



eurostat

- Full view -

# INFOSOC\_ESQRSET\_A\_CY\_2021\_0000

National Reference Metadata in ESS Standard for Quality Reports

Structure (ESQRS)

Compiling agency: STATISTICAL SERVICE OF CYPRUS  
(CYSTAT)



## Eurostat metadata

### Reference metadata

- [1. Contact](#)
- [2. Statistical presentation](#)
- [3. Statistical processing](#)
- [4. Quality management](#)
- [5. Relevance](#)
- [6. Accuracy and reliability](#)
- [7. Timeliness and punctuality](#)
- [8. Coherence and comparability](#)
- [9. Accessibility and clarity](#)
- [10. Cost and Burden](#)
- [11. Confidentiality](#)
- [12. Comment](#)
- [Related Metadata](#)
- [Annexes](#) (including footnotes)

For any question on data and metadata, please contact: [EUROPEAN STATISTICAL DATA SUPPORT](#)

## 1. Contact

[Top](#)

1.1. Contact organisation	STATISTICAL SERVICE OF CYPRUS (CYSTAT)
1.2. Contact organisation unit	ICT SURVEYS
1.3. Contact name	CONSTANTINOS MINA
1.4. Contact person function	STATISTICS OFFICER
1.5. Contact mail address	STATISTICAL SERVICE OF CYPRUS CY-1444, NICOSIA CYPRUS
1.6. Contact email address	cmina@cystat.mof.gov.cy
1.7. Contact phone number	+357 22602112
1.8. Contact fax number	+357 22661313

## 2. Statistical presentation

[Top](#)

### 2.1. Data description

#### (Metadata report)

*Name of the data collection:*

ΕΡΕΥΝΑ ΧΡΗΣΗΣ ΤΕΧΝΟΛΟΓΙΩΝ ΠΛΗΡΟΦΟΡΙΚΗΣ ΚΑΙ ΕΠΙΚΟΙΝΩΝΙΩΝ ΚΑΙ  
ΗΛΕΚΤΡΟΝΙΚΟΥ ΕΜΠΟΡΙΟΥ 2021  
SURVEY ON ICT USAGE AND E-COMMERCE IN ENTERPRISES 2021

Data on the Information and Communication Technologies (ICT) usage and e-commerce in enterprises are survey data. They are collected by the National Statistical Institutes or Ministries and are in principle based on Eurostat's **annual model questionnaires on ICT usage and e-commerce in enterprises**.

Large part of the data collected is used to measure the progress in the implementation of one of the main political priorities of the European Commission for 2019 to 2024 – [A Europe fit for the digital age](#). Part of this is the "[European strategy for data](#)", envisioning a single market for data to ensure the EU's global competitiveness and data sovereignty, in which context a comprehensive set of new rules for all digital services was proposed: [the Digital Services Act](#) and the [Digital Markets Act](#), which are centrepieces of the EU digital strategy. Furthermore, the Commission and the High Representative of the Union for Foreign Affairs and Security Policy presented a [new "EU cybersecurity strategy"](#), which is intended to bolster the EU's collective resilience against cyberthreats, safeguard a global and open internet and protect EU values and the fundamental rights of its people. Furthermore, data will allow monitoring the progress towards the Commission's vision for Europe's digital transformation by 2030 presented on 9 March 2021. This vision for the EU's digital decade evolves around four cardinal points: Skills, Digital transformation of businesses, Secure and sustainable digital infrastructures, and Digitalisation of public services.

The aim of the European survey on ICT usage and e-commerce in enterprises is to collect and disseminate harmonised and comparable information at European level.

## 2.2. Classification system

[NACE rev.2 2008](#)

## 2.3. Coverage - sector

### (Metadata report)

*All economic activities in the scope of Annex I of the Commission Regulation are intended to be included in the general survey, covering enterprises with 10 or more employees and self-employed persons. These activities are: NACE Rev. 2 sections C, D, E, F, G, H, I, J, L, M and N, division 95.1.*

### Coverage of enterprises 0-9 employees and self-employed persons:

*In this section, please indicate for the micro-enterprises if all the NACE categories were covered – by introducing an "x" in the column next to the appropriate response; if not which ones were included.*

Economic Activity	Micro-enterprises			
All NACE Rev. 2 categories covered?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
If not, which ones were covered?	<input type="text"/>			

## 2.4. Statistical concepts and definitions

The model questionnaire on ICT usage and e-commerce in enterprises provides a large variety of variables covering among other, the following areas:

- General information about ICT systems
- Access to and use of the Internet
- E-commerce and e-business
- Covid-19 impact
- Other topics : internet of things, artificial intelligence, cloud computing, sharing of information electronically within the enterprise etc.

The annual model questionnaires and the methodological manual comprise definitions and explanations regarding the topics of the survey.

## 2.5. Statistical unit

### (Metadata report)

#### Statistical Unit

Please indicate the statistical unit used. If it wasn't the "enterprise", as defined in the model survey, please mention the reasons.
Enterprise

## 2.6. Statistical population

### (Metadata report)

#### Target Population

As required by Annex of the Commission Implementing Regulation, enterprises with 10 or more employees and self-employed persons are intended to be covered by the survey.

**Coverage of enterprises 0-9 employees and self-employed persons:**

Indicate below what is the scope for the coverage of micro-enterprises in terms of size and if the breakdown in the size classes is provided or not. For each one of the two items below introduce an "x" in the column next to the appropriate response.

If the variable used to define enterprise size was not the number of employees and self-employed persons, indicate which one was used (number of employees, number of FTE's ...), the reason and the possible impact on results.

Coverage of micro-enterprises	Yes	No	X
Breakdown between size classes [0 to 1] and [2 to 9]	Yes	No	
If different size delimitation or different variable was used, please indicate it.			

**2.7. Reference area**

**(Metadata report)**

**Geographic scope (all enterprises)**

Please indicate here if all the territory of the country was considered or if any part of the country was not included. All territory of the country should be covered. In case parts of the country were not included indicate which, the reasons why, and an estimate of the percentage of the target population not covered.

Government controlled areas of the Republic of Cyprus

**2.8. Coverage - Time**

**(Metadata report)**

**Reference period**

In this section please indicate if the reference periods defined in the model questionnaire were followed in the national survey and highlight the differences.

The reference periods defined in the model questionnaire were followed in the national survey.

**2.9. Base period**

Not applicable

**3. Statistical processing**

[Top](#)

**3.1. Source data**

**(Metadata report) / (Quality report)**

**A) Frame population**

**A) 1. Description of frame population**

In this section please include information concerning the frame population.

a) When was the sample for the ICT usage and e-commerce in enterprise survey drawn?	Not applicable, since a census was carried out for the survey year 2021.
b) When was the last update of the Business register that was used for drawing the sample of enterprises for the survey?	The last update of the Business Register was in September 2020 for the reference period of December 2019.
c) Please indicate if the frame population is the same as, or is in some way coordinated with, the one used for the Structural Business Statistics (different snapshots)	The frame population is the Business Register which is the same for both ICT and SBS surveys. However, the SBS 2020 sample is drawn from the frame in May 2021, where the ICT sample is drawn from the frame in November 2020.

d) Please describe if different frames are used during different stages of the statistical process (e.g. frame used for sampling vs. frame used for grossing up):	The frame population is the Business Register. It is updated using information from administrative sources (V.A.T. Department, Social Insurance Department, and Department of Registrar Companies) so as to take into account changes in the structure of employment by industry, occupation and size of the establishment. After relevant sample surveys are completed, the updated information of sampled enterprises is provided to the Business Register. Due to the continuous updating of the Business Register the frames used for sampling and grossing up are different.
e) Please indicate shortcomings in terms of timeliness (e.g. time lag between last update of the sampling frame and the moment of the actual sampling), geographical coverage, coverage of different subpopulations, data available etc., and any measures taken to correct it, for this survey.	Although every effort is made to update the Business Register on a regular basis, as the situation with the enterprises is not static, the information can never be up-to-date.

