

# USAGE OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN THE REPUBLIC OF SERBIA, 2011

HOUSEHOLDS / INDIVIDUALS  
ENTERPRISES



Belgrade, 2011.

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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, play the most important part in production, the economy and all other spheres of in the life of individuals and the 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 organizations dealing with financial and insurance activities. This undertaking was primarily meant to test methodologies and instruments and prepare for implementation similar, regular surveys related to households and the economy.

In the previous five 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 enterprises.

Both surveys were also carried out on the territory of the Republic of Serbia in 2011 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 2011, while selected ones referred to the entire 2010.

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 2400 households and 2400 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 and activities, by telephone. It covered 1200 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, and that it will be the basis for its further development



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# GRAPHS

## **Part 1** **ICT usage in households/by individuals in the Republic of Serbia, 2011**

1. Devices available in households
2. Computers in households
3. Number of computers in households
4. Percentage of households having a computer, by type of locality
5. Percentage of households having a computer by income level
6. Does the household have access to the Internet at home?
7. Households having an Internet connection, by type of locality
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9. Devices used to access the Internet
10. Type of Internet connection
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14. Percentage of computer users (in the last three months), by educational level
15. Educational structure of computer users
16. Percentage of computer users (in the last three months), by employment situation
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18. How often, on average, did you use the computer in the last three months?
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20. Use of mobile phones, by sex and age
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22. Percentage of Internet users (in the last three months), by educational level
23. Educational structure of Internet users
24. Percentage of Internet users (in the last three months), by employment situation
25. How often, on average, did you use the Internet in the last three months?
26. Use of the Internet (in the last 3 months), by sex and age
27. Where did you use the Internet in the last three months?
28. Use of mobile devices to access the Internet
29. Types of Internet activities in the last three months
30. Types of Internet use (for private purposes) in the last 3 months

31. For which of the following public authorities' services did you use the Internet?
32. Reasons for not having sent filled in forms to public authorities over the Internet?
33. When did you last (for private purposes) buy/order goods or services over the Internet?
34. Which of the following goods/services did you order (for private purposes) over the Internet in the last 12 months?
35. When did you last take a computer-related training course (at least 3 hours)?
36. What are the reasons for not having taken a computer-related course in the last three years?

## Part 2

### ICT usage in enterprises in the Republic of Serbia, 2011

1. Does your enterprise use computers?
2. Enterprises by the percentage of employees using a computer at least once a week
3. Did your enterprise use, in January 2011, open source software free of charge?
4. Did your enterprise use the open source operating system Linux?
5. Does your enterprise have an Internet connection?
6. Enterprises by the percentage of persons who use the Internet at least once a week
7. Does your enterprise have one of the following external connection to the Internet?
8. What is the maximum download speed of the Internet connection (contracted with your Internet provider)?
9. Does your enterprise interact electronically with public authorities?
10. Does your enterprise interact with public authorities over the Internet for private purposes?
11. Did your enterprise interact with public authorities over the Internet for the following procedures?
12. Do you consider any of the following reasons as limiting your electronic interaction with public authorities?
13. Does your enterprise have a Website?
14. Does your enterprise provide over its Website the following facilities?
15. Did your enterprise order goods/services over the Internet?
16. Did your enterprise receive orders over the Internet?
17. Percentage of the total turnover in 2010 resulting from orders received over the Internet
18. Did your enterprise have in place, in 2010, a policy related to?





# USAGE OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN THE REPUBLIC OF SERBIA, 2011

HOUSEHOLDS / INDIVIDUALS



## 1.1. METHODOLOGY

Survey period	<ul style="list-style-type: none"><li>• The survey was carried from 12 April to 27 April 2011</li></ul>
Type of survey	<ul style="list-style-type: none"><li>• Telephone interview</li></ul>
Sample size	<ul style="list-style-type: none"><li>• 2400 households</li><li>• 2400 individuals</li></ul>
Target population	<ul style="list-style-type: none"><li>• For households: the target population is composed of all households with at least one member aged between 16 and 74</li><li>• For individuals: the target population is composed of all individuals aged between 16 and 74</li></ul>
Sample type	<ul style="list-style-type: none"><li>• Two-stage, stratified sample</li></ul>
Geographic scope	<ul style="list-style-type: none"><li>• Territory of the Republic of Serbia (excl. AP Kosovo and Metohia)</li></ul>

## 1.2. SAMPLE

The survey on ICT usage in households was conducted on a representative sample of 2400 households on the territory of the Republic of Serbia. The response rate was 97.0% (2329 households).

### Households

Sample (households)	Income			Territory			Type of household		Total
	Up to 300 euros	300 - 600 euros	Over 600 euros	Central Serbia	Vojvodina	Belgrade	Urban	Rural	
Number	1424	643	262	1197	646	486	1348	981	2329
%	61.1	27.6	11.2	51.4	27.7	20.9	57.9	42.1	100

The same sample was used both for households and individuals aged from 16 to 74 who reside on the territory of the Republic of Serbia. The response rate was 97.0% (2329 individuals).

### Individuals

Sample (individuals)	Age						Sex		Educational level			Employment situation				Total
	16 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	Men	Women	Lower than secondary education	Secondary education	Tertiary education	Employee	Unemployment	Student	Other	
Number	226	243	329	400	513	618	1134	1195	646	1192	491	656	573	83	1017	2329
%	9.7	10.4	14.1	17.2	22.0	26.5	48.7	51.3	27.7	51.2	21.1	28.2	24.6	3.6	43.7	100

## 1.3. MAIN FINDINGS

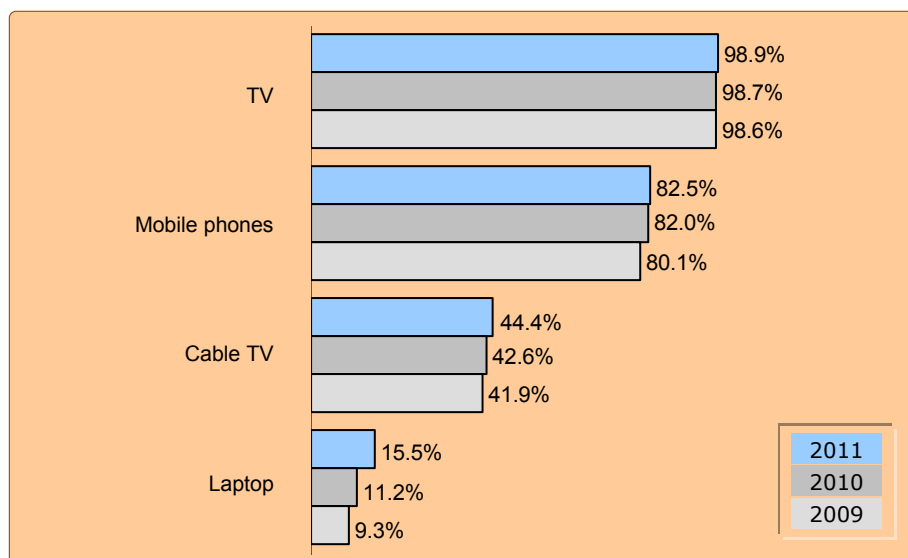
### 1.3.1. Devices in households

Households were offered to give more than one answer to the question relative to the devices available in households. The survey shows that 98.9% of household have a TV set and 44.4% cable TV.

82.5% of households have a mobile phone

15.5% of households have a laptop, which is an increase of 4.3%, 6.2% and 9.7% in relation to 2010, 2009 and 2008 respectively.

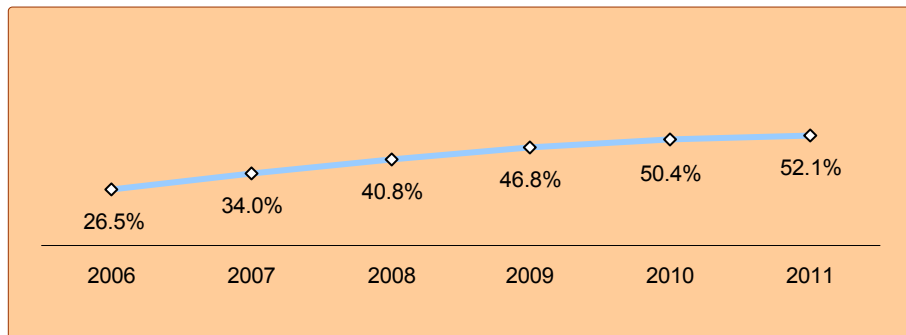
**Graph. 1.1. Devices available in households**



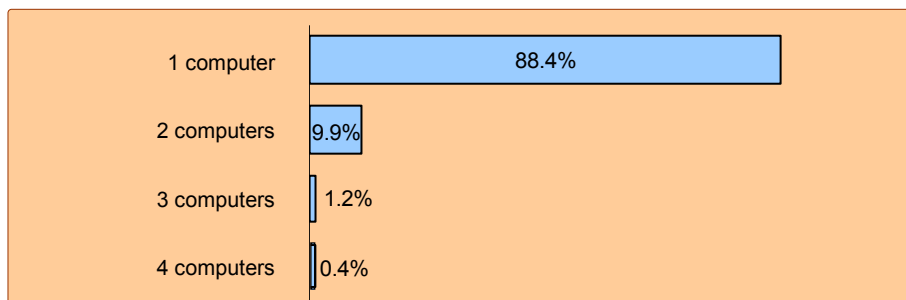
### 1.3.2. Computers in households

The main findings of the survey show that 52.1% of households in the Republic of Serbia have a computer, which is an increase of 1.7%, 5.3% and 11.3% in relation to 2010, 2009 and 2008 respectively. The percentage of computers in households varies as to the territory: in Belgrade it amounts to 61%, in Vojvodina 53%, and in Central Serbia 47.2%.

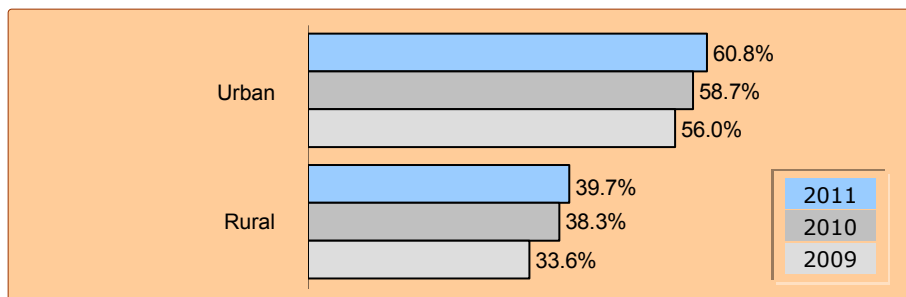
52.1% of households have a computer

**Graph 1.2. Computers in households**

Most of the households have one computer (88.4%), while just a few households (9.9%) have two computers.

**Graph 1.3. Number of computers in households**

The differences are also visible when comparing the availability of computers in urban and rural areas of Serbia: 60.8% versus 39.7%. In relation to 2010, this gap has increased slightly, which is also backed by growth rates of computer availability in urban and rural parts of Serbia. The growth rate in the urban part of Serbia is 2.1%, and in the rural ones it amounts to 1.4%, when compared to 2010.

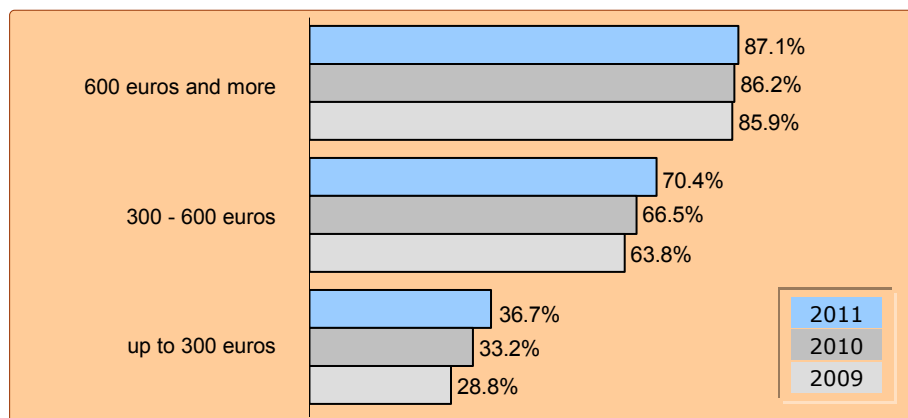
**Graph 1.4. Percentage of households having a computer, by type of locality**

However, the structure of households by monthly income is expressive of the greatest gap as to the availability of computers in households. Computers are mostly available in households with a monthly income of over 600 euros (87.1%) then in households with an income up to 300 euros (36.7%).

Growth rates in certain income classes for 2011 indicate that the above mentioned gap diminished slightly in 2011, when compared to 2010. Growth rates for households with an income under 600 euros increased by 3.9% in relation to 2010, and those for households with an income over 600 euros are 0.9%.

36.7% of households with an income of 300 euros have a computer

**Graph 1. 5. Percentage of households having a computer by income level**

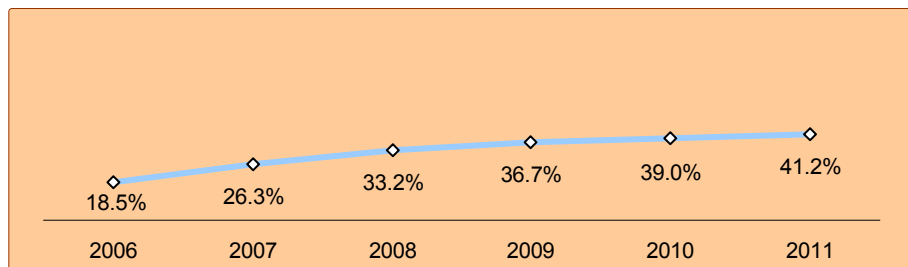


### 1.3.3. Internet in households

In the Republic of Serbia 41.2% of households have an Internet connection, which is an increase of 2.2%, 4.5% and 8% when compared to 2010, 2009 and 2008 respectively.

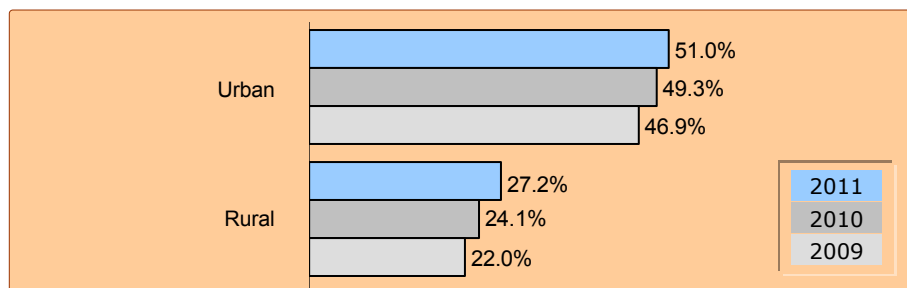
41.2% of households have an Internet connection

**Graph 1. 6. Does the household have access to the Internet at home?**



The highest percentage of Internet connection was observed in Belgrade (51.6%), in Vojvodina (42%), and in Central Serbia 36.3%.

**Graph 1.7. Households having an Internet connection, by type of locality**



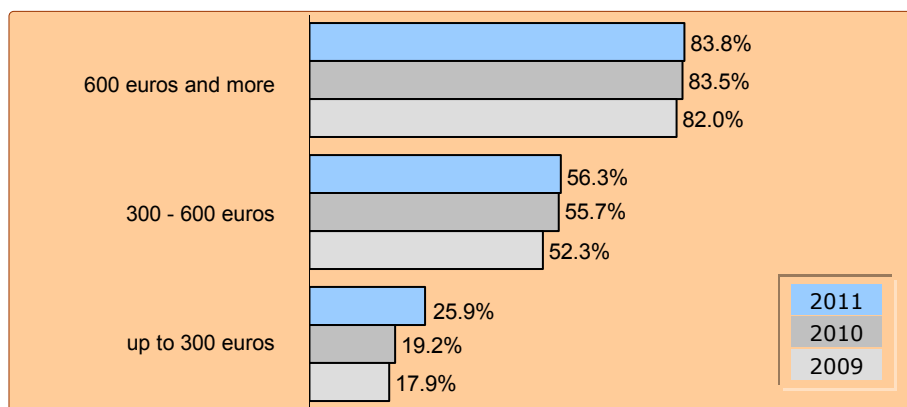
There are also considerable differences as to the percentage of Internet connection in urban and rural parts of Serbia: 51% versus 27.2%. When compared to 2010, the results indicate that the gap diminished slightly. The growth rate in the urban part of Serbia is 1.7% and in the rural part 3.1%.

In the same way as in computer availability in households, a large gap as regard the Internet connection appears when observing the structure of households according to their monthly income level. The internet connection is mostly used by households which monthly income exceeds 600 euros (83.8%), while only 25.9% of households with an income under 300 euros are connected to the Internet.

25.9% of households with an income up to 300 euros have an Internet connection

The data for 2010 indicate that the gap in 2011, as regard the Internet connection availability according to income level, diminished. This is clearly expressive from the growth rates in certain income classes for 2010 in relation to the previous year. While the growth rate for households with an income of 600 euros, when compared to 2010, is 0.3%, i.e. 0.6% for households with an income from 300 to 600 euros that for households having an income up to 300 euros amounts to 6.7%.

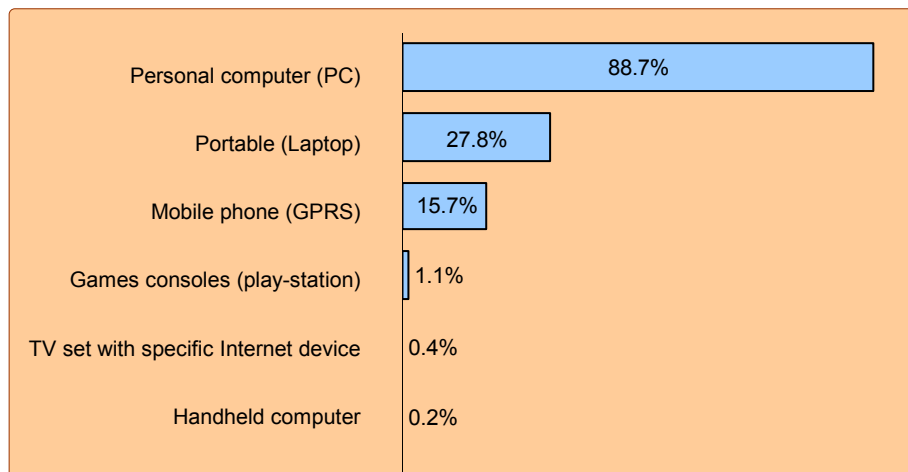
**Graph 1.8. Households having an Internet connection, by income level**



As regard the devices used to access the Internet, 88.7% of households answered using personal computer, 27.8% laptop and 15.7% mobile phone.

The results of the survey indicate that the number of households that access the Internet via a laptop increased by 8.5% in relation to 2010, but the number of households accessing the Internet via a personal computer decreased by 2.3%.

**Graph 1.9. Devices used to access the Internet**

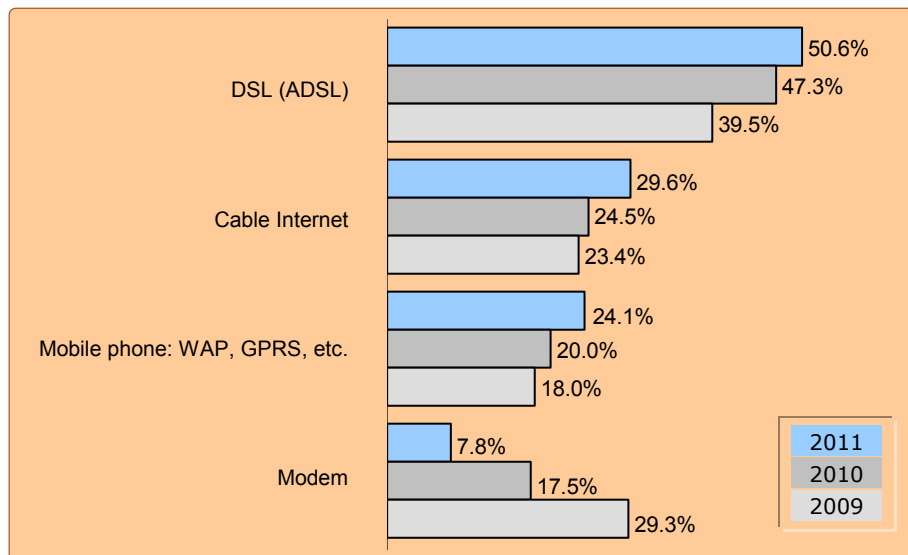


As for types of connection, households were given the possibility to give several answers. The results indicate that of the total number of households that have an Internet connection, 50.6% of them have DSL (ADSL), 29.6% cable Internet, 24.1% WAP and GPRS, and 7.8% a modem connection.

7.8% of households having access to the Internet use a modem connection

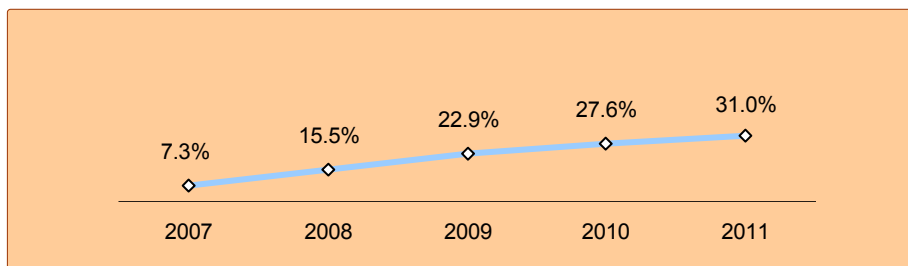
Based on the results of the survey a decrease of 9.7% and 21.5% in relation to 2010 and 2009 respectively was observed in the use of a modem connection. This is primarily due to the use of a broadband connection.



**Graph 1.10. Type of Internet connection**

31% of households in Serbia have a broadband Internet connection

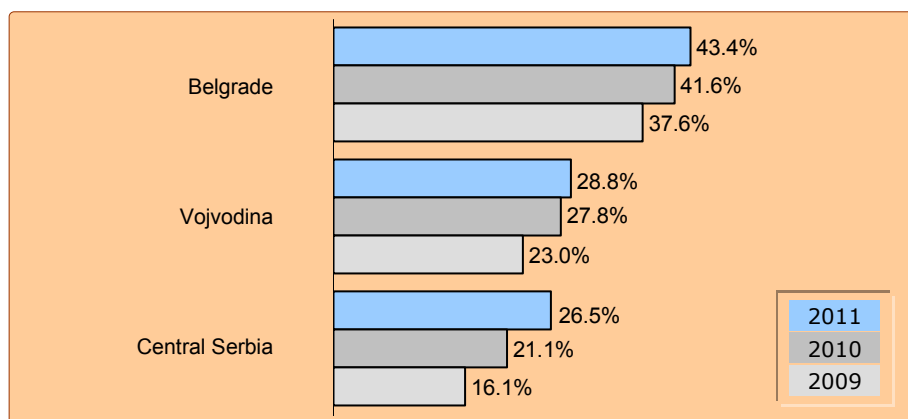
The broadband Internet connection, besides providing faster access, changes the entire way of using the Internet since it allows quicker download of information compared to the traditional dial-up modem connection. Accordingly, from 2005, the percentage of households having this type of Internet connection is taken to be one of the main indicators of ICT development in the European Union. In Serbia 31% of households have a broadband connection, which is an increase of 3.4% and 8.1% in relation to 2010 and 2009. The type of Internet connection is most used in Belgrade (43.4%), in Vojvodina (28.8%), and the least in Central Serbia (26.5%).

**Graph 1.11. Broadband Internet connection in households**

The broadband Internet connection is mostly used in households with a monthly income of over 600 euros (71.1%), while the share of household with an income less than 300 euros is only 18%.

Large differences are also observed when comparing the use of this type of Internet connection in the rural and urban parts of Serbia: 41.2% versus 16.4%.

**Graph 1.12. Broadband Internet connection in households, by territory**



### 1.3.4. Individuals: use of computers

In the Republic of Serbia, 54.3% persons used a computer in the last three months, 2.3% more than three months ago, and 3.3% more than one year ago. There are even 40.1% of individuals who have never used a computer. The number of computer users increased by 3.6%, 4.6% and 7.9% in relation to 2010, 2009 and 2008 respectively.

The number of computer users increased by 3.6% in relation to 2010

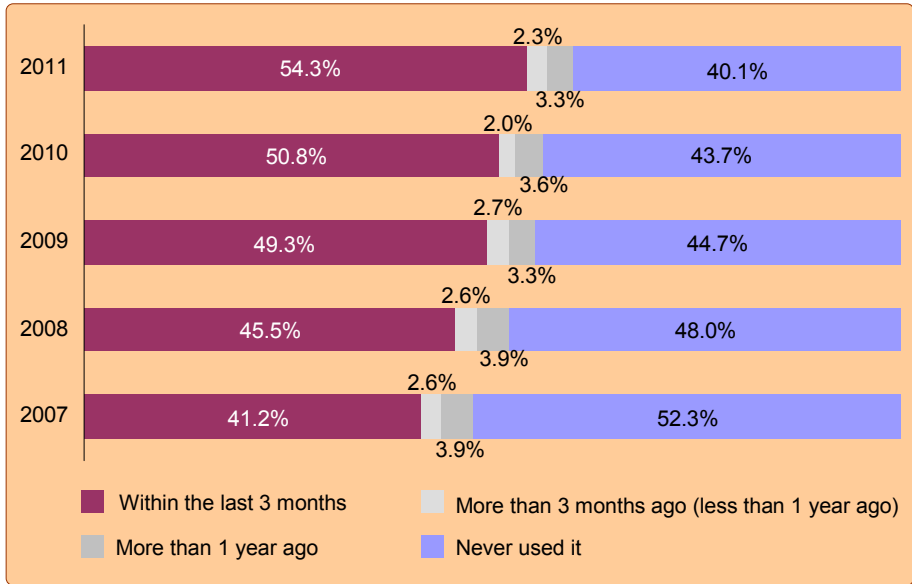
When compared with 2010, the number of persons who used a computer in the last three months increased by 150 000.

More than 3 050 000 persons used a computer in the last three months

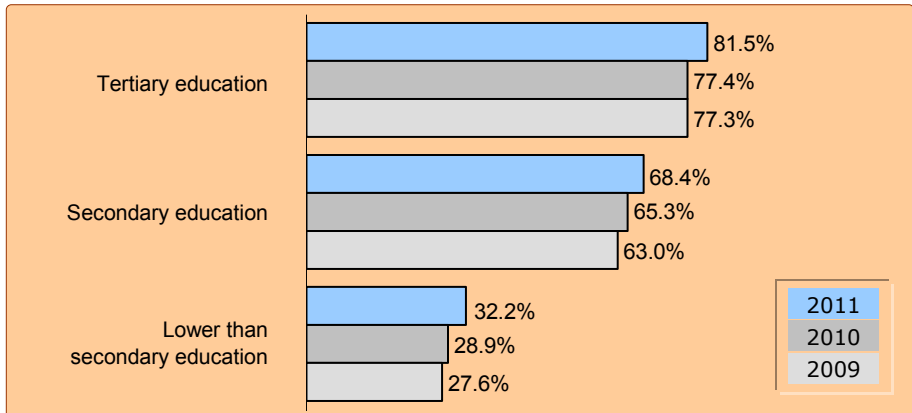
The percentage of computer users (in the last three months), according to educational level:

- 81.5% of persons with tertiary education;
- 68.4% of persons with secondary education;
- 32.2% of persons with lower than secondary education.

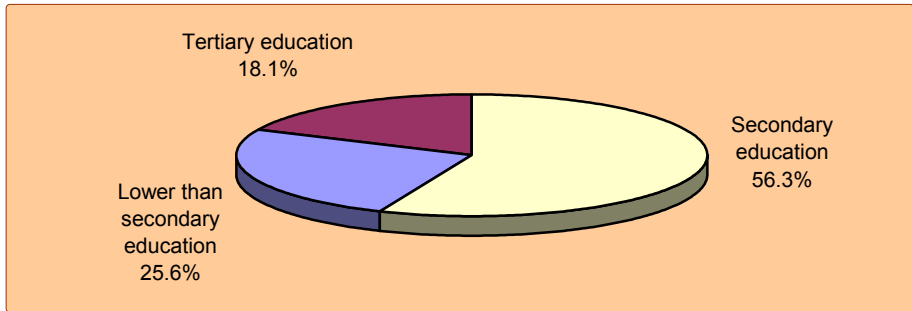
**Graph 1.13. When did you last use a computer?**



**Graph 1.14. Percentage of computer users (in the last three months), by educational level**

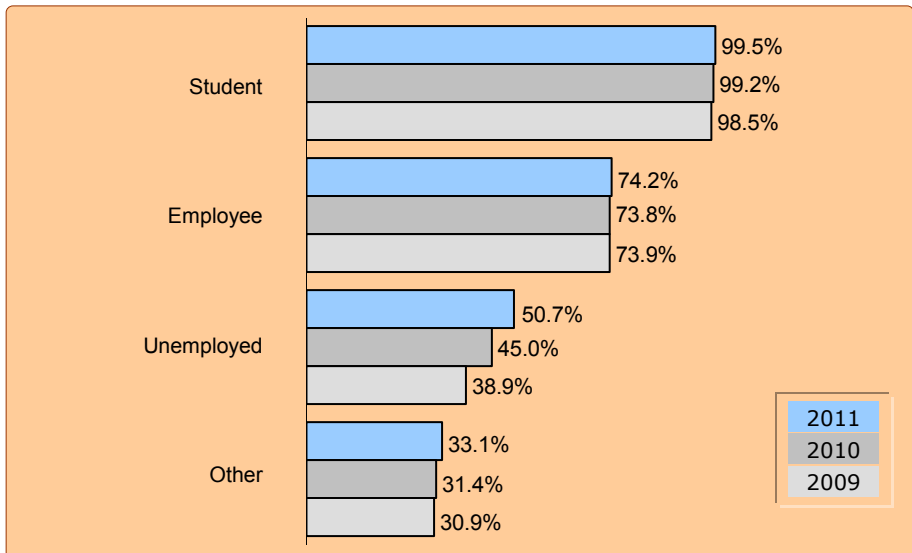


Among computer users, 56.3% have secondary educational level, 25.6% lower than secondary educational level, and 18.1% tertiary educational level.

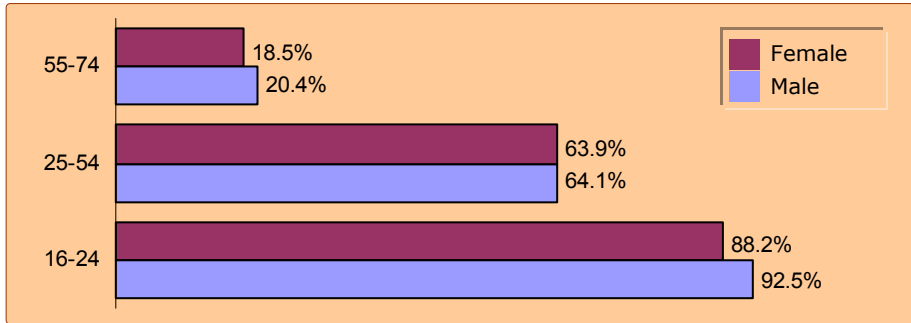
**Graph 1.15. Educational structure of computer users**

The percentage of computer users (in the last three months), according to employment situation:

- 99.5% of students;
- 74.2% of employees;
- 50.7% of unemployed;
- 33.1% of others (retired, on compulsory military service, etc.).

