

USAGE OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN THE REPUBLIC OF SERBIA, 2009

* Households/individuals* Enterprises



Belgrade, 2009

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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 banking and insurance. This undertaking was primarily meant to test methodologies and instruments and prepare for implementation similar, regular surveys related to households and the economy.

In 2006, 2007 and 2008 the Statistical Office of the Republic of Serbia conducted two surveys on the usage of information and communication technologies. The first one referred to households and individuals, and the second included also enteprises.

Both surveys were also carried out on the territory of the Republic of Serbia in 2009 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 preceeding the telephone interview were taken to be the reference period, which was, for most of the questions asked to enterprises, January 2009, while selected ones referred to the entire 2008.

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 reference one).

The survey for enterprises was carried out on a sample stratified by size and activities, by telephone. It covered 1152 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 be the basis for its further development.



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USAGE OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN THE REPUBLIC OF SERBIA, 2009

* Households/individuals



1.1. METHODOLOGY

Realisation	Survey carried out on 7 May 2009
Type of survey	Telephone interview
Sample size	 2400 households 2400 individuals
Target population	 For households: the target population includes all households with at least one member aged between 16 and 74 For individuals: the target population includes all individuals aged between 16 and 74
Sample type	Two-stage stratified sample
Survey coverage	 Territory of the Republic of Serbia (without AP Kosovo and Metohia)

1.2. SAMPLE

The surve y on the usage of info rmation and communication technologies in hou scholds has been carried out on a representative sample of 2 400 households on the territory of the Republic of Serbia. The response rate is 96.6% (2 318 households).

Households									
		Income			Region			be of sehold	
Sample (households)	Under 300 euros	300 - 600 euros	More than 600 euros	Central Serbia	Vojvodina	Belgrade	Urban	Rural	Total
Number	1324	697	297	1162	635	521	955	1363	2318
%	57.1	30.1	12.8	50.1	27.4	22.5	41.2	58.8	100

The sample used for households has been applie d for individuals aged 16 to 74 living on the territory of the Republic of Serbia. The response rate is 96.6% (2318 households).

	Godine						Ρ	ol	Obr	azova	anje	F	Radni	statu	S	
Sample (individuals)	16 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	Male	Female	Lower than secondary	Secondary	Tertiary	Employed	Uenmployed	Student	Other	Total
Number	312	330	328	408	449	491	1010	1308	560	1321	437	711	627	104	876	2318
%	13.5	14.2	14.2	17.6	19.4	21.1	43.6	56.4	24.2	57.0	18.8	30.7	27.0	4.5	37.8	100

Individuals

`73C

1.3. MAJOR FINDINGS

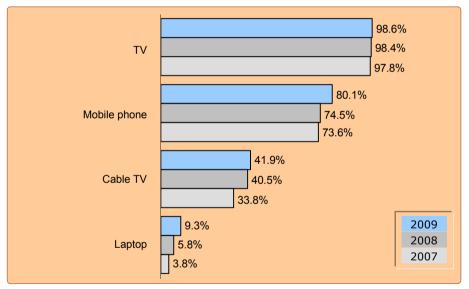
1.3.1. Devices in households

The respondents have been offered to give mu ltiple answers to the question relating to devices available in households. The su rvey indicates t hat 98.6% of hou seholds have a TV receiver, and 41.9% have cable TV.

80.1% of households have a mobile phone

A total of 9.3% of households possess a laptop, which represents increases of 3.5%, 5.5% and 7.8% compared to 2008, 2007 and 2006 respectively.

The survey shows that 68.9% of households own a radio receiver.



Graph 1.1. Devices available in households

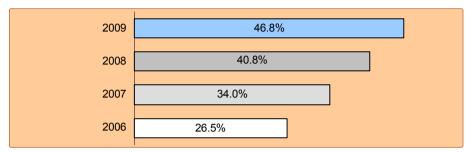
1.3.2. Computers in households

Based on major findings of this surve y 46.8% of households in the Republic of Se rbia have a computer, which represents increases of 6%, 12.8% and 20.3% compared to 2008, 2007 and 2006 respectively. The availability of computers in households varies depending on the territory: in Belgrade it amounts to 59.8%, in Vojvodina to 46.1%, and in Central Serbia to 41.3%.

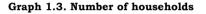
46.8% of households have a computer

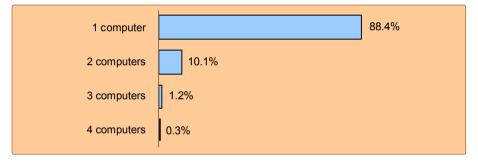
Survey results

Graph 1.2. Computers in households

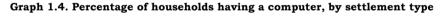


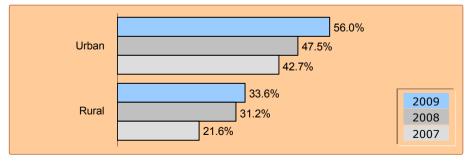
Most of households have one computer (88.4%), and just a fe w of them have t wo computers (10.1%).





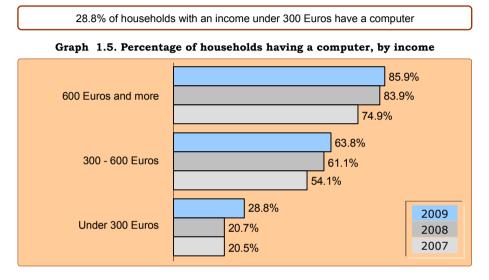
When comparing the u rban and rural a reas in Serbia differences are also notic ceable: 56% versus 33.6%. In relation to 2008, this gap has increased even more. Growth rates of the availability of computers in urban and rural areas of Serbia speak in favor of this finding. In urban parts of Serbia, the growth rate amounts to 8.5%, and to 2.4% in its rural parts in relation to 2008.





However, the largest gap concerning the availability of computers in households has been found in the structure of households by their monthly income. Computers are possessed mostly by households with an i ncome over 600 Eu ros (85.9%), and the percentage of those owning a computer and having an income under 300 Euros is 28.8%.

Compared to 2008 the gap in 2009 relating t o t he availabilit y of computers in households, according to th eir i ncome, has slightly decr eased of which e xpressive are g rowth rates i n selected categories of income for 2009 i n relation to the previous year. The growth rates for households with an i ncome ove r 300 Eu ros, i n rel ation to 20 08, are a bit hi gher than 2% contrary to those for households with an income under 300 Euros amounting to 8.1%.

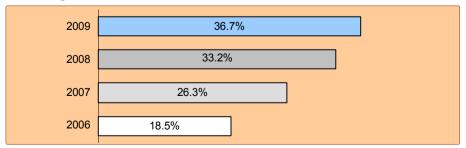


1.3.3. Internet in households

There are in the Republic of Serbia 36.7% of household that have access to the Internet, which represents i ncreases of 3.5%, 10.4% and 18 .2% i n relation to 2008, 2007 and 20 06 respectively.

36.7% of households have an Internet connection

Graph 1.6. Does the household have access to the Internet at home?



Rural

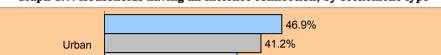
35.0%

2009

2008

2007

The Internet is most accessed to in Belgrade (48.6%), in Vojvodina (37.9%), and in Central Serbia (30.5%).



22.0%

21.7%

13.7%

Graph 1.7. Households having an Internet connection, by settlement type

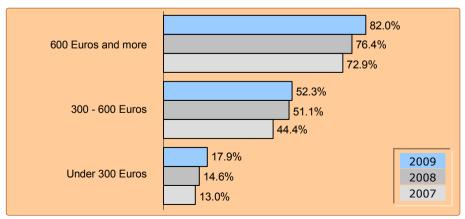
There are important differences when comparing the availability of Internet connections in urban and rural areas in Serbia: 46.9% versus 22.0%. In relation to 2008, the results are expressive of an increased gap existing in the availability of Internet connections in those areas. The growth rate in urban parts of Serbia amounts to 5.7% and that in rural parts to only 0.3%.

When observing the structure of households by monthly income, there is a large difference as to the availability of Internet connections, just as it is the case with the availability of computers in households. The Internet is mostly accessed in households with a monthly income over 60 0 Euros (82.0%), and in 17.9% of households, which income is under 300 Euros.

17,9% of households with an income under 300 Euros have an Internet connection

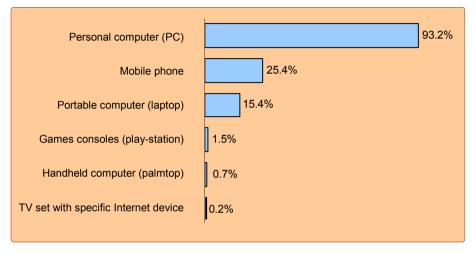
According to data for 2008, t here is an even more i mportant gap regarding the a vailability of Internet connect ions, by i ncome. Gro wth rates i n certai n cate gories of i ncome i n 2009, compared to the previous year, are clearly expressive of the previous. The growth rate for households which income exceeds 300 Euros, i n relation to 2008, amounts to 3.3 %, i.e. 1.2% for households with an income ranging between 300 and 600, and that for households with over 600 Euros of income is 5.6%.

Graph 1.8. Households having an Internet connection, by income



When asked ab out devices on which the Intern et is accessed, 93.2% of house holds said that they used personal computers for that purpose, 25.4% went to the Internet via a mobile phone, and 15.4% via a laptop.

The results of the survey are indicative of a 6.9 % growth of the number of household having access to the Internet when compared to 2 008. On the other hand, the number of households using a personal computer to access the Internet increased by 2%.

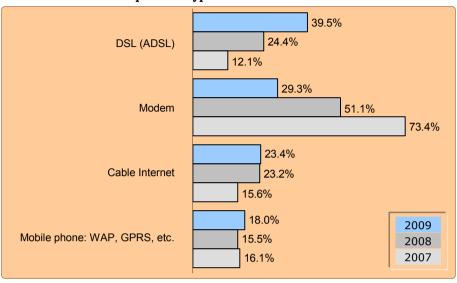


Graph 1.9. Devices on which the Internet is accessed

Regarding the w ay the I nternet is accessed (types of connections) households have been offered to choose among several answers. The results show that of the total number of thouseholds having an Internet connection, 39.5% of them have DSL (ADSL), 29.3% a modem connection, 23.4% cable Internet, and 18% have WAP and GPRS.

29,3% of households access the Internet via a modem connection

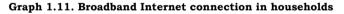
According to the results, the use of modem connections drop ped by 21.8 % and 44.1% compared to 20 08 and 2007 respectively, mainly because of the increased usage of the broadband connection.

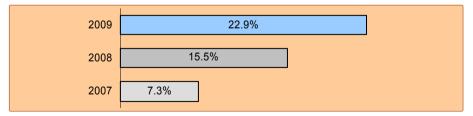


Graph 1.10. Type of Internet connection

22.9% of households in Serbia have a broadband Internet connection

Besides enabling quicker access to the Internet the b roadband Internet connection changes completely the way the Internet is used: information is downloaded rather f aster than with the traditional (dial-up) modem connection. Accordingly, the percentage of households having this type of Inter net connecti on is a among the maj or indicators showing the cour se of IC T development in the Euro pean Union since 2005. In Ser bia, 22. 9% of households have a broadband Internet connection, which are 7.4 % and 15.6% increases compared to 2008 and 2007 respectively. The percentage of this type of Internet connection is the highest in Belgrade amounting to 37.6%, then in Vojvodina being 23%, and is the lowest in Central Serbia reaching 16.1%.



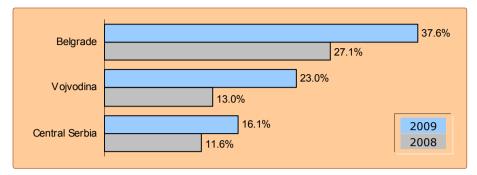


The broadband Internet connecti on is mainly utilized by households which monthly income exceeds 600 Euros (58.3%), while the share of households having an income under 300 Euros is 9.1%.

There are considerable differences when comparing this type of connection in urban and rural areas of Serbia: 33.7% versus 7.4%.



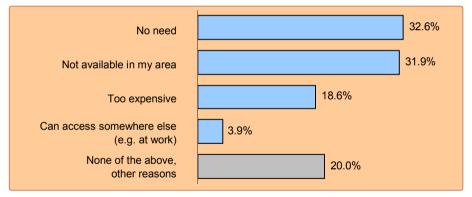
Graph 1.12. Broadband Internet connection in households, by territory



The most frequent answers as to the reasons of not having a broadband Internet connection at home are as follows:

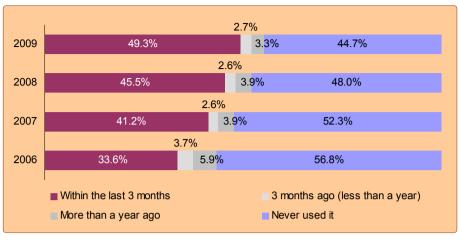
- "No need" (32.6%)
- "Not available in my area" (31.9%)
- "T oo expensive" (18.6%)

Graph 1.13. Reasons for not having a broadband connection at home



1.3.4. Individuals: use of computers

In the Republic of Serbia 49.3% of i ndividuals used a computer within the l ast three months, 2.7% more than n three months ago, and 3.3% more than one year ago. Eve n 44.7% of individuals have never used a computer. The number of computer users has grow n by 3.3%, 7.6% and 12.1% compared to 2008, 2007 and 2006 respectively.



Graph 1.14. When did you last use a computer?

The number of computer user has grown by 3.3% in relation to 2008

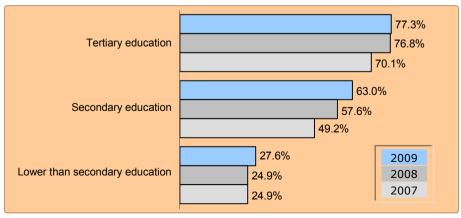
When compared to 2008, the number of individuals that used a computer within the last three months increased slightly by more than 200 000.

More than 2 850 000 individuals used a computer within the last three months

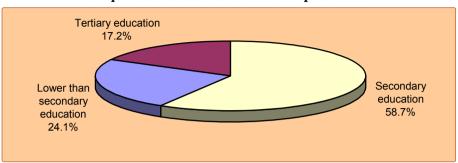
The percentage of computer users (within the last three months), by educational level:

- 77.3% of individuals with tertiary education;
- 63.0% of individuals with secondary education;
- 27.6% of individuals with an educational level lower than secondary.

Graph 1.15. Percentage of computer users (within the last three months), by educational level



Among the users of computers, 58.7% of them have attai ned secondary educ ational level, 17.2% have attained tertiary educational level, and 24.1% have an educational level lower than secondary.

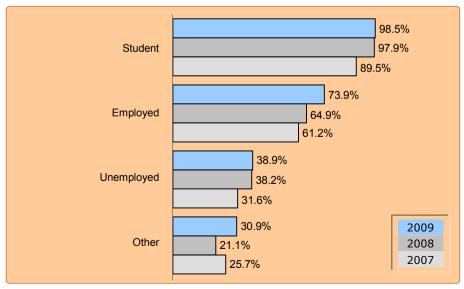


Graph 1.16. Educational levels of computer users

The percentage of computer users (within the last three months), by employment situation:

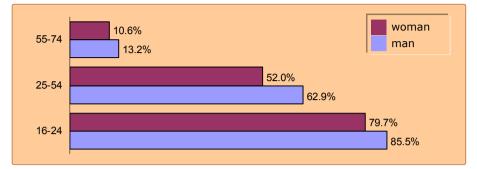
- 98.5% of students;
- 73.9% of employees;
- 38.9% of unemployed;
- 30.9% of others (retired, on compulsory military service...).

Graph 1.17. Share of computer users (within the last three months), by employment situation



After the analysis of the respondents by sex, it has appeared that 54.2% of males and 44.6% females have used a computer.

Graph 1.18. Use of computers (withing the last 3 months), by sex and age

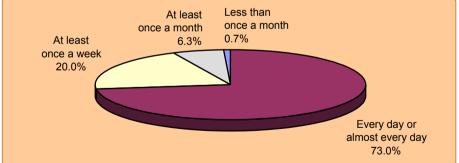


As far as the qu estion on how often on average households used a computer within the last 3 months, 73% of them used it every day or almost every day, 20% at least once a week, 6,3% at least once a month, and 0,7 % less than once a month.

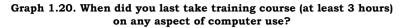
More than 2 080 000 individuals use a computer every day or almost every day

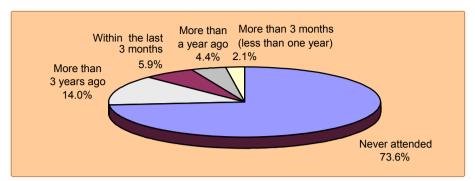
Compared to 20 08 the number of individuals that used a comput er every day or almost every day has grown slightly by more than 180 000.

Graph 1.19. How often, on average, did you use a computer in the last 3 months?



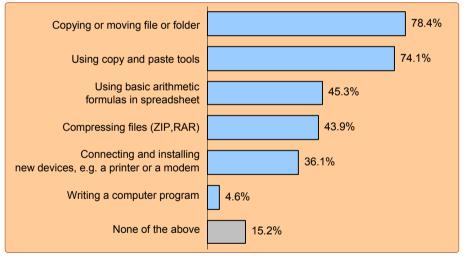
Within the last three months computers were m ostly used at home (92.6%), the n at pl ace of work (26.2%) and in place of education (13.3%).





The surve y indicates that onl y 5.9% of respondent took a training course on an y aspect of computer use within the last three months. There were even 73.6% who have never taken any training course.

Graph 1.21. Which of the following computer-related activities have you already carried out?



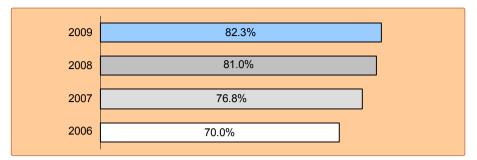
1.3.5. Individuals: use of mobile phones

The surve y sho ws that 82. 3% of population us e a mobile phone, while in 2008 this figure amounted to 81%, and in 2007 to 76.8%.

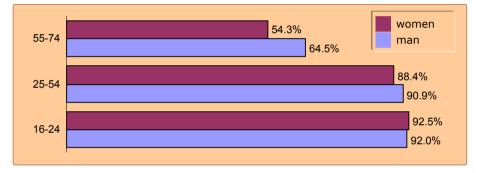
More than 4 760 000 persons use a mobile phone

Survey results

Graph 1.22. Use of mobile phones



In relation to 2008, the number of individuals who used a mobile phone grew by slightly more than 110 000.



Graph 1.23. Use of mobile phones, by sex and age

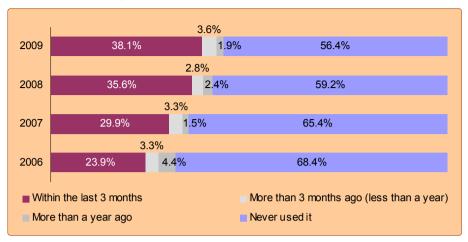
1.3.6. Individuals: use of the Internet

In Serbi a 38.1 % of i ndividuals used the Internet within the last three months, 3.6% of respondents used it more than three months ago, and 1.9% more than one year ago. The percentage of respondents who have never used the Internet is 56.4%.

The number of I nternet users has increased by 2.8%, 9% and 12% compared to 2008, 2007 and 2006 respectively.

The number of Internet users has increased by 2.8% compared to 2008

Graph 1.24. When did you last use the Internet?



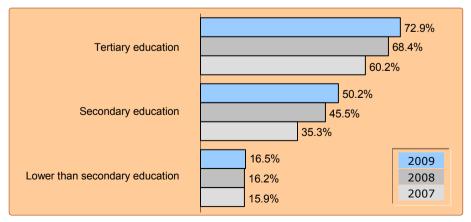
More than 2 200 000 individuals use the Internet within the last three months

In relation to 2008 the number of i ndividuals who used the Internet within the last three months has increased by slightly more than 200 000.

The percentage of Internet users (within the last three months), by level of education:

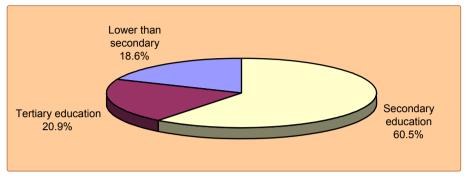
- 72.9% of individuals with tertiary education;
- 50.2% of individuals with secondary education;
- 16.5% of individuals with an educational level lower than secondary.

Graph 1.25. Percentage of Internet users (within the last three months), by educational level



Among Internet users 60.5% have attained seco ndary education al level, 20.9% tertiar y, and 18.6% of users have an educational level lower than secondary.

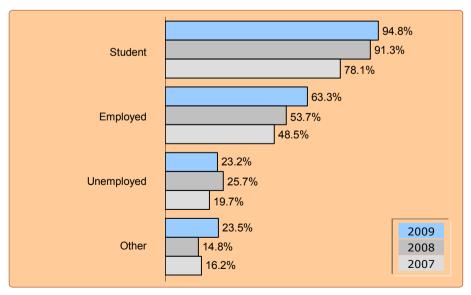




The percentage of Internet users (within the last three months), by employment situation:

- 94.8% of students;
- 63.3% of employees;
- 23.2% of unemployed;
- 23.5% of others (retired, on compulsory military service...).

Graph 1.27. Percentage of Internet users (within the last three months), by employment situation

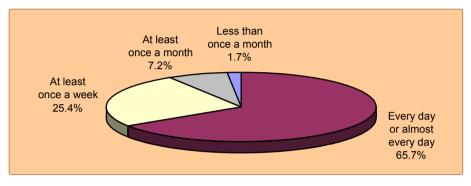


When asked how often on average they used the Internet within the last three months, 65.7% of respondents used it every day or almost every day.

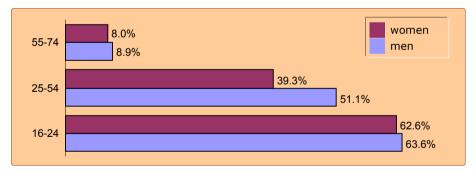
More than 1 450 000 individuals use the Internet every day or almost every day

Compared to 20 08, the number of individuals who have used the Internet every day or almost every day has grown by slightly more than 200 000.

Graph 1.28. How often, on average, did you use the Internet within the last 3 months?

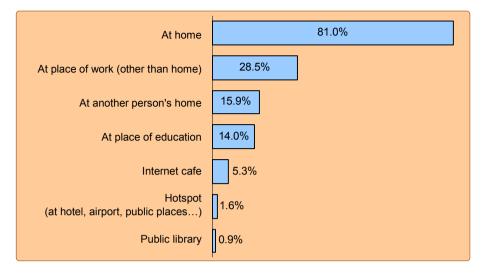


Graph 1.29. Use of the Internet (within the last 3 months), by sex and age



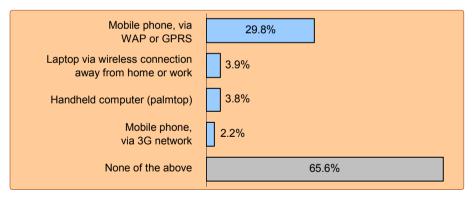
The analysis of the respondent by sex indicates that within the last three months 42.3% of male individuals and 34.1% of female individuals used the Internet.