**A) 2. Frame population distribution**

*Please provide the number of statistical units (enterprises) in the frame population, by size and by economic activity. Optional size classes are to be filled in if applicable. For the Quality report, please update the frame population, if needed.*

**NOTE: PLEASE FILL IN THE RELEVANT INFORMATION IN THE ATTACHED EXCEL FILE (Worksheet: FRAME POPULATION)**

**(Metadata report)**

**B) Sampling design - Sampling method**

<i>This section includes a description of the sampling method used (e.g. stratified random sample, quota sampling, cluster sampling; one-stage or two-stage sampling). If stratification was used, please indicate which variables were used to stratify, the categories of those variables, in particular for the NACE categories related to the "possible calculation of European aggregates", and the final number of strata. Include also in this section the method used for the determination of the sample size and the method used for sample selection. In particular, mention if any procedures for the coordination or non-overlapping with samples of other surveys was used.</i>
Not Applicable since for the year 2021 it has been decided to cover all small, medium and large enterprises (census of enterprises) with 10 or more employees and self-employed persons. In the frame there were 16 NACE groups and 3 size groups.

**(Metadata report) / (Quality report)**

**C) Gross sample distribution**

*Please provide the number of statistical units (e.g. enterprises) selected for sampling without any posterior correction for misclassification, by size and by economic activity. Optional size classes are to be filled in if applicable. For the Quality report, please update the gross sample, if needed.*

**NOTE: PLEASE FILL IN THE RELEVANT INFORMATION IN THE ATTACHED EXCEL FILE (Worksheet: GROSS SAMPLE)**

**(Quality report)**

**D) Net sample distribution**

*Please provide the number of enterprises used for grossing up and tabulation, by size and by economic activity. Optional size classes are to be filled in if applicable.*

**NOTE: PLEASE FILL IN THE RELEVANT INFORMATION IN THE ATTACHED EXCEL FILE (Worksheet: NET SAMPLE)**

**3.2. Frequency of data collection**

*Annual. No additional information is requested.*

### 3.3. Data collection

#### (Metadata report) / (Quality report)

##### A) Survey period

*Please indicate the dates between which the data collection took place, i.e., when the questionnaires were sent out (or the web-questionnaire made available) and when the last filled in questionnaire treated and used for the results was received. Please indicate also the collection dates for the micro-enterprises (if conducted), even if they are the same as the general survey.*

Survey / Collection	Date of sending out questionnaires	Date of reception of the last questionnaire treated
General survey	05/02/2021	24/05/2021
Micro-enterprises	Not Applicable	Not Applicable

#### (Metadata report)

##### B) Survey vehicle

*Stand-alone or embedded in another survey. Please introduce an "x" in the row below.*

*In addition, please indicate if the data collection for micro-enterprises was integrated with the general survey, i.e. the same questionnaire was used and the sending out of questionnaires was simultaneous.*

General survey:		Was the collection of micro-enterprises integrated with the general survey?		
Stand-alone survey	Embedded in another survey	Yes	No	Not applicable
X				X

#### (Metadata report)

##### C) Survey type

*Please give a short description of the survey type (e.g. web survey, face-to-face interviews, self-administered mail survey, telephone interview, combination of techniques, other).*

Web survey. The web questionnaire was available online during the entire survey period. The enterprises were informed about the web survey either by email or by telephone, or both.

#### (Metadata report)

##### D) Survey participation

*Please indicate if the survey was mandatory or voluntary, by introducing an "x" in the row below.*

Mandatory	Voluntary
X	

### 3.4. Data validation

#### (Metadata report) / (Quality report)

*Please inform if the validation tool provided by Eurostat is also used in your country and which further verifications are carried out before data are transmitted.*

The validation tool provided by EUROSTAT is used in Cyprus. Year to year checks are also carried out before data transmission.

### 3.5. Data compilation

#### (Quality report)

##### Grossing-up procedures

*Please give a description of the extrapolation or weighting procedures used to gross up the number of enterprises, number of employees and self-employed persons and turnover in the net sample to the*

*(target) population. Please present the different steps taken or factors applied to the design weighting to take into account the (post)stratification, balancing for unit non-response, etc. Please describe the different categories of questions – if any – that have been grossed up differently (see also the model questionnaire and the Methodological Manual).*

To gross up the number of enterprises, the following factor is applied:

$$\text{Factor}_i = \frac{N_i}{n_i}$$

where

$N_i$  = total number of enterprises in stratum  $i$  of the population

$n_i$  = total number of enterprises in stratum  $i$  of the sample

sample = the enterprises that responded in stratum  $i$

\*\*\*\*\*

To gross up the number of employed persons the following factor is applied:

$$\text{Factor\_employees}_i = \frac{\text{EMPLOYEES}_i}{\text{employees}_i}$$

where

$\text{EMPLOYEES}_i$  = total number of employed persons in stratum  $i$  of the population

$\text{employees}_i$  = total number of employed persons in stratum  $i$  of the sample

sample = the enterprises that responded in stratum  $i$

\*\*\*\*\*

To gross up the turnover and purchases the following factor is applied:

$$\text{Factor\_monetary}_i = \frac{\text{TURNOVER}_i}{\text{turnover}_i}$$

where

$\text{TURNOVER}_i$  = total turnover in stratum  $i$  of the population

$\text{turnover}_i$  = total turnover in stratum  $i$  of the sample

sample = the enterprises that responded in stratum  $i$

\*\*\*\*\*

Note:

For the results according to NACE Rev.2 the population figures  $N_i$ ,  $\text{EMPLOYEES}_i$  and  $\text{TURNOVER}_i$  for the different strata were obtained from the updated version of Business Register.

### 3.6. Adjustment

*Not applicable*

## 4. Quality management

[Top](#)

### 4.1. Quality assurance

The Methodological Manual provides guidelines and standards for the implementation of the surveys in the Member States. It is updated every year according to the changed contents of the model questionnaires.

*Please briefly describe the general quality assurance framework of your organisation and how it is implemented for the domain-specific activities:*

The quality of statistics in CYSTAT is managed in the framework of the European Statistics Code of

Practice which sets the standards for developing, producing and disseminating European Statistics as well as the ESS Quality Assurance Framework (QAF). CYSTAT endorses the Quality Declaration of the European Statistical System. In addition, CYSTAT is guided by the requirements provided for in Article 11 of the Official Statistics Law No. 25(I) of 2021 as well as Article 12 of Regulation (EC) No 223/2009 on European statistics, which sets out the quality criteria to be applied in the development, production and dissemination of European statistics.

The Methodological Manual provides guidelines and standards for the implementation of the surveys in the Member States. It is updated every year according to the changed contents of the model questionnaires.

