HELLENIC REPUBLIC

HELLENIC STATISTICAL AUTHORITY

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PRESS RELEASE

SURVEY ON THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES AND E-COMMERCE IN ENTERPRISES
2018

The Hellenic Statistical Authority announces the results of the Annual Survey on the Use of Information and Communication Technologies and e-commerce in enterprises, for the year 2018, pertaining to the use of computers, internet access and ubiquitous connectivity, sharing of information electronically within the enterprise, as well as to the receipt of orders and sales made over the internet (e-commerce).

The survey is an annual sample survey, which is conducted in accordance with Regulation (EC) No 808/2004 of the European Parliament and of the Council of 21 April 2004, concerning Community statistics on the information society and pursuant to Commission Regulation 1515/2017 of 31 August 2017 implementing the aforementioned Regulation. The survey is conducted on the enterprises employing 10 persons and over.

According to the results of the survey:

- In 2018, out of a total of 29,401 enterprises (*) employing 10 persons and over, 25,515 enterprises, representing 86.8%, used computers, whereas in 2017, out of total of 26,208 enterprises, 23,220 enterprises, representing 88.6%, used computers. Computers include personal and portable computers, personal digital assistants (PDAs) and smartphones (Table 1).

- In 2018, out of a total of 29,401 enterprises (*) employing 10 persons and over, with a total turnover of 237.2 billion euro, 3,312 enterprises received orders that were placed via a website or an application or EDI-type messages, representing 11.3% of the total number of enterprises and the relevant turnover amounted to 9.0 billion euro, representing 3.8% of the total turnover. In 2017, out of a total of 26,208 enterprises with a total turnover of 247.2 billion euro, 3,039 enterprises received orders that were placed via a website or an application or EDI-type messages, representing 11.6% of the total number of enterprises and the corresponding turnover amounted to 8.9 billion euro, representing 3.6% of the total turnover (Table 2).

This press release also present data concerning the downloading speed, the usage of a website, advertising through the internet and the use of cloud computing (Graphs 1 to 4).

Finally, for the first time, data on more specialized topics are presented pertaining to the use of 3D digital printing and robotics, as well as to big data analysis. (Graphs 5 to 7).

(*)Enterprises are under divisions 10-63, 68-82 and 95.1 of NACE Rev.2 economic activity.

Information:
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Table 1 : Number of enterprises and employees using a computer, 2017 and 2018

	2017	2018	Change % 2018/2017
Total number of enterprises (*)	26,208	29,401	12.2
Number of enterprises that use a computer	23,220	25,515	9.9
Number of enterprises that use a computer and have access to the internet	22,701	25,293	11.4
Number of enterprises that provide the employees portable devices that allow a mobile connection to the internet	12,396	14,888	20.1
Number of enterprises that have their own website	16,976	19,053	12.2
Number of enterprises that bought clod computing services	2,890	3,772	30.5
Total number of employees	1,038,371	1,159,171	11.6
Number of employees that use a computer	453,914	491,636	8.3
Number of employees that use a portable device with access to the internet	146,605	170,509	16.3

Table 2 : E-commerce, 2017and 2018

	2017	2018	Change % 2018/2017
Total number of enterprises (*)	26,208	29,401	12.2
Number of enterprises than received orders for goods or services places via a website or an application	3,039	3,312	9.0
Number of enterprises than received orders for goods or services places via EDI-type messages	363	296	-18.6
Number of enterprises than placed orders for goods or services places via a website or an application or EDI-type messages	2,752	4,033	46.5
Total turnover	247,190	237,197	-4.0
Total value of the turnover resulting from orders received that were placed via a website or an application or EDI-type messages	8,895	9,042	1.7

