

## Community survey on ICT usage and e-commerce in enterprises 2023

**Company name:**.....

**Bulstat ID:**

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**Contact details of the person, who fills in the questionnaire:**

**Name, surname:**.....

**Email:**.....

**Phone:**.....

### Module A: Access and use of the internet

**A1.** How many persons employed have **access to the internet** for business purposes?

*Including fixed line and mobile connection.*

*(Number)*

**If your enterprise does not have internet access fill '0' and the survey ends.**

#### Use of a fixed connection 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.*

Yes

No

**Go to A4**

**A3.** What is the maximum contracted download **speed** of the fastest fixed line internet connection of your enterprise?

*Tick only one.*

a) less than 30 Mbps	<input type="checkbox"/>
b) at least 30 but less than 100 Mbps	<input type="checkbox"/>
c) at least 100 but less than 500 Mbps	<input type="checkbox"/>
d) at least 500 but less than 1000 Mbps	<input type="checkbox"/>
e) at least 1000 Mbps/1 Gbps	<input type="checkbox"/>

#### Use of a website

**A4.** Does your enterprise have a **website**?

Yes

No

**Go to A6**

**A5.** Does the website have any of the following:

**Yes**

**No**

	Yes	No
a) Description of goods or services, price information	<input type="checkbox"/>	<input type="checkbox"/>
b) Online ordering or reservation or booking, e.g. shopping cart	<input type="checkbox"/>	<input type="checkbox"/>
c) Possibility for visitors to customise or design online goods or services	<input type="checkbox"/>	<input type="checkbox"/>
d) Tracking or status of orders placed	<input type="checkbox"/>	<input type="checkbox"/>
e) Personalised content on the website for regular/recurrent visitors	<input type="checkbox"/>	<input type="checkbox"/>
f) A chat service for customer support (a chatbot, virtual agent or a person replying to customers)	<input type="checkbox"/>	<input type="checkbox"/>

g) Advertisement of open job positions or online job application	<input type="checkbox"/>	<input type="checkbox"/>
h) Content available in at least two languages <i>Including a multilingual website within a single domain or multiple domains of your enterprise in different languages (e.g. ".bg", ".uk", ".de", ".es").</i>	<input type="checkbox"/>	<input type="checkbox"/>

### Use of mobile apps

**A6.** Does your enterprise have a mobile app for clients (e.g. for loyalty program, e-commerce, customer support)? Yes  No

### Use of social media

*Enterprises using social media are considered those that have a user profile, an account or a user licence depending on the requirements and the type of the social media.*

<b>A7.</b> Does your enterprise use any of the following social media:	<b>Yes</b>	<b>No</b>
a) Social networks (e.g. Facebook, LinkedIn, Xing, Yammer, Viadeo)	<input type="checkbox"/>	<input type="checkbox"/>
b) Enterprise's blog or microblogs (e.g. Twitter)	<input type="checkbox"/>	<input type="checkbox"/>
c) Multimedia content sharing websites or apps (e.g. YouTube, Flickr, Instagram, SlideShare, Pinterest, Snapchat)	<input type="checkbox"/>	<input type="checkbox"/>

**If there is at least one answer 'Yes' in A7 continue with A8, otherwise go to A9.**

<b>A8.</b> Does your enterprise use any of the above mentioned social media to:	<b>Yes</b>	<b>No</b>
a) Develop the enterprise's image or market products (e.g. advertising or launching products)	<input type="checkbox"/>	<input type="checkbox"/>
b) Obtain or respond to <u>customer</u> opinions, reviews, questions	<input type="checkbox"/>	<input type="checkbox"/>
c) Involve <u>customers</u> in development or innovation of goods or services	<input type="checkbox"/>	<input type="checkbox"/>
d) Collaborate with <u>business partners or other organisations</u> (e.g. suppliers, public authorities, non-governmental organisations)	<input type="checkbox"/>	<input type="checkbox"/>
e) Recruit employees	<input type="checkbox"/>	<input type="checkbox"/>
f) Exchange views, opinions or knowledge <u>within the enterprise</u>	<input type="checkbox"/>	<input type="checkbox"/>

### Other use of the internet

**A9.** Does your enterprise pay to advertise on the internet? Yes  No   
*E.g. adverts on search engines, on social media, on other websites or apps.*