- **European Statistics Code of Practice:**

<https://ec.europa.eu/eurostat/documents/4031688/8971242/KS-02-18-142-EN-N.pdf/e7f85f07-91db-4312-8118-f729c75878c7>

- **ESS Quality Assurance Framework (QAF):**

<http://ec.europa.eu/eurostat/documents/64157/4392716/ESS-QAF-V1-2final.pdf/bbf5970c-1adf-46c8-afc3-58ce177a0646>

- **Quality Declaration of the European Statistical System:**

[http://ec.europa.eu/eurostat/documents/4031688/8188985/KS0217428ENN\\_corr.pdf/116f7c85-cd3e-4bff-b695-4a8e71385fd4](http://ec.europa.eu/eurostat/documents/4031688/8188985/KS0217428ENN_corr.pdf/116f7c85-cd3e-4bff-b695-4a8e71385fd4)

- **Official Statistics Law No. 25(I) of 2021:**

<https://www.cystat.gov.cy/en/StaticPage?id=1074>

- **Regulation (EC) No 223/2009 on European statistics (consolidated text):**

<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02009R0223-20150608&qid=1504858409240&from=EN>

#### 4.2. Quality management - assessment

At European level, the recommended use of the annual Eurostat model questionnaire aims at improving comparability of the results among the countries that conduct the survey on ICT usage and e-commerce in enterprises. Moreover, the Methodological Manual provides guidelines and clarifications for the implementation of the surveys in the Member States.

**(Metadata report)**

Please provide an overall assessment of the national methodology for quality management:

The Methodological Manual provided by Eurostat includes the guidelines and standards used by CYSTAT for the implementation of the survey. The Eurostat model questionnaire on ICT usage and e-Commerce in enterprises for 2021 was used.

## 5. Relevance

[Top](#)

### 5.1. Relevance - User Needs

At European level, European Commission users (e.g. DG CNECT, DG GROW, DG JUST, DG REGIO, DG JRC etc.) are the principal users of the data on **ICT usage and e-commerce in enterprises** and contribute in identifying/defining the topics to be covered. Hence, main users are consulted regularly (at hearings, task forces, ad hoc meetings) for their needs and are involved in the process of the development of the model questionnaires at a very early stage.

User needs are considered throughout the whole discussion process of the model questionnaires aiming at providing relevant statistical data for monitoring and benchmarking of European policies.

**(Metadata report)**

Please add information concerning the involvement of users at national level (if available):

Not available

**5.2. Relevance - User Satisfaction**

At European level, contacts within the Commission, the OECD and other stakeholders give a clear picture about the key users' satisfaction as to the following data quality aspects: accuracy and reliability of results, timeliness, satisfactory accessibility, clarity and comparability over time and between countries, completeness and relevance. Overall users have evaluated positively (good, very good) the data quality on the ICT usage and e-commerce in enterprises.

**(Metadata report)**

*Please add information concerning user satisfaction at national or European level (if available):*

Since 2008 (with the exception of 2010 and 2013) CYSTAT carries out an annual online "Users Satisfaction Survey". The results of the surveys are available on CYSTAT's website at the link attached below.

Overall, the users of statistical data published by CYSTAT are satisfied.

<https://www.cystat.gov.cy/>

**5.3. Completeness****(Metadata report)****A) Questionnaire****Implementation of the mandatory questions in the national questionnaire and adoption of questions for micro-enterprises (Model Questionnaire)**

*All mandatory characteristics included in Annex of the **Commission Implementing Regulation (EU) 2020/1030 of 15 July 2020** are intended to be derived from the general survey, covering enterprises with 10 or more employees and self-employed persons.*

*In the following table in the column "**General Survey**" please indicate any deviation of the question from the recommendation as defined in the model questionnaire, for the general survey.*

*For each question or item, an "x" in the column named "**Micro-enterprises**" would mean that it was included in the national questionnaire addressed to **micro-enterprises**. The national questionnaire(s) (and an English version, if available,) should be provided in the annex.*

		<b>General Survey</b>	<b>Micro-enterprises</b>
	<b>Question / Item</b>	<b>Any deviation from question / item in model questionnaire</b>	<b><u>Question included</u></b>
	<b>Module A: Access and use of the internet</b>		
A1.	How many persons employed have access to the internet for business purposes? (including fixed line and mobile connection) (Filter question) If you can't provide this value, please indicate an estimate of the percentage of the total number of persons employed who have access to the internet for business purposes		
A2.	Does your enterprise use any type of fixed line connection to the internet? (e.g. ADSL, SDSL, VDSL, fiber optics technology (FTTP), cable technology, etc.) (Add national examples) (Filter question)		



		General Survey	Micro-enterprises
	Question / Item	Any deviation from question / item in model questionnaire	<u>Question included</u>
A3.	<p>What is the maximum contracted download speed of the fastest fixed line internet connection of your enterprise?</p> <p>(additional categories at national level can be added, if needed)</p> <p>(Tick only one)</p> <p>a) less than 30 Mbit/s</p> <p>b) at least 30 but less than 100 Mbit/s</p> <p>c) at least 100 Mbit/s but less than 500 Mbit/s</p> <p>d) at least 500 Mbit/s but less than 1 Gbit/s</p> <p>e) at least 1 Gbit/s</p>		
A8.	<p>Does your enterprise use any of the following social media?</p> <p>(add national examples; replace existing examples if necessary)</p> <p>a) Social networks (e.g. Facebook, LinkedIn, Xing, Viadeo, Yammer, etc.)</p> <p>b) Enterprise's blog or microblogs (e.g. Twitter, etc.)</p> <p>c) Multimedia content sharing websites or apps (e.g. YouTube, Flickr, SlideShare, Instagram, Pinterest, Snapchat etc.)</p> <p>d) Wiki based knowledge sharing tools</p>		
	<b>Module B: e-Commerce sales</b>		
B1.	<p>During 2020, did your enterprise have web sales of goods or services via:</p> <p>a) your enterprise's websites or apps?</p> <p>(including extranets)</p> <p>b) e-commerce marketplace websites or apps used by several enterprises for trading goods or services?</p> <p>(e.g. e-Bookers, Booking, hotels.com, eBay, Amazon, Amazon Business, Alibaba, Rakuten, TimoCom etc.)</p> <p>[Please add national examples of e-commerce marketplaces incl. government marketplaces]</p>		
B2.	<p>What was the value of your web sales?</p> <p>(please refer to the provided definition of web sales)</p> <p>Please answer to a) OR b)</p> <p>a) What was the value of your web sales of goods or services, in 2020?</p> <p>OR</p> <p>b) What percentage of total turnover was generated by web sales of goods or services, in 2020?</p> <p>If you cannot provide the exact percentage an approximation will suffice.</p>		

		General Survey	Micro-enterprises
	Question / Item	Any deviation from question / item in model questionnaire	<u>Question included</u>
B3.	<p>What was the percentage breakdown of the value of web sales in 2020 for the following: (Please refer to value of web sales you reported in B2) If you cannot provide the exact percentages an approximation will suffice.</p> <p>a) via your enterprise's websites or apps? (including extranets)</p> <p>b) via e-commerce marketplace websites or apps used by several enterprises for trading goods or services? (e.g. e-Bookers, Booking, hotels.com, eBay, Amazon, Amazon Business, Alibaba, Rakuten, TimoCom etc.)</p> <p>[Please add national examples of e-commerce marketplaces incl. government marketplaces]</p>		
B6.	<p>What was the percentage breakdown of the value of web sales in 2020 by type of customer: (Please refer to value of web sales you reported in B2)</p> <p>If you cannot provide the exact percentages an approximation will suffice.</p> <p>a) Sales to private consumers (B2C)</p> <p>b) Sales to other enterprises (B2B) and Sales to public sector (B2G)</p>		
B7.	<p>During 2020, did your enterprise have web sales to customers located in the following geographic areas?</p> <p>a) Own country</p> <p>b) Other EU countries</p> <p>c) Rest of the world</p>		
B8.	<p>What was the percentage breakdown of the value of web sales in 2020 to customers located in the following geographic areas? (Please refer to value of web sales you reported in B2) If you cannot provide the exact percentages an approximation will suffice.</p> <p>a) Own country</p> <p>b) Other EU countries</p> <p>c) Rest of the world</p>		