**Graph 1.16. Percentage of computer users (in the last three months), by employment situation**

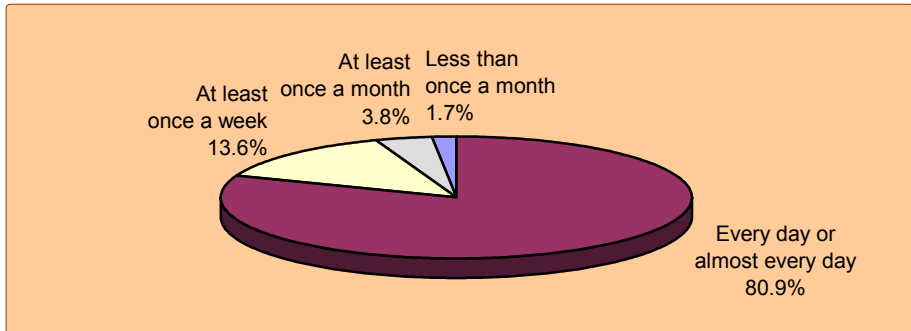
The analysis of the respondents by sex indicates that in the last three months 55.3% of men and 53.4% of women used a computer.

**Graph 1.17. Use of computers (in the last 3 months), by sex and age**

According to the answers to the question about the average frequency of use of computers in the last three months, 80.9% of respondents used a computer every day or almost every day, 13.6% at least once a week, 3.8% at least once a month, and 1.7% less than once a month.

More than 2 500 000 persons use a computer every day or almost every day

When compared with 2010, the number of persons who used a computer every day or almost every day increased by some 200 000.

**Graph 1.18. How often, on average, did you use the computer in the last three months?**

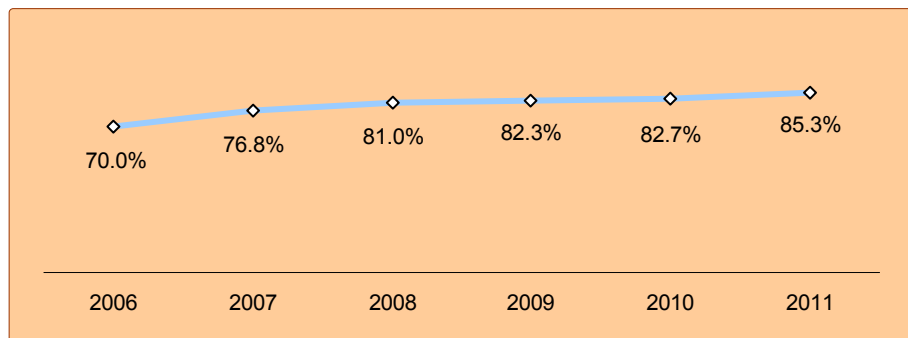
In the last three months computers were mostly used at home (92.9%), then at place of work (22.3%) and at place of education (8.9%).

### 1.3.5. Individuals: use of mobile phones

The survey indicates that 85.3% of persons use a mobile phone, while in 2010 the percentage was 82.7%.

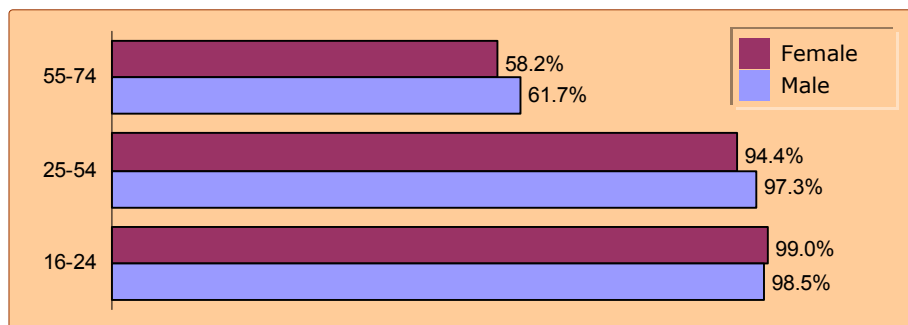
More than 4 800 000 persons use a mobile phone

**Graph 1.19. Use of mobile phones**



When compared with 2010, the number of persons who used a mobile phone increased by some 15 000.

**Graph 1.20. Use of mobile phones, by sex and age**



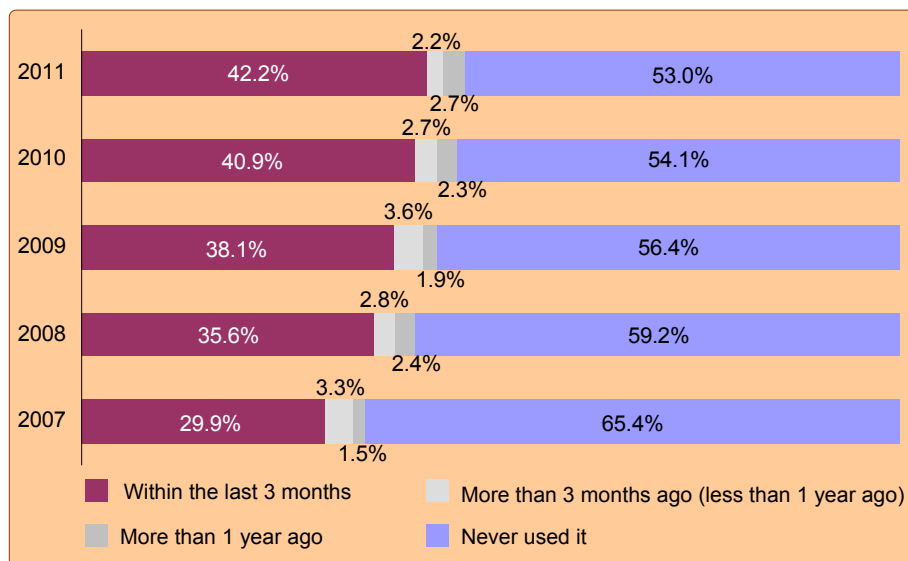
### 1.3.6. Individuals: use of the Internet

In Serbia, 42.2% of persons used the Internet in the last three months, 2.2% of respondents used the Internet more than 3 months ago, and 2.7% more than one year ago. Even 53% of respondents never used the Internet.

The number of Internet users increased by 1.1%, 3.4%, 6.2% and 12.4% in relation with 2010, 2009, 2008 and 2007 respectively.

The number of Internet users increased by 1.1%, when compared with 2010

**Graph 1.21. When did you last use the Internet?**



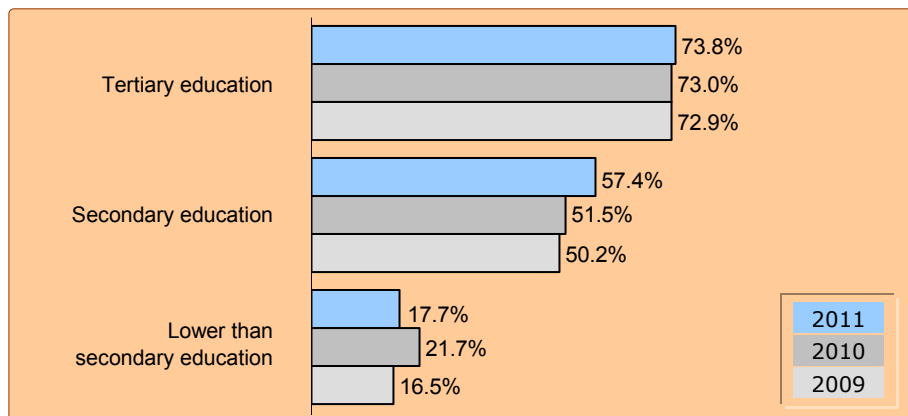
More than 2 400 000 persons used the Internet in the last three months

When compared with 2010, the number of persons who used the Internet in the last three months increased by some 40 000.

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

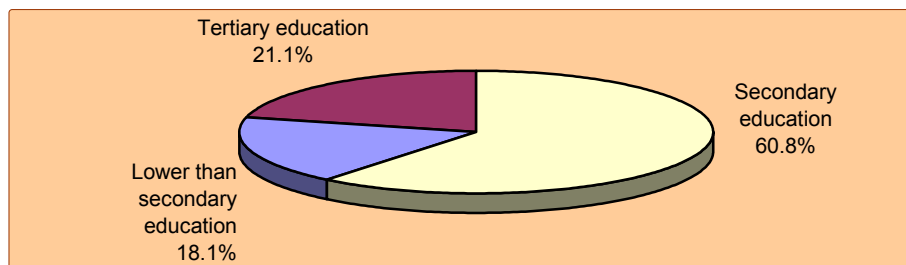
- 73.8% of persons with tertiary education;
- 57.4% of persons with secondary education;
- 17.7% of persons with lower than secondary education.

**Graph 1.22. Percentage of Internet users (in the last three months), by educational level**



Among Internet users, 60.8% attained secondary educational level, 18.1% of users attained lower than secondary educational level, and 21.1% tertiary.

**Graph 1.23. Educational structure of Internet users**

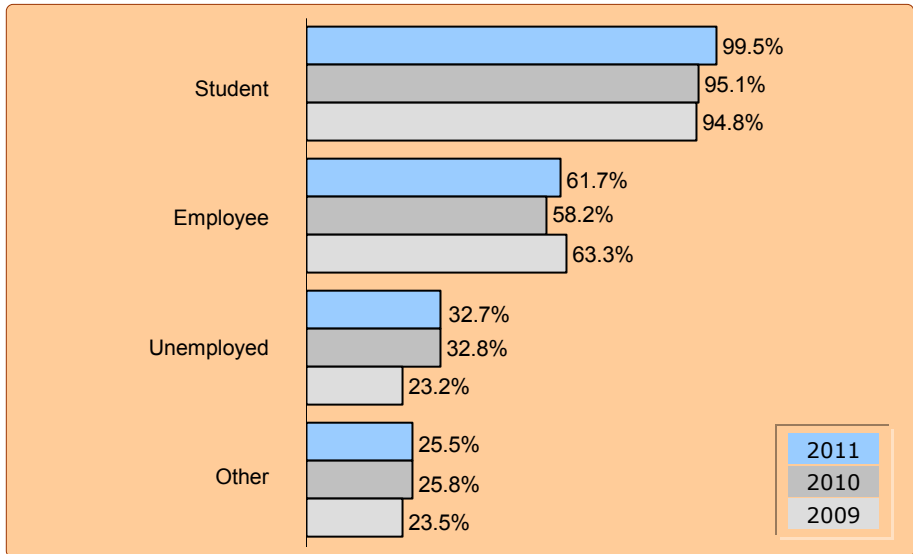


The percentage of Internet users (in the last three months), by employment situation:

- 99.5% of students;
- 61.7% of employees;
- 32.7% of unemployed;
- 25.5% of others (retirement, compulsory military service ...).



**Graph 1.24. Percentage of Internet users (in the last three months, by employment situation**

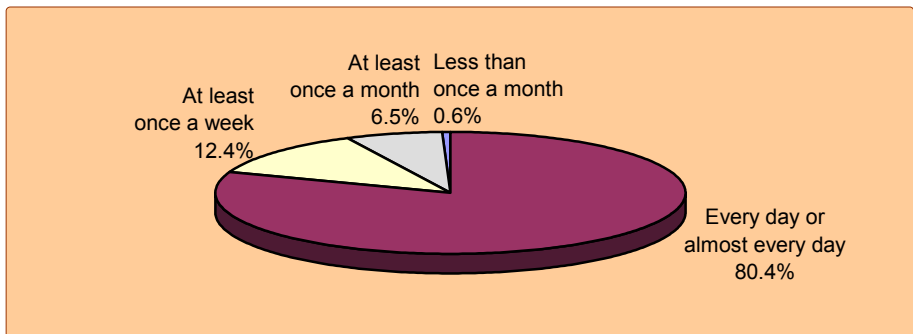


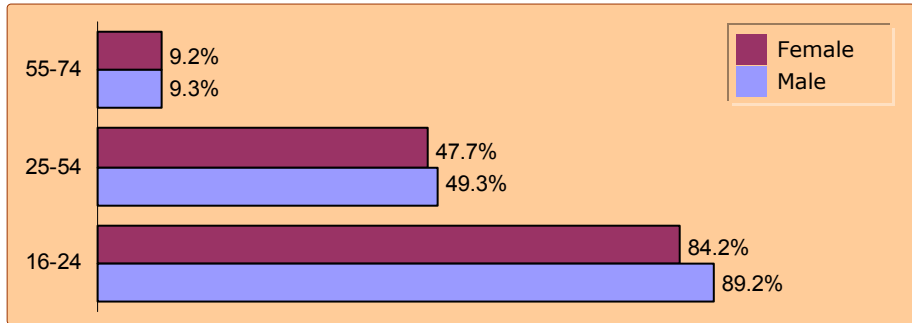
According to answers concerning the average frequency of Internet use in the last three months, 80.4% of respondents said having used it every day or almost every day.

More than 1 900 000 persons use the Internet every day or almost every day

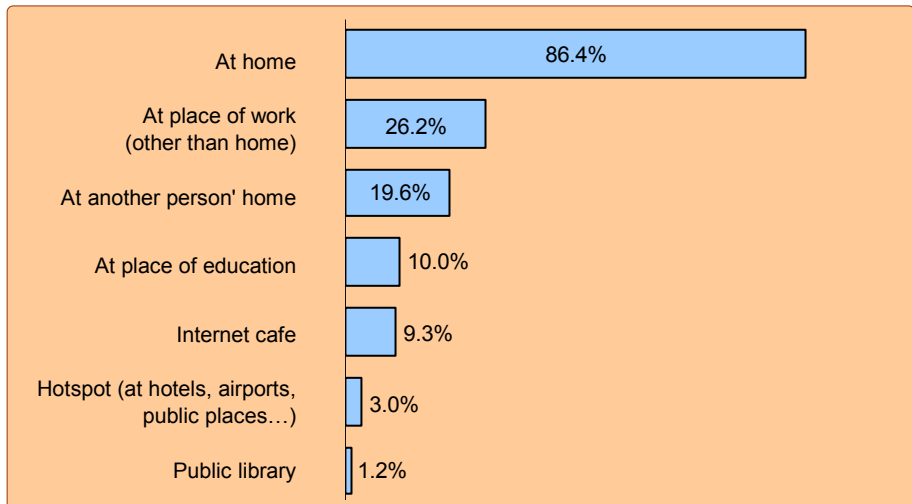
Compared to 2010, the number of persons who used the Internet every day or almost every day increased by some 200 000.

**Graph 1.25. How often, on average, did you use the Internet in the last three months?**

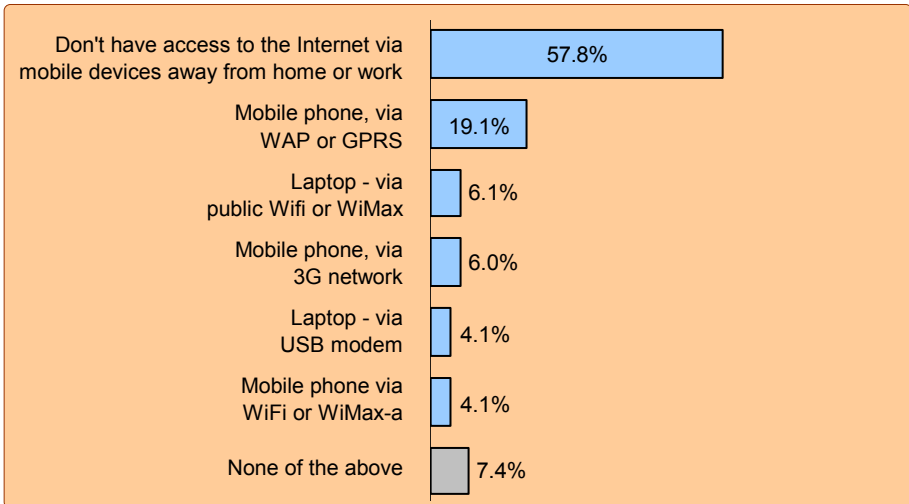
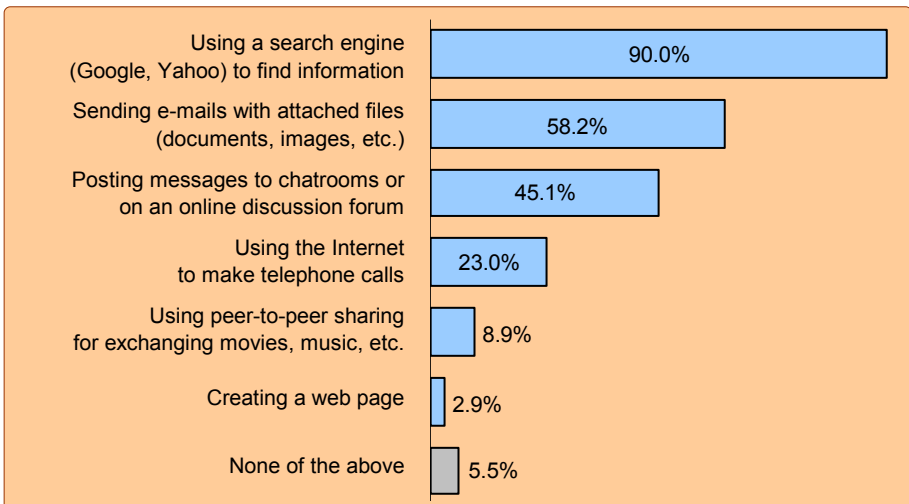


**Graph 1.26. Use of the Internet (in the last 3 months), by sex and age**

The analysis of respondents by sex indicates that 43.9% of men and 40.5% of women used the Internet in the last three months.

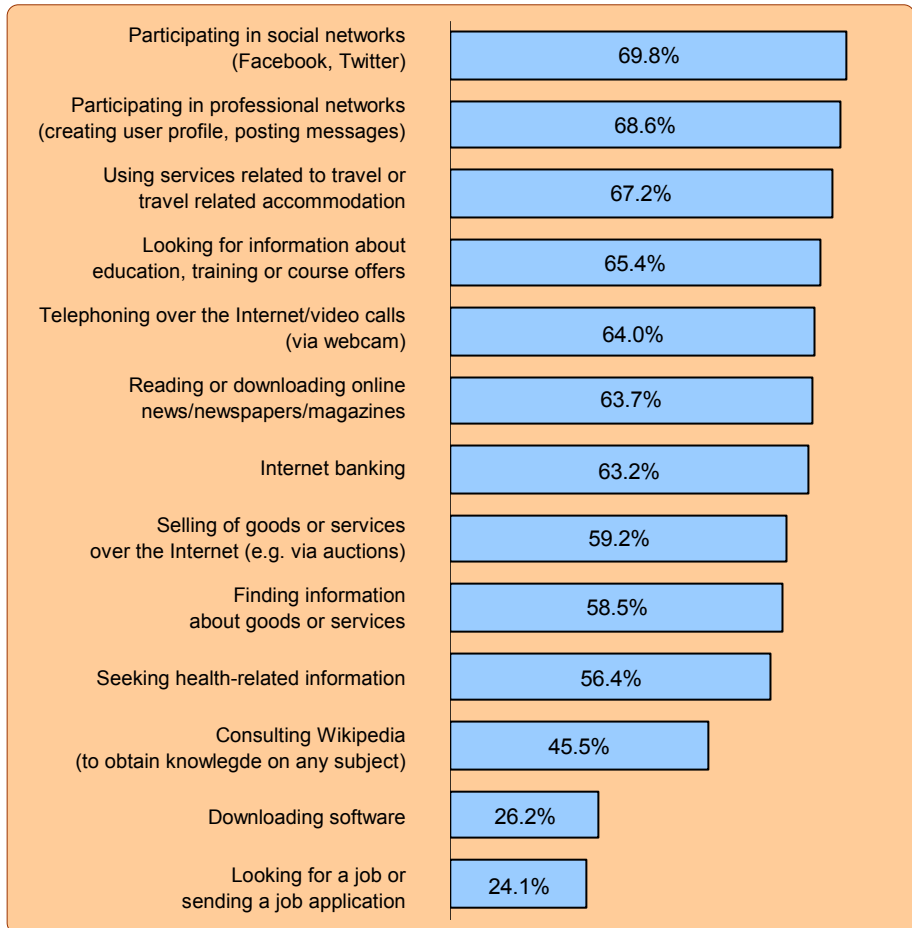
**Graph 1.27. Where did you use the Internet in the last three months?**

In the last three months most of the respondents used the Internet at home (86.4%), but 26.2% used it at place of work, 19.6% at another person's home, 10% at place of education and 9.3% in Internet cafés.

**Graph 1.28. Use of mobile devices to access the Internet****Graph 1.29. Types of Internet activities in the last three months**

The respondents used the Internet in the last three months mostly to participate in social networks, such as Facebook and Twitter (69.8%).

**Graph 1.30. Types of Internet use (for private purposes) in the last 3 months**



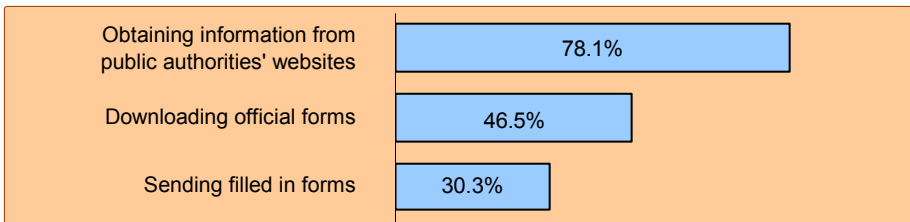
91.8% of Internet users aged from 16 to 24 have a open account in social networks (Facebook, Twitter)

### 1.3.7. e-government

The survey indicates that 17.3% of respondents among Internet users use the Internet instead of personal contacts or visits to public authorities.

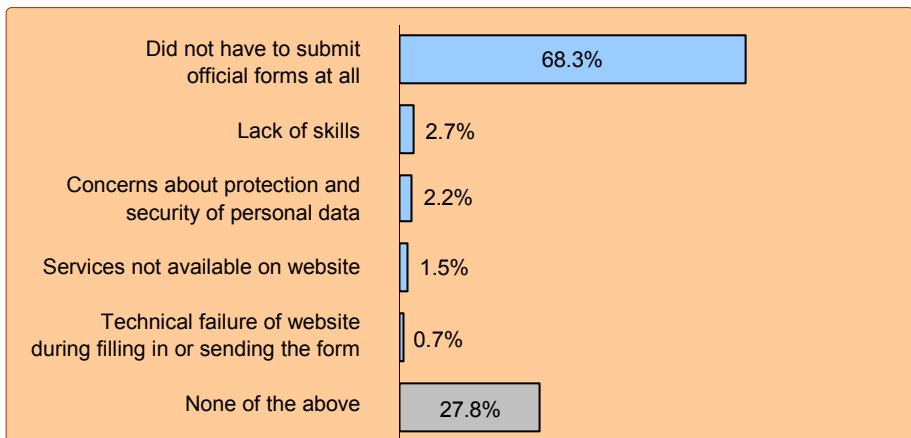
More than 680 000 persons interact electronically with public authorities

**Graph 1.31. For which of the following public authorities' services did you use the Internet?**



The survey indicates that 78.1% of respondents used the Internet in the last three months to obtain information from public institutions' sites, 46.5% to download official forms and 30.3% to send filled in forms.

**Graph 1.32. Reasons for not having sent filled in forms to public authorities over the Internet?**



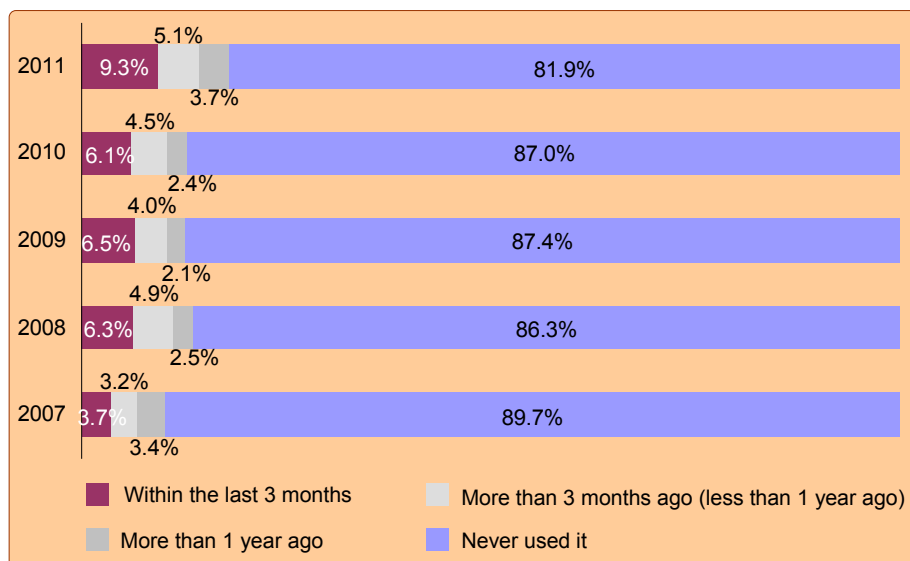
### 1.3.8. e-commerce

As regard the period when Internet users bought/ordered goods or services via the Internet, 9.3% of users bought/ordered goods/services in the last three months, 5.1% did it more than three months ago, and 3.7% more than a year ago.

81.9% of Internet users have never bought/ordered goods or services over the Internet.

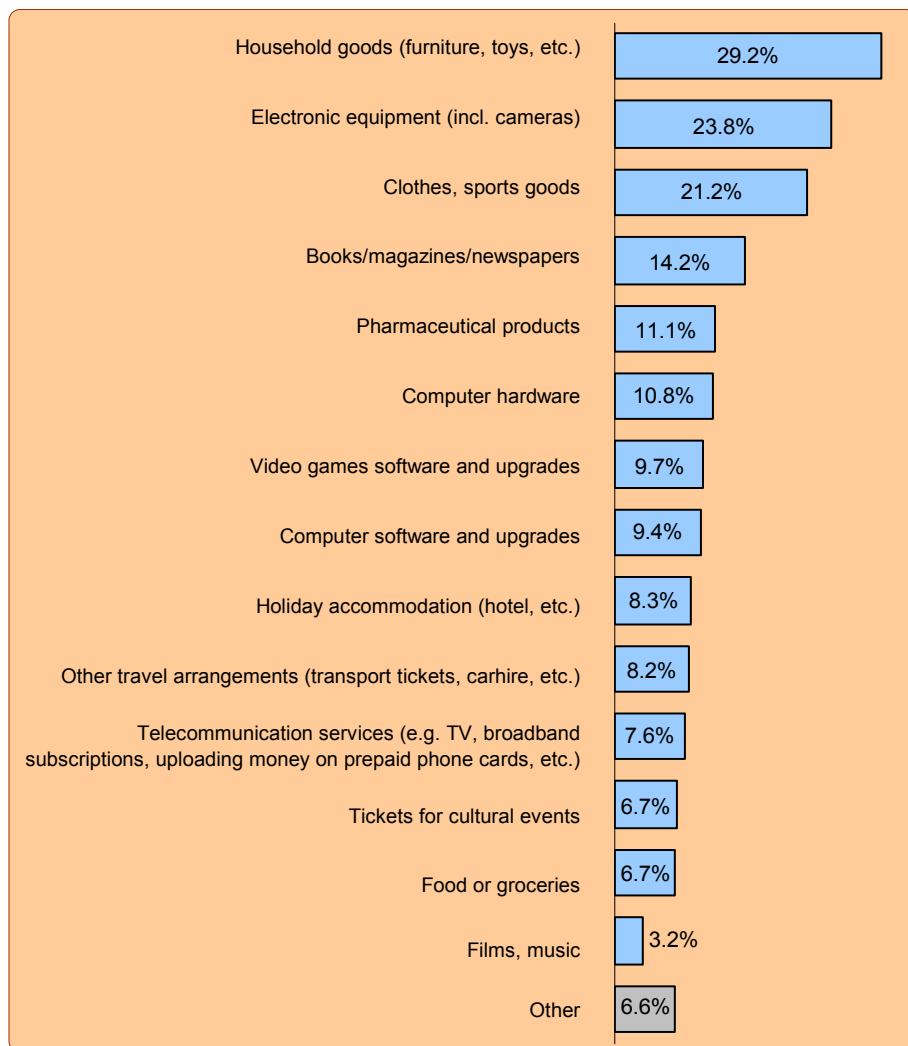
More than 380 000 persons bought or ordered goods/services over the Internet in the last 12 months

**Graph 1.33. When did you last (for private purposes) buy/order goods or services over the Internet?**



Compared to 2010, the number of persons who bought or ordered goods/services over the Internet increased by some 100 000.

**Graph 1.34. Which of the following goods/services did you order (for private purposes) over the Internet in the last 12 months?**

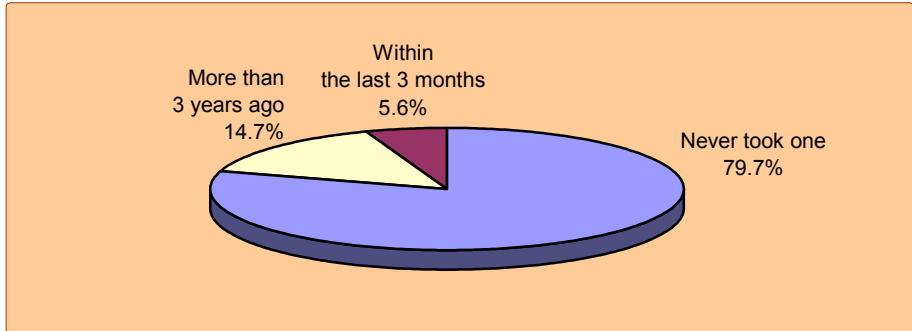


Most of Internet users bought/ordered household goods (29.2%), electronic equipment (23.8%) and clothes and sports goods (21.2%).

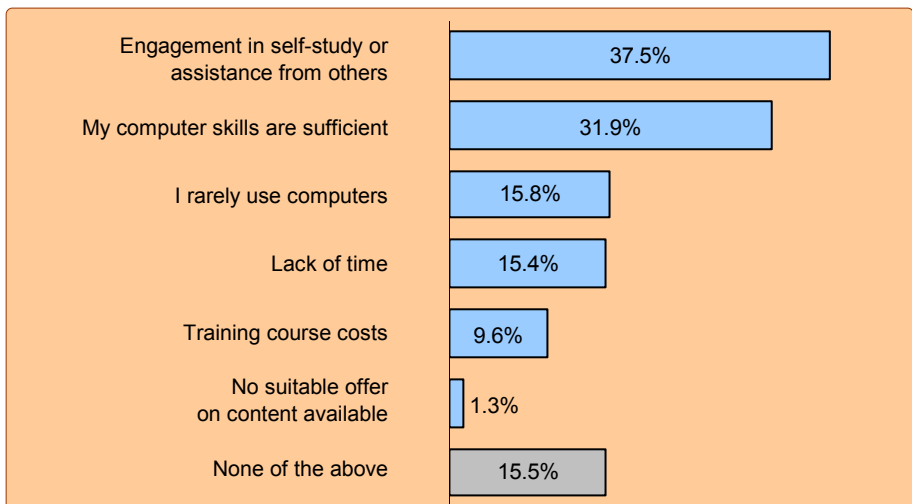
### 1.3.9. e-skills

The survey indicates that only 5.6% of respondents took computer-related training course in the last three years. Among them 79.7% said having never taken one.