Graph 1.30. Where did you use the Internet in the last 3 months?



Within the last three months most of the respondents used the Internet at home (81%), 28.5% used it at place of work, 15.9% at another person's home, 14% at place of education, and 5.3% in Internet-cafés.

Graph 1.31. Use of mobile devices to access the Internet



The respondents used the Internet in the last three months mostly for: sending and receiving e-mails (79.2%), pla ying or do wnloading games, images, music, film s (64%), finding information about goods and services (56.6%).



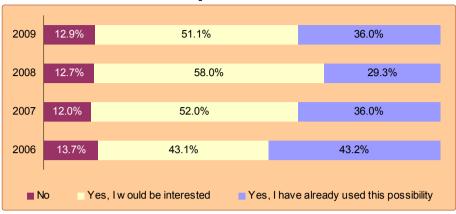
Graph 1.32. Reasons for using the Internet (for private purposes) within the last 3 months

Sending/receiving e-mails	79.2%
Playing or downloading games, images, films or music	64.0%
Finding information about goods and services	56.6%
Posting messages to chat sites, to newsgroups or on-line discussion forum	42.3%
Reading or downloading on-line newspapers/news magazines	42.1%
Using services related to travel and accommodation	35.0%
Telephoning over the Internet/ video calls	27.0%
Consulting the Internet with the purpose of learning	27.0%
Uploading self-created content (text, images, videos, music, etc.) to any website to be shared	26.8%
Looking for information about education, training or course offers	26.4%
Listening to web radios/ watching web television	25.3%
Downloading software	23.5%
Seeking health-related information	21.9%
Looking for a job or sending a job application	15.7%
Internet banking	12.0%
Sale of goods or services (e.g. via auctions)	4.4%
Doing an on-line course (of any subject)] 1.3%

1.3.7. e-government

The surve y indicates that 12.9% of responden ts belonging to the Internet pop ulation us e Internet services instead of entering into personal contacts or going directly to public institutions or administration bodies, while 51.1% of them is interested in that possibility, but do not use it at the moment.

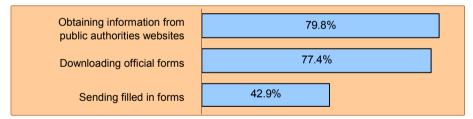
Graph 1.33. Would you rather use the Internet service of public authorities instead personal contacts?



The fact that 36% of respondent are not interested in that possibility is disquieting. Compared to 2008 the number of individuals who use Internet services of pu blic authorities h as grown by slightly more than 25 000.

More than 285 000 individuals use Internet services of public authorities

Graph 1.34. For which of the following local authorities services did you use the Internet?



The survey indicates also that 79.8% of respondents used the Internet in the last three months for obtaining information from websites of public authorities, 77.4% for downloading forms, and 42.9% for sending filled in forms.

1.3.8. e-commerce

As far as the period w ithin which Internet users bought/ordered goods or services via the Internet, 6.5% of users did it w ithin the last three months, 4.0% m ore than three months ago, and 2.1% more than a year ago.

There are 87.4 % of Internet us ers who have never bought/or dered goods or services via the Internet.

More than 264 000 individuals bought/ordered goods/services in the last 12 months

Graph 1.35. When did you last (for private use) bought/ordered goods or services via the Internet?

	4.0%	
2009	6.5% 2.1%	87.4%
	4.9%	
2008	6.3% 2.5%	86.3%
	3.2%	
2007	3.7 <mark>% 3.</mark> 4%	89.7%
	4.6%	
2006	5.6% 1.4%	88.4%
With	ning the last 3 months	More than 3 months ago (less than a year)
Mor	e than a year ago	Never used it

Compared to 2008, the number of individuals who have bought/ordered goods/services over the Internet has grown to slightly more than 14 000.

Graph 1.36. What types of goods/services did you buy/order (for private use) via the Internet in the last 12 months?

Films, music	28.3%
Holiday accommodation (hotel, etc.)	25.5%
Computer software and their upgrades	24.8%
Clothes, sports goods	22.9%
Other travel arrangements (transport tickets, carhire, etc.)	22.2%
Electronic equipment (incl. cameras)	14.4%
Household goods (furniture, toys, etc.)	12.6%
Books / magazines / newspapers / e-learning material	10.9%
Computer hardware	7.6%
Food/groceries	6.2%
Tickets for cultural events	5.8%
Pharmaceutical products	4.2%
Games and upgrades	2.9%
Telecommunication services (e.g. uploading money on prepaid phone cards, etc.)	2.0%
Other	11.8%

Most of Inter net users bu y/order over the I nternet films a nd music (28.3 %), h oliday accommodation (25.5%) and computer software (24.8%).

Graph 1.37. What were the reasons for not buying/ordering goods or services for personal use in the last 12 months?

No need	59.2%
Prefer to shop in person, like to see product, loyalty to shops, force of habit	40.0%
Payment security concerns (e.g. giving credit card details)	10.5%
Do not have a payment card allowing to pay over the Internet	9.6%
Lack of skills	5.7%
Trust concerns about receiving or returning goods, complaint/redress concerns	5.7%
Privacy concerns (e.g. giving personal information over the Internet)	5.2%
Internet connection too slow	2.7%
Delivery of goods ordered over the Internet is a problem	2.2%
Relevant information about goods and services difficult to find on the website	0.7%
Other	11.2%



1.4. RESULTS OF THE SURVEY

MODUL E1.A: Access to information and communication technologies

				9								
							in	perce	ntages			
Answer (households)	Income			Region			Type of household					
	under 300 Euros	300 - 600 Euros	more than 600 Euros	Central Serbia	Vojvodina	Belgrade	urban	rural	Total			
A1: Devices available in households (tick all that apply)												
TV	97.7	99.7	99.9	98.4	98.0	99.6	99.1	97.9	98.6			
Mobile phone	69.7	91.9	98.2	78.0	76.4	89.2	84.4	73.9	80.1			
Radio-receiver	63.1	74.6	80.6	67.6	72.4	67.3	70.2	66.9	68.9			
Personal computer (PC)	28.8	63.8	85.9	41.3	46.1	59.8	56.0	33.6	46.8			
Cable TV	28.2	56.1	68.5	32.9	34.5	70.6	61.3	13.9	41.9			
Laptop	3.2	11.6	30.2	6.6	8.1	16.5	13.2	3.6	9.3			
None of the above	0.4	0.0	0.0	0.3	0.3	0.0	0.0	0.6	0.2			
A2: Do you	or any	one in	your	housel	hold h	ave ac	cess					
	to t	he Into	ernet a	t hom	le?							
No	80.9	46.4	18.0	69.1	59.5	50.9	52.3	76.6	62.3			
Yes	17.9	52.3	82.0	30.5	37.9	48.6	46.9	22.0	36.7			
Don't know	1.2	1.3	0.0	0.4	2.6	0.5	0.8	1.4	1.0			
A3: Devices on wh	A3: Devices on whicht he Internet is accessed (tick all that apply) $^{1)}$											
Personal computer (PC)	93.6	92.6	93.6	93.2	92.1	94.1	94.3	89.6	93.2			
Mobile phone	20.5	23.3	33.1	19.7	21.9	36.6	25.2	26.2	25.4			

Mobile phone	20.5	23.3	33.1	19.7	21.9	36.6	25.2	26.2	25.4
Portable computer (laptop)	7.2	16.0	22.4	13.1	13.7	20.3	18.2	7.1	15.4
Games consoles (play-station)	0.3	2.3	1.5	1.1	2.2	1.5	1.9	0.4	1.5
Handheld computer (palmtop)	0.5	0.7	0.7	0.8	0.8	0.4	0.7	0.5	0.7
TV set with specific Internet device	0.0	0.6	0.0	0.0	0.9	0.0	0.3	0.0	0.2

¹⁾ The results refer to households that answered "YES" in question A2.

MODUL E1.A: Access to information and communication technologies

in percentages											
	Income			Region			Type of household				
Answer (households)	under 300 Euros	300 - 600 Euros	more than 600 Euros	Central Serbia	Vojvodina	Belgrade	urban	rural	Total		
A4: Type of Internet connection (tick all that apply) $^{1)}$											
DSL (ADSL)	35.4	40.1	42.4	37.0	37.9	44.4	45.5	21.0	39.5		
Modem	40.0	26.9	22.5	39.5	26.0	18.4	23.4	47.3	29.3		
Cable Internet	15.6	24.1	29.8	16.4	23.2	33.3	26.9	12.7	23.4		
Mobile phone: WAP, GPRS, etc.	14.3	16.0	24.5	15.3	15.7	24.1	16.4	23.1	18.0		
ISDN	1.4	1.3	2.1	2.2	2.2	0.0	1.2	2.5	1.6		
A5: Reasons for not		-				onnect	tion at	home			
	(t	ick all	that a	(pply) ²)						
No need	34.5	36.9	21.8	31.2	33.2	36.0	39.6	23.3	32.6		
Not available in my area	29.5	28.6	41.5	36.3	31.3	18.6	19.8	47.7	31.9		
Too expensive	23.0	18.9	10.8	16.9	18.3	24.2	19.5	17.3	18.6		
Can access broadband	3.4	3.2	6.1	4.2	1.1	7.9	4.0	3.8	3.9		

¹⁾ Data refer to households that answered "YES" in question A2.

16.9

20.2

24.6

17.7

22.1

23.6

22.3

17.1

20.0

²⁾ Data refer to households that answered positively in question A4A and/or A4B and/or A4F.



somewhere elese None of the abov, other

MODULE 1.B: Use

			Gender						
Answer (individuals)	16 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	male	female	
	B1: When								
Within the last 3 months	82.7	71.5	61.9	41.9	17.3	5.7	54.2	44.6	
Never used one	7.9	19.8	31.7	54.6	77.4	91.9	42.6	46.7	
More than 1 year ago	2.2	4.6	4.4	1.8	4.8	2.2	2.0	4.5	
More than 3 months (less than a year)	7.2	4.1	2.0	1.7	0.5	0.2	1.2	4.2	
		в	2: How	7 often	on av	erage	did yo	u use	
Every day or almost every day	68.7	77.7	73.5	73.6	74.9	56.5	73.8	72.0	
At least once a week	24.6	18.2	17.2	17.2	21.2	27.5	21.1	18.6	
At least once a month	6.5	4.1	8.5	6.9	3.3	13.0	4.7	8.3	
Less than once a month	0.2	0.0	0.8	2.3	0.6	3.0	0.4	1.1	
			вз:	Where	did y	ou use	a con	puter	
At home	96.0	89.8	92.2	92.1	90.5	93.3	92.9	92.3	
At place of work (other than home)	4.0	33.7	33.9	41.4	35.1	14.6	24.9	27.7	
At another person's home	34.7	12.6	8.7	9.1	4.5	9.2	11.7	23.5	
At place of education	37.5	3.6	4.4	2.3	0.0	0.0	7.3	20.3	
Other (Internet-cafe, hotel)	15.5	3.6	3.5	2.4	0.7	0.0	5.1	8.5	
]	B4: Wh	en did	you l	ast tal	te a tra	aining	
Never taken one	82.9	75.5	67.3	64.6	70.8	67.8	76.8	70.3	
More than 3 years ago	9.2	10.0	18.1	18.3	23.8	23.0	11.2	16.8	
Within the last 3 months	4.5	6.8	8.6	4.3	2.8	7.8	5.9	5.9	
More than 1 year ago	1.9	6.4	4.5	7.2	1.8	1.4	4.4	4.5	
More than 3 month ago (less than 1 year)	1.5	1.3	1.5	5.6	0.8	0.0	1.7	2.5	
¹⁾ Data refer to individuals who answ	ered in	questio	n B1 "V	Vithin th	e last 3	month	s" .		

²⁾ Data refer to individuals who answered "Never used one" in question B1.

Sample

of computers in percentages													
		ation	nt situa	oloyme	Emp	evel	ional le	Educat					
Answer (individuals)	Total	other	student	unemployed	employee	tertiary education	secondary education	lower than secondary education					
use a computer?													
Within the last 3 months	49.3	30.9	98.5	38.9	73.9	77.3	63.0	27.6					
Never used one	44.7	65.2	0.0	52.3	20.8	15.4	29.7	68.1					
More than 1 year ago	3.3	3.6	1.5	3.5	3.0	6.3	4.4	1.3					
More than 3 months (less than a year	2.7	0.3	0.0	5.3	2.3	1.0	2.9	3.0					
a computer in the last 3 months? ¹⁾													
Every day or almost every day	73.0	67.7	92.3	61.9	79.2	84.2	77.5	54.0					
At least once a week	20.0	29.9	3.9	24.4	15.3	10.0	16.2	36.4					
At least once a month	6.3	1.7	3.8	11.5	5.5	5.6	5.5	8.8					
Less than once a month	0.7	0.7	0.0	2.2	0.0	0.2	0.8	0.8					
)	pply) ¹	hat a	k all t	s? (tic	nonth	st 3 n	in the la					
At home	92.6	96.5	96.2	95.7	89.0	93.4	90.1	98.2					
At place of work (other than home	26.2	3.7	17.6	6.1	47.3	60.2	26.4	1.5					
At another person's home	17.1	45.4	25.4	8.6	9.9	14.3	16.5	20.6					
At place of education	13.3	47.3	35.2	2.9	3.5	4.0	12.8	21.1					
Other (Internet-cafe, hotel	6.7	19.5	10.3	0.6	4.6	6.4	5.4	10.0					
ter use? ²⁾	compu	ct of o	aspe	on any	ours) o	st 3 ho	at leas	course (a					
Never taken one	73.6	82.8	73.2	79.2	66.2	49.5	76.2	83.7					
More than 3 years ago	14.0	9.9	6.8	11.4	18.0	31.7	11.4	8.3					
Within the last 3 months	5.9	4.7	12.0	4.2	6.9	6.1	6.5	4.4					
More than 1 year ago	4.4	1.3	5.2	3.6	6.2	11.0	4.0	1.0					
More than 3 month ago (less than year	2.1	1.3	2.8	1.6	2.7	1.7	1.9	2.6					

MODULE 1.B: Use

			Gender						
Answer (individuals)	16 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	male	female	
B5: Which of the following computer-relation									
Copying or moving a file or folder	78.3	80.1	77.0	79.5	74.1	73.1	78.7	78.0	
Use of copy and paste tools	71.9	76.4	73.8	74.5	76.5	73.1	72.2	76.3	
Use of basic arithmetic formula in a spreadsheet	50.4	47.7	41.3	42.9	36.3	27.1	42.3	48.9	
Compressing file (ZIP,RAR)	46.7	48.3	40.7	42.7	31.5	23.1	46.4	41.1	
Connecting and installing new devices, e.g. a printer or a modem	33.8	44.8	37.4	29.4	26.1	34.3	46.1	24.5	
Writing a computer program	5.0	6.2	3.2	4.3	3.0	2.9	6.0	3.0	
None of the above	10.8	15.5	16.8	18.1	19.1	24.9	12.5	18.2	

¹⁾ Data refer to individuals who answered "Within the last 3 months" in question B1.

of computers

Sample

of com	ipute	rs				in percentages		
Educa	tional le	evel	Emp	oloyme	nt situa	ation		
lower than secondary education	secondary education	tertiary education	employee	unemployed	student	other	Total	Answer (individuals)
activitie	s have	e you	alread	ly car				
64.0	79.9	93.5	84.4	64.6	92.8	78.8	78.4	Copying or moving a file or folder
54.4	76.7	92.9	77.8	61.8	94.5	76.9	74.1	Use of copy and paste tools
34.5	44.4	63.8	45.1	33.4	65.0	57.7	45.3	Use of basic arithmetic formula in a spreadsheet
31.5	43.7	62.3	48.7	31.7	64.5	43.7	43.9	Compressing file (ZIP,RAR)
25.1	36.0	52.0	43.8	30.3	57.6	19.2	36.1	Connecting and installing new devices, e.g. a printer or a modem
0.0	4.5	11.8	5.3	1.6	16.0	4.3	4.6	Writing a computer program
19.0	16.6	4.8	11.6	25.7	5.5	11.8	15.2	None of the above



MODULE	1.C:	Use	of
--------	------	-----	----

			A	ge			Gei	nder
Answer (individuals)	16 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	male	female
					C1:	When	did yo	ou last
Never used it	28.7	32.3	48.4	62.5	84.8	94.7	50.9	61.7
Within the last 3 months	62.6	58.2	46.4	33.4	12.8	3.6	42.3	34.1
More than 3 months ago (less than a year)	6.4	5.5	4.2	2.8	0.4	1.0	5.0	2.2
More than 1 year ago	2.3	4.0	1.0	1.3	2.0	0.7	1.8	2.0
			C2:	How	often o	on ave	rage di	id you
Every day or almost every day	57.6	68.4	70.0	69.1	69.0	57.2	66.3	64.9
At least once a week	37.4	21.5	18.9	19.9	25.6	21.7	24.8	26.1
At least once a month	4.1	7.5	10.6	8.1	3.0	16.3	7.3	7.0
Less than once a month	0.9	2.6	0.5	2.9	2.4	4.8	1.6	2.0
	C3: Where did you use the Internet in the las							
At home	69.2	79.1	91.5	88.3	88.1	76.1	82.3	79.5
At place of work (other than home)	3.3	34.7	36.9	47.6	37.3	18.4	27.7	29.3
At another person's home	20.6	22.1	8.9	10.7	5.7	14.5	17.5	14.0
At place of education	40.2	4.2	3.2	2.5	3.3	7.5	11.5	16.9
In Internet café	10.1	4.8	2.6	2.7	1.2	3.1	7.4	2.8
Hotspot (at hotel, airport, public places…)	1.0	1.5	2.8	1.1	1.7	0.0	1.6	1.5
At public library	0.6	1.5	0.6	0.8	0.8	3.1	0.6	1.3
	C	C4: Die	l you u	ise one	e of th	e follo	wing n	nobile
Mobile phone, via WAP or GPRS	36.6	31.2	32.8	19.1	12.4	10.9	34.3	24.4
Laptop, via wireless connection, away from home or work	1.8	4.6	4.1	5.7	5.0	0.0	3.6	4.2
Handheld computer (palmtop)	3.4	5.4	2.0	4.4	3.4	2.2	4.2	3.3
Mobile phone, via 3G network	1.5	3.2	1.4	3.8	0.0	0.0	2.1	2.5
None of the above	60.4	61.9	65.1	74.4	79.2	87.0	60.7	71.3
¹⁾ Data refer to individuale who answe		rate at						

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

		tion	nt situa	oloyme	Emp	eve	tional le	Educat
Answer (individuals)	Total	other	student	unemployed	employee	tertiary education	secondary education	lower than secondary education
						et?	ntern	ise the l
Never used	56.4	71.7	1.1	71.0	30.8	22.4	43.3	78.9
Within the last 3 month	38.1	23.5	94.8	23.2	63.3	72.9	50.2	16.5
More than 3 months ago (less that a year	3.6	3.3	1.3	4.0	3.5	0.9	3.7	4.0
More than 1 year ag	1.9	1.5	2.8	1.8	2.4	3.8	2.8	0.6
		s? ¹⁾	onths	st 3 m	the la	et in f	Intern	ise the l
Every day or almost every da	65.7	51.2	76.9	65.3	69.5	81.0	66.6	45.3
At least once a wee	25.4	44.7	18.6	26.7	18.9	11.5	23.6	46.6
At least once a mon	7.2	3.3	3.5	6.2	9.3	7.3	7.8	5.2
Less than once a mon	1.7	0.8	1.0	1.8	2.3	0.2	2.0	2.9
)	(pply)	that a	k all	s? (tio	3 month
At hom	81.0	57.8	87.2	89.2	85.2	88.4	82.3	68.4
At place of work (other than hom	28.5	2.8	13.7	9.3	46.7	56.7	27.1	1.3
At another person's hom	15.9	21.8	24.0	14.2	13.6	15.9	19.8	3.2
At place of education	14.0	48.7	40.0	3.3	3.0	5.6	12.8	27.1
In Internet ca	5.3	6.7	15.7	4.1	4.0	5.1	6.9	0.0
Hotspot (at hotel, airport, pub places.	1.6	0.7	2.8	0.0	2.3	4.2	1.1	0.0
At public libra	0.9	0.7	4.5	0.3	0.8	2.2	0.7	0.0
bly) ¹⁾	at app	all th	(tick	ernet?	e Inte	ess th	to acc	levices (
Mobile phone, v WAP or GPR	29.8	34.8	56.9	20.8	28.3	26.6	35.4	14.9
Laptop, via wireless connectio away from home or wo	3.9	0.5	12.5	3.7	4.1	7.6	2.8	3.3
Handheld computer (palmto	3.8	1.8	5.3	8.3	2.6	3.0	4.3	3.2
Mobile phon via 3G netwo	2.2	0.9	4.2	1.8	2.7	3.7	2.2	0.9
None of the above	65.6	63.7	37.1	70.7	67.6	67.1	59.7	82.8



MODULE 1.C: Use of

			A	ge			Gender	
Answer (individuals)	16 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	male	female
	C5	: For w	hich a	ctivit	ies (foı	r priva	te pur	poses)
Sending/receiving e-mails	78.2	75.5	80.5	83.6	82.1	81.0	74.3	85.0
Playing or downloading games, images, films or music	88.6	62.0	53.6	47.6	38.9	52.8	65.4	62.2
Finding information about goods and services	33.5	66.8	70.0	66.4	45.4	49.3	60.4	52.2
Posting messages to chat sites, newsgroups or online disucssion forum	66.0	44.0	28.4	24.1	23.6	36.3	37.3	48.2
Reading or downloading online newspapers/news magazines	37.6	41.8	41.9	47.8	48.2	49.8	41.4	42.9
Using services related to travel and accommodation	42.1	31.7	33.2	34.2	26.3	14.7	27.8	43.5
Telephoning over the Internet/ video-calls	22.3	25.8	32.4	28.8	29.3	29.2	25.0	29.4
Consulting the Internet for the purpose of learning	21.5	28.0	28.9	31.8	23.4	42.0	25.4	28.8
Uploading self-created content (text, images, videos, music, etc.)	46.3	23.0	17.3	15.9	12.4	36.2	27.5	26.0
Looking for information about education, training or course offers	28.5	27.0	27.7	25.6	11.7	13.4	20.7	33.3
Listening to web radios or watching web television	39.9	23.9	20.4	13.5	16.4	11.3	21.4	30.0
Downloading software	24.2	28.0	23.3	19.3	12.5	24.5	29.7	16.2
Seeking health-related information	6.9	28.7	25.5	32.0	22.7	15.6	20.5	23.6
Looking for a job or sending job application	6.2	25.1	18.4	13.9	15.8	17.6	15.8	15.6
Internet banking	10.0	14.3	13.7	10.8	10.6	2.7	13.3	10.4
Sale of goods or services (e.g. via auctions)	3.6	6.3	5.2	3.3	0.8	2.3	5.7	3.0
Doing an online course (in any subject)	0.6	1.0	1.5	2.7	1.4	0.0	1.4	1.2