		General Survey	Micro-enterprises
	Question / Item	Any deviation from question / item in model questionnaire	<u>Question included</u>
B9.	Regarding web sales to other EU countries: did your enterprise experience any of the following difficulties during 2020? a) High costs of delivering or returning products when selling to other EU countries b) Difficulties related to resolving complaints and disputes when selling to other EU countries c) Adapting product labelling for sales to other EU countries d) Lack of knowledge of foreign languages for communicating with customers in other EU countries e) Restrictions from your business partners to sell to certain EU countries f) Difficulties related to the VAT system in EU countries (e.g. uncertainty regarding VAT treatment in different countries)		
B10.	During 2020, did your enterprise have EDI-type sales of goods or services? (Filter question)		
B11.	What was the value of your EDI-type sales? (please refer to the provided definition of EDI-type sales) Please answer to a) OR b) a) What was the value of your EDI-type sales of goods or services, in 2020? OR b) What percentage of total turnover was generated by EDI-type sales of goods or services, in 2020? If you cannot provide the exact percentage an approximation will suffice.		
B12.	During 2020, did your enterprise sell via EDI-type messages to customers located in the following geographic areas? a) Own country b) Other EU countries c) Rest of the world		
	<b>Module C: Sharing of information electronically within the enterprise</b>		
C1.	Does your enterprise use ERP software?		

		General Survey	Micro-enterprises
	Question / Item	Any deviation from question / item in model questionnaire	<u>Question included</u>
C2.	Does your enterprise use CRM software to manage: a) the collection, storing and making available information on customers to various business functions b) the analysis of information on customers for marketing purposes (e.g. setting prices, sales promotion, choosing distribution channels, etc.)		
	<b>Module D: Use of cloud computing services</b>		
D1.	Does your enterprise buy any cloud computing services used over the internet? (Please refer to the definition of cloud computing above, exclude free of charge services.) (Filter question)		
D2.	Does your enterprise buy any of the following cloud computing services used over the internet? (Please refer to the definition of cloud computing above, exclude free of charge services.) a) E-mail (as a cloud computing service) b) Office software (e.g. word processors, spreadsheets etc.) (as a cloud computing service) c) Finance or accounting software applications (as a cloud computing service) d) Enterprise Resource Planning (ERP) software applications (as a cloud computing service) e) Customer Relationship Management (CRM) software applications (as a cloud computing service) f) Security software applications (e.g. antivirus program, network access control) (as a cloud computing service) g) Hosting the enterprise's database(s) (as a cloud computing service) h) Storage of files (as a cloud computing service) i) Computing power to run the enterprise's own software (as a cloud computing service) j) Computing platform providing a hosted environment for application development, testing or deployment (e.g. reusable software modules, application programming interfaces (APIs)) (as a cloud computing service)		
	<b>Module E: Internet of Things</b>		
E1.	Does your enterprise use interconnected devices or systems that can be monitored or remotely controlled via the internet (Internet of Things)? (Filter question)		

		General Survey	Micro-enterprises
	Question / Item	Any deviation from question / item in model questionnaire	<u>Question included</u>
E2.	<p>Does your enterprise use interconnected devices or systems that can be monitored or remotely controlled via the internet (Internet of Things) for any of the following?</p> <p>a) for energy consumption management (e.g. "smart"-meters, -thermostats, -lamps (lights))</p> <p>b) for premises' security (e.g. "smart" -alarm systems, -smoke detectors, -door locks, -security cameras)</p> <p>c) for production processes (e.g. sensors or RFID tags that are monitored/controlled via the internet and used to monitor or automate the process)</p> <p>d) for logistics management (e.g. sensors monitored/controlled via the internet for tracking products or vehicles in warehouse management)</p> <p>e) for condition-based maintenance (e.g. sensors monitored/controlled via the internet to monitor maintenance needs of machines or vehicles)</p> <p>f) for customer service (e.g. "smart" cameras or sensors monitored/controlled via the internet to monitor customers' activities or offer them a personalised shopping experience)</p> <p>g) for other purposes</p>		
	<b>Module F: Artificial Intelligence</b>		
F1.	<p>Does your enterprise use any of the following Artificial Intelligence technologies?</p> <p>a) Technologies performing analysis of written language (text mining)</p> <p>b) Technologies converting spoken language into machine-readable format (speech recognition)</p> <p>c) Technologies generating written or spoken language (natural language generation)</p> <p>d) Technologies identifying objects or persons based on images (image recognition, image processing)</p> <p>e) Machine learning (e.g. deep learning) for data analysis</p> <p>f) Technologies automating different workflows or assisting in decision making (Artificial Intelligence based software robotic process automation)</p> <p>g) Technologies enabling physical movement of machines via autonomous decisions based on observation of surroundings (autonomous robots, self-driving vehicles, autonomous drones)</p>		
F2.	<p>Does your enterprise use Artificial Intelligence software or systems for any of the following purposes?</p> <p>a) for marketing or sales</p> <p>e.g.</p>		

		General Survey	Micro-enterprises
	Question / Item	Any deviation from question / item in model questionnaire	<u>Question included</u>
	<ul style="list-style-type: none"> <li>• chatbots based on natural language processing for customer support,</li> <li>• customer profiling, price optimisation, personalised marketing offers, market analysis based on machine learning, etc.</li> </ul> <p>b) for production processes</p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• predictive maintenance based on machine learning,</li> <li>• tools to classify products or find defects in products based on computer vision,</li> <li>• autonomous drones for production surveillance, security or inspection tasks,</li> <li>• assembly works performed by autonomous robots, etc.</li> </ul> <p>c) for organisation of business administration processes</p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• business virtual assistants based on machine learning and/or natural language processing,</li> <li>• voice to text conversion based on speech recognition for document drafting,</li> <li>• automated planning or scheduling based on machine learning,</li> <li>• machine translation, etc.</li> </ul> <p>d) for management of enterprises</p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• machine learning to analyse data and help make investment or other decisions,</li> <li>• sales or business forecasting based on machine learning,</li> <li>• risk assessment based on machine learning, etc.</li> </ul> <p>e) for logistics</p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• autonomous robots for pick-and-pack solutions in warehouses,</li> <li>• route optimization based on machine learning,</li> <li>• autonomous robots for parcel shipping, tracing, distribution and sorting,</li> <li>• autonomous drones for parcel delivery, etc.</li> </ul> <p>f) for ICT security</p> <p>e.g.</p> <ul style="list-style-type: none"> <li>• face recognition based on computer vision for authentication of ICT users,</li> <li>• detection and prevention of cyber-attacks based on machine learning, etc.</li> </ul> <p>g) for human resources management or recruiting</p> <p>e.g.</p>		

		General Survey	Micro-enterprises
	Question / Item	Any deviation from question / item in model questionnaire	<u>Question included</u>
	<ul style="list-style-type: none"> <li>• candidates pre-selection screening, automation of recruiting based on machine learning,</li> <li>• employee profiling or performance analysis based on machine learning,</li> <li>• chatbots based on natural language processing for recruiting or supporting human resources management, etc.</li> </ul>		
	<b>Module X: Background information</b> (X1-X3) available in some countries from SBS, the business register or administrative data and thus not to be included; latest available information should be provided		
X1.	Main economic activity of the enterprise, during 2020		
X2.	Average number of employees and self-employed persons (persons employed), during 2020		
X3.	Total turnover (in monetary terms, excluding VAT), for 2020		

**(Metadata report)****B) Coverage of the optional questions of the Model Questionnaire**

Indicate which optional questions were included in the national questionnaire. For each question or item, an "x" in the column named "**Question included**" means that it was included in the national questionnaire. The column "10+" refers to enterprises with "10 or more employees and self-employed persons" and column "Micro" refers to micro-enterprises.

