

Statistics on ICT usage and e-commerce introduced

Statistics Explained

Statistics on [Information and Communication Technologies \(ICTs\)](#) and e-commerce describe the most recent developments in digital technologies' usage in enterprises and in particular the use of internet transforming the business world in the [European Union \(EU\)](#) and its Member States. ICT statistics are an important tool for formulating and monitoring policies in the Digital Economy and Society. With the [Digital Single Market Strategy](#) the European Commission wants to make the EU's single market [fit for the digital age](#) – moving from national digital markets to a single one. Among others, data are used largely to measure the performance of Europe in the [Digital Economy and Society Index](#) .

The dedicated website [Digital economy and society - Overview](#) provides an overview and the links to available data, methodologies, legislation, publications and policy background.

Statistics on ICT-usage and e-commerce are a topic of European business statistics. This article is therefore linked to the online [European business statistics manual](#) , which provides a detailed description of European business statistics (EBS), including how they are compiled and the methodologies behind them.

General overview

ICT statistics are collected via an annual survey. Mobile internet access, social media use, e-commerce, cloud computing services, the use of e-business solutions, big data analysis, 3D printing, use of robotics, Internet of Things, Artificial Intelligence, ICT specialists and skills and ICT security are subjects covered by statistics on ICT usage and e-commerce¹. Given the fast technological developments and the miscellaneous needs for various topics related to ICT, the content of the ICT usage and e-commerce questionnaire changes every year. Nevertheless, at the same time the burden on respondents should be limited to the extent possible, therefore not all subjects are collected every year.

Scope

Statistics on ICT usage and e-commerce cover the 27 EU Member States, and also provide aggregate data for the EU. There is also a good coverage of indicators from enlargement and EEA countries beyond the EU.

Data are collected and published with an annual frequency. Depending on the subject, the reference period is the situation when the survey takes place or the calendar year before².

The activity coverage of the survey is restricted to those enterprises whose principal activity is within [NACE Rev. 2](#) Sections C to N, excluding Section K, but including Group 95.1: manufacturing; electricity, gas, steam and air conditioning supply; water supply, sewerage and waste management and remediation activities; construction; wholesale and retail trade, repair of motor vehicles and motorcycles; transportation and storage; accommodation

¹Data are also available on the use of information and communication technologies in households and by individuals.

²For specific indicators in e-commerce, ICT security (insurance), Big Data Analysis and ICT specialists and skills.

and food service activities; information and communication; real estate activities; professional, scientific and technical activities; administrative and support service activities; and the repair of computers and communication equipment.

The annual survey on ICT usage and e-commerce covers enterprises that have at least 10 employees and self-employed persons. The data are broken down according to the enterprise size classes of small enterprises (10-49 employees and self-employed persons), medium enterprises (with 50-249 employees and self-employed persons) and large enterprises (250 or more employees and self-employed persons).

Data for enterprises with less than 10 employees and self-employed persons are collected on an optional basis, i.e. only by some countries.

Statistics on ICT-usage and e-commerce are part of European business and trade statistics. The European business statistics manual describes the [scope and main concepts](#) of these statistics.

Legal and non-legal measures

The legal base is [Regulation \(EU\) No 2019/2152 of the European Parliament and of the Council of 27 November 2019 on European business statistics](#)³, implemented by annual Commission implementing regulations. To facilitate the data collection, Eurostat develops together with the experts from the National Statistical Authorities annual model questionnaires. They can be downloaded from the [dedicated website's methodology page](#).

The European business statistics manual gives an overview of [legal and non-legal measures](#) for statistics in general and European business and trade statistics.

Statistical units/Observation units

A [statistical unit/observation unit](#) is the entity for which data are collected. It is to be distinguished from the reporting unit, i.e. the entity which reports data to the Statistical Institute. The statistical observation unit is the enterprise, as defined in [Regulation \(EEC\) No 696/1993](#).

More explanations on the statistical unit enterprise can be found [here](#).

Classifications

The classifications used for the activity breakdown is [NACE](#) Rev.2 (Statistical classification of economic activities in the European Community, second revision).

A distinction is made for the data needed to publish [national aggregates](#). The following sections, divisions and aggregates of sections, divisions and groups are required:

- aggregates of NACE sections and group C+D+E+F+G+H+I+J+L+M+N+95.1, D+E
- NACE sections: C, F, G, H, I, J, L, M, N
- NACE divisions: 47, 55
- aggregates of NACE divisions: 10+11+12+13+14+15+16+17+18, 19+20+21+22+23, 24+25, 26+27+28+29+30+31+32+33
- aggregate of the divisions and groups: 26.1+26.2+26.3+26.4+26.8+46.5+58.2+61+62+63.1+95.1

In addition, further data are collected with a reliability sufficient to allow the calculations of [European totals \(EU aggregates\)](#). The following sections, divisions, group and aggregates of NACE divisions are required:

³OJ L 327, 17.12.2019, p. 1ff.

