.

2.14 Cost and burden

Statistics Denmark passes forward pre-produced statistical estimates for internet, radio and television. Therefore, there is no direct reporting in relation to the compilation of these statistics.

2.15 Comment

For more information, go to the subject page on Internet, Radio and TV.

3 Statistical processing

For these statistics, Statistics Denmark solely perform quality assurance and dissemination of information that has been collected, processed and disseminated by other statistical producers and data providers. Please consult the original sources for a detailed review of the statistical processing.

3.1 Source data

The Danish Energy Agency's semi-annual telecommunications statistics contain information on the developments in the Danish telecommunications market. The statistics are based on reports from telecommunications providers in Denmark with the number of subscriptions, landline traffic, mobile telephony and broadband as well as IPTV and bundled services.

The Danish Media Association's Advertising Consumption Survey is an annual survey and survey of the overall Danish advertising market. The survey is conducted on the basis of confidential reporting from the individual media groups to the Danish Advertising Consumption Survey, and is done in collaboration with the Institute for Advertising and Market Statistics (IRM).

The market statistics from The Danish Media Association's Online Index show the trend in online advertising. It is based on reports from members, media agencies' turnover as it is reported to the industry organization Creativity & Communication, as well as market estimates from industry players and expert reviews.

The historical Statbank tables are also based on several studies from TNS Gallup as well as figures from the trade organization Consumer Electronics and Copydan.

3.2 Frequency of data collection

Yearly, semi-annual and quarterly.

3.3 Data collection

Dissemination of statistics from the Danish Energy Agency and The Danish Media Association.



3.4 Data validation

All active Statbank tables consist of ready-made statistics that Statistics Denmark disseminates. The data validation therefore consists of comparing new and updated figures from the original sources with previous time series and sum checks. If the data validation raises questions, contact the original sources.

3.5 Data compilation

Since data is collected and processed in the institutions that collect data, Statistics Denmark does not do any actual data processing. In some cases, percentages are calculated.

3.6 Adjustment

Not relevant for these statistics.

4 Relevance

Primary users are the Ministry of Culture, The Agency for Culture and Palaces, researchers, the press and interest organizations. User satisfaction has not been examined.

4.1 User Needs

Primary users are the Ministry of Culture, The Agency for Culture and Palaces, researchers, the press and interest organizations.

4.2 User Satisfaction

User satisfaction has not been examined for these statistics.

4.3 Data completeness rate

Not relevant for these statistics.

5 Accuracy and reliability

Statistics on broadband subscriptions and active internet subscriptions are based on the Danish Energy Agency's telecommunications statistics, which are based on reports from most of the providers of electronic communications networks and services in Denmark. Advertising revenue by media is based on The Danish Media Association's Advertising Consumption Survey, and internet revenue by ad type is based on market statistics from The Danish Media Association's Online Index. Both the Advertising Consumption Survey and the market statistics are used and recognized by the industry.



5.1 Overall accuracy

Since electronic communications networks and services can be offered in Denmark by anyone without prior permission, registration or the like, the assumption is that not all providers in the Danish telecommunications market are included in the telecommunications statistics. In addition, neither foreign providers nor providers offering exclusively hotspots are included in the statistics.

The three most recent six month periods in the statistics on broadband and active Internet subscriptions are preliminary and are therefore continuously updated. Figures that are 32 months or older at the reference date are considered final. The market statistics from The Danish Media Association's Online Index are always published by Statistics Denmark irrespective of missing reports. Delayed reporting are incorporated in the next coming statistics. The latest quarters in revenue on the internet by ad type are therefore preliminary. The most recent year in media ad revenue statistics is preliminary and is therefore continuously updated. Figures that are 28 months or older in relation to the reference year are considered final.

No uncertainty calculations are available.

For further considerations regarding precision and reliability are referred directly to the original sources. For information regarding the precision and reliability of the historical statistics bank tables are referred to respectively. TNS Gallup, the industry organization Consumer Electronics and Copydan.

5.2 Sampling error

Not relevant for these statistics.

5.3 Non-sampling error

In view of the competition in the telecommunications market, market shares in the Danish Energy Agency's telecommunications statistics are not published for providers with a market share of less than five percent, unless the company is part of a group collaboration with another telecommunications company and the companies' total market share is or exceeds five percent. This applies from the second half of 2011. Previously, the discretionary limit was three percent.

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

Estimates on broadband subscriptions and active internet subscriptions are based on the Danish Energy Agency's telecommunications statistics, which are based on reports from most of the providers of electronic communications networks and services in Denmark. The figures are therefore considered to show a fairly accurate picture of the development in the number of broadband subscriptions and active internet subscriptions.