**Go to B1**

<b>A10.</b> Does your enterprise using any of the following targeted advertising methods based on:	<b>Yes</b>	<b>No</b>
a) Content or keywords searched by internet users	<input type="checkbox"/>	<input type="checkbox"/>
b) Tracking of internet users' past activities or profile	<input type="checkbox"/>	<input type="checkbox"/>
c) Geolocation of internet users	<input type="checkbox"/>	<input type="checkbox"/>
d) Any other method of targeted advertising on the internet not specified above	<input type="checkbox"/>	<input type="checkbox"/>

### Module B: e-Commerce sales

*In e-commerce sales of goods or services, the order is placed via web sites, apps or EDI-type messages by methods specifically designed for the purpose of receiving orders.*

*The payment may be done online or offline.*

*e-Commerce does **not include** orders written in e-mail.*

*Please report web and EDI-type sales separately. They are defined by the method of placing the order:*

- **Web sales:** the customer places the order on a website or through an app (**questions from B1 to B4**);
- **EDI type sales:** an EDI-type order message is created from the business system of the customer (**questions B5 and B6**).

### Web sales of goods or services

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

- Your enterprise's websites or apps:
  - ✓ Online store (webshop);
  - ✓ Web forms;
  - ✓ Extranet (webshop or web forms);

- ✓ Booking/reservation applications for services;
  - ✓ Apps for mobile devices or computers.
  - e-commerce marketplace websites or apps used by several enterprises for trading goods or services (e.g. eBay, Amazon, Booking.com, TimoCom, Alibaba, Amazon, eMag, Glovo, Takeaway, etc.).
- Orders written in e-mail are not counted as web sales.

<b>B1.</b> During 2022, did your enterprise have <b>web sales</b> of goods or services via:	<b>Yes</b>	<b>No</b>
a) Your enterprise's websites or apps (including extranets)	<input type="checkbox"/>	<input type="checkbox"/>
b) e-commerce marketplace websites or apps used by several enterprises for trading goods or services (e.g. Booking.com, TimoCom, eBay, Amazon, Alibaba, eMAG, Glovo, Takeaway, etc.)	<input type="checkbox"/>	<input type="checkbox"/>

**If both B1a) and B1b) = 'No' then go to B5.**

**B2.** What was the **value of your web sales** in 2022.

a) **Value** of your web sales (in thousands leva, excluding VAT) (If the value is less than one thousand leva, please enter "1").

**(Thousands leva)**

**OR**

b) **Percentage** of the total turnover\* generated by web sales

\* Turnover includes gross sales revenue, incl. revenue tax, excluding VAT and revenue from sales of raw materials (code 15500 + code 15420 of the Annual Activity Report)

\_ \_ \_ %

**If both B1a) and B1b) = 'Yes' continue with B3, otherwise go to B4.**

**B3.** What was the percentage breakdown of the value of web sales in 2022 for the following:

a) Via your enterprise's websites or apps (including extranets)	_ _ _ %
b) Via e-commerce marketplace websites or apps used by several enterprises for trading goods or services (e.g. Booking.com, TimoCom, eBay, Amazon, Alibaba, eMAG, Glovo, Takeaway, etc.)	_ _ _ %
<b>Total:</b>	<b>1 0 0%</b>

**B4.** What was the percentage breakdown of the value of web sales in 2022 by type of customer:

a) Sales to private consumers	_ _ _ %
b) Sales to other enterprises and sales to public sector	_ _ _ %
<b>Total:</b>	<b>1 0 0%</b>

**EDI-type sales**

EDI-type sales cover orders placed by your customers via EDI-type messages (EDI: Electronic Data interchange) in an agreed or standard format suitable for automated processing meaning:

- EDI-type order message created from the business system of the customer;
- orders transmitted via EDI-service provider;
- automatic system generated demand driven orders;
- orders received directly into your ERP system.

Examples of EDI - EDIFACT, EANCOM, UBL, XML, eXite, ECOD.

**B5.** During 2022, did your enterprise have **EDI-type sales** of goods or services?      Yes       No

**Go to C1**

**B6.** What was the value of your **EDI-type sales** in 2022:

a) **Value** of your EDI-type sales of goods or services (in thousands leva, excluding VAT) (If the value is less than one thousand leva, please enter "1").