**Graph 1.35. When did you last take a computer-related training course (at least 3 hours)?**



**Graph 1.36. What are the reasons for not having taken a computer-related course in the last three years?**







# 1.4. SURVEY RESULTS

## MODULE 1.A: Access to Information and Communication Technologies

in percentages

Answer (households)	Income			Territory			Type of households		Total
	up to 300 Euros	300 - 600 Euros	more than 600 Euros	Central Serbia	Vojvodina	Belgrade	urban	rural	
<b>A1: Devices available in households (all that apply)</b>									
TV	95,8	99,6	99,0	97,2	99,0	99,7	99,0	98,5	98,9
Mobile phone	74,2	93,0	97,5	80,4	81,6	92,0	88,0	76,1	82,5
Personal computer (PC)	36,7	70,4	87,1	47,2	53,0	61,0	60,8	39,7	52,1
Cable TV	32,3	58,4	72,5	34,0	41,2	70,9	64,3	15,7	44,4
Laptop	7,0	21,3	45,3	12,8	14,1	23,1	19,9	9,2	15,5
None of the above	1,4	0,0	0,0	1,1	1,0	0,0	0,5	1,3	0,8
<b>A2: Do you or anyone in your household have access to the Internet at home?</b>									
No	72,0	42,9	16,0	61,3	57,6	48,0	47,8	70,8	57,2
Yes	25,9	56,3	83,8	36,3	42,0	51,6	51,0	27,2	41,2
Don't know	2,0	0,8	0,2	2,4	0,4	0,4	1,2	2,0	1,5
<b>A3: Devices used to access the Internet (all that apply)<sup>1)</sup></b>									
Personal computer (PC)	87,0	90,5	88,4	87,1	91,9	87,9	89,3	86,9	88,7
Portable computer (laptop)	18,1	28,0	42,8	24,0	25,3	36,0	29,9	21,9	27,8
Mobile phone (GPRS)	10,3	15,9	24,2	14,3	18,3	15,4	15,1	17,3	15,7
Games console (play-station)	1,2	0,5	2,0	1,3	0,9	1,0	1,4	0,4	1,1
TV set with specific Internet device	0,3	0,3	0,7	0,2	0,0	1,0	0,4	0,4	0,4
Handheld computer	0,3	0,0	0,4	0,5	0,0	0,0	0,0	0,8	0,2

<sup>1)</sup> Data refer to households that said "Yes" in question A2.

## MODULE 1.A: Access to Information and Communication Technologies

in percentages

Answer (households)	Income			Territory			Type of households		Total
	up to 300 Euros	300 - 600 Euros	more than 600 Euros	Central Serbia	Vojvodina	Belgrade	urban	rural	
<b>A4: Type of Internet connection (all that apply)<sup>1)</sup></b>									
DSL(ADSL)	50,9	49,8	51,4	60,2	45,6	40,5	50,5	50,8	50,6
Cable Internet	26,5	28,6	35,9	16,8	30,9	48,2	35,3	14,1	29,6
Mobile phone (via GPRS)	22,3	23,8	27,2	26,8	19,3	24,5	23,7	25,1	24,1
Wireless Internet (WiFi, WiMax)	10,1	15,3	11,9	12,4	19,8	6,2	9,8	20,1	12,6
Modem	9,8	8,6	3,7	12,4	3,4	5,0	6,1	12,5	7,8
Mobile phone (via 3G network)	1,9	1,1	5,4	3,4	0,4	3,0	2,5	2,3	2,5
ISDN	2,1	0,8	1,0	1,0	2,3	0,8	1,2	1,5	1,3
<b>A5: What are the reasons for not having access to the Internet at home? (all that apply)<sup>2)</sup></b>									
Don't need the Internet	35,6	39,4	34,9	31,3	48,2	33,3	40,1	32,8	36,4
Equipment costs too high	26,5	17,5	14,0	24,8	30,1	13,9	20,6	27,7	24,2
Access costs too high	26,1	17,7	8,7	26,9	27,3	9,8	19,6	27,8	23,7
Don't want the Internet	17,9	24,3	28,4	12,9	23,2	32,7	23,2	16,1	19,6
Lack of skills	5,1	5,4		7,9	2,6	0,4	3,7	6,3	5,0
Physical disability	3,7	1,8	2,6	5,3	1,0	1,0	2,2	4,3	3,3
have access to the Internet elsewhere	1,9	4,0	9,7	2,5	2,6	2,7	3,5	1,7	2,6
Privacy or security concerns	0,4	0,0	0,0	0,4	0,0	0,4	0,5	0,2	0,3
None of the above, but other	27,7	19,9	22,4	31,6	18,7	20,6	23,9	27,7	25,9

<sup>1)</sup> Data refer to households that said "Yes" in question A2.

<sup>2)</sup> Data refer to households that said "Yes" in question A2.

**MODULE 1.B: Use of**

Answer (individuals)	Age						Gender	
	16 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	man	woman
<b>B1: When did you last</b>								
Within the last 3 months	90,4	74,7	63,9	53,6	28,9	6,4	55,3	53,4
More than 3 months ago (less than a year)	2,2	3,3	2,8	2,9	2,0	0,0	2,4	2,2
More than 1 year	0,7	3,4	4,4	3,1	5,8	1,5	2,6	4,0
Never used one	6,7	18,6	29,0	40,4	63,4	92,1	39,7	40,5
<b>B2: How often on average, did you</b>								
Every day or almost every day	86,5	79,2	75,0	80,8	84,7	77,9	80,5	81,4
At least once a week	10,7	17,0	15,6	12,3	9,8	17,4	13,1	14,0
At least once a month	2,1	2,7	6,7	4,2	3,8	4,7	3,9	3,7
Less than once a months	0,8	1,1	2,7	2,7	1,8	0,0	2,5	0,9
<b>B3: Where did you use a computer</b>								
At home	93,9	92,6	90,9	93,3	93,9	94,0	94,5	91,2
At place of work (other than home)	5,0	26,2	31,8	31,6	21,5	6,6	21,0	23,5
At another person's home	27,8	15,9	13,1	2,2	3,1	5,0	17,5	11,2
At place of education	30,0	1,7	2,7	1,5	1,6	0,0	8,8	9,0
Other (Internet café, hotel...)	8,0	8,1	5,3	0,9	0,4	0,0	6,9	3,8

<sup>1)</sup> Data refer to individuals who answered "within the last 3 months" in question B1.

**computers**

in percentages

Educational level			Employment situation				Total	Answer (individuals)
lower than secondary	secondary	tertiary	employee	unemployed	student	other		
<b>use a computer?</b>								
32,2	68,4	81,5	74,2	50,7	99,5	33,1	54,3	Within the last 3 months
1,5	3,4	1,1	2,5	3,6	0,5	1,0	2,3	More than 3 months ago (less than a year)
1,9	4,6	3,3	3,3	4,0	0,0	3,0	3,3	More than 1 year
64,4	23,6	14,1	20,1	41,7	0,0	62,9	40,1	Never used one
<b>use a computer in the last 3 months?<sup>1)</sup></b>								
79,0	80,3	85,7	83,7	72,9	94,5	82,3	80,9	Every day or almost every day
17,3	12,7	11,1	11,2	18,9	3,8	14,4	13,6	At least once a week
1,3	5,5	2,0	4,1	4,4	1,7	3,0	3,8	At least once a month
2,4	1,5	1,2	1,1	3,8	0,0	0,4	1,7	Less than once a months
<b>in the last 3 months? (all that apply)<sup>1)</sup></b>								
95,3	91,4	94,1	91,4	92,7	95,2	95,2	92,9	At home
3,0	21,5	51,7	48,3	3,6	2,9	5,1	22,3	At place of work (other than home)
18,2	14,0	10,3	10,8	12,3	19,0	23,3	14,4	At another person's home
20,4	5,2	4,5	2,6	3,3	35,4	20,1	8,9	At place of education
3,2	6,1	6,1	4,6	5,6	15,6	2,2	5,3	Other (Internet café, hotel...)

**MODULE 1.C: Use**

Answer (individuals)	Age						Gender	
	16 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	man	woman
<b>C1: When did you last</b>								
Within the last 3 months	86,7	60,0	54,6	31,5	14,5	1,9	43,9	40,5
More than 3 months ago (less than a year)	2,7	3,2	3,8	1,8	0,9	0,0	2,5	1,8
More than 1 year	1,4	7,6	1,1	2,7	1,6	0,8	3,5	1,9
Never used one	9,1	29,2	40,5	63,9	83,0	97,3	50,1	55,7
<b>C2: How often on average did you use</b>								
Every day or almost every day	86,3	79,1	78,7	74,7	77,9	67,2	82,4	78,4
At least once a week	8,9	14,2	11,1	16,6	16,1	25,7	10,5	14,4
At least once a month	4,8	6,0	9,8	7,4	3,7	7,1	6,8	6,3
Less than once a months	0,0	0,8	0,5	1,3	2,3	0,0	0,4	0,9
<b>C3: Where did you use the Internet</b>								
At home	86,6	82,9	86,9	90,5	88,3	92,6	85,6	87,2
At place of work (other than home)	5,2	32,6	33,5	44,9	34,8	16,2	26,1	26,2
At another person's place	31,7	19,7	16,7	4,5	4,0	8,9	24,4	14,6
At place of education	28,3	1,5	2,0	1,8	3,3	0,0	9,0	11,0
In Internet café	17,0	10,1	6,0	0,9	0,0	0,0	11,9	6,6
At hotspot (at hotels, airports, public places, etc.)	0,9	5,8	4,9	0,7	0,8	0,0	3,9	2,1
In public library	2,2	1,6	0,5	0,0	0,0	0,0	1,2	1,2
<b>C4: Did you use any of the following mobile</b>								
Don't have access to the Internet via mobile devices away from home or work	50,1	51,8	62,4	69,9	76,3	67,1	55,5	60,1
Mobile phone, via WAP or GPRS	24,0	25,9	14,2	9,7	4,5	17,2	22,9	15,1
Laptop - via public Wifi or WiMax	7,2	4,4	8,7	4,6	2,0	0,0	5,9	6,2
Mobile phone, via 3G network	8,2	5,6	6,2	3,8	2,1	4,2	5,3	6,8
Laptop - via USB modem	6,1	2,7	4,2	3,3	2,3	0,0	3,7	4,5
Mobile phone via WiFi or WiMax	2,5	6,8	5,0	2,8	0,0	0,0	4,3	3,8
None of the above	8,6	5,3	7,4	8,2	8,9	12,0	7,3	7,6

<sup>1)</sup> Data refer to individuals who answered "Within the last 3 months" in question C1.

**of the Internet****in percentages**

Educational level			Employment situation				Total	Answer (individuals)
lower than secondary	secondary	tertiary	employee	unemployed	student	other		
<b>use the Internet?</b>								
17,7	57,4	73,8	61,7	32,7	99,5	25,5	42,2	Within the last 3 months
1,5	2,8	2,1	4,0	1,9	0,5	1,0	2,2	More than 3 months ago (less than a year)
2,8	2,9	1,6	2,2	5,2	0,0	0,9	2,7	More than 1 year
78,0	36,9	22,6	32,0	60,2	0,0	72,6	53,0	Never used one
<b>the Internet in the last 3 months?<sup>1)</sup></b>								
78,1	78,7	87,4	81,9	74,8	89,0	80,1	80,4	Every day or almost every day
9,7	14,2	9,5	12,1	14,3	8,6	12,7	12,4	At least once a week
12,2	6,3	2,4	5,6	9,8	2,4	6,7	6,5	At least once a month
0,0	0,8	0,7	0,5	1,2	0,0	0,5	0,6	Less than once a months
<b>in the last 3 months? (all that apply)<sup>1)</sup></b>								
83,8	85,7	90,4	86,1	84,8	88,7	87,8	86,4	At home
5,4	21,6	57,2	52,7	5,0	4,0	6,3	26,2	At place of work (other than home)
33,6	18,9	9,3	13,2	21,0	21,7	31,1	19,6	At another person's place
32,0	5,6	3,6	2,5	2,2	33,4	24,4	10,0	At place of education
17,4	7,5	7,7	5,7	9,3	15,4	14,3	9,3	In Internet café
0,0	3,1	5,5	5,5	1,3	2,5	0,2	3,0	At hotspot (at hotels, airports, public places, etc.)
1,3	1,4	0,5	0,4	1,4	3,9	1,2	1,2	In public library
<b>devices to access the Internet? (all that apply)<sup>1)</sup></b>								
55,6	59,2	55,5	56,6	68,6	47,1	51,5	57,8	Don't have access to the Internet via mobile devices away from home or work
21,5	19,1	16,8	18,8	12,5	33,5	20,6	19,1	Mobile phone, via WAP or GPRS
7,5	5,4	6,8	7,3	2,7	9,8	5,6	6,1	Laptop - via public Wifi or WiMax
12,2	4,3	5,8	6,2	4,7	6,7	7,0	6,0	Mobile phone, via 3G network
7,2	2,4	6,6	3,7	3,0	2,4	7,6	4,1	Laptop - via USB modem
6,1	2,5	6,9	5,2	3,9	3,0	2,4	4,1	Mobile phone via WiFi or WiMax
8,5	7,4	6,4	8,2	5,7	4,2	9,9	7,4	None of the above

**MODULE 1.C: Use**

Answer (individuals)	Age						Gender	
	16 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	man	woman
<b>C5: For which of the following activities (for private purposes)</b>								
Participating in social networks (Facebook, Twitter)	91,8	75,9	62,1	40,0	33,4	13,0	71,1	68,5
Participating in professional networks (creating user profile, posting messages)	14,3	22,3	10,7	10,8	6,0	3,7	91,8	75,9
Using services related to travel or travel related accommodation	20,2	91,8	32,1	29,6	22,0	41,1	54,6	68,7
Looking for information about education, training or course offers	75,5	61,5	59,4	65,4	55,8	26,5	63,8	67,1
Telephoning over the Internet/video calls (via webcam)	37,0	41,9	40,7	35,1	40,9	34,9	75,5	61,5
Reading or downloading online news/newspapers/news magazines	54,6	68,7	63,3	73,1	68,5	63,8	67,6	59,7
Internet banking	3,3	11,5	7,6	12,0	6,5	4,0	49,0	62,9
Selling of goods or services over the Internet (e.g. via auctions)	4,5	12,9	12,3	15,9	8,0	11,4	48,5	55,2
Finding information about goods or services	49,0	62,9	62,0	69,7	50,4	33,9	63,0	53,7
Seeking health-related information	48,5	55,2	59,0	71,0	59,7	40,6	53,5	59,3
Consulting Wikipedia (to obtain knowledge on any subject)	58,9	42,9	41,0	34,8	32,6	4,0	47,2	43,6
Downloading software	32,4	27,6	22,0	20,6	16,1	20,2	33,7	18,3
Looking for a job or sending a job application	16,1	36,5	30,4	17,0	6,3	0,0	26,5	21,6
Posting opinions on social issues via blogs and/or social networks	11,6	17,5	13,1	7,5	5,9	0,0	17,0	7,8
Taking part in online consultations or voting to define social issues (petitions)	6,3	12,1	9,8	6,1	1,7	0,0	10,3	6,1
Doing an online course	1,2	3,7	8,3	2,2	2,9	3,5	4,6	2,8

<sup>1)</sup> Data refer to individuals who answered "within the last 3 months" in question C1.



**of the Internet****in percentages**

Educational level			Employment situation				Total	Answer (individuals)
lower than secondary	secondary	tertiary	employee	unemployed	student	other		
<b>did you use the Internet within the last 3 months? <sup>1)</sup></b>								
91,0	68,6	55,1	59,1	69,6	89,9	83,3	69,8	Participating in social networks (Facebook, Twitter)
62,1	40,0	33,4	13,0	71,1	68,5	91,0	68,6	Participating in professional networks (creating user profile, posting messages)
63,3	73,1	68,5	63,8	67,6	59,7	37,5	67,2	Using services related to travel or travel related accommodation
62,5	64,0	71,8	64,3	58,9	84,2	66,1	65,4	Looking for information about education, training or course offers
59,4	65,4	55,8	26,5	63,8	67,1	62,5	64,0	Telephoning over the Internet/video calls (via webcam)
37,5	67,2	76,5	69,3	62,3	71,4	48,8	63,7	Reading or downloading online news/newspapers/news magazines
62,0	69,7	50,4	33,9	63,0	53,7	28,0	63,2	Internet banking
59,0	71,0	59,7	40,6	53,5	59,3	35,4	59,2	Selling of goods or services over the Internet (e.g. via auctions)
28,0	63,2	71,2	67,4	58,9	62,3	35,7	58,5	Finding information about goods or services
35,4	59,2	66,5	65,7	50,0	54,3	45,0	56,4	Seeking health-related information
55,3	39,6	53,7	39,2	33,4	74,0	59,9	45,5	Consulting Wikipedia (to obtain knowledge on any subject)
27,8	23,9	31,2	23,9	23,2	37,8	28,8	26,2	Downloading software
9,9	27,3	27,3	22,4	41,0	20,4	7,5	24,1	Looking for a job or sending a job application
12,4	11,1	16,5	12,3	11,3	15,4	12,9	12,5	Posting opinions on social issues via blogs and/or social networks
4,9	8,4	10,8	9,7	7,2	9,8	5,5	8,2	Taking part in online consultations or voting to define social issues (petitions)
3,7	2,8	6,4	4,8	3,0	1,3	3,7	3,7	Doing an online course

**MODULE 1.D:**

Answer (individuals)	Age						Gender	
	16 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	man	woman
<b>D1: For which of the following services of public authorities</b>								
Obtaining information from public authorities' websites	84,0	68,8	77,7	83,2	90,7	52,4	76,3	80,2
Downloading official forms	40,0	53,3	51,2	40,0	34,1	47,6	47,1	45,7
Sending filled in forms	31,4	38,1	25,9	29,7	18,1	15,8	30,9	29,6
<b>D2: What were the reasons for not sending filled-in forms</b>								
Did not have to submit filled-in forms	66,1	74,1	64,1	67,5	73,1	64,0	68,1	68,5
Lack of skills	0,7	2,5	3,3	4,9	6,1	3,7	3,5	1,8
Concerns about protection and security of personal data	0,7	3,2	3,6	1,8	2,3	0,0	2,4	2,0
Services not available on website	0,4	0,5	2,0	3,7	2,8	8,0	1,3	1,6
Technical failure of website during filling-in or sending the form	0,0	1,3	0,5	1,5	0,6	0,0	1,1	0,3
None of the above	33,1	22,7	31,1	23,2	21,1	24,2	28,2	27,5

<sup>1)</sup> Data refer to individuals who answered "within the last 3 months" or „More than 3 months ago (less than a year)" in question C1.

<sup>2)</sup> Data refer to individuals who answered "sending filled-in forms" in question D1.

**e-government<sup>1)</sup>**

in percentages

Educational level			Employment situation				Total	Answer (individuals)
lower than secondary	secondary	tertiary	employee	unemployed	student	other		

**did you use the Internet in the last 3 months? (all that apply)**

84,7	78,9	76,0	79,5	74,4	86,4	66,2	78,1	Obtaining information from public authorities' websites
58,5	38,6	58,5	51,5	36,8	50,0	26,9	46,5	Downloading official forms
43,2	23,9	39,8	30,1	23,6	44,7	34,0	30,3	Sending filled in forms

**to public authorities over the Internet:<sup>2)</sup> (all that apply)**

55,1	71,2	72,8	71,6	64,8	62,4	68,8	68,3	Did not have to submit filled-in forms
2,1	3,2	1,7	2,9	2,2	3,5	2,4	2,7	Lack of skills
0,0	2,8	2,8	2,8	2,8	2,8	0,0	2,2	Concerns about protection and security of personal data
0,0	1,2	4,0	2,4	1,0	0,0	0,8	1,5	Services not available on website
0,0	1,1	0,0	0,7	0,0	3,5	0,2	0,7	Technical failure of website during filling-in or sending the form
43,9	24,5	21,9	23,6	31,4	32,4	30,1	27,8	None of the above

**MODULE 1.E: e-commerce**

Answer (individuals)	Age						Gender	
	16 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	man	woman
<b>E1: When disc you last buy/order, for personal</b>								
Within the last 3 months	9,2	10,4	11,3	7,3	4,3	0,0	11,7	6,8
More than 3 months ago (less than a year)	4,4	5,4	5,7	6,3	1,5	9,7	5,3	4,9
More than 1 year ago	3,2	4,9	4,1	2,2	3,2	2,3	4,3	3,1
Never used it	83,2	79,3	78,9	84,2	90,9	88,0	78,7	85,2
<b>E2: What types of goods or services did you buy or order</b>								
Household goods (furniture, toys, etc.)	24,6	26,6	35,3	31,3	28,9	69,4	28,4	30,5
Electronic equipment (incl. cameras)	12,1	41,4	22,7	12,7	12,8	0,0	31,7	11,5
Clothes, sports goods	23,9	22,0	18,9	14,1	47,1	0,0	21,0	21,6
Books/magazines/newspapers	11,9	7,7	26,2	11,5	12,8	0,0	10,9	19,3
Pharmaceutical products	7,3	4,4	14,0	25,9	24,3	0,0	10,5	12,0
Computer hardware	11,4	13,7	11,8	0,0	21,4	0,0	15,3	3,9
Video games software and upgrades	11,7	9,4	8,3	9,2	12,8	0,0	14,9	1,7
Computer software and upgrades	7,7	18,3	2,8	5,5	11,5	0,0	12,6	4,5
Holiday accommodation (hotel, etc.)	5,2	4,5	7,1	23,0	21,4	0,0	9,7	6,2
Other travel arrangements (transport tickets, car hire, etc.)	0,0	9,2	11,8	13,9	11,5	30,6	7,0	10,0
Telecommunication services (e.g. broadband subscriptions, uploading money on prepaid phone cards, etc.)	5,2	10,1	7,7	8,5	0,0	0,0	10,4	3,2
Tickets for cultural events	11,7	3,6	4,8	6,8	11,5	0,0	10,5	0,9
Food or groceries	7,2	7,9	4,3	6,6	12,8	0,0	8,0	4,7
Other	5,7	4,2	10,2	5,5	15,4	0,0	9,0	2,7
Films, music	6,5	0,0	2,8	2,6	12,8	0,0	4,6	0,9
e-learning material	6,7	0,9	0,0	0,0	0,0	0,0	1,4	3,2
Share purchases, insurance policies and other financial services	0,0	0,0	2,0	0,0	0,0	0,0	0,8	0,0

<sup>1)</sup> The data refer to individuals who answered "never used it" in question C1.

<sup>2)</sup> The data refer to individuals who answered "in the last 3 months (less than a year)" in question D1.

**activities and obstacles<sup>1)</sup>**

in percentages

Educational level			Employment situation				Total	Answer (individuals)
lower than secondary	secondary	tertiary	employee	unemployed	student	other		
<b>purposes/goods or services over the Internet?</b>								
5,2	9,3	13,4	11,5	6,6	14,3	5,7	9,3	Within the last 3 months
2,9	4,6	8,8	5,4	3,5	7,4	5,7	5,1	More than 3 months ago (less than a year)
2,3	3,2	6,6	3,8	5,6	0,6	2,3	3,7	More than 1 year ago
89,6	82,8	71,1	79,3	84,3	77,7	86,3	81,9	Never used it
<b>over the Internet in the last 12 months? (all that apply)<sup>2)</sup></b>								
28,3	32,0	24,2	28,8	24,9	32,2	33,5	29,2	Household goods (furniture, toys, etc.)
12,5	28,1	19,7	27,2	38,4	5,8	9,7	23,8	Electronic equipment (incl. cameras)
36,5	17,6	22,4	22,8	4,5	24,5	35,3	21,2	Clothes, sports goods
11,2	14,9	14,0	16,2	17,9	7,8	8,6	14,2	Books/magazines/newspapers
0,0	12,3	12,9	8,5	14,4	10,5	16,0	11,1	Pharmaceutical products
12,3	10,9	10,2	8,8	24,5	0,6	9,5	10,8	Computer hardware
12,5	8,0	12,0	8,8	11,9	6,3	13,6	9,7	Video games software and upgrades
12,5	8,0	11,0	12,3	8,6	0,0	9,7	9,4	Computer software and upgrades
12,5	1,6	19,4	12,8	1,8	0,0	9,7	8,3	Holiday accommodation (hotel, etc.)
0,0	4,7	17,7	14,4	3,4	0,0	1,0	8,2	Other travel arrangements (transport tickets, car hire, etc.)
12,5	4,3	12,2	7,1	8,9	1,6	13,6	7,6	Telecommunication services (e.g. broadband subscriptions, uploading money on prepaid phone cards, etc.)
12,5	6,1	5,7	5,5	5,2	6,3	13,6	6,7	Tickets for cultural events
0,0	8,3	6,1	8,5	1,9	13,7	0,0	6,7	Food or groceries
11,7	5,5	6,7	4,6	13,9	10,0	0,0	6,6	Other
0,0	3,6	3,5	4,4	0,0	6,4	0,0	3,2	Films, music
0,0	3,1	0,9	2,2	0,0	6,8	0,0	2,1	e-learning material
0,0	0,9	0,0	1,0	0,0	0,0	0,0	0,5	Share purchases, insurance policies and other financial services

**MODULE 1.E: e-commerce**

Answer (individuals)	Age						Gender	
	16 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	man	woman

**E3: Were any of the following products that you bought or ordered**

Computer software (incl. computer and video games and software upgrades)	46,5	75,8	19,4	47,9	0,0	0,0	70,3	3,1
Electronic books, magazines, newspapers and e-learning material	36,3	24,2	80,6	52,1	100,0	0,0	20,7	96,9
Films, music	20,2	0,0	0,0	0,0	100,0	0,0	12,3	3,1

**E4: From whom did you buy/order goods or**

National sellers	93,2	91,2	89,9	89,0	71,1	100,0	91,4	89,5
Sellers from EU countries	6,8	5,1	10,6	7,1	28,9	0,0	7,1	8,9
Sellers from the rest of the world	5,2	10,7	4,6	3,9	0,0	0,0	9,4	1,5

**E5: Did you place a bet (e.g. sports betting) and/or**

Yes	5,2	9,5	0,0	0,0	0,0	0,0	5,8	2,0
No	94,8	90,5	100,0	100,0	100,0	100,0	94,2	98,0

<sup>1)</sup> The data refer to individuals who answered "never used it" in question C1.

<sup>2)</sup> The data refer to individuals who gave a positive answer to questions D2D and/or D2E and/or D2F and/or D2H and/or D2I.

<sup>3)</sup> The data refer to individuals who answered "in the last 3 months" or "More than 3 months ago (less than a year)" in question D1.

**activities and obstacles<sup>1)</sup>**

in percentages

Educational level			Employment situation				Total	Answer (individuals)
lower than secondary	secondary	tertiary	employee	unemployed	student	other		

**over the Internet downloaded or accessed from websites? (all that apply)<sup>2)</sup>**

100,0	33,8	63,2	44,2	53,2	27,2	100,0	47,7	Computer software (incl. computer and video games and software upgrades)
0,0	56,9	36,8	55,8	46,8	49,5	0,0	46,4	Electronic books, magazines, newspapers and e-learning material
0,0	12,7	4,0	6,2	0,0	27,5	0,0	9,2	Films, music

**services over the Internet in the last 12 months?<sup>3)</sup>**

100,0	92,2	84,1	89,1	92,0	93,1	91,8	90,7	National sellers
0,0	6,8	12,8	9,0	5,1	6,9	8,2	7,8	Sellers from EU countries
12,5	4,7	7,4	7,5	5,7	0,0	9,7	6,4	Sellers from the rest of the world

**play lott over the Internet in the last 12 months?**

12,5	5,0	0,0	5,7	0,0	0,0	9,7	4,3	Yes
87,5	95,0	100,0	94,3	100,0	100,0	90,3	95,7	No

**MODULE 1.F:**

Answer (individuals)	Age						Gender	
	16 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	man	woman
<b>F1: When did you last take a computer-related</b>								
Never took one	88,7	82,4	75,9	70,1	70,3	74,8	83,9	75,5
More than 3 years ago	6,2	13,6	18,2	21,0	24,1	22,4	10,5	18,9
In the last 3 years	5,1	4,0	6,0	8,9	5,6	2,8	5,6	5,6
<b>F2: What are the reasons for not taking</b>								
Self-study or informal assistance from other persons	43,2	38,7	34,8	36,1	21,2	22,9	37,2	37,8
Know enough	38,5	38,1	24,9	22,7	19,3	19,9	37,2	26,0
Use the computer on rare occasions	9,0	14,4	19,1	25,6	20,8	19,7	11,6	20,5
Lack of time	9,2	21,4	20,5	13,5	5,6	15,5	17,7	12,9
Training courses cost	4,3	8,9	14,9	17,1	4,9	9,3	8,6	10,7
Inadequate content offered	1,3	0,4	1,5	1,0	5,1	0,0	1,6	1,0
None of the above	17,4	8,6	17,6	11,0	35,1	35,6	15,8	15,1

<sup>1)</sup> The data refer to individuals who answered "never used it" in question B1.

<sup>2)</sup> The data refer to individuals who answered "never took one" in question E1.



**e-skills**

in percentages

Educational level			Employment situation				Total	Answer (individuals)
lower than secondary	secondary	tertiary	employee	unemployed	student	other		
<b>training course (at least 3 hours)?<sup>1)</sup></b>								
95,9	80,9	58,0	69,3	85,9	88,0	89,1	79,7	Never took one
2,4	14,3	29,8	22,8	10,1	6,7	8,0	14,7	More than 3 years ago
1,7	4,8	12,3	8,0	4,0	5,3	2,9	5,6	In the last 3 years
<b>computer-related training course in the last 3 years:<sup>2)</sup></b>								
26,6	41,2	40,1	38,2	33,7	52,7	35,4	37,5	Self-study or informal assistance from other persons
19,6	33,6	46,8	37,2	21,0	53,4	30,6	31,9	Know enough
17,2	16,4	10,3	16,4	22,2	3,1	10,2	15,8	Use the computer on rare occasions
17,1	14,8	15,3	19,3	18,8	8,1	6,6	15,4	Lack of time
10,6	10,3	4,4	9,3	12,6	4,9	7,4	9,6	Training courses cost
1,7	0,7	3,4	1,0	1,3	1,2	1,9	1,3	Inadequate content offered
21,4	14,5	9,1	13,5	13,0	12,4	24,2	15,5	None of the above

**MODULE 1.F:**

Answer (individuals)	Age						Gender	
	16 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	man	woman
<b>F3: Which of the following computer-related</b>								
Using copy and paste tools to duplicate or move information within a document	86,0	73,7	60,6	52,7	45,1	24,1	70,6	65,6
Copying or moving a file or folder	85,8	70,1	62,1	55,8	42,8	26,2	71,5	63,8
Transferring files between computer and other devices (from mobile phones, mp3 players)	69,5	57,7	36,7	26,4	15,9	11,3	56,2	39,1
Connecting and installing new devices (e.g. modem)	53,4	43,9	30,7	24,8	18,9	15,4	46,5	30,2
Compressing (zipping) files	47,7	45,5	33,8	27,3	17,1	16,1	45,8	30,6
Using basic arithmetic formulas in a spreadsheet	53,5	34,8	36,6	28,3	21,3	21,1	39,1	36,7
Installing a new or replacing and old operating system	30,1	26,7	13,2	14,6	4,3	3,4	27,4	14,1
Creating electronic presentations (slides, incl. sound or video)	35,7	23,6	10,9	11,9	4,8	3,4	25,1	15,9
Modifying the configuration parameters of software applications	15,3	17,0	12,5	10,8	4,9	1,7	19,1	7,9
Writing a computer program using a specialised programming language	21,5	10,2	8,7	8,8	5,7	5,2	14,2	10,3
None of the above	8,8	15,3	30,6	38,1	50,2	62,0	19,6	27,6

<sup>1)</sup> The data refer to individuals who did not answer "never used it" in question B1.