Advertising revenue by media is based on The Danish Media Association's Advertising Consumption Survey, and internet revenue by ad type is based on market statistics from The Danish Media Association's Online Index. Both the Advertising Consumption Survey and the market statistics are used and recognized by the industry.

For further considerations regarding the overall quality, please consult the sources directly.

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

The three most recent six month periods in the statistics on broadband subscriptions and active internet subscriptions are preliminary and therefore continuously updated. The total number of broadband subscriptions is typically revised by \pm 1 per cent. Figures that are 32 months or older at the reference date are final. The market statistics from The Danish Media Association's Online Index are always published irrespective of missing reportings. Delayed reportings are incorporated in the next coming statistics. The latest quarters in revenue on the internet by ad type are therefore preliminary. The most recent year in media ad revenue statistics is preliminary and is therefore continuously updated. In some cases (in the reference years 2013 and 2015), total advertising revenue has been revised by less than \pm 0.5 per cent. Figures that are 28 months or older in relation to the reference year are considered final.

6 Timeliness and punctuality

Estimates on broadband subscriptions and active internet subscriptions are published approx. eight months after the end of the reference period. Internet revenue by ad type is published an average eight to nine months after the end of the reference quarter. Advertising revenue by media is published at the end of April two years after the reference year. The publication date of the statistics may be delayed compared to scheduled release times, because the publishing times of the original sources may vary.

6.1 Timeliness and time lag - final results

Both preliminary and final figures are published. The last three months of DIS122 and DIS129 are preliminary. Figures that are 32 months or older at the reference date are final. The past year in VIR316 is tentative. Figures that are 28 months or older in relation to the reference year are considered final.



6.2 Punctuality

The publication date of the statistics may be delayed compared to scheduled release times. That's because the publishing times of the original sources may vary.

7 Comparability

From the first half of 2008, active internet subscriptions only include broadband connections, i.e. internet connections with downstream capacity of 144 Kbit/s or more. From the second half of 2008 and onwards, business subscriptions are divided into subscriptions used by business and private. No comparison of these statistics has been made with similar international estimates. For further considerations regarding comparability please consult the original sources.

7.1 Comparability - geographical

No international comparison is made in the dissemination of these statistics. These statistics are not based on international regulations or guidelines and may thus deviate from similar estimates in other countries.

7.2 Comparability over time

Statistics Denmark currently disseminates four Statbank tables with statistics on internet, radio and TV. These statistics are comparable since the turn of the millennium. DIS122 and DIS129 have been slightly revised when the tables were updated on February 14, 2020. The table is now consistent with the Danish Energy Agency's telecommunications statistics. In addition, there are a number of archived tables in the Statbank which goes back to the 1990's.

From the first half of 2008, active internet subscriptions only include broadband connections, i.e. internet connections with downstream capacity of 144 Kbit/s or more. From the second half of 2008 and onwards, business subscriptions are divided into subscriptions used by business and private.

7.3 Coherence - cross domain

These statistics supplement other <u>cultural statistics</u>.

7.4 Coherence - internal

Not relevant for these statistics.

8 Accessibility and clarity

The statistics are published in the **<u>StatBank</u>**.

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.

8.4 News release

Not relevant for these statistics.

8.5 Publications

Publications only in Danish.

8.6 On-line database

The statistics are published in the StatBank in the following tables:

- <u>DIS122</u>: Broadband subscriptions by type of broadband
- DIS129: Active internet subscriptions by number and share and private and business
- <u>VIR316</u>: Advertising turnover by media
- <u>VIR331</u>: Turnover from internet by type of advertising

8.7 Micro-data access

For this topic, Statistics Denmark disseminates aggregated statistics that have been collected and processed by others, and do therefore not possess the underlying micro-data.

8.8 Other

Figures are available on the web pages of the sources for these statistics.

8.9 Confidentiality - policy

Data Confidentiality Policy for Statistics Denmark.

8.10 Confidentiality - data treatment

Statistics Denmark disseminates aggregated data in accordance with Statistics Denmark's Data Confidentiality Policy.

8.11 Documentation on methodology

Documentation on methodology only in Danish.

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 is in the division of Science, Technology and Culture. The person responsible is Ditte Trier Jakobsen, tel.: + 45 3917 3518, e-mail: dtj@dst.dk.

9.1 Contact organisation

Statistics Denmark

9.2 Contact organisation unit

Science, Technology and Culture, Business Statistics.

9.3 Contact name

Ditte Trier Jakobsen

9.4 Contact person function

Responsible for the statistics

9.5 Contact mail address

Sejrøgade 11, 2100 Copenhagen

9.6 Contact email address

dtj@dst.dk

9.7 Contact phone number

 $+45\ 3917\ 3518$

9.8 Contact fax number

+45 39 17 39 99