(*)Enterprises are under divisions 10-63, 68-82 and 95.1 of NACE Rev.2 economic activity.
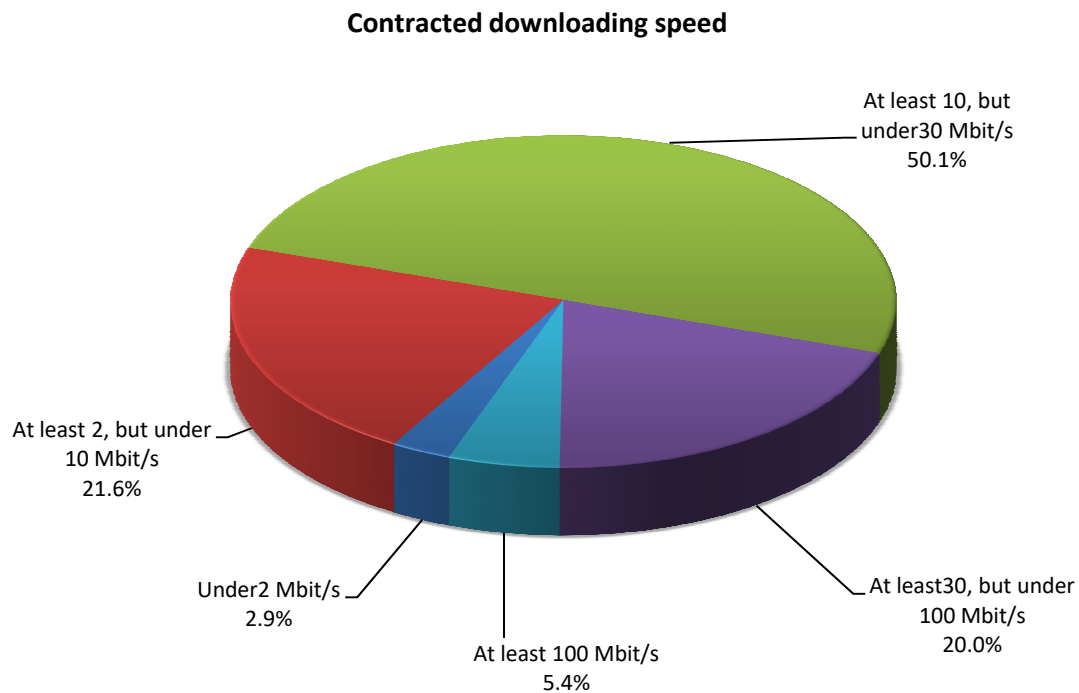Turnover values are in millions of euros.

"E-commerce" is the sale or purchase of goods or services conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders.
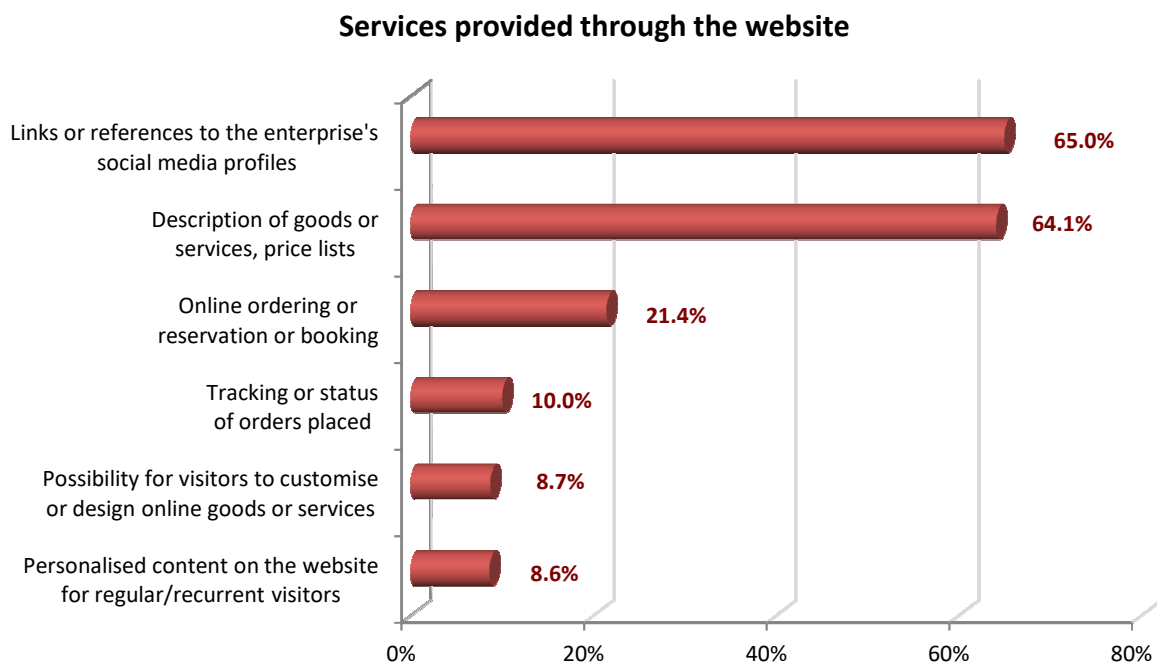
The payment and the delivery of the goods or services do not have to be conducted online.
E-commerce transactions exclude orders made by manually typed e-mail messages, phone, fax or other means of manually typed orders.

