



USAGE OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN THE REPUBLIC OF SERBIA, 2022

Households/Individuals Enterprises



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Enterprises



Usage of information and communication technologies in the Republic of Serbia, 2022

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✓ INTRODUCTION

Modern society has become "information society" with the development and usage of information and communication technologies, which, as its main characteristic, plays the most important part in production, the economy and all other sphere in the life of individuals and society as a whole.

Aware of the significance of those technologies, the Statistical Office of the Republic of Serbia carried out in 2004 a pilot survey on the usage of information and communication technologies in organisations dealing with financial and insurance activities. This undertaking was primarily meant to test and prepare the methodologies and instruments for the implementation of similar regular surveys related to households and the economy.

In the previous sixteen years, the Statistical Office of the Republic of Serbia conducted two surveys on the usage of information and communication technologies. The first one referred to households and individuals, and the second included also enteprises.

Both surveys were carried out on the territory of the Republic of Serbia also in 2022 based on EUROSTAT methodology. Data for the Republic of Serbia exclude those for AP Kosovo and Metohija.

As for households and individuals, the three months preceding the telephone interview were taken to be the reference period, which was, for most of the questions asked to enterprises, January 2022, while selected ones referred to the entire 2021.

The survey for households was carried out on a two-stage sample, which was stratified according to the criterion on urban characteristics. The sample was allocated to the territories of Central Serbia (excluding Belgrade), AP Vojvodina and Belgrade, proportionally to the number of households. It included 2800 households and 2800 individuals. The interview was done both by telephone and indirectly (answers given by another person other than the absent one).

The survey for enterprises was carried out on a sample stratified by size classes and activities, through telephone interview. The sample covered 1 716 enterprises.

The Statistical Office of the Republic of Serbia is hopeful that this publication will provide the users enough information on the current situation in information and communication technologies, which will serve as the basis for further development.

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95.0% of households have a mobile phone, and 98.5% a TV set.

77.0% of households have a computer.

83.2% of household have an Internet connection.





In the last three months, 75.9% of persons used a computer.





In the last three months, 47.8% of Internet users bought/ordered over the Internet.



When asked how often they used, on average, the Internet in the last three months, 92.0% of respondents said more than once during the day.

The analysis of the respondents by sex indicates that 85.9% of men and 81.2% of women used the Internet in the last three months.

More than 81% of the Internet population have an account on social networks (Facebook, Twitter).



Most of the users buy/order clothes and sports goods over the Internet (71.5%).



Internet-connected smart devices, such as smart watches, fitness bands, goggles or headsets and other accessories are used by 15.8% of individuals who used the Internet in the last three months.



30.2% of the Internet population used the Internet to print official forms from web pages or apps of public authorities.





17.9% of persons kept their laptop or tablet being no more in use, and 15.7% kept their desktop computer.







THE SURVEY WAS CARRIED OUT ON THE SAME SAMPLE FOR HOUSEHOLDS AND INFIVIDUALS (AGED 16-74).

THE RESPONSE RATE IS 90.6%.



The results on the behavior of persons and their habits concerning the recycling of IT devices no more in use indicate that 18.9% of persons sold/donated their mobile phone.

1.1. METHODOLOGY

	Survey period	 The survey was carried out from 15 February to 28 February 2022
C	Type of survey	Telephone interview
合	Sample size	2 800 households2 800 individuals
_ ~	Target population	 For households: target population is made of all households with at least one member aged betwee 16 and 17 For individuals: target population is made of all
		individuals aged betwee 16 and 74
Ŀ	Type of sample	Two-stage, stratitified sample
•	Geographic scope	Territory of the Republic of Serbia (without AP Kosovo and Metohia)

1.2. SAMPLE

The survey on ICT usage in households was conducted on a representative sample of 2 800 households on the territory of the Republic of Serbia. The response rate was 90.6% (2 537 individuals).

HOUSEHOLDS

			Income			Region Type of survey						
Sample (households)	Up to 30000 dinars	30000 – 50000 dinars	50000 – 70000 Dinars	70000 – 90000 Dinars	More than 90000 dinars	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Urban	Other	Total
Number	285	507	425	362	459	634	729	679	495	1616	921	2537
%	14,0	24,9	20,9	17,8	22,5	25,0	28,7	26,8	19,5	63,7	36,3	100,0

The same sample was used for households and for individuals aged from 16 to 74 living on the territory of the Republic of Serbia. The sample included 2 800 individuals. The response rate was.

INDIVIDUALS

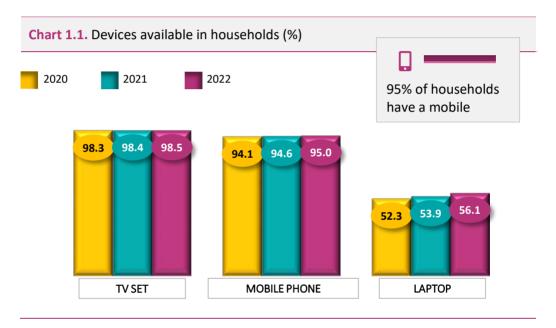
			A	Age			S	ex	Educ	ational	level	Employment status				
Sample (individuals	16–24	25–34	35–44	45–54	55–64	65–74	Men	Women	Lower than secondary	Secondary	Tertiary	Employed	Unemployed	Student	Other	Total
Број	178	156	303	392	494	1014	1007	1530	259	1583	695	752	395	133	1257	2537
%	7,0	6,1	11,9	15,5	19,5	40,0	39,7	60,3	10,2	62,4	27,4	29,6	15,6	5,2	49,5	100,0

1.3. MAIN FINDINGS

1.3.1. Devices available in households

Households were offered to give more than one answer to the question relative to the devices available in households. The survey shows that 98.5% of households have a TV set, while 95.0% have a mobile phone.

There are 56.1% of households that have a laptop, an increase of 2.2% and 3.8% in relation to 2021 and 2020, respectively.



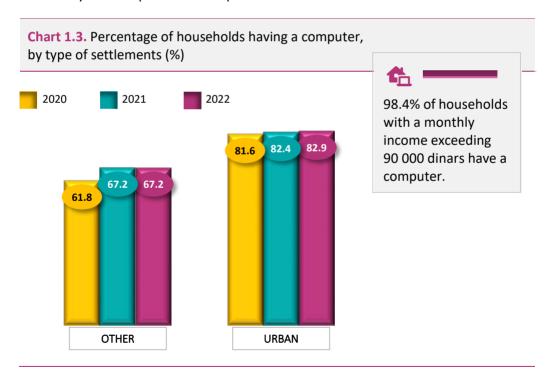
1.3.2. Computer in households

The main findins of the survey show that 77.0% of households in the Republic of Serbia have a computer, wich is an increase of 0.3% and 2.7% in relation to 2021 and 2020, respectively. The percentage of computers in households varies depending on the territory: in Belgrade it amounts to 93.7%, in Vojvodina to 73.5%, in Šumadija i Zapadna Srbija to 70.8% and in Južna Srbija i Istočna Srbija to 69.9%.

Chart 1.2. Computers in households (%)



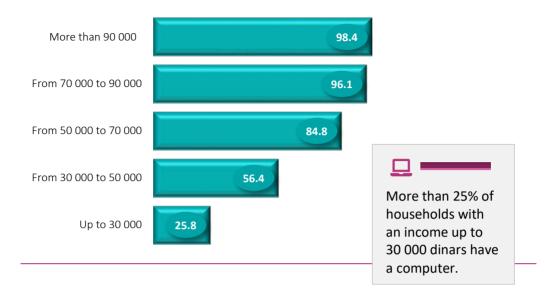
The differences are visible when comparing the availability of computers in urban and other parts of the Republic of Serbia: 82.9% versus to 67.2%. There was an increase of 0.5% in urban parts of the Republic of Serbia, while the growth rate of computer availability in other parts of the Republic of Serbia remained at the same level.



The gap in the availability of computers in households is visible when looking at the structure of households by monthly income. In the category of income from 70 000 to 90 000 dinars, 96.1% of households have a computer, and 84.8% in the category of households with an income from 50 000 to 70 000 dinars.



Chart 1.4. Percentage of households having a cmoputer by income level (%)

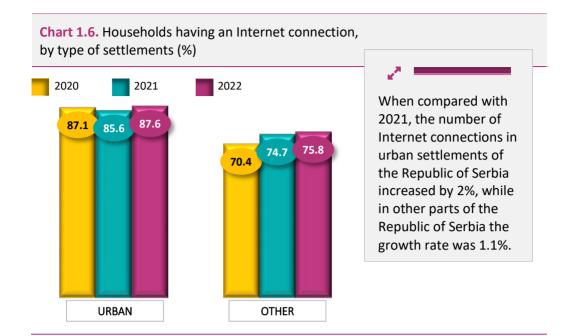


1.3.3. Internet in households

In the Republic of Serbia, 83.2% of households have an Internet connection, wich is an increase of 1.7% and 2.2% in relation to 2021 and 2020, respectively. The survey indicates that all the households that have an Internet connection in the Republic of Serbia have a broadband Internet connection.

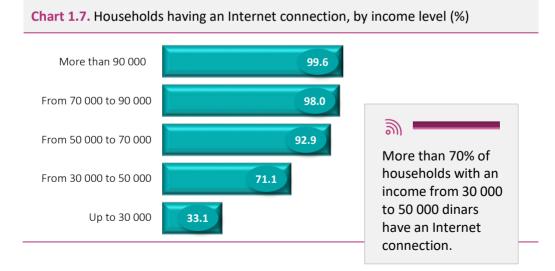
Chart 1.5. Does the household have access to the Internet at home? (%) 55.8 62.8 63.8 68.0 64.7 இ 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022

The highest percentage of Internet connection was observed in Belgrade, amounting to 93.0%. In Region Vojvodina it is 81.9%, in Region Šumadija and Zapadna Srbija 80.7% and in Region Južna and Istočna Srbija 76.6%.

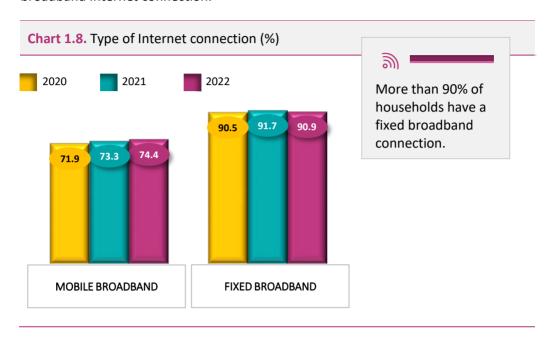


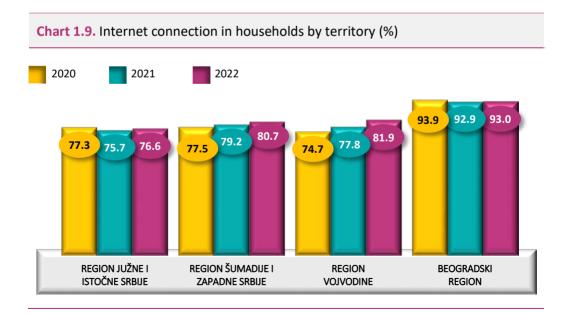
There are considerable differences as to the percentage of Internet connections in urban and other settlements of the Republic of Serbia: 87.6% versus 75.8%. When compared with 2021, there was a growth of 2% in urban settlements of the Republic of Serbia, while in other parts of the Republic of Serbia the growth rate amounts to 1.1%.

As in computer availability in households, there is a large gap as regard Internet connection by households' income level. Internet connection is mostly used by households with a monthly income that exceeds 90 000 dinars (99.6%), while the share of households with an income up to 30 000 dinars amounts to 33.1%.



As regard the way of accessing the Internet (type of connection), households were offered to tick whether they have a fixed or mobile broadband Internet connection. The results indicate that of the total number of households having an Internet connection, 90.9% have a fixed broadband connection, and 74.4% have a mobile broadband Internet connection.





1.3.4. Individuals: use of computers

In the Republic of Serbia, 75.9% of individuals used a computer in the last three months, 2.2% used a computer more than three months ago, 4.6% more than one year ago, and 17.3% of individuals never used a computer. The number of persons who used a computer in the last three months increased by 1.1%, 3.5% and 4.0% in relation to 2021, 2020 and 2019, respectively.

Share of compyter users (in the last three months), by educational level:

- 94.2% of persons with tertiary educational level;
- 86.0% of persons with secondary educational level;
- 47.7% of persons with lower than secondary education level.

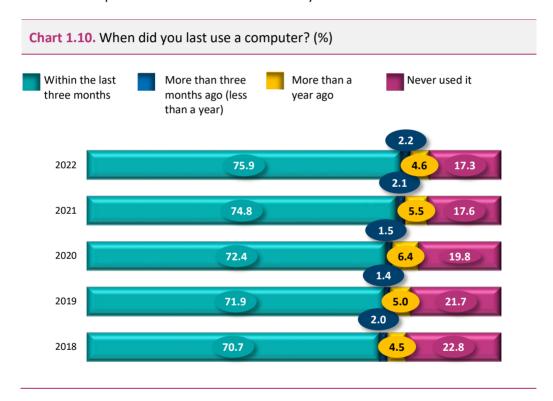
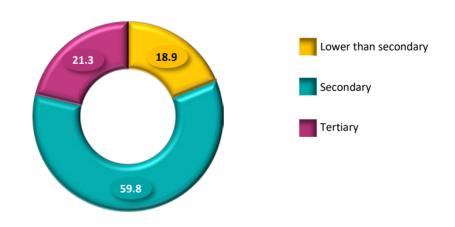


Chart 1.11. Share of computer users (in the last three months), by educational level (%)



Among computer users, 59.8% have secondary educational level, 18.9% lower than secondary and 21.3% have tertiary education.

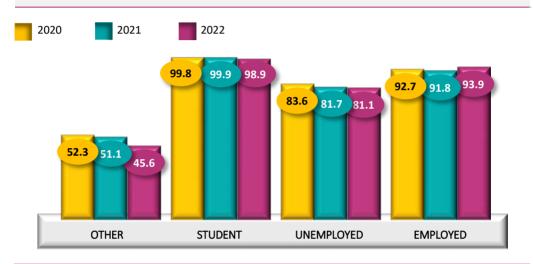
Chart 1.12. Educational structure of computer users (%)



The share of computer users (in the last three months), by employment status:

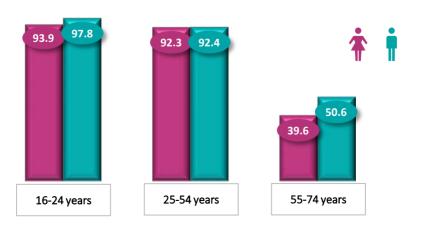
- 98.9% of students:
- 93.9% of employed persons;
- 81.1% of unemployed persons;
- 45.6% of others (retired persons, persons serving military service...).

Chart 1.13. Share of computer users (in the last three months), by employment status (%)



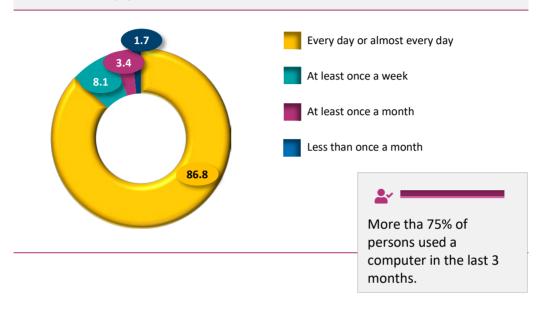
The analysis of respondents indicates that 79.% of men and 72.7% of women used a computer in the last three months.

Chart 1.14. Use of computers (in the last three months), by sex and age (%)



When asked how often, on average, they used a computer in the last three months, 86.8% of respondents said having used a computer every day or almost every day, 8.1% at least once a week, 3.4% at least once a month, and 1.7% less than once a month.

Chart 1.15. How often, on average, did you use a computer in the last three months? (%)



1.3.5. Individuals: use of mobile phones

The survey indicates that 95.5% of persons use a mobile phone.

Chart 1.16. Use of mobile phones (%)



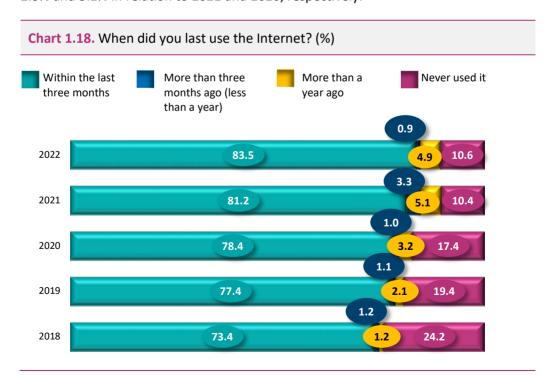
Chart 1.17. Use of mobile phones, by sex and age (%)



1.3.6. Individuals: use of the Internet

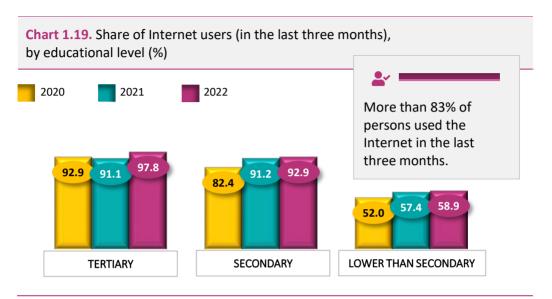
In the Republic of Serbia, 83.5% used the Internet in the last three monhts, 0.9% of respondents used the Internet more than three months ago, 4.9% more than one year ago, while 10.6% of respondents never used the Internet.

The number of persons who used the Internet in the last three months increased by 2.3% and 5.1% in relation to 2021 and 2020, respectively.



The share of Internet users (in the last three months), by educational level:

- 97.8% of persons with tertiary educational level;
- 92.9% of persons with secondary educational level;
- 58.9% of persons with lower than secondary education level.



Among the Internet users, 58.7% have secondary educational level, 21.2% lower than secondary educational level, amd 20.1% have tertiary educational level.

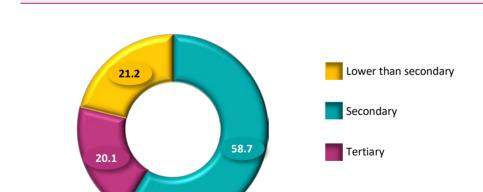
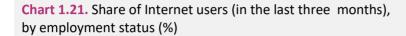


Chart 1.20. Educational structure of Internet users (%)

The share of Internet users (in the last three months), by employment status:

- 100.0% of students:
- 98.9% of employed persons;
- 88.7% of unemployed persons;
- 58.1% of others (retired persons, persons serving military service...).



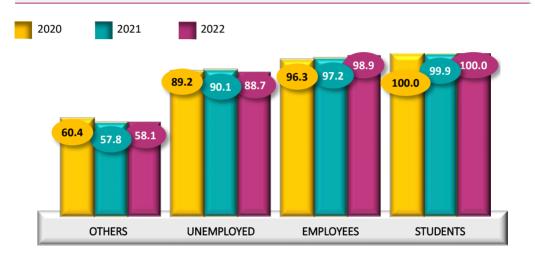


Chart 1.22. How often on average, did you use the Internet in the last three months? (%)

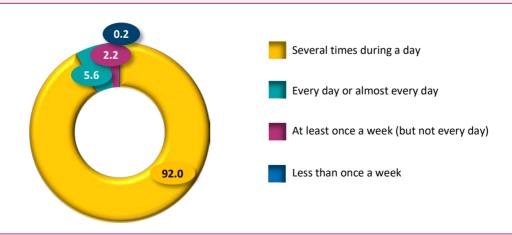
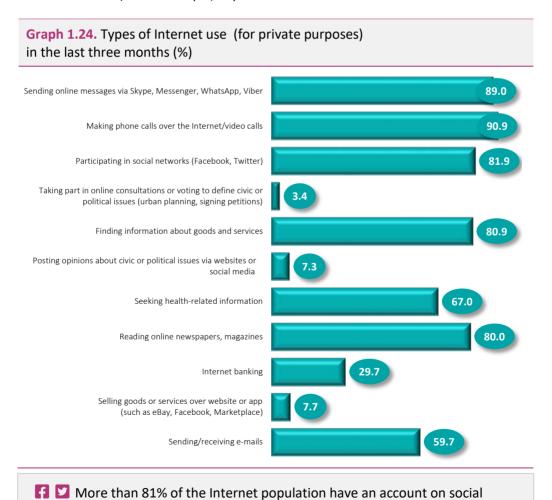


Chart 1.23. Use of the Internet (in the last three months), by sex and age (%)



The analysis of the respondents indicates that 85.9% of men, and 81.2% of women used the Internet in the last three months.

In the last three monts the respondents used the Internet mostly for sending online messages via WhatsApp, Viber, Skype, Messenger (89.0%), as well as for telephoning over the Internet/video calls (90,9%).



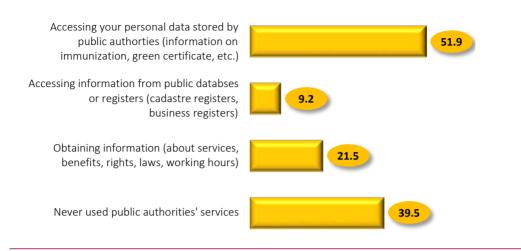
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networks (Facebook, Twitter).

22

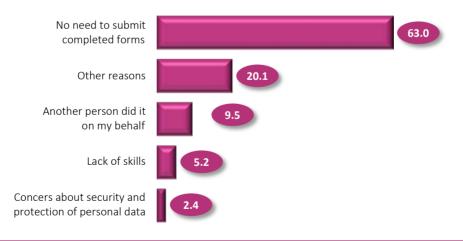
1.3.7. e-government

Chart 1.25. For which of the following public authorities' services did you use the Internet? (%) (among Internet users in the last twelve months)



The surveys indicates that 30.2% of the Internet population used the Internet to print official forms from websites or apps of public authorities.

Graph 1.26. Reason for not having submitted completed forms to public authorities over the Internet (%) (among Internet users in the last twelve months)



1.3.8. E-commerce

As regard the period when Internet users have bought/ordered goods or services via the Internet, 47.8% of users bougth/ordered goods/services in the last three month, 15.7% more than three months ago, and 9.5% more than a year ago.

The percentage of Internet users who have never bought/ordered goods over the Internet is 27,1%.

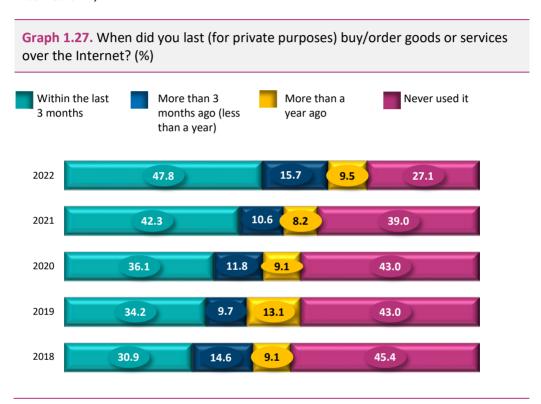
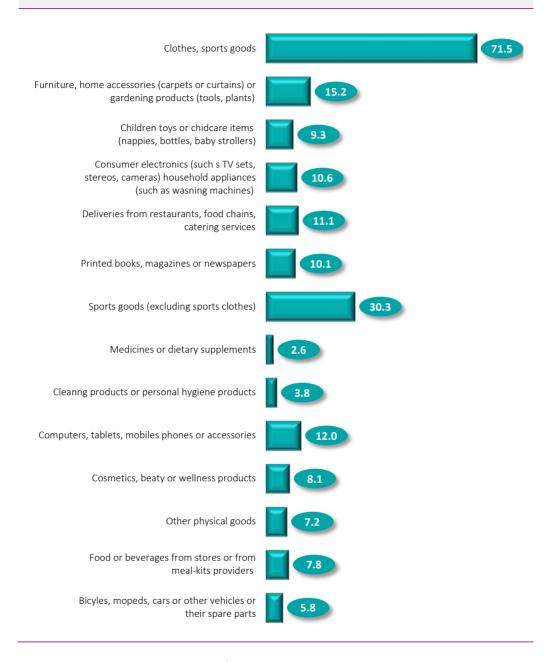


Chart 1.28. Which of the following types of goods or services did you buy/order over the Intenet in the last 12 months (for private purposes) (%)

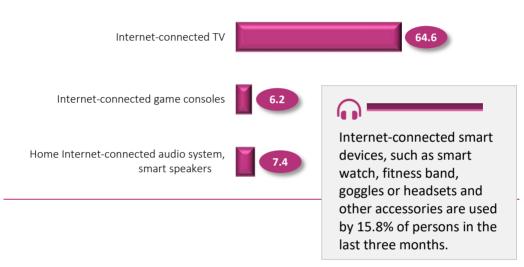


The largest number of users buy/order over the Internet clothes and sports goods (71.5%) and sports goods (30.3%).

1.3.9. Internet of things

When asked about the use of Internet-connected smart devices used in the last three months the respondents were offered to provide several answers. The survey indicates that 64.6% of the respondents have an Internet-connected TV set, 6.2% use game consoles, while 7.4% of the respondents use Internet-connected home audio systems, smart speakers.

Chart 1.29. Did you use the Internet via any of the following devices at home in the last three months for private purposes? (%)



1.3.10. Green ICT

The main findings obtained in this survey by observing individuals' behaviour when using the Internet in the last three months and their habits concerning the recycling of IT devices no longer in sue are as follows:

- 22.7% of persons sold or donated their mobile phone or smartphone;
- 21.4% of persons kept their laptop or tablet they were not using anymore;
- 18.8% of persons kept their desktop computer they were not using anymore.

