



Ministry of Telecom and Mass Media
of the Russian Federation



Federal State
Statistics Service



HIGHER SCHOOL OF ECONOMICS
NATIONAL RESEARCH UNIVERSITY

Information Society Indicators in the Russian Federation

Data book



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This data book continues the series of publications by HSE Institute for Statistical Studies and Economics of Knowledge (HSE ISSEK) dedicated to information society statistics. It presents statistical data on ICT infrastructure, the content and media sector and the activities of ICT sector enterprises. In addition data collected in business tendency surveys is provided offering assessments of the activities by enterprises rendering ICT services. Special sections contain indicators of ICT usage in the business enterprise sector, public sector, by public authorities, households, and individuals. For the first time information on the distribution of ICT sector employees by age group is provided in the data book. The indicators under consideration are based on state-of-the art methodological approaches to information society statistics and comply with international standards, allowing for international comparison.

The data book uses information provided by the Federal State Statistics Service, Eurostat, the Ministry of Telecom and Mass Media of the Russian Federation, OECD, UNESCO, as well as the results of analytical and methodological studies and special surveys by HSE ISSEK.

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Symbols used in tables:

- ... data not available
and not included in the totals
- data not applicable
- 0.0 insignificant value

In some tables, details may not add up to the total because of rounding.

MAIN INFORMATION SOCIETY INDICATORS

	2005	2006	2007	2008	2009	2010	2011	2012	2013
ICT Sector									
Number of enterprises, at the end of the year, <i>thousand</i>	109	102	112	110	127	138	145	150	153*
Number of employees:									
thousand persons	1347	1364	1340	1371	1280	1306	1268	1294	1320*
as a percentage of the total employment	2.8	2.8	2.7	2.8	2.7	2.8	2.8	2.8	2.8
Gross value added:									
billion roubles	660	791	1027	1219	1273	1354	1541	1771	1935
as a percentage of GDP	3.6	3.4	3.6	3.5	3.8	3.4	3.3	3.4	3.4
Content and Media Sector									
Number of enterprises, at the end of the year, <i>thousand</i>	...	...	...	...	49.0	51.3	51.4	50.9	...
Number of employees:									
thousand persons	257.8	257.3	257.5	262.8	252.6	261.2	250.8	226.0	...
as a percentage of the total employment	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	...
Gross value added:									
billion roubles	111.0	145.1	177.8	228.6	189.8	206.4	208.3	225.9	243.5
as a percentage of GDP	0.6	0.6	0.6	0.6	0.6	0.5	0.4	0.4	0.4
ICT Infrastructure									
Telephones (including public payphones) per 100 inhabitants	30	31	32	32	32	31	31	30	...
Mobile cellular telephones per 100 inhabitants	86	108	120	140	161	166	179	183	...
Fixed broadband Internet subscriptions per 100 inhabitants	...	...	...	...	...	...	12	14	...
ICT Usage by Enterprises									
Enterprises using personal computers as a percentage of the total number of enterprises	91.1	93.3	93.3	93.7	93.7	93.8	94.1	94.0	...
Enterprises using the Internet as a percentage of the total number of enterprises	53.3	61.3	67.8	73.7	78.3	82.4	84.8	86.9	...
Enterprises with a website as a percentage of the total number of enterprises	14.8	21.1	19.8	22.8	24.1	28.5	33.0	37.8	...

* Estimated by HSE Institute for Statistical Studies and Economics of Knowledge on the basis of data provided by Federal State Statistics Service.

(continued)

	2005	2006	2007	2008	2009	2010	2011	2012	2013
ICT Usage by Households									
Households with personal computers as a percentage of the total number of households	25	31	37	43	49	55	60	67	...
Households with Internet access as a percentage of the total number of households*	9	18	21	28	36	48	57	60	...
ICT Usage by Individuals									
Individuals using the Internet every day or almost every day as a percentage of all individuals aged 16–74**	...	...	...	...	22	26	33	41	43
Individuals who have never used the Internet as a percentage of all individuals aged 16–74**	...	...	...	...	55	51	42	34	29
Individuals using the Internet as a percentage of all individuals aged 16–74:									
at home	...	...	...	...	31	35	47	58	...
at work	...	...	...	...	15	12	14	22	...
at place of education	...	...	...	...	4	4	4	8	...
at another person's home	...	...	...	...	11	7	6	14	...
Individuals' level of computer skills (aged 16–74):									
high	...	...	...	...	...	...	...	18	19
medium	...	...	...	...	...	...	...	21	21
low	...	...	...	...	...	...	...	15	16
Individuals' level of Internet skills (aged 16–74):									
high	...	...	...	...	...	3	4	11	...
medium	...	...	...	...	...	12	16	26	...
low	...	...	...	...	...	31	31	21	...

* 2005–2009 – via personal computer, 2010–2012 – via any device.

** 2012 – aged 18–74.



1. ICT Infrastructure

1.1. MAIN INDICATORS OF ICT INFRASTRUCTURE

(at the end of the year)

	2005	2010	2011	2012
Fixed telephones (including public payphones) per 100 inhabitants	30	31	31	30
Mobile cellular telephones per 100 inhabitants	86	166	179	183
Fixed broadband Internet subscriptions per 100 inhabitants	...	...	12	14
Level of network digitalization, <i>per cent</i> :				
urban areas	64.2	83.0	87.6	88.5
rural areas	35.8	63.9	65.9	67.3
Rural areas having telephony, <i>as a percentage of the total</i>	67.0	90.1	90.1	90.0
Percentage of the population covered by:				
radio	...	95.0	95.9	94.1
air analogue television	98.6	98.6	98.7	98.9

Source (here and below in sections 1.2 – 1.10, 1.14): data is provided by the Ministry of Telecom and Mass Media of the Russian Federation.

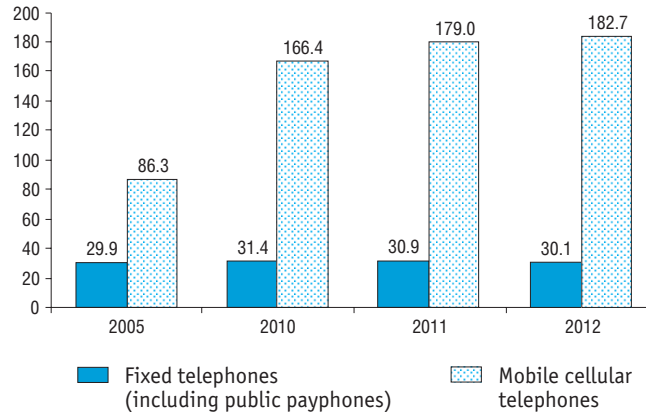
1.2. FIXED, MOBILE CELLULAR TELEPHONES AND PUBLIC PAYPHONES

(at the end of the year)

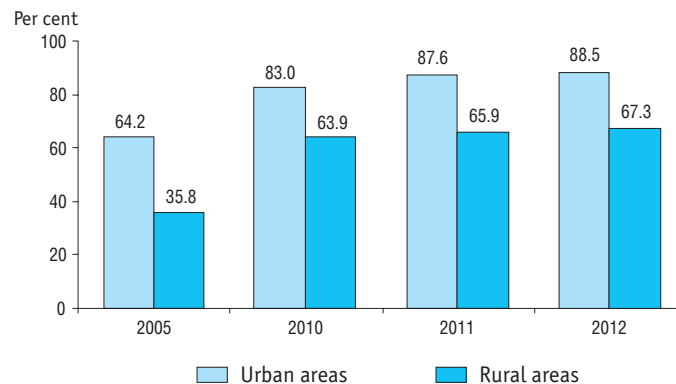
	2005	2010	2011	2012
Fixed telephones of local telephone network, <i>thousand</i>	42731	44726	43969	42727
Of which home telephones	32454	33209	32360	31265
Public payphones – total, <i>thousand</i>	151	190	183	175
Mobile cellular telephones, <i>thousand</i>	123549	237689	256117	261886

1.3. TELEPHONE DENSITY

(units per 1000 inhabitants; at the end of the year)



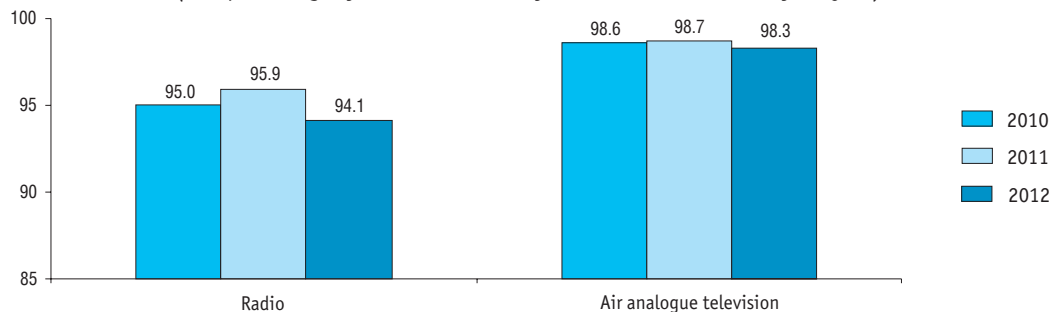
1.4. LEVEL OF NETWORK DIGITALIZATION

1.5. SATELLITE, TELEVISION AND RADIO HARDWARE
(at the end of the year)

	2005	2010	2011	2012
Satellite transmitting-receiving stations working within PSTN	1396	11048	14800	27377
Television transmitters:				
analogue	...	16896	17583	17469
digital	...	142	692	1202
Radio transmitters:				
long and medium wave	316	313	336	312
short wave	164	156	137	129
Main radio broadcasting stations – total, <i>million</i>	15.1	8.0	7.0	6.2

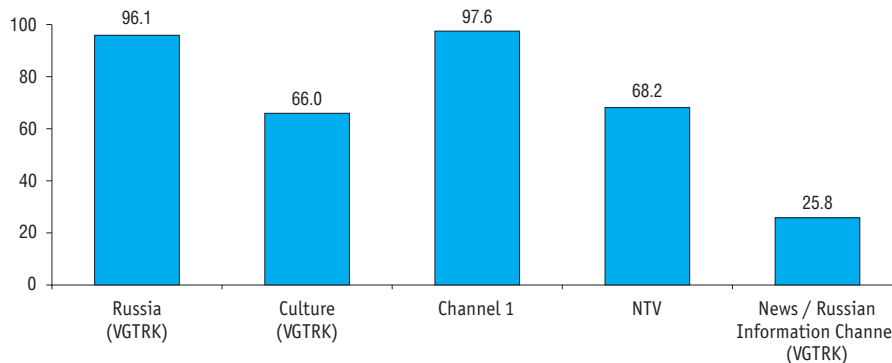
1.6. COVERAGE OF THE POPULATION BY RADIO AND TELEVISION

(as a percentage of the total number of inhabitants; at the end of the year)



1.7. COVERAGE OF THE POPULATION BY RUSSIAN POPULAR TELEVISION CHANNELS: 2012

(as a percentage of the total number of inhabitants; at the end of the year)



1.8. INTERNET SUBSCRIPTIONS

(thousand; at the end of the year)

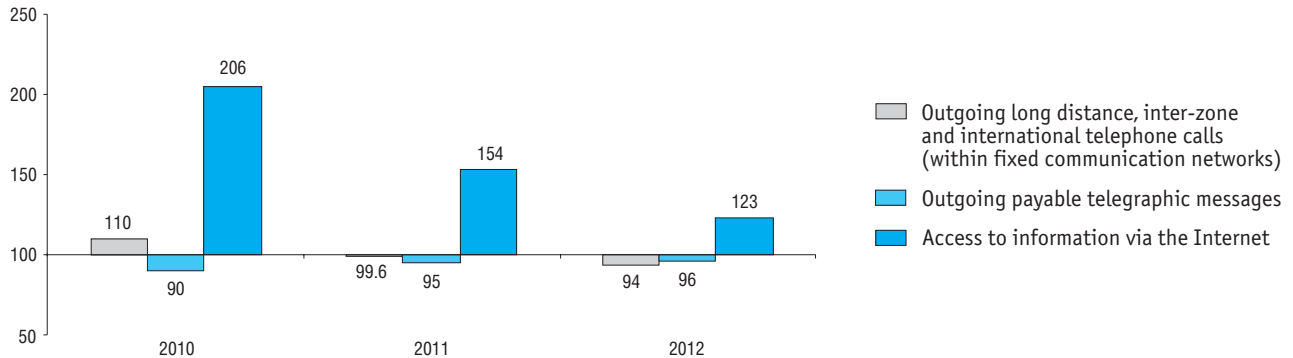
	Total		Of which			
	2011	2012	physical entities		legal entities	
			2011	2012	2011	2012
Active fixed broadband Internet subscriptions – total	17420	20704	16417	19565	1003	1139
Of which:						
by type of connection:						
xDSL	8006	7854	7328	7161	678	693
FTTH/ FTTB (ETTx)	7749	11063	7540	10761	209	302
cable modem	...	372	...	364	...	7.3
by other cable connection	1665	1415	1549	1278	116	137
by Internet connection speed:						
256 Kbps – less than 2 Mbps	5284	5429	4820	4885	464	543
2 Mbps – less than 10 Mbps	8425	9352	8049	8933	376	419
10 Mbps – less than 100 Mbps	3586	5773	3449	5621	137	152
100 Mbps – less than 1 Gbps	123	149	98	125	26	24
above 1 Gbps	2.4	0.9	1.5	0.2	0.9	0.7
IP-TV subscriptions	1473	1602	1464	1596	8.8	6.0
Active IP-TV subscriptions (without Internet access)	188	274	186	271	2.5	2.5
Active satellite Internet subscriptions	26	27	7.0	4.1	19	22
Active terrestrial wireless subscriptions	192	140	–	–	–	–

1.9. COMMUNICATION SERVICES BY TYPE

	2010	2011	2012
Outgoing long distance, inter-zone and international telephone calls (within fixed communication networks), <i>million hours</i>	599	597	564
Outgoing payable telegraphic messages, <i>thousand items</i>	10335	9798	9420
Access to information via the Internet – total, <i>PBytes</i>	5530	8492	10395
Including dedicated access	5327	7937	9432
Of which with dedicated xDSL access	1159	1738	2262

1.10. TRENDS IN COMMUNICATION SERVICES BY TYPE

(as a percentage of the previous year)



1.11. AVERAGE COMMUNICATION TARIFFS FOR INDIVIDUALS

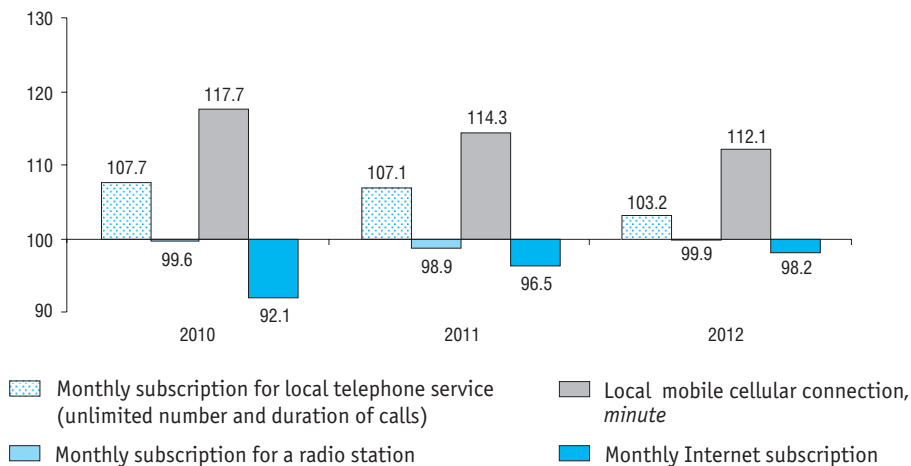
(roubles; December)

	2005	2010	2011	2012
Monthly subscription for local telephone service (unlimited number and duration of calls)	189.15	348.76	377.38	397.02
Monthly subscription for telephone service (telephone line of any type)	122.53	150.78	165.28	176.15
Automatic long-distance calls to locations between 1201–3000 km, <i>minute</i>	6.22	5.15	5.02	4.99
Monthly subscription for a radio station	21.67	54.44	60.64	65.39
Local mobile cellular connection, <i>minute</i>	4.64	2.25	1.60	1.42
Monthly Internet subscription	...	599.37	555.57	537.10

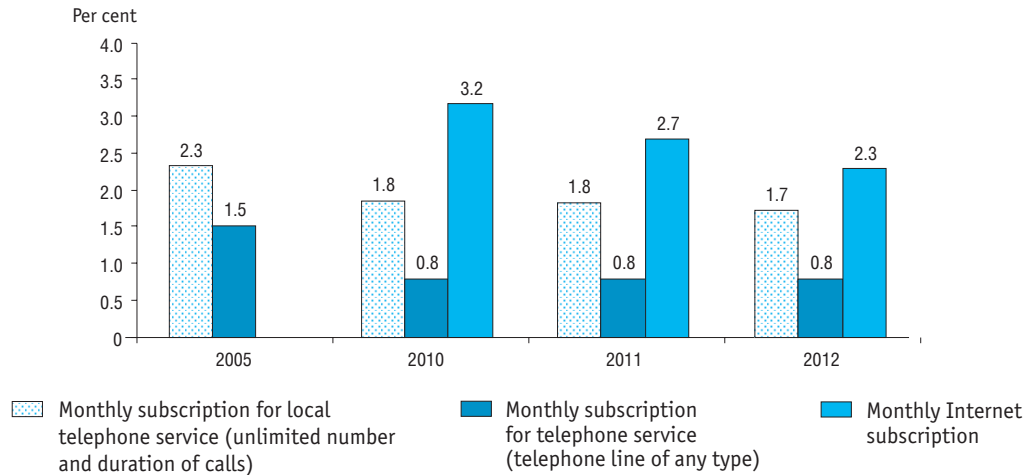
Source: data is provided by Federal State Statistics Service (1.11–1.12).

1.12. INDICES OF COMMUNICATION TARIFFS FOR INDIVIDUALS

(as a percentage of the previous year)



1.13. TARIFFS FOR COMMUNICATION SERVICES TO AVERAGE PERSONAL INCOME RATIO



Source: estimated by HSE Institute for Statistical Studies and Economics of Knowledge on the basis of data provided by Federal State Statistics Service.

1.14. MAIN INDICATORS OF ICT INFRASTRUCTURE BY REGION OF THE RUSSIAN FEDERATION

(at the end of the year)

	Rural areas having telephony, as a percentage of the total		Telephones per 100 inhabitants				Fixed broadband Internet subscriptions per 100 inhabitants	
			Fixed telephones (including public payphones)		Mobile cellular telephones			
	2011	2012	2011	2012	2011	2012	2011	2012
Russian Federation	90.1	90.0	30.9	30.1	179.0	182.7	12.2	14.4
Central Federal District	87.4	88.0	37.7	37.1	199.0	204.6	13.9	15.8
Belgorod Region	95.4	95.4	27.7	26.7	159.3	166.9	8.9	9.8
Bryansk Region	100	100	26.7	26.5	154.9	165.5	10.6	12.5
Vladimir Region	84.2	84.2	27.9	27.9	160.7	162.4	10.7	12.4
Voronezh Region	98.5	98.3	31.1	30.9	159.8	162.4	12.4	16.2
Ivanovo Region	75.2	71.5	25.8	25.6	177.7	176.7	8.6	10.5
Kaluga Region	86.7	86.7	34.7	34.1	174.0	177.5	15.0	15.9
Kostroma Region	77.8	77.8	31.7	31.0	205.0	179.3	13.4	16.4
Kursk Region	98.5	98.5	22.5	21.9	169.0	169.4	7.6	10.5
Lipetsk Region	96.0	96.0	32.0	31.1	156.0	158.1	10.8	12.1
Moscow Region	91.8	92.9	26.8	27.0	228.9*	239.5*	7.3	7.9
Oryol Region	100	100	27.1	26.3	183.1	183.8	9.6	11.8
Ryazan Region	90.2	90.2	28.8	28.1	168.8	168.7	7.1	10.6
Smolensk Region	100	100	32.6	31.9	186.6	190.2	10.7	13.5
Tambov Region	98.9	99.2	26.3	25.9	153.2	161.1	7.8	12.4
Tver Region	79.9	79.9	27.0	26.1	192.0	190.8	8.0	10.5
Tula Region	99.3	99.3	31.9	31.7	179.5	165.1	12.7	15.9
Yaroslavl Region	64.8	70.7	34.9	33.3	181.5	176.8	16.7	18.5
Moscow	–	...	58.8	56.7	228.9*	239.5*	23.4	24.6
Northwestern Federal District	83.7	83.5	38.4	37.2	211.7	217.8	15.5	17.5
Republic of Karelia	80.6	80.7	35.6	33.7	206.1	187.5	21.6	23.9
Republic of Komi	99.1	98.1	38.2	37.6	187.4	188.7	14.7	16.5

(continued)

	Rural areas having telephony, <i>as a percentage of the total</i>		Telephones per 100 inhabitants				Fixed broadband Internet subscriptions per 100 inhabitants	
			Fixed telephones (including public payphones)		Mobile cellular telephones			
	2011	2012	2011	2012	2011	2012	2011	2012
Arkhangelsk Region	84.5	84.5	30.7	29.1	189.0	192.5	14.1	15.6
Of which Nenets Autonomous District	...	0.0	25.5	25.2	...	...	...	...
Vologda Region	74.0	73.6	32.7	31.8	195.0	187.2	13.8	16.2
Kaliningrad Region	98.5	98.5	32.5	33.5	199.0	194.9	18.8	20.2
Leningrad Region	96.1	96.1	25.0	24.0	227.2*	242.9*	7.4	8.7
Murmansk Region	89.3	89.3	42.6	40.8	226.1	224.0	15.3	17.2
Novgorod Region	100	100	31.2	30.0	197.8	198.4	13.6	14.8
Pskov Region	78.4	78.4	32.5	31.6	180.3	173.2	6.3	7.6
Saint-Petersburg	–	–	48.9	47.0	227.2*	242.9*	19.4	21.9
Southern Federal District	97.2	97.2	24.2	23.6	179.5	180.3	9.3	11.1
Republic of Adygeya	93.5	93.0	16.2	15.8	124.5	122.7	3.7	4.9
Republic of Kalmykia	99.2	100	16.7	16.3	163.4	163.3	4.5	6.1
Krasnodar Territory	98.5	98.5	23.5	22.6	202.2	201.8	8.9	11.4
Astrakhan Region	92.6	92.6	22.4	21.8	193.3	185.7	9.5	11.3
Volgograd Region	95.1	95.1	27.1	26.2	174.2	171.9	12.1	13.9
Rostov Region	98.5	98.5	25.2	24.8	158.0	164.5	9.1	9.9
North Caucasian Federal District	87.5	89.1	12.1	11.6	131.6	131.6	3.4	4.3
Republic of Dagestan	95.6	98.4	3.2	2.8	118.2	116.8	0.5	0.9
Republic of Ingushetia	4.3	4.3	2.4	2.3	130.5	120.2	0.5	0.6
Kabardino-Balkarian Republic	100	100	16.5	16.1	125.9	130.6	4.9	6.8
Karachaevo-Cherkceccian Republic	99.2	99.2	14.3	13.8	126.8	129.7	4.4	5.6
Republic of North Ossetia–Alania	93.0	93.0	27.5	27.1	128.6	135.7	5.7	6.9
Chechen Republic	20.5	20.5	1.3	1.3	118.7	120.5	0.1	0.1
Stavropol Territory	99.4	99.4	22.3	21.5	155.4	153.8	7.2	9.0

(continued)

	Rural areas having telephony, <i>as a percentage of the total</i>		Telephones per 100 inhabitants				Fixed broadband Internet subscriptions per 100 inhabitants	
			Fixed telephones (including public payphones)		Mobile cellular telephones			
	2011	2012	2011	2012	2011	2012	2011	2012
Volga Federal District	97.1	96.8	29.7	29.6	167.7	169.0	13.2	16.1
Republic of Bashkortostan	100	100	27.8	27.1	157.3	161.6	13.2	16.1
Republic of Mari El	97.7	97.7	23.9	26.4	154.4	161.2	12.0	13.9
Republic of Mordovia	100	100	29.9	30.2	151.0	155.7	9.6	12.1
Republic of Tatarstan	100	100	30.6	30.2	171.3	169.0	18.9	21.8
Udmurtian Republic	97.8	97.8	28.1	26.9	156.9	157.1	15.0	17.9
Chuvash Republic	99.9	100	22.4	21.9	180.2	176.8	6.3	8.7
Perm Territory	94.6	92.6	30.9	30.2	160.6	163.5	10.6	10.4
Kirov Region	96.3	96.3	32.2	30.9	174.5	161.0	14.4	16.7
Nizhni Novgorod Region	90.7	90.0	35.9	35.3	173.1	174.2	14.2	18.2
Orenburg Region	100	100	27.7	28.7	170.7	167.6	11.7	14.8
Penza Region	98.4	98.4	27.2	27.9	162.7	172.6	9.1	11.5
Samara Region	96.0	96.0	31.6	32.6	182.7	185.0	13.2	18.4
Saratov Region	99.8	100.0	27.3	27.4	168.3	170.1	12.7	15.4
Ulyanovsk Region	96.3	96.3	30.2	30.3	165.0	173.6	14.1	16.6
Urals Federal District	96.6	96.7	31.7	29.9	179.5	183.7	14.1	16.9
Kurgan Region	97.0	97.0	27.5	27.0	150.9	158.1	10.4	13.4
Sverdlovsk Region	94.2	94.3	32.3	30.4	176.9	181.0	14.3	16.7
Tyumen Region	98.0	98.0	34.4	32.5	194.3	201.0	16.6	18.0
Of which								
Khanty-Mansi Autonomous District – Yugra	98.0	98.0	35.7	32.9	197.6	204.1	15.2	16.6
Yamalo-Nenets Autonomous District	93.8	93.8	35.0	33.6	236.7	246.5	14.3	15.3
Chelyabinsk Region	98.2	98.1	29.2	27.2	175.3	176.0	12.5	16.9

(continued)

	Rural areas having telephony, <i>as a percentage of the total</i>		Telephones per 100 inhabitants				Fixed broadband Internet subscriptions per 100 inhabitants	
			Fixed telephones (including public payphones)		Mobile cellular telephones			
	2011	2012	2011	2012	2011	2012	2011	2012
Siberian Federal District	92.3	90.0	27.4	26.3	160.4	165.0	10.0	13.3
Republic of Altai	98.0	98.0	20.2	19.0	144.5	145.3	3.6	4.1
Republic of Buryatia	97.1	81.1	19.6	19.1	142.3	148.5	4.6	5.5
Republic of Tyva	71.1	71.1	11.8	10.7	147.8	146.9	1.2	1.4
Republic of Khakasia	98.9	98.9	24.5	23.1	182.7	184.6	7.9	8.2
Altai Territory	99.4	99.6	28.9	28.3	135.4	134.7	7.8	12.2
Zabaikalsk Territory	98.6	72.6	20.8	20.1	127.0	136.9	4.4	5.0
Krasnoyarsk Territory	91.6	92.1	29.7	28.4	154.7	164.7	10.1	13.6
Irkutsk Region	82.3	84.0	25.1	23.6	166.0	176.2	7.2	11.5
Kemerovo Region	74.4	74.4	25.9	24.7	174.5	172.5	10.3	12.7
Novosibirsk Region	97.7	97.5	33.0	31.8	180.9	176.4	20.1	25.9
Omsk Region	97.5	97.3	27.1	26.4	170.2	180.3	9.6	14.0
Tomsk Region	91.9	91.9	34.9	33.3	160.8	174.9	11.2	11.7
Far Eastern Federal District	91.9	90.8	29.9	28.9	165.8	171.8	11.6	13.0
Republic of Sakha (Yakutia)	87.4	84.8	27.2	25.0	136.6	143.1	9.4	9.6
Kamchatka Territory	98.8	98.8	37.1	35.4	189.4	195.6	10.9	11.3
Primorsky Territory	98.9	98.4	29.6	28.9	168.2	177.5	14.0	15.9
Khabarovsk Territory	89.5	89.5	31.1	30.3	178.8	184.0	13.5	14.8
Amur Region	88.6	88.6	21.4	20.6	171.9	171.5	6.1	7.5
Magadan Region	94.3	94.3	40.7	38.3	189.5	200.8	14.9	16.7
Sakhalin Region	90.1	85.2	39.3	39.2	156.6	160.3	11.1	13.0
Jewish Autonomous Region	100	100	25.6	24.7	144.4	143.4	10.2	13.3
Chukotka Autonomous Region	100	100	39.6	42.9	127.0	145.6	7.5	9.5

* Aggregate data on the City of Moscow and Moscow Region; the City of Saint-Petersburg and Leningrad Region.