		Question included		
	Optional question / item	10+	Micro	Any deviation from question / item in model questionnaire
	<b>Module A: Access and use of the internet</b> (optional items)			
A4.	Does your enterprise provide portable devices that allow a mobile connection to the internet using mobile telephone networks, for business purposes? (e.g. via portable computers or other portable devices such as smartphones)	X		

		Question included		
	Optional question / item	10+	Micro	Any deviation from question / item in model questionnaire
A5.	How many persons employed use a portable device provided by the enterprise, that allows internet connection via mobile telephone networks, for business purposes? (e.g. portable computers, or other portable devices such as smartphones) If you can't provide this value, please indicate an estimate of the percentage of the total number of persons employed who use a portable device provided by the enterprise, that allows internet connection via mobile telephone networks, for business purposes (e.g. portable computers, or other portable devices such as smartphones)	X		
A6.	Does your enterprise have a website? (Filter question)	X		
A7.	Does the website have any of the following? a) Description of goods or services, price information b) Online ordering or reservation or booking, e.g. shopping cart c) Possibility for visitors to customise or design online goods or services d) Tracking or status of orders placed e) Personalised content on the website for regular/recurrent visitors f) Links or references to the enterprise's social media profiles	X		
	<b>Module B: e-Commerce sales</b> (optional items)			
B4.	Via how many e-commerce marketplaces did you have web sales during 2020?	X		
B5.	Did more than half of your turnover from e-commerce marketplaces in 2020 come from only one e-commerce marketplace?	X		
	<b>Module F: Artificial Intelligence</b> (optional items)			



		Question included		
	Optional question / item	10+	Micro	Any deviation from question / item in model questionnaire
F3.	How did you enterprise acquire the Artificial Intelligence software or systems that it uses? a) They were developed by own employees (including those employed in parent or affiliate enterprise) b) Commercial software or systems were modified by own employees (including those employed in parent or affiliate enterprise) c) Open-source software or systems were modified by own employees (including those employed in parent or affiliate enterprise) d) Commercial software or systems ready to use were purchased (including examples where it was already incorporated in a purchased item or system) e) External providers were contracted to develop or modify them	X		
F4.	Has your enterprise ever considered using any of the Artificial Intelligence technologies listed in question F1? (Filter question)	X		
F5.	What are the reasons for your enterprise not to use any of the Artificial Intelligence technologies listed in question F1? a) The costs seem too high b) There is a lack of relevant expertise in the enterprise c) Incompatibility with existing equipment, software or systems d) Difficulties with availability or quality of the necessary data e) Concerns regarding violation of data protection and privacy f) Lack of clarity about the legal consequences (e.g. liability in case of damage caused by the use of Artificial Intelligence) g) Ethical considerations h) Artificial Intelligence technologies are not useful for the enterprise	X		
	<b>Module G: Covid-19 impact</b> ( <i>optional items</i> )			

		Question included		
	Optional question / item	10+	Micro	Any deviation from question / item in model questionnaire
G1.	During 2020, did the enterprise: (via computers or mobile phones) a) increase the percentage of persons employed having remote access to the e-mail system of the enterprise b) increase the percentage of persons employed having remote access the ICT systems of the enterprise other than e-mail c) increase the number of remote meetings conducted by the enterprise (e.g. via Skype, Zoom, MS Teams, etc.)	X		
G2.	To what degree were these changes due to the covid-19 pandemic? (via computers or mobile phones) a) in the remote access to the e-mail system of the enterprise b) in the remote access the ICT systems of the enterprise other than e-mail c) in number of remote meetings conducted by the enterprise	X		
G3.	During 2020, due to the Covid-19 pandemic did your enterprise start or increased efforts to sell goods or services via internet (via website or apps, marketplaces or EDI-type messages)?	X		

**(Metadata report)****C) General remarks on the national questionnaire**

*The General remarks on the national questionnaire section can be filled in with general information about the variables collected. For example, if a variable was collected/verified from administrative sources, other survey, etc. It is noted that X1-X3 variables may be available from SBS, the business register or other administrative sources.*

Not Applicable

**(Metadata report)****D) Additional questions introduced in national questionnaire(s)**

*In this section you can introduce general information on the adoption of additional national questions. In the following table you can provide the designation of these questions and any other additional information on that question you wish to provide.*

Additional questions	Additional information


**5.3.1. Data completeness - rate**

*Not requested (to be calculated by EDIT). Please provide any relevant qualitative information in the column "Any deviation from question/item in the model questionnaire" under 5.3.A and 5.3.B.*

## 6. Accuracy and reliability

[Top](#)

### 6.1. Accuracy - overall

#### (Quality report)

#### A) Reliability of breakdowns to be used for the calculation of European aggregates

Please indicate for both the general survey and for micro-enterprises the breakdowns to be used for the calculation of **European** aggregates that have a **sufficiently high quality** to be released at **national** level by introducing an "x" in the column next to the Y/N responses.

**Note:** In the case there is a grant agreement that foresees that certain breakdowns will be provided with sufficiently high quality to allow their release at **national** level, the following table should reflect the grant agreement ("x" next to "Yes" for the respective breakdowns).

In the case data for few variables/breakdowns cannot be released - although the particular breakdowns had been taken into account in the sampling design as foreseen in the grant agreement - **it is expected that the breakdowns are marked with "Yes", data are accordingly flagged as unreliable and explanations should be provided in column comments regarding reliability (below).**

In all cases, data will be evaluated for completeness and compliance with the terms in the grant agreement (if applicable) and the current quality report based on the table below; additional clarifications may be requested in case of incomplete information.

Economic Activity	Micro-enterprises			Comments regarding reliability	General Survey			Comments regarding reliability
10-12	Yes	No			Yes	X	No	
13-15	Yes	No			Yes	X	No	
16-18	Yes	No			Yes	X	No	
19	Yes	No			Yes	X	No	
20	Yes	No			Yes	X	No	
21	Yes	No			Yes	X	No	
22 - 23	Yes	No			Yes	X	No	
26	Yes	No			Yes	X	No	
27	Yes	No			Yes	X	No	
28	Yes	No			Yes	X	No	
29-30	Yes	No			Yes	X	No	
31-33	Yes	No			Yes	X	No	
35	Yes	No			Yes	X	No	
36-39	Yes	No			Yes	X	No	
45	Yes	No			Yes	X	No	

46	Yes	No		Yes	X	No	
58-60	Yes	No		Yes	X	No	
61	Yes	No		Yes	X	No	
62-63	Yes	No		Yes	X	No	
69-71	Yes	No		Yes	X	No	
72	Yes	No		Yes	X	No	
73-75	Yes	No		Yes	X	No	
77-78+80-82	Yes	No		Yes	X	No	
79	Yes	No		Yes	X	No	
95.1	Yes	No		Yes	X	No	

**(Quality report)****B) Comments on reliability and representativeness of results and completeness of dataset**

*These comments should reflect overall standard errors reported for the indicators and breakdowns in section 6.2.1 (Sampling error - indicators) and the rest of the breakdowns for national and European aggregates, as well as other accuracy measurements. The estimated standard error should not exceed 2pp for the overall proportions and should not exceed 5pp for the proportions related to the different subgroups of the population (for those NACE aggregates for the calculation and dissemination of national aggregates). If problems were found, these could have implications for future surveys (e.g. need to improve sampling design, to increase sample sizes, to increase the response rates etc.).*

***Comments related to all indicators, breakdowns concerning accuracy (sampling error in 6.2.1, other indicators and breakdowns, breakdowns for national and European aggregates):***

The data resulting from the survey are considered reliable. The estimated standard error does not exceed 2% for the overall proportions and 5% for the proportions relating to the different subgroups of the population (for those NACE aggregates used for the calculation and dissemination of national aggregates). The standard error is higher than 5% only in subgroups C13\_15, C16\_18, C20, C21, C27, C28, C29\_30, C31\_33, D35, E36\_39, G45, J58\_60, J61, L68, M72, M73\_75 and N79 which constitute though, only 0,3%, 1,6%, 0,7%, 0,2%, 0,3%, 0,4%, 0,1%, 1,6%, 0,1%, 1,6%, 2,0%, 1,7%, 0,5%, 0,9%, 0,1%, 1,9% and 1,0% of the total population respectively.