Chart 1.30. What did you do with your mobile phone or smartphone when you replaced it or stopped using it? (%)

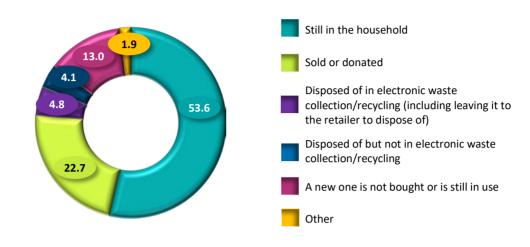


Chart 1.31. What did you do with your laptop or tablet when you replaced it or stopped using it? (%)

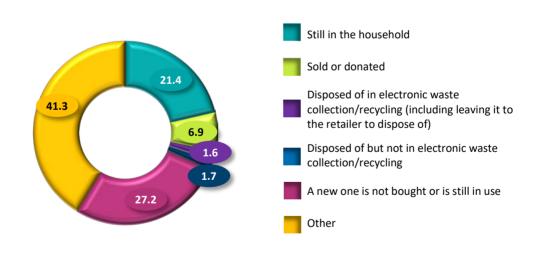
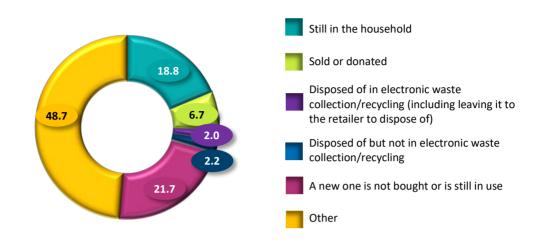


Chart 1.32. What did you do with your desktop computer when you replaced it of stopped using it? (%)



1.4. SURVEY RESULTS

MODULE 1.A: Access to information and communication technologies

%

			Income	!			R	egion		Ty _l hous		
Answer (households)	Up to 30000 dinars	30 000- 50 000 dinars	50 000 – 70 000 dinars	70 000 – 90 000 dinars	More than 90 000	Beogradski	Vojvodina	Šumadija i Zapadna Srbija	Južna i Istočna Srbija	Urban	Other	Total

A1_H: Devices available in households (tick all that apply)

Desktop computer	25.8	56.4	84.8	96.1	98.4	93.7	73.5	70.8	69.9 82.9	67.2	77.0
Laptop	16.1	39.5	61.8	65.4	75.1	78.2	48.1	49.2	49.4 60.9	48.1	56.1
TV	97.4	99.5	98.9	99.3	98.8	98.8	96.4	99.6	99.4 98.8	98.0	98.5
Mobile phone	76.7	94.0	98.9	98.1	99.7	96.3	94.9	94.6	93.8 96.8	91.9	95.0

A1: Do you or anyone in your household have access to the Internet at home?

Yes	33.1	71.1	92.9	98.0	99.6	93.0	81.9	80.7	76.6 87.6	75.8	83.2
No	66.9	28.9	7.1	2.0	0.4	7.0	18.1	19.3	23.4 12.4	24.2	16.8

A2: Type of Internet connection (tick all that apply)¹⁾

Fixed broadband connection	75.5	76.6	89.8	97.1	98.0	93.3	89.8	88.0	92.7 92.6	87.5 90.9
Mobile broadband connection	42.2	67.0	69.5	78.5	86.3	76.8	72.5	74.8	73.1 76.3	70.6 74.4

¹⁾ The data refer to households that answered "YES" in question A1.

MODULE B_H: Use of computers

			A	ge			S	Sex		
Answer (individuals)	16–24	25–34	35–44	45–54	55–64	65–74	Men	Women		
B1_H: When did you last										
Within the last three months	95.9	97.8	95.2	84.3	59.0	30.2	79.2	72.7		
More than three months ago (less than a year)	4.1	2.2	0.0	4.2	1.0	2.2	0.9	3.4		
More than a year ago	0.0	0.0	1.3	4.6	7.6	12.6	3.5	5.7		
Never used it	0.0	0.0	3.5	6.8	32.4	55.0	16.5	18.1		
			B2_H: I	How on	often,	on ave	rage,	did you		
Every day or almost every day	96.8	97.2	93.1	83.7	70.9	53.9	85.3	88.5		
At least once a week	0.0	0.0	2.5	10.0	21.9	36.0	8.7	7.4		
At least once a month	3.2	1.6	2.8	2.5	5.5	9.3	3.9	2.8		
Less than than once a month	0.0	1.1	1.6	3.8	1.7	0.8	2.1	1.3		

 $^{^{1)}}$ The data refer to individuals who answered "Within the last three months" in question B1_H .

		on	nt situati	ploymer	Em	evel	cational I	Educ
Answer (individuals)	Total	Other	Student	Unemployed	Employee	Tertiary	Secondary	Lower than secondary
						er?	omput	use a c
Within the last three months	75.9	45.6	98.9	81.1	93.9	94.2	86.0	47.7
More than three months ago (less than a year)	2.2	3.4	1.1	3.1	0.7	1.0	2.0	3.2
More than a year ago	4.6	10.4	0.0	4.0	1.0	2.9	4.8	5.3
Never used it	17.3	40.6	0.0	11.7	4.3	1.8	7.2	43.9
		? ¹⁾	onths	three n	e last t	er in th	omput	use a c
Every day or almost every day	86.8	70.4	100.0	84.5	91.8	89.0	86.2	86.4
At least once a week	8.1	20.3	0.0	8.1	4.9	8.9	7.8	8.1
At least once a month	3.4	7.7	0.0	3.9	2.1	2.0	3.6	4.4
Less than than once a month	1.7	1.5	0.0	3.4	1.2	0.2	2.4	1.2

MODULE B: Use of the Internet

		Sex									
Answer (individuals)	16–24	25–34	35–44	45–54	55–64	65–74	Men	Women			
B1: When did you las											
Within the last three months	100.0	100.0	99.7	97.2	69.2	40.8	85.9	81.2			
More than three months ago (less than a year)	0.0	0.0	0.3	0.0	1.1	1.1 3.7		1.1			
More than a year ago	0.0	0.0	0.0	2.8	16.0	9.1	3.7	6.1			
Never used it	0.0	0.0	0.0	0.0	13.7	46.5	9.6	11.6			
		B2: How often on average, did you									
Several times during a day	97.5	97.3	97.0	91.1	85.1	72.3	92.3	91.7			
Every day or almost every day	2.5	2.2	1.1	6.9	10.5	18.2	5.4	5.7			
At least once a week (but not every day)	0.0	0.6	1.7	1.8	4.1	8.4	2.0	2.3			
Less than once a week	0.0	0.0	0.3	0.2	0.3	1.2	0.3	0.2			

¹⁾ The data refer to individuals who answered "Within the last three months" in question B1.

		on	ıt situati	ploymen	Educational level								
Answer (individuals)	Total	Other	Student	Unemployed	Employee	Tertiary	Secondary	Lower than secondary					
use the Internet?													
Within the last three months	83.5	58.1	100.0	88.7	98.9	97.8	92.9	58.9					
More than three months ago (less than a year)	0.9	2.5	0.0	0.3	0.1	0.3	0.8	1.4					
More than a year ago	4.9	9.8	0.0	6.7	0.7	1.4	2.9	10.6					
Never used it	10.6	29.6	0.0	4.4	0.2	0.6	3.4	29.1					
	use the Internet in the last three months? ¹⁾												
Several times during a day	92.0	78.8	100.0	93.3	96.2	93.6	91.9	90.8					
Every day or almost every day	5.6	14.1	0.0	3.9	3.4	4.6	5.7	6.1					
At least once a week (but not every day)	2.2	6.4	0.0	2.4	0.4	1.7	2.0	3.1					
Less than once a week	0.2	0.6	0.0	0.4	0.0	0.1	0.4	0.0					

MODULE B: Use of the Internet (continued)

		Age						
Answer (individuals)	16–24	25–34	35–44	45–54	55–64	65–74	Men	Women

B3: For which of the following activities did you use the Internet

78.8	72.4	64.8	54.4	42.7	28.6	60.9	58.5
96.8	92.0	92.5	89.2	86.4	86.4	90.6	91.2
97.0	94.5	88.3	83.2	59.8	46.1	82.8	80.9
98.2	96.5	94.2	88.5	79.1	60.9	88.4	89.5
77.7	93.7	84.3	84.0	75.1	51.2	81.9	79.9
70.1	77.7	84.1	85.4	81.1	76.0	76.4	83.7
4.5	8.4	10.9	7.5	4.4	4.0	7.0	7.5
2.5	3.9	1.1	8.5	1.4	1.0	3.5	3.3
68.2	55.1	50.4	17.0	11.8	7.0	38.7	36.3
48.6	32.2	27.0	27.3	25.5	15.0	29.8	30.0
28.5	18.4	14.4	11.7	7.2	3.4	16.5	12.7
86.4	86.7	80.5	77.1	67.6	58.2	82.1	73.8
55.2	28.4	31.6	24.2	12.5	9.6	31.6	24.6
42.8	75.4	71.3	77.6	67.1	50.9	63.8	70.2
0.4	2.6	1.4	2.9	2.2	2.3	1.2	2.8
	96.8 97.0 98.2 77.7 70.1 4.5 2.5 68.2 48.6 28.5 86.4 55.2 42.8	96.8 92.0 97.0 94.5 98.2 96.5 77.7 93.7 70.1 77.7 4.5 8.4 2.5 3.9 68.2 55.1 48.6 32.2 28.5 18.4 86.4 86.7 55.2 28.4 42.8 75.4	96.8 92.0 92.5 97.0 94.5 88.3 98.2 96.5 94.2 77.7 93.7 84.3 70.1 77.7 84.1 4.5 8.4 10.9 2.5 3.9 1.1 68.2 55.1 50.4 48.6 32.2 27.0 28.5 18.4 14.4 86.4 86.7 80.5 55.2 28.4 31.6 42.8 75.4 71.3	96.8 92.0 92.5 89.2 97.0 94.5 88.3 83.2 98.2 96.5 94.2 88.5 77.7 93.7 84.3 84.0 70.1 77.7 84.1 85.4 4.5 8.4 10.9 7.5 2.5 3.9 1.1 8.5 68.2 55.1 50.4 17.0 48.6 32.2 27.0 27.3 28.5 18.4 14.4 11.7 86.4 86.7 80.5 77.1 55.2 28.4 31.6 24.2 42.8 75.4 71.3 77.6	96.8 92.0 92.5 89.2 86.4 97.0 94.5 88.3 83.2 59.8 98.2 96.5 94.2 88.5 79.1 77.7 93.7 84.3 84.0 75.1 70.1 77.7 84.1 85.4 81.1 4.5 8.4 10.9 7.5 4.4 2.5 3.9 1.1 8.5 1.4 68.2 55.1 50.4 17.0 11.8 48.6 32.2 27.0 27.3 25.5 28.5 18.4 14.4 11.7 7.2 86.4 86.7 80.5 77.1 67.6 55.2 28.4 31.6 24.2 12.5 42.8 75.4 71.3 77.6 67.1	96.8 92.0 92.5 89.2 86.4 86.4 97.0 94.5 88.3 83.2 59.8 46.1 98.2 96.5 94.2 88.5 79.1 60.9 77.7 93.7 84.3 84.0 75.1 51.2 70.1 77.7 84.1 85.4 81.1 76.0 4.5 8.4 10.9 7.5 4.4 4.0 2.5 3.9 1.1 8.5 1.4 1.0 68.2 55.1 50.4 17.0 11.8 7.0 48.6 32.2 27.0 27.3 25.5 15.0 28.5 18.4 14.4 11.7 7.2 3.4 86.4 86.7 80.5 77.1 67.6 58.2 55.2 28.4 31.6 24.2 12.5 9.6 42.8 75.4 71.3 77.6 67.1 50.9	96.8 92.0 92.5 89.2 86.4 86.4 90.6 97.0 94.5 88.3 83.2 59.8 46.1 82.8 98.2 96.5 94.2 88.5 79.1 60.9 88.4 77.7 93.7 84.3 84.0 75.1 51.2 81.9 70.1 77.7 84.1 85.4 81.1 76.0 76.4 4.5 8.4 10.9 7.5 4.4 4.0 7.0 2.5 3.9 1.1 8.5 1.4 1.0 3.5 68.2 55.1 50.4 17.0 11.8 7.0 38.7 48.6 32.2 27.0 27.3 25.5 15.0 29.8 28.5 18.4 14.4 11.7 7.2 3.4 16.5 86.4 86.7 80.5 77.1 67.6 58.2 82.1 55.2 28.4 31.6 24.2 12.5 9.6 31.6 42.8 75.4 71.3 77.6 67.1 50.9 63.8

¹⁾ The data refer to individuals who answered "Within the last three months" in question B1 ".

Educ	ational l	evel	Em	ployme	nt situati	on							
Lower than secondary	Secondary	Tertiary	Employee	Unemployed	Student	Other	Total	Answer (individuals)					
for priv	/ate pu	rposes	in the	last th	ree mo	onths?1) (tick	all that apply)					
31.3	62.1	82.9	69.1	54.8	85.4	35.0	59.7	Sending/receiving e-mails					
91.1	90.5	91.9	93.3	87.3	93.4	89.0	90.9	Making calls over the Internet/video calls					
81.4	82.5	80.4	87.5	86.5	97.4	58.6	81.9	Paticipation in social networks (Facebook, Twitter)					
91.1	89.7	84.6	91.0	90.8	98.7	78.3	89.0	Sending online messages via WhatsApp, Viber, Skype, Messenger					
68.7	83.1	87.3	88.9	81.2	83.3	64.2	80.9	Finding information about goods and services					
60.2	83.6	90.4	84.5	77.0	73.7	77.6	80.0	Reading online newspaper, magazines					
3.0	8.1	9.3	10.0	6.5	7.3	3.0	7.3	Expressing opinions about civic or political issues on websites or in social media					
1.9	3.2	5.6	5.1	3.0	2.9	0.8	3.4	Taking part in online consultations or voting to define civic or political issues (urban planning, signing petitions)					
22.3	39.8	46.8	41.5	33.9	68.8	18.6	37.5	Listening or downloading music (web radio, music streaming)					
16.8	32.4	36.5	35.0	20.3	52.7	19.5	29.9	Watching television programme over the Internet from TV broadcasters					
9.2	13.1	24.9	16.8	9.3	34.0	6.9	14.6	Watching video on demand from commercial services (Netflix, HBO G, Amazon, Prime)					
73.7	79.0	79.8	84.6	74.8	94.1	61.2	78.0	Watching video content from sharing services (such as Youtube)					
29.8	30.3	19.8	28.4	23.1	53.9	20.4	28.1	Playing or downloading games					
55.9	68.4	74.4	73.4	77.1	49.5	52.2	67.0	Seeking health-related information					
0.0	2.4	2.9	2.6	2.3	0.0	1.5	2.0	Making an appointment with a doctor over website or app					

MODULE B: Use of the Internet (continued)

			Ag	ge			Sex		
Answer (individuals)	16–24	25–34	35–44	45–54	55–64	65–74	Men	Women	
B3: For which	of the	e follov	wing ac	tivitie	s did y	ou use	the In	ternet	
Accessing personal health records online	1.2	0.4	1.4	2.5	1.2	1.9	1.2	1.6	
Using other health services via website or app instead of having to go to hospital or visit a doctor (such as getting prescription or online consulations)	1.0	2.7	0.9	1.9	2.4	1.3	1.3	2.1	
Selling of goods or services via website or app (such as eBay, Facebook, Marketplace)	9.1	14.9	8.3	5.9	2.3	1.7	8.2	7.3	
Internet banking	30.6	38.3	32.0	28.8	24.1	15.0	29.7	29.8	
B4: Which of the following learn	ing act	ivities	have y	ou per	forme	d over	the Int	ernet	
Doing an online course	27.4	15.7	6.6	3.6	3.5	1.0	8.8	10.8	
Finding online learning material (audiovisual material, online learning software, electronic textbooks)	64.9	32.1	18.6	19.5	11.5	8.3	24.7	27.6	
Communicating with educators or learnes using audio or video online tools (such as Zoom, MS Teams, Google Classroom, etc.)	79.2	13.8	14.2	15.2	4.9	4.4	19.9	23.0	
Never carried out any of the above	13.8	67.6	73.0	74.1	84.8	87.9	68.4	65.1	
B5: What was the	purpo	se of t	he leai	ning a	ctivitie	s you	partici	paded	
For formal education (scholl or university)	96.3	36.2	37.9	46.4	19.8	21.2	59.7	58.0	
For professional or business purposes	0.9	36.5	31.3	29.9	40.5	18.4	20.1	21.9	
For private purposes	8.5	45.7	35.8	33.5	46.0	63.4	25.7	31.6	

¹⁾ The data refer to individuals who answered "Within the last three months" in question B1".

²⁾ The data refer to individuals who answered "YES" at any of the three proposed anweres in question B4.

Educ	ational	level	Em	ployme	nt situat	ion		
Lower than secondary	Secondary	Tertiary	Employee	Unemployed	Student	Other	Total	Answer (individuals)
for priv	vate pi	urpose	s in th	e last t	hree n	nonths	3 ¹⁾ (tio	ck all that apply)
1.2	1.4	1.9	1.6	1.9	0.9	0.8	1.4	Accessing personal health records online
1.7	1.3	2.9	2.0	0.6	0.0	3.2	1.7	Using other health services via website or app instead of having to go to hospital or visit a doctor (such as getting prescription or online consulations)
4.5	8.2	9.8	10.1	8.4	8.4	2.3	7.7	Selling of goods or services via website or app (such as eBay, Facebook, Marketplace)
10.4	29.2	51.7	43.5	14.6	40.0	14.8	29.7	Internet banking
for edu	ucation	nal, pri	vate o	r profe	ssiona	l purp	oses ir	the last three months?1)
6.6	8.6	16.6	7.8	5.6	33.9	6.4	9.8	Doing an online course
22.0	22.9	39.9	24.6	15.9	71.9	17.8	26.1	Finding online learning material (audio- visual material, online learning software, electronic textbooks)
29.6	18.7	20.7	13.6	12.7	83.8	15.5	21.4	Communicating with educators or learnes using audio or video online tools (such as Zoom, MS Teams, Google Classroom, etc.)
67.4	71.0	53.6	69.9	76.9	9.0	77.8	66.7	Never carried out any of the above
in the	last th	ree mo	onths?	2) (tick	all tha	t apply	/)	
92.0	62.5	27.5	28.7	48.9	98.7	69.0	58.8	For formal education (scholl or university)
3.6	11.7	50.9	45.4	13.3	0.6	6.9	21.0	For professional or business purposes
8.3	30.9	39.9	39.7	39.7	7.6	30.0	28.7	For private purposes

MODULE C: E-government

		Sex						
Answer (individuals)	16–24	25–34	35–44	45–54	55–64	65–74	Men	Women

C1: In the last 12 months, did you contact authorities' services or public services the following activities? 1)

					101	iowing	activi	ties? *
Accessing your personal data stored by public authorities (information on immunization, green certificate, etc.)	54.9	51.1	55.3	49.9	54.8	40.9	52.2	51.6
Accessing information from public databases or registers (cadastre registers. business registers)	3.7	10.7	8.6	11.8	8.7	10.7	9.3	9.0
Obtaining information (about services, benefit, rights, laws, working hours)	17.2	32.4	26.1	19.5	15.6	8.5	23.8	19.2
Never used puliv authorities' services	41.9	30.7	35.5	43.6	40.2	53.0	37.6	41.4
C2: In the last 12 months, d	id you	downle	oad or	printed	officia	l forms	from	public
Yes	24.5	47.2	29.0	27.7	24.3	21.2	28.4	32.0
No	75.5	52.8	71.0	72.3	75.7	78.8	71.6	68.0
C3: In the last 12 m	onths	, did yo	ur mak	-	pointn r passp			

Yes	25.1	24.0	22.7	20.3	18.7	12.2	19.4	23.1
No	74.9	76.0	77.3	79.7	81.3	87.8	80.6	76.9

C6: In the last 12 months, did you carry out any of the following activities using for private purposes?1)

Requested official documents or certificates (such as diplomas, birth, marriage/divorce certificate, death certificate, residence certificate, police or criminal record)	7.2	9.2	6.0	8.7	6.6	3.4	6.0	8.4
Requested benefits or entilements (pension, unemployment, children's allowance, enrollment in schools. universities)	8.3	3.2	1.4	2.6	1.3	0.3	2.5	3.2
Made other requests, complaints (asking for legal assistance)	1.3	3.4	0.6	0.6	0.8	0.6	0.5	2.0
None of the above	8/1/1	84.5	93 U	88.2	91.6	96 1	91.6	86.8

¹⁾ The data refer to individual who answered "Within the last three months" or "More than three months ago (less than a year)" in question B1.

Edu	cational I	level	Em	ployme	nt situati	ion		
Lower than secondary	Secondary	Tertiary	Employee	Unemployed	Student	Other	Total	Answer (individuals)
_	website		os for p	rivate	purpo	ses for		
29.2	54.5	68.9	62.5	41.3	57.3	41.1	51.9	Accessing your personal data stored by public authorities (information on immunization, green certificate, etc.)
4.5	8.1	17.4	14.4	6.1	3.8	5.2	9.2	Accessing information from public databases or registers (cadastre registers. business registers)
17.1	21.0	27.7	26.6	23.5	21.5	10.1	21.5	Obtaining information (about services, benefit, rights, laws, working hours)
60.5	37.8	21.8	27.8	45.8	40.4	53.8	39.5	Never used puliv authorities' services
author	rities' w	veb pag	ge or a	pp for	private	purpo	ses? 1)	
10.3	30.5	50.6	43.5	20.3	26.4	17.6	30.2	Yes
89.7	69.5	49.4	56.5	79.7	73.6	82.4	69.8	No
	website vate pu			ıblic au	ıthoriti	es or a	servic	e
7.8	21.7	34.4	28.3	12.7	31.9	12.2	21.2	Yes
92.2	78.3	65.6	71.7	87.3	68.1	87.8	78.8	No
	e or ap		ıblic aı	ıthorit	ies or p	ublic s	ervice	s,
2.6	6.8	13.1	11.0	4.0	8.0	3.1	7.2	Requested official documents or certificates (such as diplomas, birth, marriage/divorce certificate, death certificate, residence certificate, police or criminal record)
1.2	3.0	4.0	2.7	1.2	11.7	0.7	2.8	Requested benefits or entilements (pension, unemployment, children's allowance, enrollment in schools. universities)
0.0	1.2	2.9	1.1	1.8	2.6	0.3	1.3	Made other requests, complaints (asking for legal assistance)
96.1	89.4	81.3	85.7	93.2	79.3	96.2	89.3	None of the above

MODULE C: E-government (continued)

		Sex						
Answer (individuals)	16–24	25–34	35–44	45–54	55–64	65–74	Men	Women

C7: What were the reasons for not asking for official documents or public services,

No need to request any documents or to submit any request	57.3	61.7	65.9	72.3	60.6	51.4	67.2	58.5
Lack of skills (don't know how to use website or use is too complicated)	1.8	1.6	7.7	1.9	9.1	11.6	2.8	7.8
Concerns about security or personal data or unwillingness to pay online (credit card fraud)	6.8	5.7	0.8	0.3	1.0	0.4	2.3	2.4
Another person did it on my behalf	17.2	6.3	4.2	4.5	13.6	21.1	9.6	9.3
Other reasons	16.9	24.8	21.4	21.0	16.6	16.2	18.3	22.0

C8: Were there problems when you used website or app of

Website or app was difficult to use	4.7	2.6	1.1	3.1	2.9	2.4	1.8	3.6
Technical problems when using website or app	9.8	9.0	13.4	13.6	17.6	14.4	12.2	13.1
It was impossible to access the service on smarphone or tablet	6.3	2.4	2.1	2.9	4.0	2.1	3.9	2.4
Other reasons	11.9	7.4	6.8	6.5	6.5	17.3	8.9	7.6
Did not have any problem	72.1	79.8	77.0	75.4	70.7	65.0	75.4	74.4

²⁾ The dat refer to individuals who answered «None of the above" in question B6.

³⁾ The data refer to individuals who answered "YES" in B1a, B1b, B1c; B2a, B3a; B5a or B6a, B66, B6c questions from the questionnaire.