2. ICT Sector

2.1. General Characteristics of the ICT Sector

2.1.1. MAIN INDICATORS OF THE ICT SECTOR

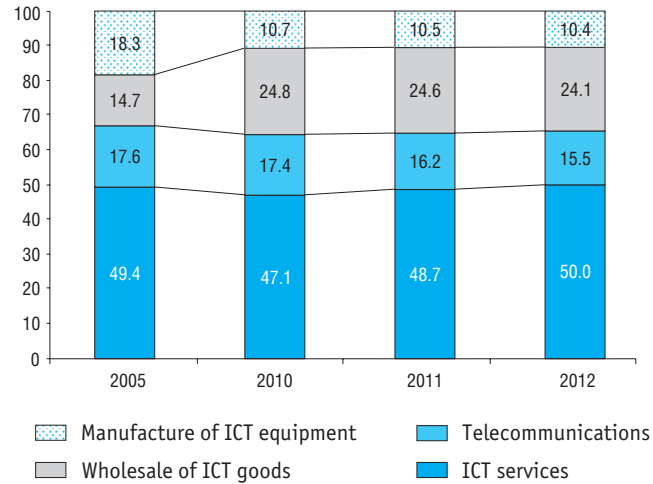
	ICT Sector				As a percentage of the respective indicator for the national economy			
	2005	2010	2011	2012	2005	2010	2011	2012
Number of enterprises, <i>thousand, at the end of the year</i>	109	138	145	150	2.3	2.9	3.0	3.1
Number of employees, <i>thousand</i>	1347	1306	1268	1294	2.8	2.8	2.8	2.8
Gross value added, <i>billion roubles</i>	660	1354	1541	1771	3.6	3.4	3.3	3.4
Turnover of enterprises, <i>billion roubles</i>	1256	2691	2832	3110	3.4	3.3	2.8	2.8
Fixed capital investment, <i>billion roubles</i>	271	297	355	421	7.5	3.2	3.2	3.3

Source (here and below in sections 2.2–2.7, 2.9–2.10): estimated by HSE Institute for Statistical Studies and Economics of Knowledge (HSE ISSEK) on the basis of data provided by Federal State Statistics Service.

2.1.2. ICT SECTOR ENTERPRISES BY ECONOMIC ACTIVITY

(at the end of the year)

	RCEA code (Rev. 1.1)	Number of enterprises, <i>thousand</i>				As a percentage of total ICT sector enterprises			
		2005	2010	2011	2012	2005	2010	2011	2012
ICT sector – total		109.1	138.3	145.0	149.5	100	100	100	100
Manufacture of office, accounting and computing machinery	30	4.3	3.3	3.3	3.3	3.9	2.4	2.3	2.2
Manufacture of insulated wire and cable	31.3	0.9	0.6	0.6	0.6	0.8	0.4	0.4	0.4
Manufacture of radio, television and communication equipment and apparatus	32	7.8	5.1	5.3	5.3	7.2	3.7	3.6	3.6
Manufacture of instruments and appliances for measuring and checking	33.2	6.6	5.1	5.3	5.5	6.1	3.7	3.7	3.7
Manufacture of industrial process control equipment	33.3	0.3	0.6	0.7	0.7	0.3	0.5	0.5	0.5
Wholesale of ICT goods	51.43.2, 51.84, 51.86, 51.87.5	16.0	34.4	35.7	36.0	14.7	24.8	24.6	24.0
Telecommunications	64.2	19.3	24.0	23.4	23.1	17.6	17.4	16.2	15.5
Renting of office machinery and equipment, including computers	71.33	0.5	0.8	0.8	0.8	0.4	0.6	0.5	0.5
Computer and related activities	72	53.4	64.4	69.9	74.2	49.0	46.5	48.2	49.6

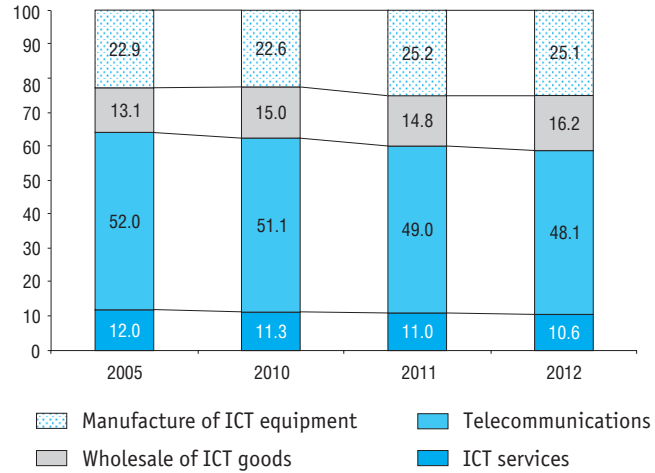
2.1.3. PERCENTAGE DISTRIBUTION OF ICT SECTOR ENTERPRISES BY ECONOMIC ACTIVITY*(at the end of the year)*

2.2. Output of the ICT Sector

2.2.1. TURNOVER OF ICT SECTOR ENTERPRISES BY ECONOMIC ACTIVITY

	RCEA code (Rev. 1.1)	Billion roubles				As a percentage of the previous year; <i>at constant prices</i>		
		2005	2010	2011	2012	2010	2011	2012
ICT sector – total		1255.9	2691.4	2832.2	3110.3	107.9	97.2	103.8
As a percentage of the turnover in the national economy		3.4	3.3	2.8	2.8			
Manufacture of office, accounting and computing machinery	30	21.0	51.5	51.5	56.3	101.5	81.6	114.2
Manufacture of insulated wire and cable	31.3	55.0	118.8	153.7	166.5	75.5	137.0	106.4
Manufacture of radio, television and communication equipment and apparatus	32	109.6	236.0	247.3	278.4	129.8	89.0	101.0
Manufacture of instruments and appliances for measuring and checking	33.2	97.1	193.7	253.3	273.3	101.1	100.4	103.1
Manufacture of industrial process control equipment	33.3	4.2	7.9	6.6	6.4	110.5	63.9	92.2
Wholesale of ICT goods	51.43.2, 51.84, 51.86, 51.87.5	164.5	403.8	419.3	502.9	82.9	90.3	113.3
Telecommunications	64.2	653.5	1374.9	1387.8	1496.6	119.2	98.4	101.8
Renting of office machinery and equipment, including computers	71.33	0.8	2.0	0.8	2.1	189.8	32.8	266.0
Computer and related activities	72	150.2	302.8	311.9	327.8	92.3	93.9	99.6

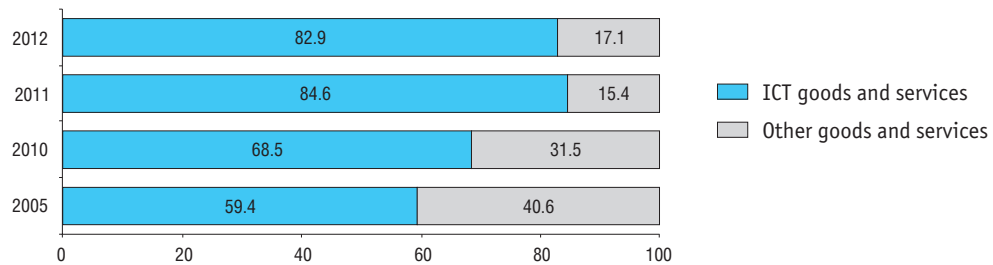
2.2.2. PERCENTAGE DISTRIBUTION OF THE ICT SECTOR TURNOVER BY ECONOMIC ACTIVITY



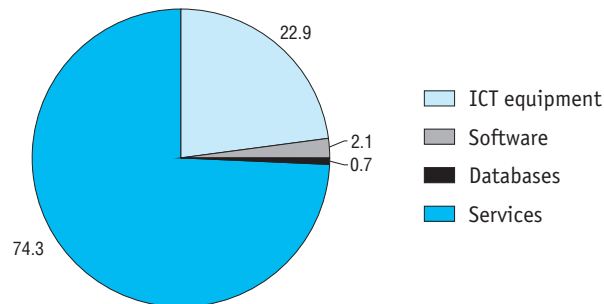
2.2.3. SALES OF ICT SECTOR ENTERPRISES BY ECONOMIC ACTIVITY

	RCEA code (Rev. 1.1)	Billion roubles				As a percentage of the total		
		2005	2010	2011	2012	2010	2011	2012
ICT sector – total		1077.6	2461.7	2488.2	2729.8	100	100	100
Manufacture of office, accounting and computing machinery	30	12.7	40.3	40.2	44.3	1.6	1.6	1.6
Manufacture of insulated wire and cable	31.3	51.0	109.3	158.5	170.5	4.4	6.4	6.3
Manufacture of radio, television and communication equipment and apparatus	32	94.8	227.6	236.9	269.9	9.3	9.5	9.9
Manufacture of instruments and appliances for measuring and checking	33.2	86.1	188.3	244.8	263.9	7.6	9.8	9.7
Manufacture of industrial process control equipment	33.3	3.3	7.6	8.7	8.8	0.3	0.4	0.3
Wholesale of ICT goods	51.43.2, 51.84, 51.86, 51.87.5	98.0	104.8	169.7	208.3	4.3	6.8	7.6
Telecommunications	64.2	620.6	1365.4	1377.8	1483.1	55.5	55.4	54.3
Renting of office machinery and equipment, including computers	71.33	0.8	2.0	1.0	2.1	0.1	0.0	0.1
Computer and related activities	72	110.3	416.4	250.6	278.9	16.9	10.1	10.2

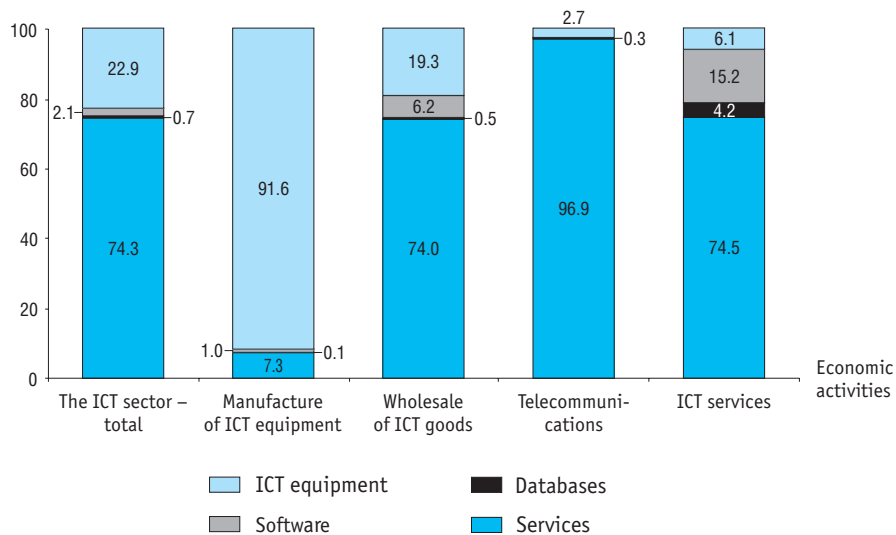
2.2.4. ICT GOODS AND SERVICES AS A PERCENTAGE OF TOTAL SALES IN THE ICT SECTOR



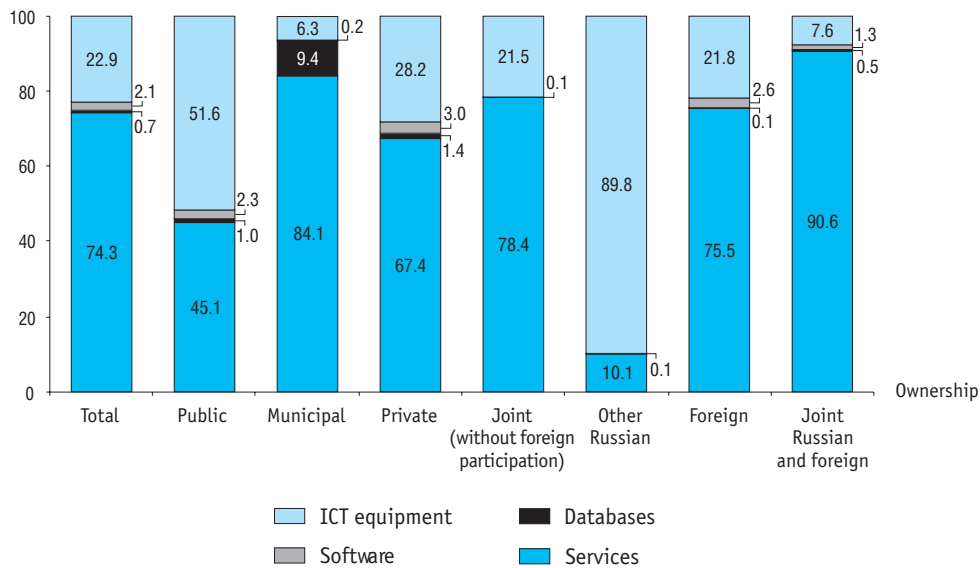
2.2.5. PERCENTAGE DISTRIBUTION OF ICT GOODS AND SERVICES SALES BY TYPE: 2012



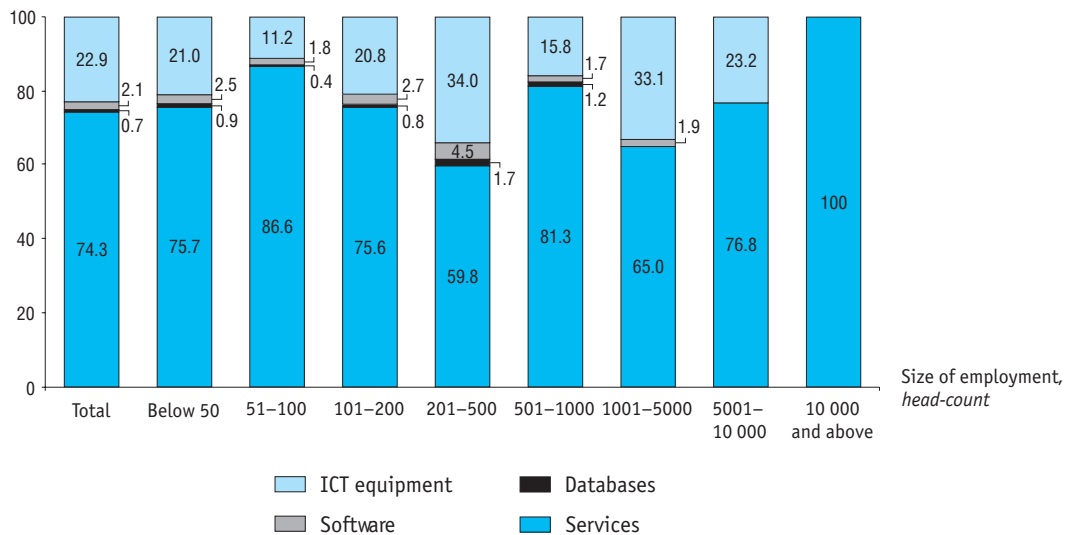
2.2.6. PERCENTAGE DISTRIBUTION OF ICT GOODS AND SERVICES SALES BY ECONOMIC ACTIVITY: 2012



2.2.7. PERCENTAGE DISTRIBUTION OF ICT GOODS AND SERVICES SALES BY TYPE AND OWNERSHIP: 2012

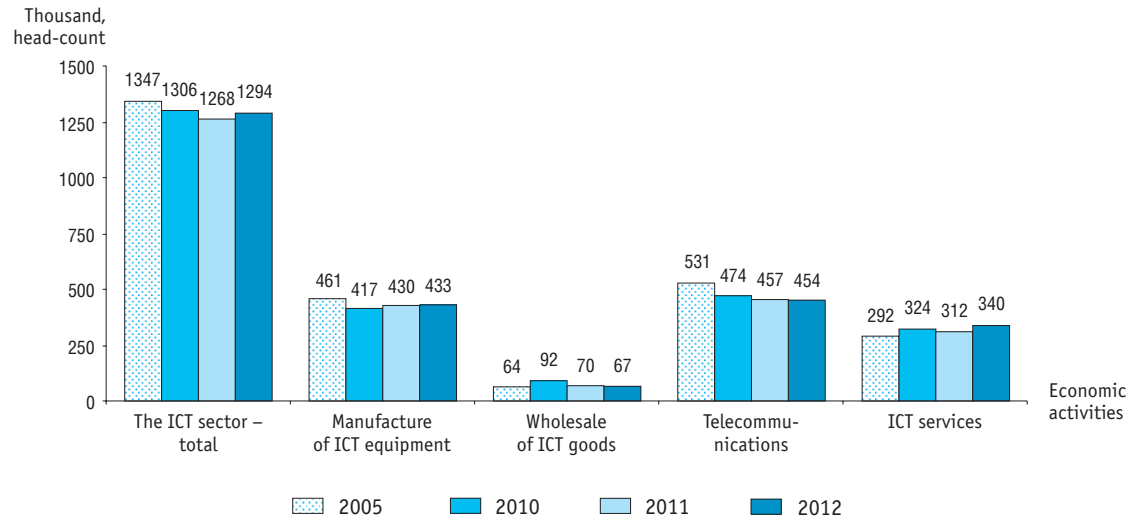


2.2.8. PERCENTAGE DISTRIBUTION OF ICT GOODS AND SERVICES SALES BY TYPE AND SIZE OF EMPLOYMENT: 2012

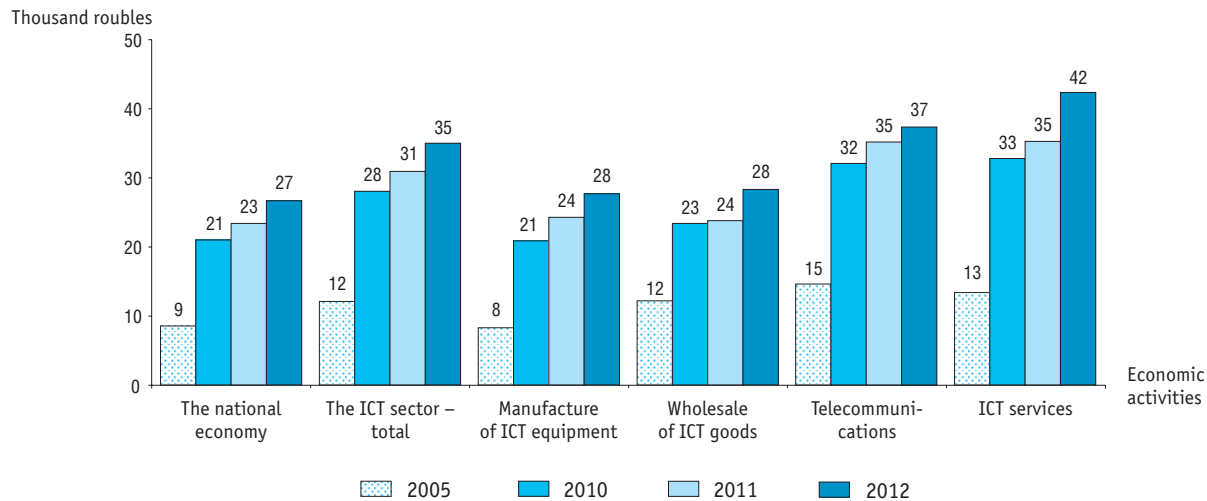


2.3. Employment in the ICT Sector

2.3.1. EMPLOYMENT IN THE ICT SECTOR BY ECONOMIC ACTIVITY

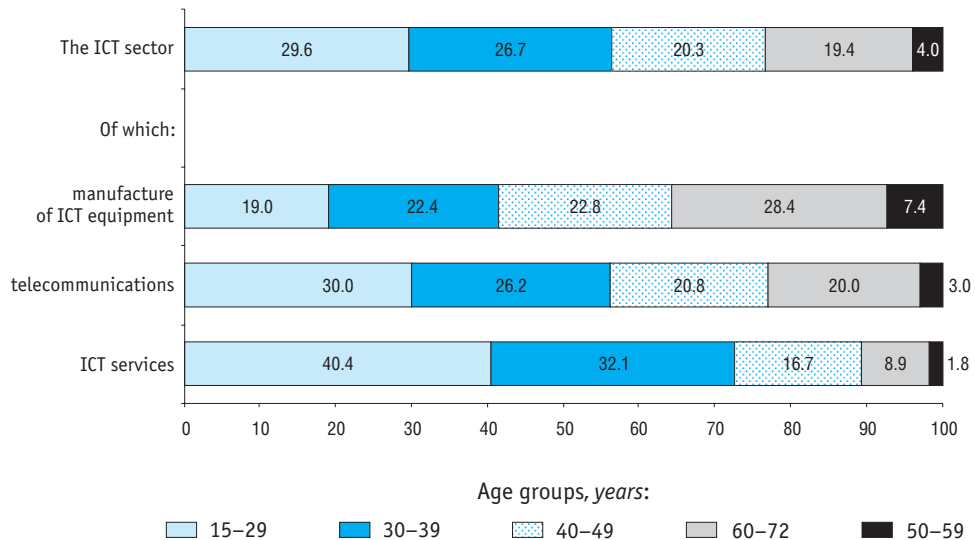


2.3.2. AVERAGE MONTHLY SALARIES PER EMPLOYEE BY ECONOMIC ACTIVITY



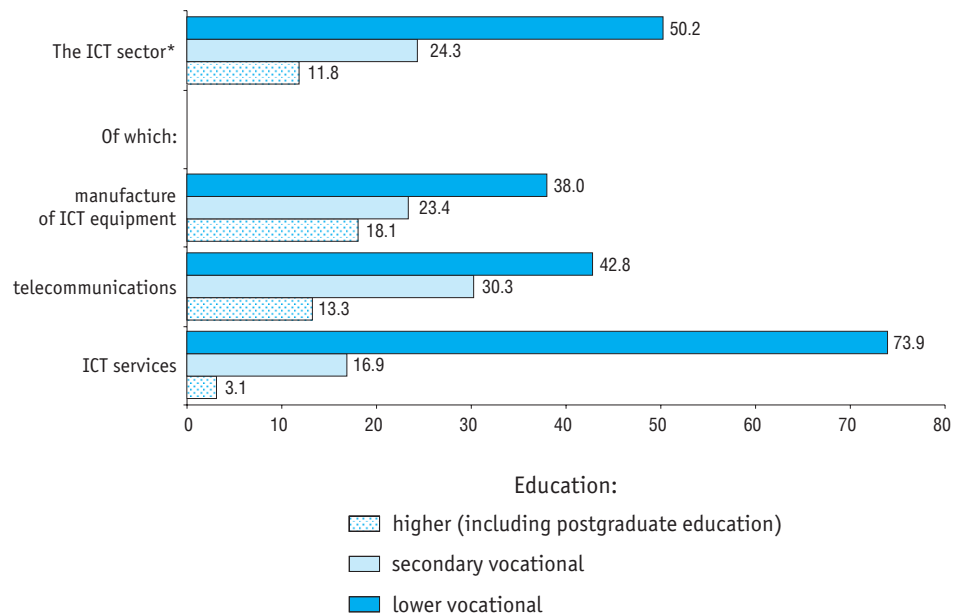
2.3.3. PERCENTAGE DISTRIBUTION OF ICT SECTOR EMPLOYMENT BY AGE GROUP AND ECONOMIC ACTIVITY*

(as a percentage of the total ICT sector employment)



* Data on enterprises engaged in wholesale of ICT goods is excluded.