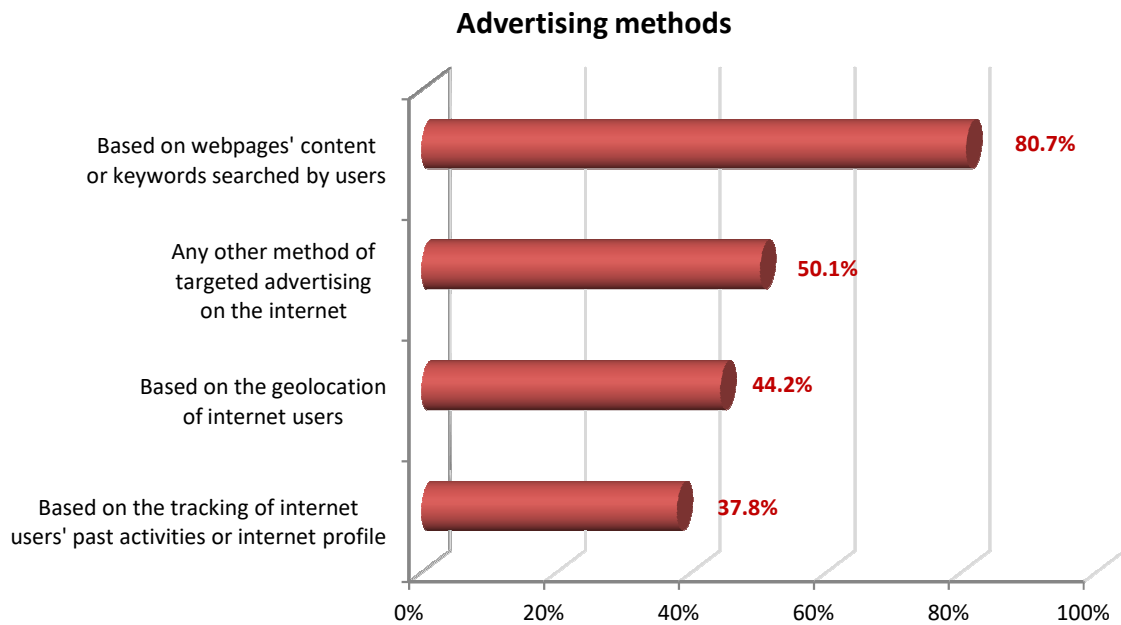*Graph 1: Maximum contracted downloading speed, 2018*