Edu	cational	level	Em	ıploymeı	nt situat	ion		
Lower than secondary	Secondary	Tertiary	Employee	Unemployed	Student	Other	Total	Answer (individuals)

or not submitting form using website or app or public authorities in the last 12 months $?^2$

				•		45t 12 1	
63.0	51.0	66.8	69.6	65.5	66.0	61.1	65.7
5.2	11.7	2.5	2.3	3.6	1.2	3.2	13.4
2.4	1.0	6.7	1.3	2.8	2.0	3.1	0.7
9.5	16.9	14.5	3.9	7.2	8.8	10.4	7.6
20.1	19.9	9.5	22.9	20.9	22.2	22.4	12.6
.2 mo	e last 1	s in th	service	public	ties or _l	uthori	oublic a
2.7	1.4	6.2	2.9	2.2	3.1	2.7	1.7
12.6	14.4	10.3	11.3	13.1	11.8	12.1	16.4
3.1	2.5	8.9	2.5	2.5	3.7	3.6	0.0
8.3	11.8	16.0	7.6	5.8	8.8	8.7	5.3
74.9	70.5	64.8	76.9	77.6	75.8	74.2	76.6
	5.2 2.4 9.5 20.1 2.7 12.6 3.1 8.3	11.7 5.2 1.0 2.4 16.9 9.5 19.9 20.1 e last 12 more 1.4 2.7 14.4 12.6 2.5 3.1 11.8 8.3	2.5 11.7 5.2 6.7 1.0 2.4 14.5 16.9 9.5 9.5 19.9 20.1 s in the last 12 more 6.2 1.4 2.7 10.3 14.4 12.6 8.9 2.5 3.1 16.0 11.8 8.3	2.3 2.5 11.7 5.2 1.3 6.7 1.0 2.4 3.9 14.5 16.9 9.5 22.9 9.5 19.9 20.1 services in the last 12 more 2.9 6.2 1.4 2.7 11.3 10.3 14.4 12.6 2.5 8.9 2.5 3.1 7.6 16.0 11.8 8.3	3.6 2.3 2.5 11.7 5.2 2.8 1.3 6.7 1.0 2.4 7.2 3.9 14.5 16.9 9.5 20.9 22.9 9.5 19.9 20.1 bublic services in the last 12 more 2.2 2.9 6.2 1.4 2.7 13.1 11.3 10.3 14.4 12.6 2.5 2.5 8.9 2.5 3.1 5.8 7.6 16.0 11.8 8.3	1.2 3.6 2.3 2.5 11.7 5.2 2.0 2.8 1.3 6.7 1.0 2.4 8.8 7.2 3.9 14.5 16.9 9.5 22.2 20.9 22.9 9.5 19.9 20.1 ties or public services in the last 12 months 3.1 2.2 2.9 6.2 1.4 2.7 11.8 13.1 11.3 10.3 14.4 12.6 3.7 2.5 2.5 8.9 2.5 3.1 8.8 5.8 7.6 16.0 11.8 8.3	3.2 1.2 3.6 2.3 2.5 11.7 5.2 3.1 2.0 2.8 1.3 6.7 1.0 2.4 10.4 8.8 7.2 3.9 14.5 16.9 9.5 22.4 22.2 20.9 22.9 9.5 19.9 20.1 10thorities or public services in the last 12 more 2.7 3.1 2.2 2.9 6.2 1.4 2.7 12.1 11.8 13.1 11.3 10.3 14.4 12.6 3.6 3.7 2.5 2.5 8.9 2.5 3.1 8.7 8.8 5.8 7.6 16.0 11.8 8.3

MODULE D: E-commerce¹⁾

			Ag	ge			Se	x
Answer (individuals)	16–24	25–34	35–44	45–54	55–64	65–74	Men	Women
	D1: W	hen di	d you l	ast bu	y or o	rder go	ods or s	ervices
Within the last three months	65.6	61.7	50.2	45.3	28.3	22.6	46.7	48.9
More than three moths ago (less than a year)	10.2	15.7	18.8	18.6	13.8	13.2	17.7	13.7
More than a year ago	10.0	11.2	8.8	8.9	10.3	6.9	8.1	10.9
Never bought or order over the Internet	14.3	11.5	22.2	27.1	47.6	57.2	27.6	26.5
D2: What types of go	ods or	service	es did y	ou bu	y or o	rder ov	er the Ir	nternet
Clothes, sports goods	79.3	76.9	73.2	71.4	48.2	43.9	62.7	80.0
Sports goods (excluding sports clothes)	28.8	27.3	37.9	32.9	23.6	14.5	30.5	30.1
Children toys or childcare items (nappies, bottles, baby strollers)	2.8	16.6	9.3	8.8	7.4	3.1	5.4	13.1
Furniture, home accessories (carpets or curtains) or gardening products (tools, plants)	4.1	12.0	22.1	19.8	19.0	16.2	15.0	15.3
Music as CDs, vinyls, etc.	1.2	0.0	0.0	1.0	0.5	0.0	0.9	0.1
Films or series as DVDs, Blu-ray discs	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Printed books, magazines or newspapers	13.9	13.3	8.7	4.8	9.8	7.3	8.5	11.7
Computers, tablets, mobile phones or accessories	13.8	9.7	14.5	10.8	12.9	7.3	14.1	10.0
Consumer electronics (such as TV sets, stereos, cameras), household appliances (such as washing machines)	5.8	10.8	12.0	11.4	15.1	10.4	14.5	6.8
Medicines or dietary supplements (e.g. vitamins)	2.4	0.0	3.7	2.6	6.2	4.8	3.1	2.0
Deliveries from restaurants, food chains, catering services	16.6	14.7	7.6	7.8	8.7	4.9	11.0	11.3
Food or beverages from stores or from meal-kits providers	14.5	8.4	4.3	7.6	4.0	2.6	6.1	9.4
Cosmetics, beaty or wellness products	4.3	10.9	9.3	9.9	3.6	4.1	6.1	10.0
Cleaining products or personal hygiene products	5.4	2.8	3.3	5.2	2.3	1.8	3.3	4.3
Bicycles, mopeds, cars or other vehicles or their spare parts	1.5	4.5	5.6	7.5	14.6	8.8	9.8	2.0
Other physical goods	3.5	3.6	7.4	10.3	8.4	25.3	7.9	6.4

¹⁾ The data refer to individuals who answered "Within the last three months" or "More than three months ago (less than a year" in question B1.

70											
		on	nt situati	oloymer	Emp	evel	ational le	Educ			
Answer (individuals)	Total	Other	Student	Unemployed	Employee	Tertiary	Secondary	Lower than secondary			
			oses?	purp	private	net for	e Interi	over th			
Within the last three months	47.8	29.2	65.6	44.5	55.3	52.8	48.8	40.3			
More than three moths ago (less than a year)	15.7	11.3	12.3	14.6	19.6	19.4	17.1	8.4			
More than a year ago	9.5	11.1	11.4	9.1	8.3	8.4	9.0	11.9			
Never bought or order over the Internet	27.1	48.4	10.7	31.8	16.8	19.4	25.2	39.3			
that apply)	tick all	nths? (ree mo	ast th	in the l	rposes	ate pui	for priv			
Clothes, sports goods	71.5	59.5	88.7	74.6	68.4	66.0	75.0	66.5			
Sports goods (excluding sports clothes)	30.3	24.3	28.1	21.4	36.6	29.1	34.3	18.1			
Children toys or childcare items (nappies, bottles, baby strollers)	9.3	9.7	0.0	10.1	11.6	8.3	11.1	4.7			
Furniture, home accessories (carpets or curtains) or gardening products (tools, plants)	15.2	11.0	3.7	12.6	20.9	17.0	14.3	15.7			
Music as CDs, vinyls, etc.	0.5	0.3	1.6	0.3	0.3	0.3	0.3	1.3			
Films or series as DVDs, Blu-ray discs	0.2	0.0	1.1	0.0	0.0	0.0	0.3	0.0			
Printed books, magazines or newspapers	10.1	6.3	21.4	9.4	8.2	17.5	8.6	6.4			
Computers, tablets, mobile phones or accessories	12.0	14.0	10.5	11.6	12.1	19.5	9.1	12.6			
Consumer electronics (such as TV sets, stereos, cameras), household appliances (such as washing machines)	10.6	12.9	5.7	10.3	11.5	12.3	10.1	9.9			
Medicines or dietary supplements (e.g. vitamins)	2.6	3.7	1.9	1.0	3.2	2.8	2.8	1.5			
Deliveries from restaurants, food chains, catering services	11.1	1.6	26.0	5.4	12.0	25.9	8.6	1.5			
Food or beverages from stores or from meal-kits providers	7.8	4.3	21.9	3.0	6.8	10.2	7.4	6.1			
Cosmetics, beaty or wellness products	8.1	1.6	3.7	9.1	10.8	12.1	8.2	3.0			
Cleaining products or personal hygiene products	3.8	1.6	11.7	0.8	3.5	4.0	4.0	2.9			
Bicycles, mopeds, cars or other vehicles or their spare parts	5.8	8.0	2.0	3.7	7.4	4.5	5.8	7.5			
Other physical goods	7.2	10.7	4.1	4.4	8.3	9.3	6.8	5.7			

MODULE D: E-commerce¹⁾ (continued)

			A	\ge			S	ex
Answer (individuals)	16–24	25–34	35–44	45–54	55–64	65–74	Men	Women
D3: From	who	m did y	ou buy	the me	entione	d good	s via v	vebsite
National sellers	95.2	98.3	99.0	96.2	92.7	95.4	96.9	96.8
Sellers from EU countries	11.8	15.8	14.3	12.2	7.5	2.4	9.8	15.4
Sellers from the rest of the world	6.4	5.1	7.2	11.8	6.4	4.4	7.7	6.7
Country of origin of seller not known	2.2	0.0	0.7	1.2	3.6	2.0	1.0	1.4
D4: Did you buy any of	the a	bove m	nentior	ned pro	ducts f	rom pri	vate p	ersons
Yes	31.9	31.6	32.6	34.4	31.6	21.6	29.7	34.2
No	68.1	68.4	67.4	65.6	68.4	78.4	70.3	65.8
D5: Did you buy	or sub	scribe	via wel	bsite or	app fo	r perso	nal pu	rposes
Music as a streaming service or downloading	4.1	3.1	2.6	6.4	2.5	0.5	4.8	2.5
Films or series as a streaming service or for downloading	8.2	11.6	7.2	8.3	3.8	1.7	9.6	6.7
Electronic books, online magazines or online newspapers	5.9	1.6	1.3	6.0	3.1	1.6	3.5	3.2
Online games or downloads for smartphones, tablets, computers or consoles	15.5	8.3	3.3	5.2	2.0	0.0	8.5	5.5
Computers or other software downloaded, including upgrades	2.5	2.1	0.3	1.6	0.9	1.5	2.3	0.9
Apps related to health or fitness (excluding free apps)	0.9	0.5	0.6	0.2	0.9	0.6	0.4	0.8
Other apps (related to language learning, travels, weather) excluding free apps	0.8	2.1	0.7	1.2	1.2	0.0	1.1	1.3
Did not buy or subscribe to any of the above	80.1	84.6	88.0	82.5	91.1	94.7	83.0	87.2

 $^{^{1)}}$ The data refer to individuals who answered "Within the last three months" or "More than three months ago (less than a year" in question B1.

Anguar		n	t situatio	oloymen	Emp	evel	ational le	Educ
Answer (individuals)	Total	Other	Student	Unemployed	Employee	Tertiary	Secondary	Lower than secondary
	ply)	at ap	ck all th	ths (ti	ee mon	ast thre	in the l	or app
National sellers	96.9	95.6	96.5	95.9	97.8	94.4	97.2	98.7
Sellers from EU countries	12.6	11.0	21.8	11.4	11.0	15.5	12.4	9.9
Sellers from the rest of the world	7.2	4.8	7.7	7.7	7.6	11.9	6.8	3.1
Country of origin of seller not known	1.2	2.8	0.9	1.3	0.8	2.2	1.2	0.0
	place) i	arket	ook M	, Facel	ia eBay	app (v	site or	via web
Yes	32.0	39.9	30.1	35.6	28.6	30.7	33.2	29.3
No	68.0	60.1	69.9	64.4	71.4	69.3	66.8	70.7
rate purposes)	(for pri	oses?	e purpo	privat	ths for	ee mon	ast thre	in the la
Music as a streaming service or downloading	3.7	0.4	4.9	1.0	5.4	5.3	3.3	2.9
Films or series as a streaming service or for downloading	8.1	1.9	9.2	7.8	9.7	8.4	9.1	4.8
Electronic books, online magazines or online newspapers	3.3	4.6	3.8	1.9	3.5	6.9	1.9	3.8
Online games or downloads for smartphones, tablets, computers or consoles	7.0	9.4	11.9	3.5	6.4	4.3	7.3	9.2
Computers or other software downloaded, including upgrades	1.5	1.2	2.3	0.3	2.0	2.8	1.5	0.0
Apps related to health or fitness (excluding free apps)	0.6	0.5	1.2	0.0	0.7	1.5	0.4	0.0
Other apps (related to language learning, travels, weather) excluding free apps	1.2	0.0	1.1	0.0	2.1	3.5	0.7	0.0
oid not buy or subscribe to any of the above	85.1	88.3	83.3	89.1	83.0	80.0	86.7	86.0

MODULE D: E-commerce¹⁾ (continued)

			Αį	ge			S	ex
Answer (individuals)	16–24	25–34	35–44	45–54	55–64	65–74	Men	Women
D6: In th	e last t	hree m	onths,	did you	buy or	subscr	ibe to	any of
Tickets for sports events	12.2	4.7	3.2	5.5	1.3	0.0	6.5	4.4
Tickets for cultural and other events (cinemas, concerts, fairs)	28.2	11.5	5.4	14.7	12.7	4.7	11.7	15.7
Subscription to the Internet or connection via mobile phone	0.8	0.9	0.6	2.2	1.4	1.8	1.0	1.3
Subscription to electricity, water or heating supply, waste disposal or similar services	1.3	4.2	1.2	1.5	2.9	2.2	2.4	2.1
Household services (such as cleaning, babysitting, reapir work, gardening)	0.0	0.0	0.3	0.0	0.9	0.0	0.0	0.3
Did not buy or subscribe to any of the above	65.6	80.0	91.4	78.7	83.6	94.1	81.8	79.3
D8: In the la	st thre	e mont	hs, did	you bu	ıy any t	ranspo	rt ser	vice via
A transport enterprise for buses, taxi (e.g. UBER)	5.2	7.8	3.6	7.7	4.8	6.2	5.3	6.6
Private person	0.4	0.5	0.0	0.2	0.9	0.0	0.0	0.6
Didn't buy	94.8	92.2	96.4	92.0	94.3	93.8	94.7	93.2
D9: In t	he last	three n	nonths	, did yo	u rent	accomi	modat	tion via
Enteprises such as hostels or travel agencies	5.5	6.4	4.5	12.7	6.8	4.7	5.5	8.4
Private persons (such as Airbnb)	2.9	6.5	3.1	3.2	3.2	2.0	3.2	4.5
Didn't rent accommodation via website or app	92.0	90.3	92.8	84.7	90.0	93.3	91.6	88.9
4) = 4								

¹⁾ The data refer to individuals who answered "Within the last three months" or "More than three months ago (less than a year" in question B1.

Edcu	ıational l	evel	Em	ploymer	nt situati	on		
Lower than secondary	Secondary	Tertiary	Employee	Unemployed	Student	Other	Total	Answer (individuals)
the me	ntione	d via w	ebsite	or app	for pri	vate pu	urposes	s (tick all that apply)
6.8	5.8	3.5	4.0	5.2	10.4	5.7	5.4	Tickets for sports events
5.0	14.8	18.1	12.3	4.2	32.9	13.7	13.7	Tickets for cultural and other events (cinemas, concerts, fairs)
0.0	0.9	2.9	1.7	0.3	1.1	0.6	1.2	Subscription to the Internet or connection via mobile phone
0.0	2.0	4.6	3.5	1.9	0.0	0.7	2.2	Subscription to electricity, water or heating supply, waste disposal or similar services
0.0	0.1	0.4	0.2	0.0	0.0	0.3	0.1	Household services (such as cleaning, babysitting, reapir work, gardening)
91.2	79.5	74.5	81.5	90.5	60.9	82.2	80.6	Did not buy or subscribe to any of the above
websit	e or ap	p for pr	rivate p	urpose	es from	? (tick	all that	t apply)
1.9	4.8	12.6	7.5	6.4	3.3	2.7	6.0	A transport enterprise for buses, taxi (e.g. UBER)
0.0	0.1	1.3	0.6	0.0	0.0	0.3	0.3	Private person
98.1	95.2	87.0	92.3	93.6	96.7	97.0	93.9	Didn't buy
websit	e or ap	p, for p	rivate	purpos	es fron	n? (tick	all tha	t apply)
7.6	5.3	11.2	9.0	1.5	6.7	8.8	7.0	Enteprises such as hostels or travel agencies
0.0	3.1	9.3	4.5	2.6	6.2	1.2	3.9	Private persons (such as Airbnb)
92.4	92.4	82.6	87.8	95.8	90.0	89.9	90.2	Didn't rent accommodation via website or app

MODULE E: Internet of things¹⁾

			Ag	e			Sex	ĸ
Answer (individuals)	16–24	25–34	35–44	45–54	55–64	65–74	Men	Women
E1: Did you u	se any	of the	follow	ing Int	ernet-	conne	cted de	evices
Internet-connected thermostat, lights, plug-ins or other Internet-connected solutions for energy for your home	2.7	2.5	1.1	3.0	0.8	0.8	2.8	1.1
Internet-connected home alarm system, smoke detector, security cameras solutions for energy for your home	5.5	6.7	5.4	5.5	3.2	0.5	4.5	5.4
Internet-connected home appliances, such as robot vacuums, fridges, ovens, coffee machines	11.0	1.2	3.4	6.3	5.3	2.1	4.5	5.2
Virtual assistant in the form of a smart speaker or app (Google Home, Amazon)	6.7	3.7	1.7	3.8	2.3	1.6	4.6	2.0
Didn't use any of the above	79.7	86.2	90.2	86.3	89.1	95.3	87.2	87.6
E2: What were the reasons for n	ot usir	ng any o	of the	menti	oned I	nterne	t-conn	ected
Didn't know such devices or systems exisited	3.8	0.0	5.7	6.1	5.8	5.3	3.9	4.9
I had no need to use those connected devices/systems	58.1	69.5	69.9	65.0	70.9	70.4	68.6	66.3
Costs too high	0.6	3.0	5.7	2.2	5.3	5.1	4.2	3.2
Lack of compatibility with other devices or systems	3.2	9.1	5.6	6.7	4.4	3.2	5.1	6.4
Lack of skills to use those devices or systems	0.0	0.0	0.6	1.3	2.3	5.5	1.6	0.9
Concerns about the privacy and protection of data about me generated by those devices or systems	1.3	0.0	1.1	1.1	0.3	0.2	1.1	0.4
Concerns about security (that the device or system will be hacked)	0.0	0.0	0.0	0.0	0.1	0.5	0.1	0.1
Concerns about safety or health (the use of the devices or systems could lead to an accident, injury or health problems)	0.0	0.0	0.0	0.0	1.0	0.0	0.3	0.0
Other reasons	33.5	26.5	16.2	19.9	13.6	15.9	19.1	22.4

 $^{^{1\!)}}$ The data refer to individuals who answered "Within the last three months" in question B1.

Educ	ational l	level	Em	ploymei	nt situat	tion			
Lower than secondary	Secondary	Tertiary	Employee	Unemployed	Student	Other	Total	Answer (individuals)	
or syst	ems fo	r priv	ate pu	rposes	?				
2.6	1.9	1.2	2.2	2.3	2.8	0.7	1.9	Internet-connected thermostat, lights, plug-ins or other Internet-connected solutions for energy for your home	
4.5	4.9	5.5	6.2	2.6	9.8	2.8	4.9	Internet-connected home alarm system, smoke detector, security cameras solutioins for energy for your home	
4.0	5.1	5.0	5.4	3.4	8.2	3.8	4.9	Internet-connected home appliances, such as robot vacuums, fridges, ovens, coffee machines	
1.2	3.9	3.8	3.2	2.3	9.1	1.9	3.3	Virtual assistant in the form of a smart speaker or app (Google Home, Amazon)	
91.3	86.1	87.0	86.2	90.9	75.6	91.6	87.4	Didn't use any of the above	
device	s or sy	stems	for pri	vate n	urnos	ac 2			
				rate p	a. pos	C 3:			
12.4	2.5	1.1	2.3	4.8	2.3	8.7	4.4	Didn't know such devices or systems exisited	
65.9	2.5				•		4.4 67.5	· · · · · · · · · · · · · · · · · · ·	
		1.1	2.3	4.8	2.3	8.7		exisited I had no need to use those connected	
65.9	66.6	71.8	2.3	4.8	2.3	8.7 62.8	67.5	exisited I had no need to use those connected devices/systems	
65.9	66.6	1.1 71.8 2.4	2.3 71.4 3.3	4.8 65.3 7.0	2.3 67.4 0.0	8.7 62.8 2.4	67.5 3.7	exisited I had no need to use those connected devices/systems Costs too high Lack of compatibility with other devices or	
65.9 4.8 4.5	66.6 3.7 5.5	1.1 71.8 2.4 7.9	2.3 71.4 3.3 8.1	4.8 65.3 7.0 3.7	2.3 67.4 0.0 6.1	8.7 62.8 2.4 3.6	67.5 3.7 5.7 1.3	exisited I had no need to use those connected devices/systems Costs too high Lack of compatibility with other devices or systems Lack of skills to use those devices or	
65.9 4.8 4.5 0.3	66.6 3.7 5.5 1.8	1.1 71.8 2.4 7.9 0.7	2.3 71.4 3.3 8.1 0.2	4.8 65.3 7.0 3.7 2.0	2.3 67.4 0.0 6.1 0.0	8.7 62.8 2.4 3.6 2.9	67.5 3.7 5.7 1.3	exisited I had no need to use those connected devices/systems Costs too high Lack of compatibility with other devices or systems Lack of skills to use those devices or systems Concerns about the privacy and protection of data about me generated by	
65.9 4.8 4.5 0.3	66.6 3.7 5.5 1.8	1.1 71.8 2.4 7.9 0.7	2.3 71.4 3.3 8.1 0.2	4.8 65.3 7.0 3.7 2.0	2.3 67.4 0.0 6.1 0.0	8.7 62.8 2.4 3.6 2.9	67.5 3.7 5.7 1.3 0.7	exisited I had no need to use those connected devices/systems Costs too high Lack of compatibility with other devices or systems Lack of skills to use those devices or systems Concerns about the privacy and protection of data about me generated by those devices or systems Concerns about security (that the device	

MODULE E: Internet of things¹⁾ (continued)

	Age Sex							
Answers (individuals)	16–24	25–34	35–44	45–54	55–64	65–74	Men	Women
	E3: Die	d you u	se the	Intern	et on a	ny of t	he follo	wing
Internet-connected TV	73.8	75.3	61.3	66.7	57.3	41.6	64.8	64.5
Internet-connected game console	20.0	4.2	4.5	5.1	2.9	1.0	9.2	3.2
Internet-connected audio system, smart speakers	22.0	5.3	5.4	6.8	3.7	1.0	8.6	6.2
Didn't use the mentioned Internet- connected devices	24.9	24.7	38.1	33.1	42.7	58.2	34.7	35.3

¹⁾ The data refer to individuals who answered "Within the last three months" in question B1.

MODULE F: Green ICT¹⁾

	Age							x
Answer (individuals)	16–24	25–34	35–44	45–54	55–64	65–74	Men	Women
	F1_1: What did you do with your mobile phor							
Still in the household	54.7	52.0	54.1	53.6	52.9	55.6	54.0	53.2
Sold or donated	28.6	22.4	23.2	22.8	19.3	17.4	22.6	22.7
Disposed of in electronic waste collection/recycling (including leaving it to the retailer to dispose of)	4.4	5.4	2.4	7.4	4.3	4.8	4.2	5.4
Disposed of but not in electronic waste collection/recycling	2.2	2.8	5.3	3.1	6.0	6.1	4.0	4.1
A new one is not bought or is still in use	7.8	16.2	12.8	10.8	16.1	14.4	13.1	12.8
Other	2.2	1.2	2.3	2.2	1.4	1.8	1.9	1.8

 $^{^{1)}}$ The data refer to individuals who answered "Within the last three months" in question B1.

		ion	nt situat	ployme	Em	level	ational	Educ
Answer (individuals)	Total	Other	Student	Unemployed	Employee	Tertiary	Secondary	Lower than secondary
		oses?	purpo	private	ne for	our hon	s in yo	device
Internet-connected TV	64.6	48.9	73.7	57.2	74.8	73.6	64.1	57.7
Internet-connected game consoles	6.2	6.7	14.9	3.2	5.4	5.1	5.8	8.4
Internet-connected audio system, smart speakers	7.4	5.1	18.9	3.9	7.7	7.0	8.3	5.3
Didn't use the mentioned Internet- connected devices	35.0	50.6	25.8	42.8	24.7	25.9	35.5	42.3

%

		n	t situatio	oloymen	Emp	level	cational	Educ
Answer (individuals)	Total	Other	Student	Unemployed	Employee	Tertiary	Secondary	Lower than secondary
it?	using	pped	t or sto	laced i	ou rep	when y	ohone	smart
Still in the household	53.6	51.6	56.3	62.0	49.3	42.7	54.2	62.3
Sold or donated	22.7	19.0	29.2	14.3	27.6	24.4	25.6	13.0
Disposed of in electronic waste collection/recycling (including leaving it to the retailer to dispose of)	4.8	4.9	5.0	3.6	5.4	7.4	3.7	5.5
Disposed of but not in electronic waste collection/recycling	4.1	5.3	0.6	4.9	3.9	3.8	4.1	4.3
A new one is not bought or is still in use	13.0	18.4	7.8	13.6	11.1	20.4	10.8	11.9
Other	1.9	0.8	1.2	1.6	2.8	1.3	1.7	3.0

MODULE F: Green ICT (continued)

			Ag	je			Se	x
Answer (individuals	16–24	25–34	35–44	45–54	55–64	65–74	Men	Women
	F1_	2: Wha	nt did y	ou do	with y	our lap	top or	tablet
Still in the household	33.8	21.2	17.0	20.5	18.9	18.8	18.6	24.2
Sold or donated	6.4	8.9	6.3	8.0	4.9	5.0	5.9	7.8
Disposed of in electronic waste collection/recycling (including leaving it to the retailer to dispose of)	0.0	1.7	2.1	2.8	0.8	1.3	1.6	1.6
Disposed of but not in electronic waste collection/recycling	2.2	1.9	2.7	0.6	1.2	1.3	1.6	1.8
A new one is not bought or is still in use	28.9	32.0	27.6	23.7	23.7	26.5	27.9	26.4
Other	28.7	34.4	44.3	44.3	50.5	47.2	44.4	38.1
	F1_3:	What d	lid you	do wi	th you	r deskt	op com	puter
Still in the household	25.1	21.1	15.8	21.7	12.4	14.6	18.6	19.0
Sold or donated	4.2	6.5	7.7	9.3	5.8	3.6	7.7	5.7
Disposed of in electronic waste collection/recycling (including leaving it to the retailer to dispose of)	1.1	1.7	1.7	3.8	1.2	1.6	0.9	3.2
Disposed of but not in electronic waste collection/recycling	1.8	1.5	3.7	1.3	2.4	1.9	2.6	1.7
A new one is not bought or is still in use	24.2	17.9	26.1	23.3	16.7	19.8	22.2	21.3
Other	43.7	51.2	44.9	40.7	61.5	58.4	48.1	49.3

¹⁾ The data refer to individuals who answered "Within the last three months" in question B1.