**e-skills**

in percentages

Educational level			Employment situation				Total	Answer (individuals)
lower than secondary	secondary	tertiary	employee	unemployed	student	other		
<b>activities have you already carried out? <sup>1)</sup></b>								
58,7	68,1	78,5	70,7	56,1	97,7	68,4	68,1	Using copy and paste tools to duplicate or move information within a document
57,8	67,6	78,9	72,2	55,3	89,5	67,9	67,7	Copying or moving a file or folder
49,4	45,0	54,5	44,4	40,6	78,1	52,7	47,7	Transferring files between computer and other devices (from mobile phones, mp3 players)
36,2	36,0	48,4	38,2	28,9	64,4	42,3	38,4	Connecting and installing new devices (e.g. modem)
30,4	35,3	56,3	41,8	26,8	63,0	37,4	38,2	Compressing (zipping) files
41,8	33,6	47,8	37,8	26,5	67,3	43,6	37,9	Using basic arithmetic formulas in a spreadsheet
16,3	20,7	25,9	20,3	17,8	36,2	19,6	20,8	Installing a new or replacing and old operating system
17,9	19,6	26,6	18,5	13,9	46,5	24,2	20,5	Creating electronic presentations (slides, incl. sound or video)
8,3	12,7	21,8	14,6	10,0	22,3	12,9	13,5	Modifying the configuration parameters of software applications
13,9	9,6	19,1	10,2	7,4	22,9	19,9	12,2	Writing a computer program using a specialised programming language
29,6	24,2	15,1	21,4	30,8	0,1	27,6	23,6	None of the above

**MODULE 1.F:**

Answer (individuals)	Age						Gender	
	16 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	man	woman
<b>F4: Which of the following Internet-related</b>								
Using of search engine (Google, Yahoo) to find information	95,3	91,7	90,5	83,9	78,5	55,2	92,6	87,8
Sending e-mails with attached files (documents, pictures, etc.)	73,1	68,3	70,6	58,6	64,0	55,6	70,2	66,5
Posting messages to chatrooms or an online discussion forum	75,2	57,7	44,8	24,1	27,7	3,3	55,2	50,2
Using the Internet to make telephone calls	45,1	44,4	41,9	36,3	43,8	39,1	45,0	40,5
Uploading text, games, images, films or music to websites	39,4	41,3	23,4	19,9	19,0	6,0	34,3	29,8
Using peer-to-peer file sharing for exchange of films, music, etc.	28,8	27,5	17,4	13,0	6,1	10,5	23,5	20,6
Changing security settings on the Internet	16,8	23,2	13,5	11,7	0,0	3,0	20,5	11,2
Creating a web page	10,7	12,4	9,1	9,6	2,3	6,1	12,1	7,9
None of the above	2,7	3,6	5,0	11,2	11,5	30,4	4,1	6,8
<b>F5: Where and how did you obtain</b>								
Informal assistance from colleagues, relatives, friends	59,3	74,0	76,8	66,5	55,3	72,8	70,0	66,2
Self-study in the sense of learning-by-doing	44,3	55,1	51,0	52,6	46,2	35,9	51,8	48,4
Formal education (school, university)	74,4	46,0	24,5	19,2	11,9	11,4	41,9	42,2
Self-study using books, cd-roms, online courses, Wikipedia	41,4	34,5	33,2	27,9	18,6	31,4	38,0	29,7
Training courses in adult education center	5,1	10,3	10,8	14,4	10,1	13,2	6,3	13,0
Vocational training courses (on the demand of the employer)	0,7	3,2	8,7	19,4	26,4	20,6	5,6	10,5
Some other way	2,4	0,0	0,8	3,3	3,7	3,9	2,3	0,9

<sup>1)</sup> The data refer to individuals who did not answer "never used it" in question C1.

**e-skills****in percentages**

Educational level			Employment situation				Total	Answer (individuals)
lower than secondary	secondary	tertiary	employee	unemployed	student	other		
<b>activities have you already carried out? <sup>1)</sup></b>								
80,6	91,8	95,4	92,7	85,3	100,0	87,4	90,3	Using of search engine (Google, Yahoo) to find information
56,1	67,0	84,9	72,2	56,9	90,3	65,9	68,4	Sending e-mails with attached files (documents, pictures, etc.)
55,6	52,8	49,9	47,0	43,8	84,5	63,7	52,8	Posting messages to chatrooms or an online discussion forum
40,0	40,4	52,8	43,7	34,8	57,0	45,8	42,8	Using the Internet to make telephone calls
28,0	32,6	34,9	29,5	27,8	56,9	31,9	32,1	Uploading text, games, images, films or music to websites
23,0	21,6	22,8	19,8	16,6	47,0	22,9	22,1	Using peer-to-peer file sharing for exchange of films, music, etc.
7,2	17,7	19,6	15,2	14,5	29,3	13,2	16,0	Changing security settings on the Internet
8,5	9,4	13,9	10,2	8,4	13,9	10,5	10,1	Creating a web page
10,8	4,3	3,5	3,8	8,4	0,0	7,5	5,4	None of the above
<b>your computer or Internet skills: <sup>1)</sup></b>								
67,3	69,4	64,7	68,0	75,0	72,4	55,1	68,1	Informal assistance from colleagues, relatives, friends
34,3	51,3	62,7	59,7	40,7	50,9	42,9	50,1	Self-study in the sense of learning- by-doing
48,4	39,9	42,4	38,3	30,7	80,0	51,2	42,1	Formal education (school, university)
27,8	33,4	41,7	35,0	26,7	48,5	35,7	33,8	Self-study using books, cd-roms, online courses, Wikipedia
1,8	9,1	19,6	13,3	8,0	9,3	4,0	9,6	Training courses in adult education center
0,0	6,9	20,2	13,5	2,9	1,1	7,4	8,1	Vocational training courses (on the demand of the employer)
3,3	1,4	0,4	0,5	2,3	1,5	2,9	1,6	Some other way

**MODULE 1.F:**

Answer (individuals)	Age						Gender	
	16 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	man	woman
<b>F6: Do you find your computer or</b>								
Communicating with relatives, friends, colleagues over the Internet	94,2	91,0	96,3	85,8	96,2	85,3	92,5	92,7
Protecting own computer from viruses or other infections	74,0	64,8	52,4	45,3	38,0	38,8	66,8	53,5
Protecting own information on the computer	65,1	56,4	46,6	40,8	36,3	32,6	55,5	51,1
Finding or changing jobs in a year laps of time	52,4	61,9	48,6	42,8	33,4	17,3	52,3	51,3

<sup>1)</sup> The data refer to individuals who gave a positive answer in questions from a) to j) in question F3 or from a) to h) in question F4.

**e-skills**

in percentages

Educational level			Employment situation				Total	Answer (individuals)
lower than secondary	secondary	tertiary	employee	unemployed	student	other		
<b>Internet skills as sufficient for:<sup>1)</sup></b>								
84,1	94,2	95,7	93,8	86,5	96,7	97,6	92,6	Communicating with relatives, friends, colleagues over the Internet
69,5	56,6	63,8	58,9	54,0	77,6	65,3	60,4	Protecting own computer from viruses or other infections
50,1	51,5	62,2	53,8	45,5	71,1	55,2	53,4	Protecting own information on the computer
31,7	53,6	65,2	57,5	45,8	68,8	37,5	51,8	Finding or changing jobs in a year laps of time

# 1.5. QUESTIONNAIRE

## ICT USAGE IN HOUSEHOLDS AND BY INDIVIDUALS

### MODULE 1.A: ACCESS TO INFORMATION AND COMMUNICATION TECHNOLOGIES

A1	Do you or anyone in your household have access to a computer at home?			
(tick all that apply)				
	a) Personal computer (PC)	<input type="checkbox"/>	<input type="checkbox"/>	
	a1) total number of computers in your household	<input type="text"/>	<input type="text"/>	
	b) Laptop	<input type="checkbox"/>	<input type="checkbox"/>	
	b1) total number of laptops in your household	<input type="text"/>	<input type="text"/>	
	c) TV	<input type="checkbox"/>	<input type="checkbox"/>	
	c1) Satellite TV	<input type="checkbox"/>	<input type="checkbox"/>	
	c2) Cable TV	<input type="checkbox"/>	<input type="checkbox"/>	
	c3) Digital TV	<input type="checkbox"/>	<input type="checkbox"/>	
	c4) Total number of TV sets in your household	<input type="text"/>	<input type="text"/>	
	d) Radio receiver (including walkman, mobile phone, car radio...)	<input type="checkbox"/>	<input type="checkbox"/>	
	d1) total number of radio receiver in your household	<input type="text"/>	<input type="text"/>	
	e) Mobile telephone	<input type="checkbox"/>	<input type="checkbox"/>	
	f) None of the above	<input type="checkbox"/>	<input type="checkbox"/>	
	-> go to A2			
	A2	Do you or anyone in your household have access to the Internet <u>at home</u> , regardless of whether it is used?		
(tick only one)				
	a) Yes	<input type="checkbox"/>	-> go to A3	
	b) No	<input type="checkbox"/>	-> go to A5	
	c) Don't know	<input type="checkbox"/>	-> got o B1	



<b>A3</b>	Which of the following devices do you use to access the Internet <u>at home</u> ?	
(tick all that apply)		
	a) Personal computer (PC)	<input type="checkbox"/>
	b) Portable computer (laptop)	<input type="checkbox"/>
	c) Other	<input type="checkbox"/>
	c1) Mobile phone (GPRS, etc.)	<input type="checkbox"/>
	c2) Handheld computer (palmtop, PDA)	<input type="checkbox"/>
	d) TV with specific Internet device	<input type="checkbox"/>
	e) Game console (play-station)	<input type="checkbox"/>
	f) Don't know	<input type="checkbox"/>
-> go to A4		
<b>A4</b>	What type of Internet connection do you use at home?	
(tick all that apply)		
	a) Modem	<input type="checkbox"/>
	b) ISDN	<input type="checkbox"/>
	c) DSL (ADSL)	<input type="checkbox"/>
	d) Cable Internet	<input type="checkbox"/>
	e) Wireless Internet (WiFi, WiMax, satellite Internet)	<input type="checkbox"/>
	f) Mobile phone (via 3G modem)	<input type="checkbox"/>
	g) Mobile phone (via GPRS)	<input type="checkbox"/>
-> go to B1		
<b>A5</b>	What are the reasons for not having access to the Internet at home?	
(tick all that apply)		
	a) Have access to the Internet elsewhere	<input type="checkbox"/>
	b) Don't want the Internet	<input type="checkbox"/>
	c) Don't need the Internet	<input type="checkbox"/>
	d) Equipment costs too high	<input type="checkbox"/>
	e) Access costs too high	<input type="checkbox"/>
	f) Lack of skills	<input type="checkbox"/>
	g) Privacy or security concerns	<input type="checkbox"/>
	h) Physical disabilities	<input type="checkbox"/>
	i) None of the above; other reasons	<input type="checkbox"/>
-> go to B1		

**MODULE 1.B: USE OF COMPUTERS**

<b>B1</b>	When did you last use a computer?		
(tick only one)			
	a) Within the last 3 months	<input type="checkbox"/>	-> go to B2
	b) More than 3 months ago (more than a year)	<input type="checkbox"/>	-> go to C1
	c) More than 1 year ago	<input type="checkbox"/>	-> go to C1
	d) Never used it	<input type="checkbox"/>	-> got to C1
-> go to B3			
<b>B2</b>	How often on average did you use a computer in the last 3 months?		
(tick only one)			
	a) Every day or almost every day	<input type="checkbox"/>	
	b) At least once a week	<input type="checkbox"/>	
	c) At least once a month	<input type="checkbox"/>	
	d) Less than once a month	<input type="checkbox"/>	
-> go to B3			
<b>B3</b>	Where did you use a computer in the last 3 months?		
(tick all that apply)			
	a) At home	<input type="checkbox"/>	
	b) At place of work (other than home)	<input type="checkbox"/>	
	c) At place of education	<input type="checkbox"/>	
	d) At another person's home	<input type="checkbox"/>	
	e) Other (Internet-cafe, hotel, airport...)	<input type="checkbox"/>	
-> go to C1			

**MODULE 1.C: USE OF THE INTERNET**

<b>C1</b>	When did you last use the Internet?		
(tick only one)			
	e) Within the last 3 months	<input type="checkbox"/>	-> go to C2
	f) More than 3 months ago (more than a year)	<input type="checkbox"/>	-> go to D1
	g) More than 1 year ago	<input type="checkbox"/>	-> go to E1
	h) Never used it	<input type="checkbox"/>	-> go to F1
<b>C2</b>	How often on average did you use the Internet in the last 3 months?		
(tick only one)			
	e) Every day or almost every day	<input type="checkbox"/>	
	f) At least once a week	<input type="checkbox"/>	
	g) At least once a month	<input type="checkbox"/>	
	h) Less than once a month	<input type="checkbox"/>	
-> go to C3			
<b>C3</b>	Where did you the Internet in the last 3 months?		
(tick all that apply)			
	a) At home	<input type="checkbox"/>	
	b) At place of work (other than home)	<input type="checkbox"/>	
	c) At place of education	<input type="checkbox"/>	
	d) At another person's place	<input type="checkbox"/>	
	e) Other	<input type="checkbox"/>	
	e1) Public library	<input type="checkbox"/>	
	e2) Post office	<input type="checkbox"/>	
	e3) Public institution, town hall, government organisation	<input type="checkbox"/>	
	e4) Community or voluntary organisation	<input type="checkbox"/>	
	e5) Internet cafe	<input type="checkbox"/>	
	e6) Hotspot (at hotels, airports, public places ...)	<input type="checkbox"/>	
-> go to C4			

<b>C4</b>	Do you use any of the following mobile devices to access the Internet away from or work?	
(tick all that apply)		
	a) Mobile phone	
	a1) Mobile phone, via GPRS	
	a2) Mobile phone, via 3G modem (UMTS, HSDPA)	
	a3) Mobile phone, via Wifi or WiMax	
	b) Laptop	
	b1) Via USB modem	
	b2) Via public Wifi or WiMax	
	c) None of the above, other	
	d) I don't have access to the Internet via mobile devices away from home or work	
-> go to C5		
<b>C5</b>	For which of the following activities did you use the Internet in the last 3 months for private purposes?	
(tick all that apply)		
	Communication	
	a) Participating in social networks (facebook, twitter)	
	Access to information	
	b) Reading or downloading online news/newspapers/magazines	
	b1) Have you subscribed to news services or products?	
	Yes	
	No	
	c) Seeking health-related information	
	d) Looking for information about education, training or course offers	
	e) Finding information about goods or services	
	f) Downloading software	
	Civic and political participation	
	g) Posting opinions on social issues via blogs and/or social networks	
	h) Taking part in online consultation or voting to define social issues (petitions)	
	Learning	
	i) Doing an online course (in any subject)	
	j) Consulting Wikipedia (to obtain knowledge on any subject)	
	Professional life	
	k) Looking for a job or sending job applications	
	l) Participating in professional networks (creating user profile, posting)	
	Other online services	
	m) Using services related to travel and travel related accommodation	
	n) Selling of goods or services via the Internet (e.g. via auctions)	
	o) Telephoning over the Internet /video calls (via webcam) over the Internet	
	p) Internet banking	
-> go to D1		

**MODULE 1.D: USE OF e-GOVERNMENT**

<b>D1</b>	Did you use in the last 12 months the services of public authorities over the Internet, for private purposes, for the following activities:		
	a) Obtaining information from public authorities' websites	<input type="checkbox"/>	<input type="checkbox"/>
	b) Downloading official forms	<input type="checkbox"/>	<input type="checkbox"/>
	c) Sending filled in forms	<input type="checkbox"/>	<input type="checkbox"/>
If the answer is „No“ under c -> to D2; otherwise, go to E1			
<b>D2</b>	What were the reasons for not sending filled in forms to public authorities over the Internet in the last 12 months:		
	a) Did not have to submit official forms -> go to E1	<input type="checkbox"/>	<input type="checkbox"/>
	b) Services not available on website	<input type="checkbox"/>	<input type="checkbox"/>
	c) Technical failure of website during filling in or sending the forms	<input type="checkbox"/>	<input type="checkbox"/>
	d) Lack of skills (did not know how to use website or the use was too complicated)	<input type="checkbox"/>	<input type="checkbox"/>
	e) Concerns about protection and security of personal data	<input type="checkbox"/>	<input type="checkbox"/>
	f) None of the above	<input type="checkbox"/>	<input type="checkbox"/>
-> go to E1			

**MODULE 1.E: e-COMMERCE**

(only for respondents who did not answer "never used it" in question C1 ")

<b>E1</b>	When did you last buy or order goods or services over the Internet for private purposes: (excluding manually typed e-mails)		
(tick only one)			
	a) Within the last 3 months	<input type="checkbox"/>	-> go to E2
	b) More than 3 months ago (less than a year)	<input type="checkbox"/>	-> go to E2
	c) More than 1 year ago	<input type="checkbox"/>	-> go to E5
	d) Never bought or ordered	<input type="checkbox"/>	-> go to E5
<b>E2</b>			
What types of goods or services did you buy or order over the Internet in the last 12 months for private purposes:			
(tick all that apply)			
	a) Food or groceries	<input type="checkbox"/>	<input type="checkbox"/>
	b) Household goods (e.g. furniture, toys, etc.)	<input type="checkbox"/>	<input type="checkbox"/>
	c) Pharmaceutical products	<input type="checkbox"/>	<input type="checkbox"/>
	d) Films, music	<input type="checkbox"/>	<input type="checkbox"/>
	e) Books/magazines/newspapers	<input type="checkbox"/>	<input type="checkbox"/>
	f) e-learning material	<input type="checkbox"/>	<input type="checkbox"/>
	g) Clothes, sports goods	<input type="checkbox"/>	<input type="checkbox"/>
	h) Video games and upgrades	<input type="checkbox"/>	<input type="checkbox"/>
	i) Computer software and upgrades	<input type="checkbox"/>	<input type="checkbox"/>
	j) Computer hardware	<input type="checkbox"/>	<input type="checkbox"/>
	k) Electronic equipment (incl. cameras)	<input type="checkbox"/>	<input type="checkbox"/>
	l) Telecommunication services (e.g. broadband subscription, uploading money on prepaid phone cards, etc.)	<input type="checkbox"/>	<input type="checkbox"/>
	m) Share purchases, insurance policies and other financial services	<input type="checkbox"/>	<input type="checkbox"/>
	n) Holiday accommodation (hotel...)	<input type="checkbox"/>	<input type="checkbox"/>
	o) Other travel arrangements (transport tickets, car hire, etc.)	<input type="checkbox"/>	<input type="checkbox"/>
	p) Tickets for cultural events	<input type="checkbox"/>	<input type="checkbox"/>
	q) Other	<input type="checkbox"/>	<input type="checkbox"/>
-> If „Yes“ to categories d, e, f, h or i -> go to E3; otherwise go to E4			

E3	Were any of the following products, which you bought or ordered over the Internet, downloaded or accessed from websites rather than delivered by post, etc.?	
(tick all that apply)		
	a) Films, music	<input type="checkbox"/>
	b) Electronic books, magazines, newspapers, e-learning material	<input type="checkbox"/>
	c) Computer software (incl. computer and video games and software upgrades)	<input type="checkbox"/>
-> go to E4		
E4	From whom did you buy/order goods or services over the Internet for private purposes in the last 12 months:	
(tick all that apply)		
	a) From national sellers	<input type="checkbox"/>
	b) From sellers from EU countries	<input type="checkbox"/>
	c) From sellers from the rest of the world	<input type="checkbox"/>
	d) Country of origin of sellers is not known	<input type="checkbox"/>
-> go to E5		
E5	Did you place a bet (e.g. sports betting) and/or play lotto over the Internet in the last 12 months? <i>(only for respondents who did not answer „never used it“ in question C1)</i>	
(tick only one)		
	a) Yes	<input type="checkbox"/>
	b) No	<input type="checkbox"/>
-> go to F1		

**MODULE 1.F: e-SKILLS**

<b>F1</b>	When did you last take a training course (at least 3 hours) related to computer use?		
(for respondents how did not answer „never used it “ in question B1)			
	a) Within the last 3 years	<input type="checkbox"/>	-> go to F3
	b) More than 3 years ago	<input type="checkbox"/>	-> go to F2
	c) Never took one	<input type="checkbox"/>	-> go to F2
<b>F2</b>	What are the reasons for not having taken a computer-related course in the last 3 years?		
(tick all that apply)			
	a) My computer skills are sufficient	<input type="checkbox"/>	
	b) I rarely use computers	<input type="checkbox"/>	
	c) Self-study or assistance from others	<input type="checkbox"/>	
	d) Lack of time	<input type="checkbox"/>	
	e) Course costs	<input type="checkbox"/>	
	f) No suitable offer on content available	<input type="checkbox"/>	
	g) None of the above	<input type="checkbox"/>	
-> go to F3			
<b>F3</b>	Which of the following computer-related activities have you already carried out?		
(tick all that apply)			
	a) Copying or moving a file or folder	<input type="checkbox"/>	
	b) Using copy and paste tools to duplicate or move information within a document	<input type="checkbox"/>	
	c) using basic arithmetic formulas in a spreadsheet	<input type="checkbox"/>	
	d) Compressing (or zipping) files	<input type="checkbox"/>	
	e) Connecting or installing new devices (e.g. modem)	<input type="checkbox"/>	
	f) Writing a computer program using a specialised programming language	<input type="checkbox"/>	
	g) Transferring files between computer and other devices (mobile phone, mp3 device...)	<input type="checkbox"/>	
	h) Modifying the configuration parameters of software applications	<input type="checkbox"/>	
	i) Creating electronic presentations (slides, incl. sound or video)	<input type="checkbox"/>	
	j) Installing a new or replacing an old operating system	<input type="checkbox"/>	
	k) None of the above	<input type="checkbox"/>	
-> go to F4			



<b>F4</b>	Which of the following Internet-related activities have you already carried out? (for respondents who did answer in question C1 „never used it “)	
(tick all that apply)		
	a) Using a search engine to find information (Google, Yahoo)	<input type="checkbox"/>
	b) Sending e-mails with attached files (documents, pictures)	<input type="checkbox"/>
	c) Posting messages to chat rooms, or an online discussion forum	<input type="checkbox"/>
	d) Use of the Internet to make telephone calls	<input type="checkbox"/>
	e) Using peer/to/peer file sharing for exchanging films, music, etc.	<input type="checkbox"/>
	f) Creating a web page	<input type="checkbox"/>
	g) Uploading text, games, images, films or music to websites	<input type="checkbox"/>
	h) Modifying the security settings of Internet browsers	<input type="checkbox"/>
	i) None of the above	<input type="checkbox"/>
-> go to F5		
<b>F5</b>	Where or how did you obtain your computer or Internet skills?	
(for respondents who ticked from a) to j) in question F3 or from a) to h) in question F4)		
	a) Formal education (school, faculty)	<input type="checkbox"/>
	b) Training courses in adult education centre	<input type="checkbox"/>
	c) Vocational training courses (on employer's demand)	<input type="checkbox"/>
	d) Self-study using books, cd-roms, online courses, Wikipedia	<input type="checkbox"/>
	e) Self-study in the sense of learning-by-doing	<input type="checkbox"/>
	f) Informal assistance from colleagues, relatives, friends	<input type="checkbox"/>
	g) Some other way	<input type="checkbox"/>
-> go to F6		
<b>F6</b>	Do you judge your computer or Internet skills to be sufficient for:	
(for respondents who ticked from a) to j) in question F3 or a) to h) in question F4)		
	a) Looking for a job or changing job within a year	<input type="checkbox"/>
	b) Communicating with relatives, friends, colleagues over the Internet	<input type="checkbox"/>
	c) Protecting personal data on the computer	<input type="checkbox"/>
	d) Protecting private computer from viruses or other infections	<input type="checkbox"/>
-> go to G1		

**MODULE 1.G: MAIN INFORMATION ON THE RESPONDENT**

**G1** Number of the respondent \_\_\_\_\_

**G2** Sex

- a) Man   
b) Woman

**G3** Educational level

- a) Lower than secondary education   
b) Secondary education   
c) Tertiary education

**G4** Employment situation

- a) Employee   
b) Unemployed   
c) Student   
d) Other not in the labour force (retired, in compulsory military service)

**G5** Municipality \_\_\_\_\_ code |\_|\_|\_|\_|\_|\_|\_|

**G6** Locality \_\_\_\_\_ code |\_|\_|\_|\_|\_|\_|\_|

**G7** Number of household members \_\_\_\_\_

**G8** Of which, number of children aged under 18 \_\_\_\_\_

**G9** Household income (average net monthly income)

- a) Up to 300 euros   
b) From 300 to 600 euros   
c) More than 600 euros





# USAGE OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN THE REPUBLIC OF SERBIA, 2011

## ENTERPRISES



## 2.1. METHODOLOGY

Survey period	<ul style="list-style-type: none"> <li>The survey was carried out from 23 May to 8 June 2011</li> </ul>
Type of survey	<ul style="list-style-type: none"> <li>Telephone interview</li> </ul>
Sample size	<ul style="list-style-type: none"> <li>1200 enterprises</li> </ul>
Target population <sup>1)</sup>	<ul style="list-style-type: none"> <li>Enterprises with 10 or more employees</li> <li>Section C: Manufacturing</li> <li>Sections D and E: Electricity, gas and steam, water supply, sewerage and waste management</li> <li>Section F: Construction</li> <li>Section G: Wholesale and retail trade; repair of motor vehicles and motorcycles</li> <li>Section H: Transportation and storage</li> <li>Section I: Accommodation and food service activities</li> <li>Section J: Information and communication</li> <li>Sections L and M: Real estate activities; professional, scientific and technical activities</li> <li>Section N and Division 95: Administrative and support activities; repair of computers</li> <li>Financial and insurance activities</li> </ul>
Sample type	<ul style="list-style-type: none"> <li>Stratified sample</li> </ul>
Geographic	<ul style="list-style-type: none"> <li>Territory of the Republic of Serbia (excl. AP Kosovo and Metohija)</li> </ul>

<sup>1)</sup> Since 2011, the Classification of Activities has been in use according to the Regulation on the Classification of Activities („Official Gazette of the RS”, No 54/10). 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 1200 enterprises on the territory of the Republic of Serbia. The response rate was 89% (1067 enterprises).

Uzorak (preduzeća)		Veličina			Teritorija			Ukupno
		malo (10-49)	srednje (50-249)	veliko (250+)	centralna Srbija	Vojvodina	Beograd	
Delatnost	Prerađivačka industrija	124	110	128	171	105	86	362
	Snabdevanje električnom energijom, gasom, parom i vodom; Upravljanje otpadnim vodama	29	28	21	40	28	10	78
	Građevinarstvo	30	28	36	37	22	35	94
	Trgovina na veliko i malo	49	41	24	56	23	35	114
	Saobraćaj i skladištenje	35	24	16	29	19	27	75
	Usluge smeštaja i ishrane	31	27	5	25	19	19	63
	Informisanje i komunikacije	45	26	8	29	14	36	79
	Banke i osiguravajuća društva	7	1	11	2	2	15	19
	Poslovanje nekretninama; Stručne, naučne i tehničke delatnosti	62	39	11	38	30	44	112
Administrativne i pomoćne uslužne delatnosti; Popravke kompjutera	29	21	21	22	15	34	71	
Broj	449	277	341	441	345	281	1067	
Procenat	42,0	26,0	32,0	41,3	32,3	26,4	100	

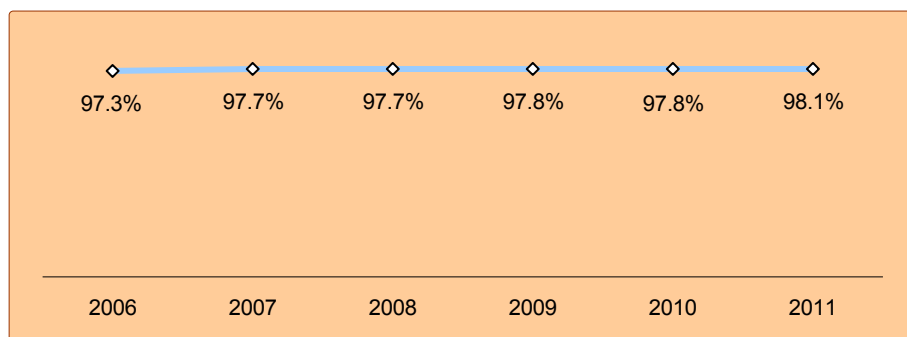
## 2.3. MAIN FINDINGS

### 2.3.1. Computers and computer networks in enterprises

The results of the survey indicate that 98.1% of enterprises on the territory of the Republic of Serbia use computers, which is an increase of 0.3% in relation to 2010. The percentage of computers is bigger in large enterprises (more than 250 employees) and in medium enterprises (50–249 employees), amounting to 100%. This percentage amounts to 98% in small enterprises (10–49 employees).

98.1% enterprises use computers

**Graph 2.1. Does your enterprise use computers?**



The percentage of computer use in enterprises varies depending on the territory: in Belgrade it amounts to 99.3%, in Vojvodina to 98.4%, and in Central Serbia to 96.5%.

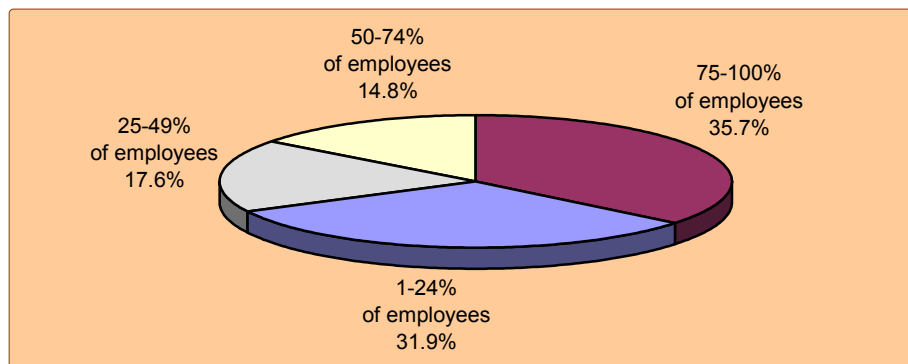
The use of computers in enterprises, by activities:

- Financial and insurance activities (100%)
- Transportation and storage (100%)
- Electricity, gas and steam, water supply; sewerage and waste management (100%)
- Real estate activities; Professional, scientific and technical activities (99.9%)
- Administrative and support activities; Repair of computers (99.7%)
- Construction (99.4%)
- Wholesale and retail trade; repair of motor vehicles and motorcycles (99%)
- Information and communication (97.1%)
- Manufacturing (96.2%)
- Accommodation and food service activities (95.8%)

In 31.9% of enterprises ¼ of employed persons use a computer at least once a week, while in 35.7% of enterprises 75-100% of employees use a computer at least once a week.

