

Institut national de la statistique et des études économiques

National registration number (matricule national):



Name of the enterprise:

.....

Contact

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\$ 247-84365 (afternoons only)

Survey on the usage of information and communication technologies by enterprises – 2025

The aim of this survey is the collection of data concerning enterprises in order to compile statistics on their usage of Information and Communication Technologies (ICT). This survey is carried out under **Regulation (EU)** 2019/2152 of the European Parliament and of the Council and of the Law of 10 July 2011 organising the Institut national de la statistique et des études économiques (STATEC).

Under the terms of the Law of 10 July 2011 establishing STATEC, businesses are bound to respond to this questionnaire. According to article 15 of the aforementioned Law, the refusal to respond to the survey, the refusal to respond within the requested time frame or the intentional delivery of inaccurate or incomplete information is liable to a fine of 251 up to 2.500 euros.

STATEC guarantees the confidential treatment of the individual data of the enterprises, which are used exclusively for the compilation of statistics or in the carrying out of scientific studies.

Please keep a copy of this questionnaire for your own records and return the completed original questionnaire to STATEC before the date mentioned in the letter accompanying the survey.

Objectives of the survey

The aim of this survey is to collect data on the usage of information and communication technologies (ICT) by Luxembourgish enterprises. The collected data are used in the production of harmonised and comparable statistics across the European Union. They are therefore an essential tool for national and European policy makers to measure progress towards the goals concerning the adoption and use of ICT, such as the "Digital Agenda for Europe" of the European Commission.

The results of previous surveys are available on the Luxembourgish Statistics Portal (https://statistiques.public.lu/en/donnees/themes/entreprises.html), under « Science and technology ».

Scope

The present survey is aimed at resident businesses carrying out market activities according to the statistical classification of economic activities in the European Community (NACE Rev.2) on or from the Luxembourgish economic territory during the observation period.

The definition of the enterprise unit used in this survey includes resident natural persons, legal persons incorporated under Luxembourgish Law or Luxembourgish branches of legal units incorporated under foreign law.

Please exclude any activities relating to any permanent establishments and subsidiaries located in foreign territories such as foreign branches of a legal unit incorporated under Luxembourgish law.

Where not otherwise specified, please consider as reference the current situation (year 2025). The reference period for the percentages of sales/orders data is financial year 2024. Please report all items to the best of your ability, estimates are acceptable.

How to respond to this questionnaire?

This questionnaire is <u>intended primarily for the ICT manager or a senior professional in the ICT department</u> of your enterprise. In any case the respondent should not be someone with responsibilities only in accounting.

The survey is divided into several sections. Each section contains questions about various aspects of ICT at your enterprise. Due to the specialised nature of each question (e.g. financial indicators, human resources records etc.), it may be necessary to collaborate with colleagues in different departments to answer the questions.

Please take into account all of the legal units listed in the "List of legal units targeted by this survey", that was annexed to the letter inviting you to participate in the survey.

The structure of the questionnaire

This questionnaire is divided into eight sections:

- Section A General information
- Section B Access and use of the internet
- Section C e-Commerce
- Section D Data utilisation and analytics
- Section E Use of cloud computing services
- Section F Artificial Intelligence
- Section G ICT and the environment
- Section H Comments and contact coordinates

Disclaimer: References to third-party brands, products and trademarks are for the sake of clarification and are not intended to promote the use of such products.

Section A - General information

A1. Is your enterprise part of an enterprise group?

An enterprise group consists of two or more legally defined enterprises under common ownership. Each enterprise in the group can serve different markets, as with national or regional subsidiaries, or serve different product markets. The head office is also part of an enterprise group.

Yes	
No	

Section B - Access and use of the internet

B1. How many persons employed have access to the internet for business purposes?

Please consider the aggregate number of persons from all the legal units listed in the letter accompanying the survey.

Including fixed line, fixed wireless and mobile telephone network connection.

Answer about your enterprise only for Luxembourg. Exclude any subsidiaries, parent enterprises and foreign branches for the purposes of this survey.



If the value is " $\mathbf{0}$ " \rightarrow Please go to question **G1**.

Use of a fixed connection to the internet for business purposes

B2. Does your enterprise use any type of fixed connection to the internet?

(e.g. ADSL, SDSL, VDSL, fiber optics technology (FTTP), cable technology, fixed wireless, etc.)