Edcu	ıational	level	Em	ployme	nt situa	tion		
Lower than secondary	Secondary	Tertiary	Employee	Unemployed	Student	Other	Total	Answer (individuals)
when y	ou re	placed	it or st	opped	using	it ?		
17.5	22.6	22.1	21.2	17.3	36.3	18.8	21.4	Still in the household
4.9	5.8	12.1	10.3	4.1	7.1	3.1	6.9	Sold or donated
0.6	1.8	2.2	1.9	2.1	0.0	1.3	1.6	Disposed of in electronic waste collection/recycling (including leaving it to the retailer to dispose of)
0.8	1.8	2.3	2.5	1.1	0.6	1.3	1.7	Disposed of but not in electronic waste collection/recycling
19.0	27.6	34.6	27.2	27.9	32.9	23.6	27.2	A new one is not bought or is still in use
57.2	40.5	26.7	36.9	47.5	23.1	51.8	41.3	Other
when y	ou re	placed	it or st	opped	using	it?		
14.2	20.7	17.9	20.2	17.6	24.9	14.2	18.8	Still in the household
6.5	6.5	7.4	8.5	7.9	3.2	3.5	6.7	Sold or donated
1.9	1.5	3.6	2.2	1.7	1.4	2.2	2.0	Disposed of in electronic waste collection/recycling (including leaving it to the retailer to dispose of)
1.7	2.2	2.5	2.5	2.6	0.0	2.2	2.2	Disposed of but not in electronic waste collection/recycling
12.1	24.2	24.8	24.4	17.1	26.4	19.4	21.7	A new one is not bought or is still in use
63.6	45.0	43.7	42.2	53.1	44.1	58.5	48.7	Other



Statistical Office of the Republic of Serbia



Data from this questionnaire are considered official secret and are used for statistical purposes only (Law on Official Statistics, "Official Gazette of the RS", number 104/09)

USAGE OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN HOUSEHOLDS AND BY INDIVIDUALS

A1_N	Do you or anyone in your household have access to the Internet at ho	ome?
(tick all	that apply)	
a) Desk	top computer	
b) Lapte	op (notebook)	
c) Table	et	
d) TV		
e) Radio	o-receiver (including mobile phone, car radio)	
f) Mobi	le phone	
e) None	e of the above	
	ightarrow Go to A1	
A1	Do you or anyone in your household have access to the Internet at ho	ome? (on any device)
(tick on	lly one)	
a) Yes		-> Go to A2
b) No		-> Go to B1_N
c) Don'	t know	-> Go to B1_1
A2	What type of Internet connection do you use at home?	
(tick all	that apply)	
a) Fixed	broadband connection	
b) Mob	ile broadband connection	
	-> Go to B1_N	
	MODULE B_N: USE OF COMPUTE	ERS
B1_N	When did you last use a computer (at home, at work place or some ot (desktop, laptop, notebook, tablet, excluding smartphones)	her place)?
(tick on	ly one)	
a) With	in the last three months	\rightarrow Go to B2_1
c) More	e than three months ago (less than a year)	→ Go to B
d) More	e than a year ago	→ Go to B
e) Neve	er used it	→ Go to B
B2_N	How often, on average, did you use the Internet in the last three mor	iths?
(tick on	ly one)	
a) Ever	y day or almost every day	
b) At le	ast once a week	
c) At lea	ast once a month	
d) Locc	than once a month	

MODULE B: USE OF THE INTERNET When did you last use the Internet? R1 (using desktop, laptop, mobile phone, smartphone) (tick only one) a) Within the last three months \rightarrow Go to C2 b) More than three months ago (less than a year) \rightarrow Go to C1 c) More than than a year ago \rightarrow Go to G1 d) Never used it \rightarrow Go to G1 B2 How often, on average, did you use the Internet in the last three months? (tick only one) a) Several times a day b) Every day or almost every day c) At least once a week (but not every day) d) Less than once a week -> Go to B3 For which of the following activities did you use the Internet (including via apps) for private purposes, in the last **B3** three months? (tick all that apply) Communication a) Sending/receiving e-mails b) Telephoning over the Internet (via web cam) (using apps, such as Skype, Messenger, WhatsApp, FaceTime, Viber, Snapchat, Zoom, MS Teams, Webex) c) Participating in social networks (creating user profile, posting messages or other contributions on Facebook, Twitter, Instagram, Snapchat, etc.) d) Sending online messages via Skype, Messenger, WhatsApp, Viber, Snapchat Access to information e) Finding information about goods and services f) Reading online newspapers, magazines Civic and political participation g) Posting opinions about civic or political issues via websites or social media (such as Facebook, Twitter, Instagram, Youtube) h) Taking part in online consultations or voting to define civic or political issues (urban planning, signing petitions) Use of entertainment i) Listening or downloading music (web radio, music streaming) j) Watching television programme over the Internet from TV broadcasters k) Watching video on demand from commercial services (such as Netflix, HBO GO, Amazon Prime, Maxdome, Apple TV, etc.) I) Watching video content via sharing services (such as Youtube) m) Playing or downloading games E-health n) Seeking health-related information o) Making an appointment with a doctor over website or app p) Online access to own medical record q) Using other medical services over website or app instead of going to hospital or doctor (such as obtaining prescription or online consultations)

041	ulius comises					
	nline services					
- ·	g goods or services over website or app (such as eBay, Facebook, Marketplace)					
s) Internet banking (including mobile banking)						
	-> Go to B4					
B4	B4 Which of the following learning activities did you carry out over the Internet for private or professional purposes in the last three months?					
(tick all	that apply)					
a) Doing	a) Doing an online course					
	ng online learning material (audio-visual material, online learning software, electronic poks, learning apps)					
,	nunicating with instructors or students using audio or visual tools (such as <i>Zoom, MS Teams, le Classroom,</i> etc.)					
d) Neve	r carried out any of the above					
	-> Go to B5					
B5	What was the purpose of the learning activities you performed in the last three months?					
	(for persons who answered "YES" in question B4 under a), b) or c))					
(tick all	that apply)					
a) For fo	ormal education (school or university)					
b) For p	rofessional or business purposes					
c) For pi	ivate purposes					
	-> Go to C1					
	MODULE C: USE OF E-GOVERNMENT					
(for p	persons who used the Internet in the last 12 months - who answered "YES" in questoin B1a or I	B1b)				
(for p	nersons who used the Internet in the last 12 months - who answered "YES" in questoin B1a or I In the last 12 months, did you contact authorities' services or public services using website purposes for the following activities?		os for private			
C1	In the last 12 months, did you contact authorities' services or public services using website		os for private			
C1 (tick all	In the last 12 months, did you contact authorities' services or public services using website purposes for the following activities?		os for private			
C1 (tick all a) Acces	In the last 12 months, did you contact authorities' services or public services using website purposes for the following activities? that apply) sing your personal data stored by public authorities (information on immunization, green		os for private			
C1 (tick all a) Access certifi	In the last 12 months, did you contact authorities' services or public services using website purposes for the following activities? that apply) sing your personal data stored by public authorities (information on immunization, green cate, etc.)?		os for private			
C1 (tick all a) Access certiff b) Access c) Obtain	In the last 12 months, did you contact authorities' services or public services using website purposes for the following activities? that apply) sing your personal data stored by public authorities (information on immunization, green icate, etc.)? sing information from public databases or registers (cadastre registers, business registers)		os for private			
C1 (tick all a) Access certiff b) Access c) Obtain	In the last 12 months, did you contact authorities' services or public services using website purposes for the following activities? that apply) sing your personal data stored by public authorities (information on immunization, green cate, etc.)? sing information from public databases or registers (cadastre registers, business registers) ning information (about services, benefits, rights, laws, working hours)		os for private			
C1 (tick all a) Access certiff b) Access c) Obtain	In the last 12 months, did you contact authorities' services or public services using website purposes for the following activities? that apply) sing your personal data stored by public authorities (information on immunization, green icate, etc.)? sing information from public databases or registers (cadastre registers, business registers) ining information (about services, benefits, rights, laws, working hours) r used public authorities' services	or app				
C1 (tick all a) Acces certif b) Acces c) Obtai d) Neve	In the last 12 months, did you contact authorities' services or public services using website purposes for the following activities? that apply) sing your personal data stored by public authorities (information on immunization, green cate, etc.)? sing information from public databases or registers (cadastre registers, business registers) ning information (about services, benefits, rights, laws, working hours) r used public authorities' services -> Go to C2 In the last 12 months, did you download or print official forms from public authorities' web purposes?	or app				
C1 (tick all a) Acces certif b) Acces c) Obtai d) Neve	In the last 12 months, did you contact authorities' services or public services using website purposes for the following activities? that apply) sing your personal data stored by public authorities (information on immunization, green cate, etc.)? sing information from public databases or registers (cadastre registers, business registers) ning information (about services, benefits, rights, laws, working hours) r used public authorities' services -> Go to C2 In the last 12 months, did you download or print official forms from public authorities' web purposes?	or app				
C1 (tick all a) Acces certif b) Acces c) Obtai d) Neve C2 (tick onl a) Yes	In the last 12 months, did you contact authorities' services or public services using website purposes for the following activities? that apply) sing your personal data stored by public authorities (information on immunization, green cate, etc.)? sing information from public databases or registers (cadastre registers, business registers) ning information (about services, benefits, rights, laws, working hours) r used public authorities' services -> Go to C2 In the last 12 months, did you download or print official forms from public authorities' web purposes?	or app				
C1 (tick all a) Acces certif b) Acces c) Obtai d) Neve	In the last 12 months, did you contact authorities' services or public services using website purposes for the following activities? that apply) sing your personal data stored by public authorities (information on immunization, green icate, etc.)? sing information from public databases or registers (cadastre registers, business registers) ning information (about services, benefits, rights, laws, working hours) r used public authorities' services -> Go to C2 In the last 12 months, did you download or print official forms from public authorities' web purposes? y one)	or app				
C1 (tick all a) Acces certif b) Acces c) Obtai d) Neve C2 (tick onl a) Yes	In the last 12 months, did you contact authorities' services or public services using website purposes for the following activities? that apply) sing your personal data stored by public authorities (information on immunization, green cate, etc.)? sing information from public databases or registers (cadastre registers, business registers) ning information (about services, benefits, rights, laws, working hours) r used public authorities' services -> Go to C2 In the last 12 months, did you download or print official forms from public authorities' web purposes?	or app	or app, for private			
C1 (tick all a) Acces certif b) Acces c) Obtai d) Neve C2 (tick onl a) Yes b) No	In the last 12 months, did you contact authorities' services or public services using website purposes for the following activities? that apply) sing your personal data stored by public authorities (information on immunization, green cate, etc.)? sing information from public databases or registers (cadastre registers, business registers) ning information (about services, benefits, rights, laws, working hours) r used public authorities' services -> Go to C2 In the last 12 months, did you download or print official forms from public authorities' web purposes? y one) -> Go to C3 In the last 12 months, did you make an appointment or reservation using website or app of service (for passeport, ID card, etc.) for private purposes?	or app	or app, for private			
C1 (tick all a) Access certiff b) Access certiff c) Obtain d) Neve C2 (tick onl a) Yes b) No C3	In the last 12 months, did you contact authorities' services or public services using website purposes for the following activities? that apply) sing your personal data stored by public authorities (information on immunization, green cate, etc.)? sing information from public databases or registers (cadastre registers, business registers) ning information (about services, benefits, rights, laws, working hours) r used public authorities' services -> Go to C2 In the last 12 months, did you download or print official forms from public authorities' web purposes? y one) -> Go to C3 In the last 12 months, did you make an appointment or reservation using website or app of service (for passeport, ID card, etc.) for private purposes?	or app	or app, for private			
C1 (tick all a) Access certif b) Access certif b) Access color a) Neve C2 (tick onla) Yes b) No C3 (tick onla)	In the last 12 months, did you contact authorities' services or public services using website purposes for the following activities? that apply) sing your personal data stored by public authorities (information on immunization, green cate, etc.)? sing information from public databases or registers (cadastre registers, business registers) ning information (about services, benefits, rights, laws, working hours) r used public authorities' services -> Go to C2 In the last 12 months, did you download or print official forms from public authorities' web purposes? y one) -> Go to C3 In the last 12 months, did you make an appointment or reservation using website or app of service (for passeport, ID card, etc.) for private purposes?	or app	or app, for private			

C5	In the last 12 months, did you submit your tax return using website or app for private purp	oses?					
(tick on	ly one)						
a) Yes, I	did it myself						
b) No, t	his was done automatically (by a tax authority, employer, other body,)						
c) No, I	c) No, I submitted it personally in paper form to the tax administration						
d) No,	d) No, another person did it on my behalf (e.g. family member, tax adviser)						
e) No, f	e) No, from other reasons						
	-> Do to C6						
C6	In the last 12 months, did you carry out any of the following activity using website or app o public services, for private purposes?	f publ	ic authorities or				
(tick all	that apply)						
'	nitting a request for an official document or certificate (such as diplomas, birth certificate, age/divorce certificate, death certificate, residence certificate, police or criminal record)						
	g for benefits or rights (pension, unemployment, children's allowance, enrollment in ols, universities)						
c) Subm	itting other requests, complaints (asking for legal assistance)						
d) None	e of the above						
	-> If the answer in question C6 under d) is "None of the above" -> go to C7; otherwise	go to	C8				
C7	What were the reasons for not asking for official documents or not submitting form using vauthorities or public services, in the last 12 months?	vebsit	e or app of public				
(tick all	that apply)						
a) No n	eed to request any documents or to submit any request						
	If the answer is "YES" in a) -> go to question C8; otherwise go to c-f in question C	27					
b) Lack	of skills (don't know how to use website or use is too complicated)						
	erns about security or protection of personal data or unwillingness to make payments over nternet (credit cards fraud)						
d) Anot	her person did it on my behalf						
e) Othe	r reasons						
C8	Were there problems when you used website or app of public authorities or public service	in the	last 12 months?				
	(for persons who answered "YES" in C1 under a), b), v); C2a), C3a), C4a), C5a) or C6 under	er a), b), c))				
(tick all	(tick all that apply)						
,	of website or app too complicated (not user-friendly, wordings not clear, procedure badly ined)						
b) Tech	b) Technical problems when using website or app (loading to slow, web location down)						
	c) It was impossible to access the service on smartphone or tablet (incompatible device version or apps not accessible)						
d) Othe	r reasons						
e) Did n	e) Did not have any problem						

MODULE D: E-COMMERCE

D1	When did you last buy or order goods or services over the Internet for private purposes? (via website or apps using any device: desktop, laptop, mobile phone, smartphone)					
(for pe	(for persons who used the Internet in the last 12 months - who answered "YES" in question B1a or B1b)					
(tick or	nly one)					
a) With	in the last three months		ightarrow Go to D2			
b) Mor	b) More than three months ago (less than a year) $AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA$					
c) Mor	e than a year ago		ightarrow Go to D11			
d) Nev	er		\rightarrow Go to D11			
D2	What types of goods or services did you buy over website or app in the last three months, f Including online purchase from enterprises or physical persons and including second hand go		rate purposes?			
(tick al	that apply)					
a) Clotl	nes (including sports clothes), footwear or accessories (such as bags, jewelry))					
b) Spor	ts goods (excluding sports clothes)					
c) Child	lren toys or childcare items (nappies, bottles, baby strollers)					
d) Furn	iture, home accessories (carpets or curtains) or gardening products (tools, plants)					
e) Mus	ic as CDs, vinyls, etc.					
f) Films	or series as DVDs, <i>Blu-ray</i> discs					
g) Print	red books, magazines or newspapers					
e) Com	puters, tablets, mobile phones or accessories					
f) Cons machir	umer electronics (such as TV sets, stereos, cameras) household appliances (such as washing les)					
g) Med	icines or dietary supplements (e.g. vitamins)					
h) Deli	veries from restaurants, food chains, catering services					
i) Food	or beverages from stores or from meal-kits providers					
j) Cosm	netics, beauty or wellness products					
	ning products or personal hygiene products (toothbrushes, handkerchiefs, washing ents, cleaning cloths)					
l) Bicyc	les, mopeds, cars or other vehicles or their spare parts					
m) Oth	er physical goods					
	-> Go to D3					
D3	From whom did you buy the mentioned goods via website or apps, in the last three months including online purchase from enterprises or physical persons.	;?				
(for pe	rsons who answered "YES" in any option of question D2)					
(tick al	that apply)					
a) Nati	onal sellers					
b) Selle	ers from EU countries					
c) Selle	rs from the rest of the world					
d) Cou	ntry of origin of seller not known					
	-> Go to D4					
D4	Did you buy any of the above mentioned products from private persons via website or app (via ebay, Facebook Marketplace)?					
(for pe	rsons who answered "YES" in any option of question D2)					
(tick or	nly one)					
a) Yes						
b) No						
	-> Go to D5					

D5	Did you buy or subscribe to multimedia via website or app for personal purposes, in the lass	st 3 m	onths?			
(for per	(for persons who answered "Within the last three months" in question D1)					
(tick all	that apply)					
a) Musi	c as a streaming service or downloading					
b) Films	or series as a streaming service or for downloading					
c) Elect	ronic books, online magazines or online newspapers					
d) Onlir	ne games or downloads for smartphones, tablets, computers or consoles					
e) Com	outers or other software downloaded, including upgrades					
f) Apps	related to health of fitness (excluding free apps)					
g) Othe	r apps (related to language learning, travels, weather) excluding free apps					
h) Did n	ot buy or subscribe to any of the above					
	-> Go to D6					
D6	In the last three months, did you buy or subscribe to any of the mentioned via website or ap	op for	private purposes?			
(for per	sons who answered "Within the last 3 months" in question D1)					
(tick all	that apply)					
a) Ticke	ts for sport events					
b) Ticke	ts for cultural and other events (cinemas, concerts, fairs)					
c) Subso	cription to the Internet or connection via mobile phone					
d) Subs	cription to electricity, water or heating supply, waste disposal or similar services					
e) Hous	ehold services (such as cleaning, babysitting, repair work, gardening)					
(also	when bought via a private persons, for example via Facebook Marketplace)					
f) Did n	ot buy or subscribe to any of the above					
	-> Go to D7					
D7	Did you buy any of the above mentioned household service from private persons via websit Facebook Marketplace)?	e or a	pp (e.g. via			
	sons who answered "YES" in question D6e)					
(tick on	ly one)					
a) Yes						
b) No						
	-> Go to D8					
D8	In the last three months, did you buy any transport service via website or app for private pu	ırpose	es from:			
<u>`</u>	sons who answered "Within the last three months" in question D1a)					
<u>`</u>	that apply)					
	nsport enterprise for buses, taxi (e.g. UBER)					
	te person					
c) Didn'	•					
DO	-> Go to D9	(
D9	In the last three months, did you rent accommodation via website or app, for private purpo	ses tr	om:			
· ·	that apply) prises such as hotels or travel agencies					
-	-					
	te person (such as Airbnb)					
c) Dian'	t rent accommodation via website or app					
	-> Go to D11					

D11	In the last three months, did you carry out any of the following activities via website or app, f	or private purposes?				
(for pe	ersons who answered "Within the last three months" in question D1)					
(tick a	(tick all that apply)					
	ing insurance policies, including travel insurance, also as a package with another services, e.g. icket					
b) Tak	b) Taking a loan, mortgage or credit from banks or other financial institutions					
c) Buy	c) Buying or selling shares, bonds, units in funds or other financial resources					
d) Did	n't carry out any of the mentioned activities					
	-> Go to D1					
	MODULE E: INTERNET OF THINGS					
	(for persons who answered "Within the last three months" in question B1)					
E1	Did you use any of the following Internet-connected devices or systems for private purposes?)				
(tick a	ll that apply)					
•	rnet-connected thermostat, lights, plug-ins or other Internet-connected solutions for energy your home	-> Go to E3				
	rnet-connected home alarm system, smoke detector, security cameras, door locks or other sty/security solutions for your home	-> Go to E3				
c) Inte	rnet-connected home appliances, such as robot vacuums, fridges, ovens, coffee machines	-> Go to E3				
d) Virt	ual assistant in the form of a smart speaker or app (Google Home, Amazon)	-> Go to E3				
e) Did	n't use any of the above	-> Go to E2				
E2	What were the reasons for not using any of the mentioned Internet-connected devices or sys purposes?	tems for private				
(for pe	ersons who answered "YES" in question E1e)					
(tick a	Il that apply)					
a) Did	n't know such devices or systems existed					
	-> if the answer is "YES" in E2a) go to E3; otherwise go to E2 B)-i)					
b) I ha	d no need to use those connected devices/systems					
c) Cos	ts too high					
d) Lac	k of compatibility with other devices or systems					
e) Lacl	c of skills to use those devices or systems					
f) Con	cerns about privacy and protection of data about me generated by those devices or systems					
g) Con	cerns about security (that the device or system will be hacked)					
	cerns about security or health (the use of the devices or systems could lead to an accident, ry or health problems)					
i) Othe	er reasons					
	-> Go to E3					
E3	Did you use the Internet on any of the following devices in your home for private purposes?					
(tick a	ll that apply)					
a) Inte	rnet-connected TV					
b) Inte	b) Internet-connected game consoles					
c) Inte	rnet-connected audio system, smart speakers					
d) Did	n't use the mentioned Internet-connected devices					
	-> Go to E4					

E4	Did you use any of the following Internet-connected devices for private purposes?		
(tick a	all that apply)		
	art watch, fitness band, connected goggles or headsets, safety trackers, Internet-connected ressories		
,	ternet-connected devices for monitoring blood pressure, sugar level, body weight (smart les) or other Internet-connected devices for health and medical care		
c) Inte	ernet-connected toys, such as robot toys (including educational) or dolls		
d) Car	r with built-in wireless Internet connection		
e) Did	In't use the mentioned devices via the Internet		
E5	Did you encounter any of the following problems related to the mentioned Internet-connected	ed devices	or systems?
(for p	ersons who answered "YES" in question E1 under a), b), c), d), E3 under a), b), c) or D4 under a), l	o), c), d))	
(tick a	all that apply)		
,	oblems related to security or privacy (hacked device or system, problems related with the otection of information about you or your family generated by those devices or systems)		
	oblems related to security or health (use of devices or systems lead to accidents, injury or alth problems)		
e) Dif	ficulties related to the use of devices (devices settling, installing, connecting devices)		
f) Oth	er problems (problems related to connection, support)		
g) Did	in't encounter any problem		
	-> Go to F1		
	MODULE F: GREEN INTERNET		
	(for persons who used the Internet in the last three months - who answered "YES" in question B	1a)	
F1_1	(for persons who used the Internet in the last three months - who answered "YES" in question B What did you do with your mobile phone or smartphone when you replaced it or stopped us		
(tick a	What did you do with your mobile phone or smartphone when you replaced it or stopped us		
(tick a	What did you do with your mobile phone or smartphone when you replaced it or stopped us all that apply)		
(tick a a) Stil b) Sol c) Dis	What did you do with your mobile phone or smartphone when you replaced it or stopped us all that apply) I in the household		
(tick a a) Stil b) Sol c) Dis	What did you do with your mobile phone or smartphone when you replaced it or stopped us all that apply) I in the household d or donated posed of within collection or recycling of electronic waste (including taken to the seller to		
(tick a a) Stil b) Sol c) Dis disp d) Dis	What did you do with your mobile phone or smartphone when you replaced it or stopped us all that apply) I in the household d or donated posed of within collection or recycling of electronic waste (including taken to the seller to pose of it)		
(tick a a) Stil b) Sol c) Dis disp d) Dis	What did you do with your mobile phone or smartphone when you replaced it or stopped us all that apply) I in the household d or donated posed of within collection or recycling of electronic waste (including taken to the seller to pose of it) posed of, but not within collection and recycling of electronic waste		
(tick a a) Stil b) Sol c) Dis disp d) Dis e) A n	What did you do with your mobile phone or smartphone when you replaced it or stopped us all that apply) I in the household d or donated posed of within collection or recycling of electronic waste (including taken to the seller to pose of it) posed of, but not within collection and recycling of electronic waste		
(tick a a) Stil b) Sol c) Dis dis d) Dis e) A n f) Oth	What did you do with your mobile phone or smartphone when you replaced it or stopped us all that apply) I in the household d or donated posed of within collection or recycling of electronic waste (including taken to the seller to pose of it) posed of, but not within collection and recycling of electronic waste ewe one is not bought or is still be used ere -> Go to F1_2 What did you do with your laptop or tablet when you replaced it or stopped using it?		
(tick a a) Stil b) Sol c) Dis dis d) Dis e) A n f) Oth	What did you do with your mobile phone or smartphone when you replaced it or stopped us all that apply) I in the household d or donated posed of within collection or recycling of electronic waste (including taken to the seller to pose of it) posed of, but not within collection and recycling of electronic waste lew one is not bought or is still be used er -> Go to F1_2		
(tick a a) Stil b) Sol c) Dis disp d) Dis e) A n f) Oth	What did you do with your mobile phone or smartphone when you replaced it or stopped us all that apply) I in the household d or donated posed of within collection or recycling of electronic waste (including taken to the seller to pose of it) posed of, but not within collection and recycling of electronic waste ewe one is not bought or is still be used ere -> Go to F1_2 What did you do with your laptop or tablet when you replaced it or stopped using it?		
(tick a a) Stil b) Sol c) Dis dis d) Dis e) A n f) Oth F1_2 (tick a a) Stil b) Sol	What did you do with your mobile phone or smartphone when you replaced it or stopped us all that apply) I in the household d or donated posed of within collection or recycling of electronic waste (including taken to the seller to pose of it) posed of, but not within collection and recycling of electronic waste new one is not bought or is still be used ner -> Go to F1_2 What did you do with your laptop or tablet when you replaced it or stopped using it? I in the household d or donated		
(tick a a) Stil b) Sol c) Dis dis d) Dis e) A n f) Oth F1_2 (tick a a) Stil b) Sol c) Dis	What did you do with your mobile phone or smartphone when you replaced it or stopped us all that apply) I in the household d or donated posed of within collection or recycling of electronic waste (including taken to the seller to pose of it) posed of, but not within collection and recycling of electronic waste ew one is not bought or is still be used her -> Go to F1_2 What did you do with your laptop or tablet when you replaced it or stopped using it? all that apply I in the household		
(tick a a) Stil b) Sol c) Dis disp d) Dis e) An f) Oth F1_2 (tick a a) Stil b) Sol c) Dis disp	What did you do with your mobile phone or smartphone when you replaced it or stopped us all that apply) I in the household d or donated posed of within collection or recycling of electronic waste (including taken to the seller to pose of it) posed of, but not within collection and recycling of electronic waste new one is not bought or is still be used ner -> Go to F1_2 What did you do with your laptop or tablet when you replaced it or stopped using it? I in the household d or donated posed of within collection or recycling of electronic waste (including taken to the seller to		
(tick a a) Stil b) Sol c) Dis disp d) Dis e) A n f) Oth F1_2 (tick a a) Stil b) Sol c) Dis disp d) Dis	What did you do with your mobile phone or smartphone when you replaced it or stopped us all that apply) I in the household d or donated posed of within collection or recycling of electronic waste (including taken to the seller to pose of it) posed of, but not within collection and recycling of electronic waste new one is not bought or is still be used ner -> Go to F1_2 What did you do with your laptop or tablet when you replaced it or stopped using it? all that apply I in the household d or donated posed of within collection or recycling of electronic waste (including taken to the seller to pose of it)		
(tick a a) Stil b) Sol c) Dis disp d) Dis e) A n f) Oth F1_2 (tick a a) Stil b) Sol c) Dis disp d) Dis	What did you do with your mobile phone or smartphone when you replaced it or stopped us all that apply) I in the household d or donated posed of within collection or recycling of electronic waste (including taken to the seller to pose of it) posed of, but not within collection and recycling of electronic waste new one is not bought or is still be used her -> Go to F1_2 What did you do with your laptop or tablet when you replaced it or stopped using it? all that apply I in the household d or donated posed of within collection or recycling of electronic waste (including taken to the seller to pose of it) posed of, but not within collection and recycling of electronic waste here wone is not bought or is still be used		