2.3.4. EMPLOYEES WITH HIGHER, SECONDARY AND LOWER VOCATIONAL EDUCATION AS A PERCENTAGE OF THE TOTAL ICT SECTOR EMPLOYMENT BY ECONOMIC ACTIVITY



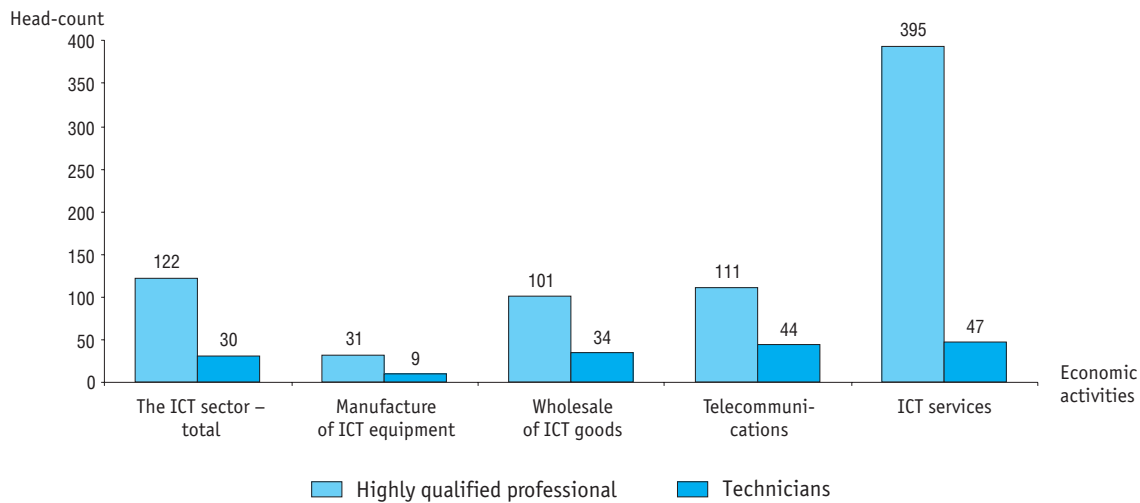
* Data on enterprises engaged in wholesale of ICT goods is excluded.

2.3.5. ICT PROFESSIONALS IN THE ICT SECTOR*
(as a percentage of the total employment in the ICT sector)

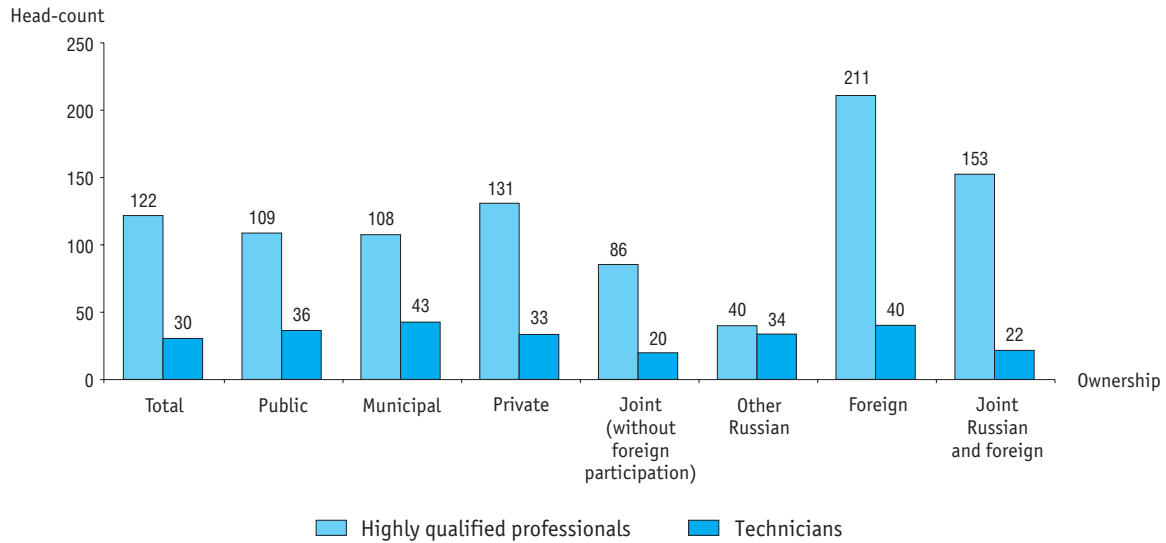
	2005	2010	2011	2012
Highly qualified professionals:				
computer system developers and analysts	1.0	1.5	1.9	2.2
programmers	1.9	2.9	2.9	3.1
other computer-related professionals	...	2.2	2.2	2.8
electronics, communication and instrument engineers	4.6	4.1	4.1	4.1
Technicians:				
electronics and telecommunications technicians	1.8	1.4	1.5	1.3
computer maintenance technicians and operators	1.4	0.6	0.6	0.6
computer devices and peripherals maintenance technicians and operators	...	0.3	0.4	0.5
industrial robots maintenance technicians and operators	...	0.0	0.1	0.1
radio, television and telecommunications hardware technicians and operators	...	0.5	0.5	0.5

* The data is presented according to the Russian National Classification of Occupations.

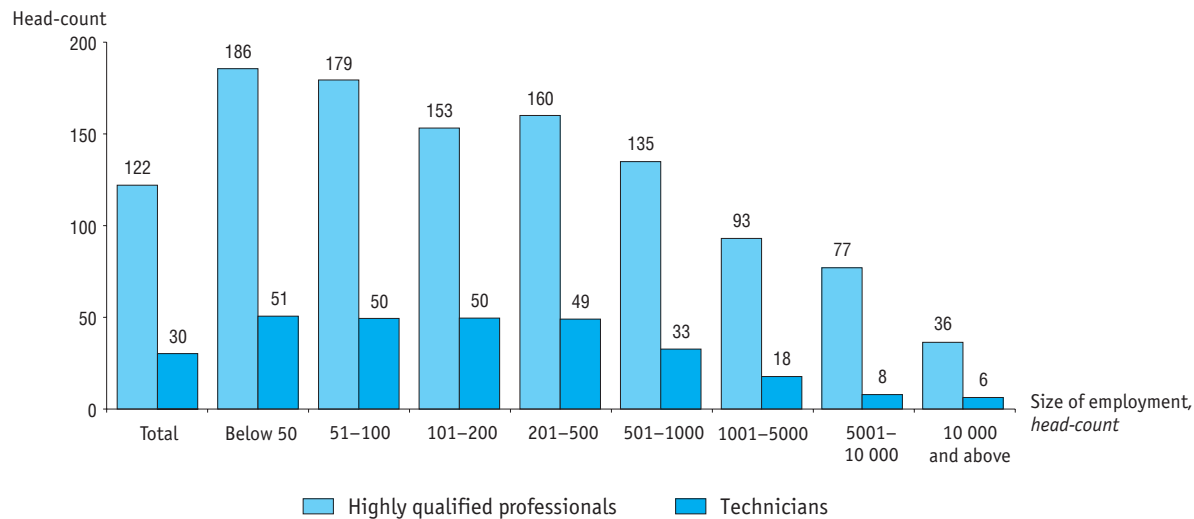
2.3.6. ICT PROFESSIONALS PER 1000 EMPLOYEES IN THE ICT SECTOR BY ECONOMIC ACTIVITY: 2012



2.3.7. ICT PROFESSIONALS PER 1000 EMPLOYEES IN THE ICT SECTOR BY OWNERSHIP OF ENTERPRISES: 2012



2.3.8. ICT PROFESSIONALS PER 1000 EMPLOYEES IN THE ICT SECTOR BY SIZE OF EMPLOYMENT: 2012



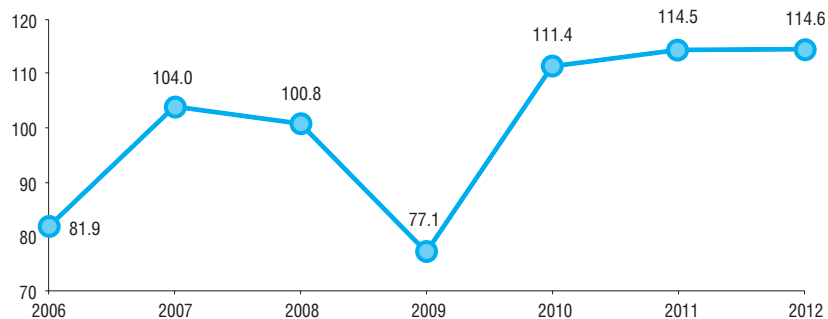
2.4. Investment in the ICT Sector

2.4.1. FIXED CAPITAL INVESTMENT IN THE ICT SECTOR

	Billion roubles	As a percentage of the respective indicator for the national economy
2005	271.5	7.5
2010	297.0	3.2
2011	354.8	3.2
2012	421.0	3.3

2.4.2. TRENDS IN FIXED CAPITAL INVESTMENT IN THE ICT SECTOR

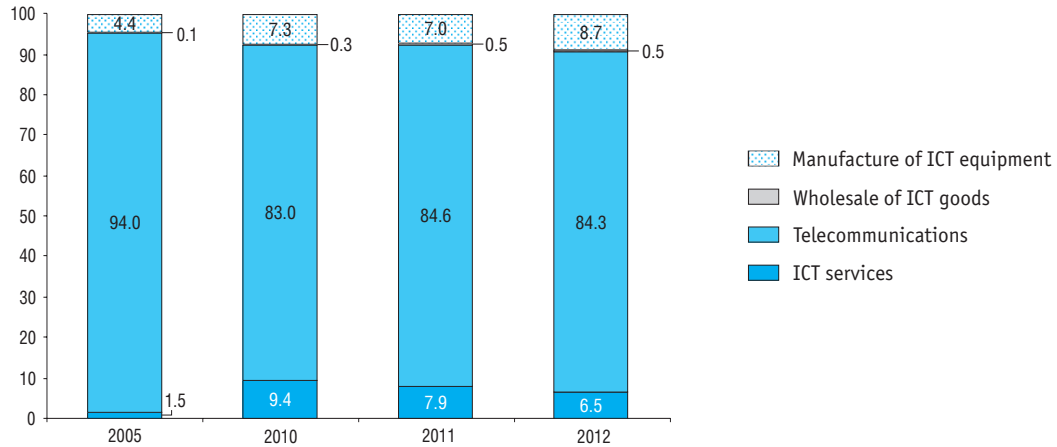
(as a percentage of the previous year; at constant prices)



2.4.3. FIXED CAPITAL INVESTMENT IN THE ICT SECTOR BY ECONOMIC ACTIVITY

	RCEA code (Rev. 1.1)	Billion roubles				As a percentage of the previous year; <i>at constant prices</i>		
		2005	2010	2011	2012	2010	2011	2012
ICT sector – total		271491	297048	354784	421025	111	114	115
Manufacture of office, accounting and computing machinery	30	582	1396	1840	2400	186	135	115
Manufacture of insulated wire and cable	31.3	2465	1899	3394	5613	50	168	157
Manufacture of radio, television and communication equipment and apparatus	32	4885	9600	9200	15100	109	90	156
Manufacture of instruments and appliances for measuring and checking	33.2	4015	8742	10472	13449	99	113	122
Manufacture of industrial process control equipment	33.3	25	56	35	81	302	59	218
Wholesale of ICT goods	51.43.2, 51.84, 51.86, 51.87.5	347	784	1729	1964	57	196	108
Telecommunications	64.2	255214	246650	300019	355130	106	117	114
Renting of office machinery and equipment, including computers	71.33	658	2220	3395	3289	699	144	92
Computer and related activities	72	3300	25700	24700	24000	250	92	94

2.4.4. PERCENTAGE DISTRIBUTION OF FIXED CAPITAL INVESTMENT IN THE ICT SECTOR BY ECONOMIC ACTIVITY

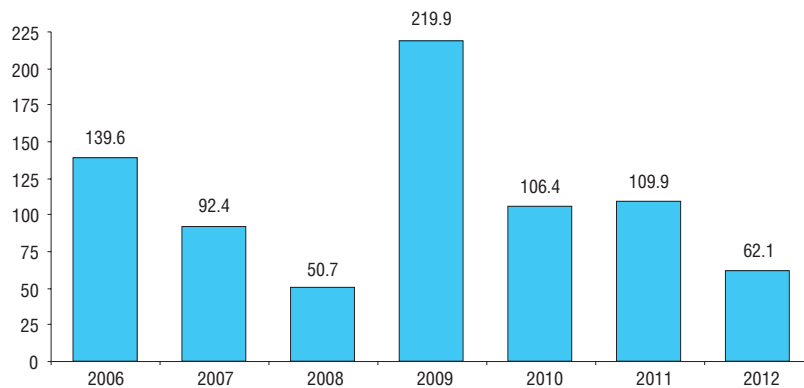


2.4.5. FOREIGN INVESTMENT IN THE ICT SECTOR

	Million US dollars	As a percentage of the respective indicator for the national economy
2005	3520	6.6
2010	5389	4.7
2011	5920	3.1
2012	3673	2.4

2.4.6. TRENDS IN FOREIGN INVESTMENT IN THE ICT SECTOR

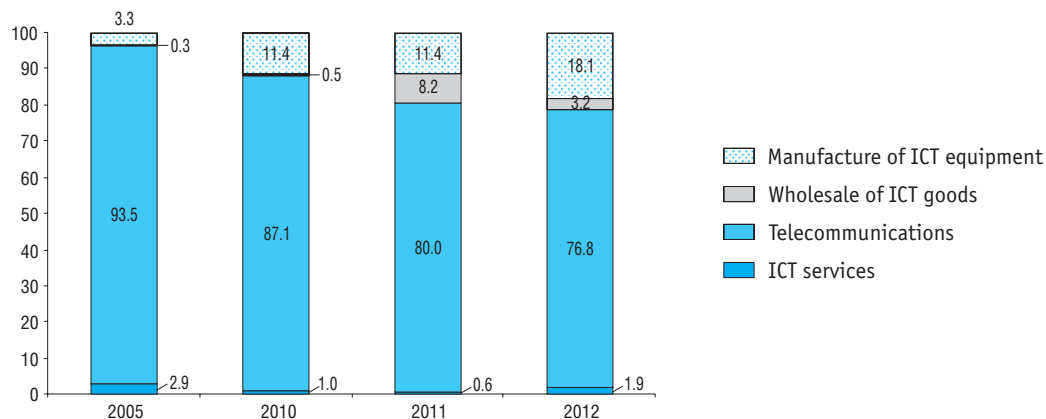
(as a percentage of the previous year)



2.4.7. FOREIGN INVESTMENT IN THE ICT SECTOR BY ECONOMIC ACTIVITY

	RCEA code (Rev. 1.1)	Million US dollars				As a percentage of the total		
		2005	2010	2011	2012	2010	2011	2012
ICT sector – total		3519.8	5388.6	5919.5	3673.3	100	100	100
Manufacture of office, accounting and computing machinery	30	0.1	130.0	74.3	70.7	2.4	1.3	1.9
Manufacture of insulated wire and cable	31.3	7.2	11.9	58.2	74.4	0.2	1.0	2.0
Manufacture of radio, television and communication equipment and apparatus	32	110.4	470.4	526.0	507.7	8.7	8.9	13.9
Manufacture of instruments and appliances for measuring and checking	33.2	–	3.8	7.5	12.4	0.1	0.1	0.3
Manufacture of industrial process control equipment	33.3	–	–	–	–	–	–	–
Wholesale of ICT goods	51.43.2, 51.84, 51.86, 51.87.5	11.5	28.6	485.0	115.8	0.6	8.1	3.2
Telecommunications	64.2	3287.4	4690.2	4733.4	2822.5	87.0	80.0	76.8
Renting of office machinery and equipment, including computers	71.33	18.6	3.1	–	1.6	0.1	–	–
Computer and related activities	72	84.6	50.6	35.1	68.2	0.9	0.6	1.9

2.4.8. PERCENTAGE DISTRIBUTION OF FOREIGN INVESTMENT IN THE ICT SECTOR BY ECONOMIC ACTIVITY



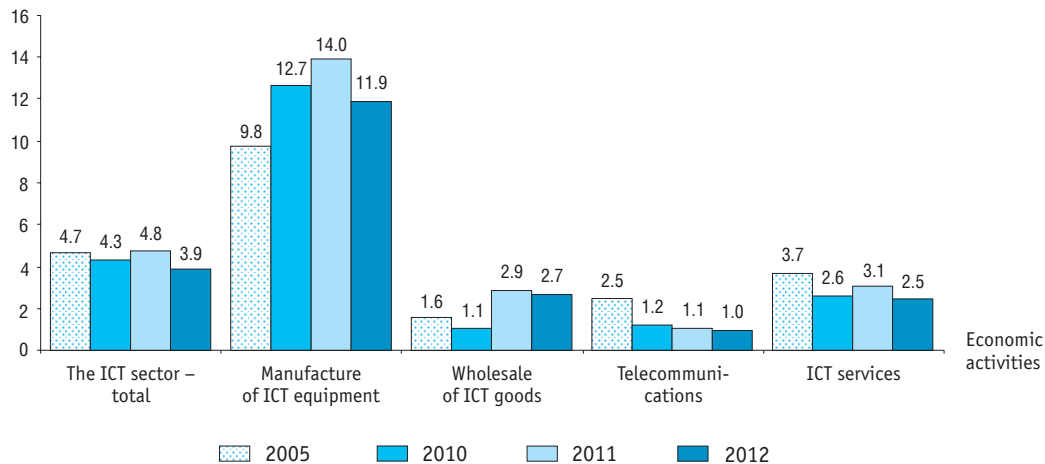
2.4.9. FOREIGN INVESTMENT IN THE ICT SECTOR BY TYPE

	Million US dollars				As a percentage of the total				As a percentage of the respective indicator for the national economy			
	2005	2010	2011	2012	2005	2010	2011	2012	2005	2010	2011	2012
Foreign investment – total	3520	5389	5920	3673	100	100	100	100	6.6	4.7	3.1	2.4
Direct investment	137	550	733	552	3.9	10.2	12.3	15.0	1.0	4.0	4.0	3.0
Portfolio investment	6	110	10	37	0.2	2.0	0.2	1.0	1.3	10.2	1.3	2.0
Other investments	3377	4729	5177	3084	95.9	87.8	87.5	84.0	8.4	4.7	3.0	2.3

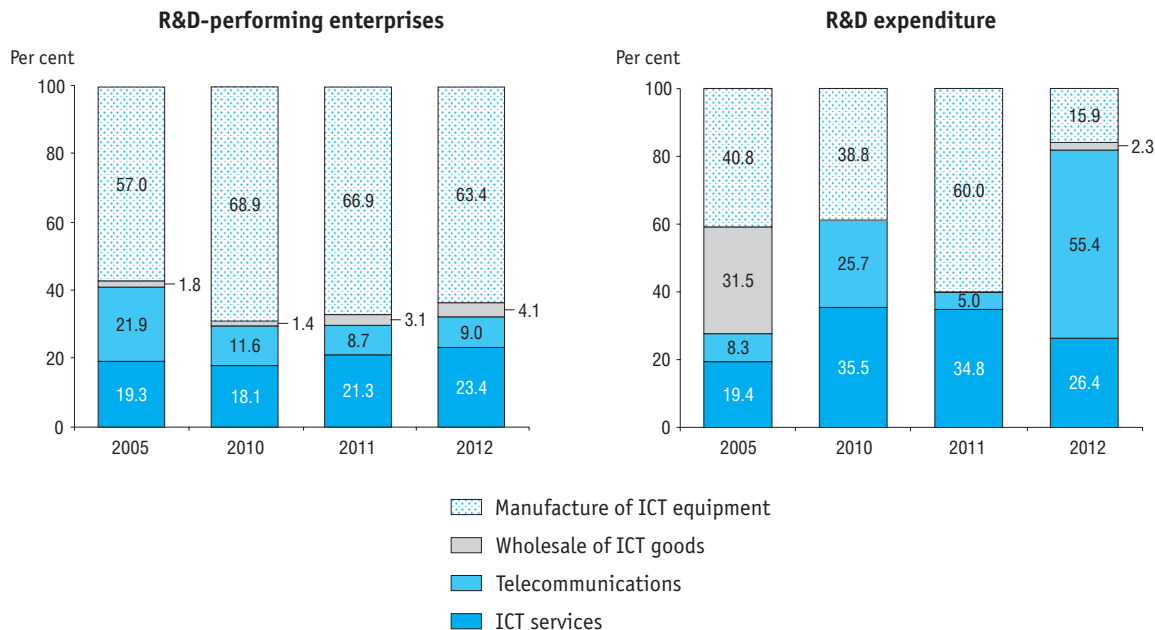
2.5. Research and Development (R&D) in the ICT Sector

2.5.1. R&D-PERFORMING ENTERPRISES IN THE ICT SECTOR BY ECONOMIC ACTIVITY

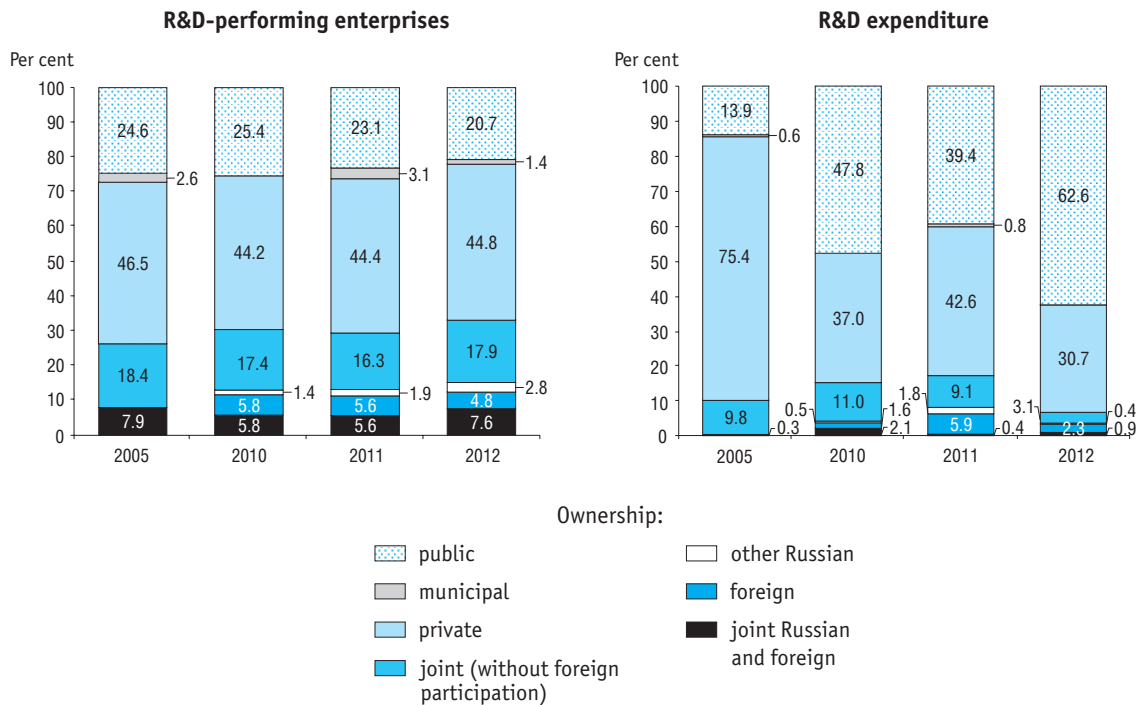
(as a percentage of the total number of enterprises)



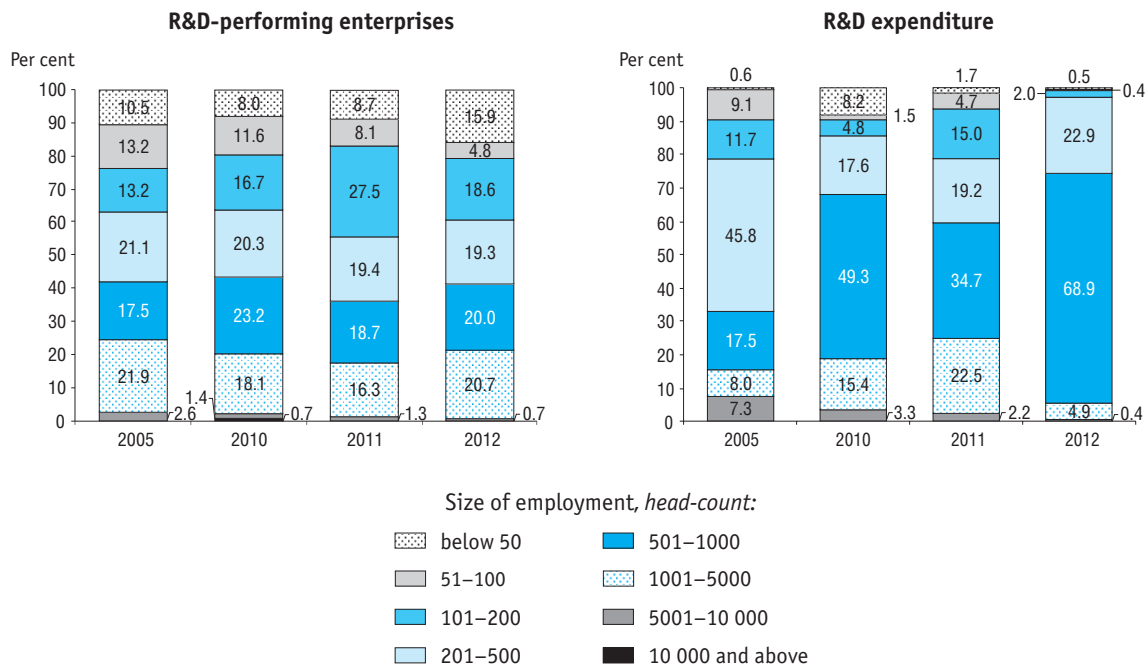
2.5.2. R&D-PERFORMING ENTERPRISES IN THE ICT SECTOR AND R&D EXPENDITURE BY ECONOMIC ACTIVITY