Yes	

Please go to question B3.

No

Please go to question B4.

B3. What is the maximum contracted download speed of the fastest fixed internet connection of your enterprise?

(Please tick one box only)

a.	Less than 30 Mbit/s	
b.	At least 30 but less than 100 Mbit/s	
c.	At least 100 but less than 500 Mbit/s	
d.	At least 500 but less than 1 Gbit/s	
e.	At least 1 Gbit/s	

Use of a website

B4. Does your enterprise have a website?

Yes	□ →	Please go to question B5 .
No	□ →	Please go to question B6 .

B5. Does the website have any of the following?

	No
a. Description of goods or services, price information	
b. Online ordering or reservation or booking	
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	
 A chat service for customer support (a chatbot, virtual agent or a person replying to customers in real-time) 	
g. Advertisement of open job positions or online job application	
h. Content that presents sustainability reporting consisting in Environmental, Social, and Governance (ESG) information	
 Content available in at least two languages Please, consider a multilingual website within a single domain (e.g. ".com") or multiple domains of your enterprise in different languages (e.g. ".es", ".uk"). 	

Use of Social Media

B6. Does your enterprise use any social media (i.e. have a user profile or an account)?

(e.g. Facebook, Instagram, X (formerly Twitter), Snapchat, YouTube, LinkedIn, TikTok, Xing, Viadeo)

Yes	
No	

Section C - e-Commerce

In **e-Commerce** sales of goods or services, the order is placed via web sites, apps or EDI-type messages (EDI: Electronic Data interchange) by methods specifically designed for the purpose of receiving orders.

The payment and the ultimate delivery of the goods or services do not necessarily have to be conducted online.

E-Commerce transactions exclude orders made by manually typed e-mail messages.

Web sales of goods or services

Web sales cover orders, bookings and reservations placed by your customers via

- your enterprise's websites or apps¹ :
 - online store (webshop)
 - web forms
 - extranet (webshop or web forms)
 - booking/reservation applications for services
 - apps for mobile devices or computers
- e-Commerce marketplace² websites or apps (used by several enterprises for trading goods or services).

Orders written in e-mail are not counted as web sales.

C1. During 2024, did your enterprise have web sales of goods or services via:

		Yes	Νο
a.	your enterprise's website or "apps"? including those of parent or affiliate enterprises, extranets		
b.	e-Commerce marketplace websites or "apps" used by several enterprises for trading goods or services?		
	e.g. letzshop.lu, e-Bookers, Booking, hotels.com, eBay, Amazon, Amazon Business, Alibaba, Rakuten, TimoCom, etc.		

If you answered <u>No to both items</u> → Please go to question C7.

Otherwise \rightarrow Please go to question C2.

C2. Please state the value of the turnover resulting from web sales of goods or services (in monetary terms, excluding VAT), in financial year 2024.

Please consider the aggregate turnover (as defined in the statutory annual accounts) of all the legal units listed in the letter accompanying the survey.

Exclude any subsidiaries, parent enterprises and foreign branches for the purposes of this survey.



If you answered <u>Yes to both items</u> in $C1 \rightarrow$ Please go to question C3. Otherwise \rightarrow Please go to question C4.

¹ **App(s)**. A mobile app, short for mobile application or just app, is application software designed for a specific purpose (e.g. entertainment, shopping, etc.), downloaded and used on computers depending on their operating system (e.g. portable devices such as tablets, smartphones, etc.).

² The term '**e-Commerce marketplace**' refers to websites or apps used by several enterprises for trading products (*e.g. Booking, eBay, Amazon, Amazon Business, Alibaba, Rakuten, etc.*). *Amazon Business* is a marketplace on *Amazon.com* that is addressed to B2B commercial transactions. E-Commerce marketplaces are different from e-Commerce platforms (*e.g. Shopify, WooCommerce, Magento, Bigcommerce, etc.*). The latter provide scalable, self-made online solutions for business that would like to set up their own e-Commerce website.

C3. Please provide a percentage breakdown of the total turnover (excluding VAT) from web sales in financial year 2024 (refer to the amount provided in C2) for the following:

a.	via your enterprise's website or "apps" including those of parent or affiliate enterprises, extranets		<u> </u>]%
b.	via e-Commerce marketplace websites or "apps" used by several enterprises for trading goods or services]%
	e.g. letzshop.lu, e-Bookers, Booking, hotels.com, eBay, Amazon, Amazon Business, Alibaba, Rakuten, TimoCom, etc.			
				_

Total (a.+b.) This percentage refers to the amount indicated in a

This percentage refers to the amount indicated in question C2.