F1_3	What did you do with your desktop computer when you replaced it or stopped using it?	
	all that apply)	
	l in the household	
	d or donated	
	posed of within collection or recycling of electronic waste (including taken to the seller to	
dis	pose of it)	
	posed of, but not within collection and recycling of electronic waste	
-	new one is not bought or is still be used	
f) Oth		
	-> Go to G1	
	MODULE G: RESPONDENT'S BACKGROUND INFORMATION	
G1	Year of birth	-> Go to G1a
G1a	Did your birthday pass	
a) Yes		
b) No		
G2	Respondent's sex	
a) Ma	lle	
b) Fei		
	-> Go to G3	
G3	Country of birth (select from the classification SCL GEO code)	-> Go to G4
G4	Citizenship (select from the classification SCL GEO code)	-> Go to G5
G5	Education	
(Tick	only one)	
	thout school	
b) 1-	4 grades of primary school	
c) 5–8	3 grades of primary school	
d) Se	condary vocational school, grammar school	
e) Spe	ecialisation after secondary school, school for highly qualified workers	
	h school	
	culty / higher school / academy	
h) Ma		
I) Dod	torate	
CC	-> Go to G6 Respondent's employment situation?	
G6	only one)	
-	ployed	→ Go to G7
	employed	→ Go to G12
c) Ret		\rightarrow Go to G12
	hers not included in labour force	\rightarrow Go to G12
e) Stu		→ Go to G12
	usewife	→ Go to G12
g) Pei	rsons serving military service	→ Go to G12
h) Ot	her	→ Go to G2

G7	Respondent's employment status (this question refers to persons who answered "Employed" in question G6)					
a) Self	-employed persons with employees					
b) Self	b) Self-employed person without employees					
c) Emp	c) Employed					
d) Em	d) Employed in family business (unpaid work)					
	-> Go to G8					
G8	Working hours? (this question refers to persons who answered "Employed" in question G6)					
(tick o	nly one)					
a) Full	-time					
b) Par	t-time					
	-> Go to G9					
G9	Type of employment contract? (this question refers to persons who answered "Employed" in question G7)					
(tick o	nly one)					
a) Peri	manent employment contract					
b) Fixe	d-term employment contract					
	-> Go to G11					
G11	Occupation? (select from the list of occupations of the classification ISCO 08)	→ Go to G12				
G12	Region of residence (NUTS1 classification)	→ Go to G16				
G16	Total number of household members	→ Go to G17				
G17	Of which children aged under 16	→ Go to G18				
G18	Household income (average net monthly income)					
-	nly one)					
a) Up t	0 30000					
	n 30000 to 50000					
-	n 50000 to 70000					
-	n 70000 to 90000					
e) Mor	e than 90000					
G19	Disability and limited activity due to health issues (own opinion)					
a) Very	limited					
b) Limi	ted, but not severely					
c) Not	limited at all/Without limitation					
G20	Duration of the interview (in minutes)	End of the interview				



100% of enterprises have an Internet connection.

100% of enterprises have a broadband Internet.



In 21.4% of enterprises, from 1% to 24% of employed persons use the Internet, while in 46.6% of enterprise from 75% to 100% of employees use the Internet.



In the category of 24% of employed persons using portable devices for business purposes there are 42.3% of enterprises.







Strong password authentication, as well as ICT security measure in ICT systems are used by 79.2% of enterprises, while 65.1% make backups on a separate locations, and 56.8% control the access to the network as a security measure in their ICT systems.

More than 53% of employees in enterprises attend training and use Internet available information related to ICT security issues.





More than 61% of enterprises dispose of ICT equipment they stopped using in the scope of collection/recycling of electronic waste.

During 2021, 28.0% of enterprises sold products/services over the Internet.

The percentage of the total turnover generated from sales of products/services over the Internet is 69.3% of enterprises in the category from 1% to 24%, while 17.7% of enterprises are in the category from 24% to 49%.



84.9% of enterprises have a website, an increase of 0.4% in relation to 2021, and an increase of 0.5% in relation to 2020.

Differences in website use exist also depending on the territory.

In Belgrade region 91.2% of enterprises have a website, in Region Vojvodine 81.8%, in Region Sumadije i Zapadne Srbije 79.2% and in Region Juzne i Istocne Srbije 80.2%.





ICT specialists are recruited by 24.7% of enterprises, of which mostly in Belgrade region, 33.5%, and the least in Region Sumadije i Zapadne Srbije, 17.5%.

Training for ICT skills for specialists was provided by 11.3% of enterprises, and training for ICT skills for other employees by 19.6%.







THE SURVEY WAS CARRIED OUT ON A REPRESENTATIVE SAMPLE OF 1716 ENTERPRISES.

THE RESPONSE RATE IS 90.8% (1559 ENTERPRISES).



Measures influencing the quantity of paper used for printing and copying are implemented by 64.5% of enterprises, and 44.2% of enterprises apply measures to influence the consumption of ICT equipment energy.



2.1. METHODOLOGY

	Survey period	The survey was carried out from 15 March to 31 March 2022.				
C.	Type of survey	Telephone interview				
4	Sample size	• 1 716 enterprises				
*	Target population ¹⁾	 Enterprises with 10 and more employees Section C: Manufacturing Sections D and E: Electricity, gas, water and steam and air conditioning supply; Water supply, sewerage Section F: Construction Section G: Wholesale and retail trade, repair of motor vehicles Section H: Transport, storage and communications Section I: Accommodation and food service activities Section J: Information and communications Sections L and M: Real estate activities; Professional, scientific and technical activities Section N and division 95: Administrative and support service activities; Repair of computers Banks and insurance companies 				
<u>.</u>	Type of sample	Stratified sample				
•	Geographical area	 Territory of the Republic of Serbia (without AP Kosovo and Metohija) 				

¹⁾ Since 2011, the Classification of Activities has been in use according to the Regulation on the Classification of Activities, ("Official Journal of the RS", No 54/2010). This classification is harmonised with *NACE rev.*2

! 2.2. SAMPLE

The survey on ICT usage in enterprises was carried out on a representative sample of 1716 enterprises on the territory of the Republic of Serbia. The response rate was 90.8% (1 559 enterprises).

Sample (enterprises)		Size class		Region					
		Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodine	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
Activity	Manufacturing	193	208	198	122	167	162	148	599
	Electricity, gas, steam and air conditioning supply; Water supply and sewerage	34	36	32	22	28	28	24	102
	Construction	18	19	31	19	17	17	15	68
	Wholesale and retail trade	72	64	71	80	48	46	33	207
	Transport and storage	16	19	30	26	14	13	12	65
	Accommodation and food service activities	74	58	6	52	32	34	20	138
	Information and communications	57	44	19	56	22	17	25	120
	Real estate activities; Professional, scientific and technical activities	81	53	17	54	42	31	24	151
	Administrative and support service activities; Repair of computers	53	20	36	59	26	13	11	109
Number		598	521	440	490	396	361	312	1559
Percentage		38.36	33.42	28.22	31.43	25.40	23.16	20.01	100.0

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dil 2.3. MAIN FINDINGS

2.3.1. Internet in enterprises

In the Republic of Serbia, 100% of enterprises have an Internet connection. The survey shows that all enterprises have a broadband Internet connection.

Chart 2.1. Does your enterprise have access to the Internet? (%)



In 21.4% of enterprises from 1% to 24% of employees use the Internet, while in 46.6% of enterprises from 75% to 100% of employees use the Internet.

Chart 2.2. Enterprises by the percentage of employees using the Internet (%)

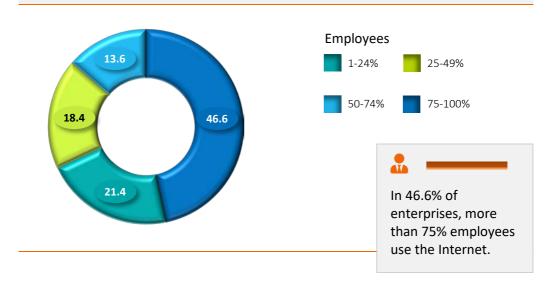
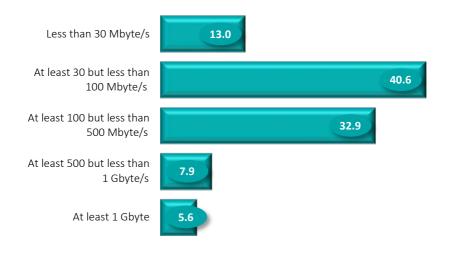


Chart.2.3. What is the maximum contracted speed of the Internet connection in your enterprise? (%)



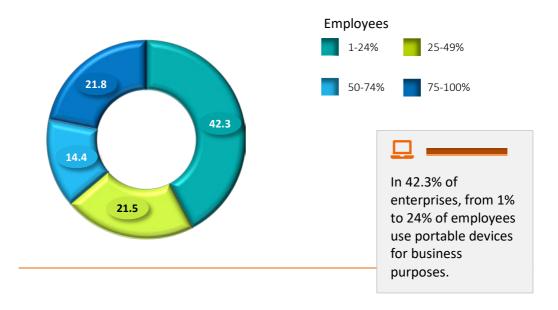
2.3.2. Percentage of the persons employed who use portable devices for business purposes that allow Internet connection via mobile telephone network

On the territory of the Republic of Serbia, in the category up to 24% persons employed who use portable devices for business purposes there are 42.3% of enterprises, while, within the category from 75% to 100% of persons employed using portable devices for business purposes there are 21.8% of employees.

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Chart 2.4. Enterprises by the percentages of persons employed using portable devices for business purposes (%)



2.3.3. Website

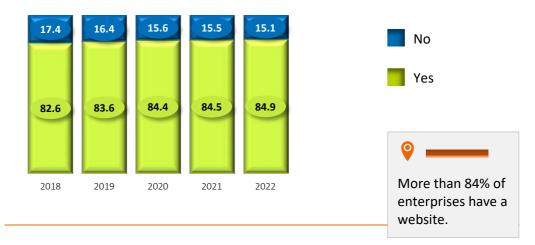
There are 84.9% of enterprises that have a website, an increase of 0.4% compared with 2021, and an increase of 0.5% compared with 2020.

In relation to the structure of enterprises by size class, the following results are obtained:

- 96.7% of large enterprises have a website;
- 91.5% of medium enterprises have a website;
- 82.7% of small enterprises have a website.

There are also differences by territory. In Beogradski region 91.2% of enterprises have a website, in Region Vojvodine, 81.8%, in Region Šumadije i Zapadne Srbije 79.2% and in Region Južne i Istočne Srbije 80.2% of enterprises.

Chart 2.5. Does your enterprise have a website? (%)



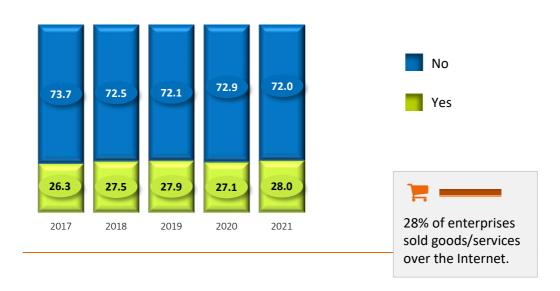
Website available in enterprises, by activities:

- Information and communications (100.0%);
- Administrative and support service activities; Repair of computers (94.1%);
- Real estate activities; Professional, scientific and technical activities (91.5%);
- Manufacturing (88.0%);
- Accommodation and food service activities (92.5%);
- Wholesale and retail trade (84.7%);
- Construction (69.6%);
- Electricity, gas, steam and air conditioning supply; Water supply and sewerage (89.2%);
- Transportation and storage (61.3%).

2.3.4. E-commerce

In 2021, 28.0% of enterprises in the Republic of Serbia sold goods/services over the Internet.

Chart 2.6. Does your enterprise sold products/services over the Internet? (%)



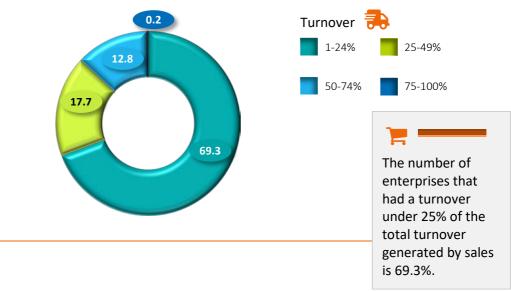
When looking at the structure of enterprises by size class, the following results are obtained:

- 24.9% of large enterprises sold goods/services over the Internet;
- 25.0% of medium enterprises sold goods/services over the Internet;
- 21.8% of small enterprises sold goods/services over the Internet;

When asked about the percentage of the total turnover generated from sales of goods/services over the Internet, enterprises answered as follows:

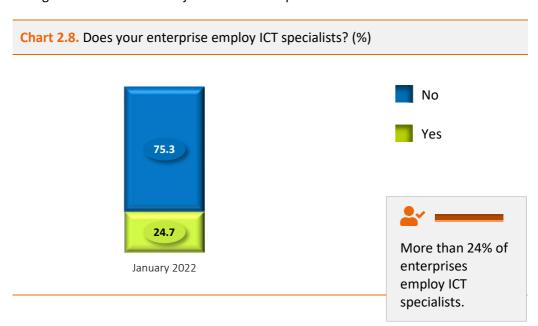
- "Less than 25%"(69.3% of enterprises);
- "More than 25%, and less than 50%" (17.7% of enterprises);
- "More than 50%, and less than 75%" (12.8 % of enterprises);
- "75 % and more" (0.2% of enterprises).

Chart 2.7. Percentage of the total turnover in 2021 generated by sales of goods/services over the Internet (%)



2.3.5. ICT specialists and skills

On the territory of the Republic of Serbia, 24.7% of enterprises employ ICT specialists, of which in Belgrade 33.5%, Vojvodina 19.5% in Region Šumadije i Zapadne Srbije 17.5% in Region Južne i Istočne Srbije 19.0% of enterprises.



2.3.6. ICT security

In the Republic of Serbia 79.2% of enterprises use authentication via a public password as a measure in their ICT systems, while 65.1% of enterprise make backup copies to a separate location, and 56.8% control the access to the network as a security measure in their ICT systems.

Chart 2.9. Did your enterprise use any of the following ICT measures? (%)

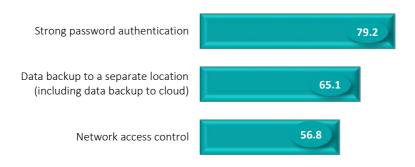
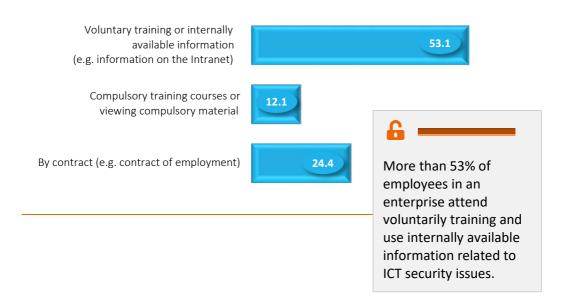


Chart 2.10. Does your enterprise make persons employed aware of their obligations related to ICT security issues? (%)



2.3.7. THE ENVIRONMENT

In the Republic of Serbia, 64.5% of enterprises use measures to influence the quantity of paper used for printing and copying, and 44.2% of enterprises use measures to influence the consumption of energy of ICT equipment.

Chart 2.11. Does your enterprise think of how ICT services/equipment impact the environment when choosing them (e.g. energy consumption)? (%)

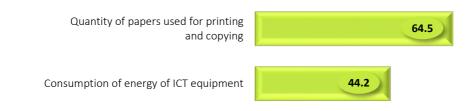
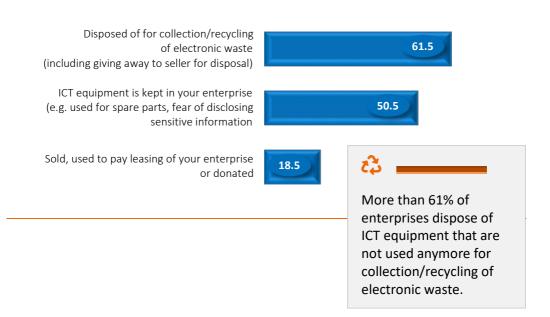


Chart 2.12. What does your enterprise do with ICT equipment that are not used anymore? (%)



2.4. SURVEY FINDINGS

MODULE A: Use of the Internet

A1: Percentage of the number of persons employed who use the Internet for business purposes?

Enterprises Size class Region Medium (50–249) Šumadije i Zapadne Srbije Južne i Istočne Srbije Small (10-49) Total Large (250+) Beogradski Vojvodina 20.7 1-24% 24.3 21.6 19.2 17.6 28.3 24.3 21.4 25-49% 17.3 21.9 22.7 11.1 25.0 24.2 18.7 18.4 50-74% 12.7 16.5 18.4 12.2 14.9 12.7 17.1 13.6 75-100% 49.3 37.3 37.3 57.5 42.5 34.8 39.8 46.6

%

A2: Does your enterprise use any type of broadband Internet connection (such as ADSL, SDSL, FTTP, cable Internet, public Wi-Fi)?

% Size class Region Medium (50-249) Šumadije i Zapadne Srbije Južne i Istočne Srbije Small (10-49) Total -arge (250+) **Enterprises 3eogradski** Vojvodina

YES

YES									
	Manufacturing	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Electricity, gas, steam and air conditioning supply; Water supply and sewerage	100.0	100.0	100.0	100.0	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	100.0		
	Construction	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Wholesale and retail trade	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Transportation and storage	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Activity	Accommodation and food service activities	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Ā	Information and communications	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Real estate activities; Professional, scientific and technical activities	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Administrative and support service activities; Repair of computers	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

A3: What is the maximum contracted speed of the Internet connection in your enterprise)?

				Enterp	orise			
	S	ize class						
	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
Less than 30 Mbytes/s	13.0	14.9	4.8	8.5	9.5	21.5	20.0	13.0
At least 30, but less than 100 Mbytes/s	40.8	40.5	38.6	37.9	46.0	38.2	43.4	40.6
At least 100, but less than 500 Mbytes/s	32.2	33.7	42.5	37.2	33.2	27.8	27.2	32.9
At least 500, but less than 1 Gbyte/s	9.1	3.1	5.6	9.3	5.3	9.7	5.2	7.9
At least 1 Gbyte/s	5.0	7.7	8.6	7.2	6.1	2.9	4.2	5.6

A4: Percentage of the persons employed who use portable devices that allow mobile Internet connection, using mobile telephone networks, for business purposes?

purposes?								%
				Enterp	rises			
	S	ize class						
	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
1–24%	41.5	47.1	36.4	34.6	41.5	50.2	55.4	42.3
25–49%	21.9	19.9	19.4	19.6	26.9	19.9	19.2	21.5
50-74%	13.9	15.4	21.5	16.6	14.4	11.6	12.5	14.5
75–100%	22.7	17.6	22.7	29.1	17.1	18.3	12.9	21.8



A5: Does your enterprise hold remote meetings (e.g. via *Skype-a, Zoom-a, Ms Teams-a, WebEx-a*)?

Ms	Teams-a, WebEx-a)?								%
		S	ize class			Reg	gion		
	Enterprises Manufacturing Electricity, gas, steam and air conditioning supply; Water upply and sewerage Construction Wholesale and retail trade Transportation and storage Accommodation and food ervice activities Information and communications Real estate activities; Professional, scientific and echnical activities Administrative and support ervice activities; Repair of	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
YES									
	Manufacturing	29.7	59.5	88.9	51.9	36.4	35.7	42.6	40.7
	Electricity, gas, steam and air conditioning supply; Water supply and sewerage	14.1	24.2	60.6	48.5	14.3	21.5	20.1	22.4
	Construction	18.0	59.1	74.9	36.8	8.0	32.2	16.9	26.7
	Wholesale and retail trade	39.9	64.3	81.4	65.0	40.7	16.7	18.5	44.2
Ϊŧ	Transportation and storage	-	31.4	78.9	10.0	6.0	4.0	8.9	7.0
Activity	Accommodation and food service activities	13.1	48.2	28.6	12.9	17.0	39.2	8.5	17.5
	Information and communications	82.8	89.9	96.6	88.1	88.4	54.7	72.6	84.5
	Real estate activities; Professional, scientific and technical activities	71.1	88.8	94.0	94.3	32.8	41.8	58.0	73.8
	Administrative and support service activities; Repair of computers	28.7	24.1	70.7	29.3	21.6	52.1	46.1	31.2
Tota		34.9	57.7	82.4	56.1	31.9	28.7	31.0	41.0

A6: Does your enterprise have any ICT security guidelines for remote meetings (e.g. password required)?

IIICC	tings (c.g. password require	cuj.							70
			Size clas	S		Re	gion		
	Enterprises	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
YES									
	Manufacturing	57.8	72.1	78.7	63.1	63.2	65.7	75.3	65.8
	Electricity, gas, steam and air conditioning supply; Water supply and sewerage	88.5	47.3	65.0	63.6	72.8	39.2	93.8	64.4
	Construction	57.4	42.6	36.9	68.5	78.7	13.6	10.2	50.2
	Wholesale and retail trade	45.4	77.3	68.9	44.2	72.2	42.4	92.8	52.7
/ity	Transportation and storage	-	82.4	40.9	73.3	44.3	74.5	91.8	68.7
Activity	Accommodation and food service activities	60.5	69.4	50.0	65.8	21.6	81.5	74.8	63.3
	Information and communications	69.4	81.1	92.9	73.6	61.3	97.0	80.6	72.5
	Real estate activities; Professional, scientific and technical activities	59.5	79.5	70.4	65.1	27.9	98.3	45.0	62.9
	Administrative and support service activities; Repair of computers	32.6	76.8	65.1	47.8	13.2	65.4	49.5	45.9
Total		55.3	71.6	71.2	59.1	60.8	60.3	71.7	60.8



A7: Does your enterprise have guidelines to promote remote meetings instead of business trips?