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

Sample

erne	t						in percentages
ional le	eve	Emp	oloyme	nt situa	ation		
secondary education	tertiary education	employee	unemployed	student	other	Total	Answer (individuals)
ise th	e Inte	rnet i	in the	last 3	8 mon	ths? ¹⁾	
75.5	92.5	80.5	78.9	88.7	72.5	79.2	Sending/receiving e-mails
61.9	47.3	56.6	63.0	71.8	83.3	64.0	Playing or downloading games, images, films or music
59.2	72.4	67.7	58.7	53.4	23.8	56.6	Finding information about goods and services
39.3	36.0	34.6	34.8	57.8	67.5	42.3	Posting messages to chat sites, newsgroups or online disucssion forum
38.6	52.0	45.1	38.5	45.2	36.5	42.1	Reading or downloading online newspapers/news magazines
27.2	40.7	33.5	30.7	32.6	44.6	35.0	Using services related to travel and accommodation
25.5	31.0	27.7	25.8	20.8	28.4	27.0	Telephoning over the Internet/ video-calls
27.9	38.8	25.6	25.1	64.2	20.3	27.0	Consulting the Internet for the purpose of learning
22.9	22.3	20.4	20.3	53.0	43.4	26.8	Uploading self-created content (text, images, videos, music, etc.)
26.9	30.6	23.4	25.0	45.8	30.0	26.4	Looking for information about education, training or course offers
22.7	22.9	20.9	13.7	37.0	47.1	25.3	Listening to web radios or watching web television
23.7	30.2	28.0	16.7	39.3	13.2	23.5	Downloading software
23.5	32.4	25.4	24.9	26.3	7.1	21.9	Seeking health-related information
16.3	21.6	13.8	29.9	24.1	2.3	15.7	Looking for a job or sending job application
8.7	21.2	18.3	5.6	12.3	1.0	12.0	Internet banking
4.4	6.9	5.1	4.4	5.2	2.2	4.4	Sale of goods or services (e.g. via auctions)
0.6	3.7	1.5	1.4	1.7	0.5	1.3	Doing an online course (in any subject)
i	Image: New York Image: New York State 11 75.5 61.9 61.9 39.3 38.6 27.2 25.5 27.9 22.9 26.9 22.7 23.7 23.5 16.3 8.7 4.4	Annols Second Secon	Noncolumnation Entropy Image: Section of the s	None Second level Second level No No	AnnoleEmperimentationappendixap	AnnoleEmploymentappending boundappending boundappending boundappending boundappending boundappending boundappending boundappending boundappending boundappending boundappending boundappending boundappending boundappending boundappending boundappending boundappending appendingappending boundappending boundappending boundappending appendingappending appendingappending appendingappending appendingappending appending appendingappending appendingappending appendingappending appendingappending appending appendingappending appendingappending appendingappending appendingappending appending appendingappending 	NonallesticationExperimentationSecond Second



Introduction

Sending filled in forms

Obtaining information

Sending filled in forms

from Websites of public institutions "Downloading" official forms

MODULE 1.F:

			A	ge			Gender	
Answer (individual)	16 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	male	female
с	6: Did	you u	se Inte	ernet s	ervice	s to in	teract	with
Yes, I would (but currently I do not use this possibility)	46.9	52.7	51.9	56.8	46.8	36.7	53.9	47.9
No	42.9	33.0	36.0	29.4	29.7	54.2	32.5	40.0
Yes, I have already been using this possibility	10.2	14.3	12.1	13.8	23.5	9.1	13.6	12.1
C7: For wh	ich of	the fo	llowin	g servi	ces of	public	autho	rities
							Withiı	ng the
Obtaining information from Websites of public institutions	31.7	62.2	48.6	82.9	82.6	70.1	59.2	57.5
"Downloading" official forms	95.9	42.0	40.8	49.7	74.9	0.0	67.4	45.2

¹⁾ Data refer to individuals who answe	ered "Within th	ne last 3 months	" in question C1.	
²⁾ Data refer to individuals who answe	ered "Yes. I ha	ave been alread	v usina this possib	ilitv" .

11.5

4.1

0.0

4.3

24.0

32.1

28.4

25.1

45.1

30.4

32.8

15.8

29.0

17.1

13.9

16.5

23.7

17.4

21.0

26.2

0.0

29.9

29.9

0.0

19.0

14.1

12.2

11.6

Within the last

35.6

30.8

29.2

23.6

Questionnaire	Survey results	ings	jor find	Ma		ample	S	gу	Methodolo
in noreenteree							ent ¹⁾	rnme	e-gove
in percentages									
			ation	nt situa	oloyme	Emp	evel	tional le	Educa
	Answ (individ	Total	others	student	unemployed	employee	tertiary education	secondary education	lower than secondary education
		cts?	conta	sonal	of per	stead	es ins	thoriti	local aut
Yes, I would									
I do not use this possibility)	(but currently	51.1	44.1	52.0	50.1	53.9	58.8	49.9	46.7
No		36.0	43.9	31.6	36.0	33.6	24.4	38.5	40.4
eady been using this possibility	Yes, I have alr	12.9	12.0	16.4	13.9	12.5	16.8	11.6	12.9
) ²⁾	tick all that apply	ths? (1	8 mon	last 3	in the	ernet i	e Inte	use th	did you
								onths	last 3 m
ining information	Obta from Websites of p	58.5	16.8	69.3	56.7	71.6	81.9	63.1	10.5
ng" official forms	"Downloadi	57.9	91.6	73.0	50.1	47.6	49.0	52.3	87.4
ng filled in forms	Sendi	26.1	0.0	26.7	40.2	28.7	25.2	31.2	12.6
								hs	12 mont
ining information	Obta	21.3	1.5	25.0	32.9	22.3	12.8	32.8	0.0

Obtaining information from Websites of public institutions	21.3	1.5	25.0	32.9	22.3	12.8	32.8	0.0	
"Downloading" official forms	19.5	1.5	13.6	34.3	20.0	16.9	27.5	0.0	
Sending filled in forms	16.8	0.0	24.5	23.4	18.4	11.7	21.5	10.5	

MODULE 1E.D: e-commerce,

			A	ge			Ger	nder
Answers (individuals)	16 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	male	female
I	01: Wh	en did	l you la	ast (fo	r priva	te pur	poses)	buy /
Never	88.6	85.9	88.2	85.3	90.3	93.4	86.1	89.0
Within the last 3 months	9.0	6.2	6.1	4.0	4.0	4.9	8.2	4.3
More than 3 months ago	1.8	4.9	4.8	5.9	3.6	0.0	3.9	4.1
More than 1 ago	0.6	3.0	0.9	4.8	2.1	1.7	1.8	2.6
D2: What types of goo	ds or s	ervice	s did y	ou ord	ler (foi	r priva	te pur	poses)
Films, music	68.6	9.7	24.9	0.0	0.0	0.0	35.9	14.8
Hotel accommodation (hotel, etc.)	65.7	5.7	21.3	0.0	0.0	0.0	34.2	10.1
Computer sofware and upgrades	65.7	6.6	11.8	6.5	0.0	0.0	34.9	7.0
Clothers, sports goods	9.3	35.7	16.2	26.2	44.9	100.0	16.9	33.6
Other travel arrangements (transport tickets, carhire, etc.)	66.1	6.9	0.0	5.2	0.0	0.0	34.3	1.0
Electronic equipment (incl. cameras)	8.8	21.4	2.7	31.2	0.0	0.0	21.6	1.6
Household goods (furniture, toys, etc.)	3.6	11.0	21.8	18.0	20.5	0.0	9.5	18.1
Books/magazines/newspapers/ e-learning material)	0.0	22.3	17.3	4.5	0.0	32.7	6.3	19.2
Computer hardware	0.4	11.1	7.5	10.4	29.2	0.0	9.1	5.1
Foods/groceries	0.0	1.2	23.9	4.5	0.0	0.0	0.0	17.3
Tickets for cultural events	0.4	10.6	12.6	0.0	0.0	0.0	5.8	5.7
Pharmaceutical products	2.2	10.7	0.0	0.0	16.8	0.0	1.7	8.7
Video games software and upgrades	0.0	1.2	11.8	0.0	0.0	0.0	0.0	8.0
Telecommunication services (e.g. uploading money on prepaid phone cards)	3.2	0.0	4.9	0.0	0.0	0.0	3.1	0.0
Other	5.8	17.1	16.7	8.4	9.1	0.0	8.9	17.0

¹⁾ Data refer to individuals who did not answer "Never" in question C1.

²⁾ Data refer to individuals who answered "Within the last 3 months" or "More than 3 months ago (less than a year) in question D1.

activities and barriers¹⁾

-	activit	ies a	na ba	irrie	rs		in percentages		
	Educat	tional le	evel	Emp	oloyme	nt situa	ation		
	lower than secondary education	secondary education	tertiary education	employees	unemployed	student	others	Total	Answers (individuals)

order goods or services over the Internet?

Sample

Never	87.4	95.8	84.0	85.8	85.3	83.4	90.0	83.7
Within the last 3 months	6.5	2.4	6.2	4.4	9.0	6.6	4.9	10.7
More than 3 months ago	4.0	1.1	5.4	6.6	3.8	6.5	3.2	4.0
More than 1 ago	2.1	0.7	4.4	3.2	1.9	3.5	1.9	1.6

over the Internet in the last 12 months? (tick all that apply)²⁾

Films, music	28.3	11.7	7.1	19.5	35.5	5.0	6.7	81.7
Hotel accommodation (hotel, etc.)	25.5	0.0	0.0	10.5	36.5	3.9	5.8	74.6
Computer sofware and upgrades	24.8	0.0	0.0	15.0	33.6	0.0	6.3	74.6
Clothers, sports goods	22.9	24.8	46.7	36.6	15.0	23.6	31.6	8.7
Other travel arrangements (transport tickets, carhire, etc.)	22.2	0.0	5.4	0.4	34.6	1.9	5.3	66.0
Electronic equipment (incl. cameras)	14.4	26.8	0.0	17.3	13.5	7.5	18.3	13.9
Household goods (furniture, toys, etc.)	12.6	0.0	16.4	18.9	11.1	21.9	10.2	8.7
Books/magazines/newspapers/ e-learning material)	10.9	3.7	21.8	0.0	14.8	13.9	16.3	0.0
Computer hardware	7.6	5.9	0.0	5.8	9.3	13.8	9.2	0.0
Foods/groceries	6.2	0.0	5.4	10.5	5.3	3.9	5.9	8.7
Tickets for cultural events	5.8	0.0	12.4	0.4	7.7	12.6	5.8	0.0
Pharmaceutical products	4.2	9.5	15.3	5.1	2.2	6.0	6.0	0.0
Video games software and upgrades	2.9	0.0	0.0	10.5	0.6	1.4	0.0	8.7
Telecommunication services (e.g. uploading money on prepaid phone cards)	2.0	0.0	0.0	3.9	1.7	4.4	2.0	0.0
Other	11.8	21.3	1.5	22.0	8.0	16.7	14.0	4.3



MODULE 1E.D: e-commerce,

				Gender					
Answers (individuals)	16 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	male	female	
D3: Were any of the following products that you bought or									

Tickets for travel or cultural events	95.7	0.0	0.0	32.1	0.0	0.0	68.4	0.0
(Electronic) books, magazines, newspapers, e-learning material	0.0	16.0	0.0	27.8	0.0	100.0	0.8	17.3
Films	0.0	12.3	7.5	0.0	0.0	0.0	0.0	14.6
Music	3.7	4.9	0.0	0.0	0.0	0.0	4.1	0.0
Computer software (incl. computer and video games and software upgrades)	0.0	0.0	0.0	40.1	0.0	0.0	3.7	0.0
None of the above	0.5	79.1	92.5	0.0	0.0	0.0	23.0	76.9

D4: From whom did you buy/order goods or

National sellers	28.2	85.4	97.2	88.3	67.6	100.0	62.5	85.9
Sellers from other EU countries	71.8	18.5	2.8	11.7	37.1	32.7	42.5	9.3
Sellers from the rest of the world	0.7	13.2	5.0	0.0	20.0	0.0	6.2	4.7
Country of origin of sellers is not known	0.4	9.8	0.0	0.0	0.0	0.0	2.7	3.2

D5: In the last 12 months, how did you pay for goods

Payment not via the Internet (in cash, via ordinary bank transfer, etc.)	29.1	73.6	75.8	74.1	46.1	67.3	53.4	71.8
Provided credit or debit card details over the Internet	70.8	24.1	19.9	21.6	24.6	32.7	46.1	20.2
Electronic bank transfer via Internet banking	0.4	16.5	4.3	4.2	29.3	32.7	7.9	7.1
Provided prepaid or prepaid account details over the Internet	0.0	11.3	0.0	0.0	0.0	32.7	4.8	1.0

¹⁾ Data refer to individuals who did not answer "Never" in question C1.

²⁾ Data refer to individuals who answered "Within the last 3 months" or "More than 3 months ago (less than a year) in question D1.

³⁾ Data refer to individuals who answered positively in questions D2D and/or D2E and/or D2G and/or D2H and/or D2N and/or D2O.

in nercentages

activities and barriers¹⁾

Sample

								in percentages
Educat	tional le	evel	Emp	oloyme	nt situa	ation		
lower than secondary education	secondary education	tertiary education	employees	unemployed	student	others	Total	Answers (individuals)

ordered over the Internet dowloaded (or accessed) from Websites?³⁾

Tickets for travel or cultural events	47.5	0.0	0.0	0.0	59.4	0.0	6.8	80.7
(Electronic) books, magazines, newspapers, e-learning material	5.8	24.3	0.0	0.0	6.6	10.3	14.7	0.0
Films	4.5	0.0	0.0	0.0	5.6	0.0	14.7	0.0
Music	2.8	75.7	26.0	0.0	0.0	8.0	5.8	0.0
Computer software (incl. computer and video games and software upgrades)	2.6	0.0	0.0	18.8	0.0	0.0	8.5	0.0
None of the above	39.5	0.0	74.0	81.2	31.7	81.7	58.3	19.3

services over the Internet in the last 12 months?²⁾

National sellers	71.0	89.0	75.1	82.8	64.2	88.1	86.0	34.0
Sellers from other EU countries	30.5	9.6	13.9	11.6	41.6	23.3	11.6	66.0
Sellers from the rest of the world	5.7	5.1	16.5	1.6	6.1	5. 9	9.1	0.0
Country of origin of sellers is not known	2.9	0.0	0.0	5.3	2.6	0.5	5.9	0.0

or services ordered over the Internet for private use?²⁾

Payment not via the Internet (in cash, via ordinary bank transfer, etc.)	60.0	86.7	62.2	74.0	51.7	66.3	78.8	25.4
Provided credit or debit card details over the Internet	36.8	3.7	17.3	21.9	47.9	20.9	20.5	74.6
Electronic bank transfer via Internet banking	7.6	13.3	15.0	4.5	7.4	17.7	7.5	0.0
Provided prepaid or prepaid account details over the Internet	3.5	3.7	5.5	0.0	4.5	8.0	3.4	0.0



Introduction

MODULE 1E.D: e-commerce,

		Gei	Gender					
Answers (individuals)	16 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	male	female

D6: In the last 12 months, did you encounter problems when

No	99.2	100.0	100.0	88.4	90.9	100.0	97.8	97.3
Yes	0.8	0.0	0.0	11.6	9.1	0.0	2.2	2.7

D7: What problems did you encounter when buying/ordering

Technical failure of website during ordering or payment	53.5	0.0	0.0	0.0	0.0	0.0	8.7	0.0
Speed of delivery lower than indicated	46.5	0.0	0.0	0.0	0.0	0.0	7.6	0.0
Frauds (e.g. no goods/services delivered, misuse of credit card details, etc.)	46.5	0.0	0.0	0.0	0.0	0.0	7.6	0.0

D9: Do you read conditions of sale when purchasing goods

Always	22.2	69.9	78.5	87.5	66.3	100.0	56.6	67.6
Sometimes	77.4	26.7	9.7	12.5	33.7	0.0	43.4	22.3
Never	0.3	3.4	11.8	0.0	0.0	0.0	0.0	10.1

¹⁾ Data refer to individuals who did not answer "Never" in question C1.

²⁾ Data refer to individuals who answered "Within the last 3 months" or "More than 3 months ago (less than a year) in question D1.

in nercentages

activities and barriers¹⁾

								in percentages
Educat	tional le	evel	Emp	oloyme	nt situa	ation		
lower than secondary education	secondary education	tertiary education	employees	unemployed	student	others	Total	Answers (individuals)

byuing/ordering goods or services over the Internet for private use?²⁾

No	97.6	100.0	100.0	95.0	98.1	99.0	95.5	100.0
Yes	2.4	0.0	0.0	5.0	1.9	1.0	4.5	0.0

goods or services over the Internet in the last 12 months?

Technical failure of website during ordering or payment	5.2	0.0	0.0	10.4	0.0	53.5	0.0	0.0
Speed of delivery lower than indicated	4.5	0.0	0.0	9.0	0.0	46.5	0.0	0.0
Frauds (e.g. no goods/services delivered, misuse of credit card details, etc.)	4.5	0.0	0.0	9.0	0.0	46.5	0.0	0.0

or services over the Internet for private use? $^{2)}$

Always	60.5	72.1	50.3	72.9	55.7	85.4	70.7	25.4
Sometimes	35.8	27.9	33.2	16.4	44.3	14.1	27.3	66.0
Never	3.7	0.0	16.5	10.8	0.0	0.4	2.0	8.7



MODULE 1E.D: e-commerce,

			Ą	ge			Gei	nder
Answers (individuals)	16 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	male	female

D10: What were the reasons for not buying/ordering goods or

Have no need	59.3	61.6	60.3	55.1	57.0	54.5	63.4	54.2
Prefer to shop in person, like to see product, loyalty to shops, force of habit	37.6	38.8	36.1	45.2	55.6	42.0	34.7	46.2
Payment security concerns (e.g. giving credit card details)	5.9	7.5	14.1	16.6	14.7	13.8	11.9	8.9
Don't have a payment card allowing to pay over the Internet	6.2	8.8	12.5	10.2	13.9	20.8	12.2	6.5
Lack of skills	1.7	1.8	4.5	15.0	13.5	24.6	7.1	4.0
Trust concerns about receiving or returning goods, complaints/redress concerns	2.8	6.7	7.4	6.3	7.1	8.3	6.4	4.9
Privacy concerns (e.g. giving personal details over the Internet)	2.7	3.9	8.1	6.1	9.0	9.9	6.1	4.1
Internet connection is too slow	1.1	3.6	1.9	3.5	6.1	5.5	3.9	1.3
Delivery of goods ordered over the Internet is a problem	1.8	3.6	1.0	2.2	2.5	2.6	2.5	1.9
Relevant information about gooods and services difficult to find on website	0.4	0.4	1.0	0.5	3.4	2.3	0.7	0.7
Other	7.5	9.1	10.4	18.1	20.6	14.4	11.3	11.1
10	1. Did	wou n	lace a	het (e	a snot	rte het	tina) a	nd/or

D11: Did you place a bet (e.g. sports betting) and/or

No	97.9	98.1	97.5	98.9	99.3	96.8	97.5	98.9
Yes	2.1	1.9	2.5	1.1	0.7	3.2	2.5	1.1

¹⁾ Data refer to individuals who did not answer "Never" in question C1.

²⁾ Data refer to individuals who answered "More than 1 ago" or "Never" in question D1.

³⁾ Data refer to individuals who answered "Within the last 3 months" in question C1.

in nercentages

Survey results

Sample

								in por contagoo
Educa	tional le	evel	Emp	oloyme	nt situa	ation		
lower than secondary education	secondary education	tertiary education	employees	unemployed	student	others	Total	Answers (individuals)

services for personal use in the last 12 months?²⁾

Have no need	59.2	62.1	61.5	66.6	54.3	52.3	61.5	58.5
Prefer to shop in person, like to see product, loyalty to shops, force of habit	40.0	33.8	43.3	37.3	43.5	45.5	37.6	42.2
Payment security concerns (e.g. giving credit card details)	10.5	6.5	13.2	9.1	12.6	21.9	9.3	3.6
Don't have a payment card allowing to pay over the Internet	9.6	7.1	13.2	7.8	11.0	15.8	9.2	4.8
Lack of skills	5.7	3.4	4.5	7.4	6.0	5.8	5.2	7.0
Trust concerns about receiving or returning goods, complaints/redress concerns	5.7	2.7	5.0	4.4	7.6	7.1	6.9	0.5
Privacy concerns (e.g. giving personal details over the Internet)	5.2	3.2	6.4	7.8	4.7	7.5	5.5	2.0
Internet connection is too slow	2.7	1.5	5.1	7.0	1.0	0.5	2.5	5.6
Delivery of goods ordered over the Internet is a problem	2.2	1.3	4.1	1.7	2.7	1.1	3.3	0.0
Relevant information about gooods and services difficult to find on website	0.7	0.3	1.8	0.6	0.8	0.6	1.0	0.0
Other	11.2	7.2	13.1	13.2	11.8	14.1	11.9	6.5

play lotto over the Internet in the last 12 months?³⁾

No	98.1	98.6	96.2	97.1	98.6	98.1	97.9	98.7
Yes	1.9	1.4	3.8	2.9	1.4	1.9	2.1	1.3

1.5. QUESTIONNAIRE

USAGE OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN HOUSEHOLDS AND BY INDIVIDUALS

MODUL 1.A: ACCESS TO INFORMATIONA AND COMMUNICATION TECHNOLOGIES

A	1 Do yo	u or anyone in your household have access to the	following devices at home?							
	(tick all that apply)									
	a) TV									
	a1) Satellite TV									
		a2) Cable TV								
		a3) Digital TV								
		a4) Total number of TV receivers in your house	holds							
	b)	Radio-receivers (including walkman, mobile phor	ne, car radio)							
		b1) total number of receivers in your household								
	c)	Personal computer (PC)								
		c1) total number of computers in your household	b							
	d)	Laptop								
		d1) total number of laptop computers in the hou	sehold							
	e)	Mobile telephone								
	f)	None of the mentioned								
	-> go to	o A2								
A2	A2 Do you or anyone in your household have access to the Internet <u>at home</u> , whether it is used or not?									
	(one answer only)									
	a) Y	es	-> go to A3							
	b)	No	-> go to A6							
	c)	Don't know	-> go to A6							

A3	On which of the following devices do you access the Internet at home?		
	(tick all that apply)		
	a) Personal computer (PC)		
	b) Portable computer (laptop)		
	c) Other		
	c1) Mobile phone (GPRS, etc.)		
	c2) Handheld computer (palmtop, PDA)		
	d) TV with specific Internet device		
	e) Games consoles (play-station)		
	f) Don't know		
	-> go to A4		
A4	What type of Internet connection do you use?		
	(tick all that apply)		
	a) Modem		
	b) ISDN		
	c) DSL (ADSL)		
	d) Cable Internet		
	e) Wireless Internet		
	f) Mobile telephone (GPRS etc.)		
	If c,d or e are ticked -> go to A6; otherwise go to A5.		
A5	What are the reasons for not having a broadband Internet connection (such as ca or DSL connection) at home?	able	
	(tick all that apply)		
	a) Too expensive		
	b) No need		
	c) Not available in my area		
Γ	d) Can access somewhere else (e.g. at work)		
	e) None of the above, other reasons		
	-> go to A6		
A6	(IT costs include costs for the purchase of software, hardware and other services) In Euros]
	-> go to B1		