C4. Please provide a percentage breakdown of the total turnover (excluding VAT) from web sales in financial year 2024 (refer to the amount provided in C2), by type of customer:

υ.	Total (a.+b.+c.)	_ /0
c	B2G (Business-to-government, sales to public authorities)	٦.
b.	B2B (Business-to-business, sales to other enterprises)]%
a.	B2C (Business-to-consumer, sales to private consumers)	_%

C5. Please provide a percentage breakdown of the total turnover (excluding VAT) from web sales in financial year 2024 (refer to the amount provided in C2), by geographic areas:

a.	Luxembourg		%
b.	Belgium, France, Germany, Netherlands	,	%
C.	Other EU countries	,	%
d.	Rest of the world		%
	Total (a.+b.+c.+d.) This percentage refers to the amount indicated in question C2.	1 0 0	%

If you answered "0" to items b. and c. → Please go to question C7. Otherwise → Please go to question C6.

C6. Regarding web sales to other EU countries: did your enterprise experience any of the following difficulties during 2024?

		Yes	No
a.	High costs of delivering or returning products when selling to other EU countries		
b.	Difficulties related to resolving complaints or 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 other EU countries e.g. uncertainty regarding VAT treatment in different countries		

EDI-type sales

EDI-type sales cover **orders placed** by your customers via EDI-type messages (EDI: Electronic Data interchange) meaning:

- in an agreed or standard format suitable for automated processing;
- EDI-type order message created from the business system of the customer;
- including orders transmitted via EDI-service provider;
- including automatic system generated demand driven orders;
- including orders received directly into your ERP (Enterprise Resource Planning) system.

Examples of EDI: EDIFACT, XML/EDI (e.g. UBL, Rosettanet)

C7. During 2024, did your enterprise have EDI-type sales of goods or services?

Please exclude manually typed e-mails.



C8. Please state the value of the turnover (in monetary terms, excluding VAT) resulting from your EDI-type sales of goods or services, in financial year 2024.

Please consider the aggregate turnover (as defined in the statutory annual accounts) of all the legal units listed in the letter accompanying the survey.

Exclude any subsidiaries, parent enterprises and foreign branches for the purposes of this survey.



C9. Please provide a percentage breakdown of the total turnover from EDI-type sales of goods or services in financial year 2024, by geographic areas:

	Total (a.+b.+c.+d.) This percentage refers to the amount indicated in question C8 .	1 0 0	%
d.	Rest of the world		%
C.	Other EU countries		%
b.	Belgium, France, Germany, Netherlands		%
a.	Luxembourg		%

Use of business software

D1. Does your enterprise use the following business software?

		Yes	No
a.	Enterprise Resource Planning (ERP) software An ERP (Enterprise Resource Planning) is a software package used to manage resources by sharing information among different functional areas (e.g. accounting, planning, production, marketing, etc.). ERP software can be off-the-shelf software, customised to the needs of the enterprise or self-created software.		
b.	Customer Relationship Management (CRM) software e.g. Software for managing information about customers (e.g. relations or transactions), CRM facilitates communication with the customer and helps track customer interests, purchasing habits.		
C.	Business Intelligence (BI) software BI software accesses and analyses data (e.g. from data warehouses, data lakes) from internal IT systems and/or external sources and presents analytical findings in reports, summaries, dashboards, graphs, charts or maps, to provide users with detailed insights for decision-making and strategic planning.		

Data analytics

Data analytics refers to the use of technologies, techniques or software tools for analysing data to extract patterns, trends and insights to make conclusions, predictions and better decision-making with the aim of improving performance (e.g. increase production, reduce costs). Data may be extracted from your own enterprise' data source or from external sources (e.g. suppliers, customers, government)

D2. Does your enterprise perform data analytics by own employees?

Please, consider internal and external data sources.



D3. Does your enterprise perform data analytics on data from the following sources?