%

	<u> </u>								
			Size clas	s		Re	gion		
	Enterprises	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
YES									
	Manufacturing	37.1	45.7	53.2	37.3	38.3	44.4	55.0	42.4
	Electricity, gas, steam and air conditioning supply; Water supply and sewerage	20.1	69.3	40.0	37.4	-	56.7	100.0	46.9
	Construction	30.1	28.7	35.4	16.2	12.8	72.8	3.4	29.9
	Wholesale and retail trade	20.5	31.7	55.2	12.1	64.2	21.6	14.6	24.4
vity	Transportation and storage	-	13.3	42.6	26.2	6.6	8.5	55.7	23.0
Activity	Accommodation and food service activities	48.3	36.8	50.0	27.5	55.0	55.9	74.8	44.5
	Information and communications	62.1	54.4	45.2	60.0	58.1	21.8	87.3	60.0
	Real estate activities; Professional, scientific and technical activities	21.6	74.3	52.8	32.4	34.1	12.7	16.7	30.5
	Administrative and support service activities; Repair of computers	32.4	64.9	47.5	37.8	67.2	56.3	-	40.5
Total		32.2	44.5	50.3	29.9	48.1	42.7	44.8	36.8

A8: Does any of the employed persons have a remote access to the following? (using computers or smartphones)

			Size class	5		Re	gion			
	Enterprises	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total	
Ente	rprise e-mail									
	Manufacturing	79.8	87.3	94.4	82.7	88.5	74.8	87.2	82.5	
	Electricity, gas, steam and air conditioning supply; Water supply and sewerage	79.5	76.0	92.4	92.2	79.4	68.1	86.1	79.2	
	Construction	73.9	85.3	88.2	80.7	76.1	72.5	67.6	76.3	
	Wholesale and retail trade	89.2	96.3	95.6	97.3	87.1	89.2	73.1	90.4	
	Transportation and storage	89.5	94.5	100.0	100.0	97.4	78.0	78.6	90.6	
Activity	Accommodation and food service activities	86.8	89.3	85.7	93.2	81.0	79.5	72.7	87.1	
⋖	Information and communications	97.2	96.2	100.0	100.0	91.5	100.0	87.2	97.1	
	Real estate activities; Professional, scientific and technical activities	91.7	90.8	100.0	97.7	87.8	77.8	70.1	91.7	
	Administrative and support service activities; Repair of computers	81.3	88.8	84.4	81.3	76.6	96.5	97.8	83.1	
Total		85.4	89.5	93.7	92.1	86.8	79.1	79.8	86.5	
Ente	rprise documents (e.g. files, tables	s, prese	ntations.	charts)						
	Manufacturing	50.7		82.0	61.5	56.7	49.0	61.8	56.1	
	Electricity, gas, steam and air conditioning supply; Water supply and sewerage	49.9	32.7	75.8	82.8	51.6	19.0	47.2	45.1	
	Construction	30.6	63.2	75.6	36.8	29.1	32.2	65.5	37.5	
	Wholesale and retail trade	70.7	84.5	88.3	82.6	58.7	72.0	68.1	73.0	
	Transportation and storage	69.6	65.5	96.9	52.9	94.7	75.1	35.9	69.8	
Activity	Accommodation and food service activities	59.9	75.6	85.7	63.8	61.4	61.1	51.4	62.0	
A	Information and communications	87.1	94.2	96.6	99.2	64.0	86.7	71.3	88.7	
	Real estate activities; Professional, scientific and technical activities	82.0	88.7	73.7	94.7	70.4	53.5	56.4	82.8	
	Administrative and support service activities; Repair of computers	33.6	82.4	79.2	32.1	64.1	70.7	96.1	47.6	
Total	<u> </u>	60.9	71.2	83.4	70.7	60.0	55.8	61.9	63.7	

A8: Does any of the employed persons have a remote access to the following (using computers or smartphones)? (continued)

(usi	ng computers or smartphone	s)? (c	ontinu	ed)					%
			Size clas	s		Re	gion		
	Enterprises	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
Ente	rprise business apps or software (e.	g. acce	ess to acc	ounting	, sales, c	orders, C	CRM)		
	Manufacturing	44.3	63.0	82.9	60.6	50.7	50.6	39.6	51.3
	Electricity, gas, steam and air conditioning supply; Water supply and sewerage	46.6	23.4	75.8	69.6	43.1	19.0	43.5	39.5
	Construction	26.1	44.1	76.8	37.0	25.9	20.7	34.5	30.6
	Wholesale and retail trade	72.4	83.3	85.6	85.3	63.9	69.7	60.9	74.2
/ity	Transportation and storage	25.0	69.8	95.8	43.6	29.7	28.9	31.0	33.7
Activity	Accommodation and food service activities	60.7	85.6	85.7	69.3	51.2	66.8	50.1	63.9
	Information and communications	81.7	93.3	100.0	95.2	62.7	64.7	72.6	84.4
	Real estate activities; Professional, scientific and technical activities	70.2	82.2	56.4	81.6	52.4	61.1	53.3	71.6
	Administrative and support service activities; Repair of computers	26.6	56.6	81.0	30.5	41.8	49.1	64.9	37.4
Total	I	53.7	66.5	83.1	68.7	49.6	49.9	47.4	57.2

A9: Please indicate an estimate of the share of the persons employed who have remote access to enterprise's e-mail (percentage of the total number of persons employed)? 1)

persons employed)? 1)								%
				Enterp	rises			
	Size class			Region				
	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
1–24%	55.1	62.4	56.2	47.2	60.5	68.7	60.3	56.5
25–49%	14.4	10.3	14.8	10.6	15.1	17.6	15.2	13.7
50–74%	14.3	11.1	12.6	17.8	11.7	8.7	11.0	13.6
75–100%	16.2	16.2	16.4	24.4	12.7	5.0	13.5	16.2

¹⁾ The results refer only to the enterprises that said "YES" in question A8a.

A10: Please indicate an estimate of the share of the persons employed (percentage of the total number of persons employed) who have remote access to enterprise's documents or software (e.g. files, tables, presentations)¹⁾

presentations								70
				Enterp	orises			
	S	ize class						
	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
1–24%	61.2	71.3	71.3	53.0	67.6	77.4	72.2	63.8
25–49%	14.8	10.0	11.4	14.8	11.9	14.3	12.2	13.7
50–74%	10.4	5.1	6.2	12.5	8.7	4.1	6.2	9.1
75–100%	13.5	13.6	11.1	19.6	11.7	4.2	9.4	13.4

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 $^{^{1)}}$ The results refer only to the enterprises that said "YES" in question A8b or A8B.

A11: Does your enterprise have ICT guidelines for secure remote access e.g. request for online meetings protected by a password, forbidding the use of public *Wi-Fi* for work, use of *VPN*, requests related to data privacy)?

% Size class Region Medium (50-249) Južne i Istočne Srbije Zapadne Srbije Total Small (10-49) **Enterprises** (250+)Šumadije i Beogradski Vojvodina -arge YES Manufacturing 22.4 43.7 73.3 51.2 23.9 28.8 23.8 31.6 Electricity, gas, steam and air conditioning supply; Water 64.1 44.8 49.0 33.7 39.9 17.8 26.6 11.5 supply and sewerage Construction 21.6 29.5 34.5 49.3 69.3 55.9 47.1 44.4 Wholesale and retail trade 39.4 57.0 64.7 38.0 51.8 43.4 42.0 42.6 Transportation and storage 31.8 47.4 83.9 52.3 25.5 39.5 11.3 35.9 Accommodation and food 46.4 62.0 33.3 53.9 36.3 44.1 38.2 48.3 service activities Information and 75.0 83.3 93.1 82.4 64.9 63.1 75.6 77.1 communications Real estate activities; Professional, scientific and 68.8 82.4 61.7 76.1 67.4 51.8 42.9 70.5 technical activities Administrative and support service activities; Repair of 30.5 41.1 73.6 41.0 36.5 22.8 25.0 36.5 computers Total 41.5 49.1 71.9 54.3 38.5 36.3 32.5 44.3

712	. Does your enterprise have	a web	site:						/0
		9	Size class			Reg	gion		
	Enterprises	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
YES									
	Manufacturing	84.8	95.4	95.0	94.8	88.9	84.0	84.1	88.0
	Electricity, gas, steam and air conditioning supply; Water supply and sewerage	78.3	100.0	100.0	100.0	93.2	81.0	87.7	89.2
	Construction	68.0	73.1	97.1	75.6	56.1	72.5	69.0	69.6
	Wholesale and retail trade	84.3	84.5	98.9	94.7	76.6	76.8	76.8	84.7
	Transportation and storage	56.7	81.7	87.0	75.8	58.4	53.5	51.6	61.3
Activity	Accommodation and food service activities	91.4	100.0	100.0	88.4	100.0	94.5	100.0	92.5
A	Information and communications	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Real estate activities; Professional, scientific and technical activities	90.1	99.1	100.0	88.5	98.2	98.9	86.2	91.5
	Administrative and support service activities; Repair of computers	91.7	100.0	100.0	100.0	88.2	64.0	100.0	94.1
Total		82.7	91.5	96.7	91.2	81.8	79.2	80.2	84.9

MODULE B: e-commerce

B1: During 2021, did your enterprise realise sales/services in the following way?

%

10110	owing way?								%
			Size clas	S		Re	gion		
	Enterprises	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
Via y	our enterprise's website or mobile	арр							
	Manufacturing	13.3	12.4	13.5	12.4	17.2	9.7	13.4	13.1
	Electricity, gas, steam and air conditioning supply; Water supply and sewerage	-	-	3.0	-	-	-	1.2	0.3
	Construction	7.6	12.8	-	-	6.3	23.4	14.6	8.4
	Wholesale and retail trade	31.2	44.6	63.7	47.1	26.0	17.2	27.3	33.8
-	Transportation and storage	7.2	7.6	35.7	2.6	2.9	22.3	3.2	8.1
Activity	Accommodation and food service activities	60.2	81.4	85.7	61.2	68.4	66.9	54.5	63.0
	Information and communications	44.7	66.3	77.0	61.5	19.9	47.5	34.6	49.6
	Real estate activities; Professional, scientific and technical activities	5.5	9.8	6.0	5.7	2.6	7.6	18.2	6.1
	Administrative and support service activities; Repair of computers	27.8	43.4	7.2	33.1	21.1	26.3	25.0	29.3
Total		21.8	25.0	24.9	29.4	17.8	17.0	18.8	22.5
Via e	-commerce website or app used by	your e	nterpris	e on ma	rketplac	es			
	Manufacturing	2.6	1.4	3.7	3.6	1.4	0.3	6.8	2.4
	Electricity, gas, steam and air conditioning supply; Water supply and sewerage	-	-	-	-	-	-	-	-
	Construction	5.4	-	-	-	-	19.7	-	4.3
	Wholesale and retail trade	8.5	10.0	11.4	9.9	9.7	3.3	11.5	8.8
≥	Transportation and storage	7.2	5.5	3.1	0.3	2.6	22.0	-	6.8
Activity	Accommodation and food service activities	33.6	33.2	85.7	39.6	10.2	57.8	4.2	34.0
	Information and communications	4.9	14.3	12.6	7.3	3.3	15.3	5.4	6.8
	Real estate activities; Professional, scientific and technical activities	1.1	-	-	-	3.1	2.7	-	0.9
	Administrative and support service activities; Repair of computers	7.0	14.1	5.4	11.0	3.7	6.5	2.2	8.4
Total		7,0	5.7	6.1	8.1	4.0	8.0	5.8	6.8

B2: What was the percentage of the total turnover generated by web sales of goods or service in 2021? 1)

				Enter	orises			
	Size class				Region			
	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
1–24%	68.8	69.4	78.7	71.3	60.6	70.6	73.4	69.3
25–49%	18.7	15.6	8.9	16.7	23.3	13.9	18.6	17.7
50–74%	12.4	14.8	10.2	12.0	15.8	14.6	8.0	12.8
75–100%	0.2	0.2	2.1	0.1	0.3	0.9	0.0	0.2

¹⁾ The results refer only to the enterprises that said "YES" in question B1.

B3: What was the percentage value of web sales in 2021 for the following?

B3: What was the percentage value of web sales in 2021 for the following?								
				Enter	orises			
	9	Size class			Reg	gion		
	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
Via your enterprise's website or mobile app								
1–24%	16.4	10.7	5.4	17.3	4.6	16.8	18.6	14.8
25–49%	2.7	0.3	1.6	0.7	0.0	10.8	0.0	2.2
50–74%	2.7	3.6	1.6	1.3	3.7	8.4	0.0	2.9
75–100%	78.2	85.4	91.4	80.6	91.7	64.0	81.4	80.1
Via e-commerce website or app used I	by your e	enterpris	e on ma	rketplac	es			
1–24%	77.7	85.2	91.4	80.4	91.2	63.3	81.4	79.7
25–49%	2.0	1.8	1.6	0.8	3.6	4.9	0.0	1.9
50–74%	3.9	2.2	1.6	1.6	0.6	15.0	0.0	3.5
75–100%	16.4	10.7	5.4	17.3	4.6	16.8	18.6	14.8



B4: What was the percentage value of web sales in 2021 by types of transactions?

of transactions?				•	•			%
				Enterpr	ises			
	9	Size class			Reg	gion		
	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
Sales to end consumers (B2C)		·						
1–24%	23.6	19.9	22.4	30.7	14.0	17.7	8.1	22.8
25–49%	4.9	2.2	0.7	3.4	2.1	10.4	2.2	4.2
50-74%	12.2	9.4	5.0	2.5	15.5	27.0	22.8	11.4
75–100%	59.3	68.5	71.9	63.4	68.4	44.9	66.9	61.6
Sale to other enterprises and sales to go	vernmer	nt bodies	(B2B, B	2G)				
1–24%	58.9	66.7	71.1	62.7	68.4	42.9	66.9	60.9
25–49%	8.9	5.6	5.8	2.2	9.7	23.9	9.7	8.1
50–74%	8.3	7.0	0.7	4.0	7.1	15.6	15.3	7.8
75–100%	23.9	20.7	22.4	31.1	14.8	17.7	8.1	23.2

B5: During 2021, did your enterprise have web sales to customers located in the following geographical area?

%

			Size clas	S		Reg	ion		
	Enterprises	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
Republic o	f Serbia								
	Manufacturing	99.5	100.0	100.0	100.0	100.0	100.0	98.3	99.6
	Electricity, gas, steam and air conditioning supply; Water supply and sewerage	-	-	100.0	-	-	-	100.0	100.0
	Construction	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0
	Wholesale and retail trade	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Transportation and storage	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Activity	Accommodation and food service activities	99.0	100.0	100.0	98.6	100.0	100.0	100.0	99.1
A	Information and communications	98.7	98.0	100.0	100.0	100.0	100.0	78.7	98.6
	Real estate activities; Professional, scientific and technical activities	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Administrative and support service activities; Repair of computers	99.1	100.0	100.0	100.0	100.0	100.0	100.0	99.4
Total		99.5	99.7	100.0	99.7	100.0	99.8	97.8	99.6

B5: During 2021, did your enterprise have web sales to customer located in the following geographical areas? (continued)

		S	ize class	;		Re	gion		
	Enterprises	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
EU cour	ntries								
	Manufacturing	4.8	10.3	12.4	3.1	4.7	12.2	6.8	6.5
	Electricity, gas, steam and air conditioning supply; Water supply and sewerage	-	-	-	-	-	-	-	-
	Construction	-	35.8	-	-	-	15.9	-	9.7
	Wholesale and retail trade	14.2	5.4	7.9	18.0	4.5	-	3.1	12.3
>	Transportation and storage	-	-	42.3	45.1	-	-	22.7	3.4
Activity	Accommodation and food service activities	21.4	31.2	33.3	15.1	35.2	33.0	47.3	22.8
	Information and communications	13.7	12.3	25.6	10.4	-	36.3	53.2	14.0
	Real estate activities; Professional, scientific and technical activities	35.5	-	-	20.3	100.0	9.3	10.1	27.9
	Administrative and support service activities; Repair of computers	7.2	27.4	25.0	17.3	7.7	6.3	-	13.7
Total		13.3	13.9	16.7	15.1	11.5	11.4	12.6	13.6
Rest of	the world								
	Manufacturing	7.5	5.8	18.7	25.9	1.7	1.8	6.0	7.9
	Electricity, gas, steam and air conditioning supply; Water supply and sewerage	-	-	-	-	-	-	-	-
	Construction	-	-	-	-	-	-	-	-
	Wholesale and retail trade	-	3.6	7.9	0.6	3.5	-	-	1.0
≥	Transportation and storage		-	25.5	33.6	-	-	-	2.0
Activit	Accommodation and food service activities	24.4	35.0	47.6	28.5	35.2	8.6	10.9	26.1
	Information and communications	10.5	26.4	33.3	15.4	-	14.0	39.7	15.8
	Real estate activities; Professional, scientific and technical activities	28.8	-	-	20.3	70.7	-	10.1	22.7
	Administrative and support service activities; Repair of computers	7.2	28.9	25.0	17.3	7.7	6.3	7.0	14.2

B8: During 2021, did your enterprise have EDI-type sales of goods or services?

									, -
		9	Size class			Re	gion		
	Enterprises	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
YES									
	Manufacturing	3.1	7.9	20.5	2.1	4.6	8.1	6.1	5.4
	Electricity, gas, steam and air conditioning supply; Water supply and sewerage	-	-	-	-	-	-	-	-
	Construction	-	-	-	-	-	-	-	-
	Wholesale and retail trade	1.3	10.1	18.7	3.4	0.1	7.1	-	2.9
_ <u>₹</u>	Transportation and storage	7.8	14.1	22.9	6.7	20.7	3.0	-	9.2
Activity	Accommodation and food service activities	17.4	4.4	28.6	19.6	7.9	19.3	2.1	15.9
	Information and communications	12.0	0.8	-	13.1	0.7	8.6	5.4	9.6
	Real estate activities; Professional, scientific and technical activities	1.5	-	-	1.4	1.3	0.7	1.8	1.3
	Administrative and support service activities; Repair of computers	-	13.4	3.6	4.3	-	4.8	-	3.1
Total		3.8	6.7	14.4	5.1	4.0	6.3	2.5	4.8

B9: What was the percentage of the total turnover generated by EDI-types sales of goods or services in 2021?¹⁾

	Enterprises									
	Size class				Reg	gion				
	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total		
1–24%	87.4	76.6	70.2	90.9	89.7	62.2	91.4	82.5		
25–49%	12.6	23.4	29.8	9.1	10.3	37.8	8.6	17.5		
50-74%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
75–100%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

 $^{^{\}rm 1)}$ The results refer only to the enterprises that said "YES" in question B8.

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%

MOULE C: ICT specialists and skills

C1: Does your enterprise employ ICT specialists?										
Srbije	Total									
20.3 1	17.9									
27.5 2	27.2									
1.7 1	18.6									
11.4 1	16.3									
27.0 1	11.7									
17.3 2	25.5									
73.6 8	87.1									
27.8 3	38.0									
- 3	32.4									
19.0 2	24.7									
	27.0 : 17.3 : 73.6 : 27.8 : :									



C2: During 2021, did your enterprise provide any type of training to the employees to develop their ICT skills?

		S	Size class	5		Re	gion		
	Enterprises	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
Traini	ing for ICT specialists							'	
	Manufacturing	2.8	11.9	48.5	3.6	6.9	10.3	11.8	8.0
	Electricity, gas, steam and air conditioning supply; Water supply and sewerage	-	20.0	39.4	12.7	5.4	25.2	2.5	11.8
	Construction	-	13.8	26.1	8.0	0.7	11.8	-	3.1
	Wholesale and retail trade	3.7	20.6	50.4	5.9	14.0	5.1	1.9	7.2
<u>₹</u>	Transportation and storage	-	20.8	59.4	13.1	0.4	1.7	3.2	4.8
Activity	Accommodation and food service activities	2.9	17.4	28.6	2.9	0.7	17.1	4.3	4.8
	Information and communications	53.2	74.9	89.7	60.4	54.2	67.8	45.1	58.3
	Real estate activities; Professional, scientific and technical activities	12.4	63.7	48.9	26.8	7.4	8.3	9.5	19.7
	Administrative and support service activities; Repair of computers	4.1	19.7	31.9	9.8	6.3	24.6	-	9.7
Total		6.7	22.8	47.6	13.8	9.5	10.7	7.7	11.3
Traini	ing for other employees								
	Manufacturing	14.0	23.7	54.2	20.5	13.4	10.9	44.6	19.0
	Electricity, gas, steam and air conditioning supply; Water supply and sewerage	9.1	21.6	42.4	13.7	13.5	30.1	7.4	17.2
	Construction	16.2	26.1	29.4	25.2	21.4	11.8	-	18.3
	Wholesale and retail trade	8.5	28.7	51.4	11.1	8.4	22.2	9.4	12.4
Ţ.	Transportation and storage	22.8	28.4	53.1	12.7	44.7	23.3	5.0	24.5
Activity	Accommodation and food service activities	7.5	16.8	28.6	4.6	9.3	26.5	2.1	8.8
	Information and communications	45.6	47.2	65.5	53.5	32.9	50.6	25.4	46.6
	Real estate activities; Professional, scientific and technical activities	24.8	70.0	39.8	40.9	6.1	35.7	5.0	31.0
	Administrative and support service activities; Repair of computers	6.2	21.9	40.8	12.3	7.0	32.9	2.2	12.3
Total		15.7	29.2	49.7	22.1	16.0	18.5	20.2	19.6

C3: During 2021, did your enterprise recruit or try to recruit ICT specialists?

		9	Size class	5		Re	gion		
	Enterprises	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
YES									
	Manufacturing	1.6	7.8	26.0	4.8	2.9	4.7	7.9	4.7
	Electricity, gas, steam and air conditioning supply; Water supply and sewerage	-	1.3	18.2	3.9	0.8	2.7	2.5	2.1
	Construction	-	4.1	23.6	0.8	3.5	0.3	0.6	1.3
	Wholesale and retail trade	-	21.5	35.7	5.8	3.7	1.4	0.6	3.8
/ity	Transportation and storage	-	6.8	32.6	2.6	0.3	3.0	2.5	2.0
Activity	Accommodation and food service activities	2.0	9.8	14.3	1.0	0.7	13.7	2.1	3.0
	Information and communications	45.6	74.2	70.1	48.7	83.3	30.8	14.1	51.5
	Real estate activities; Professional, scientific and technical activities	12.8	26.7	21.8	21.9	3.5	1.8	3.4	14.8
	Administrative and support service activities; Repair of computers	4.5	5.6	10.7	3.1	7.8	18.0	-	5.2
Total		4.9	14.9	27.7	10.8	7.1	4.3	4.2	7.7



C4: During 2021, did your enterprise have vacancies for ICT specialists that were difficult to fill in?

were	e difficult to fill in?								%
		!	Size class	5		Re	gion		
	Enterprises	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
YES									
	Manufacturing	84.9	62.1	57.5	65.9	49.6	79.5	59.2	65.5
	Electricity, gas, steam and air conditioning supply; Water supply and sewerage	-	50.0	37.5	50.0	-	66.7	-	40.0
	Construction	-	100.0	22.7	18.7	90.2	-	100.0	61.0
	Wholesale and retail trade	-	53.8	60.9	63.2	27.5	90.4	33.3	56.0
vity	Transportation and storage	-	-	90.6	88.6	100.0	11.4	-	46.0
Activity	Accommodation and food service activities	-	42.8	50.0	50.0	-	12.6	-	19.8
	Information and communications	64.0	75.6	49.3	67.2	63.6	72.1	69.1	66.3
	Real estate activities; Professional, scientific and technical activities	15.5	42.9	80.6	19.0	88.9	100.0	46.2	23.8
	Administrative and support service activities; Repair of computers	28.7	-	42.2	59.3	8.7	-	-	25.1
Total		49.9	59.1	56.5	52.5	56.0	58.7	54.0	54.2

C6: Who mainly performed the ICT functions of your enterprises in 2021? (ICT infrastructure maintenance; support to *office* software; development or support for business management/system)

supp	ort for business managemen	1L/ 5951	lem)						70	
		S	ize clas	s		Re	gion			
	Enterprises	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total	
Empl	oyees in your enterprise (including	employ	ees of p	oarent a	nd affilia	te ente	rprises)			
	Manufacturing	32.0	43.0	88.9	37.6	39.2	34.6	46.0	38.4	
	Electricity, gas, steam and air conditioning supply; Water supply and sewerage	38.7	40.0	86.4	29.4	37.2	71.9	22.5	43.4	
	Construction	12.6	32.2	70.5	26.1	11.2	5.3	21.0	17.5	
	Wholesale and retail trade	26.8	59.8	82.1	44.9	20.7	21.9	28.9	32.7	
₹	Transportation and storage	42.2	52.8	93.7	57.7	27.4	50.8	48.4	45.3	
Activi	Accommodation and food service activities	21.9	42.6	81.0	21.1	28.0	29.1	36.2	24.9	
	Information and communications	83.6	96.4	100.0	80.9	99.4	93.3	90.8	86.4	
	Real estate activities; Professional, scientific and technical activities	38.6	82.5	88.7	43.6	52.4	32.1	59.5	45.1	
	Administrative and support service activities; Repair of computers	31.1	38.6	63.0	31.3	29.3	67.1	43.9	35.3	
Total		32.8	51.2	84.5	42.8	34.1	33.3	40.4	38.2	
Exter	nal suppliers									
	Manufacturing	61.9	62.4	61.4	68.5	51.6	60.0	76.1	62.0	
	Electricity, gas, steam and air conditioning supply; Water supply and sewerage	51.6	60.3	75.8	77.9	70.4	30.3	61.4	57.4	
	Construction	79.3	85.7	59.2	79.9	72.3	95.3	67.0	79.9	
	Wholesale and retail trade	70.4	82.2	75.7	66.9	78.3	78.0	70.2	72.2	
_	Transportation and storage	75.2	83.0	58.6	93.7	75.5	76.7	33.5	75.9	
Activity	Accommodation and food service activities	61.8	64.5	61.9	51.9	84.4	79.1	46.6	62.1	
	Information and communications	53.3	20.8	59.8	59.7	24.2	32.2	26.7	47.6	
	Real estate activities; Professional, scientific and technical activities	69.5	44.5	50.4	60.3	80.6	61.3	82.1	65.9	
	Administrative and support service activities; Repair of computers	58.9	60.0	64.8	71.3	38.3	50.9	35.1	59.6	
Total		67.1	65.7	64.2	67.7	64.6	68.3	65.0	66.7	



MODULE D: ICT security

D1: Does your enterprise use any of the following ICT security measures?