MODULE 1.B: USE OF COMPUTERS

B1 When did you last use a comput	ter?	
(one answer only)		
a) Within the last 3 months		-> go to B2
b) More than 3 months ago (less than a year)	-> go to B4
c) More than 1 year ago		-> go to B4
d) Never used one		-> go to C1
B2 How often on average did you u	se a computer in the	last 3 months?
(one answer only)		
a) Every day or almost every	' day	
b) At least once a week		
c) At least once a month		
d) Less than once a month		
-> go to B3		
B3 Where did you use a computer i	in the last 3 months?	
(tick all that apply)		
a) At home		
b) At place of work (other tha	an nome)	
c) At place of education		
d) At another person's home		
e) Other (Internet-cafe, hotel	, airport)	
B4	computer use?	st 3 hours) on any aspect of
(only for respondents who <u>did not</u> and	nswer "Never used one	" in question B1)
(one answer only)		
a) Within the last 3 months	loss than a year'	
b) More than 3 months ago (- /	
c) More than 1 year ago (less	s man 3 years)	
d) More than 3 years ago		
e) Never taken one		
-> go to B5		

B	5 V	Vhio	ch of the following computer-related activities have you already carried ou	ut?	
	(tick	all	that apply)		
	i	a)	Copying or moving a file or folder		
		b)	Using copy and paste tools to duplicate or move information within a document		
	(c)	Using basic arithmetic formulas in a spreadsheet		
	(d)	Compressing files (ZIP,RAR)		
	(e)	Connecting and installing new devices, e.g. a printer or a modem		
	1	f)	Writing a computer program		
	(g)	None of the above		
	-> g	o to	o C1		

MODULE 1.C: USE OF THE INTERNET

C	:1	Whe	en did you last use the Internet?						
	(one answer only)								
		e)	Within the last 3 months	-> go to C2					
		f)	More than 3 months ago (less than a year)	-> got to D1					
		g)	More than 1 year ago	-> go to D1					
		h)	Never used it	-> go to E1					
С	;2	How	<i>v</i> often on average did you use the Internet in the la	ast 3 months?					
	(0	ne an	swer only)						
		e)	Every day or almost every day						
		f)	At least once a week						
		g)	At least once a month						
		h)	Less than once a month						
		-> go	to C3						

C3 Where did you use the Internet in the last 3 months?
(tick all that apply)
f) At home
g) At place of work (other than home)
h) At place of education
i) At another person's home
a) Other
e1) Public library
e2) Post office
e3) Public office, town hall, government agency
e4) Community or voluntary organization
e5) Internet -cafe
e6) Hotspot (at hotels, airports, public places)
-> go to C4
C4 Do you use one of the following devices to access the Internet?
(tick all that apply)
a) Mobile phone
a1) Mobile phone, via GPRS
a2) Mobile phone, via 3G network
b) Handheld computer (palmtop, PDA)
c) L aptop, via <u>wireless</u> , away from home or work
d) None of the above
-> go to C5

C		ch of the following activities did you carry out over the oses in the last 3 months?	he Inte	rnet for (orivate				
	(tick all	that apply)							
	Communication								
	a) Sending/receiving e-mails								
	 b) Telephoning over the Internet /video calls (via webcam) over the Internet 								
	c)	Posting messages to chat sites, newsgroups or for	orum						
		on search and online services							
	<u>d)</u>	Finding information about goods and services							
	e)	Using services related to travel and accommodati							
	f) g)	Listening to web radios or watching web television Uploading self-created content on the Internet (te		ges, vid	eos,				
		music, etc.)	,	0 /	<i>,</i>				
	<u>h)</u>	Downloading software			 				
	i)	Playing or downloading games, images, films or r							
	j)	Reading or downloading online newspapers/news	s maga	zines					
	k))	Looking for a job or sending a job application Seeking health-related information							
	.,	f goods or services, banking							
	Ŭ	Internet banking							
	n)	Selling of goods or services (e.g. via auctions)							
	,	and education							
	0)	Looking information about education, training or o	courses	s offers					
	p) [Doing an <u>online</u> course (in any subject)							
	q)	Consulting the Internet with the purpose of learning	ng						
	-> go to	o C6							
С		ld you rather use the Internet instead of personal co es or public authorities?	ontacts	s or going	g to public				
	(one ar	nswer only)							
	a)	Yes, I have been already using this possibility		-> go t	o C7				
	b)	Yes, I would		-> go t	o D1				
	c)	No		-> go t	o D1				
C		which of the following activities relating to interactio inistrations did you use the Internet for private purp		public se	ervices or				
	(tick all that apply)								
	In the last 3 In the last 1 months months								
	a)	Obtaining information from public authorities websites							
	b)	Downloading official forms							
	c)	Sending filled in forms							

MODUL D: E-COMMERCE: activities and barriers

(only for respondents who did not answer "Never used it" in question C1.

D1 When did you last buy or order goods or service (excluding manually typed e-mails)	es over the Internet for private use?						
(one answer only)							
a) Within the last 3 months -> go to D							
b) More than 3 months ago (less than a year)) -> go to D2						
c) More than 1 year ago	-> go to D10						
d) Never bought or ordered	-> go to D10						
D2 What types of goods or services did you order ov for private use?	ver the Internet in the last 12 months,						
(tick all that apply)							
a) Food/gr oceries							
b) Household goods (furniture, toys, etc.)							
c) Pharmaceutical products							
d) F ilms, music							
e) Books/magazines/new spapers/e-learning r	material						
f) Clothes, sports goods							
g) Games and upgrades							
h) Computer software and upgrades							
i) Computer hardware							
j) Electronic equipment (incl. cameras)							
k) Telecommunication services (e.g. TV broad uploading money on prepaid phone cards,							
I) Share purchase, insurance policies and oth	her financial services						
m) Holiday accommodation (hotel, etc.)							
n) Other travel arrangement (transport tickets	s, car hire, etc.)						
o) Tickets for cultural events							
p) Other							
If to d, e, g, h, n or o are ticked -> go to D3; otherw	vise go to D4.						

D3 Were any of the following products that you bought or downloaded or accessed from websites rather than								
(tick all that apply)			, 010.1					
b) Music	b) Music							
c) (Electronic) books, newspapers, magazines, e-lear	-							
 d) Computer software (incl. computer and video game upgrades) 	s and	software						
e) Tickets for travel and cultural events								
f) None of the above								
-> go to D4			<u> </u>					
D4 From whom did you buy/order goods or services over the months?	e Inter	rnet in the la	ast 12					
(tick all that apply)								
a) National sellers								
b) Sellers from other EU countries								
c) Sellers from the rest of the world								
d) Country of origin of sellers is not known								
-> go to D5								
D5 In the last 12 months, how did you pay for goods or servi Internet for private use?	ces o	rdered over	r the					
(tick all that apply)								
a) Provided credit or debit card details over the Internet	et							
b) Provided prepaid card or prepaid account details of	/er th	e Internet						
c) Electronic bank transfer via Internet banking								
d) Payment not via the Internet (in cash, via ordinary b	oank 1	transfer, etc	.)					
> go to D6								
D6 In the last 12 months, did you encounter any problems w or services over the Internet for private use?	hen b	ouying/orde	ring goods					
(one answer only)								
a) Yes	Π	-> go	to D7					
b) No -> go to D8								
	• <u> </u> •							

D7 In the last 12 months, what problems did you encounter when buying/ordering goods or services over the Internet?									
(tick	all that apply)								
a)	Technical failure of website during orde	ring or paym	ent						
b)	b) Difficulties in finding information concerning guarantees and other								
c) Speed of delivery lower than indicated									
d)	d) Final costs higher than indicated (e.g. higher delivery costs)								
e)	Wrong or damaged goods/services del	vered							
f)	Frauds (e.g. no goods/services delivere etc.)	ed, misuse of	credit cards de	tails,					
g)	Complaints and redress were difficult o complaint	r no satisfact	ory response af	ter					
h) (Other								
-> go	o to D8								
	w important are the following arguments f er the Internet for personal use?	-	lering goods or	services					
	(tick a	, 	To some						
		Very	extent	Not at all					
aj	Wider choice of goods or services								
b)	Lo wer prices								
c)									
d)) Convenience (e.g. less time consuming)								
e	 Opportunity to buy products not available in my region 								
f)	Certification of quality of website services or recognized trust mark								
g)	 Opinion and feedback from other users 								
h)) Certainty about legal rights and guarantees								
-> ge	o to D9								

	9		you read the conditions of sale when purchasing goods or services over the rnet for private use?	ie				
	(0	ne ar	nswer only)					
		a) Alw ays						
		,	Sometimes					
		- /	lever					
	->	go to	o D11					
D	10		at were the reasons for not buying/ordering goods or services for personal ast 12 months?	use in				
	(ti	ck all	that apply)					
		a)	Have no need					
		b)	Prefer to shop in person, like to see product, loyalty to shops, force of habit					
		C)	Relevant information about goods and services difficult to find on website					
		d)	Lack of skills					
		e)	Delivery of goods ordered over the Internet is a problem					
		f)	Payment security concerns (e.g. giving credit cards details)					
		g)	Privacy concerns (e.g. giving personal details over the Internet)					
		h)	Trust concerns about receiving or returning goods, complaints/redress concerns					
		i)	Don't have a payment card allowing to pay over the Internet					
		j)	Speed of the Internet connection is too slow					
		k) C	Dther					
	->	go to	DD11	-				
D	11		you place a bet (e.g. sports betting) and/or play lotto over the Internet in the nonths?	ne last				
	(0	nce a	answer only)					
		c) Y	′ es					
		b) N						
	->	go to) E1					

MODUL E: BAKCGROUNG INFORMATION ON THE RESPONDENT

E1	A .go							
	Age			<u> </u>				
E2	Gender a) b)	Male Fema	ale					
E3 b) c)	Educatio a)	Lower Secor			ucation			
E4 b)	c)	Emplo Unem Stude	oyee iployed nt	labor forc	e (retired perso	ns, in c	ompulsory military service)	
E5	Municipa	ality				code		
E6	Locality					code		
E7	Number	of hou	isehold me	embers				
F8	Of	which,	number o	f children	under 18			
E9	Househo	old inc a) b) c)	Under 30 From 300					
E10	Informa	ation re a) b)	responde	ent usehold m	ember			

USAGE OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN THE REPUBLIC OF SERBIA, 2009

* Enterprises



2.1. METHODOLOGY

Realization	• The survey was carried out on from 2 June to 20 June 2009			
Type of survey	Telephone interview			
Sample size	1152 enterprises			
Target population	 Enterprises with 10 employees and more Section D: Manufacturing Section F: Construction Section G: Wholesale and retail trade, motor vehicle repair Groups 55.1 and 55.2: Hotels, camping sites and other short-stay accommodation Section I: Transport, storage and communication Section K: Real estate, renting and business activities Groups 92.1 and 92.2: Motion picture, video, radio and TV activities Banks and insurance companies 			
Sample type	Stratified sample			
Survey coverage	 Territory of the Republic of Serbia (without AP Kosovo and Metohia) 			

2.2. SAMPLE

The survey on the usage of information and communication technology in enterprises has been carried out on a representative sample of 1152 enterprises on the territory of the Republic of Serbia. The response rate is 94% (1083 enterprises).

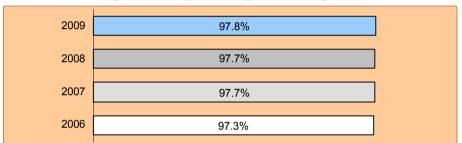
Sample (enterprises)		Size			Region			
		Small-size (10-49)	Medium-size (50-249)	Large (250+)	Central Serbia	Vojvodina	Belgrade	Total
	Manufacturing	246	75	104	194	122	109	425
	Construction	69	20	25	41	26	47	114
	Wholesale and retail trade; motor vehicle repai	208	51	24	88	81	114	283
ity	Hotels, camping sites and other provision of short stay accommodation	14	8	4	12	4	10	26
Activity	Transport, storage and communications	71	13	20	29	27	48	104
	Real estate, renting and business activities	100	23	13	19	22	95	136
	Motion picture and video activities, radio and TV activities	18	5	3	12	6	8	26
	Banking and insurance companies	7	5	26	4	6	28	38
Number		733	200	219	399	294	459	1152
Percentage		63.6	17.4	19.0	34.6	25.5	39.9	100

2.3. MAJOR FINDINGS

2.3.1. Computers in enterprises

The results of the survey indicates that 97.8% of enterprises on the territory of the Republic of Serbia use computers for their business operations, which represents increases of 0.1% compared to 2008. The percentage of computers is the highest in large enterprises (more than 250 employees) and medium-size enterprises (50-249), amounting to 100%, but it totals to 97% in small-size enterprises (10-49 employees).

97.8% of enterprises use computers for their business operations



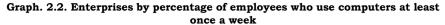
Graph 2.1. Does your enterprise use computers?

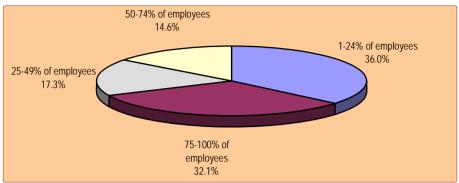
The percentage of computers used in enterprises is different depending on the territory: in Belgrade it is 98.5%, in Vojvodina 98.2%, and in Central Serbia 96.4%.

The use of computers in enterprises according to activities:

- Banks and insurance companies (100%)
- Real estate, renting and business activities (100%)
- Transport, storage and communications (98.5%)
- Wholesale and retail trade (98.1%)
- Manufacturing (97.5%)
- Motion picture, video, radio and TV activities (96%)
- Construction (95.7%)
- Hotels, camping sites and other short-stay accommodation (87.1%)

In 36% of enterprise there is $\frac{1}{4}$ of employees who use a computer at least once a week, and in 32.1% of enterprises the percentage of employees using a computer at least once a week amounts to 75-100%.



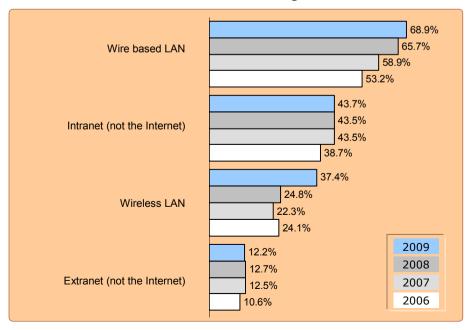


2.3.2. Computer networks in enterprises

Several answers were allowed in the question relating to the availability of information and communication technologies in enterprises. The survey indicates that 8.9% of enterprises have in use Wire based LAN, 43.7% Intranet, 37.4% Wireless LAN, and 12.2% have Extranet.

68.9% of enterprises have in use Wire based LAN

Graph. 2.3. Does your enterprise use the following informations and communication technologies?



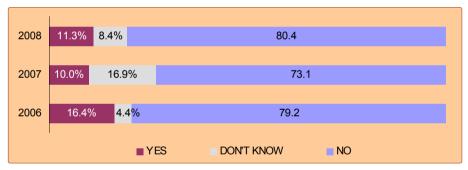


11.3% of enterprises used ERP in January 2009

ERP (abbreviation for Enterprise Resource Planning), i.e. a businness information system, can be most concisely defined as a software application that integrates main business functions in the enterprise, such as production, distribution, finance (i.e. accounting) in a single whole. Thus one obtains a system allowing, on one hand, the enterprise to manage all human and material resources, and on the other one, to plan, develop and monitor business functions and procedures.

Beginning 2007, the extent in which ERP is used in enterprise has been used as one of the indicator for measuring how much the use of information and communication technologies has been developed in enterprises.

In January 2009, 11.3% of enterprises in Serbia used ERP. The enterprises being analyzed by their size, it has appeared that of the total number of large enterprises 49.2% of them have in use ERP. ERP is available in 21.6% medium-size enterprises and in 7% small-size ones. The results of the analysis of enterprises by their activity show that banks and insurance companies are the most numerous to use ERP (41.9%), followed by enterprises dealing with transport, storage and communications (15.7%).



Graph 2.4. Did your enterprise use ERP in January?

Alike ERP, the use of the application for managing customer relationship, CRM (abbreviation of Customer Relationship Management), beginning 2007, is one of the main indicators of the level of development of information and communication technologies in EU enterprises. Briefly, CRM can be defined as a set of functions allowing the collection of information about customers, sales, marketing efficiency, customers' reactions and market trends.

14.1% of enterprises used CRM in January 2009

During January 2009, 10.1% of enterprises in Serbia used CRM meant for the analysis of information related to customers for marketing purposes, while 12.9% used it to capture, store and make available to other business services information about customers. The analysis of enterprises by their size indicates that of the total number of large enterprises 36.8% of them have in use CRM. As far as medium-size enterprises are concerned, CRM is in use in 26.1% of them, and in 10.2% small-size ones. When analyzed by their activity, it appears that banks and insurance companies are the most numerous to use CRM (71%), followed by enterprises dealing with transport, storage and communications (24.8%).

Graph 2.5. Did your enterprise use, in January 2009, a software application for customer management relationship, so-called CRM, allowing:

Capture, store and make available to other business functions the information about the clients	12.9%
Make analysis of the information about clients for marketing purposes (setting prices, sales promotions, selection of distribution channels, etc.)	10.1%

During 2009, 17% of enterprises used Linux, which is most used in large enterprises (39.7%), then in medium-size ones (25.1%), and at the end in small ones (14%).

The analysis of enterprises by their activities indicates that banks and insurance companies are the most numerous to use Linux (83,9%).



Graph 2.6. Did your enterprise use open source operating systems, such as Linux?

17% of enterprises used Linux Linux "open source" operating system in 2009

2.3.3. Internet in enterprises

In the Republic of Serbia, 94.5% of enterprises have an Internet connection, which represents increases by 3%, 3.9% and 4.3% compared to 2008, 2007 and 2006 respectively. The analysis of enterprises by their size indicates that of the total number of large enterprises, 100% of them have an Internet connection, which is available in 97.7% of medium-size enterprises. The situation is slightly different in small-size enterprises among which 93.4% can access the Internet.

94.5% of enterprises has an Internet connection

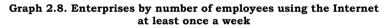
Graph 2.7. Does your enterprise have access to the Internet?

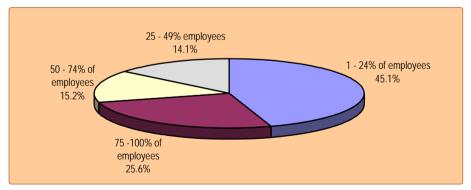


Use of the Internet in enterprises, according to activities:

- Banks and insurance companies (100%)
- Motion picture, video, radio and TV activities (100%)
- Real estate, renting and business activities (98.7%)
- Manufacturing (97%)
- Construction (92.3%)
- Wholesale and retail trade (92%)
- Hotels, camping sites and other short-stay accommodation (89%)
- Transport, storage and communications (88.5%)

In 45.1% of enterprises, $\frac{1}{4}$ of employees use the Internet at least once a week, while in 25.6% of enterprises 75-100% of employees use the Internet at least once a week.





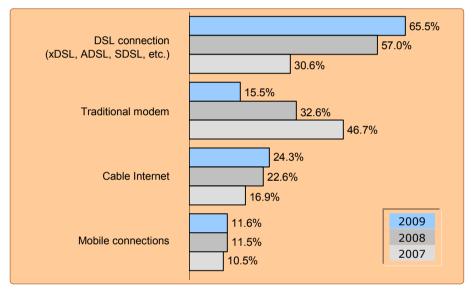
Regarding the way the Internet is accessed (type of connection) enterprises were asked to choose one of the offered answers.

The results indicate that of the total number of enterprises having an Internet connection, 65.5% of enterprises have in use DSL, 15.5% a modem connection and 34.3% cable Internet.

The data are expressive of a decreased use of modem connection by 17.1%, and of an increased use of DSL by 8.5%, compared to 2008.

65.5% of enterprises having access to the Internet use DSL (xDSL, ADSL) connection

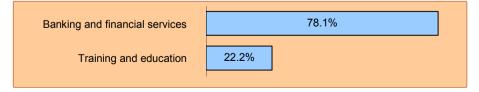
Graph 2.9. Does your institution have one of the following types of external connections to the Internet?



The most frequent answers to the question related to the use of the Internet by enterprises are as follows:

- "Banking and financial services"(78.1%)
- "Training and education"(22.2%)

Graph 2.10. Does your enterprise use the Internet for the following purposes?

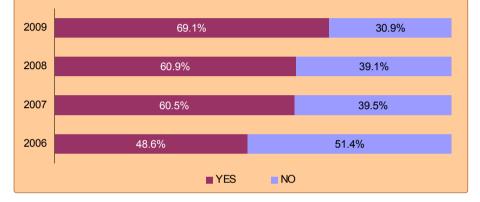




2.3.4. e-government

Of the total number of enterprises having a connection to the Internet, 69.1% of them use the Internet services of public authorities, which represents increases of 8.2%, 8.6% and 20.5% compared to 2008, 2007 and 2006 respectively. There are 30.9% of enterprises that use this possibility.

69.1% of enterprise having an Internet connection use the Internet services of public authorities



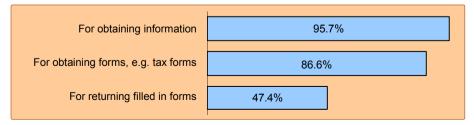
Graph 2.11. Does your enterprise use Internet services of public authoristies?

The analysis of enteprises by their activity indicates that banks and insurance companies are the most numerous to use Internet services of public authorities (90.3%), followed by enterprises dealing with construction (86.8%).

The most frequent answers to purposes for which enterprises are using Internet services are as follows:

- "For obraining information"(95.7%)
- "For obtaining forms"(86.6%)
- "For returning filled in forms"(47.4%)

Graph 2.12. Does your enterprise use public authorities Internet for the following purposes?



2.3.5. Website

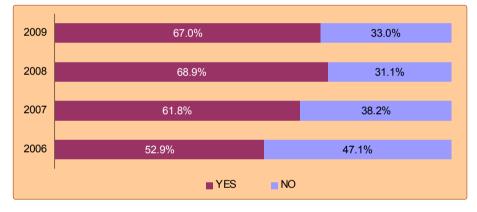
There are 67% of enterprises with an Internet connection that have a Website, while this percentage in 2008 amounted to 68.9%, in 2007 to 61.8%, and in 2006 to 52.9%.

When observing the structure of enterprises by their size, the following results have been obtained:

- 81.0% of large enterprises have a Website
- 79.8% of medium-size enterprises have a Website
- 62.5% of small-size enterprises have a Webiste

67% of enterprises with an Internet connection have a Website

There also differences regargind the territory. In Belgrade, 78.2% of enterprises have a Website, in Vojvodina there are 66.3% of them, and in Central Serbia 55,3% that have a Website.