		Yes	No
a.	Data analytics on data from transaction records such as sale details, payments recordse.g. from Enterprise Resource Planning system (ERP), own webshop		
b.	Data analytics on data about customers such as customer purchasing information, location, preferences, customer reviews, searches e.g. from Customer Relationship Management system (CRM) or own website		
C.	Data analytics on data from social media, incl. from your enterprise's own social media profiles e.g. personal information, comments, video, audio, images		
d.	Data analytics on web data e.g. search engine trends, web scraping ³ data		
e.	Data analytics on location data from the use of portable devices or vehicles e.g. portable devices using mobile telephone networks, wireless connections or GPS		
f.	Data analytics on data from smart devices or sensors e.g. Machine to Machine (M2M) communications, sensors installed in machinery, manufacturing sensors, smart meters, Radio frequency identification (RFID ⁴) tags		
g.	Data analytics on government authorities' open data e.g. enterprise public records, weather conditions, topographic conditions, transport data, housing data, buildings data		
h.	Data analytics on satellite data e.g. satellite imagery, navigation signals, position signals Please, include data acquired from enterprise's own infrastructure or from externally provided service (e.g. AWS Ground Station) and exclude location data from the use of portable devices or vehicles using GPS.		

D4. Does an external enterprise or organisation perform data analytics for your enterprise?

Please include data analytics based on data from internal and external sources.

Yes	
No	

³ Web scraping: use of computer program for extracting data from website

⁴ A Radio Frequency identification-RFID tag is a device that can be applied to or incorporated into a product or an object and transmits data via radio waves.

Section E - Use of cloud computing services

Cloud computing refers to ICT services that are used over the internet to access software, computing power, storage capacity etc., where the services have all of the following characteristics:

- are delivered from servers of service providers -
- can be easily scaled up or down (e.g. number of users or change of storage capacity)
- can be used on-demand by the user, at least after the initial set up (without human interaction with the service provider)
- are paid for, either per user, by capacity used, or they are pre-paid.

Cloud computing may include connections via Virtual Private Networks (VPN).

E1. Does your enterprise use any paid cloud computing services?

Please exclude free of charge services.



→ Please go to question F1.

E2. Does your enterprise use any of the following paid cloud computing services?

Please exclude free of charge services.

		Yes	No
a.	E-mail, as a cloud computing service		
b.	Office software, as a cloud computing service e.g. word processors, spreadsheets, etc.		
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, 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, as a cloud computing servicee.g. reusable software modules, application programming interfaces (APIs)		

Section F - Artificial Intelligence

Artificial intelligence refers to systems that use technologies such as: **text mining, computer vision, speech recognition, natural language generation, machine learning, deep learning** to gather, use and/or produce data, for example to make predictions, recommendations, or decisions, with varying levels of autonomy.

Artificial intelligence systems can be purely software based, e.g.:

- systems that create content (generative AI);
- chatbots and business virtual assistants based on natural language processing;
- face recognition systems based on computer vision or speech recognition systems;
- data analysis based on machine learning, etc.;

or embedded in devices, e.g.:

- autonomous robots for warehouse automation or production assembly works;
- autonomous drones for production surveillance or parcel handling, etc.

F1. Does your enterprise use any of the following Artificial Intelligence technologies?

		Yes	No
a.	Technologies performing analysis of written language (text mining)		
b.	Technologies converting spoken language into machine-readable format (speech recognition)		
C.	Technologies generating written, spoken language or programming codes (natural language generation, speech synthesis)		
d.	Technologies generating pictures, videos, sound/audio		
e.	Technologies identifying objects or persons based on images or videos (image recognition, image processing)		
f.	Machine learning (e.g. deep learning) for data analysis		
g.	Technologies automating different workflows or assisting in decision making (Artificial Intelligence based software robotic process automation)		
h.	Technologies enabling physical movement of machines via autonomous decisions based on observation of surroundings (autonomous robots, selfdriving vehicles, autonomous drones)		

If you answered <u>No to all items</u> \rightarrow Please go to question F4. Otherwise \rightarrow Please go to question F2.

F2. Does your enterprise use Artificial Intelligence software or systems for any of the following purposes?