2.5.3. R&D-PERFORMING ENTERPRISES IN THE ICT SECTOR AND R&D EXPENDITURE BY OWNERSHIP OF ENTERPRISES

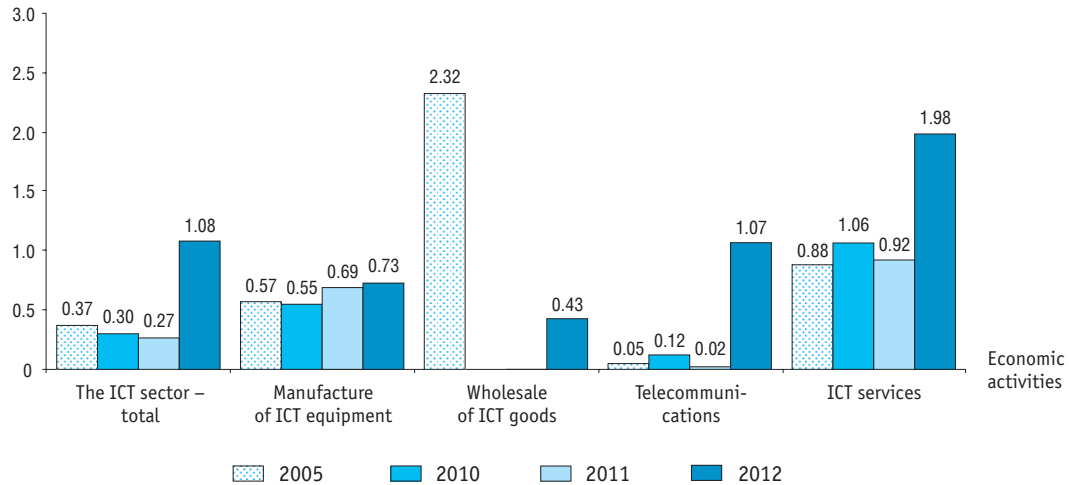


2.5.4. R&D-PERFORMING ENTERPRISES IN THE ICT SECTOR AND R&D EXPENDITURE BY SIZE OF EMPLOYMENT



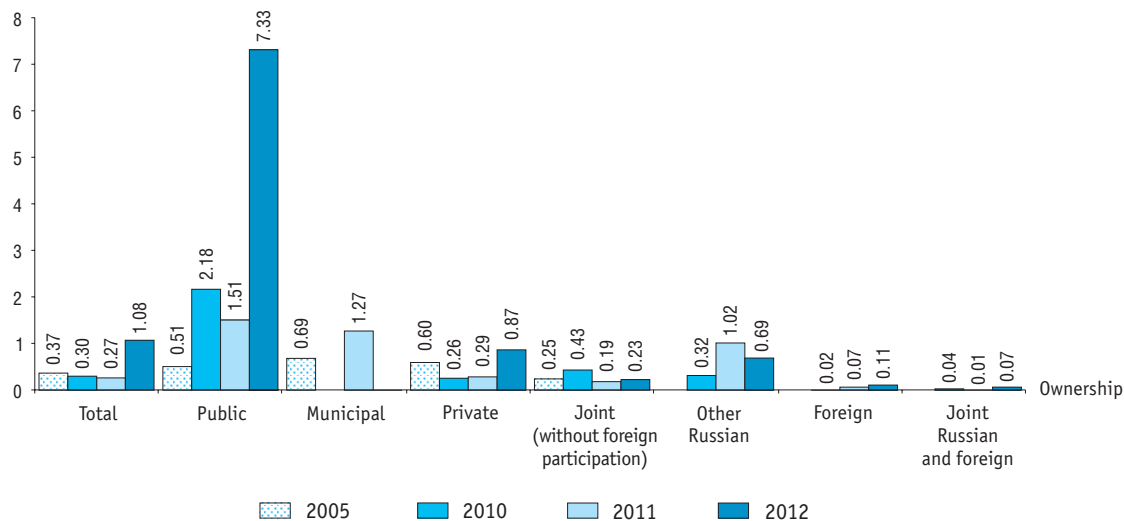
2.5.5. R&D INTENSITY IN THE ICT SECTOR BY ECONOMIC ACTIVITY

(R&D expenditure as a percentage of production and sales costs)

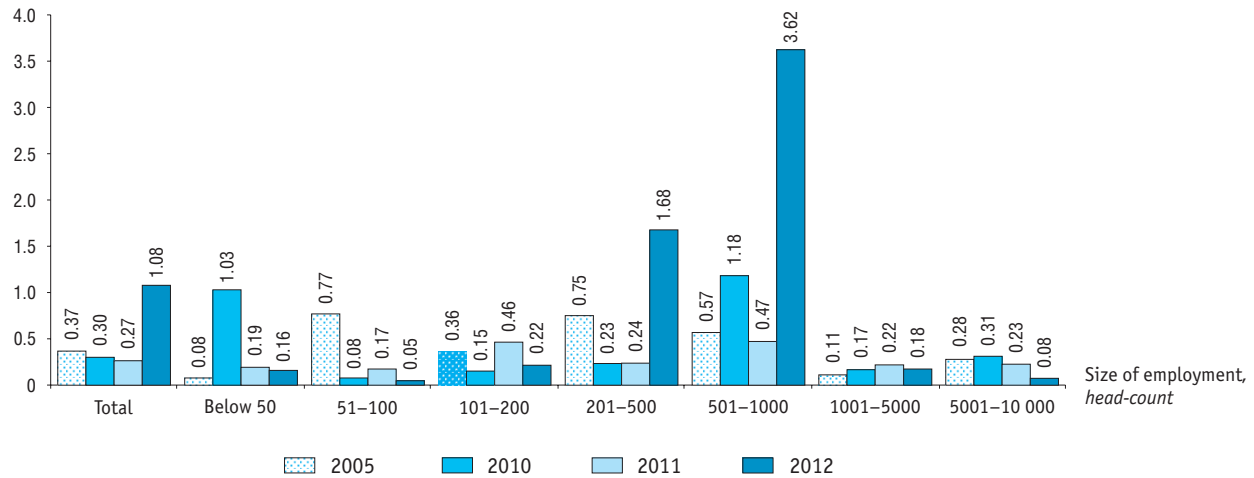


2.5.6. R&D INTENSITY IN THE ICT SECTOR BY OWNERSHIP OF ENTERPRISES

(R&D expenditure as a percentage of production and sales costs)

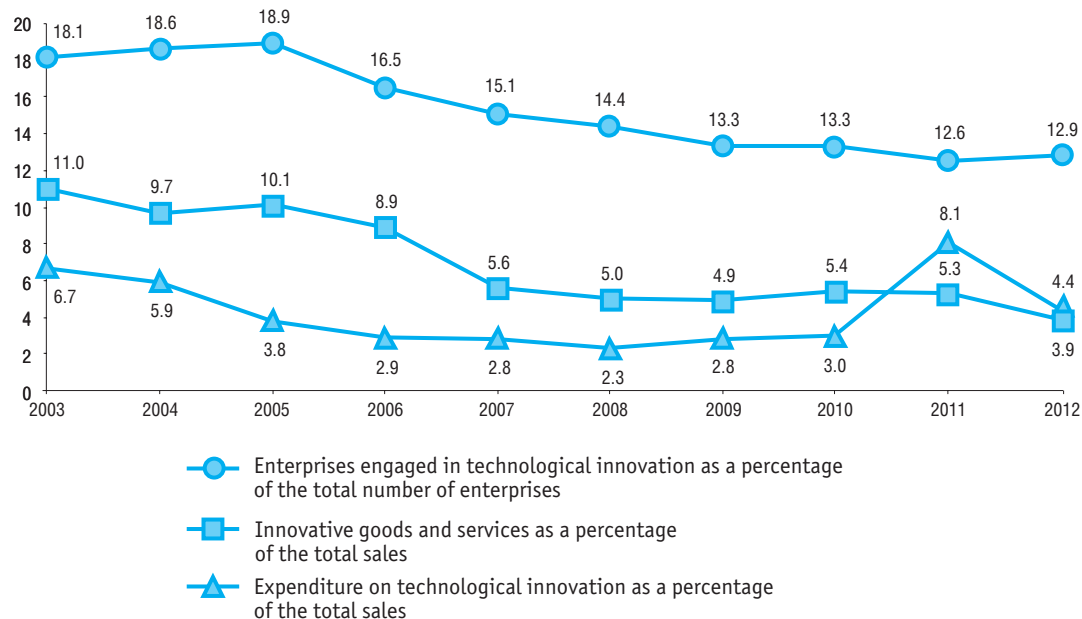


2.5.7. R&D INTENSITY IN THE ICT SECTOR BY SIZE OF EMPLOYMENT

(R&D expenditure as a percentage of production and sales costs)

2.6. Innovative Activity in the ICT Sector*

2.6.1. MAIN INDICATORS OF INNOVATION IN THE ICT SECTOR



* Here and below in the section data on the ICT sector is presented for the types of economic activity with the following RCEA codes (Rev. 1.1): 30, 32, 64, 72.

2.6.2. INNOVATIVE ACTIVITY IN THE ICT SECTOR BY ECONOMIC ACTIVITY

(per cent)

	RCEA code (Rev. 1.1)	Total			Enterprises engaged in innovation of selected types as a percentage of the total number of enterprises								
					Technological			Marketing			Organisational		
		2010	2011	2012	2010	2011	2012	2010	2011	2012	2010	2011	2012
ICT sector – total		15.8	14.8	14.3	13.3	12.6	12.9	4.8	4.1	3.5	5.5	4.6	4.3
Manufacture of office, accounting and computing machinery	30	26.8	27.5	27.3	26.8	25.0	25.0	4.9	7.5	4.5	7.3	10.0	6.8
Manufacture of radio, television and communication equipment and apparatus	32	32.3	36.1	36.3	31.3	33.5	35.0	5.6	5.2	5.4	8.2	9.7	10.5
Communications	64	15.6	13.8	13.3	11.9	11.1	11.7	6.5	5.5	4.7	6.1	4.6	4.3
Computer and related activities	72	10.0	9.2	9.4	8.7	7.9	8.3	1.5	1.2	1.0	3.3	2.8	2.6

2.6.3. PERCENTAGE DISTRIBUTION OF ICT SECTOR ENTERPRISES ENGAGED IN TECHNOLOGICAL INNOVATION BY INNOVATIVE AND ECONOMIC ACTIVITY

	RCEA code (Rev. 1.1)	R&D	Industrial design	Acquisition of machinery and equipment	Acquisition of technology	Of which acquisition of patent rights and licenses	Acquisition of software	Other types of preproduction	Personnel training	Market research	Other
2010											
ICT sector – total		24.7	23.1	70.6	8.6	4.9	39.0	14.5	27.8	8.8	10.9
Manufacture of office, accounting and computing machinery	30	54.5	45.5	54.5	18.2	9.1	36.4	9.1	36.4	9.1	9.1
Manufacture of radio, television and communication equipment and apparatus	32	58.0	30.0	72.0	8.0	7.0	38.0	21.0	24.0	11.0	9.0
Communications	64	6.6	19.4	78.1	7.7	4.6	33.2	14.3	27.0	9.7	15.3
Computer and related activities	72	23.1	20.5	52.6	10.3	2.6	55.1	7.7	33.3	3.8	2.6
2011											
ICT sector – total		27.2	24.9	69.0	8.2	5.0	36.2	15.6	22.2	7.7	14.8
Manufacture of office, accounting and computing machinery	30	60.0	40.0	60.0	10.0	10.0	50.0	20.0	20.0	10.0	10.0
Manufacture of radio, television and communication equipment and apparatus	32	62.5	33.7	68.3	3.8	2.9	33.7	20.2	27.9	9.6	7.7
Communications	64	7.0	22.7	78.9	8.1	3.8	33.0	13.5	19.5	8.1	23.2
Computer and related activities	72	24.1	16.5	48.1	13.9	10.1	45.6	13.9	21.5	3.8	5.1

(continued)

	RCEA code (Rev. 1.1)	R&D	Industrial design	Acquisition of machinery and equip- ment	Acquisition of techno- logy	Of which acquisition of patent rights and licenses	Acquisition of software	Other types of preproduc- tion	Personnel training	Market research	Other
2012											
ICT sector – total		31.3	17.9	62.1	8.0	4.7	35.3	13.4	24.2	9.6	16.0
Manufacture of office, accounting and computing machinery	30	63.6	27.3	54.5	9.1	–	27.3	27.3	18.2	18.2	–
Manufacture of radio, television and communication equipment and apparatus	32	61.8	34.5	70.9	5.5	4.5	30.9	19.1	25.5	10.9	5.5
Communications	64	10.7	11.2	65.5	5.3	1.9	34.0	12.6	24.3	11.7	27.2
Computer and related activities	72	36.7	12.2	45.9	16.3	11.2	43.9	7.1	23.5	3.1	6.1

2.6.4. SALES OF INNOVATIVE GOODS AND SERVICES IN THE ICT SECTOR BY ECONOMIC ACTIVITY

	RCEA code (Rev. 1.1)	Million roubles			As a percentage of total sales		
		2010	2011	2012	2010	2011	2012
ICT sector – total		84270.0	96412.3	85110.7	5.4	5.3	3.9
Manufacture of office, accounting and computing machinery	30	1986.5	1136.6	1020.6	5.9	3.3	2.2
Manufacture of radio, television and communication equipment and apparatus	32	19647.1	20837.9	27998.0	10.3	9.8	10.5
Communications	64	42849.6	49486.6	41444.1	3.6	3.6	2.5
Computer and related activities	72	19786.9	24951.2	14648.1	14.3	12.9	6.2

2.6.5. EXPORTS OF INNOVATIVE GOODS AND SERVICES BY ICT SECTOR ENTERPRISES BY ECONOMIC ACTIVITY

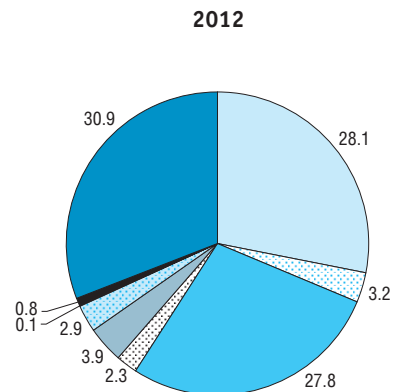
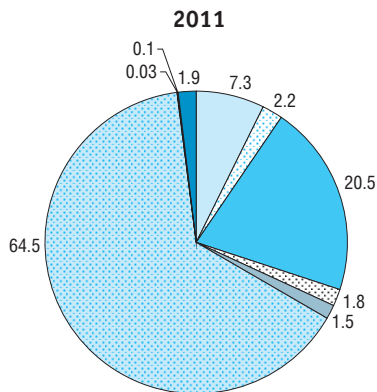
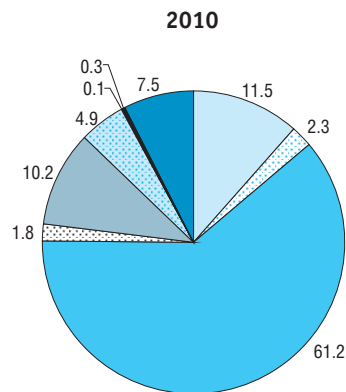
(per cent)

	RCEA code (Rev. 1.1)	Enterprises exporting innovative goods and services as a percentage of all enterprises			Exports of innovative goods and services as a percentage of total sales			Innovative goods and services as a percentage of total exports		
		2010	2011	2012	2010	2011	2012	2010	2011	2012
ICT sector – total		1.4	1.4	1.4	0.4	0.4	0.3	16.0	20.8	10.3
Manufacture of office, accounting and computing machinery	30	2.4	5.0	9.1	0.1	0.1	0.1	17.3	18.7	3.5
Manufacture of radio, television and communication equipment and apparatus	32	7.2	6.1	4.8	1.2	1.6	0.8	41.1	41.1	29.0
Communications	64	0.3	0.2	0.3	0.1	0.0	0.01	4.2	0.3	0.4
Computer and related activities	72	1.3	1.8	1.9	2.6	2.1	1.7	26.2	27.0	17.7

2.6.6. EXPENDITURE ON TECHNOLOGICAL INNOVATION IN THE ICT SECTOR BY ECONOMIC ACTIVITY

	RCEA code (Rev. 1.1)	Million roubles			As a percentage of total sales		
		2010	2011	2012	2010	2011	2012
ICT sector – total		46738.5	146199.5	96517.8	3.0	8.1	4.4
Manufacture of office, accounting and computing machinery	30	416.8	748.4	779.9	1.2	2.2	1.7
Manufacture of radio, television equipment and apparatus	32	7637.7	7697.1	12507.3	4.0	3.6	4.7
Communications	64	33710.4	130211.3	75842.6	2.8	9.5	4.6
Computer and related activities	72	4973.6	7542.7	7388.1	3.6	3.9	3.1

2.6.7. PERCENTAGE DISTRIBUTION OF EXPENDITURE ON TECHNOLOGICAL INNOVATION IN THE ICT SECTOR BY INNOVATIVE ACTIVITY



- R&D
- Industrial design
- Acquisition of machinery and equipment
- Acquisition of technology
- Acquisition of software
- Other types of preproduction
- Personnel training
- Market research
- Other

2.6.8. INNOVATIVE ACTIVITY OF ICT SECTOR ENTERPRISES BY FEDERAL DISTRICT

(per cent)

	Enterprises engaged in technological innovation as a percentage of all enterprises			Innovative goods and services as a percentage of total sales			Expenditure on technological innovation as a percentage of total sales		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
Russian Federation	13.3	12.6	12.9	5.4	5.3	3.9	3.0	8.1	4.4
Central Federal District	15.0	13.5	14.3	4.8	4.7	3.7	2.2	12.4	6.3
Northwestern Federal District	14.6	15.5	16.0	3.8	3.8	3.2	5.2	7.0	2.7
Southern Federal District	11.7	8.5	11.9	3.9	3.9	2.5	1.8	2.0	1.2
North Caucasian Federal District	8.3	8.2	9.4	13.8	2.5	1.7	3.0	0.7	1.0
Volga Federal District	13.7	12.8	12.2	10.1	8.8	7.4	3.1	2.2	3.1
Urals Federal District	8.0	10.9	9.8	1.5	9.9	0.9	1.3	3.7	1.7
Siberian Federal District	12.9	11.3	11.8	4.4	4.5	4.5	3.7	3.4	2.2
Far Eastern Federal District	13.9	13.8	11.3	6.3	4.5	3.6	7.6	10.1	3.5

2.7. Financial Effects of ICT Sector Activities

2.7.1. MAIN FINANCIAL EFFECTS OF ICT SECTOR ENTERPRISES' ACTIVITIES*

	ICT sector			As a percentage of the respective indicator for the national economy		
	2010	2011	2012	2010	2011	2012
The total number of enterprises surveyed	1890	1975	2018	3.0	3.3	3.5
Loss-making enterprises	350	404	423	2.0	2.4	2.8
Profit-making enterprises	1540	1571	1595	3.3	3.6	3.7
As a percentage of the total number of enterprises surveyed:						
loss-making enterprises	18.5	20.5	21.0	–	–	–
profit-making enterprises	81.5	79.5	79.0	–	–	–
Balance (profit minus loss) of enterprises' activities, <i>million roubles</i>	323989	341824	363237	5.3	4.7	4.7
Total losses	36433	57777	71105	4.6	4.4	6.7
Total profits	360422	399601	434342	5.2	4.7	5.0
Profitability of assets, <i>per cent</i>	10.8	8.8	8.5	–	–	–
Profitability of sales of goods and services, <i>per cent</i>	20.9	18.5	19.0	–	–	–

* Here and below in the section data on small businesses is excluded.

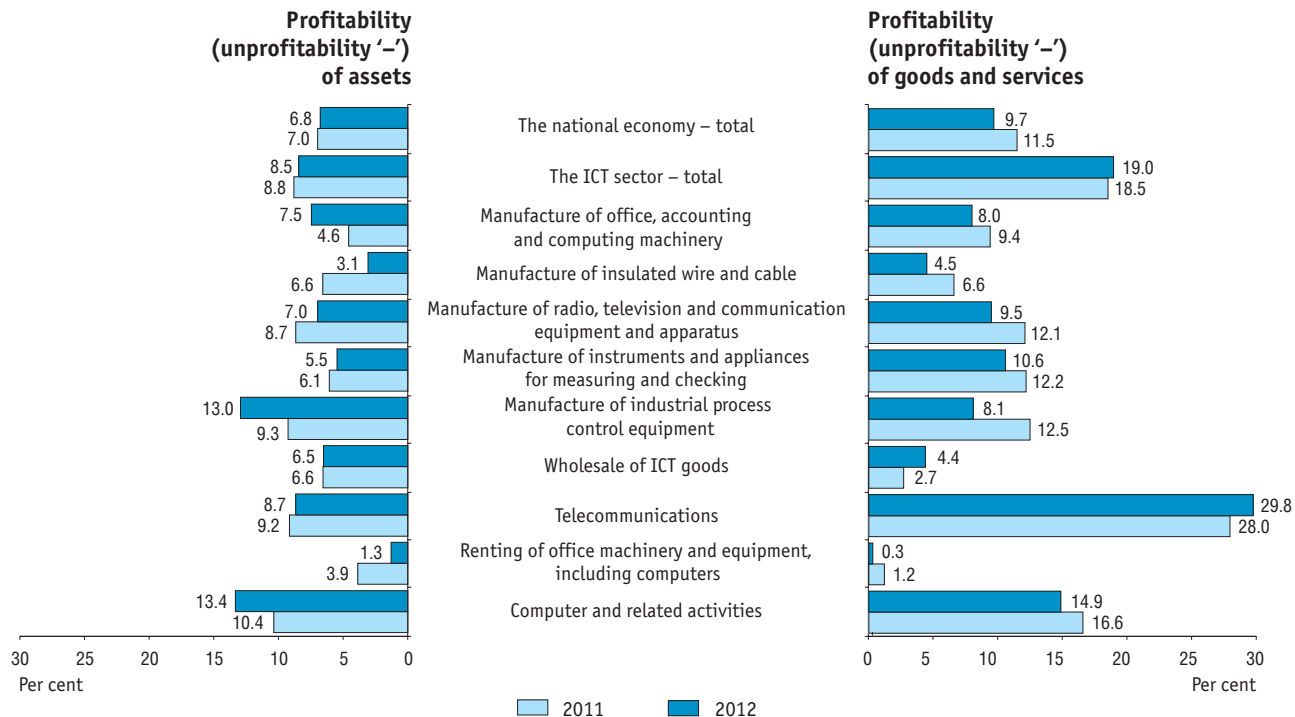
2.7.2. TOTAL LOSSES OF ICT SECTOR ENTERPRISES BY ECONOMIC ACTIVITY

	RCEA code (Rev. 1.1)	Total losses, <i>million roubles</i>			Loss-making enterprises as a percentage of the total number of enterprises		
		2010	2011	2012	2010	2011	2012
ICT sector – total		36433	57777	71105	18.5	20.5	21.0
Manufacture of office, accounting and computing machinery	30	794	535	306	20.0	8.3	18.9
Manufacture of insulated wire and cable	31.3	4258	2474	1933	28.9	29.8	25.0
Manufacture of radio, television and communication equipment and apparatus	32	1649	2336	1179	20.3	19.8	15.4
Manufacture of instruments and appliances for measuring and checking	33.2	1324	2103	2498	15.7	15.9	15.6
Manufacture of industrial process control equipment	33.3	26	14	–	23.1	18.2	–
Wholesale of ICT goods	51.43.2, 51.84, 51.86, 51.87.5	116	671	227	7.9	10.7	9.6
Telecommunications	64.2	27282	45499	62751	23.5	26.6	30.2
Renting of office machinery and equipment, including computers	71.33	80	12	12	33.3	50.0	66.7
Computer and related activities	72	904	4133	2199	12.5	16.4	16.9

2.7.3. TOTAL PROFITS OF ICT SECTOR ENTERPRISES BY ECONOMIC ACTIVITY

	RCEA code (Rev. 1.1)	Total profits, <i>million roubles</i>			Profit-making enterprises as a percentage of the total number of enterprises		
		2010	2011	2012	2010	2011	2012
ICT sector – total		360422	399601	434342	81.5	79.5	79.0
Manufacture of office, accounting and computing machinery	30	2484	2281	3230	80.0	91.7	81.1
Manufacture of insulated wire and cable	31.3	4153	8144	4917	71.1	70.2	75.0
Manufacture of radio, television and communication equipment and apparatus	32	21760	22406	20916	79.7	80.2	84.6
Manufacture of instruments and appliances for measuring and checking	33.2	13464	17171	18693	84.3	84.1	84.4
Manufacture of industrial process control equipment	33.3	759	399	448	76.9	81.8	100
Wholesale of ICT goods	51.43.2, 51.84, 51.86, 51.87.5	5164	9971	10482	92.1	89.3	90.4
Telecommunications	64.2	288100	310996	334557	76.5	73.4	69.8
Renting of office machinery and equipment, including computers	71.33	64	44	19	66.7	50.0	33.3
Computer and related activities	72	24474	28189	41080	87.5	83.6	83.1

2.7.4. PROFITABILITY (UNPROFITABILITY) OF ASSETS AND SALES OF GOODS AND SERVICES OF ICT SECTOR ENTERPRISES BY ECONOMIC ACTIVITY



2.7.5. FINANCIAL SUSTAINABILITY AND SOLVENCY OF ICT SECTOR ENTERPRISES BY ECONOMIC ACTIVITY

(per cent)