Graph 2.13. Does your enterprise have its Website?

Websites in enterprises, by activities:

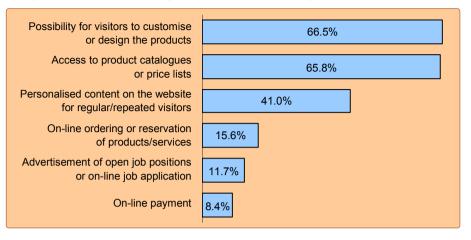
- Banks and insurance companies (96.8%)
- Hotel, camping sites and other short stay accommodation (86.9%)
- Real estate activities, renting and business activities (75.4%)
- Manufacturing (70.4%)
- Motion picture, video, radio and TV activities (66.2%)
- Transport, storage and communications (64.6%)
- Wholesale and retail trade (61%)
- Construction (60.4%)

Enterprises provide mostly provide via their Website:

- Possibility for visitors to customize with products (66.5%)
- Access to product catalogue s or price lists (65.8%)
- Personlized content in the Website for regular/repeated visitors (41%)



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



2.3.6. e-banking

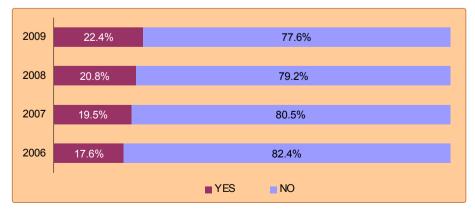
During 2008, 22.4% of enterprises having an Internet connection in the Republic of Serbia ordered goods/services over the Internet, which represents increases of 1.6%, 2.9% and 4.8% compared to 2007, 2006 and 2005 respectively.

The structure of enterprises by their size taken into account, the results are as follows:

- 24.4% of large enterprises ordered goods/services via the Internet
- 24.1% of medium-size enterprises ordered goods/services via the Internet
- 21.9% of small-size enterprises ordered goods/services via the Internet

22.4% of enterprises having an Internet connection ordered goods/services in January 2008

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

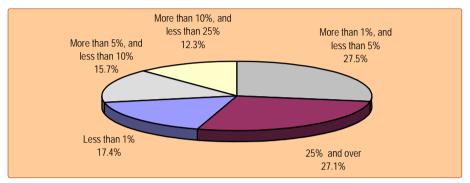


Survev results

The answers to the question on the percentage of Internet purchases in total purchases are as follows:

- "Less than 1%"(17.4% of enterprises)
- "More than 1%, and less than 5%"(27.5% of enterprises)
- "More than 5%, and less than 10%"(15.7 % of enterprises)
- "More than 10%, and less than 25%" (12.3% of enterprises)
- "25 % and over" (27.1% of enterprisespreduzeća)

Graph 2.16. Please, indicate an estimate for 2008 of the percentage of Internet purchases in relation to total purchases?



The results of the survey indicate that only 19.9% of enterprises, which have an Internet connection, received orders during 2008 (excluding e-mail orders) over the Internet. In terms of trends, one has increased by 2.9%, 3.1% and 11.6% compared to 2007, 2006 and 2005 respectively.



Graph 2.17. Did your enterprise receive orders over the Internet?

19.9% of enterprises having an Internet connection received orders via the Internet in 2008



Graph 2.18. Was your enterprise using a secure protocole, such as SSL or TLS, for the reception of orders via the Internet?



2.3.7. Safety of information systems in enterprises

In the Republic of Serbia only 20.2% of enterprises have regulations on information safety.

Graph 2.19. Does your enterprise have regulations on information safety?

YES: 20.2%	NO: 79.8%	
120.20.270	NO. 79.0%	

As far as the awareness of information safety is concerned, 16.8% of enterprises check their employees, while 83.2% of them have not implemented this kind of checking yet.

Graph 2.20. Are the employees in your enterprises checked as to the awareness of information safety measures?

YES: 16.8% NO: 83.2%

The results of the surveys indicate that 52.9% of enterprises identify the users of information systems being allowed to access them.

Graph 2.21. Were copying or taking away data (including software) prevented in your enterprise on mobile mdia (DVD, CD etc.)?



As for the problems encountered, enterprises have provided the following answers:

- "Accidental damage to information system and data" (22.3% of enterprises)
- "Intentional damage of equipment and data" (2.4% of enterprises)
- "Abuse of power"(1.3 % of enterprises)

2.4. RESULTS OF THE SURVEY

MODULE 2.A: General information on ICT system¹⁾

A1: Does your enterprise use computers?

	-	-		-		in percentages					
			Size		Region						
Enterprises		small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total			
		YES									
	Real estate, renting and professional activities	100.0	100.0	100.0	100.0	100.0	100.0	100.0			
	Banks and insurance companies	100.0	100.0	100.0	100.0	100.0	100.0	100.0			
	Transport, storage and communications	98.2	100.0	100.0	100.0	100.0	95.8	98.5			
Activity	Wholesale and retail trade	97.7	100.0	100.0	97.0	97.3	99.4	98.1			
Acti	Manufacturing	96.5	100.0	100.0	96.1	97.6	100.0	97.5			
	Motion picture, video, radio and TV activities	95.3	100.0	100.0	91.5	100.0	100.0	96.0			
	Construction	94.3	100.0	100.0	97.1	100.0	91.1	95.7			
	Hotels, camping sites and other short- stay accommodation	77.9	100.0	100.0	76.7	100.0	100.0	87.1			
Total 97.0 100.0 100.0 96.4 98.2 98.5						97.8					

A2: Percentage of employees using a computer (at least once a week)

in percentages

		Enterprises							
	Size								
	small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	total		
1-24%	34.7	41.0	36.8	43.0	44.9	22.8	36.0		
75-100%	32.6	29.5	34.0	22.2	23.4	48.0	32.1		
25-49%	17.1	18.6	15.6	20.3	18.6	13.4	17.3		
50-74%	15.6	10.9	13.6	14.5	13.1	15.8	14.6		

¹⁾ The results in tables A2 - A7 refer only to enterprises that answered positively in question A1.



Does your enterprise use the following information and communication technologies?

in percentage									
			Size			Region			
	Enterprises	small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total	
	A3: W	ire bas	ed LAN	I					
	Banks and insurance companies	100.0	80.0	100.0	100.0	100.0	96.2	96.8	
	Motion picture, video, radio and TV activities	88.7	100.0	100.0	90.7	100.0	77.1	90.3	
	Real estate, renting and business activities	87.2	100.0	42.9	74.5	92.9	91.4	88.4	
Activitiy	Manufacturing	61.7	90.1	87.9	66.8	71.8	74.3	70.2	
Acti	Wholesale and retail trade	65.6	93.8	95.3	54.2	70.6	81.2	69.8	
	Hotels, camping sites and other short stay accommodation	36.4	71.4	87.5	34.8	40.9	85.2	53.7	
	Construction	44.0	78.9	98.2	52.0	35.0	70.3	53.5	
	Transport, storage and communications	36.5	100.0	95.8	30.0	71.0	51.7	48.8	
Total		62.6	90.5	89.1	59.4	68.6	78.3	68.9	
	A4: V	Wireles	s LAN						
	Transport, storage and communications	58.8	44.3	80.4	19.2	47.6	87.4	55.2	
	Hotels, camping sites and other short stay accommodation	75.3	40.0	14.3	64.5	0.0	52.2	50.0	
	Wholesale and retail trade	44.2	38.2	66.0	55.1	27.9	46.1	43.7	
Activity	Motion picture, video, radio and TV activities	39.5	63.3	25.0	39.8	33.7	59.3	42.0	
વ	Manufacturing	30.1	36.1	62.1	37.8	28.8	33.4	34.0	
	Construction	39.0	13.2	56.4	23.4	46.6	33.8	32.7	
	Banks and insurance companies	28.6	25.0	31.6	100.0	0.0	28.0	30.0	
	Real estate, renting and business activities	29.1	23.3	66.7	25.1	37.9	26.7	28.5	
Total		37.3	33.9	60.1	39.5	31.9	39.3	37.4	

Does your enterprise use the following information and communication technologies?

in percenta								ntages
			Size		Region			
	Enterprises	small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total
	A5: Intrane	t (not 1	the Int	ernet)				
	Banks and insurance companies	71.4	80.0	94.7	100.0	100.0	84.6	87.1
	Manufacturing	39.3	54.5	75.1	48.9	40.2	43.1	44.9
	Wholesale and retail trade	35.7	95.3	77.8	51.4	53.6	33.0	44.2
	Construction	31.4	84.2	52.7	42.5	45.0	42.0	43.1
Activity	Real estate, renting and business activities	34.7	83.6	95.2	46.2	19.8	48.2	42.8
Ac	Transport, storage and communications	26.0	100.0	89.6	19.3	66.1	42.3	40.2
	Hotels, camping sites and other short stay accommodation	9.5	57.1	87.5	34.8	40.9	29.6	33.6
	Motion picture, video, radio and TV activities	17.6	100.0	100.0	25.7	11.6	54.3	28.3
Total		35.2	72.1	75.8	46.0	44.9	40.5	43.7
	A6: Extrane	t (not	the Int	ernet)				
	Banks and insurance companies	28.6	80.0	78.9	50.0	100.0	65.4	67.7
	Real estate, renting and business activities	11.5	27.1	28.6	18.4	11.9	13.3	14.0
	Manufacturing	11.8	15.6	36.7	17.5	5.7	16.8	13.9
Activity	Transport, storage and communications	14.1	1.5	52.1	4.7	6.3	28.4	13.1
Acti	Wholesale and retail trade	6.2	43.3	63.7	11.4	12.2	12.3	12.0
	Construction	4.2	10.4	16.1	9.0	3.9	4.7	6.0
	Motion picture, video, radio and TV activities	0.0	0.0	75.0	0.0	2.3	5.7	2.1
	Hotels, camping sites and other short stay accommodation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total		8.9	20.5	39.9	13.5	7.9	14.0	12.2

A7: Did your enterprise have in use, in 2009, open source operating systems, such as Linux?

						in p	bercer	tages
			Size		Region			
Enterprises		small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total
		YES						
	Banks and insurance companies	57.1	80.0	94.7	100.0	100.0	80.8	83.9
	Motion picture, vide, radio and TV activities	37.4	63.3	100.0	36.1	77.9	8.6	41.9
	Real estate, renting and business activities	34.9	52.2	14.3	21.5	60.3	35.4	37.1
Activity	Construction	17.0	15.3	16.1	0.2	27.0	24.4	16.6
Act	Transport, storage and communications	16.1	1.5	29.2	1.1	19.0	24.7	14.1
	Manufacturing	9.5	20.6	38.4	17.1	7.2	14.9	13.7
	Wholesale and retail trade	8.9	34.8	62.6	15.4	15.0	10.4	13.2
	Hotels, camping sites and other short-stay accommodation	0.0	28.6	12.5	12.3	0.0	18.5	12.8
Total			25.1	39.7	14.2	17.8	19.1	17.0

MODULE 2.B: Use of the Internet¹⁾

B1: Does your enterprise have access to the Internet?

in percentages									
			Size						
	Enterprises		medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total	
		YES							
	Motion picture, video, radio and TV activities	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
	Banks and insurance companies	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
	Real estate, renting and business activities	98.5	100.0	100.0	100.0	92.9	100.0	98.7	
Activity	Manufacturing	96.2	98.7	100.0	97.3	96.6	97.1	97.0	
Acti	Construction	92.6	89.5	100.0	94.0	85.0	96.7	92.3	
	Wholesale and retail trade	90.6	100.0	100.0	84.3	98.4	94.0	92.0	
	Hotels, camping sites and other short- stay accommodation	90.5	85.7	100.0	77.5	100.0	100.0	89.0	
	Transport, storage and communications	85.7	100.0	100.0	77.0	90.3	100.0	88.5	
Total		93.4	97.7	100.0	91.8	95.0	96.8	94.5	

B2: Percentage of the number of employees using the Internet

in percentages

	in percentagee								
		Enterprises							
	Size								
	small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	total		
1-24%	41.6	56.6	57.1	55.2	57.3	27.4	45.1		
75-100%	27.2	21.3	15.7	13.7	13.6	45.1	25.6		
50-74%	16.0	12.3	12.4	15.3	14.3	15.4	15.2		
25- 49%	15.2	9.8	14.8	15.8	14.8	12.1	14.1		

¹⁾ The results in tables B2 - B9 refer only to enterprises that answered positively in question B1.



B3: Does your enterprise have one of the following types of external connections with the Internet?

in percentag								
		Size			Region			
	Enterprises		medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total
	Tradit	tional 1	moder	1				
	Transport, storage and communications	14.4	65.3	0.0	31.7	25.6	14.6	23.4
	Banks and insurance companies	14.3	40.0	21.1	50.0	66.7	15.4	22.6
	Construction	24.9	12.1	3.6	22.3	11.8	27.4	21.4
2	Manufacturing	15.7	13.7	18.8	13.4	15.5	18.5	15.3
Activity	Real estate, renting and business activities	15.4	10.1	0.0	18.7	17.4	12.3	14.4
	Hotels, camping sites and other short- stay accommodation	0.0	33.3	12.5	31.9	0.0	1.9	14.3
	Wholesale and retail trade	11.1	22.5	13.5	23.8	14.5	4.1	12.8
	Motion picture, video, radio and TV activities	6.4	0.0	25.0	0.0	2.3	22.9	6.2
Tota	I	14.8	18.7	13.8	18.4	15.4	12.9	15.5
	DSL (xDSL, ADSL	., SDSI	., etc.)	conne	ction			
	Construction	71.8	82.8	91.1	74.2	84.3	68.6	74.9
	Wholesale and retail trade	75.4	49.3	38.0	72.7	82.5	62.7	71.0
	Hotels, camping sites and other short- stay accommodation	80.1	58.3	12.5	68.1	79.5	61.1	67.2
≳	Manufacturing	60.0	66.5	70.5	60.1	63.9	64.1	62.2

		Construction	71.8	82.8	91.1	74.2	84.3	68.6	74.9
		Wholesale and retail trade	75.4	49.3	38.0	72.7	82.5	62.7	71.0
		Hotels, camping sites and other short- stay accommodation	80.1	58.3	12.5	68.1	79.5	61.1	67.2
	>	Manufacturing	60.0	66.5	70.5	60.1	63.9	64.1	62.2
	Activity	Real estate, renting and business activities	62.3	57.4	85.7	53.0	52.9	67.1	61.9
		Motion picture, video, radio and TV activities	60.0	73.3	25.0	62.9	68.6	45.7	60.4
		Transport, storage and communications	48.6	65.3	52.1	37.0	44.6	70.2	51.8
		Banks and insurance companies	28.6	80.0	57.9	100.0	100.0	46.2	54.8
٦	Fotal		66.0	63.6	66.2	63.1	70.0	64.8	65.5

B3: Does your enterprise have one of the following types of external connections with the Internet?

in percentag									
			Size			Region			
	Enterprises	small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total	
	Cab	able Internet							
	Banks and insurance companies	71.4	60.0	100.0	50.0	100.0	88.5	87.1	
	Real estate, renting and business activities	36.3	52.2	19.0	37.6	35.8	39.2	38.3	
	Motion picture, video, radio and TV activities	35.1	0.0	75.0	27.8	24.4	51.4	32.5	
Activity	Manufacturing	27.2	26.3	36.7	23.1	25.2	37.3	27.5	
Acti	Transport, storage and communications	27.8	15.3	66.7	17.5	34.9	28.8	26.8	
	Hotels, camping sites and other short- stay accommodation	20.4	8.3	87.5	13.1	20.5	25.9	19.5	
	Wholesale and retail trade	10.0	52.6	58.5	11.8	5.7	27.5	16.9	
	Construction	11.2	23.7	43.8	13.2	7.4	22.7	15.2	
Tota	l	21.1	32.6	46.2	19.7	18.7	32.6	24.3	
	Mobile	e connections							
	Banks and insurance companies	28.6	40.0	52.6	50.0	66.7	42.3	45.2	
	Motion picture, video, radio and TV activities	26.1	26.7	25.0	37.1	9.3	25.7	26.1	
	Transport, storage and communications	28.1	1.5	33.3	19.9	6.9	38.5	23.3	
Activity	Real estate, renting and business activities	11.2	15.9	23.8	5.7	27.4	10.2	12.2	
ط	Wholesale and retail trade	8.8	19.2	31.6	7.4	7.6	14.8	10.7	
	Manufacturing	10.7	6.2	31.9	13.1	8.2	8.8	10.6	
	Hotels, camping sites and other short stay accommodation	19.9	0.0	0.0	0.0	0.0	25.9	10.6	
	Construction	6.3	5.4	28.6	6.6	7.4	7.7	7.2	
Tota	I	11.1	9.5	31.3	11.2	9.2	13.5	11.6	



B4: Does your enterprise use the Internet for the following purposes?

(as consumer of Internet services)

						in	perce	ntages
			Size			Region		
	Enterprises	small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total
	Banking an	d finan	cial se	rvices				
	Banks and insurance companies	100.0	80.0	100.0	100.0	100.0	96.2	96.8
	Construction	86.6	76.1	86.6	74.4	88.2	91.6	84.5
	Manufacturing	76.9	89.3	74.9	77.3	83.2	81.3	80.0
>	Real estate, renting and business activities	78.0	83.6	100.0	78.0	72.9	81.2	79.2
Activity	Wholesale and retail trade	77.6	82.1	93.0	69.1	71.5	89.4	78.5
Ac	Transport, storage and communications	62.9	66.0	95.8	30.7	91.0	74.6	64.6
	Motion picture, video, radio and TV activities	45.2	63.3	100.0	45.4	11.6	100.0	48.5
	Hotels, camping sites and other short stay accommodation	29.8	50.0	87.5	31.9	0.0	68.5	41.5
Tota		76.5	83.3	83.5	70.9	78.3	84.8	78.1
	Training	g and e	ducati	on				
	Motion picture, video, radio and TV activities	78.9	-	25.0	55.7	88.4	71.4	69.2
	Banks and insurance companies	42.9	40.0	68.4	50.0	100.0	53.8	58.1
	Real estate, renting and business activities	40.8	63.6	14.3	53.0	23.8	46.0	43.7
Activity	Hotels, camping sites and other short stay accommodation	19.9	33.3	12.5	0.0	0.0	61.1	24.9
٩	Construction	4.5	75.8	61.6	22.8	22.9	18.6	21.3
	Wholesale and retail trade	10.3	62.0	60.2	19.3	12.9	21.6	18.5
	Manufacturing	15.9	19.7	30.7	13.7	15.9	26.1	17.6
	Transport, storage and communications	10.8	35.5	66.7	15.4	24.7	13.5	17.3
Tota		16.7	39.6	42.0	19.2	18.0	27.8	22.2

B5: Does your enterprise use the Internet to interact with public authorities?

						ir	n perce	ntages
			Size			Region		
	Enterprises	small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total
		YES						
	Motion picture, video, radio and TV activities	100.0	63.3	100.0	91.8	100.0	100.0	96.2
	Banks and insurance companies	71.4	100.0	94.7	100.0	100.0	88.5	90.3
	Construction	84.3	94.1	96.4	84.0	82.4	92.8	86.8
Activity	Real estate, renting and business activities	75.8	90.4	95.2	52.3	91.8	82.9	78.2
Acti	Manufacturing	66.5	85.3	76.6	75.0	64.0	74.8	71.8
	Wholesale and retail trade	52.6	87.9	95.3	47.4	37.2	79.3	58.4
	Transport, storage and communications	57.0	52.3	95.8	48.0	29.4	86.6	57.4
	Hotels, camping sites and other short stay accommodation	19.9	41.7	100.0	15.9	20.5	57.4	33.6
						69.1		

B6: Does your enterprise use the Internet to interact with public authorities for the following purposes?¹⁾

in percentages								
			Size			Region		
	Enterprises	small (10-49)	medium (50-249)	large (250+)	central Serbia	Vojvodina	Belgrade	Total
	For obtain	ning ir	format	tion				
	Hotels, camping sites and other short stay accommodation	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Real estate, renting and business activities	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Manufacturing	98.5	100.0	88.0	97.6	100.0	98.3	98.4
vity	Construction	97.5	100.0	100.0	100.0	92.9	100.0	98.2
Activity	Motion picture, video, radio and TV activities	93.6	100.0	100.0	100.0	100.0	77.1	94.3
	Banks and insurance companies	100.0	80.0	94.4	100.0	100.0	91.3	92.9
	Wholesale and retail trade	86.1	100.0	100.0	81.4	64.9	100.0	89.5
	Transport, storage and communications	85.0	100.0	100.0	100.0	100.0	79.9	88.4
Total		94.3	99.9	94.1	95.3	91.9	97.9	95.7
	For obtaining	forms	(e.g. ta	x form	ıs)			
	Banks and insurance companies	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Hotels, camping sites and other short stay accommodation	100.0	100.0	87.5	100.0	100.0	96.8	97.8
	Transport, storage and communications	96.3	97.1	100.0	100.0	96.6	95.0	96.6
Activity	Real estate, renting and business activities	91.2	94.5	90.0	100.0	86.9	91.5	91.7
4	Manufacturing	86.5	98.6	85.5	94.5	89.8	83.0	90.1
	Wholesale and retail trade	78.8	100.0	100.0	79.1	100.0	81.2	83.9
	Construction	67.5	100.0	100.0	84.8	50.0	85.4	76.1
	Motion picture, video, radio and TV activities	46.3	100.0	100.0	49.4	33.7	77.1	51.5
Total		82.1	98.7	92.3	89.8	84.1	85.4	86.6

¹⁾ The results refer only to enterprises that answered positively in question B5.

B6: Does your enterprise use the Internet to interact with public authorities for the following purposes?¹⁾

in percentages Size Region Total Enterprises Vojvodina **Belgrade** nedium 50-249) 10-49) central Serbia large (250+) small For returning filled in forms Banks and insurance companies 100.0 60.0 100.0 100.0 100.0 91.3 92.9 Hotels, camping sites and other short 50.0 100.0 87.5 100.0 100.0 82.0 74.2 stay accommodation Construction 63.0 75.1 96.3 77.2 38.1 77.7 67.4 Transport, storage and 45.3 50.5 Activity 40.0 97.1 82.6 71.6 52.1 communications 68.5 53.7 43.8 52.6 50.9 Manufacturing 45.2 59.7 Real estate, renting and business 30.5 80.7 90.0 75.6 36.8 34.3 40.3 activities Motion picture, video, radio and TV 32.4 100.0 100.0 49.4 11.6 54.3 39.0 activities Wholesale and retail trade 36.2 34.7 33.2 17.8 81.1 81.0 23.7 Total 37.6 70.4 79.6 54.7 38.5 46.4 47.4

For complete electronic treating and administrative procedure (e.g. declaration, registration, authorization request) without the need for additional paper work (including payment if required)

	Banks and insurance companies	60.0	60.0	44.4	100.0	66.7	43.5	50.0
	Transport, storage and communications	51.5	0.0	52.2	16.3	25.0	60.1	42.7
	Manufacturing	25.8	28.2	25.9	30.0	24.4	22.7	26.5
Activity	Motion picture, video, radio and TV activities	14.8	57.9	50.0	39.3	0.0	5.7	18.7
Acti	Wholesale and retail trade	10.6	39.2	24.2	13.0	28.0	15.6	17.1
	Construction	0.0	32.1	35.2	4.3	4.8	15.1	8.7
	Real estate, renting and business activities	7.8	4.3	60.0	11.4	0.0	10.1	8.3
	Hotels, camping sites and other short stay accommodation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tota		16.7	27.7	31.5	21.9	18.6	19.3	20.0

¹⁾ The results refer only to enterprises that answered positively in question B5.