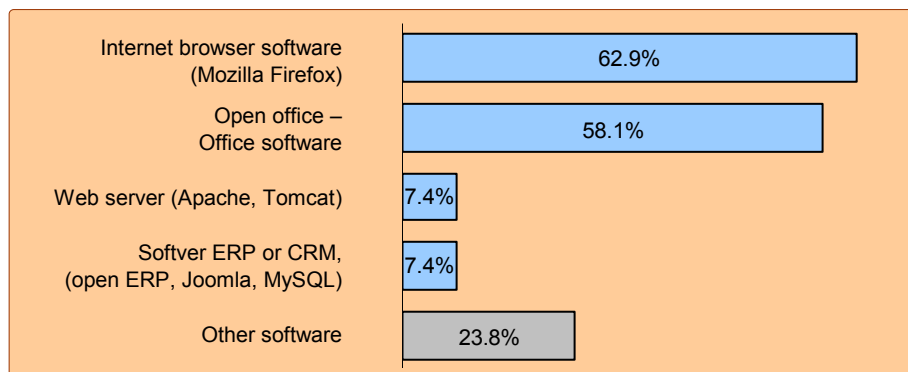


**Graph 2.2. Enterprises by the percentage of employees using a computer at least once a week**



62.9% enterprises has the Internet browser Mozilla Firefox

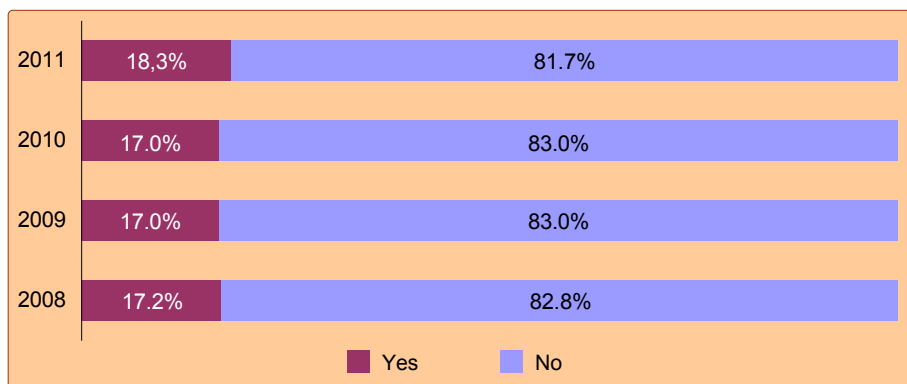
**Graph 2.3. Did your enterprise use, in January 2011, open source software free of charge?**



In January 2011, 18.3% of enterprises used Linux operating system. Linux operating system is most current in large enterprises (48.1%), in medium enterprises (20.8%), then in small ones (15.8%).

According to the analysis of enterprises by sections of activities, Linux system was mostly used in enterprises engaged in financial and insurance activities (57.9%).

**Graph 2.4. Did your enterprise use the open source operating system Linux?**



18.3% of enterprises used Linux „open source“ operating system

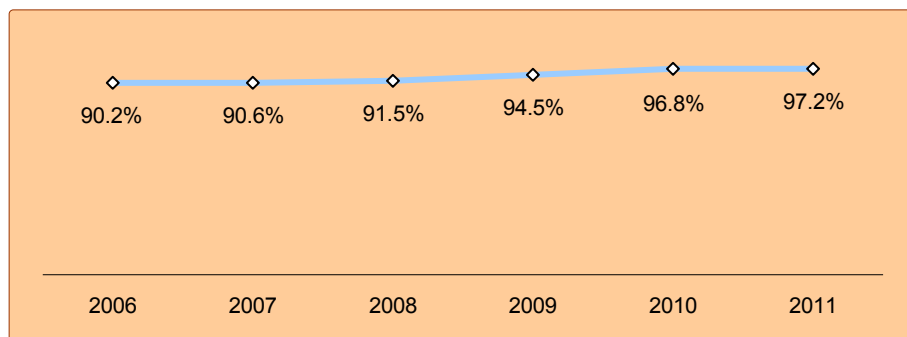
### 2.3.2. Use of the Internet in enterprises

In the Republic of Serbia, there are 97.2% that have an Internet connection, which is an increase of 0.4%, 2.7% and 5.7% compared to 2010, 2009 and 2008 respectively.

The analysis of enterprises by size shows that of the total number of large enterprises, 100% of them are connected to the Internet. As for medium enterprises, 99.9% of them have an Internet connection. The situation is slightly different in small enterprises, where 96.3% of them have access to the Internet.

97.2% of enterprises has an Internet connection

**Graph 2.5. Does your enterprise have an Internet connection?**

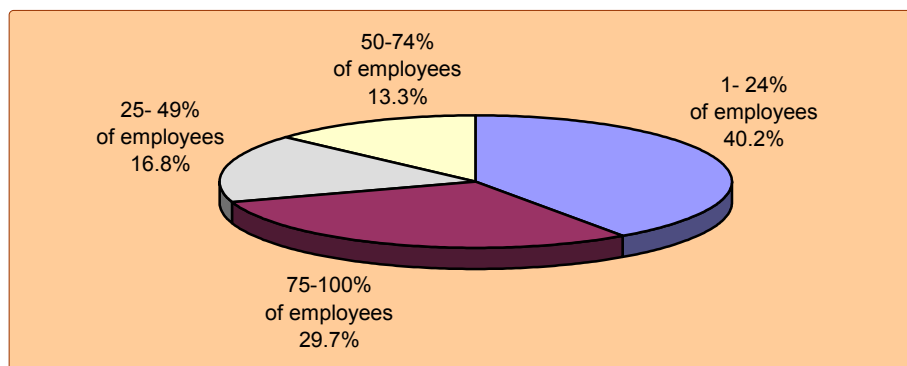


Use of the Internet in enterprises, by activities:

- Financial and insurance activities (100%)
- Administrative and support service activities; Repair of computers (100%)
- Construction (100%)
- Information and communication (100%)
- Real estate activities; Professional, scientific and technical activities (99.1%)
- Manufacturing (98.8%)
- Transpiration and storage (97.6%)
- Electricity, gas and steam, water supply; sewerage and waste management (96.9%)
- Wholesale and retail trade; repair of motor vehicles and motorcycles (93.9%)
- Accommodation and food service activities (90.9%)

In 40.2% of enterprises  $\frac{1}{4}$  of employees use the Internet at least once a week, while in 29.7% of enterprises 75-100% of employees use the Internet at least once a week.

**Graph 2.6. Enterprises by the percentage of persons who use the Internet at least once a week**



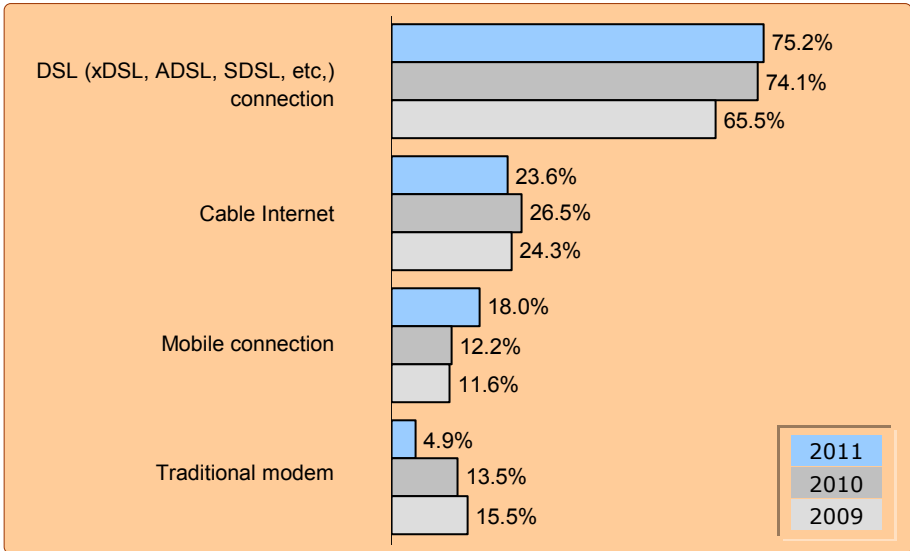
As regard the type of connection, enterprises were given the possibility to choose several answers.

The results indicate that of the total number of enterprises having an Internet connection, 75.2% have DSL, 23.6% cable Internet, and 4.9% a modem connection.

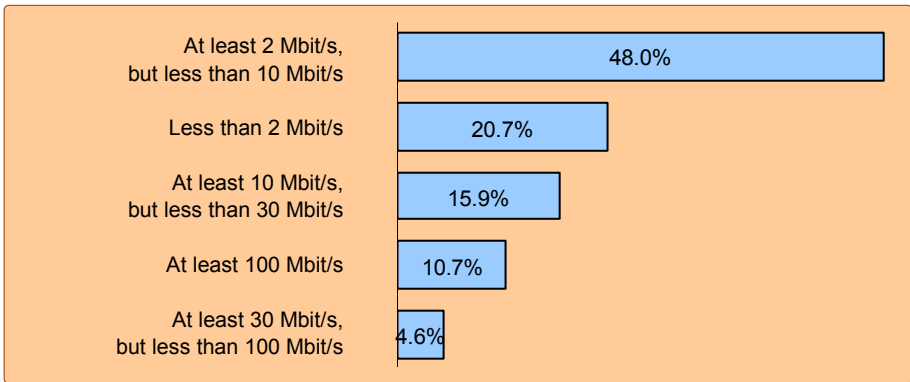
The data are expressive of a decrease of modem connection of 8.6%, as well as of an increase of DSL of 1.1% in relation to 2010.

75.2% of enterprises having an Internet connection use DSL (xDSL, ADSL) connection

**Graph 2.7. Does your enterprise have one of the following external connection to the Internet?**



**Graph 2.8. What is the maximum download speed of the Internet connection (contracted with your Internet provider)?**

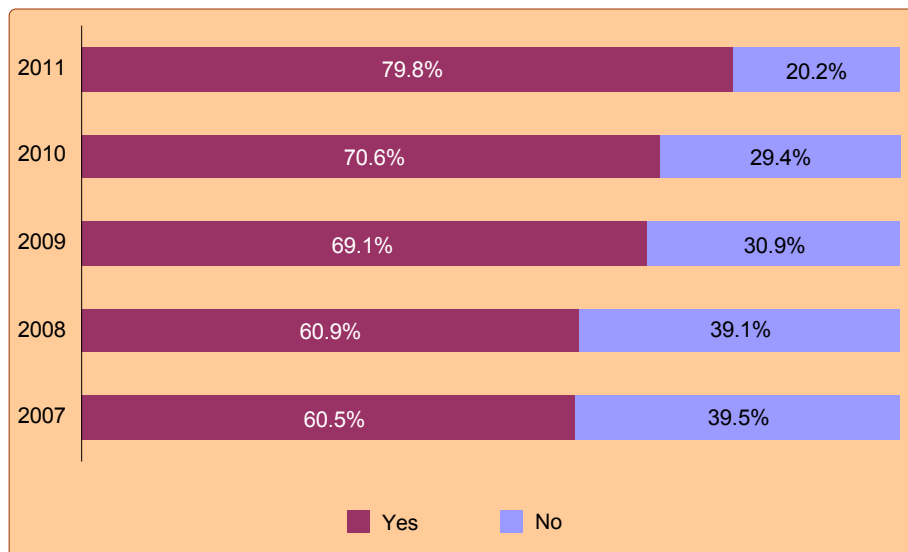


### 2.3.3. e-government

Of the total number of enterprises that have an Internet connection, 79.8% of enterprises interact electronically with public authorities, which is an increase of 9.2% and 10.7% in relation to 2010, 2009 respectively. There are 20.2% of enterprises that do not use this possibility.

79.8% of enterprises having an Internet connection interact electronically with public authorities

**Graph 2.9. Does your enterprise interact electronically with public authorities?**

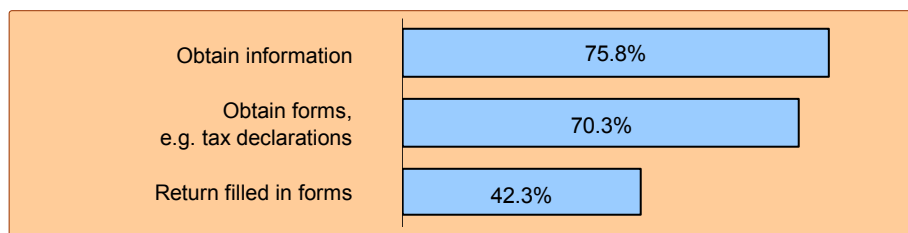


The analysis of enterprises by sections of activities indicates that companies engaged in financial and insurance activities are those which interact the most with public authorities via the Internet (88.2%).

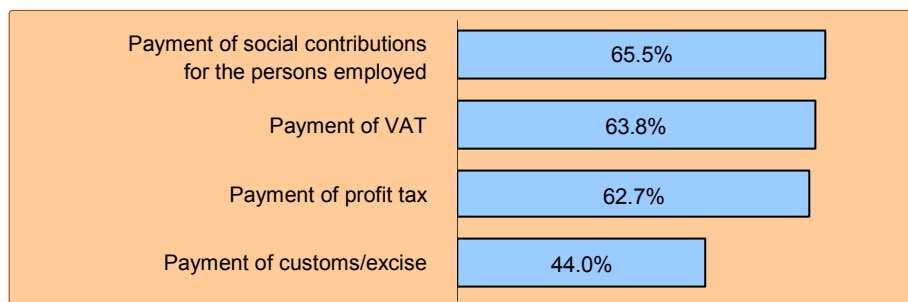
The most frequent answers as to the purposes for which the enterprise interact with public authorities via the Internet are as follows:

- „To obtain information.“ (75.8%)
- „To download forms.“ (70.3%)
- „To return filled in forms.“ (42.3%)

**Graph 2.10. Does your enterprise interact with public authorities over the Internet for private purposes?**

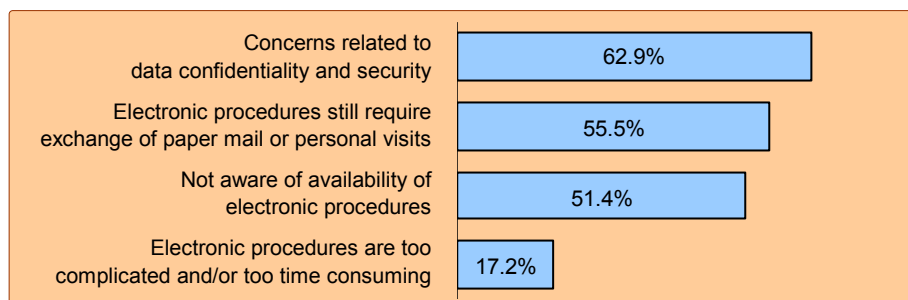


**Graph 2.11. Did your enterprise interact with public authorities over the Internet for the following procedures?**



Most of enterprises (62.9%) do not interact over the Internet with public authorities because of data confidentiality and security concerns, while 55.5% of enterprises think procedures still require exchange of paper mail or personal visits.

**Graph 2.12. Do you consider any of the following reasons as limiting your electronic interaction with public authorities?**



### 2.3.4. Website

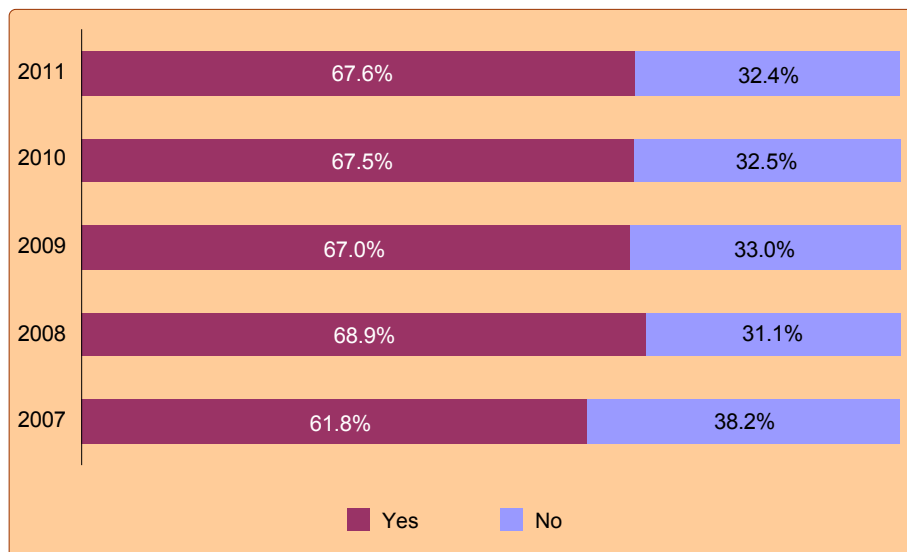
There are 67.6% of enterprises with an Internet connection that have a Website, while this percentage is 67.5% and 67% for 2010 and 2009 respectively.

When observing the structure of enterprises by size classes, the following results are obtained:

- 89% of large enterprises have a Website
- 79.3% of medium enterprises have a Website
- 63.2% of small enterprises have a website

67.6% of enterprises having an Internet connection have a Website

There are differences depending on the territory. In Belgrade there are 76.8% of enterprises that have a Website, in Vojvodina 64.8%, and in Central Serbia 58.8%.

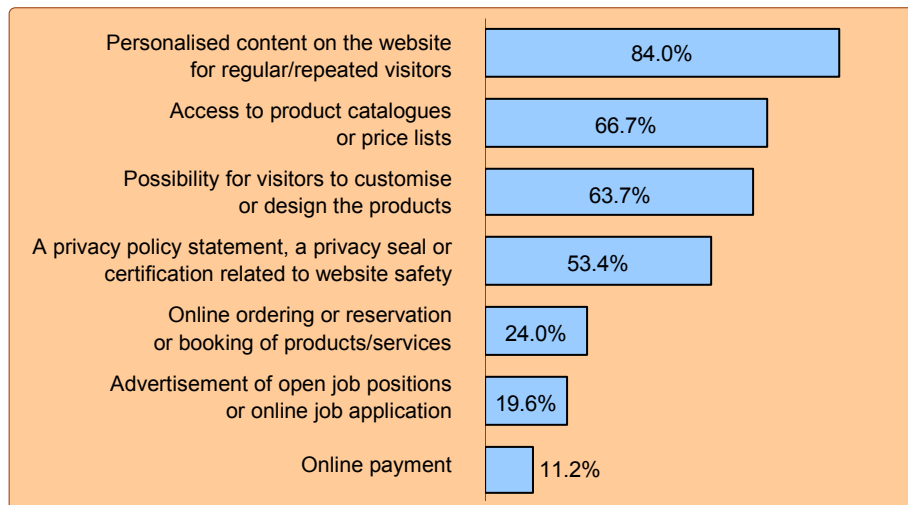
**Graph 2.13. Does your enterprise have a Website?**

Website available in enterprises by activities:

- Financial and insurance activities (100%)
- Accommodation and food service activities (84%)
- Information and communication (83.7%)
- Manufacturing (80%)
- Administrative and support activities; Repair of computers (77.9%)
- Real estate activities; Professional, scientific and technical activities (77.3%)
- Wholesale and retail trade; repair of motor vehicles and motorcycles (55.4%)
- Construction (55.1%)
- Electricity, gas and steam, water supply; sewerage and waste management (54.1%)
- Transportation and storage (49.7%)

Enterprises having a Website provide mostly the following facilities:

- Personalised content in the Website for regular/repeated visitors (84%)
- Access to product catalogues and pricelists (66.7%)
- Possibility for visitors to customise or design the products (63.7%)

**Graph 2.14. Does your enterprise provide over its Website the following facilities?**

### 2.3.5. e-commerce

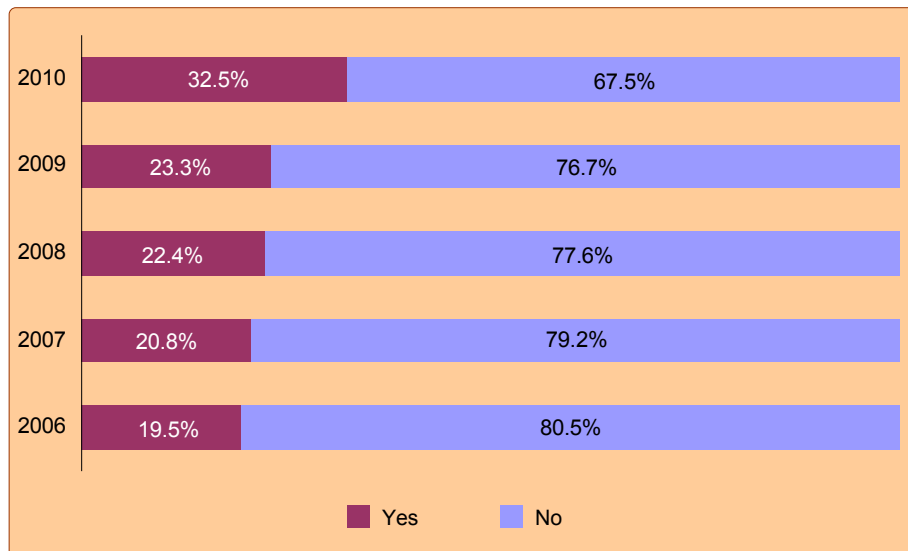
In 2010, 32.5% of enterprises having an Internet connection in the Republic of Serbia ordered goods/services over the Internet, which is an increase of 9.2% in relation to 2009 and of 10.1% compared to 2008.

When observing the structure of enterprises by size classes, the following results are obtained:

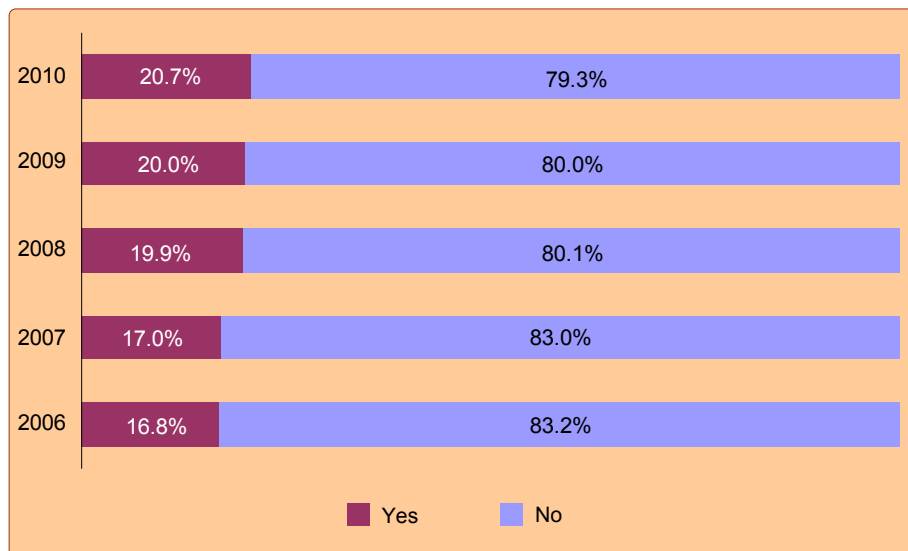
- 41.4% of large enterprises ordered goods/services over the Internet
- 48.6% of medium enterprises ordered goods/services over the Internet
- 27.9% of small enterprises ordered goods/services over the Internet

32.5% of enterprises having an Internet connection ordered, during 2010, goods/services over the Internet



**Graph 2.15. Did your enterprise order goods/services over the Internet?**

The results of the survey indicate that only 20.7% of enterprises having an Internet connection received, during 2010, orders (excluding manually-typed e-mails) over the Internet, which is an increase of 0.7%, 0.8% in relation to 2009 and 2008 respectively.

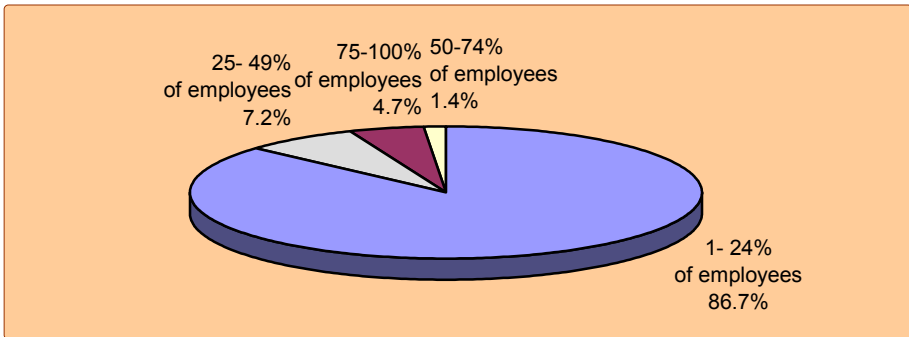
**Graph 2.16. Did your enterprise receive orders over the Internet?**

20.7% of enterprises having an Internet connection receive orders over the Internet in 2010

To the question about the percentage of the total turnover resulting from orders received over the Internet, the enterprises gave the following answers:

- „Less than 24%.“ (86.7% of enterprises)
- „More than 24%, and less than 50%.“ (7.2% of enterprises)
- „More than 50%, and less than 75%.“ (1.4% of enterprises)
- „75% and more.“ (4.7% of enterprises)

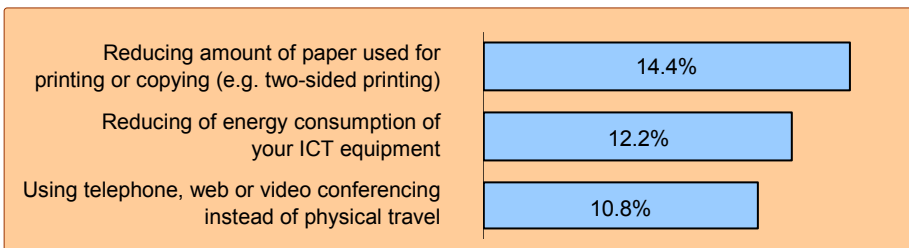
**Graph 2.17. Percentage of the total turnover in 2010 resulting from orders received over the Internet**



### 2.3.6. ICT and environmental impact

In the Republic of Serbia only 14.4% of enterprises had officially in place a policy related to the reduction of the amount of paper used in printing or copying, while 12.2% of enterprises had a policy related to the reduction of electricity consumption of their ICT equipment.

**Graph 2.18. Did your enterprise have in place, in 2010, a policy related to?**





## 2.4. SURVEY RESULTS

### MODULE 2.A: Main information on ICT system<sup>1)</sup>

#### A1: Does your enterprise use computers?

in percentages

Enterprise		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
		<b>YES</b>						
Activity	Manufacturing	95,7	100,0	100,0	94,3	95,6	100,0	96,2
	Electricity, gas and steam, water supply, sewerage and waste management	100,0	100,0	100,0	100,0	100,0	100,0	100,0
	Construction	97,0	100,0	100,0	98,1	100,0	100,0	99,4
	Wholesale and retail trade; repair of motor vehicles and motorcycles	98,8	100,0	100,0	96,8	100,0	100,0	99,0
	Transportation and storage	100,0	100,0	100,0	100,0	100,0	100,0	100,0
	Accommodation and food service activities	94,6	100,0	100,0	100,0	100,0	92,2	95,8
	Information and communication	96,5	100,0	100,0	100,0	100,0	95,1	97,1
	Financial and insurance activities	100,0	100,0	100,0	100,0	100,0	100,0	100,0
	Real estate activities; professional, scientific and technical activities	99,8	100,0	100,0	99,2	100,0	100,0	99,9
	Administrative and support activities; repair of computers	100,0	100,0	100,0	100,0	100,0	99,4	99,7
Total		98,0	100,0	100,0	96,5	98,4	99,3	98,1

#### A2: Percentage of persons employed who use computers (at least once a week)

in percentages

	Enterprises						
	Size class			Territory			Total
	Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
1- 24%	28,4	43,7	38,7	39,4	35,5	22,6	31,9
25- 49%	15,9	22,1	26,3	20,1	19,1	14,2	17,6
50-74%	15,8	11,6	12,0	18,2	15,5	11,3	14,8
75-100%	39,9	22,7	23,0	22,3	29,9	51,9	35,7

<sup>1)</sup> The results in tables A2 - A4 refer only to enterprises that gave positive answer to question A1 A1.