**(Quality report)****C) Use of flags:**
**Were data cells in the transmitted dataset flagged as unreliable?**

Yes	No <sup>1</sup>
	X
<i>If yes, please inform according to which <u>criteria or rules</u> flags have been included.</i>	<i>If no, please explain the <u>reasons</u> for not including flags in the transmitted data.</i>
	Flags were not used in the transmitted data, although the standard errors in some subgroups were higher than the threshold, due to the fact that the data transmitted were considered to be reliable. Standard errors greater than the threshold appear only in subgroups which constitute only a very small proportion of the total population.

Have Eurostat recommendations regarding flagging of unreliable data (the estimated standard error should not exceed 2pp for the overall proportions and should not exceed 5pp for the proportions related to the different subgroups of the population) been followed?	If not, please explain why.
	Flags were not used in the transmitted data, although the standard errors in some subgroups were higher than the threshold, due to the fact that the data transmitted were considered to be reliable. Standard errors greater than the threshold appear only in subgroups which constitute only a very small proportion of the total population.

[1] Please note that if data were not flagged as unreliable they will be released

## 6.2. Sampling error

### (Quality report)

#### Calculation of the standard error

Various methods can be used for the calculation of the standard error for an estimated proportion. The aim is to incorporate into the standard error the sampling variability but also variability due to unit non-response, item non-response (imputation), calibration etc. In case of census / take-all strata, the aim is to calculate the standard errors comprising the variability due to unit non-response and item non-response.

Please, describe below the approach which you have followed. This information will help Eurostat to evaluate the comparability of the standard errors supplied in the previous section by the different statistical institutes participating in the survey.

#### a) Name and brief description of the applied estimation approach

Standard errors were calculated under the assumption that the enterprises which responded to the survey behave as a stratified simple random sample. The standard error of the ratios' estimators is calculated using Taylor linearization technique.

#### b) Basic formula

In order to calculate the standard error for variables E\_AWSVAL and E\_AXSVAL, the function svystatR of the R package ReGenesees is used.

In order to calculate the standard error for variables E\_WEBORD, E\_SM1\_SNET, E\_AWSEU, E\_AXSELL, E\_ERP1, E\_CRMAN, E\_WEB, E\_SM1\_SNET, E\_AWS\_COWN, E\_AWS\_CMP, E\_CC, E\_IOT and E\_AI\_TTM the function svystatTM of the R package ReGenesees is used.

#### c) Main reference in the literature

Not available

#### d) How has the stratification been taken into account?

In order to take stratification into account, the function e.svydesign of the package ReGenesees is used prior to using the functions svystatTM and svystatR.

#### e) Which strata have been considered?

Two variables were used for stratification, NACE group and SIZE. Based on NACE Rev.2 there were 48 strata for the enterprises in sections C10\_S951\_XK. In order to calculate standard errors, stratum 6 was merged with stratum 5 and stratum 41 was merged with stratum 40, since strata 6 and 41 had only one observation.

### 6.2.1. Sampling error - indicators

**(Quality report)****Standard error (for selected indicators and breakdowns)**

Precision measures related to variability due to sampling, unit non-response (the size of the subset of respondents is smaller than the size of the original sample) and other (imputation for item non-response, calibration etc.) are not (yet) required from the Member states for all indicators. Eurostat will make basic assumptions to compute these measures for all indicators produced (e.g. stratified random sampling assuming as strata the crossing of the variables "Number of employees and self-employed persons" and "Economic Activity" as it was defined in the 3 tables of section 3.1 A2, C, D).

In order to evaluate the reasonability of the assumptions made by Eurostat, we need to compare the estimated standard error computed under these assumptions and those computed by the country, taking into account the real sampling design used and other sources of variability, for at least some of the indicators. We also need to compare these measures not only for the overall population, but also for the several breakdowns, in which case the standard error is commonly higher.

We kindly ask you to provide in the following table the estimated standard error **in percentage points** for each of the listed indicators. Both aggregates for "possible calculation of **national** aggregates" and for "possible calculation of **European** aggregates" are included in the table.

Certain cells correspond to optional size classes, and are to be filled in only when these were covered by the survey. In case of confidential data (flag c in data and in the right column of the table below), the estimated proportion and Standard error are left empty.

The first three columns of the table refer as a technical reference to the question and scope in the same terms as used in the Transmission Format.

**NOTE: PLEASE FILL IN THE RELEVANT INFORMATION IN THE ATTACHED EXCEL FILE (Worksheets starting with STANDARD ERROR)**

**6.3. Non-sampling error**

Please fill in the sub-concepts below.

**6.3.1. Coverage error**

See 3.1. A) 1. Known shortcomings of frame population, if any

**6.3.1.1. Over-coverage - rate****(Quality report)**

Please provide information concerning over-coverage (if possible, the over-coverage rate).
Not Applicable

**6.3.1.2. Common units - proportion**

Not requested.

**6.3.2. Measurement error****(Quality report)**

Measurement errors related to the survey instrument should be reported here (for example wrong routing in national questionnaire, processing errors due to coding or data entry, interviewers' bias).
Not Applicable

**6.3.3. Non response error**

See detailed sections below

**6.3.3.1. Unit non-response - rate****Response and non-response****(Quality report)****A) Unit response**

The following table should be filled in with the number of units (e.g. enterprises), by type of response to the survey and by the percentage of these values in relation to the gross sample size.

**Please note that the gross/net sample shall correspond to the (updated) gross and net sample reported in 3.1 C.**

Type of response	0-9 employees and self-employed persons	10 or more employees and self-employed persons

	Number	%	Number	%
Gross sample size (as in section 3.1 C)		100%	4515	100%
1. Response (questionnaires returned by the enterprise)			2161	47.9%
1.1 Used for tabulation and grossing up (Net sample or Final Sample; as in section 3.1 D)			2103	46.6%
1.2 Not used for tabulation			58	1.3%
1.2.1 Out of scope (deaths, misclassified originally in the target population, etc.)			58	1.3%
1.2.2 Other reasons (e.g. unusable questionnaire, etc.)			0	0
2. Non-response (e.g. non returned mail, returned mail by post office, etc.)			2354	52.1%

**Comments on unit response, if unit response is below 60%**

Due to the fact that the method used for data collection changed for 2021 (use of a web questionnaire only, compared to combination of web questionnaire and personal interviews that was used in the previous years) the response rate decreased. Furthermore, the COVID-19 pandemic also had a negative impact on the response rate of the survey.

**(Quality report)**
**B) Methods used for minimizing unit non-response**

*Please give a description of measures taken to reduce the unit non-response: advance notification in the form of a letter or phone call, showing respondents how the data they are providing are being used, system of reminders, etc.*

In order to minimize the unit non-response rate the following procedures were applied:

- a) informative e-mail to the IT manager of the enterprise just before the beginning of the data collection period,
- b) e-mail reminders were sent,
- c) telephone reminders.