Contracted downloading speed

At least 10, but under30 Mbit/s
50.1%

At least 2, but under 10 Mbit/s
21.6%

Under2 Mbit/s
2.9%

At least 100 Mbit/s
5.4%

At least30, but under 100 Mbit/s
20.0%

Graph 2: Use of a website, 2018

Services provided through the website

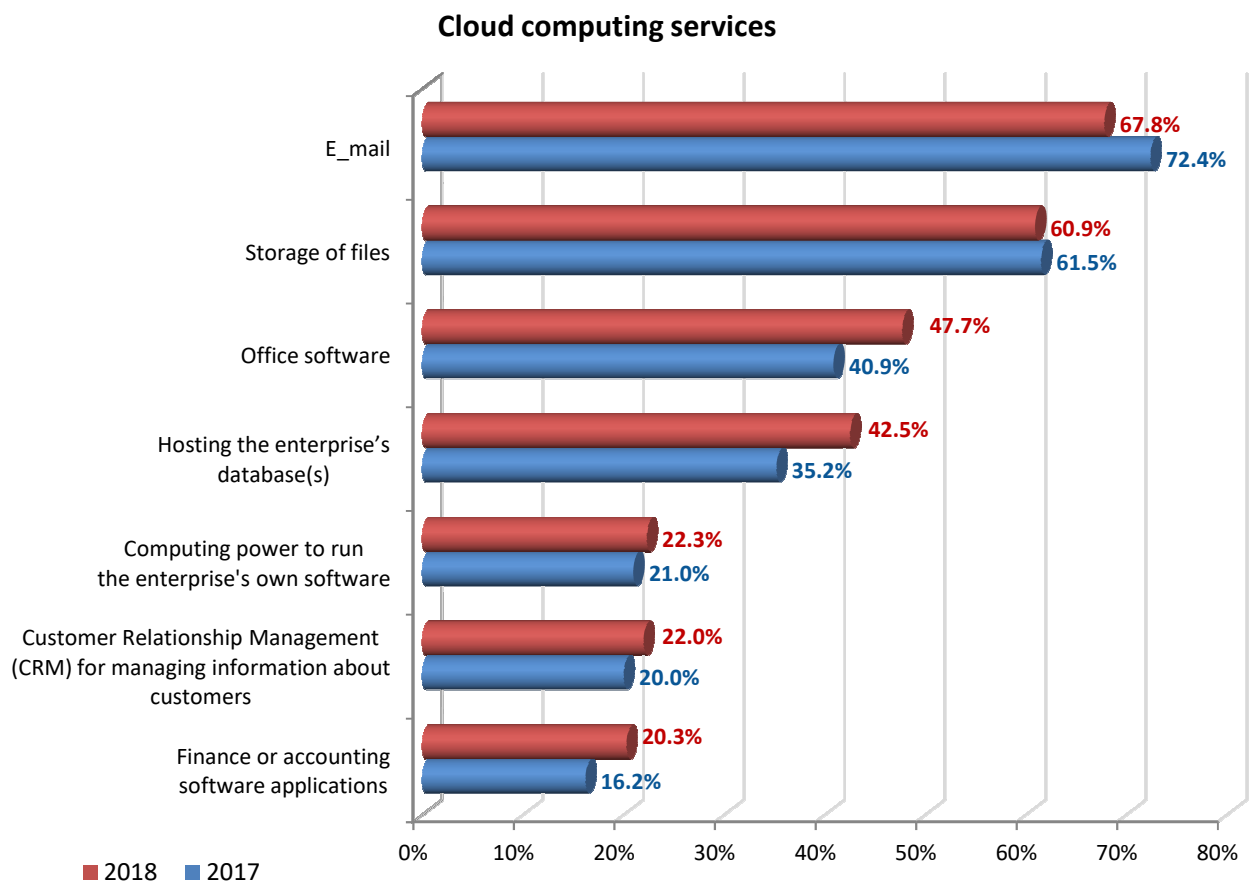|	
Links or references to the enterprise's social media profiles	65.0%
Description of goods or services, price lists	64.1%
Online ordering or reservation or booking	21.4%
Tracking or status of orders placed	10.0%
Possibility for visitors to customise or design online goods or services	8.7%
Personalised content on the website for regular/recurrent visitors	8.6%

0%   20%   40%   60%   80%

Important note: The above mentioned data was collected through a multiple choice question.

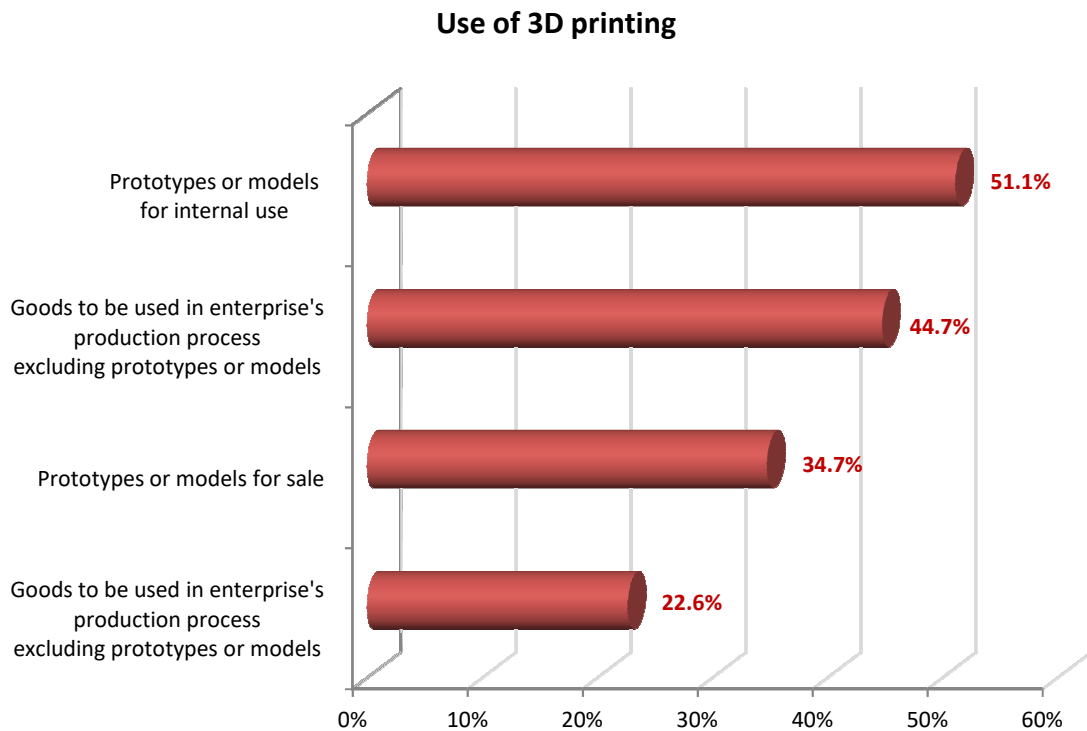*Graph 3: Use of targeted advertising methods through the internet, 2018*