**(Thousands leva)**

**OR**

b) **Percentage** of the total turnover\* generated by EDI-type sales of goods or services

\* Turnover includes gross sales revenue, incl. revenue tax, excluding VAT and revenue from sales of raw materials (code 15500 + code 15420 of the Annual Activity Report)

\_ \_ \_ %

## Module C: Data utilisation, sharing, analytics and trading

### Use of business software


C1.	Does your enterprise use the following business software?	Yes	No
a)	<b>Enterprise Resource Planning - ERP</b> <i>Software used to manage resources by sharing information among different functional areas (e.g. accounting, planning, production, marketing,). ERP software can be off-the-shelf software, customised to the needs of the enterprise or self-created software.</i>	<input type="checkbox"/>	<input type="checkbox"/>
b)	<b>Customer Relationship Management - CRM</b> <i>Software for managing information about customers (e.g. relations or transactions), CRM facilitates communication with the customer and helps track customer interests, purchasing habits.</i>	<input type="checkbox"/>	<input type="checkbox"/>
c)	<b>Business Intelligence software - BI</b> <i>BI software accesses and analyses data (e.g. from data warehouses, data lakes) from internal IT systems and external sources and presents analytical findings in reports, summaries, dashboards, graphs, charts and maps, to provide users with detailed insights for decision-making and strategic planning.</i>	<input type="checkbox"/>	<input type="checkbox"/>

### Data sharing

C2.	Does your enterprise share data electronically with suppliers or customers within the supply chain (e.g. via websites or apps, EDI systems, real-time sensors or tracking)? <i>This data may be exchanged via websites, networks or other means of electronic data transfer, excluding e-mails not suitable for automated processing or manually typed. Some of the examples of data exchange: information on inventory levels, progress of deliveries, progress in service provision, demand forecasts, products availability, customer requirements, e-commerce data, information regarding production or maintenance.</i>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
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### 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).*

C3.	Does your enterprise perform data analytics by <u>own employees</u> ? <i>Include data analytics based on data from internal and external sources.</i>	Yes <input type="checkbox"/>	No <input type="checkbox"/> 
			<b>Go to C5</b>
C4.	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 records (e.g. from Enterprise Resource Planning system (ERP), own webshop)	<input type="checkbox"/>	<input type="checkbox"/>
	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)	<input type="checkbox"/>	<input type="checkbox"/>
	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)	<input type="checkbox"/>	<input type="checkbox"/>
	d) Web data (e.g. search engine trends, web scraping data)	<input type="checkbox"/>	<input type="checkbox"/>
	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)	<input type="checkbox"/>	<input type="checkbox"/>
	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 (RFID2) tags)	<input type="checkbox"/>	<input type="checkbox"/>
	g) Data analytics on government authorities' open data (e.g. enterprise public records, weather conditions, topographic conditions, transport data, housing data, buildings data)	<input type="checkbox"/>	<input type="checkbox"/>
	h) Satellite data (e.g. satellite imagery, navigation signals, position signals) <i>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.</i>	<input type="checkbox"/>	<input type="checkbox"/>
C5.	Does an external enterprise or organisation perform data analytics for your enterprise? <i>Include data analytics based on data from internal and external sources.</i>	Yes <input type="checkbox"/>	No <input type="checkbox"/>

## Data trading


<b>C6.</b>	During 2022, did your enterprise sell (access to) any of its own data? <i>E.g. data about your enterprise's customers' preferences, data from your enterprise's smart devices or sensors.</i>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<b>C7.</b>	During 2022, did your enterprise purchase (access to) any data? <i>E.g. data about other enterprise's customers' preferences, data from other enterprise's smart devices or sensors.</i>	Yes <input type="checkbox"/>	No <input type="checkbox"/>

## Module D: 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. and 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;
- are paid for, either per user, by capacity used, or they are pre-paid.

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

<b>D1.</b>	Does your enterprise <b>buy</b> any cloud computing services used over the internet? <i>Exclude free of charge services.</i>	Yes <input type="checkbox"/>	No <input type="checkbox"/>  <b>Go to E1</b>
<b>D2.</b>	Does your enterprise <b>buy</b> any of the following cloud computing services used over the internet? <i>Exclude free of charge services.</i>	<b>Yes</b>	<b>No</b>
	a) E-mail <i>(as a cloud computing service)</i>	<input type="checkbox"/>	<input type="checkbox"/>
	b) Office software <i>(e.g. word processors, spreadsheets)</i> <i>(as a cloud computing service)</i>	<input type="checkbox"/>	<input type="checkbox"/>
	c) Finance or accounting software applications <i>(as a cloud computing service)</i>	<input type="checkbox"/>	<input type="checkbox"/>
	d) Enterprise Resource Planning (ERP) software applications <i>(as a cloud computing service)</i>	<input type="checkbox"/>	<input type="checkbox"/>
	e) Customer Relationship Management (CRM) software applications <i>(as a cloud computing service)</i>	<input type="checkbox"/>	<input type="checkbox"/>
	f) Security software applications <i>(e.g. antivirus program, network access control)</i> <i>(as a cloud computing service)</i>	<input type="checkbox"/>	<input type="checkbox"/>
	g) Hosting the enterprise's database(s) <i>(as a cloud computing service)</i>	<input type="checkbox"/>	<input type="checkbox"/>
	h) Storage of files <i>(as a cloud computing service)</i>	<input type="checkbox"/>	<input type="checkbox"/>
	i) Computing power to run the enterprise's own software <i>(as a cloud computing service)</i>	<input type="checkbox"/>	<input type="checkbox"/>
	j) Computing platform providing a hosted environment for application development, testing or deployment <i>(e.g. reusable software modules, application programming interfaces (APIs))</i> <i>(as a cloud computing service)</i>	<input type="checkbox"/>	<input type="checkbox"/>