		Yes	No
a.	for marketing or sales e.g. - customer profiling, price optimisation, personalised marketing offers, market analysis		
	 based on machine learning, chatbots based on natural language processing for customer support, autonomous robots for orders processing. 		
b.	for production or service processese.g.		
	 predictive maintenance or process optimisation based on machine learning, tools to classify products or find defects in products based on computer vision, autonomous drones for production surveillance, security or inspection tasks, assembly works performed by autonomous robots. 		
c.	for organisation of business administration processes or management		
	 business virtual assistants based on machine learning and/or natural language processing, e.g. for document drafting, data analysis or strategic decision making based on machine learning, e.g. risk assessment, based on machine learning, 		
	 planning or business forecasting based on machine learning, human resources management based on machine learning or natural language processing, e.g. candidates pre-selection screening, employee profiling or performance analysis. 		
d.	for logistics e.g.		
	 autonomous robots for pick-and-pack solutions in warehouses for parcel shipping, tracing, distribution or sorting, route optimisation based on machine learning. 		
e.	for ICT security e.g.		
	 face recognition based on computer vision for authentication of ICT users, detection and prevention of cyber-attacks based on machine learning. 		
f.	for accounting, controlling or finance management		
	 e.g. machine learning to analyse data that helps to make financial decisions, invoice processing based on machine learning, machine learning or natural language processing for bookkeeping documents. 		
g.	for research and development (R&D) or innovation activity		
	excluding research on Al e.g.		
	- analysis of data for conducting research, solving research problems, developing a new		

or significantly improved product/service based on machine learning.

F3. How did you enterprise acquire the Artificial Intelligence software or systems that it uses?

		Yes	No
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		

If you answered <u>No to all items</u> in $F1 \rightarrow$ Please go to question F4. Otherwise \rightarrow Please go to question G1.

F4. Has your enterprise ever considered using any of the Artificial Intelligence technologies listed in question F1?



Please go to question **F5**.

..... \rightarrow Please go to question **G1**.

F5. What are the reasons for your enterprise not to use any of the Artificial Intelligence technologies listed in question F1?

		Yes	No
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		

Section G - ICT and the environment

G1. Does your enterprise use ICT systems or solutions to reduce the energy consumption of the enterprise?

e.g:

- · automated system enhancing energy efficiency of machinery
- smart thermostat to monitor, control and optimize energy consumpton
- smart lighting systems
- · remote monitoring or control system to manage energy consumption
- systems to detect anomalous consumption, voltage peaks or other non-conformities etc.

Please do not take into account settings in the ICT equipment, e.g. sleep mode, turning the screen brightness down.

Yes	
No	

G2. Does your enterprise use ICT systems or solutions to reduce the materials used (including consumables) or to enhance the use of recycled materials?

e.g:

- · computer-aided design optimising material use
- · 3D printing for material efficency
- · automatic sorting for better separation and recyclability of waste
- · monitoring systems supporting predictive maintenance of assets
- · flow sensor to reduce water consumption
- · ERP systems for minimizing overstocking and reduce material waste

Please do not take into account paper consumption, e.g. amount of paper used for printing and copying.

Yes	
No	

If you answered <u>No to both</u> G1 and G2 \rightarrow Please go to question G4. Otherwise \rightarrow Please go to question G3.

G3. Does your enterprise monitor and quantify the impact of using ICT systems or solutions on energy and/or material consumption?

Quantify the impact of using ICT systems or solutions means calculating what energy or material savings/efficiency gains are due to the ICT systems or solutions used by the enterprise. This can be done, for example, by .:

· comparing energy consumption with and without a given digital energy-saving solution

· comparing the amount of production waste with and without a given computer-aided design optimising solution

• looking at energy invoice and calculating the share of the energy savings attributed to ICT solutions.

Please refer to ICT systems or solutions considered in questions G1 and/or G2.

Yes	
No	

G4. What does your enterprise do with ICT equipment (e.g. computers, monitors, mobile phones) when it is no longer used?

		Yes	No
a.	It is disposed of in electronic waste collection/recycling (incl. leaving it to the retailer to dispose of)		
b.	It is kept in the enterprise e.g. to be used as spare parts, fear of sensitive information being disclosed		
c.	It is sold, returned to a leasing enterprise, or donated		

Section H - Comments and contact coordinates

H1. In the box below, please write any additional comments that you would like to make:

H2. How long did it take to complete this questionnaire?

Hours

s _____ Minutes

H3. Please indicate the department(s) in your business that provided the information:

ICT	Management	
Finance / Accounting	Other	
Human resources		

Please provide details of the person we should contact if we have any queries regarding the information returned on this questionnaire.

Name		Phone	
Position		E-mail	
Website	http://		

(location)

(date)

(signature)

Thank you for completing the questionnaire, your response is important.