	RCEA code (Rev. 1.1)	Equity ratio		Working capital financed by equity to total assets ratio		Liquidity ratio	
		2011	2012	2011	2012	2011	2012
ICT sector – total		35.8	30.7	-56.3	-64.3	111.8	102.6
Manufacture of office, accounting and computing machinery	30	29.4	34.6	19.3	24.1	96.6	101.6
Manufacture of insulated wire and cable	31.3	19.6	22.9	-15.7	-15.0	75.7	72.0
Manufacture of radio, television and communication equipment and apparatus	32	37.5	39.4	13.1	14.8	91.8	84.8
Manufacture of instruments and appliances for measuring and checking	33.2	37.4	37.3	14.9	13.1	89.1	85.0
Manufacture of industrial process control equipment	33.3	28.7	25.6	24.4	15.7	106.8	95.5
Wholesale of ICT goods	51.43.2, 51.84, 51.86, 51.87.5	12.9	16.0	-3.9	-2.1	82.5	83.5
Telecommunications	64.2	37.0	30.8	-79.2	-93.4	119.6	101.6
Renting of office machinery and equipment, including computers	71.33	74.9	53.8	62.3	-53.7	351.0	313.3
Computer and related activities	72	30.7	28.7	-6.5	-5.9	119.8	132.9

2.7.6. PERCENTAGE DISTRIBUTION OF CURRENT ASSETS OF ICT SECTOR ENTERPRISES BY ECONOMIC ACTIVITY: 2012

(per cent)

	RCEA code (Rev. 1.1)	Reserves	Of which			Short-term financial investment	Monetary funds	Accounts receivable	Other current assets
			industrial reserves	finished product	goods for resale				
ICT sector – total		16.5	5.8	1.7	2.5	10.8	7.7	33.0	32.1
Manufacture of office, accounting and computing machinery	30	38.7	17.7	2.5	6.4	7.4	12.7	38.3	2.9
Manufacture of insulated wire and cable	31.3	38.3	17.4	13.9	1.4	9.1	3.2	43.8	5.6
Manufacture of radio, television and communication equipment and apparatus	32	39.5	13.7	5.9	0.8	4.8	9.8	40.2	5.7
Manufacture of instruments and appliances for measuring and checking	33.2	44.4	16.1	4.6	0.4	7.3	6.5	36.9	4.9
Manufacture of industrial process control equipment	33.3	35.3	13.2	1.0	11.6	6.5	4.4	50.8	3.0
Wholesale of ICT goods	51.43.2, 51.84, 51.86, 51.87.5	33.0	2.2	0.6	26.6	4.4	7.0	50.3	5.3
Telecommunications	64.2	4.1	2.3	0.1	0.4	12.1	6.2	26.1	51.5
Renting of office machinery and equipment, including computers	71.33	4.8	0.1	0.2	0.0	–	5.5	65.0	24.8
Computer and related activities	72	11.0	2.8	0.6	2.6	18.3	16.1	44.6	10.0

2.8. Business Activity of Enterprises Rendering ICT Services*

2.8.1. MAIN INDICATORS OF ACTIVITIES BY ENTERPRISES RENDERING ICT SERVICES**

(balances***, per cent)

	Level of the 1 st half-year			Trends					
				The 1 st half-year compared to the previous half-year			Expectations for the 2 nd half-year		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
Demand for services	-35	-31	-29	0	+5	+5	+9	+16	+15
Number of contracts (customers)	-21	-18	-28	+1	+9	+8	+9	+17	+15
Cost of services	-12	-12	-24	+9	+12	+10	+10	+21	+15
Prices (tariffs) for services	-4	-8	-13	+11	+17	+17	+5	+13	+10
Number of employees	-7	-8	-20	0	+9	0	+5	+8	+7
Competitiveness	+16	+5	-1	+13	+5	+10	+13	+10	+9
Investment	-25	-25	-38	-8	-6	-7	+1	0	-1
Economic status of enterprises	-10	-11	-22	-6	+2	+1	+4	+12	+8

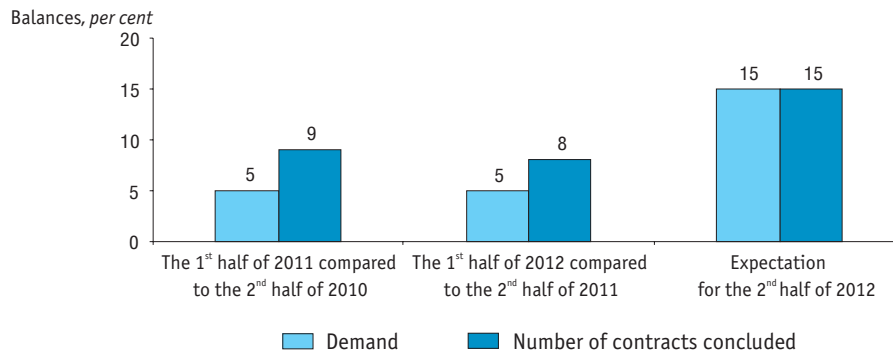
* Enterprises engaged in computer related activities (the RCEA code (Rev. 1.1) – 72).

** Assessment.

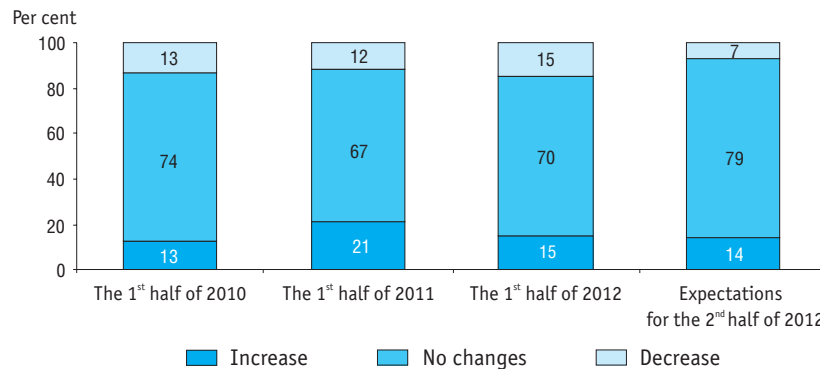
*** Balance is the difference between the respondents giving positive responses ('increase' compared to the previous period or 'above normal' current level) and those who gave negative responses ('decrease' compared to the previous period or 'below normal' current level), per cent.

Source: pilot business tendency survey of the service sector conducted by HSE in 2012.

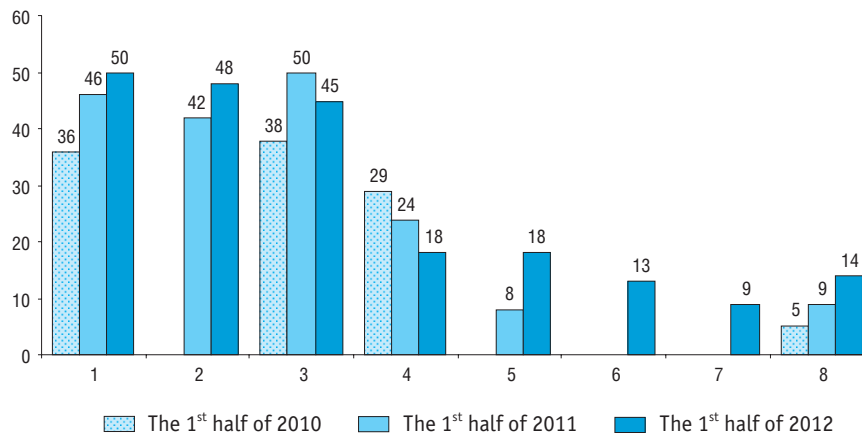
2.8.2. ASSESSMENTS OF DEMAND CHANGE AND NUMBER OF CONTRACTS CONCLUDED



2.8.3. EMPLOYEE TURNOVER ASSESSMENTS

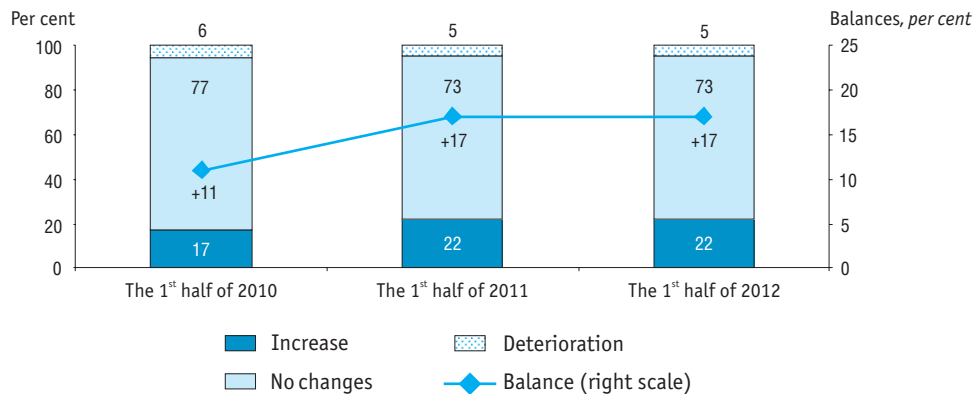


2.8.4. ENTERPRISES RENDERING IT SERVICES BY TYPE (as a percentage of the total number of enterprises surveyed)

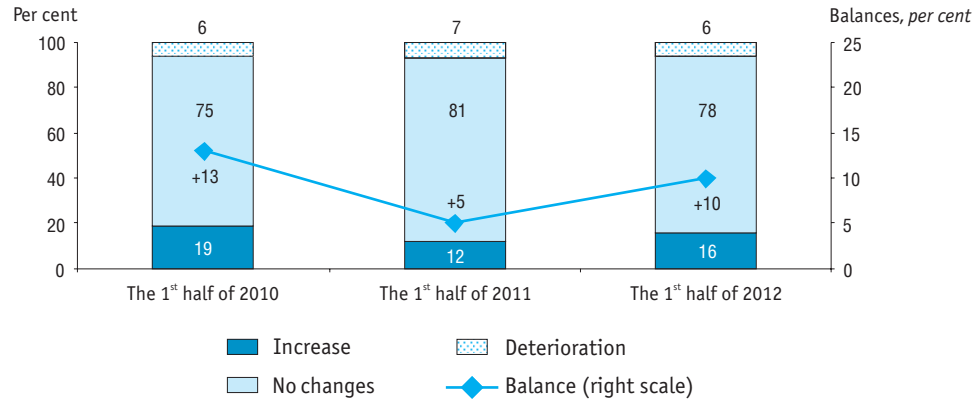


- 1 – Software development and consultancy
- 2 – Hardware and software installation and maintenance, related training and coaching
- 3 – Databases and information sources creation and processing
- 4 – Services of data processing centres
- 5 – Information security
- 6 – Outsourcing
- 7 – E-commerce and marketing
- 8 – Other

2.8.5. PRICE (TARIFF) CHANGE ASSESSMENTS

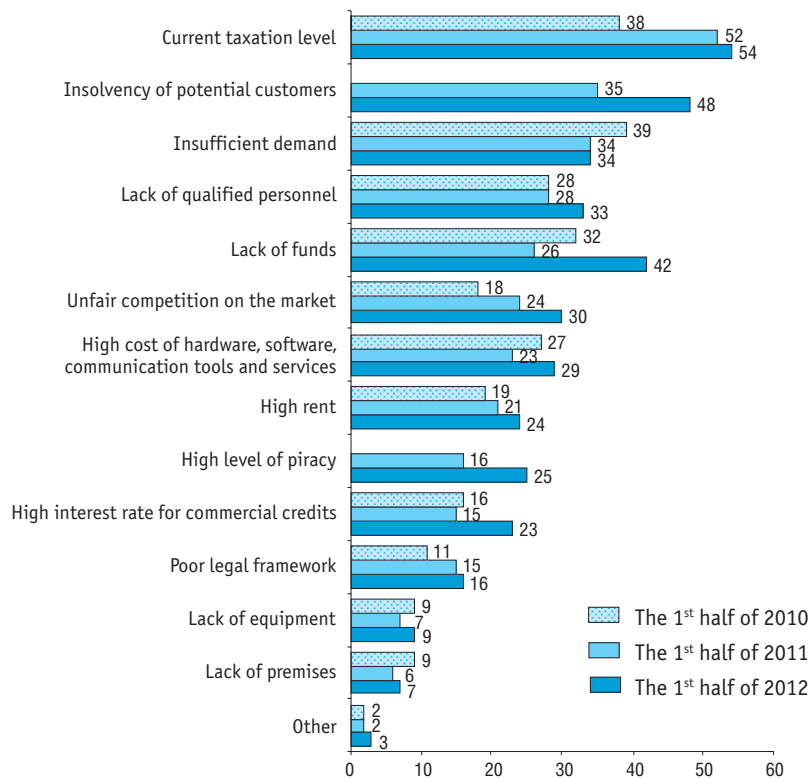


2.8.6. COMPETITIVENESS CHANGE ASSESSMENTS



2.8.7. ASSESSMENT OF FACTORS RESTRICTING BUSINESS ACTIVITIES OF ENTERPRISES RENDERING ICT SERVICES

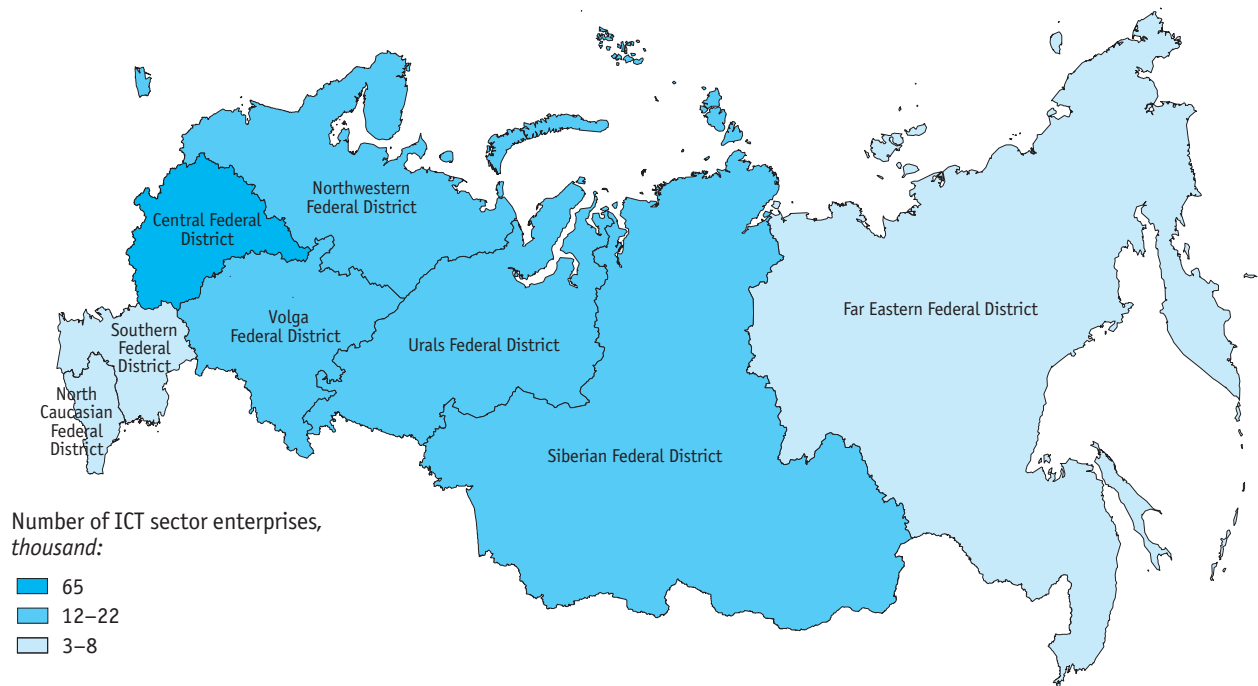
(as a percentage of the total number of enterprises surveyed)



2.9. The ICT Sector by Region of the Russian Federation

2.9.1. ICT SECTOR ENTERPRISES BY FEDERAL DISTRICT: 2012

(at the end of the year)



2.9.2. ICT SECTOR ENTERPRISES BY ECONOMIC ACTIVITY: 2012

(at the end of the year)

	Total	Manufacture of ICT equipment	Wholesale of ICT goods	Telecommunications	ICT services
Russian Federation	149539	15487	36002	23127	74923
Central Federal District	65308	6790	14938	9739	33841
Belgorod Region	1179	93	386	175	525
Bryansk Region	658	77	190	108	283
Vladimir Region	1003	138	222	228	415
Voronezh Region	1517	162	421	223	711
Ivanovo Region	703	69	144	121	369
Kaluga Region	791	138	139	135	379
Kostroma Region	299	25	51	66	157
Kursk Region	570	50	145	152	223
Lipetz Region	507	39	125	85	258
Moscow Region	6498	793	1206	1412	3087
Oryol Region	441	98	77	87	179
Ryazan Region	933	168	230	144	391
Smolensk Region	542	72	104	95	271
Tambov Region	423	30	94	111	188
Tver Region	1021	116	196	204	505
Tula Region	1224	103	345	185	591
Yaroslavl Region	1296	124	359	158	655
Moscow	45703	4495	10504	6050	24654
Northwestern Federal District	19785	2230	4698	2473	10384
Republic of Karelia	563	40	118	95	310
Republic of Komi	555	38	102	128	287

(continued)

	Total	Manufacture of ICT equipment	Wholesale of ICT goods	Telecommunications	ICT services
Arkhangelsk Region	569	44	116	145	264
Of which Nenets Autonomous District	26	2	0	8	16
Vologda Region	976	99	233	165	479
Kaliningrad Region	1307	208	322	199	578
Leningrad Region	590	65	77	140	308
Murmansk Region	596	52	86	134	324
Novgorod Region	461	72	102	103	184
Pskov Region	377	46	88	79	164
Saint-Petersburg	13791	1566	3454	1285	7486
Southern Federal District	8007	772	2215	1367	3653
Republic of Adygeya	138	12	20	41	65
Republic of Kalmykia	147	12	32	50	53
Krasnodar Territory	3198	299	878	580	1441
Astrakhan Region	465	49	84	109	223
Volgograd Region	1547	129	472	243	703
Rostov Region	2512	271	729	344	1168
North Caucasian Federal District	2787	292	548	849	1098
Republic of Dagestan	607	53	63	336	155
Republic of Ingushetia	98	3	20	50	25
Kabardino-Balkarian Republic	264	51	22	80	111
Karachaevo-Cherchessian Republic	113	12	21	33	47
Republic of North Ossetia–Alania	220	20	28	62	110
Chechen Republic	208	31	19	95	63
Stavropol Territory	1277	122	375	193	587

(continued)

	Total	Manufacture of ICT equipment	Wholesale of ICT goods	Telecommunications	ICT services
Volga Federal District	21778	2320	5517	3276	10665
Republic of Bashkortostan	2365	285	615	379	1086
Republic of Mari El	388	52	69	76	191
Republic of Mordovia	412	49	161	67	135
Republic of Tatarstan	3279	379	654	488	1758
Udmurtian Republic	1122	105	315	130	572
Chuvash Republic	712	80	201	128	303
Perm Territory	2525	249	803	333	1140
Kirov Region	791	70	182	117	422
Nizhni Novgorod Region	2891	306	823	392	1370
Orenburg Region	1011	78	220	213	500
Penza Region	748	111	145	101	391
Samara Region	3402	293	851	475	1783
Saratov Region	1293	193	302	237	561
Ulyanovsk Region	839	70	176	140	453
Urals Federal District	12451	1293	3414	1964	5780
Kurgan Region	321	23	68	75	155
Sverdlovsk Region	5888	613	1905	835	2535
Tyumen Region	3211	305	565	580	1761
Of which:					
Khanty-Mansi Autonomous District – Yugra	1418	126	212	265	815
Yamalo-Nenets Autonomous District	360	51	43	83	183
Chelyabinsk Region	3031	352	876	474	1329

(continued)

	Total	Manufacture of ICT equipment	Wholesale of ICT goods	Telecommunications	ICT services
Siberian Federal District	14992	1441	3868	2340	7343
Republic of Altai	108	7	26	26	49
Republic of Buryatia	422	31	72	100	219
Republic of Tuva	67	4	14	20	29
Republic of Khakasia	276	16	47	78	135
Altai Territory	1181	124	265	174	618
Zabaikalsk Territory	321	21	49	84	167
Krasnoyarsk Territory	2535	231	751	441	1112
Irkutsk Region	1495	122	314	289	770
Kemerovo Region	1475	137	315	293	730
Novosibirsk Region	4494	451	1430	478	2135
Omsk Region	1368	152	327	180	709
Tomsk Region	1250	145	258	177	670
Far Eastern Federal District	4431	349	804	1119	2159
Republic of Sakha (Yakutia)	621	29	66	180	346
Kamchatka Territory	267	19	36	84	128
Primorsky Territory	1482	135	338	300	709
Khabarovsk Territory	1140	106	244	238	552
Amur Region	321	13	47	129	132
Magadan Region	126	10	9	48	59
Sakhalin Region	380	29	58	105	188
Jewish Autonomous Region	62	7	4	19	32
Chukotka Autonomous District	32	1	2	16	13

2.9.3. PERCENTAGE DISTRIBUTION OF ICT GOODS AND SERVICES SALES BY TYPE: 2012

	Hardware	Software	Databases	Services
Russian Federation	22.9	2.1	0.7	74.3
Central Federal District	17.7	1.8	0.8	79.7
Belgorod Region	0.3	0.1	–	99.6
Bryansk Region	25.7	0.0	–	74.2
Vladimir Region	72.9	0.3	–	26.9
Voronezh Region	33.0	3.2	–	63.8
Ivanovo Region	9.6	0.6	–	89.8
Kaluga Region	93.8	0.1	0.0	6.1
Kostroma Region	–	0.1	–	99.9
Kursk Region	33.7	0.1	–	66.2
Lipetzk Region	11.9	0.1	–	88.0
Moscow Region	34.7	0.0	0.4	64.9
Oryol Region	32.4	0.1	8.3	59.2
Ryazan Region	64.3	1.4	0.0	34.3
Smolensk Region	66.6	0.0	0.1	33.3
Tambov Region	59.7	0.1	–	40.3
Tver Region	30.8	0.2	0.3	68.7
Tula Region	25.0	6.5	0.8	67.7
Yaroslavl Region	75.3	2.0	0.4	22.3
Moscow	3.4	2.1	1.0	93.5
Northwestern Federal District	39.0	2.8	0.4	57.8
Republic of Karelia	3.3	0.6	–	96.1
Republic of Komi	1.7	0.1	0.0	98.2

(continued)

	Hardware	Software	Databases	Services
Arkhangelsk Region	–	0.0	–	100
Of which Nents Autonomous District	–	–	–	100
Vologda Region	0.2	0.4	4.2	95.1
Kaliningrad Region	72.3	0.4	–	27.3
Leningrad Region	89.5	0.0	–	10.4
Murmansk Region	0.1	0.6	1.9	97.3
Novgorod Region	13.4	0.1	–	86.5
Pskov Region	74.1	0.2	–	25.7
Saint-Petersburg	39.0	3.7	0.3	57.0
Southern Federal District	14.8	0.4	0.4	84.4
Republic of Adygeya	43.4	–	–	56.6
Republic of Kalmykia	0.0	0.4	–	99.6
Krasnodar Territory	2.8	0.1	0.1	97.0
Astrakhan Region	–	0.1	–	99.9
Volgograd Region	42.5	2.2	0.3	55.1
Rostov Region	15.8	0.0	0.8	83.4
North Caucasian Federal District	12.3	0.3	0.2	87.2
Republic of Dagestan	20.1	–	–	79.9
Republic of Ingushetia	–	–	–	100
Kabardino-Balkarian Republic	6.6	–	–	93.4
Karachaevo-Cherchessian Republic	1.2	–	–	98.8
Republic of North Ossetia–Alania	33.2	–	–	66.8
Chechen Republic	4.5	0.4	13.7	81.5
Stavropol Territory	9.3	0.6	–	90.0

(continued)

	Hardware	Software	Databases	Services
Volga Federal District	35.2	2.8	0.9	61.1
Republic of Bashkortostan	25.3	0.3	0.1	74.3
Republic of Mari El	64.9	0.1	–	35.1
Republic of Mordovia	64.2	0.1	0.2	35.5
Republic of Tatarstan	29.4	0.4	0.0	70.2
Udmurtian Republic	68.5	0.0	0.3	31.1
Chuvash Republic	42.9	0.7	0.0	56.4
Perm Territory	20.3	3.7	0.3	75.8
Kirov Region	40.5	0.1	–	59.4
Nizhni Novgorod Region	22.1	13.0	1.2	63.8
Orenburg Region	5.5	0.1	–	94.4
Penza Region	40.8	0.6	19.3	39.3
Samara Region	25.2	0.3	0.2	74.3
Saratov Region	36.6	0.0	0.1	63.3
Ulyanovsk Region	70.2	0.1	–	29.8
Urals Federal District	22.2	4.3	0.5	73.0
Kurgan Region	6.0	0.1	0.0	93.9
Sverdlovsk Region	32.7	6.6	0.0	60.6
Tyumen Region	2.0	0.4	1.5	96.2
Of which:				
Khanty-Mansi Autonomous District – Yugra	1.4	0.6	–	98.1
Yamalo-Nenets Autonomous District	0.0	–	–	100
Chelyabinsk Region	33.8	5.1	0.6	60.5

(continued)

	Hardware	Software	Databases	Services
Siberian Federal District	24.2	2.6	0.6	72.6
Republic of Altai	–	–	0.7	99.3
Republic of Buryatia	–	0.2	–	99.8
Republic of Tuva	–	0.6	–	99.4
Republic of Khakasia	–	0.1	–	99.9
Altai Territory	10.7	–	1.8	87.5
Zabaikalsk Territory	0.1	0.1	–	99.9
Krasnoyarsk Territory	10.8	0.5	0.0	88.7
Irkutsk Region	13.2	0.2	–	86.7
Kemerovo Region	41.0	0.2	0.7	58.0
Novosibirsk Region	19.0	10.0	1.3	69.7
Omsk Region	29.6	1.5	1.6	67.3
Tomsk Region	63.6	1.4	0.0	34.9
Far Eastern Federal District	2.7	0.3	0.1	97.0
Republic of Sakha (Yakutia)	–	0.0	0.1	99.9
Kamchatka Territory	–	0.0	–	100
Primorsky Territory	3.7	0.3	–	96.0
Khabarovsk Territory	5.9	0.7	0.2	93.2
Amur Region	–	0.2	–	99.8
Magadan Region	0.0	0.0	–	100
Sakhalin Region	–	0.0	0.0	100
Jewish Autonomous Region	0.4	–	–	99.6
Chukotka Autonomous District	–	–	–	100