**(Quality report)**
**C) Methods used for unit non-response treatment**

*Indicate the method used to correct for unit non-response (Please put an "x" into the right column of the relevant treatment.)*

1. No treatment for unit non-response	
2. Treatment by re-weighting	
2.1 Re-weighting by the sampling design strata considering that non-response is ignorable inside each stratum (the naïve model)	
2.2 Re-weighting by identified response homogeneity groups (created using sample-level information)	
2.3 Re-weighting through calibration/post-stratification (performed using population information) by the groups used for calibration/post-stratification	
3. Treatment by imputation (done distinctly for each variable/item)	
4. Please briefly describe below the method(s) and the model(s) corresponding to the above or other method(s) used for the treatment of unit non-response. (e.g. Re-weighting using Horvitz-Thompson estimator, ratio estimator or regression estimator, auxiliary variables, etc.)	

Unit non-response is taken into account by calculating the weights as  $N_i/n_i$  where  $N_i$ =number of enterprises in stratum  $i$  of the population and  $n_i$ =number of responding enterprises in stratum  $i$  of the population.

**(Quality report)**

**D) Assessment of unit non-response bias**

*In case of high non-response (response rate below 60%), please provide a qualitative assessment of the bias associated with non-response (e.g. survey of non-respondents).*

Not Applicable

**6.3.3.2. Item non-response - rate**

**(Quality report)**

**A) Questions or items with item response rates below 90%**

*If any, identify the items with low response rates (the cut-off value to be used is 90% ) and indicate their respective response rates. The item non-response rate should of course be calculated taking into account the routing and filtering in the questionnaire.*

No questions or items with response rates below 90% existed

**(Quality report)**

**B) Methods used for item non-response treatment**

*Indicate whether imputations are made for item non-response and give a short description of the methods used. Please see also guidance on this subject in the model questionnaire and the Methodological Manual.*

<b>1.No treatment for item non-response</b>	
<b>2.Deductive imputation</b> An exact value can be derived as a known function of other characteristics.	
<b>3.Deterministic imputation(e.g. mean/median, mean/median by class, ratio-based, regression-based, single donor nearest-neighbour, etc)</b> Deterministic imputation leads to estimators with no random component, that is, if the imputation were to be re-conducted, the outcome would be the same	X
<b>4.Random imputation(e.g., hot-deck, cold-deck etc)</b> Random imputation leads to estimators with a random component, that is, if the imputation were re-conducted, it would have led to a different result	
<b>5.Re-weighting</b>	
<b>6.Multiple imputation</b> In multiple imputation each missing value is replaced (instead of a single value) with a set of plausible values that represent the uncertainty of the right value to impute. Multiple imputation methods offer the possibility of deriving variance estimators by taking imputation into account. The incorporation of imputation into the variance can be easily derived based on variability of estimates among the multiply imputed data sets.	
<b>7. Please briefly describe below the method(s) and the model(s) corresponding to the above or other method(s) used for the treatment of item non-response.</b>	
Imputation of the mean within classes for item-non-response was used only for question X3 on turnover, where the item non-response was 2,3%. For all other variables, no imputation was carried out.	

**(Quality report)**

**C) Other comments relating to the item non-response**

*Please use this box to inform us of additional issues concerning "non-response" calculation (e.g. method used in national publications, etc.).*

Not Applicable



<b>6.3.4. Processing error</b>
<i>See detailed sections below</i>
<b>6.3.4.1. Imputation - rate</b>
(Quality report)
<i>Please provide the imputation rate, if possible.</i>
Not Applicable
<b>6.3.5. Model assumption error</b>
<i>Not requested.</i>
<b>6.4. Seasonal adjustment</b>
<i>Not applicable.</i>
<b>6.5. Data revision - policy</b>
(Quality report)
<i>Please provide any information concerning data revisions (national policy)</i>
A data revision policy is in place at CYSTAT. It is published on CYSTAT's website, at the following link: <a href="https://www.cystat.gov.cy/en/StaticPage?id=1072">https://www.cystat.gov.cy/en/StaticPage?id=1072</a> CYSTAT also publishes a list of scheduled revisions (regular or major revisions), also published on its website, at the following link: <a href="https://www.cystat.gov.cy/en/AnnouncementList">https://www.cystat.gov.cy/en/AnnouncementList</a>
<b>6.6. Data revision - practice</b>
(Quality report)
<i>Please provide any information concerning national practices on data revisions</i>
Not Applicable
<b>6.6.1. Data revision - average size</b>
<i>Not requested.</i>

<b>7. Timeliness and punctuality</b>
<a href="#">Top</a>
<b>7.1. Timeliness</b>
<i>See detailed section below.</i>
<b>7.1.1. Time lag - first result</b>
<i>Not applicable.</i>
<b>7.1.2. Time lag - final result</b>
(Quality report)
<b>A)</b> Data are to be delivered to Eurostat in the fourth quarter of the reference year (due date for the finalised dataset is 5th October). European results are released before the end of the survey year or in the beginning of the year following the survey year (T=reference year; T+0 for indicators referring to the current year; T+10 months for other indicators referring to the previous year e.g. e-commerce).
<i>Please report any deviation from the above:</i>
The data have been delivered to Eurostat before 5th October 2021.
(Quality report)
<b>B)</b> Date of release of final national data
<i>Please report the release date of final national data.</i>
The release date of the final data is estimated to be 6/12/2021

**7.2. Punctuality***See detailed sections below***7.2.1. Punctuality - delivery and publication****(Quality report)**

*Please report on the time lag between the actual date of data delivery to Eurostat and the deadline (5th October).*

The actual date of the data delivery to Eurostat was the 24th of September (11 days earlier).

**8. Coherence and comparability**[Top](#)**8.1. Comparability - geographical**

The model questionnaire is generally used by the countries that conduct the survey on ICT usage and e-commerce in enterprises. Due to (small) differences in translation, in reference periods, in the used survey vehicle, in non-response treatment or different routing through the questionnaire, some results for some countries may be of reduced comparability. In these cases, notes are added in the metadata.

**(Quality report)**

*Please indicate here if you have deviated from the model questionnaire or the concepts described in the Methodological manual that would affect the comparability of data among countries (e.g. different or no filter question, etc)*

No deviations from the model questionnaire or the concepts described in the Methodological manual that would affect the comparability of data.

**8.1.1. Asymmetry for mirror flow statistics - coefficient***Not applicable***8.2. Comparability - over time***See detailed section below.***8.2.1. Length of comparable time series****(Metadata report)**

*Please indicate any changes in the survey from the previous year(s) that may have an impact on the comparability over time of the results delivered to Eurostat (and not particularly those relating to results released only nationally).*

No changes were made in the survey which may have an impact on the comparability of the results.

**8.3. Coherence - cross domain****(Metadata report)**

*Please indicate any issues with other statistical data collections in enterprises (using either surveys or administrative sources) that may have an impact on the coherence **across domains**. e.g. use of different statistical units from Structural business survey, economic activities, size classes, reference period, etc*

The statistical unit used (enterprise) as well as the economic activities covered in ICT usage and e-Commerce in enterprises survey are the same as in SBS survey. Regarding the size classes in ICT survey the size classes are small (10-49 employees), medium (50-249 employees), large (250+ employees) while in SBS the size classes used are 0-1, 2-9, 10-19, 20-49, 50-249, 250+. In ICT survey respondents should consider as reference period the time of the completion of the survey (survey period in 2021) excluding some questions that refer to year 2020. In SBS the reference period is year 2019.