B6: Does your enterprise use the Internet to interact with public authorities for the following purposes?¹⁾

						ir) perce	ntages
		Size				Region		
Enterprises		small (10-49)	medium (50-249)	large (250+)	central Serbia	Vojvodina	Belgrade	Total
	For submitting a proposa	l in an	electr	onic t	ender :	system		
	Transport, storage and communications	18.7	40.1	0.0	65.9	0.0	5.0	21.3
	Banks and insurance companies	0.0	20.0	16.7	50.0	33.3	8.7	14.3
	Manufacturing	5.5	22.5	10.1	8.2	15.8	11.1	10.9
Activity	Motion picture, video, radio and TV activities	11.3	0.0	0.0	10.1	0.0	22.9	10.2
Acti	Wholesale and retail trade	5.8	2.3	3.7	6.6	0.0	5.9	5.0
	Construction	3.6	6.6	3.7	7.6	0.0	4.0	4.2
	Real estate, renting and business activities	1.4	4.3	0.0	5.4	0.0	1.7	1.9
	Hotels, camping sites and other short stay accommodation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tota		5.6 14.7 6.8 10.3 7.3 6.2				7.8		

¹⁾ The results refer only to enterprises that answered positively in question B5.

	in percentage								
			Size			Region			
Enterprises		small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total	
		YES							
	Banks and insurance companies	85.7	100.0	100.0	100.0	100.0	96.2	96.8	
	Hotels, camping sites and other short- stay accommodation	89.5	83.3	87.5	71.0	100.0	98.1	86.9	
	Real estate, renting and business activities	70.8	100.0	95.2	55.4	84.7	79.5	75.4	
Activity	Manufacturing	66.9	76.2	70.3	63.0	70.8	78.9	70.4	
Acti	Motion picture, video, radio and TV activities	61.1	100.0	100.0	81.4	33.7	77.1	66.2	
	Transport, storage and communications	59.9	78.2	95.8	41.6	67.4	82.6	64.6	
	Wholesale and retail sale	57.7	78.1	81.3	46.8	54.9	74.6	61.0	
	Construction	52.3	82.0	100.0	36.2	70.6	76.4	60.4	
Tota	I	62.5	79.8	81.0	55.3	66.3	78.2	67.0	

B7: Does your enterprise have a Website/Home Page?



(your enterprise and provider of Internet services)¹⁾

					ir	n perce	ntages
		Size			Region		
Enterprises	small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total

Confidentiality (protection) of data of the visitors of the Website or asserting Website security?

			•					
	Banks and insurance companies	16.7	40.0	73.7	50.0	33.3	60.0	56.7
	Hotels, camping sites and other short stay accommodation	33.3	80.0	71.4	22.4	40.9	83.0	53.9
	Manufacturing	40.4	30.6	21.1	42.0	29.6	35.9	36.6
>	Wholesale and retail trade	36.7	32.0	13.2	25.9	56.8	29.4	35.3
Activity	Real estate, renting and business activities	27.4	66.4	5.3	37.1	13.9	39.7	34.5
	Motion picture, video, radio and TV activities	38.9	0.0	50.0	22.8	72.4	33.3	33.3
	Transport, storage and communications	18.7	62.0	21.7	35.2	40.7	18.5	28.7
	Construction	0.0	21.7	8.9	0.0	6.0	9.8	6.5
Tota		32.3	36.5	21.6	34.2	33.6	31.6	32.9

Access to product catalogues and price lists?

	Hotels, camping sites and other short stay accommodation	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Transport, storage and communications	71.2	100.0	58.7	73.6	68.2	84.1	77.1
	Manufacturing	63.8	78.2	77.9	66.6	72.3	68.1	68.7
Activity	Wholesale and retail trade	71.6	39.4	53.7	53.9	46.4	79.1	65.4
Acti	Motion picture, video, radio and TV activities	73.5	26.7	25.0	57.0	93.1	63.0	64.1
	Real estate, renting and business activities	64.5	57.4	5.3	61.1	57.7	63.3	61.9
	Banks and insurance companies	16.7	60.0	63.2	50.0	66.7	52.0	53.3
	Construction	58.7	20.8	55.4	45.1	69.5	35.7	48.4
Tota		66.8	63.3	63.7	62.7	64.2	68.9	65.8

¹⁾ The results refer only to enterprises that answered positively in question B7.

(your enterprise and provider of Internet services)¹⁾

in	percentages
	percentages

Logical Size Regional Logical (10-49) medium Logical (10-49) medium Central (20-249) Central Volvodina Central Central Volvodina Central Central							1 00100	mageo
			Size			Region		
	Enterprises	small (10-49)	medium (50-249)	large (250+)	ent	vodir	Belgrade	Total

Possibility for visitors to customise or design the products?

Motion picture, video, radio and TV activities	91.9	73.3	50.0	88.6	65.5	96.3	87.3
Hotels, camping sites and other short stay accommodation	100.0	60.0	28.6	77.6	100.0	73.6	80.0
Banks and insurance companies	100.0	40.0	84.2	100.0	100.0	76.0	80.0
Real estate, renting and business activities	81.6	54.8	94.7	67.5	70.6	80.4	76.7
Transport, storage and communications	86.4	45.4	54.3	73.6	68.5	80.5	75.4
Manufacturing	66.8	88.4	61.2	57.0	89.3	78.7	72.8
Construction	43.3	100.0	83.0	100.0	41.7	57.3	61.6
Wholesale and retail trade	38.9	95.4	69.9	50.1	63.4	43.5	49.9
	60.4	84.1	68.3	61.3	73.8	65.6	66.5
	activities Hotels, camping sites and other short stay accommodation Banks and insurance companies Real estate, renting and business activities Transport, storage and communications Manufacturing Construction	activities91.9Hotels, camping sites and other short stay accommodation100.0Banks and insurance companies100.0Real estate, renting and business activities81.6Transport, storage and communications86.4Manufacturing66.8Construction43.3Wholesale and retail trade38.9	activities91.973.3Hotels, camping sites and other short stay accommodation100.060.0Banks and insurance companies100.040.0Real estate, renting and business activities81.654.8Transport, storage and communications86.445.4Manufacturing66.888.4Construction43.3100.0Wholesale and retail trade38.995.4	activities91.973.350.0Hotels, camping sites and other short stay accommodation100.060.028.6Banks and insurance companies100.040.084.2Real estate, renting and business activities81.654.894.7Transport, storage and communications86.445.454.3Manufacturing66.888.461.2Construction43.3100.083.0Wholesale and retail trade86.495.469.9	activities91.973.350.088.6Hotels, camping sites and other short stay accommodation100.060.028.677.6Banks and insurance companies100.040.084.2100.0Real estate, renting and business activities81.654.894.767.5Transport, storage and communications86.445.454.373.6Manufacturing66.888.461.257.0Construction43.3100.083.0100.0Wholesale and retail trade38.995.469.950.1	activities 91.9 73.3 50.0 88.6 65.5 Hotels, camping sites and other short stay accommodation 100.0 60.0 28.6 77.6 100.0 Banks and insurance companies 100.0 40.0 84.2 100.0 100.0 Real estate, renting and business activities 81.6 54.8 94.7 67.5 70.6 Transport, storage and communications 86.4 45.4 54.3 73.6 68.5 Manufacturing 66.8 88.4 61.2 57.0 89.3 Construction 43.3 100.0 83.0 100.0 41.7 Wholesale and retail trade 38.9 95.4 69.9 50.1 63.4	activities 91.9 73.3 50.0 88.6 65.5 96.3 Hotels, camping sites and other short stay accommodation 100.0 60.0 28.6 77.6 100.0 73.6 Banks and insurance companies 100.0 40.0 84.2 100.0 100.0 76.0 Real estate, renting and business activities 81.6 54.8 94.7 67.5 70.6 80.4 Transport, storage and communications 86.4 45.4 54.3 73.6 68.5 80.5 Manufacturing 66.8 88.4 61.2 57.0 89.3 78.7 Construction 43.3 100.0 83.0 100.0 41.7 57.3 Wholesale and retail trade 38.9 95.4 69.9 50.1 63.4 43.5

Online ordering or reservation of goods/services?

	Hotels, camping sites and other short stay accommodation	34.5	60.0	28.6	59.2	40.9	34.0	44.1
	Transport, storage and communications	31.0	40.0	21.7	39.2	15.4	40.1	32.6
	Banks and insurance companies	16.7	0.0	36.8	50.0	33.3	24.0	26.7
Activity	Motion picture, video, radio and TV activities	18.5	0.0	25.0	11.4	0.0	33.3	15.8
4	Wholesale and retail trade	14.6	19.9	23.5	11.0	12.8	19.2	15.8
	Manufacturing	12.6	19.2	20.4	19.7	6.5	16.4	14.9
	Real estate, renting and business activities	12.9	9.6	0.0	17.1	11.5	11.1	12.0
	Construction	7.2	0.0	26.8	9.9	8.3	4.4	6.8
Tota		14.3	18.4	22.1	18.5	9.8	17.2	15.6

¹⁾ The results refer only to enterprises that answered positively in question B7.

Т

(your enterprise and provider of Internet services)¹⁾

in percentag								ntages
			Size			Region		
	Enterprises	small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total
	Onlir	ie payi	nent?					
	Banks and insurance companies	0.0	20.0	47.4	50.0	33.3	32.0	33.3
	Transport, storage and communications	16.4	2.0	8.7	11.9	15.4	11.5	12.7
	Wholesale and retail trade	12.3	2.0	15.4	13.5	8.2	10.3	10.5
Activity	Motion picture, video, radio and TV activities	10.4	0.0	25.0	0.0	0.0	33.3	9.4
Acti	Manufacturing	5.7	17.5	1.4	9.8	6.9	9.6	8.9
	Hotels, camping sites and other short stay accommodation	11.1	0.0	14.3	0.0	0.0	15.1	6.9
	Construction	3.2	7.6	28.6	9.9	-	9.0	6.4
	Real estate, renting and business activities	0.6	3.3	0.0	0.0	0.0	1.7	1.1
Tota		7.6	10.3	12.0	9.7	6.3	8.8	8.4
	Personalized content on the V	Vebsite	for re	gular/	repeat	ed visi	tors?	
	Banks and insurance companies	33.3	80.0	68.4	50.0	66.7	64.0	63.3
	Motion picture, video, radio and TV activities	67.8	0.0	25.0	34.2	65.5	92.6	55.4
	Real estate, renting and business activities	58.4	19.7	10.5	16.6	32.0	62.2	49.9
Activity	Manufacturing	47.1	49.9	46.0	55.8	35.7	48.6	47.9
Act	Construction	56.5	21.7	5.4	1.3	30.6	70.8	43.2
	Hotels, camping sites and other short stay accommodation	35.0	40.0	0.0	100.0	0.0	0.0	34.9
	Wholesale and retail trade	33.8	8.1	6.6	57.4	42.0	9.8	28.5
	Transport, storage and communications	36.7	2.0	4.3	18.8	33.3	27.2	27.2
Tota		45.0	31.8	28.2	48.3	36.1	39.2	41.0

¹⁾ The results refer only to enterprises that answered positively in question B7.

(your enterprise and provider of Internet services)¹⁾

in	percentages
	percentages

In percentages									
		Size							
Enterprises		small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total	
	Advertisement of open job positions or online job application?								
	Banks and insurance companies	16.7	40.0	68.4	50.0	66.7	52.0	53.3	
	Motion picture, video, radio and TV activities	38.9	0.0	50.0	22.8	65.5	37.0	33.3	
	Real estate, renting and business activities	19.7	23.3	21.1	16.6	20.0	21.4	20.5	
Activity	Construction	22.5	14.2	3.6	18.2	13.9	22.3	18.8	
Acti	Manufacturing	8.6	12.1	24.9	5.0	13.3	15.0	10.4	
	Wholesale and retail trade	8.4	0.0	28.7	6.0	7.0	8.0	7.3	
	Transport, storage and communications	3.0	2.0	37.0	2.6	1.5	7.1	4.5	
	Hotels, camping sites and other short- stay accommodation	0.0	0.0	71.4	0.0	0.0	9.4	4.3	
Total		11.4	10.1	26.3	7.2	11.9	14.6	11.7	

¹⁾ The results refer only to enterprises that answered positively in question B7.



B9: Was your enterprise using, in January 2009, a digital signature in any message sent, i.e. encryption methods that assure the authenticity and integrity of the message?

	in percentages									
			Size							
Enterprises		small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total		
	YES									
	Banks and insurance companies	28.6	60.0	36.8	50.0	66.7	34.6	38.7		
	Transport, storage and communication	39.7	0.0	16.7	14.9	9.4	62.5	31.5		
	Wholesale and retail trade	10.4	12.2	35.4	9.7	21.0	5.9	11.1		
~	Manufacturing	8.5	5.5	14.5	6.2	9.1	9.8	8.0		
Activity	Real estate, renting and business activities	7.5	9.6	9.5	6.4	2.0	9.9	7.9		
	Construction	3.0	24.8	5.4	6.4	0.6	13.3	7.4		
	Hotels, camping sites and other short- stay accommodation	0.0	0.0	12.5	0.0	0.0	1.9	0.8		
	Motion picture, video, radio and TV activities	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Tota	I	10.3	8.9	17.0	7.5	11.2	12.2	10.3		

MODULE 2.C: AUTOMATED DATA EXCHANGE¹⁾

C1: Was your enterprise using automated data exchange in January 2009?

in percentage									
		Size							
Enterprises		small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total	
YES									
	Banks and insurance companies	57.1	60.0	78.9	100.0	100.0	65.4	71.0	
	Transport, storage and communications	36.8	1.5	39.6	21.1	19.0	52.3	31.1	
	Wholesale and retail trade	22.5	32.8	83.0	21.5	10.3	36.1	24.8	
Activity	Real estate, renting and business activities	26.1	15.8	14.3	41.2	3.8	24.9	24.4	
Acti	Manufacturing	12.4	30.2	42.8	18.2	14.6	22.9	18.4	
	Motion picture, video, radio and TV activities	0.0	100.0	25.0	16.5	9.3	2.9	11.0	
	Construction	7.7	5.5	58.9	12.4	8.2	7.8	9.5	
	Hotels, camping sites and other short stay accommodation	0.0	14.3	12.5	12.3	0.0	1.9	6.7	
Tota		18.5	25.1	50.1	19.9	11.9	28.0	20.8	

¹⁾ The results refer only to enterprises that answered positively in question A1.



C2: Was automated data exchange used for the following purposes? $^{1)} \label{eq:c2}$

in percentage								ntages
			Size			Region		
	Enterprises	small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total
	Sending o	rders t	o supp	liers				
	Hotels, camping sites and other short- stay accommodation	0.0	100.0	0.0	100.0	0.0	0.0	90.0
	Construction	100.0	100.0	57.6	100.0	63.9	91.4	88.3
	Wholesale and retail trade	84.3	83.5	37.0	89.2	65.2	81.0	81.6
2	Manufacturing	85.0	73.7	43.5	74.0	69.5	82.1	75.7
Activity	Real estate, renting and business activities	68.2	60.4	0.0	84.5	50.0	58.3	66.8
	Transport, storage and communications	41.9	0.0	21.1	36.3	95.2	26.4	40.8
	Motion picture, video, radio and TV activities	0.0	36.7	100.0	50.0	0.0	100.0	40.6
	Banks and insurance companies	25.0	0.0	20.0	50.0	0.0	17.6	18.2
Tota		76.2	75.1	40.8	78.5	69.1	70.4	73.0
	Receiv	ing e-i	nvoice	s				
	Construction	100.0	100.0	66.7	100.0	67.2	97.1	90.8
	Hotels, camping sites and other short- stay accommodation	0.0	100.0	0.0	100.0	0.0	0.0	90.0
	Real estate, renting and business activities	87.0	20.8	66.7	84.5	50.0	79.8	80.6
Activity	Transport, storage and communications	76.7	0.0	89.5	58.4	95.2	79.2	76.5
٩	Manufacturing	70.9	79.6	55.9	68.5	70.6	80.1	72.8
	Wholesale and retail trade	53.5	68.1	31.0	71.4	53.6	47.5	54.8
	Motion picture, video, radio and TV activities	0.0	36.7	100.0	50.0	0.0	100.0	40.6
	Banks and insurance companies	75.0	33.3	26.7	50.0	0.0	41.2	36.4
Tota		68.6	72.5	51.3	72.7	67.0	65.1	68.0

¹⁾ The results refer only to enterprises that answered positively in question C1.

C2: Was automated data exchange used for the following purposes?¹⁾

Size Region Enterprises (10-49) Vojvodina (250+1) Vojvodina (250+1)	Total
Receiving orders from customers	
Hotels, camping sites and other short 0.0 100.0 0.0 100.0 0.0 0.0 0.0	90.0
Construction 100.0 100.0 54.5 100.0 63.9 88.3	87.5
Manufacturing 83.6 82.7 35.6 75.8 82.7 77.	77.8
Motion picture, video, radio and TV activities Transport, storage and 71.7 0.0 31.6 54.5 95.2 68	75.0
Transport, storage and communications 71.7 0.0 31.6 54.5 95.2 68.	69.6
Real estate, renting and business activities65.620.80.084.5100.046.1	60.8
Wholesale and retail trade 60.7 53.2 34.9 53.7 63.9 58.9	58.0
Banks and insurance companies 0.0 0.0 6.7 0.0 0.0 5.9	4.5
Total 69.9 71.1 35.8 70.8 76.6 62.1	67.4
Sending e-invoices	
Construction 100.0 100.0 63.6 100.0 67.2 94.	90.0
Transport, storage and communications87.0100.089.594.874.687.0	87.2
Real estate, renting and business activities80.420.866.784.5100.068.4	74.6
Image: Wanufacturing 54.9 71.0 58.2 54.8 69.5 66.3	61.9
Approx Manufacturing 54.9 71.0 58.2 54.8 69.5 66. Wholesale and retail trade 43.7 41.6 46.8 45.6 18.1 46.5	43.5
Motion picture, video, radio and TV 0.0 36.7 100.0 50.0 0.0 100	40.6
Banks and insurance companies 75.0 33.3 26.7 50.0 0.0 41.3	36.4
Hotels, camping sites and other short stay accommodation0.00.00.00.00.00.0	0.0
Total 61.2 58.9 55.5 61.1 56.0 60.4 ¹⁾ The results refer only to enterprises that answered positively in question C!.	60.2

¹⁾ The results refer only to enterprises that answered positively in question C!.

C2: Was automated data exchange used for the following purposes?¹⁾

					ir	n perce	ntages
		Size					
Enterprises	small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total

Sending or receiving product information (e.g. catalogues, price lists, etc.)

	Manufacturing	70.5	83.3	84.2	83.9	78.8	67.8	77.4
	Construction	56.4	100.0	90.9	75.8	39.3	91.4	71.0
	Real estate, renting and business activities	63.8	20.8	33.3	61.5	0.0	60.9	59.5
>	Wholesale and retail trade	61.8	42.7	68.7	41.8	54.0	67.4	58.8
Activity	Motion picture, video, radio and TV activities	0.0	36.7	100.0	50.0	0.0	100.0	40.6
	Transport, storage and communications	27.4	0.0	63.2	18.2	69.8	20.9	28.6
	Banks and insurance companies	0.0	0.0	20.0	0.0	0.0	17.6	13.6
	Hotels, camping sites and other short stay accommodation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total		58.8	66.0	74.6	61.7	64.6	60.9	61.8

Sending or receiving trasnport documents (e.g. consignment notes)

	Manufacturing	24.6	52.0	36.7	39.6	52.2	24.4	37.4
	Wholesale and retail trade	33.0	8.3	6.3	22.3	7.8	32.8	27.3
	Real estate, renting and business activities	15.4	20.8	0.0	15.1	0.0	16.8	15.8
>	Construction	0.0	100.0	12.1	-	3.3	49.3	15.1
Activity	Transport, storage and communications	12.9	0.0	0.0	18.2	44.4	0.0	12.3
	Hotels, camping sites and other short stay accommodation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Motion picture, video, radio and TV activities	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Banks and insurance companies	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tota	I	23.7	36.9	19.9	26.3	33.4	24.4	26.4

¹⁾ The results refer only to enterprises that answered positively in question C1.

ICT 2009

Т

C2: Was automated data exchange used for the following purposes?¹⁾

in percentag								
			Size			Region		
	Enterprises		medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total
	Sending payment instru	ictions	to fina	ancial	institu	itions		
	Banks and insurance companies	75.0	66.7	60.0	0.0	100.0	64.7	63.6
	Manufacturing	24.6	45.6	41.8	28.1	59.6	28.3	35.3
	Motion picture, video, radio and TV activities	0.0	26.7	100.0	0.0	100.0	100.0	31.3
~	Construction	-	100.0	57.6	27.3	3.3	49.3	27.6
Activity	Transport, storage and communications	27.4	0.0	21.1	36.3	69.8	9.8	26.9
	Wholesale and retail trade	30.5	3.6	27.8	12.7	2.9	35.5	25.7
	Real estate, renting and business activities	17.6	20.8	33.3	23.0	0.0	16.2	18.0
	Hotels, camping sites and other short stay accommodation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tota		25.3	32.9	41.4	22.8	40.8	28.6	28.4
Sen	ding or receiving data to/from p d	ublic au ata, et		ies (e.	g. tax :	returns	s, stati	stical
	Construction	54.7	100.0	21.2	72.7	6.6	55.1	50.8
	Banks and insurance companies	25.0	66.7	26.7	50.0	66.7	23.5	31.8
	Wholesale and retail trade	28.6	4.8	18.0	3.8	7.8	35.8	23.9
	Manufacturing	16.7	34.2	13.6	19.5	45.8	14.0	23.6

16.4

0.0

2.8

0.0

20.9

0.0

0.0

60.4

0.0

27.7

10.5

100.0

33.3

0.0

17.4

5.2

0.0

7.5

0.0

15.5

44.4

0.0

0.0

0.0

31.1

12.5

100.0

9.4

0.0

24.3

16.1

10.0

8.5

0.0

22.2

in percentages

¹⁾ The results refer only to enterprises that anwered positively in question C1.



Activity

Total

Transport, storage and

stay accommodation

Hotels, camping sites and other short

Real estate, renting and business

Motion picture, video, radio and TV

communications

activities

activities

MODULE 4.D: Module D: Sharing electronically information on the Supply Chain Management $^{1)} \label{eq:module}$

D1: In January 2009, was your enterprise regularly sharing electronically information on the supply chain management with your suppliers or customers?