%

	boes your enterprise use any		Size clas	_		Res	gion		
	Enterprises	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
Stron	g password authentication								
	Manufacturing	69.6	83.5	95.4	80.5	76.1	64.7	84.0	74.6
	Electricity, gas, steam and air conditioning supply; Water supply and sewerage	66.5	70.3	84.8	67.6	76.9	58.6	75.0	69.7
	Construction	70.7	95.9	93.6	80.7	75.8	60.6	85.4	75.8
	Wholesale and retail trade	78.5	93.7	96.3	87.6	55.7	93.2	87.1	81.0
≥	Transportation and storage	89.5	78.3	93.5	94.9	97.4	75.1	76.2	88.0
Activity	Accommodation and food service activities	69.3	89.2	100.0	63.5	82.6	83.4	83.3	71.9
	Information and communications	95.6	99.2	100.0	95.8	99.3	93.3	96.2	96.4
	Real estate activities; Professional, scientific and technical activities	83.5	98.6	88.7	87.1	72.0	97.9	91.9	85.6
	Administrative and support service activities; Repair of computers	60.4	88.1	84.4	70.2	53.0	80.2	76.8	68.2
Total		76.3	88.0	93.6	83.5	73.5	74.6	84.5	79.2
Authe	entication via biometric methods								
	Manufacturing	3.2	6.1	18.7	5.3	7.4	2.5	4.8	4.9
	Electricity, gas, steam and air conditioning supply; Water supply and sewerage	1.6	1.0	3.0	10.8	-	-	-	1.5
	Construction	-	12.4	15.6	5.5	0.3	0.3	0.6	2.6
	Wholesale and retail trade	0.6	3.8	16.8	2.9	0.4	-	0.3	1.4
>	Transportation and storage	-	5.5	3.4	0.3	2.6	-	-	0.9
Activity	Accommodation and food service activities	1.6	9.7	-	1.7	4.7	0.9	6.4	2.5
	Information and communications	21.5	20.7	35.6	16.0	43.5	11.9	21.3	21.9
	Real estate activities; Professional, scientific and technical activities	9.1	15.2	12.0	14.2	3.7	2.0	1.6	9.9
	Administrative and support service activities; Repair of computers	1.5	-	7.1	2.2	1.5	-	_	1.7
Total		3.4	7.2	15.6	6.2	5.5	1.4	3.1	4.6

%

(00	tinacay								70
		9	Size class	5		Re	gion		
	Enterprises		Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
Auth	entication based on a combination	of at le	ast two	mechan	isms of	authent	ication		
	Manufacturing	11.7	13.9	42.6	25.5	10.2	11.9	9.9	14.2
	Electricity, gas, steam and air conditioning supply; Water supply and sewerage	12.9	17.1	18.2	25.0	13.0	13.9	13.9	15.1
	Construction	5.4	12.4	22.9	6.0	0.3	20.3	-	7.1
	Wholesale and retail trade	9.0	18.9	33.3	8.0	12.5	13.3	15.1	11.0
≥	Transportation and storage	13.2	12.4	36.2	21.8	2.6	3.0	45.9	13.8
Activity	Accommodation and food service activities	8.5	26.0	14.3	12.8	4.7	8.1	14.8	10.6
	Information and communications	61.1	53.5	63.2	63.9	69.3	22.2	36.9	59.8
	Real estate activities; Professional, scientific and technical activities	24.3	43.1	39.1	36.0	6.6	26.1	5.0	27.0
	Administrative and support service activities; Repair of computers	34.0	16.8	46.0	37.9	29.0	18.0	4.4	31.4
Total		15.7	19.8	39.0	23.6	12.5	13.1	14.3	17.4
Encry	ption of data, documents or e-mai	ls							
	Manufacturing	23.7	35.1	60.0	35.5	26.5	24.2	33.0	28.8
	Electricity, gas, steam and air conditioning supply; Water supply and sewerage	23.5	21.6	33.3	26.5	20.0	31.6	16.4	23.6
	Construction	49.5	38.0	45.7	45.1	30.9	67.5	50.3	47.3
	Wholesale and retail trade	49.2	52.4	56.3	51.4	42.1	66.2	33.7	49.9
>	Transportation and storage	38.4	26.5	54.4	45.3	3.8	72.5	23.8	37.1
Activity	Accommodation and food service activities	30.4	49.7	85.7	26.3	24.1	60.2	51.2	33.2
	Information and communications	69.1	76.7	69.0	67.2	89.7	73.1	47.7	70.5
,	Real estate activities; Professional, scientific and technical activities	43.9	54.2	40.6	46.6	33.1	57.9	48.4	45.2
	Administrative and support service activities; Repair of computers	28.2	44.2	67.0	43.9	19.6	32.9	6.1	34.8
Total		40.2	42.2	57.5	46.0	31.6	47.2	34.6	41.2
									%

		9	Size class	5		Re	gion		
	Enterprises	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
Data	backup to a separate location (incl	uding b	ackup to	cloud)					
	Manufacturing	52.1	77.9	88.4	67.1	58.0	54.6	68.9	60.7
	Electricity, gas, steam and air conditioning supply; Water supply and sewerage	58.0	65.5	90.9	77.9	65.3	69.0	46.3	64.0
	Construction	59.6	62.3	61.5	50.5	95.5	55.6	34.8	60.1
	Wholesale and retail trade	64.5	87.3	85.7	65.3	83.0	65.9	52.4	68.1
>	Transportation and storage	76.3	66.5	82.8	75.5	89.0	78.0	32.7	75.0
Activity	Accommodation and food service activities	43.1	69.9	61.9	30.6	67.0	73.3	57.6	46.5
	Information and communications	83.1	86.4	93.1	81.9	93.1	73.3	86.4	84.0
	Real estate activities; Professional, scientific and technical activities	67.4	96.6	72.9	81.1	49.3	68.0	50.8	71.3
	Administrative and support service activities; Repair of computers	49.1	73.9	79.4	56.9	61.2	41.3	63.2	56.8
Total		61.2	77.8	84.5	65.1	72.5	61.5	56.5	65.1
Netw	ork access control (management o	f users'	rights ir	the ent	erprise'	s netwo	ork)		
	Manufacturing	40.9	73.0	94.0	55.0	49.0	50.0	57.8	52.1
	Electricity, gas, steam and air conditioning supply; Water supply and sewerage	45.1	58.1	97.0	63.7	54.9	48.5	59.0	55.0
	Construction	45.1	73.4	80.9	36.6	55.8	75.6	48.2	51.0
	Wholesale and retail trade	57.2	73.1	95.4	61.1	56.7	76.6	38.8	60.3
>	Transportation and storage	35.7	59.4	92.7	52.9	35.0	48.2	11.4	40.9
Activit	Accommodation and food service activities	26.6	68.1	85.7	26.8	16.2	73.3	27.8	32.1
	Information and communications	88.3	89.6	96.6	88.5	90.9	93.3	82.8	88.8
	Real estate activities; Professional, scientific and technical activities	73.4	95.8	78.2	93.5	36.2	76.4	37.3	76.5
	Administrative and support service activities; Repair of computers	53.6	51.7	75.8	61.5	27.3	57.4	75.0	55.1
Total		51.4	72.4	91.0	61.6	49.2	61.6	47.9	56.8

(COII	tillacaj								70
		9	Size clas	s		Re	gion		
	Enterprises	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
Virtua	l Private Network (VPN)								
	Manufacturing	19.0	44.6	82.7	34.4	32.2	23.9	27.8	29.3
	Electricity, gas, steam and air conditioning supply; Water supply and sewerage	19.1	22.9	78.8	41.7	29.6	8.8	34.0	25.9
	Construction	37.9	57.4	63.0	55.9	48.8	28.4	4.7	41.9
	Wholesale and retail trade	30.4	69.2	77.3	45.8	50.5	13.7	13.7	36.8
>	Transportation and storage	42.7	70.7	92.7	38.9	32.3	75.4	51.6	48.3
Activity	Accommodation and food service activities	22.6	52.7	100.0	24.1	19.6	53.8	10.6	26.8
	Information and communications	87.1	88.9	96.6	93.5	86.4	67.8	64.4	87.7
	Real estate activities; Professional, scientific and technical activities	50.1	76.5	72.2	71.4	14.7	43.9	24.6	53.9
	Administrative and support service activities; Repair of computers	27.2	39.0	72.5	35.0	24.9	57.6	14.5	33.5
Total		34.2	55.7	80.4	50.4	38.8	30.3	24.5	39.9
Syste	m for monitoring ICT security that	allows o	detectio	n of sus	picious a	ctivity i	in the er	nterprise'	s ICT
syste	ms and alerts the enterprise about	it, exce	pt antiv	irus soft	ware				
	Manufacturing	13.7	28.1	69.8	26.3	18.2	13.9	32.3	20.8
	Electricity, gas, steam and air conditioning supply; Water supply and sewerage	13.9	18.4	30.3	15.7	14.6	11.5	30.2	17.2
	Construction	2.2	48.7	44.5	16.4	4.5	4.4	20.4	11.5
	Wholesale and retail trade	26.3	36.6	59.8	31.2	34.4	25.8	11.9	28.6
>	Transportation and storage	14.0	20.4	67.2	27.8	1.1	25.6	8.2	16.5
Activity	Accommodation and food service activities	16.1	34.4	81.0	14.4	12.2	49.5	6.4	18.9
	Information and communications	51.7	73.7	93.1	63.1	56.5	42.5	25.4	57.0
	Real estate activities; Professional, scientific and technical activities	60.7	76.5	67.7	69.8	62.3	33.3	48.3	62.9
	Administrative and support service activities; Repair of computers	12.8	41.4	51.4	22.7	9.1	44.3	23.2	22.0
Total		23.2	37.7	63.4	35.1	23.6	20.2	23.0	27.5



(con	tinued)								%
		S	ize clas	S		Re	gion		
	Enterprises	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
Main	taining log files for analysis after IC	T secur	ity incid	ents					
	Manufacturing	7.0	29.7	67.9	17.8	19.2	12.2	18.1	16.4
	Electricity. gas. steam and air conditioning supply; Water supply and sewerage	14.8	19.4	63.6	20.6	26.0	8.0	31.5	21.0
	Construction	-	30.8	49.1	11.6	1.4	4.4	3.8	6.7
	Wholesale and retail trade	28.1	40.1	63.0	42.6	27.1	21.6	7.9	30.6
ξţ	Transportation and storage	6.7	22.5	64.1	27.8	1.1	3.3	10.7	10.8
Activity	Accommodation and food service activities	7.5	34.1	47.6	9.5	6.2	24.4	6.4	11.0
	Information and communications	51.7	75.7	100.0	56.1	58.7	61.4	63.1	57.6
	Real estate activities; Professional. scientific and technical activities	56.5	83.5	51.1	73.4	48.7	19.8	34.7	60.0
	Administrative and support service activities; Repair of computers	18.6	25.2	53.2	25.7	12.7	42.6	3.9	22.9
Total		20.5	37.0	64.7	36.0	21.3	15.0	16.0	25.3
Asses	sment of ICT risks. i.e. periodical as	sessme	nt of p	obabilit	y of ICT	security	inciden	ts	
	Manufacturing	11.1	17.6	51.7	19.6	20.7	7.9	14.4	15.3
	Electricity. gas. steam and air conditioning supply; Water supply and sewerage	6.1	8.9	39.4	12.7	10.4	5.3	15.1	10.2
	Construction	-	19.8	27.3	6.2	0.7	4.1	4.1	4.2
	Wholesale and retail trade	10.6	17.3	49.9	17.8	2.2	19.1	3.0	12.5
	Transportation and storage	6.7	17.1	47.1	22.1	3.0	6.3	2.5	9.5
Activity	Accommodation and food service activities	7.5	34.0	47.6	10.7	3.1	25.3	4.3	11.0
	Information and communications	33.0	74.2	86.2	51.7	15.1	50.8	29.5	42.2
	Real estate activities; Professional. scientific and technical activities	35.5	64.5	51.1	54.0	18.7	8.0	18.9	39.6
	Administrative and support service activities; Repair of computers	13.8	23.7	28.8	22.9	5.6	6.5	14.5	17.1
Total		13.1	24.8	48.2	25.3	10.4	11.3	10.0	16.6

` '								
		Size clas	S	Region				
Enterprises	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total

ICT security tests (e.g. ICT security tests. alert system. review of security measures. testing of backup systems)

	Manufacturing	12.3	23.6	55.2	23.8	17.9	12.5	19.8	17.8
	Electricity. gas. steam and air conditioning supply; Water supply and sewerage	11.4	25.0	56.1	15.7	18.8	17.5	32.7	21.0
	Construction	5.9	36.3	45.3	11.5	24.6	4.7	5.3	12.3
	Wholesale and retail trade	20.5	23.1	52.9	37.8	6.2	17.2	0.3	21.7
ity	Transportation and storage	6.7	17.1	60.2	22.1	3.7	6.6	3.2	9.8
Activity	Accommodation and food service activities	7.3	34.0	28.6	9.1	7.7	24.4	2.1	10.7
	Information and communications	50.7	78.0	93.1	63.5	59.4	35.6	21.3	57.0
	Real estate activities; Professional. scientific and technical activities	49.4	65.6	34.6	65.8	36.0	16.6	18.9	51.3
	Administrative and support service activities; Repair of computers	18.9	17.5	47.7	25.4	8.5	18.0	23.2	21.0
Total		19.5	30.7	54.7	34.9	17.0	13.6	12.1	23.0



D2: Does your enterprise make persons employed aware of the obligations related to ICT security issues in the following ways?

% Size class Region Medium (50–249) Južne i Istočne Srbije Zapadne Srbije Total Small (10-49) (250+)**Enterprises 3eogradski** Šumadije i Vojvodina Large Voluntary training or internally available information (information about the Intranet) Manufacturing 49.2 75.5 49.1 49.3 42.5 40.9 50.2 63.9 Electricity, gas, steam and air conditioning supply; Water 30.8 51.9 68.2 41.7 45.4 42.5 40.1 42.9 supply and sewerage Construction 99.7 52.7 49.1 65.6 75.9 31.2 31.9 82.8 48.0 Wholesale and retail trade 50.1 68.0 77.6 59.0 28.4 74.1 53.2 Transportation and storage 59.4 36.0 76.3 66.0 24.4 77.4 68.0 56.4 Accommodation and food 57.1 39.7 37.5 54.3 34.8 23.5 78.0 38.3 service activities Information and communications 68.5 80.8 89.7 74.3 53.7 74.7 89.2 71.4 Real estate activities; Professional. scientific and 64.6 88.8 66.2 77.8 44.8 65.0 48.4 67.8 technical activities Administrative and support service activities; Repair of 39.8 33.8 54.9 42.5 33.3 47.4 27.2 39.8 computers Total 51.6 55.1 73.5 55.6 35.5 65.2 59.2 53.1 Compulsory training courses or viewing compulsory material Manufacturing 7.8 11.4 46.2 11.0 15.5 3.8 19.1 11.2 Electricity. gas. steam and air conditioning supply; Water 8.5 2.3 24.2 13.8 1.8 3.7 7.3 8.8 supply and sewerage Construction 11.3 22.5 24.0 6.0 24.2 23.4 2.6 13.6 Wholesale and retail trade 6.6 14.4 2.2 40.6 16.8 1.2 3.0 8.6 Transportation and storage 7.2 24.0 24.6 4.8 2.0 0.4 7.3 Accommodation and food 5.9 16.4 14.3 4.5 17.4 6.3 4.3 7.2 service activities Information and communications 35.3 53.5 47.1 40.8 43.2 30.8 22.6 39.0 Real estate activities: Professional. scientific and 10.5 42.2 27.8 20.3 14.9 8.3 3.2 3.5 technical activities Administrative and support service activities; Repair of 37.3 10.1 8.3 3.3 13.4 11.8 computers

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Total

D2: Does your enterprise make persons employed aware of the obligations related to ICT security issues in the following ways? (continued)

related to ici security issues in the following ways: (continued)										
		9	Size class	i		Re	gion			
	Enterprises		Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total	
Ву со	ontract (e.g. contract of employmer	nt)								
	Manufacturing	10.6	18.0	43.6	18.0	19.3	10.6	8.7	14.6	
	Electricity. gas. steam and air conditioning supply; Water supply and sewerage	42.6	16.3	47.0	33.8	45.3	27.7	16.0	32.1	
	Construction	40.1	49.1	52.2	50.3	51.9	27.5	20.4	42.0	
	Wholesale and retail trade	17.0	19.3	43.3	18.1	23.7	16.3	9.5	18.0	
vity	Transportation and storage	11.0	23.8	42.2	6.6	23.7	4.3	27.0	13.9	
Activity	Accommodation and food service activities	21.4	17.5		12.3	51.7	17.2	12.7	20.8	
	Information and communications	65.5	63.1	60.9	67.6	62.2	54.4	59.5	64.9	
	Real estate activities; Professional. scientific and technical activities	39.6	46.7	22.6	48.1	24.9	33.8	24.6	40.3	
	Administrative and support service activities; Repair of computers	4.6	24.4	33.3	9.3	10.0	24.6	12.3	11.2	
Total		22.9	26.7	42.7	28.9	28.5	16.1	15.4	24.4	

D3: Does your enterprise have documents on measures. practice or procedures of ICT security?

procedures of fer security:									
		9	Size clas	S		Re	gion		
	Enterprises	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
YES									
	Manufacturing	28.2	54.7	86.4	49.8	31.5	36.2	38.7	38.4
	Electricity. gas. steam and air conditioning supply; Water supply and sewerage	50.3	30.3	80.3	52.9	54.3	43.1	26.2	44.7
	Construction	47.8	65.6	75.7	55.4	55.8	48.8	35.6	51.6
	Wholesale and retail trade	54.7	80.0	78.1	64.8	72.8	40.5	37.0	58.7
vity	Transportation and storage	75.0	67.2	90.1	75.8	71.4	75.4	75.4	74.3
Activity	Accommodation and food service activities	46.4	64.6	28.6	51.9	49.8	40.9	34.1	48.4
	Information and communications	90.7	92.5	100.0	94.5	96.0	63.1	79.2	91.3
	Real estate activities; Professional. scientific and technical activities	70.8	81.4	77.4	79.9	63.3	63.2	42.9	72.3
	Administrative and support service activities; Repair of computers	41.3	40.8	68.6	46.4	28.9	52.1	48.2	43.5
Total		51.8	63.5	82.0	64.6	54.8	44.9	42.6	55.2

D4: When were the documents of your enterprise about measures. practice or procedures on ICT security defined or most recently reviewed?

•			•								
		Enterprises									
	9	Size class			Region						
	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total			
In the last 12 months	62.4	70.5	73.3	65.1	58.6	82.8	45.2	64.8			
Between 12 and 24 months	20.8	17.1	19.6	15.6	36.4	15.1	7.1	19.9			
More than 24 months ago	16.8	12.4	7.1	19.3	5.0	2.1	47.7	15.3			

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		5	Size clas	S		Re	gion		
	Enterprises	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
Own	employees (including employees in	n parent	or affil	iated en	terprise	s)			
	Manufacturing	30.5	43.2	86.8	34.6	39.1	32.9	46.9	37.2
	Electricity. gas. steam and air conditioning supply; Water supply and sewerage	43.2	30.0	71.2	29.4	53.8	37.8	28.7	40.2
	Construction	12.6	30.7	67.6	26.1	11.2	5.0	19.0	17.1
	Wholesale and retail trade	33.3	59.9	77.3	44.6	29.1	36.1	34.2	38.0
<u>₹</u>	Transportation and storage	38.2	53.1	90.4	52.3	30.1	28.9	75.4	42.0
Activity	Accommodation and food service activities	21.2	31.9	61.9	21.3	13.2	32.9	38.2	22.8
	Information and communications	84.2	88.5	100.0	91.6	74.4	85.0	67.9	85.5
	Real estate activities; Professional. scientific and technical activities	44.8	89.9	83.5	56.7	38.6	41.8	56.5	51.4
	Administrative and support service activities; Repair of computers	50.5	48.1	45.8	51.7	27.8	67.1	68.9	49.6
Total		35.4	50.7	79.2	46.4	33.9	32.8	44.1	40.0
Exter	nal suppliers								
	Manufacturing	57.1	58.6	45.3	51.4	41.6	65.4	74.8	56.7
	Electricity. gas. steam and air conditioning supply; Water supply and sewerage	40.3	67.1	57.6	65.7	59.2	39.2	54.0	52.9
	Construction	69.0	73.4	33.8	54.4	72.0	95.0	67.0	68.9
	Wholesale and retail trade	65.5	55.3	54.2	59.8	68.6	68.2	62.4	63.8
ţ.	Transportation and storage	79.0	68.2	32.0	67.5	72.9	99.0	54.1	76.0
Activity	Accommodation and food service activities	38.7	54.0	33.3	24.2	64.0	67.1	47.2	40.5
	Information and communications	43.4	14.3	55.2	35.9	49.2	33.6	36.9	38.6
	Real estate activities; Professional. scientific and technical activities	65.5	21.3	44.4	66.2	41.1	49.3	66.4	59.3
	Administrative and support service activities; Repair of computers	73.6	55.1	71.9	84.5	31.3	68.9	53.9	69.6
Total		61.7	54.9	49.2	56.0	55.6	70.1	64.2	60.0

D7: Does your enterprise have insurance against ICT security incidents?

D7: Does your enterprise have insurance against ICT security incidents?									%
Enterprises		Size class			Region				
		Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
YES									
Activity	Manufacturing	7.2	15.3	35.3	10.3	13.5	7.1	15.6	11.0
	Electricity. gas. steam and air conditioning supply; Water supply and sewerage	4.8	12.9	15.2	3.9	15.5	8.0	3.7	9.1
	Construction	-	22.0	13.5	5.8	6.3	0.3	2.1	4.2
	Wholesale and retail trade	6.4	21.9	21.2	6.1	10.5	13.2	8.5	8.8
	Transportation and storage	7.2	7.6	13.0	0.7	2.6	22.3	3.2	7.4
	Accommodation and food service activities	8.6	23.7	19.0	5.8	8.4	32.1	6.4	10.5
	Information and communications	28.2	35.2	52.9	43.4	7.7	-	11.3	30.3
	Real estate activities; Professional. scientific and technical activities	16.8	62.8	29.3	30.5	4.9	24.6	4.4	23.0
	Administrative and support service activities; Repair of computers	5.7	11.2	29.4	6.7	5.6	37.8	-	8.9
Total		8.5	21.1	29.0	13.5	9.6	11.7	9.2	11.6

MODULE E: Use of robotics

E1: Does your enterprise use any of the following types of robots?

%

			Size class	,	•	Por	rion		
			_	•		Re	gion		
	Enterprises	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
Indus	trial robots (e.g. robot welding. las	er cutti	ng)						
	Manufacturing	4.9	14.7	30.7	6.7	10.6	8.7	9.8	9.0
	Electricity. gas. steam and air conditioning supply; Water supply and sewerage	-	-	-	-	-	-	-	-
	Construction	-	-	3.3	0.2	-	-	-	0.1
	Wholesale and retail trade	-	0.2	3.4	0.1	0.1	0.3	-	0.1
_ <u>₹</u>	Transportation and storage	-	9.4	3.4	5.1	-	-	-	1.5
Activity	Accommodation and food service activities	1.0	2.5	-	-	-	6.4	2.1	1.2
	Information and communications	1.5	8.7	16.1	4.8	1.1	-	-	3.3
	Real estate activities; Professional. scientific and technical activities	0.2	4.4	11.3	1.0	0.4	2.3	-	0.9
	Administrative and support service activities; Repair of computers	2.4	-	-	-	-	18.0	-	1.7
Total		1.5	6.9	16.0	2.0	3.5	4.4	3.5	3.1
Servi	ce robots (e.g. used for surveillance	e. cleani	ing. tran	sport. e	tc.)				
	Manufacturing	0.9	0.4	4.3	0.4	1.7	0.2	2.5	1.0
	Electricity. gas. steam and air conditioning supply; Water supply and sewerage	-	0.6	3.0	-	0.8	-	1.2	0.5
	Construction	-	-	-	-	-	-	-	-
	Wholesale and retail trade	-	3.2	1.3	0.1	1.8	-	-	0.5
-\$	Transportation and storage	-	9.4	3.4	5.1	-	-	-	1.5
Activity	Accommodation and food service activities	1.3	2.8	-	-	-	7.4	4.3	1.5
	Information and communications	-	-	3.4	0.2	-	-	-	0.1
	Real estate activities; Professional. scientific and technical activities	-	-	-	-	-	-	-	-
	Administrative and support service activities; Repair of computers	0.2	2.2	-	-	-	6.5	-	0.6
Total		0.3	1.6	2.7	0.4	1.0	0.5	1.1	0.7

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MODULE F: ИСТ and the environment

F1: Does your enterprise use any of the following measures to influence the following?