**A3: Did your enterprise use free of charge open source software  
in January 2011:**

**in percentages**

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Operating system (Linux)</b>								
Activity	Manufacturing	15,1	13,7	44,8	12,0	19,4	21,7	16,8
	Electricity, gas and steam, water supply, sewerage and waste management	13,3	32,7	54,5	31,8	11,5	51,4	27,0
	Construction	21,8	24,5	49,6	18,5	2,7	42,3	23,5
	Wholesale and retail trade; repair of motor vehicles and motorcycles	14,4	20,0	50,1	5,4	15,9	23,0	15,8
	Transportation and storage	5,1	18,3	42,2	4,8	3,4	19,1	9,0
	Accommodation and food service activities	17,1	28,9	38,1	8,1	2,2	33,3	20,0
	Information and communication	12,8	57,5	100,0	11,6	12,6	31,0	22,9
	Financial and insurance activities	42,9	100,0	63,6	50,0	100,0	53,3	57,9
	Real estate activities; professional, scientific and technical activities	24,4	30,2	45,8	13,3	25,4	28,9	25,6
	Administrative and support activities; repair of computers	20,2	22,6	29,6	12,7	14,9	26,6	21,5
Total	15,8	20,8	48,1	11,3	14,6	26,8	18,3	
<b>Internet browser software (Mozilla Firefox)</b>								
Activity	Manufacturing	61,9	57,1	81,3	62,8	56,9	66,3	62,0
	Electricity, gas and steam, water supply, sewerage and waste management	48,6	61,9	73,6	70,0	37,9	59,0	57,6
	Construction	55,1	59,9	88,5	48,7	71,4	54,3	57,5
	Wholesale and retail trade; repair of motor vehicles and motorcycles	51,5	75,5	88,7	43,7	67,6	56,2	55,3
	Transportation and storage	82,8	68,2	68,9	75,9	87,6	77,1	79,8
	Accommodation and food service activities	62,0	82,1	76,2	75,8	65,2	61,8	66,7
	Information and communication	83,1	89,4	76,5	88,0	75,8	85,7	83,8
	Financial and insurance activities	57,1	100,0	63,6	100,0	100,0	53,3	63,2
	Real estate activities; professional, scientific and technical activities	69,5	73,2	81,3	76,5	61,1	70,9	70,1
	Administrative and support activities; repair of computers	82,0	96,6	88,2	67,3	86,7	90,6	85,6
Total	61,0	65,9	81,3	59,3	64,9	64,6	62,9	

**A3: Did your enterprise use free of charge open source software  
in January 2011:**

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Openoffice – office software</b>								
Activity	Manufacturing	57,0	71,8	60,6	62,2	58,4	61,7	61,0
	Electricity, gas and steam, water supply, sewerage and waste management	70,0	87,3	51,2	75,2	80,6	59,0	75,3
	Construction	65,0	71,1	60,8	66,3	54,9	73,7	66,0
	Wholesale and retail trade; repair of motor vehicles and motorcycles	42,6	72,6	62,9	51,0	51,8	41,2	46,9
	Transportation and storage	57,3	82,0	81,4	62,1	65,6	60,1	62,5
	Accommodation and food service activities	77,3	73,6	76,2	90,1	58,2	75,1	76,5
	Information and communication	66,3	48,0	76,5	58,9	85,2	56,7	63,9
	Financial and insurance activities	14,3	-	54,5	50,0	50,0	33,3	36,8
	Real estate activities; professional, scientific and technical activities	56,2	73,9	58,3	90,6	85,2	42,8	58,7
	Administrative and support activities; repair of computers	46,4	78,2	60,9	63,9	65,1	47,1	54,2
Total	54,1	73,1	62,0	62,2	60,1	53,3	58,1	
<b>Web server (Apache, Tomcat)</b>								
Activity	Manufacturing	7,3	7,2	15,0	11,3	6,9	3,0	7,8
	Electricity, gas and steam, water supply, sewerage and waste management	-	14,3	24,0	8,5	2,4	34,7	9,3
	Construction		6,9	19,3	2,3	4,4	0,5	2,2
	Wholesale and retail trade; repair of motor vehicles and motorcycles	3,7	20,7	24,0	5,2	13,4	2,9	6,3
	Transportation and storage	6,1	8,5	22,5	1,4	19,4	2,8	7,2
	Accommodation and food service activities	1,7	6,1	61,9	5,3	7,1	1,8	3,8
	Information and communication	3,6	52,1	76,5	2,4	8,0	19,8	13,7
	Financial and insurance activities	-	100,0	63,6	50,0	100,0	33,3	42,1
	Real estate activities; professional, scientific and technical activities	3,5	38,2	18,8	6,6	12,2	8,3	8,7
	Administrative and support activities; repair of computers	20,4	37,1	29,3	14,5	14,9	31,3	24,6
Total	4,7	14,4	22,5	7,5	9,7	5,9	7,4	

**A3: Did your enterprise use free of charge open source software  
in January 2011:**

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Software ERP or CRM, (open ERP, Joomla, MySQL)</b>								
Activity	Manufacturing	5,6	8,1	12,4	5,7	6,5	8,4	6,7
	Electricity, gas and steam, water supply, sewerage and waste management	7,0	7,7	2,5	6,4	4,5	15,3	6,7
	Construction	-	10,9	2,2	1,3	2,6	2,6	2,2
	Wholesale and retail trade; repair of motor vehicles and motorcycles	4,0	17,6	26,3	4,6	11,8	4,1	6,2
	Transportation and storage	8,6	12,7	25,3	7,5	10,4	12,8	10,1
	Accommodation and food service activities		6,9	47,6	5,0		1,8	2,4
	Information and communication	3,6	64,7	52,9	5,3	11,6	19,0	14,6
	Financial and insurance activities	14,3	100,0	27,3	100,0	50,0	13,3	26,3
	Real estate activities; professional, scientific and technical activities	10,0	58,1	33,3	12,9	20,9	17,3	17,2
	Administrative and support activities; repair of computers	7,2	8,1	18,0	4,9	3,1	11,3	8,3
Total	4,8	15,1	16,2	5,4	8,5	8,3	7,4	
<b>Other software</b>								
Activity	Manufacturing	31,1	7,9	44,1	26,0	23,3	29,3	26,1
	Electricity, gas and steam, water supply, sewerage and waste management	58,9	69,0	63,2	63,2	65,4	62,5	63,9
	Construction	24,3	40,0	66,6	50,3	10,4	26,0	29,1
	Wholesale and retail trade; repair of motor vehicles and motorcycles	6,5	49,6	68,2	8,3	9,2	19,0	13,3
	Transportation and storage	11,5	48,0	41,7	18,9	24,3	14,0	18,9
	Accommodation and food service activities	12,5	58,8	28,6	15,6	34,8	22,8	22,8
	Information and communication	36,8	73,8	94,1	38,6	23,7	55,2	44,5
	Financial and insurance activities	57,1	-	54,5	50,0	50,0	53,3	52,6
	Real estate activities; professional, scientific and technical activities	16,5	58,3	64,6	22,8	25,0	22,6	23,1
	Administrative and support activities; repair of computers	18,2	33,3	64,7	10,8	24,6	30,0	25,3
Total	19,5	33,4	54,2	24,7	20,0	25,6	23,8	

**A4: In January 2011, did the persons employed in your enterprise have access to personal human resources services electronically**

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>YES</b>								
Activity	Manufacturing	17,6	18,7	49,4	19,4	15,5	26,0	20,1
	Electricity, gas and steam, water supply, sewerage and waste management	19,9	20,0	50,1	24,1	19,4	35,4	23,7
	Construction	21,0	23,7	53,2	22,5	26,3	20,8	22,9
	Wholesale and retail trade; repair of motor vehicles and motorcycles	25,0	24,1	49,1	11,6	21,9	36,7	25,3
	Transportation and storage	34,4	24,9	65,6	30,9	38,9	33,8	34,2
	Accommodation and food service activities	30,1	27,2	23,8	12,2	9,2	46,6	29,4
	Information and communication	24,2	42,0	58,8	15,3	14,0	38,5	28,2
	Financial and insurance activities	42,9	100,0	63,6	50,0	100,0	53,3	57,9
	Real estate activities; professional, scientific and technical activities	21,5	52,5	64,6	14,6	31,5	28,3	26,5
	Administrative and support activities; repair of computers	30,6	42,2	35,1	17,6	26,7	40,7	33,4
Total	23,0	24,4	50,7	18,2	21,4	32,1	24,5	



## MODULE 2.B: Use of the Internet<sup>1)</sup>

### B1: Does your enterprise have access to the Internet?

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>YES</b>								
Activity	Manufacturing	98,3	100,0	100,0	99,9	96,0	100,0	98,8
	Electricity, gas and steam, water supply, sewerage and waste management	92,8	100,0	100,0	97,1	95,5	100,0	96,9
	Construction	100,0	100,0	100,0	100,0	100,0	100,0	100,0
	Wholesale and retail trade; repair of motor vehicles and motorcycles	92,8	100,0	100,0	87,9	90,4	100,0	93,9
	Transportation and storage	97,0	100,0	100,0	100,0	92,0	100,0	97,6
	Accommodation and food service activities	88,7	98,1	100,0	84,3	100,0	91,6	90,9
	Information and communication	100,0	100,0	100,0	100,0	100,0	100,0	100,0
	Financial and insurance activities	100,0	100,0	100,0	100,0	100,0	100,0	100,0
	Real estate activities; professional, scientific and technical activities	98,9	100,0	100,0	100,0	94,8	100,0	99,1
	Administrative and support activities; repair of computers	100,0	100,0	100,0	100,0	100,0	100,0	100,0
Total		96,3	99,9	100,0	96,2	94,8	99,6	97,2

<sup>1)</sup> The results in tables B2 - B12 refer only to enterprise that gave positive answer to question B1.

**B2: Does your institution have one of the following types of external connection to the Internet?**

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Traditional modem</b>								
Activity	Manufacturing	2,4	2,5	42,8	7,2	4,8	2,3	5,2
	Electricity, gas and steam, water supply, sewerage and waste management	3,9	0,0	13,3	5,4	1,3	0,0	3,3
	Construction	7,2	15,1	28,7	1,1	9,6	16,4	9,7
	Wholesale and retail trade; repair of motor vehicles and motorcycles	0,0	6,0	13,3	1,9	1,8	0,3	1,1
	Transportation and storage	0,0	12,0	0,0	3,4	0,0	2,2	2,0
	Accommodation and food service activities	0,0	7,7	0,0	3,3	4,3	0,0	1,8
	Information and communication	0,0	10,3	0,0	1,2	2,7	1,2	1,5
	Financial and insurance activities	0,0	10,0	0,0	0,0	35,0	0,0	5,3
	Real estate activities; professional, scientific and technical activities	10,5	20,7	54,2	12,9	17,4	11,2	12,6
	Administrative and support activities; repair of computers	2,2	56,5	13,8	26,3	21,5	8,1	14,3
Total	2,6	7,9	28,2	5,2	5,1	4,4	4,9	
<b>DSL (xDSL, ADSL, SDSL, etc.) connection</b>								
Activity	Manf	71,5	73,6	76,5	76,2	75,8	63,1	72,4
	Electricity, gas and steam, water supply, sewerage and waste management	81,6	82,6	62,6	82,8	80,6	61,8	79,6
	Construction	64,8	89,1	67,3	92,0	65,9	54,7	69,5
	Wholesale and retail trade; repair of motor vehicles and motorcycles	79,8	66,6	48,8	80,2	79,7	74,4	77,4
	Transportation and storage	88,4	74,1	56,1	83,7	97,3	74,4	84,5
	Accommodation and food service activities	86,6	77,6	28,6	88,9	83,7	80,0	83,2
	Information and communication	81,1	57,1	52,9	75,5	72,2	78,6	76,5
	Financial and insurance activities	42,9	100,0	81,8	100,0	100,0	60,0	68,4
	Real estate activities; professional, scientific and technical activities	75,9	78,7	62,5	86,5	87,2	70,4	76,1
	Administrative and support activities; repair of computers	64,7	82,1	80,4	85,5	86,7	58,5	69,7
Total	75,8	74,7	68,1	80,5	78,2	68,8	75,2	

**B2: Does your institution have one of the following types of external connection to the Internet?**

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Cable Internet</b>								
Activity	Manufacturing	27,4	28,6	29,8	18,9	30,9	39,3	27,9
	Electricity, gas and steam, water supply, sewerage and waste management	18,4	17,7	29,6	14,5	27,8	18,8	19,5
	Construction	15,9	10,9	49,4	3,6	12,5	29,1	16,4
	Wholesale and retail trade; repair of motor vehicles and motorcycles	19,5	38,0	58,4	8,5	28,8	28,4	22,8
	Transportation and storage	11,6	32,0	48,9	19,5	5,3	23,4	16,8
	Accommodation and food service activities	13,4	51,1	47,6	20,5	16,3	26,9	23,0
	Information and communication	14,5	44,1	58,8	22,0	18,4	21,0	20,6
	Financial and insurance activities	71,4	100,0	63,6	100,0	100,0	60,0	68,4
	Real estate activities; professional, scientific and technical activities	24,9	38,6	54,2	15,9	19,3	32,4	27,3
	Administrative and support activities; repair of computers	20,8	19,6	23,6	16,5	14,9	24,4	20,8
Total	21,0	29,6	38,9	14,7	24,3	30,6	23,6	
<b>Mobile „broadband“ connection via 3G modem or 3G devices</b>								
Activity	Manufacturing	6,6	4,5	24,8	3,4	10,5	10,6	7,3
	Electricity, gas and steam, water supply, sewerage and waste management	0,0	15,0	56,7	14,4	4,9	40,3	14,1
	Construction	10,2	30,0	46,3	6,6	23,5	16,8	15,5
	Wholesale and retail trade; repair of motor vehicles and motorcycles	5,5	26,9	65,3	19,2	4,1	6,9	9,7
	Transportation and storage	0,0	19,8	53,6	4,2	4,8	8,7	5,9
	Accommodation and food service activities	22,4	13,7	38,1	12,2	2,2	32,5	20,7
	Information and communication	10,1	52,0	100,0	14,0	7,2	27,0	19,8
	Financial and insurance activities	14,3	100,0	81,8	50,0	100,0	53,3	57,9
	Real estate activities; professional, scientific and technical activities	11,5	61,1	45,8	13,2	3,7	24,7	19,1
	Administrative and support activities; repair of computers	4,3	27,3	42,7	19,2	3,1	13,9	12,4
Total	7,2	18,9	42,1	9,2	9,0	14,2	11,2	

**B2: Does your institution have one of the following types of external connection to the Internet?**

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Other mobile connection (e.g. analogue mobile phone, GSM, GPRS, EDGE)</b>								
Activity	Manufacturing	10,5	3,6	20,8	10,6	9,7	7,3	9,4
	Electricity, gas and steam, water supply, sewerage and waste management	0,0	23,5	22,3	14,3	9,9	20,8	13,6
	Construction	2,0	22,3	34,3	10,5	1,8	8,6	7,3
	Wholesale and retail trade; repair of motor vehicles and motorcycles	0,9	13,0	63,7	3,4	0,6	5,8	3,8
	Transportation and storage	15,5	4,4	32,8	7,5	37,4	2,8	14,4
	Accommodation and food service activities	26,2	8,7	38,1	9,6	14,1	32,5	22,4
	Information and communication	32,0	35,4	23,5	31,8	29,6	33,3	32,1
	Financial and insurance activities	28,6	100,0	45,5	50,0	100,0	33,3	42,1
	Real estate activities; professional, scientific and technical activities	29,6	38,0	16,7	18,3	22,1	36,2	30,6
	Administrative and support activities; repair of computers	7,2	33,7	29,6	4,9	3,1	21,9	14,6
Total	9,7	12,9	29,7	9,6	9,6	13,8	11,3	

**B3: What was the maximum contracted download speed of the Internet connection of your enterprise, in January 2011?**

in percentages

	Enterprises						Total
	Size class			Territory			
	Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
Less than 2 Mbit/s	24,0	14,4	11,0	28,1	22,3	13,2	20,7
At least 2, but less than 10 Mbit/s	50,2	40,0	59,1	36,9	50,5	55,9	48,0
At least 10, but less than 30 Mbit/s	10,0	30,2	21,1	18,0	12,6	16,5	15,9
At least 30, but less than 100 Mbit/s	2,2	11,2	4,2	5,9	2,6	5,0	4,6
At least 100 Mbit/s	13,7	4,1	4,6	11,1	12,1	9,3	10,7

**B4: Percentage of persons employed who used the Internet**

in percentages

	Enterprises						Total
	Size class			Territory			
	Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
1- 24%	34,7	58,9	48,0	52,4	48,1	24,6	40,2
25- 49%	16,1	16,5	28,2	17,5	15,6	16,9	16,8
50-74%	15,1	7,8	9,0	12,2	16,0	12,6	13,3
75-100%	34,1	16,8	14,8	17,8	20,3	46,0	29,7

**B5: Percentage of persons employed who were provided with a portable device with 3G technology for accessing the Internet**

in percentages

	Enterprises						Total
	Size class			Territory			
	Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
1- 24%	71,8	79,3	88,4	71,8	82,0	72,0	74,2
25- 49%	4,1	6,1	3,7	9,5	0,1	3,3	4,5
50-74%	21,8	5,6	6,3	18,4	13,2	19,8	17,9
75-100%	2,3	8,9	1,7	0,2	4,7	4,9	3,5

**B6: Does your enterprise have a Website?**

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>YES</b>								
Activity	Manufacturing	77,5	84,5	88,3	77,6	81,2	82,7	80,0
	Electricity, gas and steam, water supply, sewerage and waste management	39,9	60,1	79,3	44,9	59,5	81,3	54,1
	Construction	49,2	70,9	90,3	28,2	40,2	86,7	55,1
	Wholesale and retail trade; repair of motor vehicles and motorcycles	52,4	69,3	86,3	41,2	54,8	64,3	55,4
	Transportation and storage	40,2	79,8	100,0	36,6	48,6	66,4	49,7
	Accommodation and food service activities	78,5	100,0	100,0	69,9	85,9	90,8	84,0
	Information and communication	82,7	85,2	100,0	71,3	85,2	87,3	83,7
	Financial and insurance activities	100,0	100,0	100,0	100,0	100,0	100,0	100,0
	Real estate activities; professional, scientific and technical activities	73,9	95,3	100,0	70,8	65,2	82,2	77,3
	Administrative and support activities; repair of computers	75,9	83,6	80,4	89,4	61,5	80,6	77,9
Total	63,2	79,3	89,0	58,8	64,8	76,8	67,6	

**B7: Does your enterprise provide via its Website:**(your enterprise as Internet service provider)<sup>1)</sup>

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Online ordering or reservation or booking of goods/services?</b>								
Activity	Manufacturing	23,6	9,5	8,5	15,4	11,4	30,7	18,6
	Electricity, gas and steam, water supply, sewerage and waste management	9,7	0,0	0,0	0,0	7,9	0,0	3,0
	Construction	23,5	19,6	0,0	0,0	25,8	24,5	20,9
	Wholesale and retail trade; repair of motor vehicles and motorcycles	33,7	25,0	25,9	25,8	23,4	38,1	31,9
	Transportation and storage	22,1	31,4	4,2	9,3	52,1	13,7	23,0
	Accommodation and food service activities	57,1	37,1	38,1	34,3	56,3	56,0	51,0
	Information and communication	31,9	44,1	47,1	30,0	31,5	36,8	34,4
	Financial and insurance activities	28,6	0,0	63,6	0,0	50,0	53,3	47,4
	Real estate activities; professional, scientific and technical activities	13,6	16,9	29,2	18,4	28,1	10,7	14,5
	Administrative and support activities; repair of computers	36,6	23,4	9,9	34,6	38,3	28,1	31,3
Total	27,2	17,2	12,9	17,1	21,3	29,8	24,0	
<b>Privacy policy statement, privacy seal or certification related to Website safety</b>								
Activity	Manufacturing	36,6	55,1	63,7	44,4	34,4	51,5	43,6
	Electricity, gas and steam, water supply, sewerage and waste management	44,2	33,0	35,4	40,3	37,1	27,4	36,9
	Construction	75,3	51,1	42,6	55,3	26,6	83,4	67,0
	Wholesale and retail trade; repair of motor vehicles and motorcycles	60,7	39,3	59,6	44,3	30,9	73,4	57,0
	Transportation and storage	49,4	35,4	58,6	19,7	79,9	42,9	46,4
	Accommodation and food service activities	59,3	30,2	38,1	37,3	51,3	56,0	50,7
	Information and communication	69,8	69,6	52,9	70,7	64,2	70,5	69,0
	Financial and insurance activities	42,9	0,0	72,7	0,0	50,0	66,7	57,9
	Real estate activities; professional, scientific and technical activities	72,4	43,7	52,1	82,2	81,9	60,3	67,0
	Administrative and support activities; repair of computers	65,1	88,3	46,7	57,7	75,8	70,1	68,6
Total	54,5	49,3	56,8	46,4	41,1	64,6	53,4	

<sup>1)</sup> The result refer only to enterprises that gave positive answer to question B6.

**B7: Does your enterprise provide via its Website:**  
(your enterprise as Internet service provider)<sup>1)</sup>

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Product catalogues or price lists access?</b>								
Activity	Manufacturing	72,0	87,0	81,4	75,1	80,5	75,6	76,8
	Electricity, gas and steam, water supply, sewerage and waste management	19,4	33,5	47,2	38,0	39,1	0,0	31,8
	Construction	44,2	62,1	45,4	84,7	39,3	42,7	48,7
	Wholesale and retail trade; repair of motor vehicles and motorcycles	68,3	58,7	57,1	57,3	51,1	76,5	66,3
	Transportation and storage	59,6	47,7	44,2	72,4	71,2	33,0	54,9
	Accommodation and food service activities	89,4	72,5	76,2	90,2	89,2	80,2	84,4
	Information and communication	70,3	79,4	58,8	77,2	52,0	77,3	71,2
	Financial and insurance activities	57,1	100,0	81,8	100,0	100,0	66,7	73,7
	Real estate activities; professional, scientific and technical activities	49,4	47,2	35,4	56,2	60,6	44,5	48,7
	Administrative and support activities; repair of computers	68,9	57,2	31,8	74,8	92,5	50,5	63,0
Total	65,6	70,3	65,0	70,7	66,7	64,1	66,7	
<b>Possibility for visitors to customise or design the products</b>								
Activity	Manufacturing	64,7	81,7	73,6	72,9	61,1	74,2	69,9
	Electricity, gas and steam, water supply, sewerage and waste management	7,8	14,1	40,9	13,1	20,7	20,5	17,3
	Construction	44,2	21,3	75,3	72,3	33,4	35,2	40,8
	Wholesale and retail trade; repair of motor vehicles and motorcycles	53,9	27,5	82,1	40,4	44,3	56,9	50,3
	Transportation and storage	71,2	21,2	56,9	22,8	81,4	62,3	56,1
	Accommodation and food service activities	91,1	45,7	52,4	60,8	76,0	84,9	77,4
	Information and communication	95,6	75,9	35,3	97,1	94,6	85,9	89,9
	Financial and insurance activities	85,7	0,0	81,8	100,0	50,0	80,0	78,9
	Real estate activities; professional, scientific and technical activities	86,2	71,5	60,4	87,0	95,7	79,6	83,1
	Administrative and support activities; repair of computers	81,0	82,7	51,9	97,8	100,0	66,3	78,8
Total	65,4	57,3	68,2	64,6	59,7	65,3	63,7	

<sup>1)</sup> The results refer only to enterprises that gave positive answer to question B6.



**B7: Does your enterprise provide via its Website:**  
(your enterprise as Internet service provider)<sup>1)</sup>

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Online payment?</b>								
Activity	Manufacturing	14,9	0,0	8,4	7,7	11,2	13,6	10,4
	Electricity, gas and steam, water supply, sewerage and waste management	25,3	0,0	3,2	1,3	7,9	27,4	8,3
	Construction	17,6	10,8	14,2	4,2	12,7	19,5	15,7
	Wholesale and retail trade; repair of motor vehicles and motorcycles	16,9	7,3	0,0	1,4	19,4	17,8	14,7
	Transportation and storage	14,3	8,9	0,0	3,5	17,9	12,8	11,5
	Accommodation and food service activities	21,2	21,2	0,0	0,0	21,5	28,9	20,7
	Information and communication	7,5	15,7	47,1	15,2	3,1	12,3	10,5
	Financial and insurance activities	0,0	0,0	36,4	0,0	0,0	26,7	21,1
	Real estate activities; professional, scientific and technical activities	2,4	0,0	8,3	2,3	8,4	0,7	2,1
	Administrative and support activities; repair of computers	0,0	0,0	7,2	0,0	0,0	1,0	0,6
Total	13,7	4,3	9,1	5,6	12,9	14,0	11,2	
<b>Personalised content in the Website for regular/repeated visitors?</b>								
Activity	Manufacturing	85,6	97,8	76,4	91,0	87,4	84,8	88,2
	Electricity, gas and steam, water supply, sewerage and waste management	90,3	100,0	95,9	100,0	90,0	100,0	96,3
	Construction	100,0	78,4	66,6	95,8	70,0	98,8	92,3
	Wholesale and retail trade; repair of motor vehicles and motorcycles	75,5	31,6	72,4	75,4	80,0	59,7	67,9
	Transportation and storage	93,5	8,9	85,0	61,4	75,9	70,8	69,5
	Accommodation and food service activities	100,0	22,9	76,2	70,1	100,0	73,0	77,9
	Information and communication	100,0	94,7	52,9	100,0	98,9	95,5	97,0
	Financial and insurance activities	57,1	0,0	81,8	50,0	50,0	73,3	68,4
	Real estate activities; professional, scientific and technical activities	100,0	98,4	50,0	97,3	100,0	98,9	98,8
	Administrative and support activities; repair of computers	81,0	90,3	64,1	97,8	100,0	70,8	81,5
Total	87,4	76,1	74,8	87,7	85,8	80,6	84,0	

<sup>1)</sup> The results refer only to enterprises that gave positive answer to question B6.

**B7: Does your enterprise provide via its Website:**  
(your enterprise as Internet service provider)<sup>1)</sup>

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Advertisement to open job positions or online job application?</b>								
Activity	Manufacturing	16,2	14,5	28,6	9,4	18,4	25,9	16,7
	Electricity, gas and steam, water supply, sewerage and waste management	27,2	6,3	0,0	7,1	15,8	13,7	11,5
	Construction	8,8	24,2	31,1	24,2	7,1	14,0	14,2
	Wholesale and retail trade; repair of motor vehicles and motorcycles	16,9	29,2	49,1	3,9	27,0	23,2	20,1
	Transportation and storage	35,2	34,2	47,2	29,6	34,2	41,5	36,1
	Accommodation and food service activities	8,2	10,0	14,3	11,4	2,5	10,1	8,8
	Information and communication	33,6	40,5	23,5	18,1	28,4	40,9	34,1
	Financial and insurance activities	14,3	100,0	63,6	50,0	100,0	40,0	47,4
	Real estate activities; professional, scientific and technical activities	20,7	16,1	37,5	9,4	39,3	18,8	20,2
	Administrative and support activities; repair of computers	27,3	56,1	24,3	36,8	2,5	41,2	33,4
Total	18,2	20,7	31,0	11,0	21,1	24,3	19,6	

<sup>1)</sup> The results refer only to enterprises that gave positive answer to question B6.

**B8: Does your enterprise use Internet services of public authorities to:**  
in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Obtain information</b>								
Activity	Manufacturing	83,9	95,6	75,1	78,1	95,8	90,0	86,3
	Electricity, gas and steam, water supply, sewerage and waste management	77,2	100,0	55,8	84,0	81,0	100,0	84,8
	Construction	65,9	93,1	76,1	81,6	58,1	73,4	71,6
	Wholesale and retail trade; repair of motor vehicles and motorcycles	62,0	72,4	71,7	60,8	42,8	76,1	63,6
	Transportation and storage	72,4	52,5	83,9	60,5	63,3	85,6	69,5
	Accommodation and food service activities	66,2	76,4	61,9	65,7	51,1	76,7	68,5
	Information and communication	79,5	86,4	94,1	89,2	74,8	81,0	81,1
	Financial and insurance activities	71,4	100,0	90,9	50,0	100,0	86,7	84,2
	Real estate activities; professional, scientific and technical activities	81,7	75,1	72,9	82,9	88,1	78,0	80,6
	Administrative and support activities; repair of computers	92,8	47,8	78,0	83,3	82,1	82,0	82,3
Total	73,3	85,3	74,6	73,5	71,3	80,5	75,8	
<b>Obtain forms, e.g. tax declaration</b>								
Activity	Manufacturing	71,2	80,0	81,0	65,0	85,5	77,4	74,1
	Electricity, gas and steam, water supply, sewerage and waste management	81,1	96,5	77,9	88,5	82,2	100,0	87,7
	Construction	74,1	93,1	72,6	76,4	73,7	81,5	77,7
	Wholesale and retail trade; repair of motor vehicles and motorcycles	64,1	61,3	77,9	65,4	61,0	64,7	64,0
	Transportation and storage	64,0	59,5	82,2	57,8	64,9	70,8	64,0
	Accommodation and food service activities	63,7	50,8	85,7	50,3	29,9	79,0	61,1
	Information and communication	59,1	79,1	94,1	76,3	35,8	70,6	63,5
	Financial and insurance activities	71,4	100,0	90,9	50,0	100,0	86,7	84,2
	Real estate activities; professional, scientific and technical activities	70,7	81,8	72,9	83,2	82,6	66,7	72,3
	Administrative and support activities; repair of computers	69,6	64,0	84,0	73,7	45,1	77,9	69,7
Total	68,1	76,3	80,3	67,7	71,4	71,8	70,3	

**B8: Does your enterprise use Internet services of public authorities to:**  
in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Return filled in forms electronically</b>								
Activity	Manufacturing	45,2	55,8	67,9	39,9	53,2	61,2	49,5
	Electricity, gas and steam, water supply, sewerage and waste management	55,1	85,4	56,6	62,5	72,8	88,9	69,1
	Construction	41,4	67,1	51,2	39,5	36,4	59,8	46,8
	Wholesale and retail trade; repair of motor vehicles and motorcycles	25,9	27,2	55,6	27,4	26,4	26,4	26,7
	Transportation and storage	38,1	17,8	63,6	30,2	42,2	37,0	35,8
	Accommodation and food service activities	30,7	28,2	85,7	15,5	11,4	47,5	31,3
	Information and communication	37,0	65,8	82,4	44,4	35,8	45,6	43,1
	Financial and insurance activities	28,6	100,0	90,9	50,0	100,0	66,7	68,4
	Real estate activities; professional, scientific and technical activities	57,9	60,4	72,9	71,9	72,2	51,3	58,5
	Administrative and support activities; repair of computers	50,3	34,1	54,4	35,1	1,5	68,4	47,3
Total	38,8	50,4	64,2	38,0	42,0	46,1	42,3	

**B9: Did your enterprise use the Internet to manage the following administrative procedures electronically<sup>1)</sup>**

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Payment of social contributions for the persons employed</b>								
Activity	Manufacturing	56,9	82,8	65,8	53,4	65,5	77,3	65,2
	Electricity, gas and steam, water supply, sewerage and waste management	58,6	62,4	57,5	62,0	51,5	78,1	60,6
	Construction	45,4	62,8	91,8	19,5	64,5	64,0	52,4
	Wholesale and retail trade; repair of motor vehicles and motorcycles	71,9	85,8	93,0	20,8	100,0	95,4	74,8
	Transportation and storage	44,9	76,6	79,0	37,2	53,7	60,1	50,4
	Accommodation and food service activities	68,8	93,0	44,4	34,6	100,0	76,5	72,5
	Information and communication	44,2	47,4	100,0	18,7	51,3	58,3	49,1
	Financial and insurance activities	50,0	100,0	60,0	100,0	100,0	50,0	61,5
	Real estate activities; professional, scientific and technical activities	83,8	45,8	85,7	76,4	83,5	76,9	78,2
	Administrative and support activities; repair of computers	71,4	90,1	71,4	88,8	0,0	72,5	74,1
Total	61,7	74,1	72,9	45,1	70,9	76,5	65,5	
<b>Payment of profit tax</b>								
Activity	Manufacturing	54,7	87,7	68,9	52,1	66,6	78,8	65,6
	Electricity, gas and steam, water supply, sewerage and waste management	51,6	62,4	53,1	61,1	45,0	78,1	57,8
	Construction	45,4	74,2	90,9	19,5	78,6	64,0	55,5
	Wholesale and retail trade; repair of motor vehicles and motorcycles	52,9	94,7	69,5	32,0	19,4	97,4	59,4
	Transportation and storage	43,9	76,6	56,8	13,5	53,7	75,5	47,7
	Accommodation and food service activities	68,8	93,0	44,4	34,6	100,0	76,5	72,5
	Information and communication	51,7	41,0	100,0	10,6	43,9	69,6	52,8
	Financial and insurance activities	50,0	100,0	70,0	100,0	100,0	60,0	69,2
	Real estate activities; professional, scientific and technical activities	76,1	48,2	85,7	76,4	82,2	66,9	72,2
	Administrative and support activities; repair of computers	82,7	90,1	60,4	63,7	0,0	85,0	81,6
Total	56,4	78,9	69,9	44,4	58,4	78,0	62,7	

<sup>1)</sup> The results refer only to enterprises that gave positive answer to question B8.

**B9: Did your enterprise use the Internet to manage the following administrative procedures electronically<sup>1)</sup>**

**in percentages**

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Payment of VAT</b>								
Activity	Manufacturing	51,3	87,7	74,6	47,3	66,6	79,3	64,0
	Electricity, gas and steam, water supply, sewerage and waste management	51,6	62,4	53,1	61,1	45,0	78,1	57,8
	Construction	45,4	74,2	96,1	19,5	78,6	64,4	55,7
	Wholesale and retail trade; repair of motor vehicles and motorcycles	64,8	80,5	89,0	32,0	59,7	95,0	68,1
	Transportation and storage	43,9	76,6	63,3	13,5	53,7	77,1	48,3
	Accommodation and food service activities	68,8	93,0	44,4	34,6	100,0	76,5	72,5
	Information and communication	51,7	34,1	85,7	10,6	43,9	65,2	50,2
	Financial and insurance activities	50,0	100,0	70,0	100,0	100,0	60,0	69,2
	Real estate activities; professional, scientific and technical activities	78,0	58,9	85,7	78,5	88,5	69,4	75,4
	Administrative and support activities; repair of computers	71,4	95,0	71,4	94,4	0,0	72,5	74,9
Total	57,7	77,9	75,7	42,8	65,8	77,1	63,8	
<b>Payment of customs/excise</b>								
Activity	Manufacturing	44,3	74,1	61,4	42,1	51,8	69,9	54,5
	Electricity, gas and steam, water supply, sewerage and waste management	39,4	59,1	16,0	59,3	31,4	50,8	48,0
	Construction	17,5	57,9	80,1	16,3	47,6	32,5	31,6
	Wholesale and retail trade; repair of motor vehicles and motorcycles	25,7	80,5	76,8	18,3	17,9	55,5	35,6
	Transportation and storage	60,0	52,0	42,4	31,4	68,0	73,9	57,9
	Accommodation and food service activities	6,2	55,2	27,8	16,9	100,0	10,3	17,8
	Information and communication	22,4	13,8	57,1	10,6	36,4	22,6	23,0
	Financial and insurance activities	50,0	0,0	10,0	0,0	50,0	10,0	15,4
	Real estate activities; professional, scientific and technical activities	46,0	41,9	37,1	32,3	33,0	54,7	45,3
	Administrative and support activities; repair of computers	18,2	71,3	42,4	22,3	0,0	29,7	28,5
Total	35,4	65,1	56,1	33,8	43,3	51,4	44,0	

<sup>1)</sup> The results refer only to enterprises that gave positive answer to question B8.