Advertising methods

Advertising method	2018
Based on webpages' content or keywords searched by users	80.7%
Any other method of targeted advertising on the internet	50.1%
Based on the geolocation of internet users	44.2%
Based on the tracking of internet users' past activities or internet profile	37.8%

<u>*Important note:*</u> *The above mentioned data was collected through a multiple choice question.*

Graph 4: Cloud computing services, 2017 and 2018

Cloud computing services

Service	2018	2017
E_mail	67.8%	72.4%
Storage of files	60.9%	61.5%
Office software	47.7%	40.9%
Hosting the enterprise's database(s)	42.5%	35.2%
Computing power to run the enterprise's own software	22.3%	21.0%
Customer Relationship Management (CRM) for managing information about customers	22.0%	20.0%
Finance or accounting software applications	20.3%	16.2%

■ 2018 ■ 2017

<u>*Important note:*</u> *The above mentioned data was collected through a multiple choice question.*
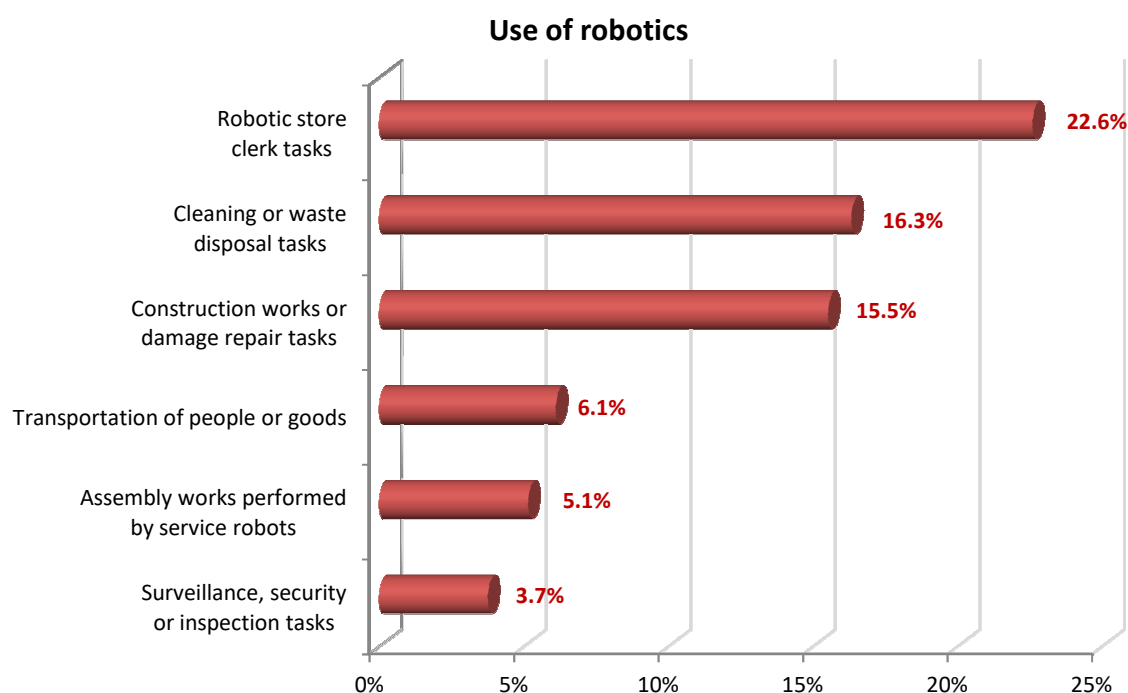
Use of 3D printing

Important note: The above mentioned data was collected through a multiple choice question.