2.9.4. FIXED CAPITAL INVESTMENT IN THE ICT SECTOR: 2012

(per cent)

	Fixed capital investment	Intangible assets investment
Russian Federation	100	100
Central Federal District	31.30	34.85
Belgorod Region	0.52	–
Bryansk Region	0.60	0.0
Vladimir Region	0.56	0.30
Voronezh Region	1.16	–
Ivanovo Region	0.42	–
Kaluga Region	1.05	0.02
Kostroma Region	0.40	–
Kursk Region	0.49	0.09
Lipetzk Region	0.57	–
Moscow Region	3.97	0.01
Oryol Region	0.32	0.03
Ryazan Region	1.14	0.19
Smolensk Region	0.46	–
Tambov Region	0.58	0.02
Tver Region	0.66	–
Tula Region	0.44	0.14
Yaroslavl Region	0.93	0.47
Moscow	17.02	33.56
Northwestern Federal District	10.87	13.79
Republic of Karelia	0.47	–
Republic of Komi	0.74	0.0

(continued)

	Fixed capital investment	Intangible assets investment
Arkhangelsk Region	0.38	–
Of which Nenets Autonomous District	0.01	–
Vologda Region	0.86	0.0
Kaliningrad Region	0.45	0.0
Leningrad Region	0.01	0.01
Murmansk Region	0.25	0.0
Novgorod Region	0.37	0.0
Pskov Region	0.47	0.0
Saint-Petersburg	6.88	13.77
Southern Federal District	9.42	9.97
Republic of Adygeya	0.05	–
Republic of Kalmykia	0.18	0.16
Krasnodar Territory	5.03	0.0
Astrakhan Region	0.44	–
Volgograd Region	0.66	0.14
Rostov Region	3.07	9.67
North Caucasian Federal District	2.59	9.55
Republic of Dagestan	0.21	7.68
Republic of Ingushetia	0.05	–
Kabardino-Balkarian Republic	0.17	0.0
Karachaevo-Cherchessian Republic	0.15	1.80
Republic of North Ossetia–Alania	0.26	–
Chechen Republic	0.24	–
Stavropol Territory	1.51	0.07

(continued)

	Fixed capital investment	Intangible assets investment
Volga Federal District	20.22	15.47
Republic of Bashkortostan	1.54	0.37
Republic of Mari El	0.45	0.79
Republic of Mordovia	0.64	–
Republic of Tatarstan	2.78	0.15
Udmurtian Republic	0.67	0.75
Chuvash Republic	0.78	0.15
Perm Territory	1.92	4.74
Kirov Region	0.60	0.09
Nizhni Novgorod Region	4.14	4.81
Orenburg Region	0.95	–
Penza Region	0.44	0.00
Samara Region	3.22	0.88
Saratov Region	1.19	2.74
Ulyanovsk Region	0.89	0.0
Urals Federal District	8.42	9.49
Kurgan Region	0.44	0.00
Sverdlovsk Region	3.74	9.40
Tyumen Region	3.21	0.05
Of which:		
Khanty-Mansi Autonomous District – Yugra	1.35	0.05
Yamalo-Nenets Autonomous District	0.72	–
Chelyabinsk Region	1.03	0.04

(continued)

	Fixed capital investment	Intangible assets investment
Siberian Federal District	12.67	0.84
Republic of Altai	0.08	–
Republic of Buryatia	0.67	–
Republic of Tuva	0.04	–
Republic of Khakasia	0.24	–
Altai Territory	0.36	0.0
Zabaikalsk Territory	0.38	–
Krasnoyarsk Territory	2.68	0.09
Irkutsk Region	1.72	–
Kemerovo Region	1.35	–
Novosibirsk Region	3.21	0.72
Omsk Region	1.02	0.00
Tomsk Region	0.92	0.02
Far Eastern Federal District	4.51	6.04
Republic of Sakha (Yakutia)	0.36	0.0
Kamchatka Territory	0.22	0.03
Primorsky Territory	1.29	0.0
Khabarovsk Territory	1.51	0.0
Amur Region	0.33	–
Magadan Region	0.13	–
Sakhalin Region	0.56	–
Jewish Autonomous Region	0.10	6.00
Chukotka Autonomous District	0.01	–

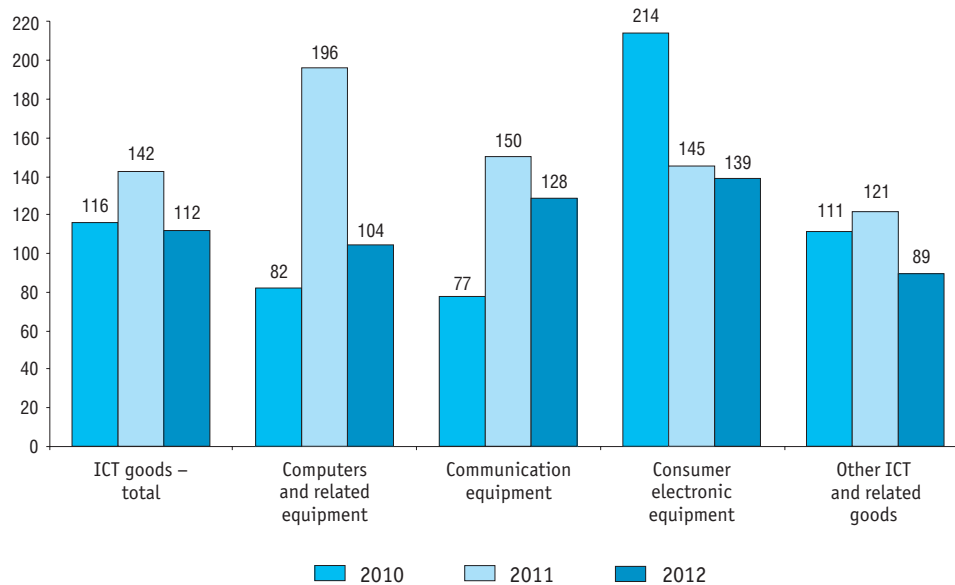
2.10. International Trade in ICT Goods and Services

2.10.1. EXPORTS OF ICT GOODS

	Million US dollars			As a percentage of the total exports of goods			As a percentage of the total exports of ICT goods		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
ICT goods – total	1033.9	1469.0	1640.8	0.26	0.28	0.31	100	100	100
Computers and related equipment	146.5	287.0	298.7	0.04	0.06	0.06	14.2	19.5	18.2
Of which computers	99.0	222.0	217.9	0.02	0.04	0.04	9.6	15.1	13.3
Communication equipment	119.2	178.8	229.4	0.03	0.03	0.04	11.5	12.2	14.0
Of which telephone and telegraph equipment	82.9	123.3	183.3	0.02	0.02	0.03	8.0	8.4	11.2
Consumer electronic equipment	303.0	439.3	609.2	0.08	0.09	0.12	29.3	29.9	37.1
Of which:									
video equipment	1.6	9.9	4.1	0.00	0.00	0.00	0.2	0.7	0.2
TV receivers	260.0	376.1	505.7	0.07	0.07	0.10	25.1	25.6	30.8
Other ICT and related goods	465.2	563.9	503.5	0.12	0.11	0.10	45.0	38.4	30.7

2.10.2. TRENDS IN EXPORTS OF ICT GOODS

(as a percentage of the previous year)

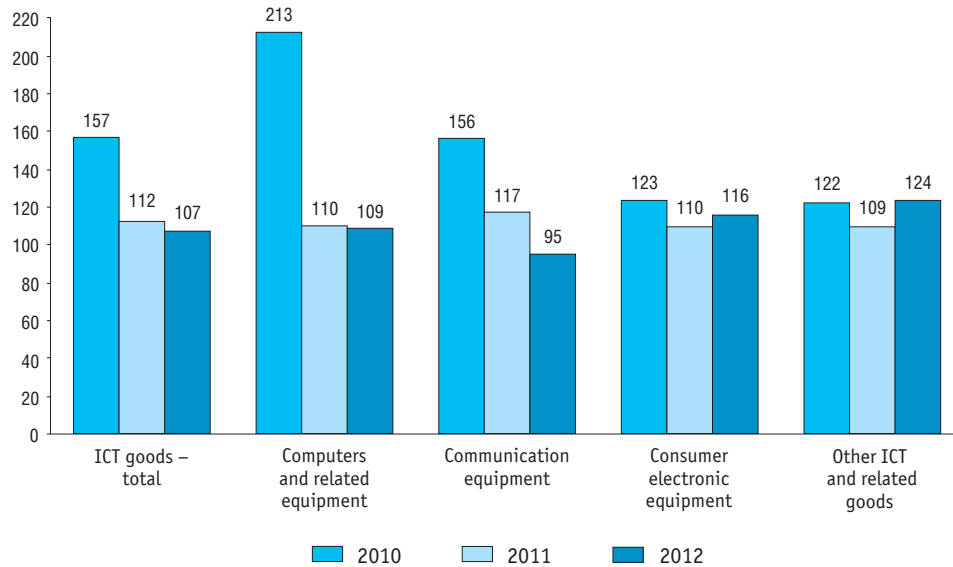


2.10.3. IMPORTS OF ICT GOODS

	Million US dollars			As a percentage of the total imports of goods			As a percentage of the total imports of ICT goods		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
ICT goods – total	19519.6	21925.0	23473.0	8.5	7.2	7.4	100	100	100
Computers and related equipment	6659.8	7332.9	7969.8	2.9	2.4	2.5	34.1	33.4	34.0
Of which computers	4816.6	5286.6	5827.8	2.1	1.7	1.8	24.7	24.1	24.8
Communication equipment	6681.1	7826.7	7431.8	2.9	2.6	2.4	34.2	35.7	31.7
Of which telephone and telegraph equipment	6606.7	7745.9	7335.1	2.9	2.5	2.3	33.8	35.3	31.2
Consumer electronic equipment	3283.0	3596.3	4157.4	1.4	1.2	1.3	16.8	16.4	17.7
Of which:									
video equipment	202.4	220.4	211.9	0.1	0.1	0.1	1.0	1.0	0.9
TV receivers	742.0	640.1	839.6	0.3	0.2	0.3	3.8	2.9	3.6
Other ICT and related goods	2895.7	3169.1	3914.0	1.3	1.0	1.2	14.9	14.5	16.6

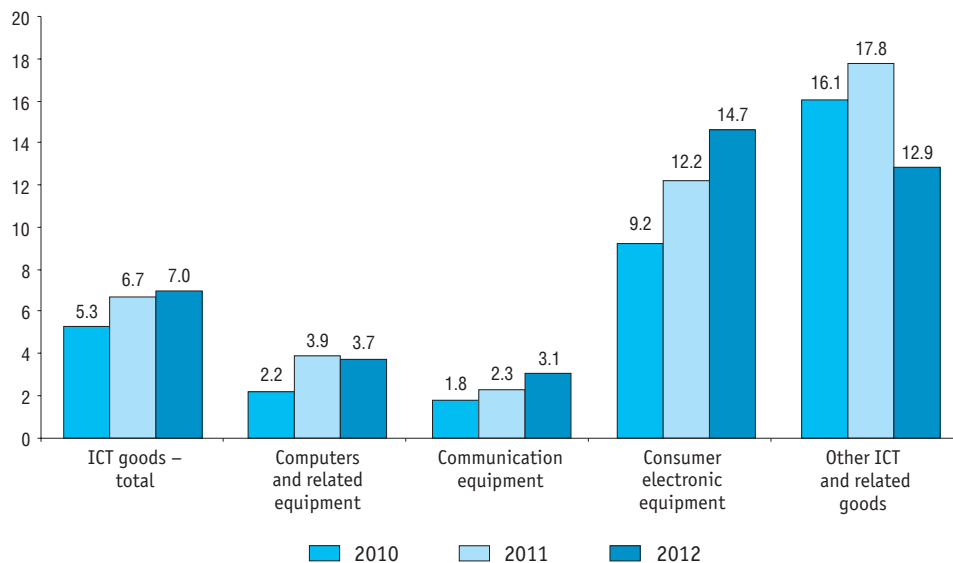
2.10.4. TRENDS IN IMPORTS OF ICT GOODS

(as a percentage of the previous year)



2.10.5. EXPORTS TO IMPORTS RATIO FOR ICT GOODS

(exports as a percentage of imports)

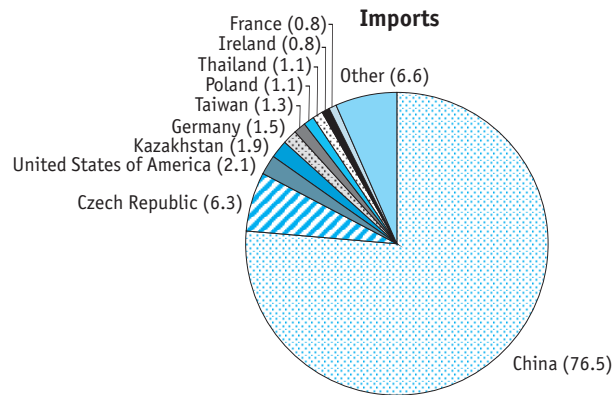
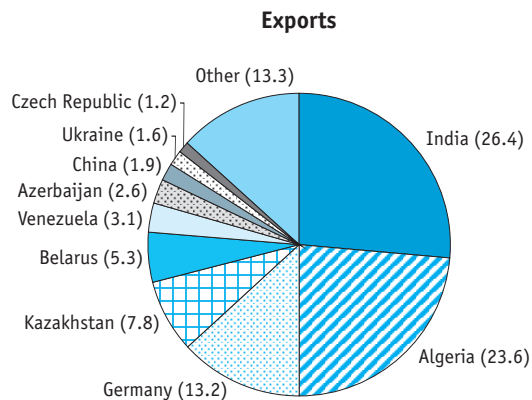


2.10.6. EXPORTS AND IMPORTS OF COMPUTERS

(million US dollars)

	2005	2010	2011	2012
Exports – total	58.7	99.0	222.0	217.9
To CIS countries	12.7	22.6	37.0	43.8
To other foreign countries	46.0	76.4	185.0	174.1
Imports – total	1356.4	4816.6	5286.6	5827.8
From CIS countries	5.9	7.7	18.4	120.6
From other foreign countries	1350.5	4808.9	5268.2	5707.2

2.10.7. PERCENTAGE DISTRIBUTION OF EXPORTS AND IMPORTS OF COMPUTERS BY COUNTRY: 2012

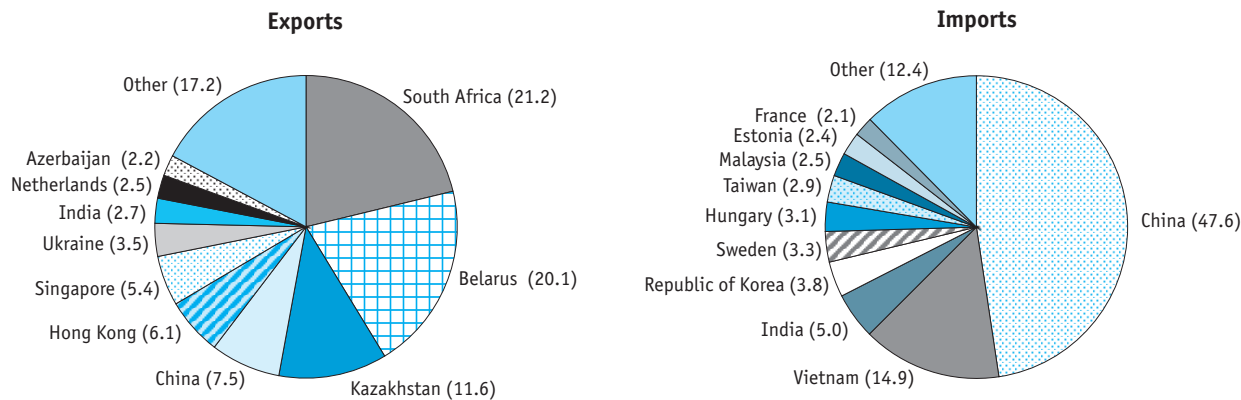


2.10.8. EXPORTS AND IMPORTS OF TELEPHONE AND TELEGRAPH EQUIPMENT

(million US dollars)

	2005	2010	2011	2012
Exports – total	41.0	82.9	123.3	183.3
To CIS countries	20.0	27.0	33.2	75.2
To other foreign countries	21.0	55.9	90.1	108.1
Imports – total	1163.8	6606.7	7745.9	7335.1
From CIS countries	3.2	3.3	10.5	8.9
From other foreign countries	1160.6	6603.4	7735.4	7326.2

2.10.9. PERCENTAGE DISTRIBUTION OF EXPORTS AND IMPORTS OF TELEPHONE AND TELEGRAPH EQUIPMENT BY COUNTRY: 2012

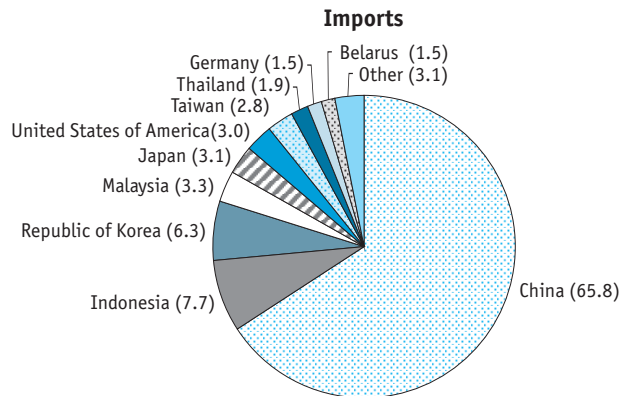
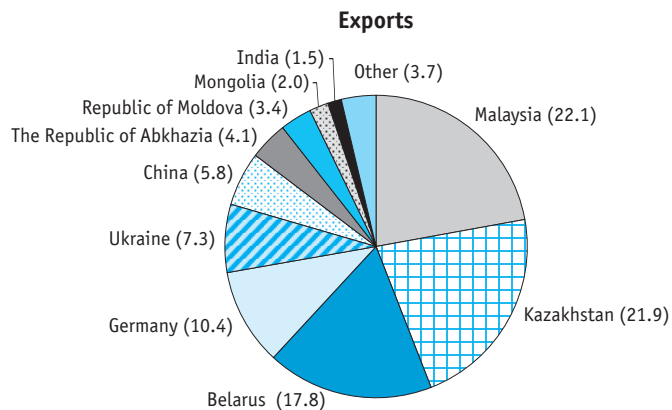


2.10.10. EXPORTS AND IMPORTS OF VIDEO EQUIPMENT

(million US dollars)

	2005	2010	2011	2012
Exports – total	1.9	1.6	9.9	4.1
To CIS countries	0.7	0.5	9.2	2.1
To other foreign countries	1.2	1.1	0.7	2.0
Imports – total	277.5	202.4	220.4	211.9
From CIS countries	0.3	0.2	0.3	3.5
From other foreign countries	277.2	202.2	220.1	208.4

2.10.11. PERCENTAGE DISTRIBUTION OF EXPORTS AND IMPORTS OF VIDEO EQUIPMENT BY COUNTRY: 2012

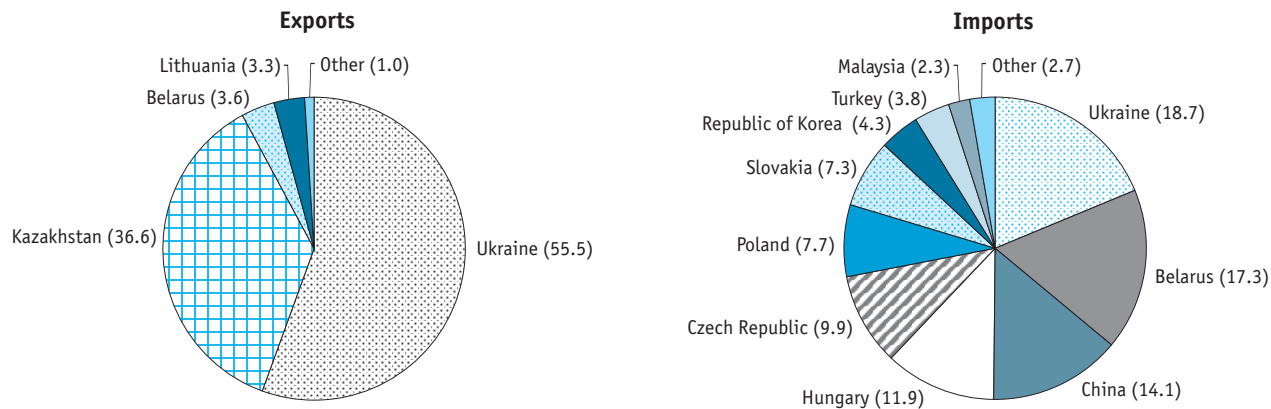


2.10.12. EXPORTS AND IMPORTS OF TV RECEIVERS

(million US dollars)

	2005	2010	2011	2012
Exports – total	10.6	260.0	376.1	505.7
To CIS countries	9.4	256.0	358.5	486.5
To other foreign countries	1.2	4.0	17.6	19.2
Imports – total	491.2	742.0	640.1	839.6
From CIS countries	61.4	98.4	163.1	303.6
From other foreign countries	429.8	643.6	477.0	536.0

2.10.13. PERCENTAGE DISTRIBUTION OF EXPORTS AND IMPORTS OF TV RECEIVERS BY COUNTRY: 2012

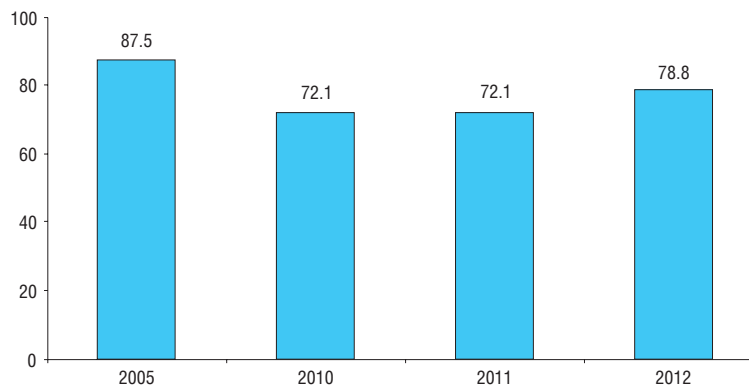


2.10.14. EXPORTS AND IMPORTS OF COMPUTER AND INFORMATION SERVICES

(million US dollars)

	2005	2010	2011	2012
Exports – total	422	1359	1753	2088
To CIS countries	30	105	154	217
To other foreign countries	392	1254	1599	1871
Imports – total	482	1884	2433	2651
From CIS countries	11	45	61	123
From other foreign countries	471	1839	2372	2528

2.10.15. EXPORTS TO IMPORTS RATIO FOR COMPUTER AND INFORMATION SERVICES

(exports as a percentage of imports)

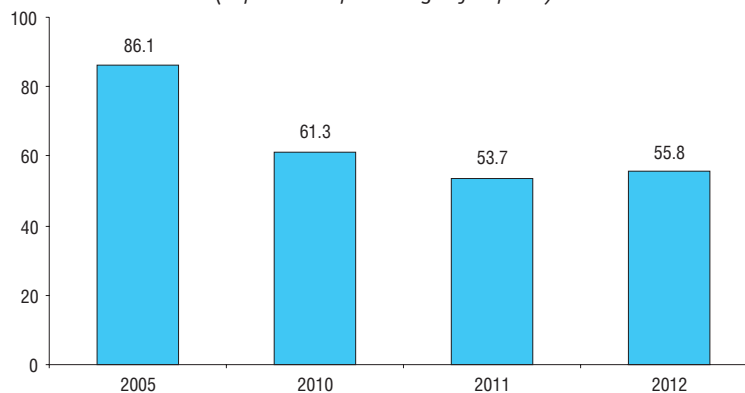
2.10.16. EXPORTS AND IMPORTS OF TELECOMMUNICATIONS SERVICES

(million US dollars)

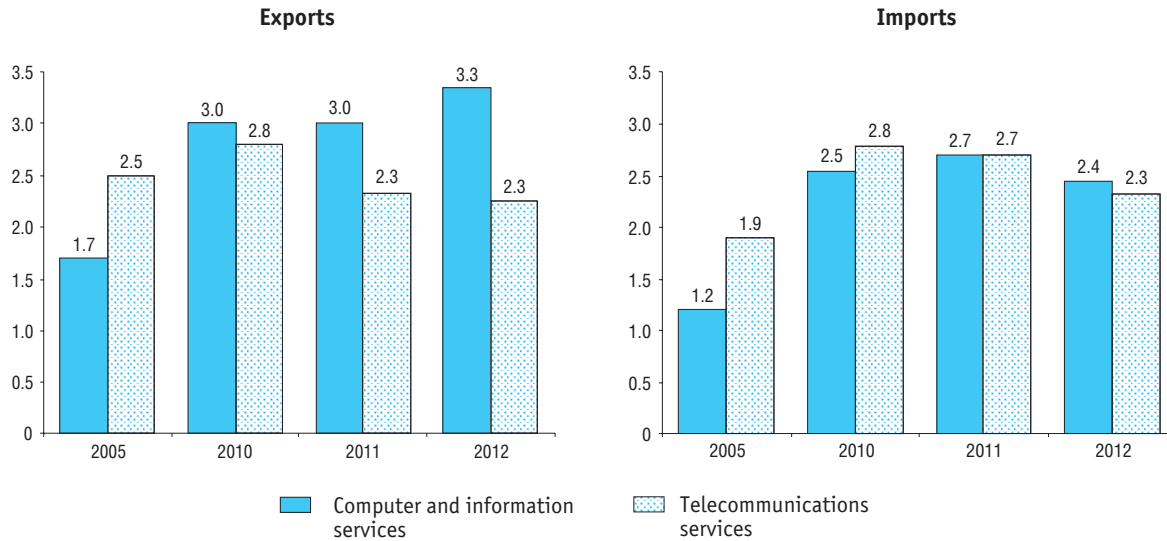
	2005	2010	2011	2012
Exports – total	620	1265	1349	1406
To CIS countries	126	273	241	252
To other foreign countries	494	992	1108	1154
Imports – total	720	2065	2513	2518
From CIS countries	223	535	618	662
From other foreign countries	497	1530	1895	1856

2.10.17. EXPORTS TO IMPORTS RATIO FOR TELECOMMUNICATIONS SERVICES

(exports as a percentage of imports)



2.10.18. ICT SERVICES AS A PERCENTAGE OF THE TOTAL VALUE OF EXPORTS AND IMPORTS OF SERVICES





3. Content and Media Sector

3.1. MAIN INDICATORS OF CONTENT AND MEDIA SECTOR ENTERPRISES' ACTIVITY

	2009	2010	2011	2012
Number of enterprises, <i>thousand; at the end of the year</i>	49.0	51.3	51.4	50.9
Employment, <i>thousand, head-count</i>	252.6	261.2	250.8	226.0
Gross value added*:				
billion roubles	189.8	206.4	208.3	225.9
as a percentage of GDP	0.6	0.5	0.4	0.4
Fixed capital investment, <i>billion roubles**</i>	5.4	5.4	8.6	9.5
Foreign investment received, <i>million US dollars</i>	88.7	168.0	54.1	51.2

* Without news agency activities (RCEA code (Rev. 1.1) – 92.4).