**B10: Do you consider any of the following reasons as limiting your electronic interaction with public authorities?<sup>1)</sup>**

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Concerns related to data confidentiality and security</b>								
Activity	Manufacturing	67,6	89,0	60,6	72,3	80,2	65,4	72,6
	Electricity, gas and steam, water supply, sewerage and waste management	55,7	93,0	84,5	82,2	66,8	77,8	76,4
	Construction	44,5	70,8	52,1	60,2	47,2	43,8	49,9
	Wholesale and retail trade; repair of motor vehicles and motorcycles	49,7	71,7	67,0	69,3	31,3	54,6	53,1
	Transportation and storage	50,9	71,4	66,4	66,9	55,1	41,0	55,1
	Accommodation and food service activities	60,6	64,4	38,1	55,1	41,3	71,8	61,0
	Information and communication	72,1	39,6	88,2	65,1	82,6	62,7	67,9
	Financial and insurance activities	71,4	100,0	54,5	100,0	50,0	60,0	63,2
	Real estate activities; professional, scientific and technical activities	77,4	60,7	66,7	74,2	74,3	75,2	74,9
	Administrative and support activities; repair of computers	67,5	59,5	48,9	69,8	95,4	50,8	64,3
Total	58,9	78,1	62,9	69,8	59,8	59,0	62,9	
<b>Electronic procedures are too complicated or too time consuming</b>								
Activity	Manufacturing	15,2	2,8	18,0	18,5	4,7	9,6	12,2
	Electricity, gas and steam, water supply, sewerage and waste management	11,4	0,0	32,1	4,0	13,1	19,4	8,9
	Construction	26,2	14,0	29,3	47,9	4,4	19,4	24,0
	Wholesale and retail trade; repair of motor vehicles and motorcycles	18,5	4,6	23,9	12,3	13,2	21,2	16,7
	Transportation and storage	17,3	25,6	19,4	6,3	25,3	28,2	18,8
	Accommodation and food service activities	18,6	12,0	23,8	8,5	23,4	19,4	17,1
	Information and communication	26,9	6,9	11,8	9,3	26,9	26,6	23,3
	Financial and insurance activities	14,3	0,0	18,2	0,0	0,0	20,0	15,8
	Real estate activities; professional, scientific and technical activities	24,5	39,4	8,3	16,8	19,3	30,8	26,4
	Administrative and support activities; repair of computers	21,6	26,0	17,8	7,8	3,1	33,7	22,2
Total	19,2	8,6	20,8	17,7	10,8	20,7	17,2	

<sup>1)</sup> The results refer only to enterprises that gave a positive answer to question B8.

**B10: Do you consider any of the following reasons as limiting your electronic interaction with public authorities?<sup>1)</sup>**

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Electronic procedures still require exchange of paper mail or personal visits</b>								
Activity	Manufacturing	56,8	44,3	64,1	59,5	44,9	54,6	54,1
	Electricity, gas and steam, water supply, sewerage and waste management	60,8	18,9	56,1	29,5	63,2	30,6	41,1
	Construction	46,3	53,6	77,3	45,2	49,7	51,6	49,0
	Wholesale and retail trade; repair of motor vehicles and motorcycles	49,6	68,7	66,5	52,3	77,9	39,5	52,5
	Transportation and storage	55,3	91,0	77,2	66,4	46,8	71,1	62,4
	Accommodation and food service activities	53,5	91,3	61,9	66,2	58,2	62,3	62,5
	Information and communication	65,2	53,2	41,2	69,7	78,9	53,2	62,5
	Financial and insurance activities	28,6	0,0	72,7	50,0	50,0	53,3	52,6
	Real estate activities; professional, scientific and technical activities	75,1	62,6	47,9	71,1	66,0	75,2	72,9
	Administrative and support activities; repair of computers	58,3	68,4	52,9	65,1	51,8	61,4	59,9
Total	55,2	54,6	64,3	56,4	58,2	53,1	55,5	
<b>Not aware of availability of Internet services of public authorities</b>								
Activity	Manufacturing	47,6	6,2	41,0	42,4	18,5	45,4	36,6
	Electricity, gas and steam, water supply, sewerage and waste management	57,0	0,0	35,2	28,6	30,7	19,4	28,3
	Construction	74,5	8,2	46,3	55,1	65,2	61,3	60,5
	Wholesale and retail trade; repair of motor vehicles and motorcycles	75,9	17,3	50,0	68,8	85,7	56,9	67,3
	Transportation and storage	60,9	24,4	45,3	52,8	44,9	63,1	53,9
	Accommodation and food service activities	62,4	45,8	61,9	60,0	77,2	50,5	58,5
	Information and communication	55,4	69,9	23,5	41,4	32,2	71,4	56,3
	Financial and insurance activities	14,3	0,0	36,4	0,0	0,0	33,3	26,3
	Real estate activities; professional, scientific and technical activities	52,8	38,7	37,5	36,2	38,7	57,6	50,6
	Administrative and support activities; repair of computers	31,0	33,3	57,3	22,4	12,8	45,1	33,8
Total	61,5	15,3	42,8	49,9	47,6	55,0	51,4	

<sup>1)</sup> The results refer only to enterprises that gave a positive answer to question B8.



**B11: During 2010, did your enterprise used the Internet for accessing tender documents in electronic procurement systems of public authorities ?**

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>YES</b>								
Activity	Manufacturing	23,5	28,3	37,2	18,8	35,9	26,5	25,7
	Electricity, gas and steam, water supply, sewerage and waste management	58,4	59,3	57,0	63,4	43,4	81,3	58,6
	Construction	59,6	81,0	61,4	70,9	54,6	64,9	63,8
	Wholesale and retail trade; repair of motor vehicles and motorcycles	31,7	34,4	44,9	27,0	26,1	38,8	32,3
	Transportation and storage	22,9	36,1	64,7	25,4	17,3	37,6	27,1
	Accommodation and food service activities	17,9	23,8	0,0	19,6	9,2	22,3	18,9
	Information and communication	26,9	38,1	70,6	40,0	33,2	25,8	30,3
	Financial and insurance activities	14,3	0,0	27,3	0,0	50,0	20,0	21,1
	Real estate activities; professional, scientific and technical activities	28,5	56,5	54,2	45,0	37,7	28,3	32,9
	Administrative and support activities; repair of computers	49,4	49,5	70,7	48,6	45,1	54,4	51,3
Total	31,8	40,0	46,6	30,8	34,2	37,0	34,2	

**B12: During 2010, did your enterprise use the Internet for offering goods and services in public authorities' electronic procurement systems?**

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>In the Republic of Serbia</b>								
Activity	Manufacturing	20,6	23,2	23,1	17,6	30,8	18,3	21,4
	Electricity, gas and steam, water supply, sewerage and waste management	58,4	66,6	60,2	69,5	44,6	81,3	62,4
	Construction	47,0	81,0	42,5	60,2	30,3	64,4	53,3
	Wholesale and retail trade; repair of motor vehicles and motorcycles	15,3	25,2	42,3	19,6	36,7	5,7	17,2
	Transportation and storage	18,0	36,1	53,6	18,8	34,6	17,2	22,7
	Accommodation and food service activities	7,0	9,3	0,0	16,3	14,1	0,0	7,4
	Information and communication	31,4	20,5	64,7	28,1	26,9	33,7	31,0
	Financial and insurance activities	14,3	0,0	9,1	0,0	0,0	13,3	10,5
	Real estate activities; professional, scientific and technical activities	12,5	31,9	45,8	13,0	12,8	17,2	15,7
	Administrative and support activities; repair of computers	23,7	37,1	54,7	32,2	36,9	25,3	29,1
Total	21,8	33,7	35,5	25,3	31,7	20,0	24,8	
<b>In EU countries</b>								
Activity	Manufacturing	4,3	6,4	9,3	2,8	9,9	4,3	5,2
	Electricity, gas and steam, water supply, sewerage and waste management	3,9	7,6	20,8	6,4	6,0	19,4	7,8
	Construction	0,0	36,4	11,2	4,1	0,9	14,8	7,5
	Wholesale and retail trade; repair of motor vehicles and motorcycles	3,1	0,0	16,1	0,0	11,1	0,5	2,9
	Transportation and storage	9,2	11,5	16,1	7,8	20,0	3,8	9,9
	Accommodation and food service activities	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	Information and communication	3,6	11,7	11,8	2,1	0,0	8,3	5,1
	Financial and insurance activities	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	Real estate activities; professional, scientific and technical activities	4,4	2,5	18,8	2,0	0,0	6,1	4,3
	Administrative and support activities; repair of computers	14,4	0,0	4,0	0,0	0,0	17,7	10,5
Total	3,9	8,3	11,4	2,6	8,2	5,2	5,1	

## MODULE 2.C: ELECTRONIC DATA TRANSMISSION<sup>1)</sup>

### C1: In January 2011, did your enterprise use electronic data transmission?

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>YES</b>								
Activity	Manufacturing	22,0	30,0	49,9	23,9	18,7	36,7	25,9
	Electricity, gas and steam, water supply, sewerage and waste management	12,7	74,1	62,4	52,4	28,2	70,1	46,0
	Construction	15,7	62,3	30,7	32,3	16,4	26,1	25,3
	Wholesale and retail trade; repair of motor vehicles and motorcycles	34,2	53,9	73,2	31,5	36,7	42,0	37,5
	Transportation and storage	31,2	51,0	81,4	26,9	44,7	41,0	36,7
	Accommodation and food service activities	42,0	31,1	38,1	26,2	65,2	38,2	39,5
	Information and communication	53,5	53,2	82,4	49,5	30,5	66,3	54,5
	Financial and insurance activities	71,4	100,0	72,7	50,0	100,0	73,3	73,7
	Real estate activities; professional, scientific and technical activities	42,8	61,2	43,8	36,3	27,8	52,8	45,4
	Administrative and support activities; repair of computers	25,7	62,0	37,1	58,2	38,5	25,3	34,1
Total	29,8	45,7	54,5	29,9	28,3	41,4	34,0	

<sup>1)</sup> The results refer only to enterprises that gave a positive answer to question A1.

**C2: Is electronic data transmission used for the following purposes?**<sup>1)</sup>

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Sending payment instructions to financial institutions</b>								
Activity	Manufacturing	64,4	70,6	57,3	59,8	68,8	69,3	65,3
	Electricity, gas and steam, water supply, sewerage and waste management	28,2	79,6	37,9	69,2	78,9	40,6	66,3
	Construction	39,9	100,0	63,6	49,6	46,8	98,9	69,5
	Wholesale and retail trade; repair of motor vehicles and motorcycles	75,0	50,9	46,7	69,4	43,2	82,7	69,5
	Transportation and storage	71,6	85,7	66,2	46,5	72,2	98,6	74,3
	Accommodation and food service activities	70,2	56,9	100,0	83,2	43,4	77,9	68,5
	Information and communication	80,2	72,2	92,9	61,9	57,2	88,6	79,8
	Financial and insurance activities	40,0	100,0	50,0	0,0	50,0	54,5	50,0
	Real estate activities; professional, scientific and technical activities	89,6	44,5	42,9	49,5	78,1	86,4	80,4
	Administrative and support activities; repair of computers	82,0	89,1	57,5	56,6	100,0	89,7	82,3
Total	72,3	70,8	56,7	61,3	58,2	82,3	70,7	
<b>Sending or receiving product information (e.g. catalogues, price lists...)</b>								
Activity	Manufacturing	85,7	87,8	88,4	90,7	86,5	82,4	86,6
	Electricity, gas and steam, water supply, sewerage and waste management	71,8	62,9	61,5	59,8	54,5	89,1	63,7
	Construction	100,0	88,9	59,8	90,9	84,4	98,0	92,6
	Wholesale and retail trade; repair of motor vehicles and motorcycles	91,6	59,5	78,0	89,5	62,6	94,2	85,1
	Transportation and storage	82,5	39,2	83,6	56,2	89,1	68,7	72,6
	Accommodation and food service activities	91,9	84,3	100,0	91,6	75,0	100,0	90,8
	Information and communication	79,7	88,6	64,3	97,6	100,0	71,9	80,1
	Financial and insurance activities	60,0	0,0	25,0	0,0	0,0	45,5	35,7
	Real estate activities; professional, scientific and technical activities	79,9	84,8	76,2	52,4	78,1	86,4	80,8
	Administrative and support activities; repair of computers	92,3	69,6	46,7	74,7	78,7	83,3	79,5
Total	87,6	74,7	77,2	83,5	75,7	87,0	83,5	

<sup>1)</sup> The results refer only to enterprises that gave a positive answer to question C1.

**C2: Is electronic data transmission used for the following purposes? <sup>1)</sup>****in percentages**

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Sending or receiving transport document (e.g. consignment notes)</b>								
Activity	Manufacturing	54,8	35,3	46,1	33,4	49,0	62,7	48,0
	Electricity, gas and steam, water supply, sewerage and waste management	77,4	13,6	19,6	11,7	49,6	26,7	22,3
	Construction	29,0	22,8	59,8	45,6	5,6	20,5	27,7
	Wholesale and retail trade; repair of motor vehicles and motorcycles	63,7	46,5	42,2	30,0	33,5	88,1	59,7
	Transportation and storage	81,0	39,2	41,6	51,9	64,5	82,6	67,4
	Accommodation and food service activities	4,1	25,5	0,0	16,8	14,2	0,0	7,6
	Information and communication	1,6	60,7	42,9	15,6	8,7	12,6	12,6
	Financial and insurance activities	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	Real estate activities; professional, scientific and technical activities	35,7	52,3	61,9	2,2	37,5	46,4	39,2
	Administrative and support activities; repair of computers	18,8	41,9	16,2	48,1	0,0	28,5	27,2
Total	48,6	36,1	40,6	30,9	36,3	57,4	44,8	
<b>Sending or receiving data to/from public authorities (e.g. tax returns, statistical data, etc.)</b>								
Activity	Manufacturing	63,0	57,5	66,5	52,4	68,3	68,3	61,8
	Electricity, gas and steam, water supply, sewerage and waste management	73,4	45,4	50,5	29,7	66,6	100,0	49,6
	Construction	0,0	61,5	85,3	22,1	21,2	50,1	33,6
	Wholesale and retail trade; repair of motor vehicles and motorcycles	34,4	14,3	53,7	32,0	29,7	32,0	31,4
	Transportation and storage	19,4	22,5	50,5	8,4	45,7	12,0	23,3
	Accommodation and food service activities	35,2	17,7	62,5	0,0	31,6	46,5	32,7
	Information and communication	64,6	55,0	92,9	58,9	48,4	69,5	64,8
	Financial and insurance activities	80,0	100,0	87,5	100,0	100,0	81,8	85,7
	Real estate activities; professional, scientific and technical activities	53,5	61,2	42,9	23,4	81,3	56,8	54,8
	Administrative and support activities; repair of computers	67,3	33,7	58,1	48,1	34,7	68,9	53,9
Total	43,4	43,0	63,7	36,3	45,2	50,0	44,8	

<sup>1)</sup> The results refer only to enterprises that gave a positive answer to question C1.

## MODULE 4.D: Electronic invoicing<sup>1)</sup>

### D1: In January 2011, did your enterprise send electronic invoices?

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Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>e-invoices in a standard structure suitable for automatic processing (e.g. EDI, XML)</b>								
Activity	Manufacturing	13,3	16,6	23,7	10,5	15,5	21,3	14,8
	Electricity, gas and steam, water supply, sewerage and waste management	5,8	22,0	13,7	16,7	0,0	43,1	13,9
	Construction	14,9	19,0	24,3	6,6	3,5	32,5	16,1
	Wholesale and retail trade; repair of motor vehicles and motorcycles	23,8	42,1	25,9	9,4	6,4	49,1	26,2
	Transportation and storage	23,6	21,0	61,7	8,5	51,4	19,7	24,9
	Accommodation and food service activities	30,5	8,6	0,0	29,0	18,5	25,2	25,1
	Information and communication	25,3	24,7	17,6	20,8	15,7	30,2	24,9
	Financial and insurance activities	28,6	100,0	18,2	0,0	50,0	26,7	26,3
	Real estate activities; professional, scientific and technical activities	21,8	23,6	35,4	15,3	13,1	26,6	22,2
	Administrative and support activities; repair of computers	31,3	22,6	15,6	12,5	25,1	34,0	28,2
Total	19,8	23,0	24,8	11,0	13,6	33,7	20,6	

<sup>1)</sup> The results refer only to enterprises that gave a positive answer to question A1.

**D1: In January 2011, did your enterprise send electronic invoices?**

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Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Electronic invoices not suitable for automatic processing, (e.g. e-mailed invoices)</b>								
Activity	Manufacturing	77,5	89,1	76,2	75,4	96,5	72,9	80,7
	Electricity, gas and steam, water supply, sewerage and waste management	100,0	66,8	100,0	64,5	0,0	100,0	76,9
	Construction	100,0	79,8	78,8	94,7	26,2	99,1	94,0
	Wholesale and retail trade; repair of motor vehicles and motorcycles	54,9	81,9	49,4	83,0	100,0	54,5	60,4
	Transportation and storage	49,2	100,0	94,6	25,3	53,4	100,0	61,4
	Accommodation and food service activities	81,3	56,5	0,0	95,2	88,3	66,7	79,5
	Information and communication	50,7	24,5	100,0	45,6	6,1	57,9	48,1
	Financial and insurance activities	50,0	100,0	50,0	0,0	100,0	50,0	60,0
	Real estate activities; professional, scientific and technical activities	79,9	63,3	100,0	90,3	93,2	73,9	77,9
	Administrative and support activities; repair of computers	42,0	28,3	62,9	68,8	53,1	34,2	40,7
Total	65,8	78,9	77,4	75,7	77,0	65,4	69,3	

**D2: In January 2011, did your enterprise receive e-invoices in a standard structure suitable for automatic processing (e.g. EDI, XML)?**

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>YES</b>								
Activity	Manufacturing	44,5	72,6	57,9	70,3	57,0	38,6	54,0
	Electricity, gas and steam, water supply, sewerage and waste management	0,0	84,2	100,0	83,1	0,0	48,4	71,0
	Construction	86,9	100,0	75,3	27,5	73,8	100,0	89,1
	Wholesale and retail trade; repair of motor vehicles and motorcycles	77,5	89,7	100,0	94,7	75,0	79,0	80,4
	Transportation and storage	49,2	80,2	94,6	25,3	53,4	88,9	58,7
	Accommodation and food service activities	53,4	42,4	0,0	63,0	100,0	33,3	52,6
	Information and communication	64,7	100,0	100,0	65,3	100,0	65,8	70,8
	Financial and insurance activities	100,0	0,0	100,0	0,0	0,0	100,0	80,0
	Real estate activities; professional, scientific and technical activities	95,0	87,0	76,5	89,7	53,4	99,3	93,3
	Administrative and support activities; repair of computers	58,0	71,7	25,7	31,3	53,1	63,4	58,7
Total	68,2	83,4	74,2	71,3	61,7	74,7	71,8	



## MODULE 2.E: Automatic share of information within the enterprise<sup>1)</sup>

**E1: In January 2011, when your enterprise received a sales order (either electronically or not), was the relevant information about it shared electronically and automatically with the software used for the following functions?**

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Management of inventory levels</b>								
Activity	Manufacturing	26,7	28,1	48,1	30,7	27,9	25,7	28,5
	Electricity, gas and steam, water supply, sewerage and waste management	13,7	43,5	9,6	35,2	12,5	26,4	26,3
	Construction	22,4	19,0	22,4	16,5	11,3	33,2	21,7
	Wholesale and retail trade; repair of motor vehicles and motorcycles	61,0	27,9	59,0	57,1	69,9	48,9	56,7
	Transportation and storage	34,0	11,7	37,2	21,2	37,8	34,6	30,4
	Accommodation and food service activities	32,9	27,6	23,8	28,6	17,9	38,2	31,6
	Information and communication	14,5	31,1	41,2	3,2	3,6	29,0	18,0
	Financial and insurance activities	28,6	100,0	45,5	0,0	100,0	40,0	42,1
	Real estate activities; professional, scientific and technical activities	28,2	10,1	33,3	22,6	10,4	30,8	25,8
	Administrative and support activities; repair of computers	27,6	32,4	19,8	19,4	11,8	36,5	27,9
Total	37,6	26,5	40,5	34,5	35,5	36,5	35,6	

<sup>1)</sup> The result refer only to enterprises that gave a positive answer to question A1.

**E1: In January 2011, when your enterprise received a sales order (either electronically or not), was the relevant information about it shared electronically and automatically with the software used for the following functions?**

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Accounting</b>								
Activity	Manufacturing	20,7	28,0	68,5	30,9	23,6	20,0	25,8
	Electricity, gas and steam, water supply, sewerage and waste management	13,7	47,0	30,9	40,6	16,1	26,4	30,5
	Construction	42,5	20,2	41,6	26,4	63,7	29,1	38,2
	Wholesale and retail trade; repair of motor vehicles and motorcycles	79,2	32,0	46,4	80,1	69,9	68,7	72,5
	Transportation and storage	51,2	20,0	52,5	46,1	37,8	53,7	46,1
	Accommodation and food service activities	21,5	41,9	23,8	31,4	20,1	24,9	26,0
	Information and communication	22,0	58,6	70,6	24,0	9,0	39,7	29,4
	Financial and insurance activities	42,9	100,0	63,6	50,0	100,0	53,3	57,9
	Real estate activities; professional, scientific and technical activities	25,2	22,8	25,0	30,7	13,1	26,6	24,9
	Administrative and support activities; repair of computers	27,6	60,3	13,8	24,3	25,1	38,7	33,1
Total	44,9	31,0	54,3	44,6	41,1	41,9	42,6	

<sup>1)</sup> The result refer only to enterprises that gave a positive answer to question A1.

**E1: In January 2011, when your enterprise received a sales order (either electronically or not), was the relevant information about it shared electronically and automatically with the software used for the following functions?**

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Production and services management</b>								
Activity	Manufacturing	21,5	28,0	55,9	29,9	23,5	20,4	25,5
	Electricity, gas and steam, water supply, sewerage and waste management	13,7	47,0	15,7	38,6	13,8	26,4	28,6
	Construction	26,3	23,3	34,6	28,3	9,0	36,5	26,1
	Wholesale and retail trade; repair of motor vehicles and motorcycles	14,2	17,3	24,8	18,2	11,8	14,2	14,8
	Transportation and storage	31,3	11,7	52,5	14,6	45,8	30,5	29,0
	Accommodation and food service activities	27,2	34,4	23,8	28,6	15,7	33,3	28,7
	Information and communication	27,5	42,9	23,5	14,7	14,8	40,9	29,6
	Financial and insurance activities	28,6	100,0	63,6	50,0	100,0	46,7	52,6
	Real estate activities; professional, scientific and technical activities	25,2	11,6	25,0	29,2	12,2	24,8	23,3
	Administrative and support activities; repair of computers	34,8	47,8	17,8	18,4	20,0	47,3	36,0
Total	21,2	26,2	42,1	25,5	18,5	24,3	23,2	

1) The result refer only to enterprises that gave a positive answer to question A1.

**E1: In January 2011, when your enterprise received a sales order (either electronically or not), was the relevant information about it shared electronically and automatically with the software used for the following functions?**

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Distribution management</b>								
Activity	Manufacturing	21,0	24,8	54,8	28,6	21,9	19,7	24,2
	Electricity, gas and steam, water supply, sewerage and waste management	13,7	47,0	15,0	39,2	12,6	26,4	28,5
	Construction	22,4	23,3	32,8	18,4	8,7	36,8	23,0
	Wholesale and retail trade; repair of motor vehicles and motorcycles	27,3	17,3	49,1	23,8	31,0	25,6	26,4
	Transportation and storage	23,7	11,5	52,5	14,6	43,4	13,8	22,9
	Accommodation and food service activities	24,4	31,3	23,8	19,3	15,7	33,3	25,9
	Information and communication	16,7	31,1	11,8	12,6	2,7	27,4	18,7
	Financial and insurance activities	14,3	100,0	27,3	50,0	100,0	13,3	26,3
	Real estate activities; professional, scientific and technical activities	24,2	3,9	16,7	23,4	11,3	23,3	21,2
	Administrative and support activities; repair of computers	16,6	38,0	19,6	14,5	8,2	28,2	21,2
Total	23,3	23,7	43,0	24,8	22,4	25,1	24,3	

<sup>1)</sup> The results refer only to enterprises that gave a positive answer to question A1.

**E2: In January 2011, when your enterprise sent a purchase order (either electronically or not), was the relevant information about it shared electronically and automatically with the software used for the following functions?**

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Management of inventory levels</b>								
Activity	Manufacturing	23,4	29,1	64,1	33,3	25,2	21,0	27,6
	Electricity, gas and steam, water supply, sewerage and waste management	13,7	47,0	17,0	38,9	13,8	26,4	28,8
	Construction	18,6	23,3	51,0	24,2	16,8	21,3	20,9
	Wholesale and retail trade; repair of motor vehicles and motorcycles	34,0	20,2	27,0	45,0	11,8	34,9	32,1
	Transportation and storage	26,2	12,9	30,6	13,3	44,8	17,9	24,2
	Accommodation and food service activities	21,5	29,6	23,8	30,0	17,9	21,3	23,3
	Information and communication	14,5	36,8	23,5	4,1	2,7	29,4	18,2
	Financial and insurance activities	14,3	100,0	45,5	50,0	100,0	26,7	36,8
	Real estate activities; professional, scientific and technical activities	25,2	15,6	33,3	30,4	12,2	25,5	24,0
	Administrative and support activities; repair of computers	9,4	44,4	14,0	17,5	8,2	20,2	17,0
Total	25,7	27,1	46,4	33,2	19,3	26,6	26,9	

**E2: In January 2011, when your enterprise sent a purchase order (either electronically or not), was the relevant information about it shared electronically and automatically with the software used for the following functions?**

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Accounting</b>								
Activity	Manufacturing	24,0	27,0	67,8	33,7	23,8	22,3	27,7
	Electricity, gas and steam, water supply, sewerage and waste management	13,7	47,0	17,0	38,9	13,8	26,4	28,8
	Construction	38,1	25,2	55,7	27,3	63,7	24,0	36,4
	Wholesale and retail trade; repair of motor vehicles and motorcycles	46,7	26,5	31,5	49,9	11,8	58,0	43,8
	Transportation and storage	20,6	8,8	34,7	13,3	36,8	10,0	19,3
	Accommodation and food service activities	21,5	40,0	23,8	31,4	17,9	24,9	25,6
	Information and communication	22,0	45,6	58,8	20,8	6,3	37,7	27,0
	Financial and insurance activities	28,6	100,0	54,5	50,0	100,0	40,0	47,4
	Real estate activities; professional, scientific and technical activities	25,2	28,1	41,7	30,7	14,8	27,6	25,9
	Administrative and support activities; repair of computers	22,0	56,9	12,0	11,8	38,5	29,3	28,3
Total	32,5	29,1	51,0	35,3	24,8	35,7	32,7	

## MODULE 2.F: e-commerce<sup>1)</sup>

### F1: In 2010, did your enterprise receive orders or provide services via a Website (excluding manually typed e-mails)?

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>YES</b>								
Activity	Manufacturing	15,1	12,8	20,4	9,3	11,5	15,8	11,7
	Electricity, gas and steam, water supply, sewerage and waste management	6,5	0,0	20,0	2,3	4,5	11,1	4,1
	Construction	2,0	3,8	5,0	5,1	3,5	0,5	2,8
	Wholesale and retail trade; repair of motor vehicles and motorcycles	29,0	19,2	19,4	15,9	12,8	44,0	27,6
	Transportation and storage	16,7	19,8	20,8	11,7	28,4	26,0	17,4
	Accommodation and food service activities	26,1	50,9	23,8	13,0	22,8	45,3	31,5
	Information and communication	26,7	35,7	23,5	24,6	14,8	34,5	27,9
	Real estate activities; professional, scientific and technical activities	8,8	9,6	25,0	17,3	19,3	7,5	9,2
	Administrative and support activities; repair of computers	8,1	24,7	10,8	31,0	18,9	5,3	11,3
Total	18,4	20,0	23,0	15,7	22,2	24,9	20,7	

### F2: Percentage of the value of the total turnover in 2010 resulting from orders received via a Website<sup>2)</sup>

in percentages

	Enterprises							Total
	Size class			Territory				
	Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade		
1- 24%	88,9	66,1	64,7	88,0	67,7	92,5	86,7	
25- 49%	6,6	12,4	12,2	2,3	18,5	5,1	7,2	
50-74%	0,9	4,7	14,8	3,8	3,0	0,1	1,4	
75-100%	3,7	16,8	8,3	5,9	10,8	2,3	4,7	

<sup>1)</sup> The results refer only to enterprises that gave a positive answer to question B1.

<sup>2)</sup> The results refer only to enterprises that gave a positive answer to question F1.

**F3: In January 2010, did your enterprise receive orders via a Website from customers located in the following countries? <sup>1)</sup>**

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Republic of Serbia</b>								
Activity	Manufacturing	91,6	100,0	67,4	73,2	100,0	100,0	90,6
	Electricity, gas and steam, water supply, sewerage and waste management	100,0	0,0	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
	Wholesale and retail trade; repair of motor cycles and motorcycles	81,5	93,9	100,0	96,9	100,0	76,6	82,9
	Transportation and storage	66,7	100,0	100,0	100,0	71,9	75,8	74,8
	Accommodation and food service activities	78,3	100,0	100,0	100,0	100,0	81,4	86,2
	Information and communication	100,0	75,4	100,0	100,0	82,0	96,6	95,3
	Real estate activities; professional, scientific and technical activities	88,0	40,8	100,0	61,6	100,0	83,4	81,5
	Administrative and support activities; repair of computers	100,0	53,4	100,0	81,0	100,0	58,0	79,1
Total	84,9	89,1	87,5	86,4	94,5	82,2	85,5	
<b>Other EU countries</b>								
Activity	Manufacturing	28,4	15,5	46,1	32,9	26,3	26,6	28,7
	Electricity, gas and steam, water supply, sewerage and waste management	55,6	0,0	0,0	0,0	100,0	0,0	38,5
	Construction	0,0	0,0	17,0	0,0	0,0	45,0	3,4
	Wholesale and retail trade; repair of motor cycles and motorcycles	18,5	16,4	33,8	2,7	12,4	23,4	18,5
	Transportation and storage	33,3	85,2	16,0	23,5	36,7	49,4	42,2
	Accommodation and food service activities	28,3	67,7	100,0	66,1	59,5	36,4	43,1
	Information and communication	27,1	32,9	100,0	8,4	0,0	41,4	30,6
	Financial and insurance activities	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	Real estate activities; professional, scientific and technical activities	24,4	10,2	66,7	44,3	46,1	5,0	23,9
	Administrative and support activities; repair of computers	0,0	13,7	100,0	12,7	0,0	16,0	10,6
Total	22,8	33,1	42,0	18,8	24,7	27,0	24,8	

<sup>1)</sup> The results refer only to enterprises that gave a positive answer to question F1.