Out of a total of 546 enterprises that used 3D printers, 208 enterprises used printers owned by the enterprise or printers that were leased by the enterprise.

Explanations- Definitions:

Additive Layer Manufacturing (ALM) and 3D printing are equivalent terms for the same process. The latter is the popular term widely known while the former describes more precisely the process of joining materials to make physical objects from 3D model data, usually layer upon layer, as opposed to subtractive manufacturing methodologies such as CNC machining or milling (e.g. lathe) that uses a rotating milling cutter to remove material from a solid block of material.

Graph 6: Categories of use of robotics by the enterprises, 2018

Use of robotics

Category	Percentage
Robotic store clerk tasks	22.6%
Cleaning or waste disposal tasks	16.3%
Construction works or damage repair tasks	15.5%
Transportation of people or goods	6.1%
Assembly works performed by service robots	5.1%
Surveillance, security or inspection tasks	3.7%

Important note: The above mentioned data was collected through a multiple choice question.

Out of a total of 830 enterprises that used robotics, 570 enterprises used industrial robots and 342 used service robots. It should be noted that there are enterprises that used both kinds of robotics and that no enterprises that used robotics for secretarial or administrative support were observed under the survey.

Explanations- Definitions:

- An industrial robot is an automatically controlled, reprogrammable, multipurpose manipulator programmable in three or more axes, which may be either fixed in place or mobile for use in industrial automation applications.
- A service robot is a machine that has a degree of autonomy and is able to operate in complex and dynamic environment that may require interaction with persons, objects or other devices, excluding its use in industrial automation applications

Software robots (computer programs) and 3D printers are out of the scope of the questions.

Graph 7 : Big Data Analysis by data source, 2018

Big data analysis

Data generated from social media	58.9%
Geolocation data from the use of portable devices	44.7%
Other big data sources	22.7%
Enterprise's own data from smart devices or sensors	14.5%

0%   10%   20%   30%   40%   50%   60%

Important note: The above mentioned data was collected through a multiple choice question.

Explanations- Definitions:

Big data are generated from activities that are carried out electronically and from machine-to-machine communications (e.g. data produced from social media activities, from production processes, etc.)
Big data typically have characteristics such as:
- Significant volume referring to vast amounts of data generated over time.
- Variety referring to the different format of complex data, either structured or unstructured (e.g. text, video, images, voice, docs, sensor data, activity logs, click streams, coordinates, etc.).
- Velocity referring to the high speed, at which data is generated, becomes available and changes over time.
Big data analysis refers to the use of techniques, technologies and software tools for analyzing them.

EXPLANATORY NOTES

Survey on the Use of Information and Communication Technologies and e-Commerce in enterprises	The Survey on the Use of Information and Communication Technologies and e-Commerce in enterprises is part of the European Statistical Programme, in which all EU-countries participate. The main purpose of this survey is to study, at European and national level, the degree of ICT usage in enterprises. A significant part of the survey data are used for decision making for the Information Society. The survey was conducted by means of sending by post the survey questionnaire to the enterprises and by personal visits paid by external statistical interviewers to the enterprises that had not responded. In addition, a relevant web application is available on the website of ELSTAT for the electronic submission of data.
Legal basis	The survey is conducted in the framework of Regulation (EC) No 808/2004 of the European Parliament and of the Council concerning statistics on the information society and pursuant to Commission Regulation (EU) No 2015/2016 implementing the above Regulation**.**
Reference period	01/01/2018 to 15/09/2018.
Coverage	The survey covered all the enterprises in Greece, employing 10 persons and over. under divisions 10-63, 68-82 and 95.1 of NACE Rev.2 economic activity.
Methodology	The one-stage stratified sampling was implemented for the survey. The primary sampling unit was the enterprise employing 10 persons and over.

The main stratification criteria are the following :

- The Region (NUTS 2)

- NACE Rev.2 classes,

- Size class of the enterprise (1, 2, 3, 4 and 5)

Variables of the survey	The main variables of the survey are: - Use of computers - ICT specialists employed by the enterprise - Access and use of the Internet - Enterprise website and use of this website - Cloud computing services - Web sales - E-commerce purchases
References	More information on the survey Use of Information and Communication Technologies and e-Commerce in enterprises (tables, graphs, methodology, etc) is available on the webpage of the Hellenic Statistical Authority, www.statistics.gr, Section: Industry, Commerce, Services, Transport > Use of Information and Communication Technologies (ICT).