. 56									70
		9	Size class	i		Re	gion		
	Enterprises	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
Quan	tity of paper used for printing and	copying	3						
	Manufacturing	55.8	71.0	79.0	71.2	66.4	49.4	59.5	61.0
	Electricity. gas. steam and air conditioning supply; Water supply and sewerage	55.4	56.0	50.0	71.6	51.2	50.7	57.4	55.1
	Construction	76.1	73.9	68.3	80.1	69.8	67.8	84.2	75.5
	Wholesale and retail trade	59.9	74.9	74.6	57.3	61.8	63.3	79.9	62.3
≥	Transportation and storage	71.9	54.0	83.9	84.9	94.7	31.2	54.1	69.6
Activity	Accommodation and food service activities	48.0	58.9	47.6	43.3	56.1	51.1	72.3	49.3
	Information and communications	81.4	78.1	77.0	83.9	84.5	69.2	57.7	80.7
	Real estate activities; Professional. scientific and technical activities	68.7	78.6	73.7	72.1	59.2	73.8	78.7	70.1
	Administrative and support service activities; Repair of computers	49.1	73.6	84.3	56.8	47.7	77.2	61.0	57.2
Total		62.5	70.6	76.1	67.1	67.0	54.9	68.1	64.5
Cons	umption of energy of ICT equipmer	nt							
	Manufacturing	39.9	51.7	64.1	48.3	44.7	31.7	64.5	44.3
	Electricity. gas. steam and air conditioning supply; Water supply and sewerage	44.2	27.4	50.0	28.9	53.8	37.2	18.5	37.7
	Construction	44.1	37.7	58.2	50.3	25.6	44.4	50.6	43.3
	Wholesale and retail trade	33.0	46.3	70.3	38.1	20.5	45.7	41.2	35.7
₹	Transportation and storage	55.7	33.7	58.3	78.8	32.4	49.5	46.6	52.5
Activit	Accommodation and food service activities	29.7	48.1	33.3	31.0	27.7	29.8	54.2	32.0
	Information and communications	78.1	52.8	54.0	76.2	80.1	53.9	45.6	72.8
	Real estate activities; Professional. scientific and technical activities	52.2	69.7	78.2	67.6	25.0	39.6	51.8	54.9
	Administrative and support service activities; Repair of computers	32.9	37.8	66.7	44.8	13.6	34.6	37.7	36.8
Total		42.5	47.0	63.5	51.0	34.6	38.8	50.7	44.2

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F2: Does your enterprise think of how ICT services or ICT equipment impact the environment when choosing them (e.g. energy consumption)?

tile	environment when choosing	tileili	(c.g. c	ileigy (CONSUN	ιριισιι	j :		/0
		9	Size class	i		Re	gion		
	Enterprises	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
YES									
	Manufacturing	57.1	70.4	81.4	65.0	57.6	53.4	83.5	61.9
	Electricity. gas. steam and air conditioning supply; Water supply and sewerage	51.5	44.7	56.1	60.3	52.7	51.8	32.4	49.1
	Construction	68.0	67.5	68.3	74.9	52.6	71.6	65.8	67.9
	Wholesale and retail trade	48.6	59.8	85.4	43.7	66.2	48.4	52.6	51.1
ιţ	Transportation and storage	62.2	46.8	70.8	79.8	37.7	49.8	91.8	60.1
Activity	Accommodation and food service activities	45.9	62.0	81.0	47.4	57.5	40.7	44.4	48.1
	Information and communications	89.5	83.4	77.0	96.4	87.0	62.5	49.7	88.0
	Real estate activities; Professional. scientific and technical activities	76.1	92.8	67.7	92.0	56.8	53.4	53.4	78.2
	Administrative and support service activities; Repair of computers	62.0	68.7	86.0	80.0	27.8	75.4	37.7	65.4
Total		59.7	66.9	79.0	67.6	57.3	53.9	66.0	61.8

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mon	itors. mobile phones) that a	re not	used a	nymor	e?				9
		S	ize class	;		Reg	gion		
	Enterprises	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
-	osed of for collection/recycling of el sposal)	lectroni	c waste	(includii	ng givin _i	g away t	to the se		
	Manufacturing	51.8	74.0	85.5	70.4	53.7	61.4	48.4	59.3
	Electricity. gas. steam and air conditioning supply; Water supply and sewerage	61.0	39.2	93.9	79.9	75.8	44.9	19.8	54.9
	Construction	62.3	85.3	87.6	41.8	96.8	92.2	53.6	67.0
	Wholesale and retail trade	52.3	72.5	88.4	59.6	57.9	43.0	59.2	55.9
>	Transportation and storage	57.2	57.1	96.6	52.6	48.1	78.0	54.8	58.4
Activity	Accommodation and food service activities	36.9	60.1	66.7	34.5	42.1	41.6	71.0	39.9
	Information and communications	70.1	80.6	80.5	75.7	65.8	67.8	67.2	72.4
	Real estate activities; Professional. scientific and technical activities	79.2	89.8	89.5	90.0	56.4	65.0	95.1	80.8
	Administrative and support service activities; Repair of computers	72.2	81.0	89.7	78.6	67.2	73.7	75.0	75.
Total		57.5	73.0	87.4	64.4	59.9	61.2	55.7	61.5
	quipment is kept in your enterprise mation)	e (e.g. us	sed for s	pare pa	rts. fear	of discl	osing se	nsitive	
	Manufacturing	44.0	43.7	67.0	33.5	57.5	39.9	52.4	45.4
	Electricity. gas. steam and air conditioning supply; Water supply and sewerage	50.8	73.1	59.1	52.9	56.9	56.4	77.8	60.
	Construction	49.5	46.0	37.6	68.9	51.6	4.4	51.1	48.6
	Wholesale and retail trade	52.8	52.0	61.5	45.9	66.9	53.5	50.5	53.0
>	Transportation and storage	61.6	71.9	52.3	59.4	96.6	25.9	67.3	62.9
Activity	Accommodation and food service activities	34.3	44.9	33.3	24.9	34.4	83.1	20.3	35.0
	Information and communications	60.2	54.0	49.4	55.0	63.5	76.4	60.8	58.
	Real estate activities; Professional. scientific and technical activities	49.9	31.8	32.3	44.7	47.8	73.1	24.8	47.2
	Administrative and support service activities; Repair of computers	62.2	46.8	54.6	67.6	44.4	46.1	37.7	58.4

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Total

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50.5

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		S	Size class	;		Re	gion		
	Enterprises	Small (10–49)	Medium (50–249)	Large (250+)	Beogradski	Vojvodina	Šumadije i Zapadne Srbije	Južne i Istočne Srbije	Total
Sold.	used to pay leasing of your enterp	rise or d	lonated						
	Manufacturing	15.9	22.0	26.9	15.6	17.9	16.9	24.6	18.1
	Electricity. gas. steam and air conditioning supply; Water supply and sewerage	13.7	9.7	21.2	22.1	22.3	5.8	1.2	12.7
	Construction	6.7	33.5	16.4	10.9	3.2	4.4	43.8	11.7
	Wholesale and retail trade	22.2	11.8	17.8	27.9	15.3	22.3	2.5	20.7
ity	Transportation and storage	21.2	4.8	12.8	19.5	0.3	46.5	0.7	18.5
Activity	Accommodation and food service activities	33.4	15.5	-	40.5	24.4	12.6	15.1	31.0
	Information and communications	19.5	44.6	36.8	21.3	30.7	46.4	17.2	24.6
	Real estate activities; Professional. scientific and technical activities	15.0	29.5	22.6	18.5	7.4	26.2	16.8	17.0
	Administrative and support service activities; Repair of computers	4.1	11.9	18.0	7.9	1.5	-	21.1	6.9
Total		17.8	20.4	22.7	21.1	13.8	19.7	16.7	18.5

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Statistical Office of the Republic of Serbia



The data in this questionnaire are considered official secret and are used for statistical purposes only (Law on Official Statistics, "Official Gazette of the RS", number 104/09)

SURVEY ON THE USAGE OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN ENTERPRISES

MODULE A: ACCESS AND USE OF THE INTERNET

A1	Please indicate the percentage of the number of persons employed who use the Internet for business purposes (percentage of the total number of employed persons):		
A2	Does your enterprise use any type of fixed broadbband Internet connection? (e.g. ADSL, SDSL, FTTP, cable Internet, public Wi-Fi)	Yes	No
			→ Go to A4
A3	What is the maximum contracted dowload speed of the Internet connection in your enterprise? (tick only one)	Yes	No
	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		
A4	Please indicate the percentage of the persons employed who use portable devices (provided by the enterprise) for business purposes (percentage of the total number of persons employed), and that allow Internet connection via mobile telephone networks (portable computer, tablet, smartphone):		
A5	Does your enterprise hold remote meetings (e.g. via Skype, Zoom, MS Teams, WebEx, etc.)	Yes	No
			→ Go to A8
A6	Does your enterprise have any ICT security guidelines for remote meetings (e.g. password requirement)?	Yes	No
A7	Does your enterprise have guidelines to promote remote meetings instead of business travelling?	Yes	No

A8	Do any of the employed persons have a remote access to the following? (using computers or smartphones)	Yes	No
	a) Enterprise e-mail		
	b) Enterprise documents (e.g. files, tables, presentations, charts, photos)		
	c) Enterprise business apps or software (e.g. access to accounting, sales, orders, CRM)		
	If the answer is "NO" in A8a), A8b) and A8c)-> go to B1		
A9	Please indicate the percentage of all persons employed who have remote access to the enterprise's e-mail system (percentage of the total number of persons employed)?		
	For enterprises that answered "YES" in A8a		
A10	Please indicate the percentage of all persons employed (percentage of the total number of persons employed) who have remote access to enterprise's documents or software (e.g. files, tables, presentations)?		
	For enterprises that answered "YES" in A8b or A8c		
A11	Does your enterprise have ICT guidelines for secure remote access? (e.g. request for online meetings protected by a password, prohibition of using of public Wi-Fi for work, use of <i>VPN</i> , requests related to data privacy)	Yes	No
A12	Does your enterprise have a website?	Yes	No
	MODULE B: E-COMMERCE ce is the sale or purchase of goods or services using computer network methods design		
Payments a	ce is the sale or purchase of goods or services using computer network methods design and delivery of goods may not be done online. E-commerce transactions exclude manual	illy typed orders	5.
	ce is the sale or purchase of goods or services using computer network methods design and delivery of goods may not be done online. E-commerce transactions exclude manual During 2021, did your enterprise have web sales/services:	Yes	No
Payments a	ce is the sale or purchase of goods or services using computer network methods design and delivery of goods may not be done online. E-commerce transactions exclude manual	illy typed orders	5.
Payments a	ce is the sale or purchase of goods or services using computer network methods designand delivery of goods may not be done online. E-commerce transactions exclude manual During 2021, did your enterprise have web sales/services: a) Via your enterprise's website or mobile app?	Yes	No
Payments a	ce is the sale or purchase of goods or services using computer network methods design and delivery of goods may not be done online. E-commerce transactions exclude manual During 2021, did your enterprise have web sales/services: a) Via your enterprise's website or mobile app? (including extranet) b) Via e-commerce websites or apps used by several enterprise on marketplaces?	Yes	No
Payments a	During 2021, did your enterprise have web sales/services: a) Via your enterprise's website or mobile app? (including extranet) b) Via e-commerce websites or apps used by several enterprise on marketplaces? (Amazon, Alibaba, Limundo, Tehnomanija)	Yes	No
B1 B2 f only "YES00% in qui	During 2021, did your enterprise have web sales/services: a) Via your enterprise's website or mobile app? (including extranet) b) Via e-commerce websites or apps used by several enterprise on marketplaces? (Amazon, Alibaba, Limundo, Tehnomanija) If the answer is "NO" in B1a) and B1b)-> go to B8 What was the percentage of the total turnover generated by web sales of goods	Yes	No No on B1, indicate
B1 B2 f only "YES00% in qui	During 2021, did your enterprise have web sales/services: a) Via your enterprise's website or mobile app? (including extranet) b) Via e-commerce websites or apps used by several enterprise on marketplaces? (Amazon, Alibaba, Limundo, Tehnomanija) If the answer is "NO" in B1a) and B1b)-> go to B8 What was the percentage of the total turnover generated by web sales of goods or services in 2021? "is indicated in a) in question B1, indicate 100% in question B3a), if only "YES" is indicate estion B3b), question B3 is to be answered by the respondents that said "YES" in quest	Yes d in b) in questi ion B1 under a)	No No on B1, indicate
B1 B2 f only "YES00% in quihe answers	During 2021, did your enterprise have web sales/services: a) Via your enterprise's website or mobile app? (including extranet) b) Via e-commerce websites or apps used by several enterprise on marketplaces? (Amazon, Alibaba, Limundo, Tehnomanija) If the answer is "NO" in B1a) and B1b)-> go to B8 What was the percentage of the total turnover generated by web sales of goods or services in 2021? "is indicated in a) in question B1, indicate 100% in question B3a), if only "YES" is indicate estion B3b), question B3 is to be answered by the respondents that said "YES" in quest s have a sum of 100%.	Yes d in b) in questi ion B1 under a)	on B1, indicate and b) so that
B1 B2 f only "YES00% in quihe answers	During 2021, did your enterprise have web sales/services: a) Via your enterprise's website or mobile app? (including extranet) b) Via e-commerce websites or apps used by several enterprise on marketplaces? (Amazon, Alibaba, Limundo, Tehnomanija) If the answer is "NO" in B1a) and B1b)-> go to B8 What was the percentage of the total turnover generated by web sales of goods or services in 2021? "is indicated in a) in question B1, indicate 100% in question B3a), if only "YES" is indicate estion B3b), question B3 is to be answered by the respondents that said "YES" in quest s have a sum of 100%. What was the percentage value of web sales in 2021 for the following: a) Via your enterprise's website or mobile app?	Yes d in b) in questi ion B1 under a)	on B1, indicate and b) so that
B1 B2 f only "YES00% in quihe answers	During 2021, did your enterprise have web sales/services: a) Via your enterprise's website or mobile app? (including extranet) b) Via e-commerce websites or apps used by several enterprise on marketplaces? (Amazon, Alibaba, Limundo, Tehnomanija) If the answer is "NO" in B1a) and B1b)-> go to B8 What was the percentage of the total turnover generated by web sales of goods or services in 2021? "is indicated in a) in question B1, indicate 100% in question B3a), if only "YES" is indicate estion B3b), question B3 is to be answered by the respondents that said "YES" in quest s have a sum of 100%. What was the percentage value of web sales in 2021 for the following: a) Via your enterprise's website or mobile app? (including extranet) b) Via e-commerce website or app used by your enterprise on marketplaces?	Yes d in b) in questi ion B1 under a)	on B1, indicate and b) so that
B1 B2 f only "YES00% in quihe answers	During 2021, did your enterprise have web sales/services: a) Via your enterprise's website or mobile app? (including extranet) b) Via e-commerce websites or apps used by several enterprise on marketplaces? (Amazon, Alibaba, Limundo, Tehnomanija) If the answer is "NO" in B1a) and B1b)-> go to B8 What was the percentage of the total turnover generated by web sales of goods or services in 2021? "is indicated in a) in question B1, indicate 100% in question B3a), if only "YES" is indicate estion B3b), question B3 is to be answered by the respondents that said "YES" in quest shave a sum of 100%. What was the percentage value of web sales in 2021 for the following: a) Via your enterprise's website or mobile app? (including extranet) b) Via e-commerce website or app used by your enterprise on marketplaces? (Amazon, Alibaba, Limundo, Tehnomanija) What was the percentage breakdown of the value of web sales in 2021 by type	Yes d in b) in questi ion B1 under a)	on B1, indicate and b) so that

B5	During 2021, did your enterprise have web sales to customers located in the following geographical areas?	Yes	No
	a) Republic of Serbia		
	b) EU countries		
	c) Rest of the world		
В8	During 2021, did your enterprise have EDI-type sales of goods or services?	Yes	No
	s cover sales via electronic data exchange. This type of sales cover orders placed in an agreed ed format suitable for automatic processing (e.g. EDI-EDIFACT, XML-UBL); Manually typed		
individual me	essages are excluded.		\rightarrow go to C1
В9	What percentage was generated by EDI-types sales of goods or services during 2021?		
	MODULE C: ICT SPECIALISTS AND SKILLS		

	Does your enterprise employ ICT specialists?		
C1	(ICT specialists are employees for whom ICT is the main job (to develop, operate or maintain ICT system or apps)	Yes	No
C2	During 2021, did your enterprise provide any type of training to the employees to develop their ICT skills?	Yes	No
	a) Training for ICT specialists answer "NO" if the answer in question C1 is "NO"		
	c) Training for other employees		
C3	During 2021, did your enterprise recruit or try to recruit ICT specialists?	Yes	No
			→ go to 0
C4	During 2021, did your enterprise have vacancies for ICT specialists that were difficult to fill in?	Yes	No
		No.	
		No.	→ go to 0
	Who performed your enterprise's ICT functions in 2021?	Name of the last o	
C6	Who performed your enterprise's ICT functions in 2021? (ICT infrastructure maintenance; support for office software; development or support for business management/system)	Yes	
C6	(ICT infrastructure maintenance; support for office software; development or		→ go to 0

MODULE D: ICT SECURITY

D1	Does your enterprise use any of the following ICT security measures?	Yes	No
	a) Strong password authentication, (e.g. minimum length use of numbers and special characters, periodically change, etc.)		
	b) authentication via biometric methods used to access the enterprise's ICT system (authentication based on fingerprintes, voice, face)		
	c) Authentication based on a combination of at least two mechanisms of authentication (combination for example of a one-time password, code generated via a secure token or received by phone, biometric method – based on fingerprints, voice, face)		
	d) Encryption of data, documents or e-mails		
	e) Data backup to a separate location (including data backup to cloud)		
	f) Network access control (management of user rights in the enterprise's network)		
	VPN (Virtual Private Network extends a private network across a public network to allow secure data exchange via a public network)		
	f) System for monitoring ICT security that allows detection of suspicious activity in the ICT systems and alerts the enterprise about it, except antivirus software		
	g) Maintaining log files for analysis after ICT security incidents		
	h) Assessment of ICT risks, i.e. periodical assessment of probability of ICT security incidents		
	i) ICT security tests (e.g. testing security alert system, review of security measures, testing of backup systems)		
D2	Does your enterprise make persons employed aware of the obligations related to ICT security issues in the following ways?	Yes	No
	a) Voluntary training or internally available information (information about the Intranet)		
	b) Compulsory training courses or viewing compulsory material		
	c) By contract (e.g. contract of employment)		
D3	c) By contract (e.g. contract of employment) Does your enterprise have documents on measures, practice or procedures of ICT security? (documents on ICT security and confidentiality of data cover employee training in ICT use, measures of ICT security, assessment of ICT security measures, plans for updating ICT security documents, etc.)		_
D3	Does your enterprise have documents on measures, practice or procedures of ICT security? (documents on ICT security and confidentiality of data cover employee training in ICT use, measures of ICT security, assessment of ICT security measures,		
D3	Does your enterprise have documents on measures, practice or procedures of ICT security? (documents on ICT security and confidentiality of data cover employee training in ICT use, measures of ICT security, assessment of ICT security measures,	Yes	No
D3	Does your enterprise have documents on measures, practice or procedures of ICT security? (documents on ICT security and confidentiality of data cover employee training in ICT use, measures of ICT security, assessment of ICT security measures,	Yes	No
	Does your enterprise have documents on measures, practice or procedures of ICT security? (documents on ICT security and confidentiality of data cover employee training in ICT use, measures of ICT security, assessment of ICT security measures, plans for updating ICT security documents, etc.) When were the documents of your enterprise about measures, practice or procedures on ICT security defined or most recently reviewed? (documents on ICT security and confidentiality of data cover employee training in ICT use, measures of ICT security, assessment of ICT security measures,	Yes	No No → go to D5 No
	Does your enterprise have documents on measures, practice or procedures of ICT security? (documents on ICT security and confidentiality of data cover employee training in ICT use, measures of ICT security, assessment of ICT security measures, plans for updating ICT security documents, etc.) When were the documents of your enterprise about measures, practice or procedures on ICT security defined or most recently reviewed? (documents on ICT security and confidentiality of data cover employee training in ICT use, measures of ICT security, assessment of ICT security measures, plans for updating ICT security documents, etc.)	Yes	No No → go to D5 No
	Does your enterprise have documents on measures, practice or procedures of ICT security? (documents on ICT security and confidentiality of data cover employee training in ICT use, measures of ICT security, assessment of ICT security measures, plans for updating ICT security documents, etc.) When were the documents of your enterprise about measures, practice or procedures on ICT security defined or most recently reviewed? (documents on ICT security and confidentiality of data cover employee training in ICT use, measures of ICT security, assessment of ICT security measures, plans for updating ICT security documents, etc.) (tick only one)	Yes	No No → go to D5 No
	Does your enterprise have documents on measures, practice or procedures of ICT security? (documents on ICT security and confidentiality of data cover employee training in ICT use, measures of ICT security, assessment of ICT security measures, plans for updating ICT security documents, etc.) When were the documents of your enterprise about measures, practice or procedures on ICT security defined or most recently reviewed? (documents on ICT security and confidentiality of data cover employee training in ICT use, measures of ICT security, assessment of ICT security measures, plans for updating ICT security documents, etc.) (tick only one) a) In the last 12 months	Yes	No No → go to D5 No

D5	During 2021, did your enterprise experience any security incident that led to the following consequences?	Yes	No
	a) Unavailability of ICT services due to hardware or software failure		
	b) Unavailability of ICT services due to external attacks, random attacks		
	c) Destruction or corruption of data due to hardware of software failure		
	d) Destruction or corruption of data due to malicious software or unauthorised intrusion		
	e) Disclosure of confidential data due to intrusion, farming, phishing attack, intentional actions of own employees		
	f) Disclosure of confidential data due to unintentional actions of own employees		
D6	Who carry out ICT security related activities (i.e. security testing, training about ICT security, resolving ICT security incidents) in your enterprise?	Yes	No
	a) Own employees (including employees in parent or affiliated enterprises)		
	b) External suppliers		
D7	Does your enterprise have insurance against ICT security incidents?	Yes	No
	MODULE E: USE OF ROBOTICS		
E1	Does your enterprise use any of the following types of robots?	Yes	No
	a) Industrial robots (e.g. robot welding, laser cutting) (excluding CNC machines, 3D printers or devices completely controlled by man)		
	b) Service robots (e.g. used for surveillance, cleaning, transport, etc.)		
	If the answer is "No" in question E1a) and E1b) -> go to F1; otherwise -> go to q	uestion E3	
E3	Have the following reasons affected your enterprise's decision to use robots?	Yes	No
	a) High cost of labour		
	b) Difficulties to recruit personnel		
	c) Increase of security at work		
	c) Increase of security at work g) Possibility of high precision or standardized quality of process and/or goods and services produced		
	g) Possibility of high precision or standardized quality of process and/or goods	-	
	g) Possibility of high precision or standardized quality of process and/or goods and services produced h) To expand the range of goods produced or services provided by the		

MODULE F: ICT AND THE ENVIRONMENT

F1	Does your enterprise use any of the following measures to affect the following?	Yes	No
	a) Quantity of paper used for printing and copying		
	b) Consumption of energy of ICT equipment		
F2	Does your enterprise think of how ICT services/equipment impact the environment when choosing them (e.g. energy consumption)?	Yes	No
F3	What does your enterprise do with ICT equipment (e.g. computers, monitors, mobile phones) when is no longer used?	Yes	No
	 a) Disposed of collection/recycling of electronic waste (including giving away to the seller for disposal) 		
	b) ICT equipment is kept in the your enterprise (e.g. used for as spare parts, fear of disclosing sensitive information)		
	c) Sold, used to pay leasing enterprise or donated		2

Name of the enterprise	
Registration number of enter	prise
Name and surname	
Telephone	
e-mail	

ADSL (Asymmetric Digital Subscriber Line):

A broadband digital transmission technology using an existing telephone line and allows at the same time data transmission and vocal communication. The larger part of the range serves for data transmission to user, and the speed extends up to 6 Mbps.

Bit (Binary Digit):

The smallest information unit processed by a computer handles. A bit is expressed as 1 or 0 in a binary presentation, or as *true or false* in logic presentation. A group of 8 bits makes up 1 bite.

Broadhand:

Broadband is a communication system the agent (carrier) of which (e.g. optical cable) forwards multiplied data simultaneously, and each individual data is made module at different frequency.

B2B (Business-to-Bussiness):

Transactions between two enterprises that are carried out via networks based on IP address (Internet Protocol address) via other computer networks.

B2C (Business-to-Customer):

Transactions between a business and private customer that are carried out through other computer networks.

CRM (Customer Relationship Management):

It represents a process or methodology used to learn more about our clients' needs and habits and to developing tighter relationships with them. CRM contains several technological components, but CRM, in organizational terms, is a set of processes that will help to collect necessary information about customers, sales, marketing efficiency, customers' reactions and market trends. CRM facilitate business use of technology and human resources to have an insight of customers' behavior and value.

Download:

Electronic transmission of information from a remote computer to own computer. File download from an anonymous *FTP* (File Transfer Protocol) is a popular way of obtaining free of charge software of public property.

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Dial-up connection:

When telephone network is used for connection to a network. This includes a modem and ordinary telephone line, *ISDN* (Integrated Services Digital Network) card or *ISDN* line. If you are a typical computer user, you have one or two dial-up connections: one to get connected to the Internet, and the other to connect to your enterprise's network.

DSL (Digital Subscriber Line):

Type of fast Internet connection using standard telephone lines. It can also be a type of broadband connection.

XDSL, ADSL, etc:

Transmissions over Internet networks based on protocols and via other computer networks. Orders of goods and services are placed via those networks, but payment and final delivery of goods or services can be made online or offline. Orders placed by phone, fax or e-mails are excluded from the category of electronic commerce.

Digital goods or services:

Goods/services that can ordered and delivered directly via computer, i.e. the Internet, e.g. music, video-films, games, computer software, online newspapers, consultning services, etc.

E-mail:

Electronic transmission of messages, including text and attachments, from one computer to another located inside or outside of an organization. This includes electronic mails by internet or other computer networks.

Extranet:

A secure extension of Intranet enabling external users to have access to certain parts of the organization Intranet.

E-commerce:

E-commerce (Electronic Commerce) is the purchase or sale of goods or services over the Internet, particularly via the World Wide Web service. Practically this term is often used instead of the recent one, e-business, which means business over the Internet.

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Electronic (digital) signature:

Electronic signature is meant to be a technology used in systems of electronic business for checking the signatory's authenticity, securing the integrity of transmitted information, and the irrevocability of the electronic signature in the message or document. Therefore, a like the signature in standard business, the electronic signature is used in electronic business. Besides, the latter secures electronically signed message, which is not case with personal signatures.

ERP (Entrerprise Resource Planning):

ERP is a software system that monitors all aspects of business operations of company. The implemented ERP system integrates the business operations of different company functions (such as accountancy, sales, production, etc.) in one entity. One obtains this way a system through which one can, on one hand, manage all human and material resources, and on the other one, plan, develop and monitor business processes and procedures.

Firewall:

A combination of hardware and software which maintains the system secure. It is usually used to prevent unauthorized access to the internal local network from outside. Firewall prevents direct communication between a network and external computers.

Hardware:

A physical unit of a computer system, including external units, printers, modems, mice, etc.

Internet:

A worldwide computer network.

Internet address:

Address of one of the Internet resource. It typically reads for example: http://www.stat.gov.rs

Intranet

A network within an organization, based on Internet technologies and protocols, but available only for a selected group of people, such as the employees.

ISDN (Integrated Services Digital Network):

A fast digital telephone service, which speed ranges up to Kbps, which is several times faster than the analogue modem.

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Local Area Network (LAN):

A local network that covers and connects a group of computers, printers and other units in a relatively limited location (e.g. building). Every connected LAN unit is allowed to communicate with other networks, if needed.

Network:

A group of computers or other devices, such as printers, scanners, etc. connected to the communication link, which allows all the devices to interact. It can be small or large range, linked with cables, wireless, permanently, temporarily linked, etc. The biggest network is the Internet, the largest group of all interconnected world networks.

Server:

A computer, in an network environment, containing shared resources used by network users.

Virus:

A computer program, which, by being started-up and installed, damages or erases data in a computer.

Wide Area Network (WAN):

A communication network that connects geographically separated computers, printers and other devices.

Window:

A part of the monitor screen from which programs and processes can be opened. The user can open several windows at the same time.

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