**F3: In January 2010, did your enterprise receive orders via a Website from customers located in the following countries? <sup>1)</sup>**

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Rest of the world</b>								
Activity	Manufacturing	15,7	15,5	31,5	5,4	17,6	26,6	16,6
	Electricity, gas and steam, water supply, sewerage and waste management	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	Construction	0,0	0,0	63,7	0,0	26,2	45,0	12,8
	Wholesale and retail trade; repair of motor cycles and motorcycles	18,5	20,0	0,0	0,0	0,0	26,0	18,4
	Transportation and storage	18,1	22,1	16,0	23,5	36,7	0,0	18,8
	Accommodation and food service activities	6,5	61,5	100,0	38,4	69,0	17,8	27,2
	Information and communication	31,3	25,5	100,0	19,1	0,0	41,4	32,4
	Real estate activities; professional, scientific and technical activities	61,3	69,4	66,7	44,3	0,0	97,5	62,7
	Administrative and support activities; repair of computers	0,0	0,0	0,0	0,0	0,0	0,0	0,0
<b>Total</b>	<b>19,3</b>	<b>28,2</b>	<b>32,5</b>	<b>6,9</b>	<b>15,8</b>	<b>27,8</b>	<b>20,9</b>	

<sup>1)</sup> The results refer only to enterprises that gave a positive answer to question F1.

**F4: In January 2010, did your enterprise receive orders for goods or services via EDI-type messages?<sup>1)</sup>**

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>YES</b>								
Activity	Manufacturing	3,1	3,0	5,0	1,9	2,4	6,1	3,2
	Electricity, gas and steam, water supply, sewerage and waste management	0,0	3,8	3,7	4,0	0,0	0,0	2,1
	Construction	4,3	8,9	6,0	0,0	3,5	10,6	5,3
	Wholesale and retail trade; repair of motor vehicles and motorcycles	0,0	9,2	24,4	0,6	0,4	3,1	1,7
	Transportation and storage	3,0	19,8	4,2	1,3	10,4	7,1	5,9
	Accommodation and food service activities	1,7	3,0	0,0	2,2	7,1	0,0	2,0
	Information and communication	2,2	5,3	0,0	13,5	0,0	0,0	2,6
	Real estate activities; professional, scientific and technical activities	0,0	1,8	18,8	1,5	0,0	0,4	0,5
	Administrative and support activities; repair	0,0	6,4	0,0	0,0	0,0	2,2	1,3
Total	1,7	5,9	7,3	1,7	2,3	4,1	2,8	

<sup>1)</sup> The results refer only to enterprises that gave a positive answer to question A1.

**F7: In January 2010, did your enterprise order goods or services via the Internet (excluding manually typed e-mails)?<sup>1)</sup>**

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>YES</b>								
Activity	Manufacturing	33,5	36,5	38,7	40,0	31,7	28,9	34,6
	Electricity, gas and steam, water supply, sewerage and waste management	20,7	48,9	40,2	38,2	26,3	51,4	35,5
	Construction	22,2	49,7	35,5	40,4	19,9	24,3	28,1
	Wholesale and retail trade; repair of motor vehicles and motorcycles	17,9	67,8	48,2	17,7	39,0	21,9	24,9
	Transportation and storage	24,7	53,9	53,6	14,7	35,7	45,7	30,9
	Accommodation and food service activities	32,9	41,2	38,1	26,0	53,2	33,3	34,8
	Information and communication	61,5	60,5	29,4	51,6	33,2	74,2	60,1
	Real estate activities; professional, scientific and technical activities	35,9	67,9	64,6	50,6	26,3	42,2	40,8
	Administrative and support activities; repair	38,0	39,2	46,9	36,3	13,3	49,6	39,0
Total	27,9	48,6	41,4	32,6	32,3	32,6	32,5	

<sup>1)</sup> The results refer only to enterprises that gave a positive answer to question A1.

**F8: In January 2010, did your enterprise send orders for goods and services via computer networks to suppliers located in the following countries:** <sup>1)</sup>

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Republic of Serbia</b>								
Activity	Manufacturing	65,4	88,6	61,0	69,5	81,1	64,1	71,3
	Electricity, gas and steam, water supply, sewerage and waste management	100,0	100,0	48,4	100,0	95,6	62,2	92,7
	Construction	69,2	76,9	92,5	76,3	22,1	98,8	73,1
	Wholesale and retail trade; repair of motor vehicles and motorcycles	70,9	61,7	62,6	41,6	67,1	82,0	67,4
	Transportation and storage	79,4	58,4	100,0	71,2	93,2	62,9	74,9
	Accommodation and food service activities	32,8	59,8	100,0	22,7	60,2	38,7	41,2
	Information and communication	64,3	70,4	100,0	67,8	55,5	67,4	65,9
	Real estate activities; professional, scientific and technical activities	79,9	90,0	25,8	78,2	96,6	79,3	81,0
	Administrative and support activities; repair of computers	86,2	74,0	54,5	51,4	0,0	94,9	80,4
Total	69,1	77,1	66,0	67,2	71,5	74,6	71,2	
<b>Other EU countries</b>								
Activity	Manufacturing	30,1	54,0	35,1	28,9	47,2	42,8	36,9
	Electricity, gas and steam, water supply, sewerage and waste management	0,0	14,9	0,0	15,6	0,0	0,0	9,0
	Construction	0,0	52,5	22,1	4,1	12,9	41,8	19,0
	Wholesale and retail trade; repair of motor vehicles and motorcycles	4,5	13,5	86,4	16,9	1,4	16,9	10,8
	Transportation and storage	56,9	29,4	24,9	59,9	58,4	32,3	46,4
	Accommodation and food service activities	22,5	4,5	62,5	0,0	17,3	27,9	18,7
	Information and communication	17,7	66,7	60,0	0,0	18,9	33,2	25,8
	Real estate activities; professional, scientific and technical activities	42,5	35,0	38,7	15,4	29,9	50,6	40,6
	Administrative and support activities; repair of computers	21,5	20,7	0,0	5,4	0,0	24,1	19,1
Total	22,8	35,3	36,9	21,5	25,0	33,8	27,2	

<sup>1)</sup> The results refer only to enterprises that gave a positive answer to question F7.

**F8: In January 2010, did your enterprise send orders for goods and services via computer networks to suppliers located in the following countries:**<sup>1)</sup>

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Rest of the world</b>								
Activity	Manufacturing	22,0	34,9	29,6	29,6	32,5	10,6	26,0
	Electricity, gas and steam, water supply, sewerage and waste management	0,0	7,8	0,0	8,1	0,0	0,0	4,7
	Construction	0,0	48,3	39,0	1,0	17,5	41,8	18,6
	Wholesale and retail trade; repair of motor vehicles and motorcycles	0,0	11,4	54,5	0,6	1,4	13,8	6,0
	Transportation and storage	20,6	16,2	24,9	10,7	13,7	27,5	19,6
	Accommodation and food service activities	0,0	4,5	62,5	0,0	4,1	2,7	2,5
	Information and communication	11,8	52,1	40,0	0,0	8,0	24,6	18,4
	Real estate activities; professional, scientific and technical activities	33,4	23,5	38,7	15,6	43,0	34,2	31,2
	Administrative and support activities; repair of computers	19,0	16,3	0,0	0,0	0,0	21,7	16,4
<b>Total</b>	<b>14,3</b>	<b>25,4</b>	<b>30,7</b>	<b>17,1</b>	<b>16,3</b>	<b>21,1</b>	<b>18,5</b>	

<sup>1)</sup> The results refer only to enterprises that gave a positive answer to question F7.

## MODULE 2.G: Use of Radio Frequency Identification technologies (RFID)<sup>1)</sup>

**G1: In January 2011, did your enterprise make use of Radio Frequency Identification instruments (via radio waves)?**

in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>YES</b>								
Activity	Manufacturing	0,0	2,3	14,0	0,6	3,5	1,0	1,5
	Electricity, gas and steam, water supply, sewerage and waste management	0,0	7,3	18,5	8,0	3,5	0,0	5,5
	Construction	0,0	7,1	4,5	1,9	0,0	2,4	1,6
	Wholesale and retail trade; repair of motor vehicles and motorcycles	0,0	12,0	54,4	0,6	1,6	4,6	2,6
	Transportation and storage	5,1	4,4	56,4	1,2	5,5	16,3	7,3
	Accommodation and food service activities	0,0	20,8	23,8	1,4	2,2	8,1	5,0
	Information and communication	9,8	17,8	52,9	14,1	0,0	17,5	12,7
	Financial and insurance activities	14,3	0,0	9,1	50,0	0,0	6,7	10,5
	Real estate activities; professional, scientific and technical activities	0,3	15,1	27,1	1,2	1,8	3,5	2,8
	Administrative and support activities; repair of computers	7,2	19,2	11,6	0,0	0,0	16,9	10,1
Total	1,0	7,5	22,7	1,5	2,3	5,4	3,3	

<sup>1)</sup> The results refer only to enterprises that gave a positive answer to question A1.

## MODULE 2.H: ICT and environmental impact<sup>1)</sup>

**H1: In January 2011, did your enterprise have in place any policy designed to:**  
in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Reduce the amount of paper used in printing or copying (e.g. two-sided copying)</b>								
Activity	Manufacturing	13,4	12,4	24,9	11,0	17,0	15,4	13,9
	Electricity, gas and steam, water supply, sewerage and waste management	2,9	18,9	6,2	13,1	5,9	11,1	10,4
	Construction	12,9	22,2	19,4	2,3	0,0	35,6	15,0
	Wholesale and retail trade; repair of motor vehicles and motorcycles	15,9	8,4	28,6	7,3	11,6	22,8	15,2
	Transportation and storage	12,0	17,3	31,9	13,5	24,3	4,3	13,8
	Accommodation and food service activities	5,7	14,2	14,3	3,7	2,2	12,0	7,7
	Information and communication	7,3	20,5	11,8	17,6	2,7	9,5	9,4
	Financial and insurance activities	14,3	100,0	45,5	50,0	100,0	26,7	36,8
	Real estate activities; professional, scientific and technical activities	14,3	27,2	27,1	20,3	8,7	17,3	16,3
	Administrative and support activities; repair of computers	23,1	32,4	17,3	13,7	0,0	37,0	24,5
Total	13,7	15,2	23,2	9,8	11,9	20,1	14,4	

<sup>1)</sup> The results refer only to enterprises that gave a positive answer to question A1.

**H1: In January 2011, did your enterprise have in place any policy designed to:**  
in percentages

Enterprises		Size class			Territory			Total
		Small (10-49)	Medium (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	
<b>Reduce energy consumption of your ICT equipment</b>								
Activity	Manufacturing	8,3	9,4	22,3	7,7	11,1	10,8	9,5
	Electricity, gas and steam, water supply, sewerage and waste management	2,9	7,3	17,5	5,9	0,0	30,6	6,7
	Construction	12,9	17,2	11,4	1,3	0,0	33,1	13,7
	Wholesale and retail trade; repair of motor vehicles and motorcycles	15,2	18,1	30,5	6,4	13,2	24,0	15,9
	Transportation and storage	9,1	12,9	36,4	0,4	29,9	5,9	11,0
	Accommodation and food service activities	10,2	26,9	0,0	12,9	9,2	15,6	13,6
	Information and communication	6,7	9,1	11,8	13,0	0,0	8,3	7,3
	Financial and insurance activities	28,6	100,0	45,5	50,0	50,0	40,0	42,1
	Real estate activities; professional, scientific and technical activities	11,3	6,8	8,3	5,9	6,1	13,2	10,6
	Administrative and support activities; repair of computers	15,9	9,8	17,3	9,8	0,0	21,8	14,8
Total	11,5	12,5	21,9	6,4	10,3	18,5	12,2	
<b>Total</b>								
Activity	Manufacturing	7,0	3,9	19,9	5,7	7,9	8,4	7,1
	Electricity, gas and steam, water supply, sewerage and waste management	2,9	7,3	0,0	5,9	0,0	11,1	4,5
	Construction	6,3	15,1	9,3	5,4	0,0	16,0	8,1
	Wholesale and retail trade; repair of motor vehicles and motorcycles	18,1	18,5	30,5	6,2	21,2	25,1	18,4
	Transportation and storage	2,9	17,1	8,3	6,0	4,9	5,5	5,5
	Accommodation and food service activities	10,1	20,2	14,3	17,8	4,3	12,0	12,3
	Information and communication	4,7	23,9	17,6	9,1	13,1	5,6	8,0
	Financial and insurance activities	28,6	100,0	72,7	50,0	100,0	53,3	57,9
	Real estate activities; professional, scientific and technical activities	4,9	7,9	25,0	0,7	1,8	8,1	5,6
	Administrative and support activities; repair of computers	14,4	35,4	5,8	3,9	0,0	29,0	18,0
Total	10,2	11,3	18,2	6,1	9,9	15,6	10,8	





## 2.5. QUESTIONNAIRE

### ICT USAGE IN ENTERPRISES

#### MODULE 2.A: USE OF COMPUTERS AND COMPUTER NETWORKS

<b>A1</b> : Did your enterprises use computers in January 2011?		YES	NO
		<input type="checkbox"/>	<input type="checkbox"/> End
<b>A2</b> : Please, indicate an estimate of the percentage of the persons employed who used computers <u>at least once a week</u> in January 2011?		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> %	
<b>A3</b> : Did your enterprise used for free, in January 2011 (open source software)?		YES	NO
		<input type="checkbox"/>	<input type="checkbox"/>
	a) Operating system (Linux)	<input type="checkbox"/>	<input type="checkbox"/>
	b) Internet browser software (Mozilla Firefox)	<input type="checkbox"/>	<input type="checkbox"/>
	c) <b>Openoffice</b> – office software	<input type="checkbox"/>	<input type="checkbox"/>
	d) Web server (Apache, Tomcat)	<input type="checkbox"/>	<input type="checkbox"/>
	e) Software ERP or CRM, (open ERP, Joomla, MySQL)	<input type="checkbox"/>	<input type="checkbox"/>
	f) Other software	<input type="checkbox"/>	<input type="checkbox"/>
<b>A4</b> : In January 2011, did the persons employed in your enterprise have access to human resources services electronically?  <small>Human resources services include for example: working time recording system, request annual leave, view or download payslips or other services.</small>		YES	NO
		<input type="checkbox"/>	<input type="checkbox"/>

**MODULE 2.B: ACCESS TO THE INTERNET AND ITS USE**

<b>B1</b> : Did your enterprise have access to the Internet in January 2011?		YES	NO
		<input type="checkbox"/>	<input type="checkbox"/> Go to C1
<b>B2</b> : Did your enterprise have the following types of external connection to the Internet in January 2011?		YES	NO
	a) Traditional Modem (dial-up) or ISDN connection	<input type="checkbox"/>	<input type="checkbox"/>
	b) DSL (xDSL, ADSL, SDSL, etc.) connection	<input type="checkbox"/>	<input type="checkbox"/>
	c) Other fixed Internet connection (e.g. cable Internet, leased line – e.g. E1 or E3 on level 1 and ATM on Level 2, Frame Relay)	<input type="checkbox"/>	<input type="checkbox"/>
	d) Mobile „broadband“ connection via 3G modem or 3G handset (e.g. UMTS, EDGE, CDMA2000 1xEVDO)	<input type="checkbox"/>	<input type="checkbox"/>
	e) Other mobile connection (e.g. analogue mobile phone, GSM, GPRS, EDGE)	<input type="checkbox"/>	<input type="checkbox"/>
<b>B3</b> : What is the maximum contracted download speed of the Internet connection in your enterprise in January 2011 (defined by a contract with an Internet provider)?			
	a) Less than 2 Mbit/s		<input type="checkbox"/>
	b) At least 2, but less than 10 Mbit/s		<input type="checkbox"/>
	c) At least 10, but less than 30 Mbit/s		<input type="checkbox"/>
	d) At least 30, but less than 100 Mbit/s		<input type="checkbox"/>
	e) At least 100 Mbit/s		<input type="checkbox"/>
<b>B4</b> : Please, indicate an estimate of the percentage of the persons employed who used the Internet in January 2011.		_ _ _  %	
<b>B5</b> : Please, indicate an estimate of the percentage of the number of persons employed who were provided with a portable device with 3G technology for accessing the Internet in January 2011.  E.g. via portable computer with modem or via handset using UMTS, CDMA2000 1xEVDO, HSDPA, excluding GPRS. Mobile device with 3G technology does not have GPRS.		_ _ _  %	
<b>B6</b> : Did your enterprise have a Website or Home Page, in January 2011?		YES	NO
		<input type="checkbox"/>	<input type="checkbox"/> Go to B8

<b>B7</b> : Did the Website of your enterprise have any of the following facilities in January 2011? (your enterprise as <u>provider of Internet services</u> )			
		YES	NO
	a) Online ordering or reservation/booking of products/services	<input type="checkbox"/>	<input type="checkbox"/>
	b) A privacy statement policy or certification related to website safety	<input type="checkbox"/>	<input type="checkbox"/>
	c) Access to products catalogues and price lists	<input type="checkbox"/>	<input type="checkbox"/>
	d) Possibility for visitors to customise or design the products	<input type="checkbox"/>	<input type="checkbox"/>
	e) Online payment	<input type="checkbox"/>	<input type="checkbox"/>
	f) Personalised content in the website for regular/repeated visitors	<input type="checkbox"/>	<input type="checkbox"/>
	g) Advertisement of open job positions or online job application	<input type="checkbox"/>	<input type="checkbox"/>
<b>Internet services of public authorities</b>			
Public authorities refer to both public services and administration – tax, customs, business registration, social security, public health, environment, etc. Public authorities can be on local, regional or national level.			
<b>B8</b> : During January 2011, did your enterprise use public authorities' services over the Internet to:			
		YES	NO
	a) obtain information	<input type="checkbox"/>	<input type="checkbox"/>
	b) obtain forms, e.g. tax declaration	<input type="checkbox"/>	<input type="checkbox"/>
	c) return filled in forms, e.g. sending of statistical information to public authorities	<input type="checkbox"/>	<input type="checkbox"/> Go to B10
<b>B9</b> : During January 2011, did your enterprise use the Internet to manage the following administrative procedure?			
		YES	NO
	a) Payment of social contributions for the persons employed	<input type="checkbox"/>	<input type="checkbox"/>
	b) Payment of profit tax	<input type="checkbox"/>	<input type="checkbox"/>
	c) Payment of VAT	<input type="checkbox"/>	<input type="checkbox"/>
	d) Payment of customs/excise	<input type="checkbox"/>	<input type="checkbox"/>

B10: Do you consider any of the following reasons as limiting your interaction with public authorities over the Internet?			
		YES	NO
	a) Concerns related to data confidentiality and security	<input type="checkbox"/>	<input type="checkbox"/>
	b) Electronic procedures are too complicated or too time consuming	<input type="checkbox"/>	<input type="checkbox"/>
	c) Procedures still require exchange of paper mail or personal visits	<input type="checkbox"/>	<input type="checkbox"/>
	d) Not aware of availability of electronic procedures	<input type="checkbox"/>	<input type="checkbox"/>
<b>Electronic public procurement</b>			
<p>- <b>Electronic public procurement</b> refers to the use of the Internet by enterprises to offer goods or services to public authorities on national level or to other EU countries. The e-procurement process is based on a number of stages from the notification process (online availability of procurement notices and tender specifications) through tendering, awarding. To payment.</p> <p>- <b>e-tendering</b> is the stage of an electronic public procurement process dealing with submission of tenders and proposals on line (electronically).</p> <p>- e-tendering <b>excludes</b> submission of bids by e-mails.</p>			
B11: During 2010, did your enterprise use the Internet to access tender documents in electronic procurement systems of public authorities?		YES	NO
		<input type="checkbox"/>	<input type="checkbox"/>
B12: During 2010, did your enterprise use the Internet to offer goods or services in electronic procurement systems of public authorities?			
		YES	NO
	a) In the Republic of Serbia	<input type="checkbox"/>	<input type="checkbox"/>
	b) In EU countries	<input type="checkbox"/>	<input type="checkbox"/>

## MODULE 2.C: AUTOMATIC SHARE OF INFORMATION OUTSIDE THE ENTERPRISE

<b>Automatic share of information between enterprises and other ICT systems outside the enterprise refers to:</b>			
- sending/receiving of messages (e.g. orders, invoices, payment transactions or production descriptions) via the Internet or other computer network in an agreed format which allows their automatic processing (e.g. XML, EDIFACT, etc.), excluding manually typed messages.			
<b>C1:</b> In January 2011, did your enterprise use automatic share of information between enterprises and other ICT systems outside the enterprise?		YES <input type="checkbox"/>	NO <input type="checkbox"/> Go to D1
<b>C2:</b> Is the automatic share of information for the following purposes?		YES	NO
	a) Sending payment instructions to financial institutions	<input type="checkbox"/>	<input type="checkbox"/>
	b) Sending or receiving product information (e.g. catalogues, pricelists ...)	<input type="checkbox"/>	<input type="checkbox"/>
	Sending or receiving transport documents (e.g. consignment notes)	<input type="checkbox"/>	<input type="checkbox"/>
	Sending or receiving data to/from public authorities (e.g. tax returns, statistical data, etc.)	<input type="checkbox"/>	<input type="checkbox"/>

## MODULE 2.D: ELECTRONIC INVOICING

<b>Two different types of electronic invoices are distinguished:</b>			
- <b>e-invoice in standard structure</b> (suitable for automatic processing); these invoices may be directly exchanged between suppliers and customers, via service operators or via electronic banking system;			
- invoices in electronic format <b>not suitable for automatic processing (e.g. invoice sent by e-mail).</b>			
<b>D1:</b> Did your enterprise send electronic invoices in January 2011?		YES	NO
	e-invoices in standard structure suitable for automatic processing (e.g. EDI, XML)	<input type="checkbox"/>	<input type="checkbox"/>
	Invoices in electronic format not suitable for automatic processing, (e.g. invoices sent by e-mail)	<input type="checkbox"/>	<input type="checkbox"/>
<b>D2:</b> Did your enterprise receive, in January 2011, e-invoices in standard structure suitable for automatic processing (e.g. EDI, XML)?		YES	NO
		<input type="checkbox"/>	<input type="checkbox"/>

**MODULE 2.E: AUTOMATIC SHARE OF INFORMATION WITHIN THE ENTERPRISE**

**Automatic share of information between different services of the enterprise refers to any of the following:**

- using one single software application to support the different functions of the enterprise;
- linking data between software applications that support the different functions of the enterprise;
- using common databases or data storage accessed by the software applications that support the different functions of the enterprise;
- automatic share of information between different software systems (see the definition in module C).

<b>E1:</b> In January 2011, when your enterprise received a sales order (either electronically or not), was the relevant information about it shared electronically or automatically with the software used for the following functions?		YES	NO
	a) Management of inventory levels	<input type="checkbox"/>	<input type="checkbox"/>
	b) Keeping accounting records	<input type="checkbox"/>	<input type="checkbox"/>
	c) Management of production and services	<input type="checkbox"/>	<input type="checkbox"/>
	d) Management of distribution	<input type="checkbox"/>	<input type="checkbox"/>
<b>E2:</b> In January 2011, when your enterprise sent a purchase order (either electronically or not), was the relevant information about it shared electronically or automatically with the software used for the following functions?		YES	NO
	a) Management of inventory levels	<input type="checkbox"/>	<input type="checkbox"/>
	b) Keeping accounting records	<input type="checkbox"/>	<input type="checkbox"/>

**MODULE 2.F: e-COMMERCE**

<b>e-COMMERCE:</b>			
e-commerce refers to business communication and transfer of goods and services (purchase and sale) over computer networks, as well as to capital transfer, use of digital communication (ICT). e-commerce may be used via website or automatic share of information between enterprises, but excludes manually typed individual messages.			
<b>Web sales</b>			
<b>Sales over the Internet</b>			
<b>F1:</b> Did your enterprise receive orders or provide services via website (excluding manually typed e-mail orders), in 2010?		YES	NO
		<input type="checkbox"/>	<input type="checkbox"/> Go to F4
<b>F2:</b> Please, indicate an estimate of the percentage of the total turnover resulting from orders received through website in 2010.		_ _ _  %	
<b>F3:</b> Did your enterprise receive orders, in 2010, via website from a customer located in the following countries?		YES	NO
a)	Republic of Serbia	<input type="checkbox"/>	<input type="checkbox"/>
b)	Other EU countries	<input type="checkbox"/>	<input type="checkbox"/>
c)	Countries from the rest of the world	<input type="checkbox"/>	<input type="checkbox"/>
<b>EDI-type sales</b>			
- EDI-type sales are sales via EDI-type messages. EDI (Electronic Data Interchange) is used here as a generic term for sending or receiving business information in an agreed format suitable for automatic processing (e.g. EDIFACT, UBL, XML...).			
<b>F4:</b> In 2010, did your enterprise receive orders for goods or services via EDI-type messages?		YES	NO
		<input type="checkbox"/>	<input type="checkbox"/> Go to F7
<b>F5:</b> Please, indicate the value of the turnover in 2010 resulting from orders received via EDI-typed messages.		National currency _____	
<b>F6:</b> Did your enterprise receive, in 2010, orders via EDI-typed messages from customers located in the following geographic areas?		YES	NO
a)	Republic of Serbia	<input type="checkbox"/>	<input type="checkbox"/>
b)	Other EU countries	<input type="checkbox"/>	<input type="checkbox"/>
c)	Countries from the rest of the world	<input type="checkbox"/>	<input type="checkbox"/>



<b>Orders placed over the Internet</b>		
<b>F7</b> : Did your enterprise place orders, in 2010, for goods/services over the Internet?	YES	NO
	<input type="checkbox"/>	<input type="checkbox"/> Go to G1
<b>F8</b> : Did you enterprise place orders, in 2010, via computer networks to suppliers located in the following countries?	YES	NO
a) Republic of Serbia	<input type="checkbox"/>	<input type="checkbox"/>
b) Other EU countries	<input type="checkbox"/>	<input type="checkbox"/>
c) Countries from the rest of the world	<input type="checkbox"/>	<input type="checkbox"/>

### **MODULE 2.G: USE OF RADIO FREQUENCY IDENTIFICATION (RFID)**

<b>Radio Frequency identification technologies (RFID) means:</b>		
<ul style="list-style-type: none"> <li>- automatic identification method to store and remotely retrieve data using RFID tags or transponders;</li> <li>- RFID tag is a device that can be applied to or incorporated into a product or object and transmits data via radio waves;</li> <li>- RFID system has an antenna and receiver that reads the radio frequency and transmits the information to signal processing device.</li> </ul>		
<b>G1</b> : In January 2011, did your enterprise use RFDI instruments (equipment for radio identification via radio waves)?	YES	NO
	<input type="checkbox"/>	<input type="checkbox"/> Go to H1
<b>G2</b> : For what purposes did your enterprise use RFID in January 2011?	YES	NO
a) Persona identification or access control	<input type="checkbox"/>	<input type="checkbox"/>
b) As part of the production and/or service delivery process. Monitoring and control of industrial production, supply chain and inventory tracking, etc.)	<input type="checkbox"/>	<input type="checkbox"/>
c) Alter-sale product indentification	<input type="checkbox"/>	<input type="checkbox"/>

### **MODULE 2.H: ICT AND ENVIRONMENTAL IMPACT**

<b>H1</b> : In January 2011, did you enterprise have in place any of the following policies?		
	YES	NO
a) Reducing the amount of paper used in printing or copying (e.g. two-sided copying)	<input type="checkbox"/>	<input type="checkbox"/>
b)...Reducing the energy consumption of your ICT equipment  Automated power down alter use of equipment, use of multi-function imaging devices (printers, scanners, photocopiers, etc.)	<input type="checkbox"/>	<input type="checkbox"/>
c) Use of telephone, web of video conferencing instead of physical travel	<input type="checkbox"/>	<input type="checkbox"/>

# ICT GLOSSARY

**ADSL (Asymmetric Digital Subscriber Line):**

A broadband digital transmission technology that uses the existing telephone line and provides for possible simultaneous data sending and voice communication. The larger part of range serves for data sending to user and the speed extends up to 6 Mbps.

**Bit (Binary Digit):**

The smallest information unit that a computer handles. A bit is expressed as 1 or 0 in binary presentation, or as true, i.e. false in logic presentation. A group of 8 bits makes 1 byte.

**Broadband:**

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-Business):**

Transactions between two enterprises that are carried out by the way of networks based on IP and through other computer networks.

**B2C (Business-to-Customer):**

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

**CRM (Customer Relationship Management):**

It is a process or methodology that helps managing information about our clients' needs and habits and developing tighter relationships with them. CRM contains several technological components, but in organizational terms, CRM represents a set of processes for collecting necessary information on customers, sales, marketing efficiency, customers' reactions and market trends. CRM helps managing technologies and human resources in order to have a view of customers' behavior and value.

**Downloading**

Electronic transmission of information from a remote computer to your computer. Downloading of data files from anonymous FTP is a popular way of obtaining free of charge software of public property.

**Dial-up connection:**

Use of a telephone network for the purpose of connecting to an other network. Included are modem and regular telephone line, ISDN card and ISDN line, etc. If you are a typical computer user, you have one or two dial-up connections: one for the link to Internet and another for the link to the network at your enterprise.

**DSL (Digital Subscriber Line):**

A type of fast Internet connection that utilizes standard telephone lines. It could also be a type of broadband connection.

**xDSL, ADSL, etc.**

Transmissions via the Internet networks based on protocols and via other computer networks. Goods and services are ordered over those networks, but payments and final delivery of goods or services can be carried out on/outside the off-line network. Orders received by telephone, fax or e-mail do not fall into this category of e-commerce.

**Digital goods or services:**

Goods/services that can be ordered or delivered directly via a computer over the Internet, e.g. films, games, computer software, "on-line" newspapers, consulting services, etc.

**E-mail:**

Electronic transmission of messages, including text and attachments, between computers located inside or outside an organization. This comprises electronic mails over the Internet or other computer networks.

**Extranet:**

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

**Electronic commerce:**

E-Commerce (Electronic Commerce) is the purchase or selling 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.

**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, alike the signature in standard business, the electronic signature is used in electronic business. Besides, the latter secures electronically signed messages, which is not the case with personal signatures.

**ERP (Enterprise Resource Planning):**

ERP is a software system that monitors all the aspects of business operations of a company. The implemented ERP system is able to integrate business operations of different company functions (e.g. 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, develop and monitor business processes and procedures.

**Firewall:**

A combination of hardware and software keeping the system secure. It is usually used to prevent any unauthorized access to the internal local network from the 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:**

World computer network.

**Internet address:**

Address of one of the Internet resources. It typically reads for example:

<http://www.stat.gov.rs>

**Intranet:**

A network inside an organization based on Internet technologies and protocols, but being only available to a specific group of persons, e.g. the employees.

**ISDN (Integrated Services Digital Network):**

A fast telephone service with speed ranges up to 128 Kbps, which is several times faster than the analogous modem.

**Local Area Network (LAN):**

A local network that covers and connects a group of computers, printers and other units within a relatively limited location (e.g. building). Each 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., being connected to the communication link, which enables all the devices to interact. It can be of small range, linked with cables, wireless, permanently, temporary linked, ... The Internet is the largest network, the largest group of all interconnected world networks.

**Server:**

A computer, in a network environment, having shared resources and 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 links geographically remote computers, printers and other devices.

**Window:**

A part of a screen from which programs and processes can be started-up. Users can start-up several "windows" at the same time.



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