** Excluding data on small businesses.

Source (here and below in the section): estimated by HSE Institute for Statistical Studies and Economics of Knowledge on the basis of data provided by Federal State Statistics Service.

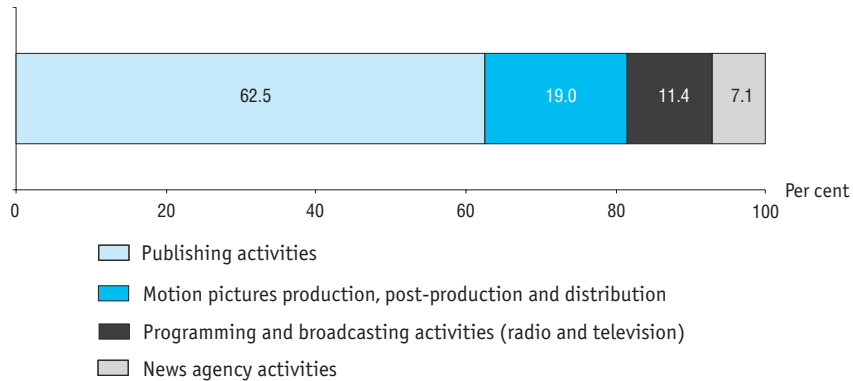
3.2. CONTENT AND MEDIA SECTOR ENTERPRISES BY ECONOMIC ACTIVITY

(thousand units; at the end of the year)

	RCEA Code (Rev. 1.1)	2010	2011	2012
Total		51.3	51.4	50.9
Publishing activities	22.1	32.9	32.5	31.8
Motion pictures production, post-production and distribution	92.1	9.3	9.6	9.7
Programming and broadcasting activities (radio and television)	92.2	5.6	5.7	5.8
News agency activities	92.4	3.5	3.6	3.6

3.3. PERCENTAGE DISTRIBUTION OF CONTENT AND MEDIA SECTOR ENTERPRISES BY ECONOMIC ACTIVITY: 2012

(at the end of the year)

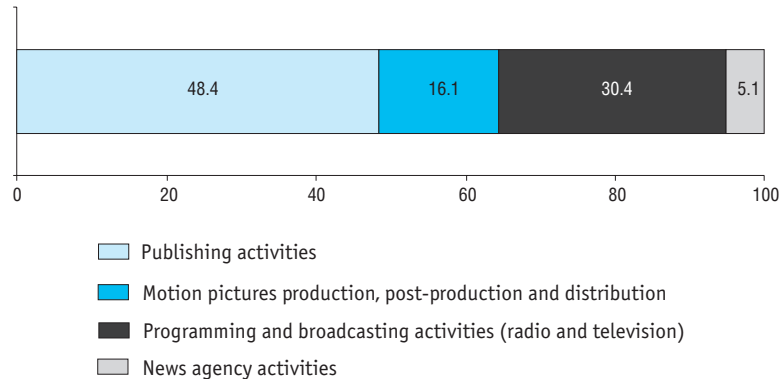


3.4. EMPLOYMENT IN CONTENT AND MEDIA SECTOR ENTERPRISES BY ECONOMIC ACTIVITY

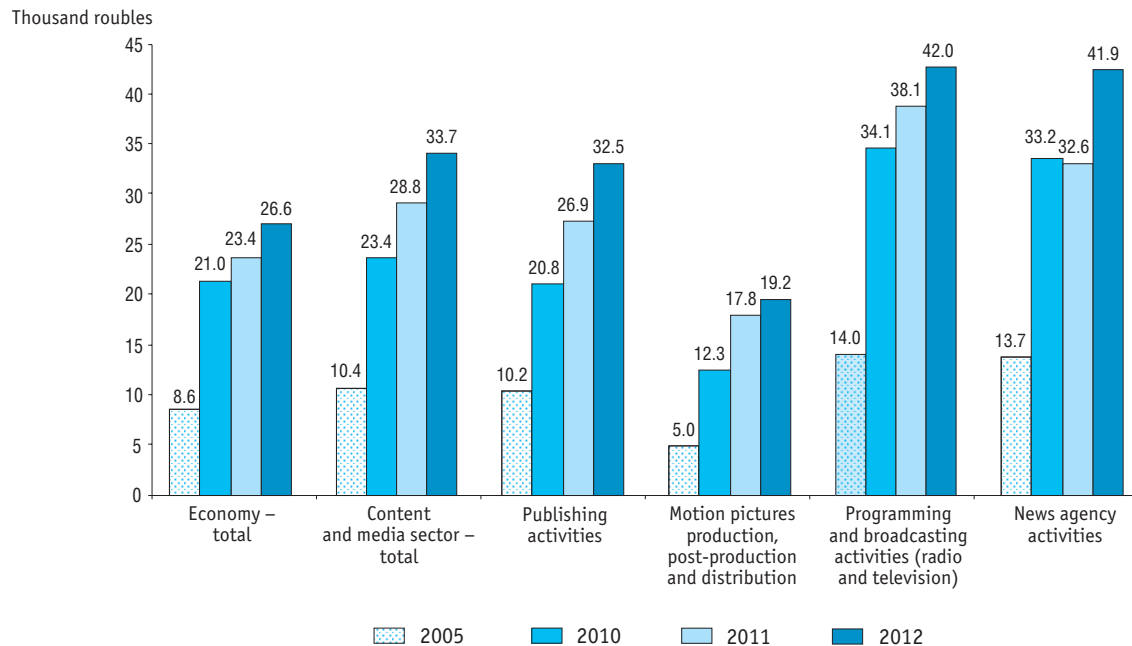
(thousand, head-count)

	RCEA Code 9 (Rev. 1.1)	2010	2011	2012
Total		261.2	250.8	226.0
Publishing activities	22.1	148.5	140.2	109.3
Motion pictures production, post-production and distribution	92.1	37.2	34.3	36.4
Programming and broadcasting activities (radio and television)	92.2	64.7	65.5	68.7
News agency activities	92.4	10.8	10.8	11.6

3.5. PERCENTAGE DISTRIBUTION OF EMPLOYMENT IN CONTENT AND MEDIA SECTOR ENTERPRISES BY ECONOMIC ACTIVITY: 2012



3.6. AVERAGE MONTHLY SALARY IN CONTENT AND MEDIA SECTOR ENTERPRISES BY ECONOMIC ACTIVITY



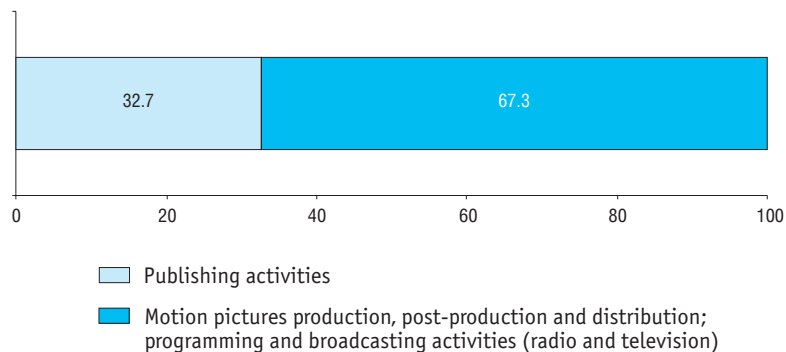
3.7. GROSS VALUE ADDED OF CONTENT AND MEDIA SECTOR ENTERPRISES BY ECONOMIC ACTIVITY*

(billion roubles)

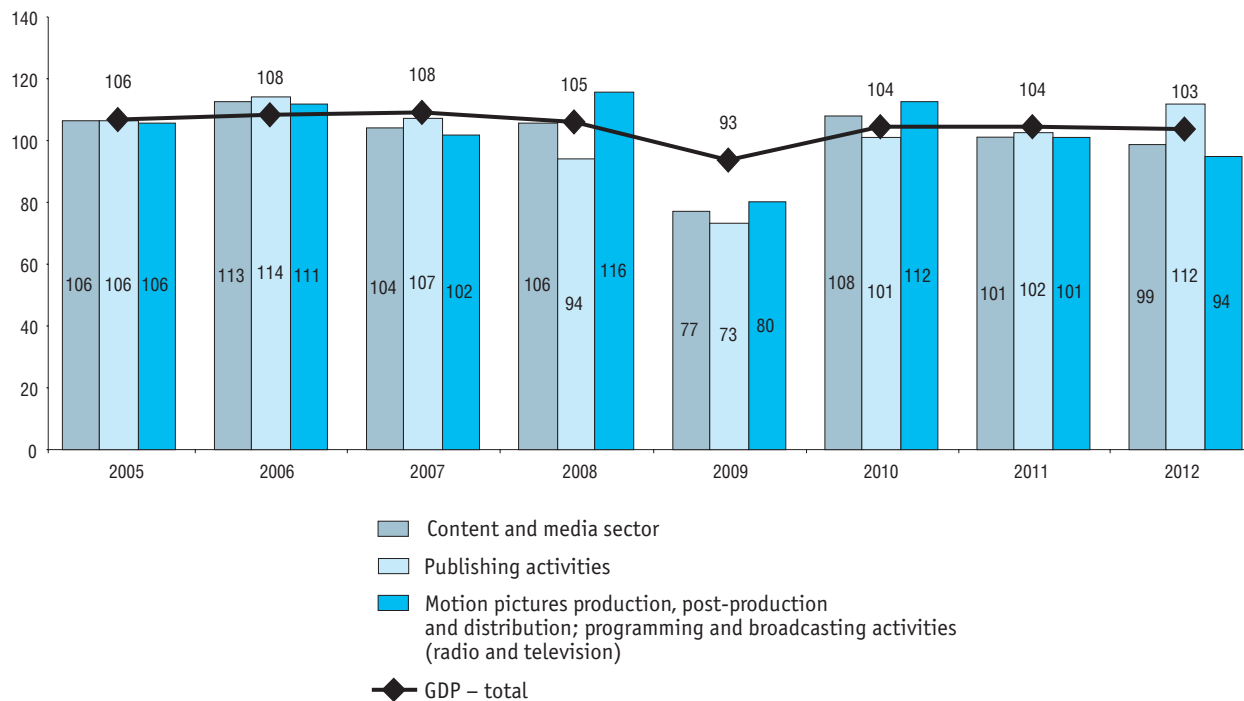
	RCEA code (Rev. 1.1)	2010	2011	2012
Total		206.4	208.3	225.9
Publishing activities	22.1	70.1	60.6	74.0
Motion pictures production, post-production and distribution; programming and broadcasting activities (radio and television)	92.1; 92.2	136.3	147.7	151.9

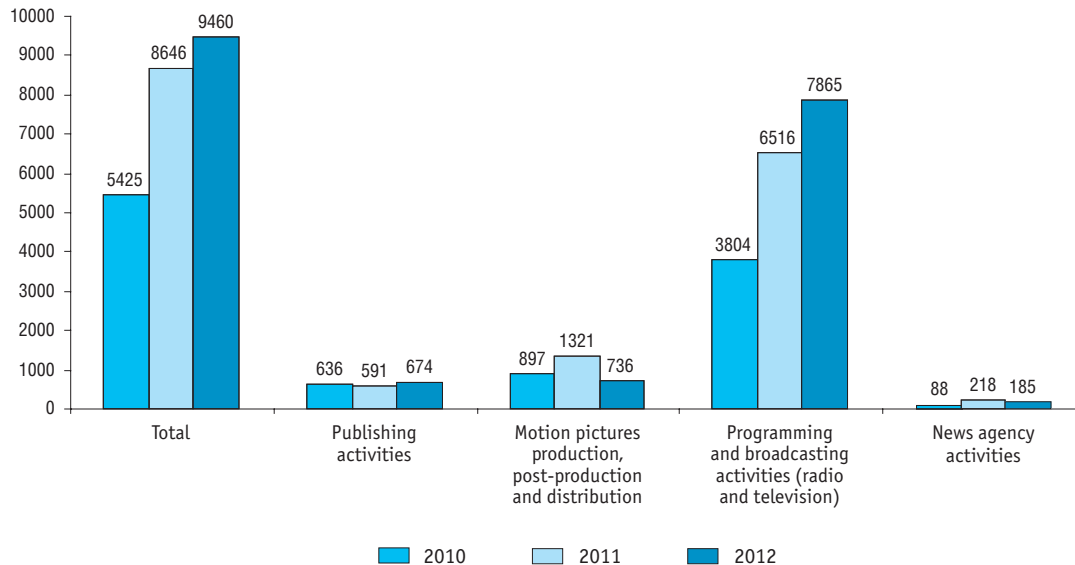
* Excluding data on news agency activities (RCEA code – 92.4).

3.8. PERCENTAGE DISTRIBUTION OF GROSS VALUE ADDED OF CONTENT AND MEDIA SECTOR ENTERPRISES BY ECONOMIC ACTIVITY: 2012



3.9. GVA ACTUAL VOLUME INDICATORS OF CONTENT AND MEDIA SECTOR ENTERPRISES BY ECONOMIC ACTIVITY (as a percentage of the previous year)



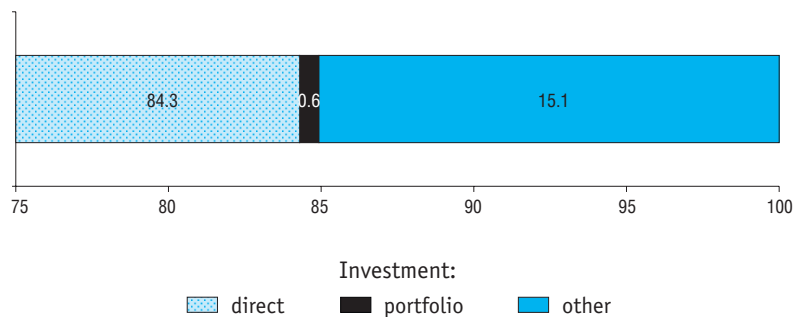
3.10. FIXED CAPITAL INVESTMENT IN CONTENT AND MEDIA SECTOR ENTERPRISES BY ECONOMIC ACTIVITY**(million roubles)*

* Excluding data on small businesses.

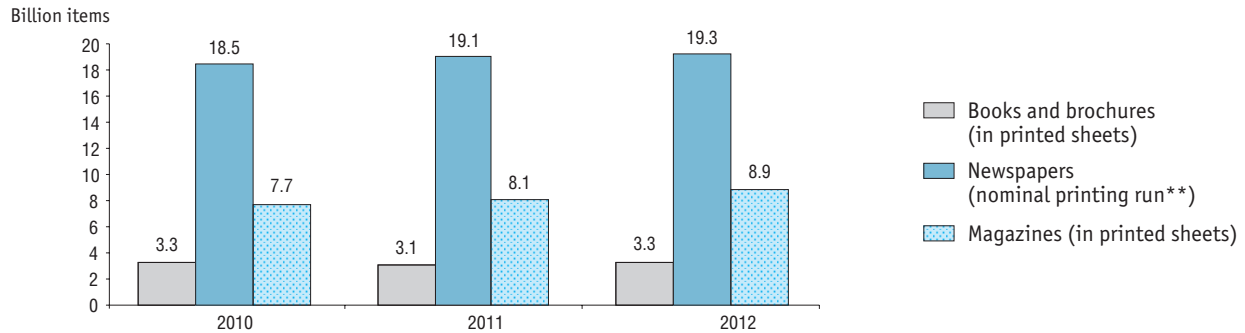
3.11. FOREIGN INVESTMENT IN CONTENT AND MEDIA SECTOR ENTERPRISES BY ECONOMIC ACTIVITY

	RCEA Code (Rev. 1.1)	Total investment, <i>thousand US dollars</i>			As a percentage of the total		
		2010	2011	2012	2010	2011	2012
Total		167964	54133	51153	100	100	100
Publishing activities	22.1	71263	43266	43531	42.4	79.9	85.1
Motion pictures production, post-production and distribution	92.1	42073	9928	5395	25.0	18.3	10.5
Programming and broadcasting activities (radio and television)	92.2	54519	743	2135	32.5	1.4	4.2
News agency activities	92.4	109	196	93	0.1	0.4	0.2

3.12. PERCENTAGE DISTRIBUTION OF FOREIGN INVESTMENT IN CONTENT AND MEDIA SECTOR ENTERPRISES BY TYPE: 2012



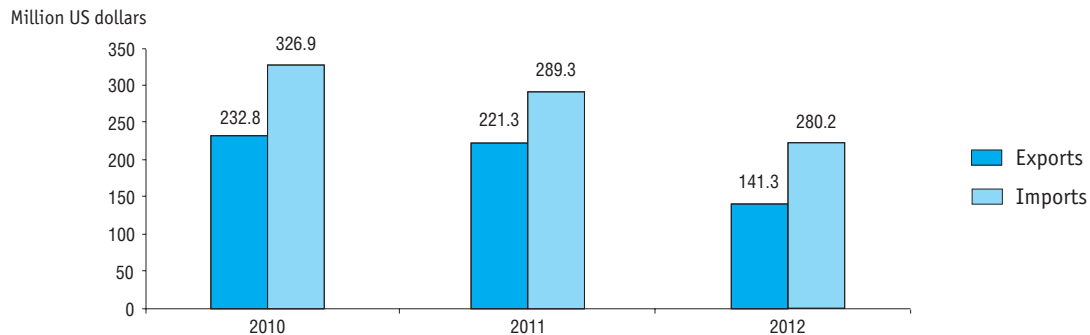
3.13. PRODUCTION OF BOOKS, NEWSPAPERS AND MAGAZINES*



* According to the Russian Classifier of Products by Economic Activity.

** Four columns, A2 format.

3.14. EXPORTS AND IMPORTS OF PRINTED PUBLICATIONS



3.15. MAIN INDICATORS OF CONTENT AND MEDIA SECTOR ENTERPRISES' ACTIVITIES BY REGION OF THE RUSSIAN FEDERATION: 2012

	Number of enterprises, <i>at the end of the year</i>	Employment, <i>thousand, head-count</i>
Russian Federation	50915	226.0
Central Federal District	25569	99.7
Belgorod Region	237	1.8
Bryansk Region	168	1.1
Vladimir Region	225	2.0
Voronezh Region	434	2.7
Ivanovo Region	213	0.9
Kaluga Region	224	1.3
Kostroma Region	146	0.8
Kursk Region	225	1.5
Lipetsk Region	215	1.1
Moscow Region	1591	5.4
Oryol Region	121	0.8
Ryazan Region	262	1.0
Smolensk Region	277	1.0
Tambov Region	149	1.0
Tver Region	351	2.7
Tula Region	256	1.3
Yaroslavl Region	367	1.4
Moscow	20108	72.0
Northwestern Federal District	5810	20.9
Republic of Karelia	215	1.0
Republic of Komi	240	1.5

(continued)

	Number of enterprises, <i>at the end of the year</i>	Employment, <i>thousand, head-count</i>
Arkhangelsk Region	348	1.3
Of which Nenets Autonomous District	21	0.1
Vologda Region	297	1.6
Kaliningrad Region	354	2.3
Leningrad Region	209	0.9
Murmansk Region	179	0.9
Novgorod Region	97	0.9
Pskov Region	131	0.8
Saint-Petersburg	3740	9.6
Southern Federal District	2462	13.6
Republic of Adygeya	68	0.7
Republic of Kalmykia	45	0.4
Krasnodar Territory	1004	4.4
Astrakhan Region	154	0.9
Volgograd Region	397	2.6
Rostov Region	794	4.7
North Caucasian Federal District	1085	7.8
Republic of Dagestan	322	2.2
Republic of Ingushetia	32	0.4
Kabardino-Balkarian Republic	98	0.7
Karachaevo-Cherkceccian Republic	42	0.4
Republic of North Ossetia–Alania	110	0.7
Chechen Republic	84	1.2
Stavropol Territory	397	2.1

(continued)

	Number of enterprises, <i>at the end of the year</i>	Employment, <i>thousand, head-count</i>
Volga Federal District	6272	36.2
Republic of Bashkortostan	749	6.6
Republic of Mari El	152	0.9
Republic of Mordovia	118	0.9
Republic of Tatarstan	1015	5.7
Udmurtian Republic	303	1.6
Chuvash Republic	180	1.1
Perm Territory	682	2.5
Kirov Region	269	1.6
Nizhni Novgorod Region	733	4.5
Orenburg Region	337	2.6
Penza Region	193	1.0
Samara Region	856	3.7
Saratov Region	463	2.3
Ulyanovsk Region	222	1.3
Urals Federal District	3498	16.2
Kurgan Region	145	0.8
Sverdlovsk Region	1584	4.9
Tyumen Region	909	6.9
Of which		
Khanty-Mansi Autonomous District – Yugra	372	2.9
Yamalo-Nenets Autonomous District	105	2.1
Chelyabinsk Region	860	3.6

(continued)

	Number of enterprises, <i>at the end of the year</i>	Employment, <i>thousand, head-count</i>
Siberian Federal District	4560	21.9
Republic of Altai	34	0.3
Republic of Buryatia	173	1.0
Republic of Tyva	45	0.3
Republic of Khakasia	115	0.8
Altai Territory	418	2.3
Zabaikalsk Territory	137	1.1
Krasnoyarsk Territory	728	4.0
Irkutsk Region	591	2.8
Kemerovo Region	485	2.6
Novosibirsk Region	1110	3.4
Omsk Region	415	2.6
Tomsk Region	309	0.7
Far Eastern Federal District	1659	9.7
Republic of Sakha (Yakutia)	297	2.0
Kamchatka Territory	94	0.3
Primorsky Territory	482	1.8
Khabarovsk Territory	371	2.6
Amur Region	189	1.2
Magadan Region	51	0.4
Sakhalin Region	131	0.7
Jewish Autonomous Region	34	0.3
Chukotka Autonomous Region	10	0.2



4. ICT Usage by Enterprises

4.1. Main Indicators of ICT Usage by Enterprises

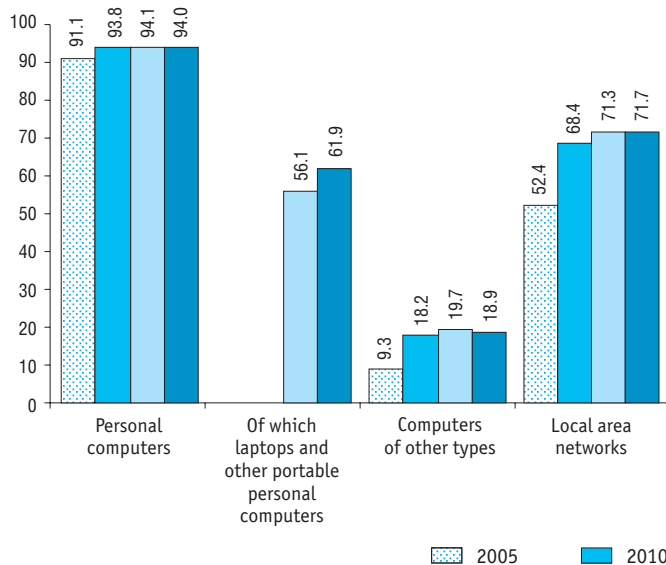
4.1.1. ENTERPRISES USING ICT

	2005	2010	2011	2012
Enterprises surveyed	150934	176684	178331	185053
Enterprises using:				
personal computers	137436	165809	167861	174011
of which laptops and other portable personal computers	...	...	100073	114630
computers of other types	13990	32070	35165	35067
local area networks	79054	120825	127062	132681
of which wireless	...	...	35602	41375
global information networks	81910	147311	152738	162012
of which:				
Internet	80444	145509	151261	160892
Intranet	...	23143	28782	27209
Extranet	...	9452	10850	11905
other global networks	10805	11085	12313	11489
e-mail	84538	144741	148218	157664
dedicated communication lines	28618	57722	59334	63865
Enterprises having a website	22348	50324	58908	69905

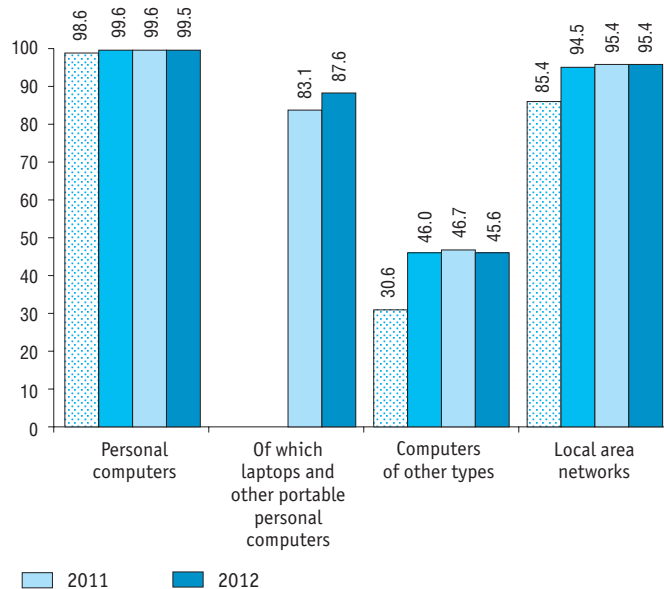
Sources (here and below in the section): estimated by HSE Institute for Statistical Studies and Economics of Knowledge on the basis of data provided by Federal State Statistics Service.