**(Metadata report)**

*Please indicate any issues with other statistical data collections (using either surveys or administrative sources) that may have an impact on the comparability across domains. e.g. comparability with data from Structural Business Survey*

Not Applicable

<b>8.4. Coherence - sub annual and annual statistics</b>
<i>Not applicable.</i>
<b>8.5. Coherence - National Accounts</b>
<i>Not applicable.</i>
<b>8.6. Coherence - internal</b>
<i>Not applicable.</i>

<b>9. Accessibility and clarity</b>		<a href="#">Top</a>
<b>9.1. Dissemination format - News release</b>		
<b>(Quality report)</b>		
<b>National dissemination of results</b>		
Please indicate if there was <u>any national news release for dissemination of results</u> or if any release is foreseen. If possible, provide links or attach News releases.		
News releases:	Links	
Results from the survey will be available on the website of the Statistical Service of Cyprus under the Statistical Theme “Science and Technology / Information Society”.	<a href="https://www.cystat.gov.cy/en/SubthemeStatistics?s=40">https://www.cystat.gov.cy/en/SubthemeStatistics?s=40</a>	
<b>9.2. Dissemination format - Publications</b>		
<b>(Quality report)</b>		
<b>National dissemination of results</b>		
Please indicate if there were <u>any national publications for dissemination of results</u> or if any publication is foreseen. If possible, provide links or attach publication.		
Publications:	Links	
Results from the survey will be available on the website of the Statistical Service of Cyprus under the Statistical Theme “Science and Technology / Information Society”.	<a href="https://www.cystat.gov.cy/en/SubthemeStatistics?s=40">https://www.cystat.gov.cy/en/SubthemeStatistics?s=40</a>	
<b>9.3. Dissemination format - online database</b>		
<i>See detailed section 9.3.1</i>		
<b>9.3.1. Data tables - consultations</b>		
<b>(Quality report)</b>		
Results for selected variables collected in the framework of this survey are available for all participating countries on <a href="#">Digital economy and society</a> of Eurostat website.		
National data tables/databases:	Links	
Results from the survey will be available on the website of the Statistical Service of Cyprus under the Statistical Theme “Science and Technology / Information Society”.	<a href="https://www.cystat.gov.cy/en/SubthemeStatistics?s=40">https://www.cystat.gov.cy/en/SubthemeStatistics?s=40</a>	
<b>9.4. Dissemination format - microdata access</b>		
<i>Not applicable.</i>		
<b>9.5. Dissemination format - other</b>		
<i>Not requested.</i>		
<b>9.6. Documentation on methodology</b>		
<b>(Quality report)</b>		
Please report on the availability of documents that are referred to as national reference metadata files, methodological papers, summary documents or other important handbooks, if any.		
Summary Results describing the results of the survey illustrated with figures. (See attachment to this report.)		

<b>9.7. Quality management - documentation</b>
<b>(Quality report)</b>
<i>Please provide information about national quality management documentation or studies (if available).</i>
Not Available
<b>9.7.1. Metadata completeness - rate</b>
Not requested.
<b>9.7.2. Metadata - consultations</b>
Not requested.

<b>10. Cost and Burden</b> <a href="#">Top</a>
<b>(Quality report)</b>
Is there any information on national level regarding the time needed by respondents to fill in the 2021 ICT usage and e-commerce in enterprises questionnaire?
<i>Please provide updated relevant information, if available.</i>
30 minutes on average to fill in the questionnaire

<b>11. Confidentiality</b> <a href="#">Top</a>
<b>11.1. Confidentiality - policy</b>
<b>(Metadata report) / (Quality report)</b>
<a href="#">Regulation (EC) No 223/2009 on European statistics</a> (recital 24 and Article 20(4)) of 11 March 2009 (OJ L 87, p. 164), stipulates the need to establish common principles and guidelines ensuring the confidentiality of data used for the production of European statistics and the access to those confidential data with due account for technical developments and the requirements of users in a democratic society.
<i>Please provide any relevant information concerning the national policy on confidentiality related to the survey on ICT usage and e-commerce in enterprises e.g. minimum number of enterprises for breakdowns, etc.</i>
Official statistics are released in accordance to all confidentiality provisions of the following: <ul style="list-style-type: none"> <li>• National Statistics Law No. 25(I) of 2021 (especially Article 16 on statistical confidentiality).</li> <li>• Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009 on European statistics and its later amendments (especially Chapter 5 on statistical confidentiality).</li> <li>• European Statistics Code of Practice (especially Principle 5 on statistical confidentiality).</li> <li>• CYSTAT's Code of Practice for the Collection, Publication and Storage of Statistical Data.</li> </ul> <p><b>Official Statistics Law No. 25(I) of 2021:</b> <a href="https://www.cystat.gov.cy/en/StaticPage?id=1074">https://www.cystat.gov.cy/en/StaticPage?id=1074</a></p> <p><b>Regulation (EC) No 223/2009 on European statistics (consolidated text):</b> <a href="http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02009R0223-20150608&amp;qid=1504858409240&amp;from=EN">http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02009R0223-20150608&amp;qid=1504858409240&amp;from=EN</a></p> <p><b>European Statistics Code of Practice:</b> <a href="https://ec.europa.eu/eurostat/documents/4031688/8971242/KS-02-18-142-EN-N.pdf/e7f85f07-91db-4312-8118-f729c75878c7">https://ec.europa.eu/eurostat/documents/4031688/8971242/KS-02-18-142-EN-N.pdf/e7f85f07-91db-4312-8118-f729c75878c7</a></p> <p><b>Code of Practice for the Collection, Publication and Storage of Statistical Data:</b> <a href="https://www.cystat.gov.cy/en/StaticPage?id=1066">https://www.cystat.gov.cy/en/StaticPage?id=1066</a></p>
<b>11.2. Confidentiality - data treatment</b>
Data are transmitted via eDamis (encrypted) and delivered to a secure environment where they are treated. National Statistical Institutes are requested to add flags for confidentiality in case results must not be disclosed.
<b>(Quality report)</b>
<i>Please provide any relevant information about national rules for treatment of confidential data or anonymisation.</i>
The treatment of confidential data is regulated by CYSTAT's Code of Practice for the Collection,

Publication and Storage of Statistical Data.

- *Code of Practice for the Collection, Publication and Storage of Statistical Data:* <https://www.cystat.gov.cy/en/StaticPage?id=1066>

## 12. Comment

[Top](#)

(Quality report)

**Problems encountered and lessons to be learnt**

*These comments can relate to methodological issues as well as to the questionnaire itself (item construction, clarity of definitions to respondents, routing and filtering, etc.)*

No problems encountered.

(Quality report)

**Other comments, if any**

No comments

(Metadata report) / (Quality report)

**Annexes**

*Note: Please also provide the annexes in a computer-readable format and in English (Files can be attached using the button "Add file")*

Please add "x" if files are attach to the current report

(Metadata report) Questionnaire in national language	X
(Metadata report) Questionnaire in English (if available)	X
(Metadata report) National reports on methodology (if available)	
(Quality report) Analysis of key results, backed up by tables and graphs in English (if available)	X

(Metadata report / Quality report)

**Other annexes**

*Please give an overview of other annexes (whether or not referred to in the preceding sections of this report)*

ENT ENUMERATORS INSTRUCTIONS - set of guidelines/instructions given to the enumerators during training

## Related metadata

[Top](#)

## Annexes

[Top](#)

[ENT QUESTIONNAIRE EN](#)  
[ENT QUESTIONNAIRE EL](#)  
[ENT ENUMERATORS INSTRUCTIONS](#)  
[ICT ENT EXCEL TABLES CY](#)  
[ICT ENT 2021 SUMMARY RESULTS](#)