- NACE sections: D, E
- NACE divisions: 19, 20, 21, 26, 27, 28, 45, 46, 61, 72, 79
- NACE group: 95.1
- aggregates of NACE divisions: 10+11+12, 13+14+15, 16+17+18, 22+23, 29+30, 31+32+33, 58+59+60, 62+63, 69+70+71, 73+74+75, 77+78+80+81+82

More information on the classifications used in business and trade statistics and the NACE classification can be found [here](#).

Data compilation and data sources

In line with the principle of subsidiarity, statistics are obtained from the Community surveys on ICT usage and e-commerce in enterprises conducted by National Statistical Authorities in the first months of the year when the survey takes place.

Data transmission, data validation, quality and metadata

National ICT data are transmitted to Eurostat by 5 October of the year when the survey takes place. Data are transferred to Eurostat via the [EDAMIS web portal](#) which is the single entry point for all data transmission to Eurostat.

ICT data are regularly monitored for their quality and especially for compliance with the regulations. National Statistical Authorities provide Eurostat with metadata by 31 May in the year when the survey takes place, and quality reports by 5 November in the year when the survey takes place. [Metadata at European level](#) are published together with [Eurobase](#) tables. Furthermore, country specific notes and other related methodological information are provided to users via links on the dedicated website.

The European business statistics manual gives further information on [data validation](#), [reference metadata](#) and [data exchange – EDAMIS](#).

Data requirements

The data requirements are specified in the annual Commission implementing regulations. They describe the details of the statistical indicators that the National Statistical Authorities have to transmit to Eurostat (e.g. variables, measurement unit, statistical population, classifications and breakdowns, transmission deadlines, deadlines for the metadata and quality reports). The latest Commission implementing regulations are published on the [dedicated website's legislation page](#).

Data requirements for other European business statistics are specified [here](#).

Production of EU aggregates

On the basis of the national data, Eurostat produces aggregate data for the EU.

The European business statistics manual describes in general the [production of EU aggregates](#) of European business statistics and their dissemination by Eurostat.

Confidentiality

In cases where national ICT data would enable the identification of individual enterprises, data are treated as confidential and are not published by Eurostat.

The chapter on [statistical disclosure control](#) of the European business statistics manual presents the various methods that may be applied by statistical offices to protect data released by statistical institutes in tables.

Dissemination

Eurostat uses various channels for the dissemination of ICT data:

- Free online database
- Free comprehensive database
- Statistics explained articles
- News releases
- News items
- Digital publication

See also

- E-business integration
- E-commerce statistics
- Social media - statistics on the use by enterprises
- Cloud computing - statistics on the use by enterprises
- ICT specialists - statistics on hard-to-fill vacancies in enterprises
- Digital economy and society statistics - enterprises

Main tables

- Digital economy and society

Database

- Digital economy and society , see:

ICT usage in enterprises (isoc_e)

Dedicated section

- Digital economy and society

Publications

- E-business integration
- E-commerce statistics
- Social media - statistics on the use by enterprises
- Cloud computing - statistics on the use by enterprises
- ICT specialists - statistics on hard-to-fill vacancies in enterprises
- Digital economy and society statistics - enterprises

Methodology

- ICT usage and e-commerce in enterprises (ESMS metadata file — isoc_e_esms)

Legislation

- [Regulation \(EC\) No 808/2004 of 21 April 2004 concerning Community statistics on the information society \(Summary\)](#)
- [Regulation \(EC\) No 960/2008 of 30 September 2008 implementing Regulation \(EC\) No 808/2004 concerning Community statistics on the information society](#)
- [Regulation \(EU\) No 1023/2009 of 29 October 2009 implementing Regulation \(EC\) No 808/2004 concerning Community statistics on the information society](#)
- [Regulation \(EU\) No 821/2010 of 17 September 2010 implementing Regulation \(EC\) No 808/2004 concerning Community statistics on the information society](#)
- [Regulation \(EU\) No 937/2011 of 21 September 2011 implementing Regulation \(EC\) No 808/2004 concerning Community statistics on the information society](#)
- [Regulation \(EU\) No 1083/2012 of 19 November 2012 implementing Regulation \(EC\) No 808/2004 concerning Community statistics on the information society](#)
- [Regulation \(EU\) No 859/2013 of 5 September 2013 implementing Regulation \(EC\) No 808/2004 concerning Community statistics on the information society](#)
- [Regulation \(EU\) No 1196/2014 of 30 October 2014 implementing Regulation \(EC\) No 808/2004 concerning Community statistics on the information society](#)
- [Regulation \(EC\) No 696/1993 of 15 March 1993 on the statistical units for the observation and analysis of the production system in the Community \(Summary\)](#)

External links

- [A Europe fit for the digital age](#)
- [The European Digital Strategy](#)

Notes

View this article online at

http://ec.europa.eu/eurostat/statistics-explained/index.php/Article_name