## Module E: Artificial Intelligence (AI)

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 and/or use data to predict, recommend or decide, with varying levels of autonomy, the best action to achieve specific goals.

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


- chatbots and business virtual assistants based on natural language processing;
- machine translation software;
- 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.

<b>E1.</b>	Does your enterprise use any of the following <b>Artificial Intelligence (AI) technologies</b> :	<b>Yes</b>	<b>No</b>
	a) Technologies performing analysis of written language <i>(e.g. text mining)</i>	<input type="checkbox"/>	<input type="checkbox"/>
	b) Technologies converting spoken language into machine-readable format <i>(speech recognition)</i>	<input type="checkbox"/>	<input type="checkbox"/>

	c) Technologies generating written or spoken language ( <i>natural language generation, speech synthesis</i> )	<input type="checkbox"/>	<input type="checkbox"/>
	d) Technologies identifying objects or persons based on images or videos ( <i>image recognition, image processing</i> )	<input type="checkbox"/>	<input type="checkbox"/>
	e) Machine learning ( <i>e.g. deep learning</i> ) for data analysis	<input type="checkbox"/>	<input type="checkbox"/>
	f) Technologies automating different workflows or assisting in decision making ( <i>e.g. AI based software robotic process automation</i> )	<input type="checkbox"/>	<input type="checkbox"/>
	g) Technologies enabling physical movement of machines via autonomous decisions based on observation of surroundings ( <i>autonomous robots, selfdriving vehicles, autonomous drones</i> )	<input type="checkbox"/>	<input type="checkbox"/>
<b>If E1 a) to g) = 'No' then go to E4.</b>			
<b>E2.</b>	Does your enterprise use Artificial Intelligence software or systems for any of the following purposes:	<b>Yes</b>	<b>No</b>
	a) for marketing or sales <i>e.g.:</i> – <i>customer profiling, price optimisation, personalised marketing offers, market analysis based on machine learning;</i> – <i>chatbots based on natural language processing for customer support;</i> – <i>autonomous robots for orders processing.</i>	<input type="checkbox"/>	<input type="checkbox"/>
	b) for production or service processes <i>e.g.:</i> – <i>predictive maintenance or process optimization based on machine learning;</i> – <i>tools to classify products or find defects in products based on computer vision ;</i> – <i>autonomous drones for production surveillance, security or inspection tasks;</i> – <i>assembly works performed by autonomous robots.</i>	<input type="checkbox"/>	<input type="checkbox"/>
	c) for organisation of business administration processes or management <i>e.g.:</i> – <i>business virtual assistants based on machine learning and/or natural language processing (e.g. for document drafting) ;</i> – <i>data analysis or strategic decision making based on machine learning (e.g. risk assessment), based on machine learning ;</i> – <i>planning or business forecasting based on machine learning;</i> – <i>human resources management based on machine learning or natural language processing (e.g. candidates pre-selection screening, employee profiling or performance analysis).</i>	<input type="checkbox"/>	<input type="checkbox"/>
	d) for logistics <i>e.g.:</i> – <i>autonomous robots for pick-and-pack solutions in warehouses for parcel shipping, tracing, distribution or sorting;</i> – <i>route optimization based on machine learning.</i>	<input type="checkbox"/>	<input type="checkbox"/>
	e) for ICT security <i>e.g.:</i> – <i>face recognition based on computer vision for authentication of ICT users ;</i> – <i>detection and prevention of cyber-attacks based on machine learning.</i>	<input type="checkbox"/>	<input type="checkbox"/>
	f) for accounting, controlling or finance management <i>e.g.:</i> – <i>machine learning to analyse data that helps to make financial decisions ;</i> – <i>invoice processing based on machine learning;</i> – <i>machine learning or natural language processing for bookkeeping documents.</i>	<input type="checkbox"/>	<input type="checkbox"/>
	g) for research and development (R&D) or innovation activity <i>Excluding research on AI.</i> <i>e.g.:</i> – <i>analysis of data for conducting research, solving research problems,</i> – <i>developing a new or significantly improved product/service based on machine learning.</i>	<input type="checkbox"/>	<input type="checkbox"/>
<b>E3.</b>	How did you enterprise acquire the Artificial Intelligence software or systems that it uses?	<b>Yes</b>	<b>No</b>
	a) They were developed by own employees ( <i>including those employed in parent or affiliate enterprise</i> )	<input type="checkbox"/>	<input type="checkbox"/>
	b) Commercial software or systems were modified by own employees ( <i>including those employed in parent or affiliate enterprise</i> )	<input type="checkbox"/>	<input type="checkbox"/>