Enterprises		Size						
		small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total
YES								
	Transport, storage and communications	47.4	0.0	37.5	23.0	47.6	50.9	39.3
	Wholesale and retail trade	34.1	12.7	41.2	26.7	26.6	37.9	31.4
	Manufacturing	18.5	35.9	26.1	23.1	17.7	29.7	23.3
Activity	Real estate, renting and business activities	18.4	14.5	19.0	41.2	11.7	12.2	17.8
Ă	Construction	10.9	5.5	41.1	9.6	5.5	17.4	11.2
	Hotels, camping sites and other short- stay accommodation	9.5	0.0	0.0	10.1	0.0	0.0	5.0
	Motion picture, video, radio and TV activities	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tota	I	24.7	22.3	30.1	23.1	20.2	28.7	24.4

¹⁾ The results refer only to enterprises that answered positively in question A1.

D2: In January 2009, was your enterprise regularly sharing electronically the following information with its suppliers?¹⁾

in percentages								
	Enterprises		Size			Region		
			medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total
Inventory levels, production plans or demand forecasts								
	Construction	58.9	100.0	69.6	66.4	90.2	57.2	64.8
	Wholesale and retail trade	54.8	74.9	78.7	53.9	44.5	62.7	56.4
	Manufacturing	46.8	55.6	63.0	57.4	51.8	42.5	51.1
vity	Real estate, renting and business activities	48.6	56.8	50.0	46.0	51.2	53.0	49.6
Activity	Transport, storage and communications	6.5	0.0	22.2	0.0	7.6	10.0	7.0
	Hotels, camping sites and other short- stay accommodation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Motion picture, video, radio and TV activities	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tota		45.6	59.2	63.9	50.9	42.5	50.0	48.7
Pro	gress of deliveries (i.e. of distribu	ution o	of raw r	nateria	als or f	finishe	d prod	ucts)
	Manufacturing	53.9	66.0	37.0	54.5	73.9	51.7	57.7
	Construction	44.8	100.0	8.7	31.2	90.2	39.6	44.5
	Real estate, renting and business activities	40.5	22.7	25.0	30.5	16.3	51.9	38.1
/ity	Wholesale and retail trade	35.1	55. 9	78.7	40.4	48.6	30.6	37.1
Activity	Transport, storage and communications	18.1	0.0	55.6	33.3	7.6	20.8	19.1
	Hotels, camping sites and other short- stay accommodation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Motion picture, video, radio and TV activities	0.0	0.0	0.0	0.0	0.0	0.0	0.0

¹⁾ The results refer only to enterprises that answered positively in question D1.

38.3

63.4

41.0

44.6

50.5



Total

42.9

37.7

D3: In January 2009, was your enterprise regularly sharing electronically the following information with its customers?¹⁾

in percentages								
	Enterprises		Size		Region			
			medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total
	Inventory levels, produc	tion p	lans or	dema	nd for	ecasts		
	Construction	43.6	100.0	69.6	97.7	90.2	19.5	53.5
	Wholesale and retail trade	50.8	44.1	-	40.8	40.2	57.8	49.4
	Manufacturing	34.8	53.0	61.1	49.7	45.6	33.8	43.4
vity	Real estate, renting and business activities	27.3	100.0	50.0	38.5	34.9	34.4	36.3
Activity	Transport, storage and communications	10.4	0.0	22.2	0.0	7.6	18.6	10.7
	Hotels, camping sites and other short- stay accommodation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Motion picture, video, radio and TV activities	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tota		38.6	55.8	46.7	43.9	37.9	42.4	41.9
P	rogress deliveries (i.e. of distribut	tion of	raw m	aterial	ls or fi	nished	produ	cts)
	Manufacturing	53.1	63.4	63.0	60.7	68.6	46.7	57.7
	Construction	57.7	100.0	4.3	62.5	90.2	38.4	53.2
	Wholesale and retail trade	36.0	37.5	25.5	39.7	47.3	29.0	35.9
/ity	Real estate, renting and business activities	21.3	65.9	25.0	23.0	16.3	33.3	26.7
Activity	Transport, storage and communications	17.7	0.0	55.6	16.7	17.8	20.8	18.8
	Hotels, camping sites and other short- stay accommodation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Motion picture, video, radio and TV activities	0.0	0.0	0.0	0.0	0.0	0.0	0.0

¹⁾ The results refer only to enterprises that answered positively in question D1.

37.4

61.5

41.4

41.8

49.9

34.0

46.6

Total

MODULE 2.E: Automatic share of information within the $enterprise^{1)}$

E1: In January 2009, 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?

						ir	n perce	ntages
			Size			Region		
	Enterprises		medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total
	Managemen	t of inv	rentory	7 levels	5			
	Manufacturing	20.0	45.5	48.1	34.0	22.4	23.3	27.8
	Banks and insurance companies	28.6	40.0	21.1	100.0	66.7	15.4	25.8
	Wholesale and retail trade	21.2	13.1	49.4	9.9	22.2	27.9	20.6
>	Real estate, renting and business activities	9.6	9.6	4.8	6.4	7.1	11.2	9.5
Activity	Construction	1.5	11.1	25.0	0.4	2.7	10.1	4.5
Ad	Transport, storage and communications	3.5	0.0	33.3	0.0	6.6	5.9	3.8
	Hotels, camping sites and other short- stay accommodation	0.0	0.0	12.5	0.0	0.0	1.9	0.7
	Motion picture, video, radio and TV activities	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tota	I	15.6	27.4	39.3	18.7	17.2	19.7	18.7
	You	accou	nting					
	Banks and insurance companies	57.1	60.0	42.1	100.0	66.7	42.3	48.4
	Manufacturing	16.3	55.1	51.7	32.8	26.5	21.0	27.8
	Wholesale and retail trade	15.9	11.1	71.3	10.2	16.8	20.3	16.2
	Construction	13.0	16.0	57.1	6.8	16.1	23.8	15.5
Activity	Motion picture, video, radio and TV activities	16.2	0.0	25.0	18.6	0.0	25.7	14.8
Ac	Real estate, renting and business activities	12.2	13.4	57.1	9.2	14.2	14.0	13.1
	Transport, storage and communications	11.9	0.0	37.5	1.7	9.7	21.8	10.7
	Hotels, camping sites and other short- stay accommodation	0.0	0.0	12.5	0.0	0.0	1.9	0.7
Tota	I	14.9	32.7	53.2	19.5	19.6	19.7	19.6

¹⁾ The results refer only to enterprises that answered positively in question A1.



E1: In January 2009, 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?

						ntages		
			Size		Region			
	Enterprises	small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total
	Your production produc	tion a	nd serv	vices n	nanage	ment		
	Banks and insurance companies	57.1	40.0	31.6	100.0	66.7	30.8	38.7
	Manufacturing	8.7	47.6	52.7	24.2	17.0	18.7	20.7
	Hotels, camping sites and other short stay accommodation	18.9	14.3	12.5	32.6	0.0	1.9	16.6
ivity	Transport, storage and communications	10.7	0.0	35.4	8.5	1.8	17.4	9.6
Acti	Real estate, renting and business activities	7.7	9.6	61.9	6.4	7.1	10.2	8.9
	Wholesale and retail trade	5.8	6.6	51.2	2.5	12.0	6.7	6.7
	Construction	1.5	10.4	46.4	3.4	6.1	6.7	5.3
	Motion picture, video, radio and TV activities	0.0	0.0	25.0	0.0	0.0	2.9	0.7
Total		7.0	27.4	48.9	13.7	12.0	11.3	12.4
	Your distrib	ution	manag	ement				
	Banks and insurance companies	28.6	40.0	21.1	100.0	66.7	15.4	25.8
	Manufacturing	7.6	48.3	42.0	22.0	16.5	18.6	19.6
	Transport, storage and communications	10.4	0.0	8.3	3.8	3.6	18.2	8.6
>	Wholesale and retail trade	6.5	6.6	51.2	2.5	8.5	10.1	7.2
Activit	Real estate, renting and business activities	6.4	9.6	4.8	0.0	7.1	8.9	6.8
	Construction	1.5	5.5	28.6	3.4	0.0	6.7	3.5
	Hotels, camping sites and other short stay accommodation	0.0	0.0	12.5	0.0	0.0	1.9	0.7
Activity Activity	Motion picture, video, radio and TV activities	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total		6.5	26.8	35.4	11.5	10.1	12.2	11.4

¹⁾ The results refer only to enterprises that answered positively in question A1.

E2: In January 2009, 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 function?

		anctio				ntages		
			Size		Region			
	Enterprises		medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total
	Your manageme	ent of	invent	ory lev	vels			
	Manufacturing	13.9	41.3	40.8	25.9	16.9	21.4	22.1
	Banks and insurance companies	28.6	40.0	10.5	100.0	33.3	11.5	19.4
	Wholesale and retail trade	16.9	7.5	51.2	5.1	13.7	26.3	16.2
	Real estate, renting and business activities	7.7	3.3	4.8	6.4	7.1	7.1	7.0
Activity	Construction	1.5	11.1	21.4	0.2	2.7	9.8	4.4
Aci	Transport, storage and communications	3.5	0.0	25.0	0.0	6.6	5.1	3.6
	Hotels, camping sites and other short stay accommodation	0.0	0.0	12.5	0.0	0.0	1.9	0.7
	Motion picture, video, radio and TV activities	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tota	l i i i i i i i i i i i i i i i i i i i	11.8	23.7	34.3	13.7	12.4	17.8	14.9
	Your	accou	inting					
	Banks and insurance companies	42.9	60.0	26.3	100.0	66.7	26.9	35.5
	Manufacturing	10.4	52.7	48.3	27.1	20.2	19.1	23.0
	Construction	13.0	16.0	53.6	6.6	16.1	23.6	15.4
	Wholesale and retail trade	11.8	7.9	71.3	7.9	13.2	15.1	12.3
Activity	Real estate, renting and business activities	11.3	14.5	4.8	6.4	18.3	11.5	11.7
Ac	Motion picture, video, radio and TV activities	9.9	0.0	25.0	18.6	0.0	2.9	9.3
	Transport, storage and communications	10.2	0.0	18.8	0.8	4.8	21.0	8.8
	Hotels, camping sites and other short stay accommodation	0.0	0.0	12.5	0.0	0.0	1.9	0.7
Tota	l i i i i i i i i i i i i i i i i i i i	11.2	30.9	46.3	16.0	15.9	16.6	16.2

in percentag								ntages
			Size			Region		
	Enterprises		medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total
	YES							
	Banks and insurance companies	14.3	20.0	57.9	62.0	50.2	35.0	41.9
	Transport, storage and communications	18.2	0.0	35.4	4.7	14.2	29.4	15.7
	Hotels, camping sites and other short- stay accommodation	0.0	28.6	25.0	12.3	0.0	20.4	13.4
Activity	Real estate, renting and business activities	13.6	3.3	71.4	25.3	10.9	9.8	13.1
٩	Manufacturing	5.4	25.2	50.2	16.2	11.0	8.1	12.6
	Wholesale and retail trade	5.1	31.2	69.0	2.7	5.9	17.0	9.6
	Construction	4.7	10.4	25.0	6.0	11.3	3.8	6.8
	Motion picture, video, radio and TV activities	0.0	36.7	25.0	8.2	0.0	2.9	4.5
Tota		7.0	21.6	49.2	11.0	9.6	12.7	11.3
		NO						
	Motion picture, video, radio and TV activities	100.0	63.3	50.0	91.8	97.7	97.1	94.8
	Construction	93.8	89.6	48.2	87.6	88.7	96.2	91.0
	Wholesale and retail trade	90.4	65.3	31.0	95.5	84.5	80.0	86.1
ost	Manufacturing	86.9	65.2	45.7	75.3	81.0	84.7	79.4
Delatnost	Real estate, renting and business activities	81.3	71.6	23.8	68.3	87.2	80.0	79.0
	Hotels, camping sites and other short- stay accommodation	54.9	71.4	75.0	57.3	40.9	79.6	63.0
	Banks and insurance companies	85.7	80.0	42.1	38.0	49.8	65.0	58.1
	Transport, storage and communications	45.9	49.2	64.6	55.6	66.5	21.1	47.0
Tota		85.1	67.8	43.9	80.2	82.3	79.2	80.4

E3: In January 2009, did your enterprise use an ERP software package?

E3: In January 2009, did your enterprise use an ERP software package?

						ir	n perce	ntages	
			Size			Region			
	Enterprises		medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total	
DON'T KNOW									
	Transport, storage and communications	35.9	50.8	0.0	39.7	19.3	49.4	37.3	
	Hotels, camping sites and other short- stay accommodation	45.1	0.0	0.0	30.4	59.1	0.0	23.6	
	Manufacturing	7.7	9.6	4.1	8.5	8.0	7.2	8.0	
Activity	Real estate, renting and business activities	5.1	25.1	4.8	6.4	1.9	10.2	8.0	
٩	Wholesale and retail trade	4.5	3.5	0.0	1.8	9.6	3.0	4.3	
	Construction	1.4	0.0	26.8	6.4	0.0	0.0	2.2	
	Motion picture, video, radio and TV activities	0.0	0.0	25.0	0.0	2.3	0.0	0.7	
	Banks and insurance companies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Tota	I	7.9	10.6	6.9	8.8	8.2	8.1	8.4	



E4: In January 2009, did your enterprise have in use any software application for information about clients, so-callled CRM, that allows to:

						ir	n perce	ntages
			Size			Region		
	Enterprises	small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total
Ca	pture, store and make available t			less fu	nction	s the i	nforma	ation
	abo	ut clie	nts?					
	Banks and insurance companies	14.3	80.0	89.5	50.0	100.0	69.2	71.0
	Transport, storage and communications	23.9	1.5	31.3	9.6	14.6	37.4	20.4
	Real estate, renting and business activities	15.9	19.8	71.4	21.1	24.0	14.4	17.4
Activity	Hotels, camping sites and other short- stay accommodation	18.0	14.3	0.0	0.0	0.0	42.6	15.4
٩	Manufacturing	7.0	30.5	39.9	17.2	13.0	11.8	14.6
	Wholesale and retail trade	7.8	19.7	38.0	8.6	7.3	12.3	9.8
	Construction	1.9	20.8	1.8	0.0	11.7	6.6	5.8
	Motion picture, video, radio and TV activities	4.9	0.0	0.0	9.3	0.0	0.0	4.3
Tota		9.1	23.9	36.5	12.3	11.9	14.1	12.9
Ма	ke analysis of the information ab price lists, sales promotions, se				-		•	-
	Banks and insurance companies	14.3	40.0	73.7	50.0	100.0	50.0	54.8
	Transport, storage and communications	27.0	0.0	27.1	8.5	13.7	45.8	22.5
	Real estate, renting and business activities	9.5	12.1	76.2	9.2	16.9	9.9	11.0
vity	Manufacturing	4.3	24.4	27.5	12.1	9.6	8.7	10.5
Activity	Hotels, camping sites and other short- stay accommodation	18.0	0.0	0.0	0.0	0.0	25.9	9.4
	Motion picture, video, radio and TV activities	9.9	0.0	0.0	18.6	0.0	0.0	8.6
	Wholesale and retail trade	6.9	13.3	26.3	6.0	7.0	10.2	8.0
	Construction	1.9	16.0	0.0	0.0	8.4	6.3	4.7
Tota		7.4	17.8	27.4	8.7	9.4	12.0	10.1

MODULE 2.F: e-commerce¹⁾

F1: Did your enterprise receive during 2008 orders over the Internet (excluding manually typed e-mails)?

						ir	n perce	ntages
			Size					
Enterprises		small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total
		YES						
	Transport, storage and communications	56.2	1.5	8.3	24.9	42.5	62.8	44.4
	Hotels, camping sites and other short- stay accommodation	50.7	16.7	25.0	26.1	0.0	59.3	35.3
⋧	Wholesale and retail trade	23.9	21.0	34.2	33.6	27.1	14.7	23.7
Activity	Motion picture, video, radio and TV activities	16.2	36.7	50.0	26.8	0.0	28.6	19.3
	Manufacturing	15.4	24.6	20.0	26.4	9.2	13.4	18.0
	Real estate, renting and business activities	15.5	3.3	71.4	31.7	15.8	9.0	14.6
	Construction	2.1	17.8	0.0	0.0	9.8	6.6	5.1
Tota	I	19.8	19.8	21.8	25.6	17.4	16.2	19.9

F3: Percentage of the total turnover in 2008 that resulted from orders received over the Internet²⁾

in percentages

	po. co								
		Enterprises							
		Size							
	small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total		
0-1%	5.2	21.4	2.5	6.1	8.8	11.1	8.3		
2-5%	19.7	25.9	23.5	21.8	29.7	13.4	21.0		
6-10%	14.6	11.6	36.4	13.7	19.8	12.9	14.8		
11-25%	12.7	22.7	14.2	15.2	16.8	12.6	14.8		
26-100%	47.8	18.4	23.4	43.2	24.9	50.0	41.1		

¹⁾ The results refer only to enterprises that answered positively in question B1.

²⁾ The results refer only to enterprises that answered positively in question F1.



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F5: Was your enterprise using a secure protocole, such as SSL or TLS, for the reception of orders via the Internet?¹⁾

						ir	n perce	ntages
			Size			Region		
	Enterprises		medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total
	YES							
	Motion picture, video, radio and TV activities	69.6	0.0	50.0	34.6	0.0	90.0	54.5
	Real estate, renting and business activities	23.5	100.0	100.0	0.0	25.8	70.9	32.0
Activity	Hotels, camping sites and other short- stay accommodation	39.2	0.0	0.0	0.0	0.0	43.8	29.9
Ac	Transport, storage and communications	26.6	100.0	0.0	20.0	24.4	30.8	27.0
	Wholesale and retail trade	23.0	41.4	59.0	5.2	10.9	76.8	26.2
	Manufacturing	28.1	16.0	31.3	20.9	39.8	22.8	24.0
	Construction	0.0	34.8	0.0	0.0	0.0	50.0	23.9
Total		25.8	24.6	49.4	14.0	19.8	49.9	26.4

¹⁾ The results refer only to enterprises that answered positively in question F1.

F6: Did your enterprise send orders, in January 2008, for products or services over the Internet (excluding manually typed e-mail)?

						ir	n perce	ntages
		Size				Region		
Enterprises		small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total
		YES						
	Motion picture, video, radio and TV activities	58.5	22.5	16.7	46.6	26.9	71.2	50.4
	Real estate, renting and business activities	40.8	50.0	0.0	42.0	0.0	59.3	42.1
₹	Manufacturing	26.2	14.5	85.7	41.2	12.6	23.9	25.5
Activity	Hotels, camping sites and other short- stay accommodation	23.4	22.2	28.4	28.0	25.4	18.8	23.3
	Transport, storage and communications	15.8	26.4	22.2	20.0	16.3	19.8	18.9
	Construction	11.3	36.7	75.0	17.5	2.3	28.6	15.7
	Wholesale and retail trade	9.2	18.3	8.9	3.5	12.1	17.4	11.0
Total		21.9	24.1	24.4	23.4	18.8	23.9	22.4

F7: Percentage of purchases over the Internet in total purchases in 2008 $^{1)}$

in percentages

	Enterprises							
		Size						
	small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total	
Less than 1%	14.0	27.1	30.4	19.9	30.0	8.2	17.4	
More than 1% and less 5%	26.1	32.2	29.8	32.0	24.9	24.8	27.5	
More than 5% and less than 10%	15.0	18.3	14.1	10.3	22.2	17.0	15.7	
More than 10% and less than 25%	12.6	9.6	22.4	13.7	9.4	12.7	12.3	
25% and over	32.3	12.8	3.3	24.1	13.5	37.3	27.1	

F8: In January 2008, did your enterprise send e-orders via computer networks to suppliers located in the following areas?¹⁾

in percentages

								mages
			Size			Region		
Enterprises		small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total
	Repu	blic of	Serbia					
	Manufacturing	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Construction	100.0	100.0	80.0	100.0	100.0	98.7	99.2
	Wholesale and retail trade	74.3	100.0	0.0	68.9	0.0	100.0	86.8
'ity	Hotels, camping sites and other short- stay accommodation	76.3	89.2	77.3	82.0	70.9	80.2	78.1
Activity	Transport, storage and communications	67.7	84.9	89.1	81.0	70.1	69.7	75.2
	Real estate, renting and business activities	70.2	100.0	94.4	38.1	83.7	92.2	74.1
	Motion picture, video, radio and TV activities	42.0	6.8	100.0	21.3	80.1	38.8	39.7
Total		68.4	84.2	88.4	69.5	74.3	74.4	72.5

¹⁾ The results refer only to enterprises that answered positively in question F6.



F8: During 2008, was your enterprise regularly sending e-orders via computer
networks to suppliers located in the following areas? ¹⁾

in percentages								
			Size		Region			
	Enterprises	small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total
	EU	count	ries					
	Manufacturing	52. 9	63.1	58.7	55.8	84.6	34.7	56.9
	Real estate, renting and business activities	40.4	100.0	72.2	15.5	67.4	61.6	47.2
	Wholesale and retail trade	36.0	53.8	28.9	27.1	39.4	48.9	38.3
Activity	Hotels, camping sites and other short stay accommodation	24.3	33.3	0.0	0.0	0.0	50.0	28.7
Ă	Construction	18.1	33.9	20.0	6.9	0.0	38.3	23.3
	Transport, storage and communications	23.4	0.0	0.0	10.7	0.0	33.2	21.2
	Motion picture, video, radio and TV activities	0.0	0.0	33.3	0.0	0.0	10.0	4.4
Tota	1	37.4	54.9	50.6	34.3	50.2	43.9	41.7
	Rest	of the	world					
	Manufacturing	20.7	39.4	43.5	25.5	32.3	31.2	28.8
	Real estate, renting and business activities	21.3	100.0	5.6	0.0	67.4	36.1	27.0
ity	Hotels, camping sites and other short- stay accommodation	48.7	0.0	0.0	0.0	0.0	43.8	25.1
Activity	Wholesale and retail trade	23.4	17.5	22.7	11.7	26.0	30.9	22.6
Ă	Construction	18.1	0.0	0.0	0.0	0.0	19.4	11.4
	Transport, storage and communications	6.7	0.0	0.0	0.0	0.0	11.2	6.0
	Motion picture, video, radio and TV activities	0.0	0.0	33.3	0.0	0.0	10.0	4.4
Tota	1	19.4	30.2	27.8	14.0	25.8	27.5	22.1

¹⁾ The results refer only to enterprises that answered positively in question F6.