	c) Open-source software or systems were modified by own employees ( <i>including those employed in parent or affiliate enterprise</i> )	<input type="checkbox"/>	<input type="checkbox"/>
	d) Commercial software or systems ready to use were purchased ( <i>including examples where it was already incorporated in a purchased item or system</i> )	<input type="checkbox"/>	<input type="checkbox"/>
	e) External providers were contracted to develop or modify them	<input type="checkbox"/>	<input type="checkbox"/>
<b>If E1 a) to g) = 'No' then go to E4, otherwise go to F1.</b>			
<b>E4.</b>	Has your enterprise ever considered using any of the Artificial Intelligence technologies listed in question E1?	Yes <input type="checkbox"/>	No <input type="checkbox"/>  <b>Go to F1</b>
<b>E5.</b>	What are the reasons for your enterprise not to use any of the Artificial Intelligence technologies listed in question E1?	<b>Yes</b>	<b>No</b>
	a) The costs seem too high	<input type="checkbox"/>	<input type="checkbox"/>
	b) There is a lack of relevant expertise in the enterprise	<input type="checkbox"/>	<input type="checkbox"/>
	c) Incompatibility with existing equipment, software or systems	<input type="checkbox"/>	<input type="checkbox"/>
	d) Difficulties with availability or quality of the necessary data	<input type="checkbox"/>	<input type="checkbox"/>
	e) Concerns regarding violation of data protection and privacy	<input type="checkbox"/>	<input type="checkbox"/>
	f) Lack of clarity about the legal consequences ( <i>e.g. liability in case of damage caused by the use of Artificial Intelligence</i> )	<input type="checkbox"/>	<input type="checkbox"/>
	g) Ethical considerations	<input type="checkbox"/>	<input type="checkbox"/>
	h) Artificial Intelligence technologies are not useful for the enterprise	<input type="checkbox"/>	<input type="checkbox"/>

## Module F: Invoicing

There are invoices in paper form and electronic form. **Invoices in electronic form** are of two types:

- *E-invoices in a standard structure (e.g. EDI, UBL, XML) suitable for automated processing. They are exchanged either directly or via service operators or via an electronic banking system;*
- *Invoices in electronic form not suitable for automated processing, (e.g. emails, transmission of PDF files, TIF image, JPEG or other format).*

<b>F1.</b>	In 2022, did your enterprise <b>send</b> any of the following types of <b>invoices</b> : <i>Include also invoices sent via intermediaries (e.g. accountants, e-invoice service providers).</i>	<b>Da</b>	<b>No</b>
	a) Invoices in electronic form, in a standard structure suitable for automated processing (e-invoices) ( <i>e.g. EDI, UBL, XML, efaktura.bg, inv.bg</i> ) <i>Excluding the transmission of PDF files.</i>	<input type="checkbox"/>	<input type="checkbox"/>
	b) Invoices in electronic form not suitable for automated processing ( <i>e.g. emails, TIF image, JPEG or other format</i> ) <i>Including the transmission of PDF files.</i>	<input type="checkbox"/>	<input type="checkbox"/>
	c) Paper invoices	<input type="checkbox"/>	<input type="checkbox"/>
<b>If F1a) = 'Yes' continue with F2, otherwise the survey ends.</b>			
<b>F2.</b>	In 2022, out of all invoices your enterprise sent (in electronic or paper form), how many were <b>einvoices</b> in a standard structure suitable for automated processing? <i>Tick only one.</i>		
	a) Less than 10%	<input type="checkbox"/>	
	b) At least 10 but less than 25%	<input type="checkbox"/>	
	c) At least 25 but less than 50%	<input type="checkbox"/>	
	d) At least 50 but less than 75%	<input type="checkbox"/>	
	e) At least 75%	<input type="checkbox"/>	

**Thank you for your cooperation!**