MODUL E2.H: Security of information systems in enterprises¹⁾ H1: Does your enterprise have regulations on information security issues? in percentages

	in percentages								
			Size			Region			
Enterprises		small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total	
		YES							
	Banks and insurance companies	71.4	60.0	84.2	100.0	100.0	73.1	77.4	
	Hotels, camping sites and other short stay accommodation	0.0	42.9	75.0	24.7	0.0	27.8	22.2	
	Motion picture, video, radio and TV activities	19.1	36.7	50.0	8.2	2.3	71.4	21.8	
Activity	Transport, storage and communication	11.6	55.7	66.7	22.3	13.0	24.3	20.4	
٩	Wholesale and retail trade	15.5	46.2	69.0	10.0	6.1	36.8	20.4	
	Manufacturing	12.9	38.1	32.9	17.7	18.0	26.8	20.2	
	Real estate, renting and business activities	17.0	30.9	80.0	2.8	16.9	26.3	20.0	
	Construction	7.3	57.8	23.6	21.1	13.0	19.7	18.2	
Tota		13.6	42.7	44.5	15.4	13.1	30.0	20.2	

H2: Does your enterprise check its employees' awareness of information security measures?

	of informatio		j			ir	n perce	ntages
			Size			Region		
	Enterprises		medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total
		YES						
	Banks and insurance companies	71.4	20.0	73.7	100.0	66.7	61.5	64.5
	Wholesale and retail trade	14.3	55.5	45.5	9.5	7.4	36.1	20.2
	Construction	13.4	36.5	27.3	21.0	18.0	17.0	18.7
	Manufacturing	12.4	23.5	19.3	13.6	15.8	18.5	15.5
Activity	Real estate, renting and business activities	10.2	24.6	70.0	2.8	7.9	18.0	13.2
Ac	Transport, storage and communications	6.4	34.0	57.1	12.9	13.0	11.1	12.3
	Motion picture, video, radio and TV activities	6.4	36.7	25.0	8.2	2.3	22.9	10.0
	Hotels, camping sites and other short- stay accommodation	0.0	14.3	12.5	12.3	0.0	1.9	6.7
Tota		12.3	32.2	31.4	12.5	12.5	24.0	16.8

¹⁾ The results refer ony to enterprises that answered positively in question A1.



H3: Were the following resources, which required provision of alternative resolutions, identified in your enterprise?

in percentages								
			Size			Region		
	Enterprises	small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total
	Hum	an reso	ources					
	Banks and insurance companies	71.4	80.0	89.5	50.0	100.0	84.6	83.9
	Motion pictures, video, radio and TV activities	68.7	100.0	50.0	81.4	53.5	74.3	71.4
	Construction	48.3	26.8	77.7	48.3	56.6	32.8	45.3
Ę	Manufacturing	43.0	45.0	46.4	37.1	35.1	63.6	43.7
Activity	Real estate, renting and business activities	32.4	62.3	95.2	53.0	56.5	27.7	37.8
	Wholesale and retail trade	39.2	23.0	74.9	26.0	14.7	60.2	37.6
	Transport, storage and communications	33.6	30.5	70.8	5.3	43.2	59.7	34.2
	Hotels, camping sites and other short stay accommodation	37.9	7.1	25.0	40.5	20.5	3.7	24.2
Total		40.7	38.2	60.6	34.7	34.1	51.8	40.9
	F	Iardwa	re					
	Banks and insurance companies	100.0	60.0	94.7	100.0	100.0	88.5	90.3
	Motion pictures, video, radio and TV activities	67.2	100.0	75.0	90.7	55.8	51.4	70.9
	Real estate, renting and business activities	36.3	83.6	95.2	52.7	62.5	36.3	44.1
Activity	Manufacturing	36.2	52.6	50.2	38.7	38.1	48.2	41.1
Act	Transport, storage and communications	28.1	51.5	87.5	13.3	30.5	59.7	33.8
	Hotels, camping sites and other short stay accommodation	9.0	57.1	87.5	12.3	40.9	59.3	33.6
	Construction	21.2	36.3	45.5	54.0	9.9	9.5	25.3
Wholesale and retail trade		18.2	51.2	90.1	10.2	13.7	39.9	23.7
Total		28.1	53.4	63.1	31.9	28.9	40.1	34.2

H3: Were the following resources, which required provision of alternative resolutions, identified in your enterprise?

in percentages								
			Size			Region		
	Enterprises	small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total
			re					
	Banks and insurance companies	85.7	60.0	78.9	100.0	100.0	73.1	77.4
	Motion pictures, video, radio and TV activities	45.8	100.0	75.0	90.7	11.6	28.6	52.2
	Real estate, renting and business activities	29.9	83.6	95.2	52.7	41.2	33.7	38.8
Activity	Manufacturing	28.0	41.4	47.8	34.8	25.6	35.6	32.4
Act	Transport, storage and communications	25.7	51.5	87.5	12.2	30.5	55.3	31.9
	Hotels, camping sites and other short stay accommodation	0.0	57.1	87.5	12.3	40.9	46.3	28.9
	Construction	21.2	36.3	43.8	54.0	9.9	9.2	25.2
	Wholesale and retail trade	16.8	52.5	90.1	11.7	16.4	34.8	22.6
Total		23.6	48.1	60.8	30.5	22.4	33.7	29.6
		None						
	Transport, storage and communications	62.7	48.5	0.0	85.6	55.0	30.5	58.4
	Wholesale and retail trade	59.5	43.2	8.2	69.2	77.2	34.5	56.6
	Real estate, renting and business activities	62.1	10.1	0.0	44.2	37.5	61.0	53.6
Activity	Hotels, camping sites and other short- stay accommodation	53.1	42.9	12.5	47.2	59.1	40.7	46.6
4	Manufacturing	46.9	43.1	45.4	52.4	50.0	30.6	45.9
	Construction	44.7	47.3	20.5	24.7	40.1	66.9	44.1
	Motion pictures, video, radio and TV activities	26.4	0.0	0.0	9.3	44.2	22.9	22.9
	Banks and insurance companies	0.0	20.0	0.0	0.0	0.0	3.8	3.2
Total		53.6	40.9	28.1	55.2	56.3	41.3	50.3

	access?									
						in p	bercer	ntages		
			Size		F	Region				
Enterprises		small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total		
		YES								
	Banks and insurance companies	100.0	80.0	100.0	100.0	100.0	96.2	96.8		
	Hotels, camping sites and other short stay accommodation	45.9	100.0	100.0	69.6	40.9	87.0	71.7		
	Motion picture, video, radio and TV activities	61.1	73.3	100.0	81.4	24.4	77.1	63.5		
Activity	Manufacturing	48.7	86.8	79.5	60.9	55.0	63.2	59.9		
Acti	Transport, storage and communications	42.6	73.3	100.0	23.1	50.8	78.0	49.3		
	Real estate, renting and business activities	43.2	72.4	95.0	74.9	67.5	34.5	48.3		
	Wholesale and retail trade	41.2	85.1	89.9	34.8	25.5	70.8	47.7		
	Construction	36.7	73.4	82.7	37.0	50.0	52.1	46.2		
Total		44.0	83.2	85.0	49.9	45.7	60.9	52.9		

H5: Does your enterprise prevent copying and carrying data (inc. software) on mobile media (e.g.DVD, CD, disquettes, etc.)?

in percentages								
			Size		F	Region		
Enterprises			medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total
YES								
	Manufacturing	47.4	50.6	32.4	65.8	32.3	33.0	47.5
	Banks and insurance companies	28.6	40.0	52.6	50.0	33.3	46.2	45.2
	Construction	32.8	57.8	24.5	39.0	50.1	25.6	37.5
>	Transport, storage and communications	38.1	21.0	61.9	35.9	11.9	55.9	35.9
Activity	Wholesale and retail trade	33.6	40.0	45.8	23.0	36.1	42.6	34.6
Act	Hotels, camping sites and other short- stay accommodation	35.6	35.7	12.5	32.6	79.5	18.5	34.4
	Real estate, renting and business activities	24.5	25.9	25.0	22.0	18.0	27.4	24.7
	Motion picture, video, radio and TV activities	0.0	0.0	75.0	0.0	2.3	5.7	2.1
Total			44.6	35.4	45.0	33.0	35.7	38.4

H4: Does your enterprise identify the users of information systems having

H6: Did your enterprise encounter the following problems?

in percentag							
		Size			Region		
Enterprises	small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total
Accidental damage to t	he info	rmatio	n syste	em ano	l data		
Motion picture, video, radio and TV activities	66.4	0.0	25.0	46.4	66.3	71.4	58.4
Real estate, renting and business activities	30.3	70.4	23.8	33.6	43.5	34.7	36.0
Manufacturing	24.4	34.7	29.7	28.7	25.8	26.7	27.3

20.6

34.7

45.8

11.6

28.5

33.4

23.7

20.5

20.4

10.5

3.2

22.3

Activitiy

Total

Transport, storage and

Hotels, camping sites and other short

communications

9.0 35.7 12.5 12.3 20.5 31.5 stay accommodation Construction 21.6 16.6 17.9 33.1 0.3 24.4 Wholesale and retail trade 9.5 13.6 33.0 10.1 20.1 4.9 Banks and insurance companies 5.3 0.0 0.0 0.0 0.0 3.8 27.6 23.2 19.9 30.9 23.0 21.0

Deliberate damage to hardware and data?

	Motion picture, video, radio and TV activities		0.0	0.0	9.3	0.0	0.0	4.3
	Real estate, renting and business activities	4.1	0.0	4.8	0.0	14.2	1.5	3.5
	Manufacturing	3.3	0.0	7.7	2.0	3.4	3.0	2.7
vitiy	Construction	1.4	5.3	3.6	6.0	0.0	0.4	2.3
Activitiy	Transport, storage and communications	1.8	0.0	20.8	0.0	0.0	6.2	2.1
	Wholesale and retail trade	2.0	1.2	4.7	0.0	1.2	3.9	2.0
	Hotels, camping sites and other short stay accommodation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Banks and insurance companies	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total		2.6	0.9	6.7	1.7	2.8	2.9	2.4



in percentage								
			Size			Region		
	Enterprises	small (10-49)	medium (50-249)	large (250+)	Central Serbia	Vojvodina	Belgrade	Total
	Abu	se of p	ower					
	Construction	0.0	16.1	1.8	6.0	0.0	3.4	3.3
	Banks and insurance companies	0.0	0.0	5.3	0.0	0.0	3.8	3.2
	Real estate, renting and business activities	2.6	6.3	0.0	0.0	0.0	4.9	3.0
.≥	Manufacturing	0.5	3.5	1.0	1.0	2.9	0.1	1.3
Activitiy	Transport, storage and communications	0.0	0.0	8.3	0.0	0.0	0.7	0.3
	Wholesale and retail trade	0.0	0.0	14.0	0.6	0.0	0.1	0.2
	Hotels, camping sites and other short stay accommodation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Motion picture, video, radio and TV activities	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tota	I	0.5	4.1	3.5	1.3	1.2	1.4	1.3
	None of	the m	ention	ed				
	Banks and insurance companies	100.0	100.0	94.7	100.0	100.0	96.2	96.8
	Wholesale and retail trade	88.7	85.2	46.5	89.2	79.6	91.1	87.5
	Hotels, camping sites and other short stay accommodation	91.0	64.3	87.5	87.7	79.5	68.5	79.5
.≥	Construction	78.4	67.6	80.4	57.8	99.7	75.4	76.3
Activitiy	Transport, storage and communications	77.6	65.3	25.0	88.4	71.5	59.6	73.9
4	Manufacturing	73.0	61.7	69.3	69.5	70.4	70.3	70.0
	Real estate, renting and business activities	66.7	29.6	71.4	66.4	49.4	63.2	61.4
	Motion picture, video, radio and TV activities	33.6	100.0	75.0	53.6	33.7	28.6	41.6
Tota	I	78.1	65.3	66.7	74.9	74.9	75.9	75.3

H6: Did your enterprise encounter the following problems?

2.5. QUESTIONNAIRE

USAGE OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN ENTERPRISES

MODULE 2.A: General information on ICT system

A1. Did your enterning use computers for its energings in	YES	NO
A1 : Did your enterprise use computers for its operations in January 2009?		□ end
A2: Please indicate the percentage of the number of persons employed who used computers at least once a week in January 2009.		%
	YES	NO
A3 : Did your enterprise use an INTERNAL COMPUTER NETWORK (e.g. LAN – Local area Network) in January 2009?		go to A5
	YES	NO
A4 : Did your enterprise use, in January 2009, a WIRELESS ACCESS within its internal computer network (e.g. Wireless LAN)?		
	YES	NO
A5 : Did your enterprise have in use INTRANET (an internal network within the enterprise) in January 2009?		
	YES	NO
A6 : Did your enterprise have in use EXTRANET in January 2009?		
A7 : Did your enterprise have in use open source operating	YES	NO
systems, such as Linux, in January 2009?		

MODULE 2.B: Use of the Internet

D4	Diduan		YES	NO
B1 2009		enterprise have access to the Internet in January		go to C1
		ndicate an estimate of the percentage of the number ployed who used the Internet in January 2009.		%
DO	D'.	and an also because of the fallowing to the set		
		enterprise have one of the following types of ections to the Internet in January 2009?	YES	NO
	a)	Traditional Modem (dial-up)		
	b)	DSL (xDSL, ADSL, SDSL, etc.) connection		
	c)	Cable Internet		
	d)	Mobile connections (e.g. analogue mobile phone, GSM, GPRS, UMTS, EDGE, CDMA2000 1xEVDO)		
B4	: Did your			
	wing purpo	YES	NO	
	a)	Banking and financial services		
	b)	Training and education		
P5	Did your	enterprise use in January 2008, the Internet to	YES	NO
		enterprise use, in January 2008, the Internet to ublic authorities?		go to B7
B6	: Did your	enterprise use the Internet to interact with public		
auth	orities for		YES	NO
	a)	Obtaining information		
	b)	Obtaining forms (e.g. tax forms)		
	c)	Returning filled in forms (e.g. provision of statistical information to public authorities)		
	d)	For treating an administrative procedure (e.g. declaration, registration, authorization request) completely electronically without the need for additional paper work (including payment if required)		
	e)	Submitting a proposal in a public electronic tender system		
		YES	NO	
B7	: Does you	ir enterprise have a Website/Home Page?		go to B9

	: Did the V			
	ities: (your entei	prise as provider of Internet services)	YES	NO
	a)	Confidentiality (privacy seal) of Website visitors' details or certification related to Website safety		
	b)	Access to product catalogues and price lists		
	c)	Possibility for visitors to customize or design the products		
	d)	Online ordering or reservation of goods/services		
	e)	Online payment		
	f)	Personalized content on the Website for regular/repeated visitors		
	g)	Advertisement of open job positions or online job application		
B9	: Did your	YES	NO	
	ny messag nenticity an			

MODULE 2.C: AUTOMATED DATA EXCHANGE OUTSIDE THE ENTERPRISE

Automated data exchange between the enterprise and other ICT systems outside the enterprise means:

• exchange of messages (e.g. orders, invoices, payment transactions or description of goods) over the Internet or other computer network in an agreed format which allows their automatic processing (e.g. XML, EDIFACT, etc.)

• without individual messages being manually types

C1	Didyour	YES NO		
2009		enterprise use automated data exchange in January		go to D1
	Was the a oses?			
	a)	Sending orders to suppliers	Γ	
	b)	Receiving e-invoices	Γ	
	c)	Receiving orders from customers	C	
	d)	Sending e-invoices	Γ	
	e)	Sending or receiving information on products (e.g. catalogues, price lists, etc.)	C	
	f)	Sending or receiving transport documents (e.g. consignment notes)	Ľ	
	g)	Sending payment instructions to financial institutions		
	h)	Sending or receiving data to/from public authorities (e.g. tax returns, statistical data, etc.)		

Survey results

Module 2.D: Sharing electronically information on the Supply Chain Management

Sharing electronically information on the supply chain management means:						
 exchanging all types of information with suppliers and/or customers in order to coordinate the availability and delivery of products and services to the final consumer, 						
• including information on demand forecasts, inventories, production, development product,	distribution o	r				
 via computer networks, not only the Internet, but also other connection computers of different enterprises. 	ons between	l				
This information may be exchanged via websites or via automated da definition in module C), but it excludes normal e-mail messages many		(see				
D1 : Was your enterprise, in January 2009, regularly sharing	YES	NO				
electronically information on the supply chain management with suppliers or customers?		go to E1				
D2 : Was your enterprise, in January 2009, regularly sharing electronically the following information with its suppliers?	YES	NO				
 a) Inventory levels, production plans or demand forecasts 						
 b) Progress of deliveries (i.e. distribution of raw materials or finished products) 						
D3: Was your enterprises, in January 2009, regularly exchanging electronically the following information with its customers?						
 a) Inventory levels, production plans or demand forecasts 						
 b) Progress of deliveries (i.e. distribution of raw materials or finished products) 						

Module 2.E: Automatic share of information within the enterprise

Automatic share of information between different functions of the enterprise means any of the following:

• Use of one single software application to support different functions of the enterprise;

• Data linking between software applications that support the different functions of the enterprise

• Use of a common database or data storage accessed by software applications that support the different functions of the enterprise

• Automated data exchange between different software systems (see definition in module C)

E1: In January 2009, when your enterprise received a sale order						
(Esther 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 of the enterprise	se			
	b)	Sending orders to your accounting function				
	c)	Your production or services management				
	d)	Your distribution management				
		y 2009, when your enterprise sent a sale order				
(either electronically or otherwise), was the relevant information about it shared electronically or automatically with the software used for the following functions?				YES	NO	
	a)	a) Management of inventory levels of the enterprise				
	b)	Sending orders to your accounting function				
E3: In January 2009, did your enterprise have in use an YES ERP software package to share information on sales and/or				S	NO	DON'T KNOW
purchases with other internal functional areas (e.g. finances, planning, marketing, etc.?						
E4 : In January 2009, did your enterprise use any software						
application for managing information about customers (so-called CRM) that allows to:				YES	NO	
	 Capture, store and make available to other business functions the information about its clients 		nts			
	 Make analysis of the information about customers for marketing purposes (setting prices, make sales promotion, choose distribution channels, etc.) 					

MODULE 2.F: e-commerce

E-COMMERCE:					
e-commerce means a business communication or transfer of goods and services (purchase and sale) via networks or computers, as well as transfer of capital by using digital communication (ICT).					
	e-commerce may be done via websites or automated data exchange between enterprises, but it excludes normal e-mail that are typed manually.				
Orde	ers received over the Internet (sales)				
	Did your enterprise receive orders over the Internet (excluding	YES	NO		
e-m	ail orders) in January 2008?		□ go to F6		
	Please indicate the percentage of orders received in one of following ways in 2008.				
	a) Via website		%		
	b) Via electronically exchanged data (XML, EDIFACT, etc.)	%			
	Please indicate an estimate of the percentage of the part of over resulted from received orders over the Internet in 2008.	<u> </u>			
	Please indicate the percentage of electronic sales (compared ectronic sales in 2008) in:				
	a) Republic of Serbia		%		
	b) EU countries	<u> </u>			
	c) Rest of the world	%			
	TOTAL	100%			
F5 : Did your enterprise use a secure protocol, such as SSL or TLS, for the reception or orders over the Internet?		YES	NO		
Orders placed over the Internet (purchases)					
F6: Did your enterprise order goods/services over the Internet in January 2008 (excluding manually typed e-mails)?		YES	NO		
			□ go to G1		

com	Please in pared to th answer o				
	a)	Less than 1%			
	b)	1% and over, and less than 5%			
	c)	5% and over, and less than 10%			
	d)	10% and over, and less than 25%			
	e)	25% and over			
F8: In 2008, was your enterprise regularly sending e-orders via					
	computer networks to suppliers located in the following areas?			NO	
	a) Republic of Serbia				
	b) EU countries				
	c) Rest of the world				

MODULE 2.G: Use of technologies for the radio-frequencies identification (RFID)

Radio-frequency identification (RFID) means:

 automatic identification method for storage and remote retrieval of data using FRID tags and transponders

• RFID tag is a device that may be used or incorporated in and product or object and that transmits information via radio waves.

• RFID system has an aerial and receiver, the latter reading the radio-frequency and transmitting information to the device for signal processing.

G1: Does your enterprise use RFID devices?			YES	NO
				go to H1
G2: What are the purposes for using RFID?				
			YES	NO
	a)	Identification of product (e.g. to prevent counterfeiting, theft control)		
	b)	Monitoring and control of industrial production		
	c)	Supply chain and inventory tracking and tracing		
	d)	Management of information about services and maintenance, management of assets		
	e)	Payment applications (e.g. pay tolls, passengers transport)		
	f)	Identification of individuals or access control		



MODULE 2.H: Security of information systems in enterprises

H1: Does your enterprise have regulations on information security?			YES	NO		
			YES	NO		
	H2: Does your enterprise check the employees' awareness of the information security measures?					
H3: Were the following resources requiring alternative resolutions identified in your enterprises:						
		(tick all that apply)				
	a) Human resources					
	b)	Hardware				
	c)	Software				
	d)	Not identified				
			YES	NO		
H4	H4: Are users of information systems identified in your enterprise?					
H5: Are copying or taking away of data prevented in your enterprise (including the software) on mobile media (e.g. DVD, CD, diskettes, etc.)?			YES	NO		
H6: Has your enterprise encountered the following problems: (tick all that apply)						
	a)	Accidental damage to information system and information				
	b)	Intentional damage to hardware and information (inside and outside)				
	c)	Abuse of power	C			
	d)	None of the mentioned	Γ]		

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 ha ndles. A bit is express ed as 1 or 0 in binar y presentation, or as true, i.e. false in logic presentation. A group of 8 bits makes 1 bite.

Broadband:

A communication system the ag ent (carrier) of which (e.g. optical cable) forw ards 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 o r methodology that helps managing information about our clients' needs and habits and developing tighter rela tionships with them. CRM c ontains several technological components, but in organizationa I terms, CRM represents a set o f processes for collecting necessary infor mation on customers, sales, ma rketing efficiency, cu stomers' reactions and market trends. C RM helps mana ging technologies and human re sources 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 anon ymous FTP is a popular w ay of ob taining 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 n etworks based on protocols and via other computer networks. Goods and services are ordered over those net goods or services can be carried out on/outside 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 attach ments, between computers located inside or outside an orga nization. This comprises electronic mails over the Internet or other computer networks.

Extranet:

A secure extension of Intranet en abling 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 technolog y used in sy stems of electronic b usiness for checking the signatory's authenticity, securing the integrity of transmitted information and the irrevocability of t he electronic signature in the message or document. Theref ore, alike the signature in sta ndard business, the electronic signature is used in electronic business. Besides, the latter secures electronically si gned messages, which is not the case w ith personal signatures.

ERP (Enterprise Resource Planning):

ERP is a softw are system that monitors all the aspects of business operations of a compan y. The implemented ERP s ystem is able to integ rate business oper ations of different company functions (e.g. accountancy, sale s, production, etc.) in one entit y. One obtains t his 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 hard ware and software keeping the system secure. It is usually used to prevent any unauthorized access to the intern al local netw ork from t he outsi de. Fire wall 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 w hich 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) . Ea ch connected LAN units is a llowed to communicate with other networks, if needed.

Network:

A group of computers or other devices, such as printers, scanners, etc., being con nected to the communication link, w hich enables all the devices to interact. It can be of small range, linked w ith cables, wireless, permanently, temp orary 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 p rogram, which, by being started-up and installed, damages or e rases data in a computer.

Wide Area Network (WAN):

A communication net work that I inks geographically remote com puters, printe rs and othe r devices.

Window:

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

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