4.1.2. USAGE OF COMPUTING MACHINERY

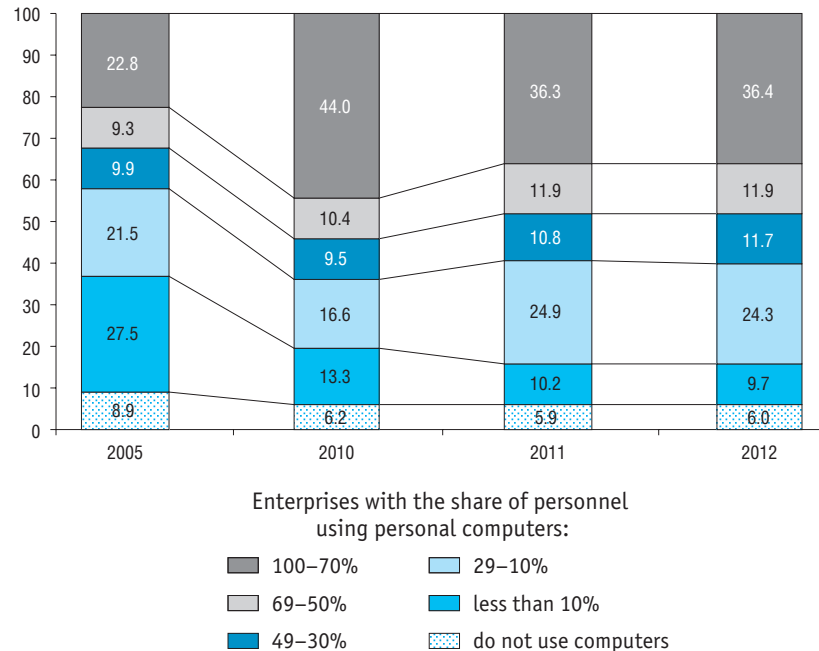
Enterprises using computing machinery as a percentage of the total number of enterprises



Personnel of enterprises using computing machinery as a percentage of the total employment

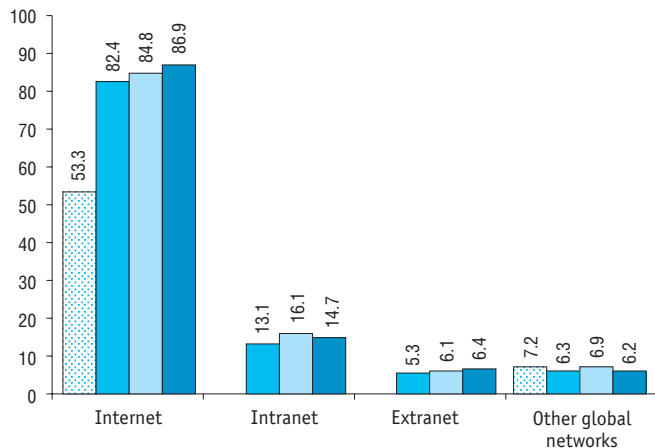


4.1.3. DISTRIBUTION OF ENTERPRISES BY SHARE OF PERSONNEL USING COMPUTERS

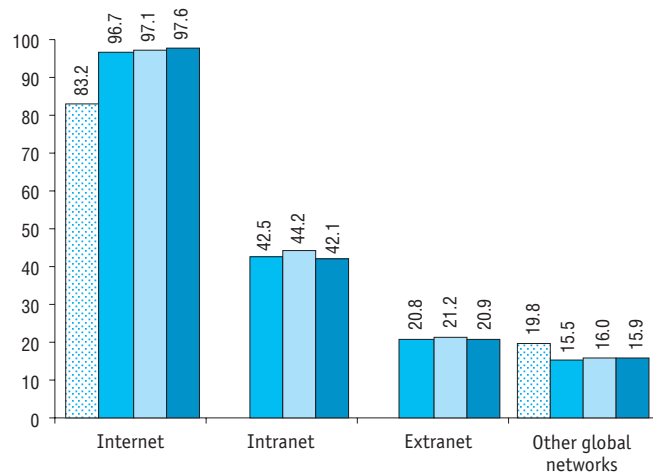
(as a percentage of the total number of enterprises)

4.1.4. USAGE OF GLOBAL INFORMATION NETWORKS IN ENTERPRISES BY TYPE

Enterprises using global networks as a percentage of the total number of enterprises



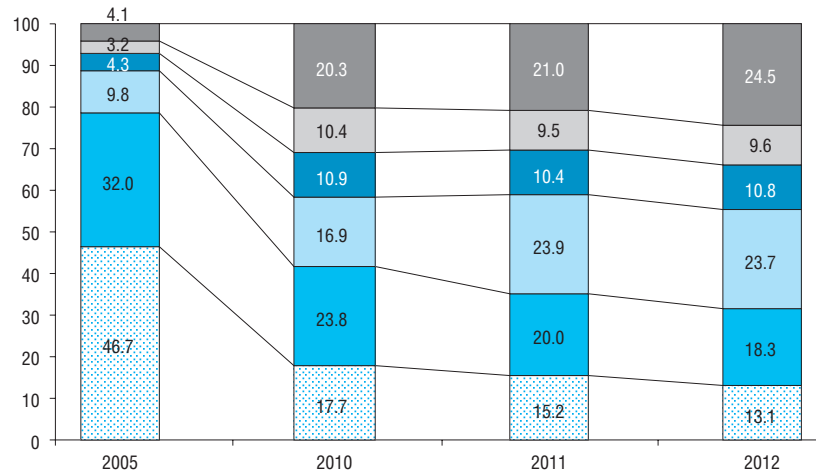
Personnel of enterprises using global networks as a percentage of the total employment



2005
 2010
 2011
 2012

4.1.5. DISTRIBUTION OF ENTERPRISES BY SHARE OF PERSONNEL USING THE INTERNET

(as a percentage of the total number of enterprises)

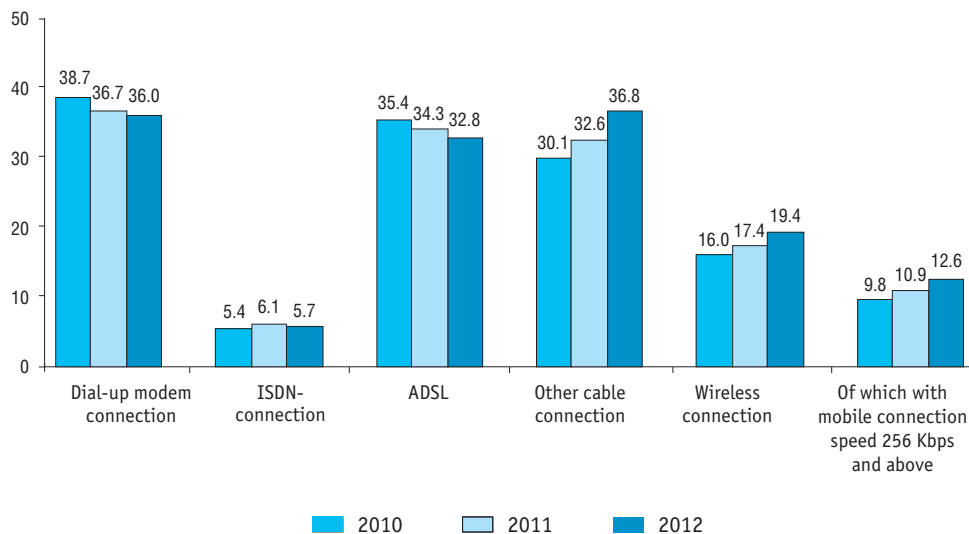


Enterprises with the share of personnel using the Internet:

- 100-70%
 - 69-50%
 - 49-30%
- 29-10%
 - less than 10%
 - do not use the Internet

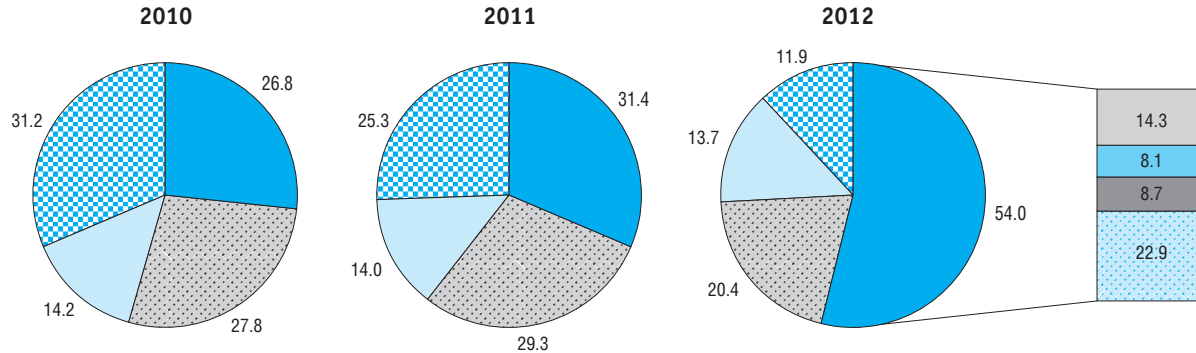
4.1.6. DISTRIBUTION OF ENTERPRISES BY TYPE OF INTERNET CONNECTION

(as a percentage of the total number of enterprises)



4.1.7. DISTRIBUTION OF ENTERPRISES BY INTERNET CONNECTION SPEED

(as a percentage of the total number of enterprises using the Internet)

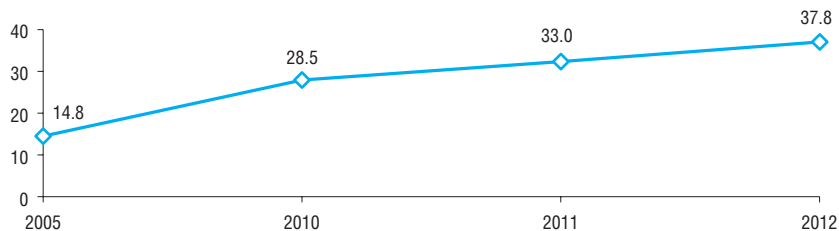


Maximum Internet connection speed:

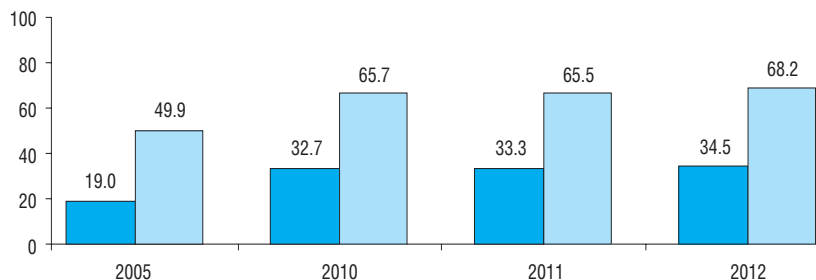
- 2 Mbps and above
- 512 Kbps – 1.9 Mbps
- 256–511 Kbps
- 256 Kbps and below
- over 100 Mbps
- 30.1–100.0 Mbps
- 10.1–30.0 Mbps
- 2.0–10.0 Mbps

4.1.8. ENTERPRISES WITH A WEBSITE

(as a percentage of the total number of enterprises)



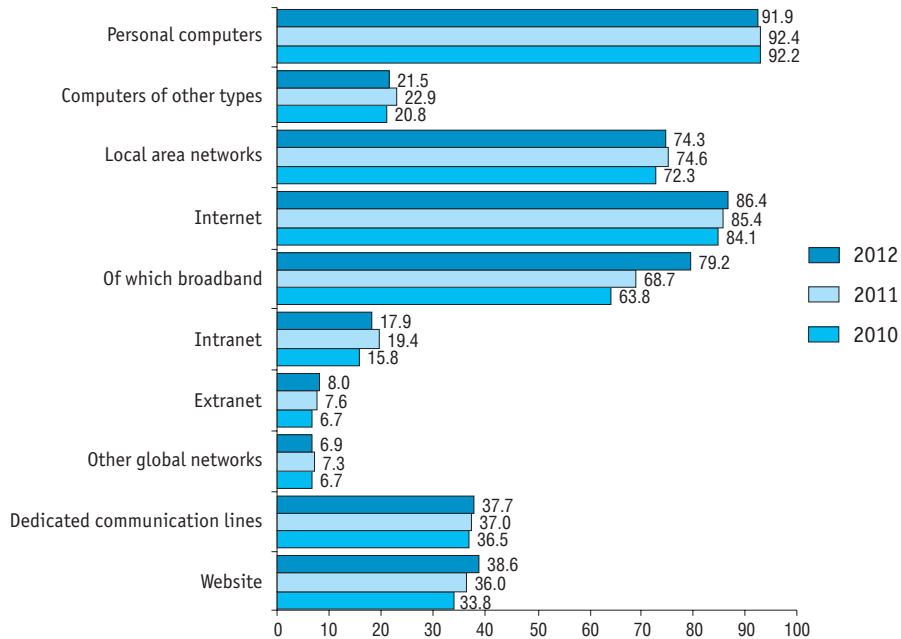
4.1.9. ENTERPRISES USING DEDICATED COMMUNICATION LINES



■ Enterprises using dedicated communication lines as a percentage of the total number of enterprises

■ Personnel using dedicated communication lines as a percentage of the total employment

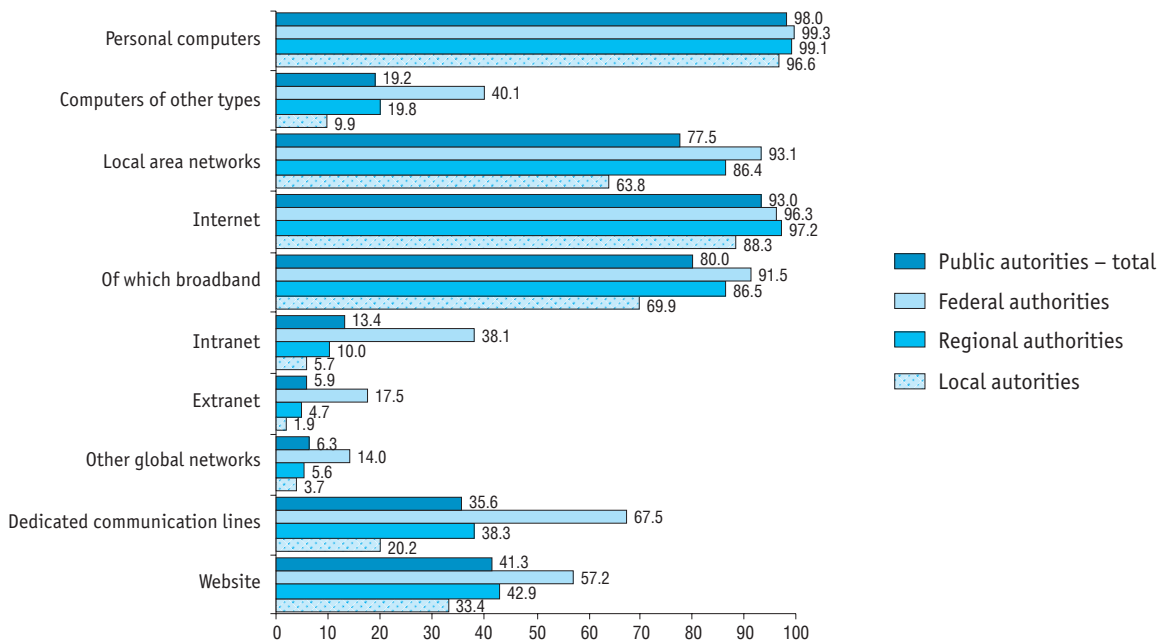
4.1.10. ICT USAGE IN THE BUSINESS ENTERPRISE SECTOR*

(as a percentage of the total number of enterprises)

* Enterprises engaged in economic activities with the following RCEA codes (Rev. 1.1): C, D, E, F, G, H, I, K.

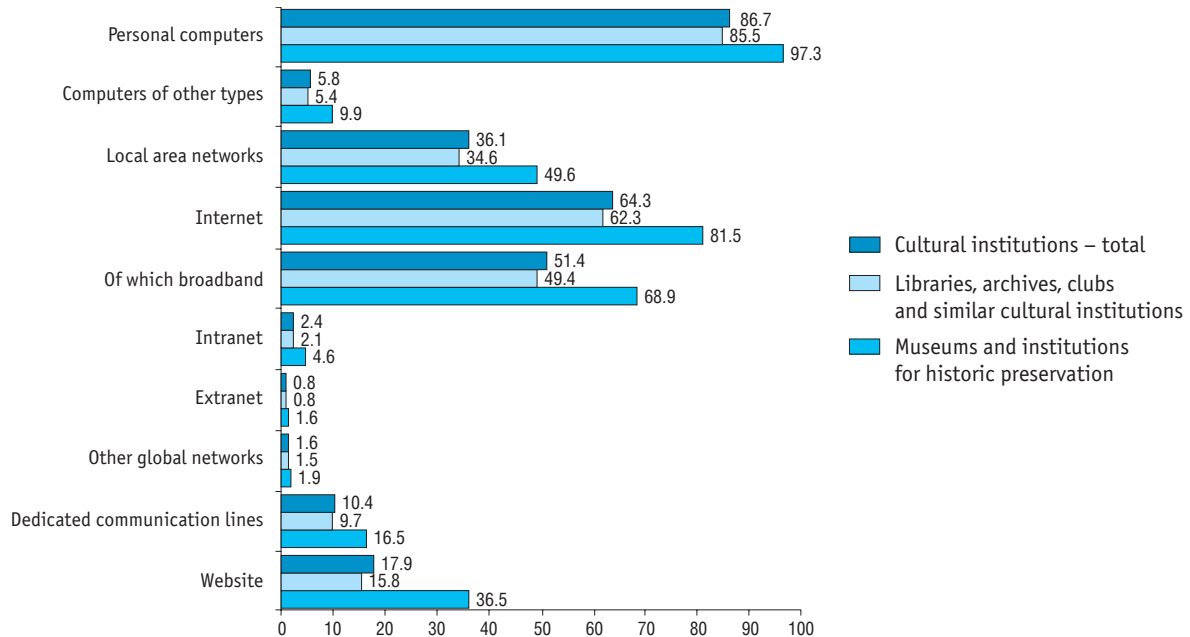
4.1.11. ICT USAGE BY PUBLIC AUTHORITIES: 2012*

(as a percentage of the total number of enterprises)



* The data is presented according to the Russian Classification of Government Authorities and Agencies (RCGAA) for the following groups 'Public authorities in the Russian Federation' (code 10000), 'Public authorities in the regions of the Russian Federation' (code 20000), 'Local authorities in the Russian Federation' (code 30000).

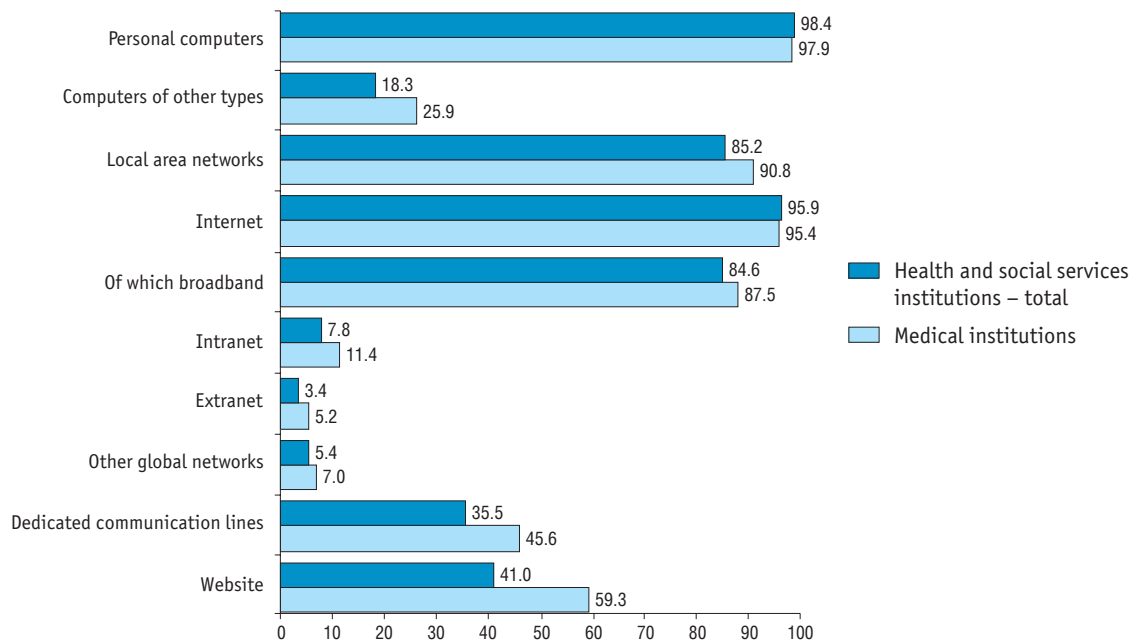
4.1.12. ICT USAGE BY CULTURAL INSTITUTIONS: 2012*

(as a percentage of the total number of institutions)

* Consolidated data is presented for the types of economic activity with the following RCEA codes: 'Leisure, entertainment, cultural and sporting activity' (code 92); 'Libraries, archives, public clubs' activity' (code 92.51); 'Museums' activity, preservation of historic sites and buildings' (Code 92.52).

4.1.13. ICT USAGE BY HEALTH AND SOCIAL SERVICES INSTITUTIONS: 2012*

(as a percentage of the total number of institutions)



* The data is presented for the types of economic activity with the following RCEA codes (Rev. 1.1): 'Health and social services institutions' (code N); 'Medical institutions' (85.11).

4.1.14. ENTERPRISES USING COMPUTING MACHINERY BY ECONOMIC ACTIVITY

(as a percentage of the total number of enterprises)

	Enterprises using							
	personal computers				other types of computers			
	2005	2010	2011	2012	2005	2010	2011	2012
Total	91.1	93.8	94.1	94.0	9.3	18.2	19.7	18.9
Mining and quarrying	93.9	93.9	94.6	93.7	16.5	31.7	30.0	31.4
Manufacture of food products and beverages	91.3	97.6	97.6	97.3	11.3	25.6	27.5	26.6
Manufacture of chemicals and chemical products	96.8	98.0	98.3	98.4	18.6	31.4	34.5	29.2
Manufacture of basic metals	96.0	97.7	97.3	96.9	15.6	28.8	30.9	28.9
Manufacture of machinery and equipment, n.e.c.	91.3	97.7	97.4	96.8	12.2	26.3	28.8	27.6
Manufacture of electrical machinery and apparatus	98.5	98.8	98.5	98.5	18.9	30.0	30.7	29.8
Electricity, gas and water supply	90.9	90.5	91.4	91.5	10.7	19.4	20.7	20.2
Construction	93.2	96.6	96.0	94.7	6.2	18.4	20.7	18.9
Wholesale and retail trade	86.0	93.1	93.9	94.4	6.7	22.4	25.5	24.6
Transport	91.1	94.5	93.6	93.4	9.0	21.6	22.9	21.9
Communications	99.6	97.8	98.9	99.3	34.2	50.8	52.3	47.8
Financial intermediation	96.0	96.5	97.1	96.8	34.4	45.7	45.5	41.3
Research and development	96.3	97.5	97.6	97.6	19.2	31.3	31.3	31.9
Public administration; compulsory social security	93.3	98.3	98.3	98.0	8.5	16.9	17.7	17.0
Higher education	98.1	98.8	98.8	99.2	22.0	34.0	36.5	35.2
Health and social work	95.3	98.0	97.9	98.4	4.7	13.7	16.3	18.3
Other activities	86.6	87.3	88.0	88.3	6.8	12.1	13.5	12.5

4.1.15. ENTERPRISES USING LOCAL AREA NETWORKS BY ECONOMIC ACTIVITY

(as a percentage of the total number of enterprises)

	2005	2010	2011	2012
Total	52.4	68.4	71.3	71.7
Mining and quarrying	69.8	82.2	85.1	84.7
Manufacture of food products and beverages	63.6	85.9	86.9	87.0
Manufacture of chemicals and chemical products	82.8	89.0	91.6	90.8
Manufacture of basic metals	75.7	86.5	88.1	88.2
Manufacture of machinery and equipment, n.e.c.	67.2	85.9	89.0	88.6
Manufacture of electrical machinery and apparatus	83.6	90.4	90.4	89.7
Electricity, gas and water supply	55.8	64.0	67.3	69.2
Construction	58.6	79.6	82.7	80.7
Wholesale and retail trade	47.9	72.6	75.9	76.8
Transport	59.8	77.9	79.2	78.9
Communications	85.4	90.5	92.6	91.7
Financial intermediation	83.7	87.8	88.6	88.8
Research and development	76.1	83.9	84.9	86.4
Public administration; compulsory social security	44.3	67.6	71.0	72.2
Higher education	85.2	91.3	92.9	92.7
Health and social work	51.4	80.4	83.7	85.2
Other activities	47.0	54.3	56.6	57.2

4.1.16. ENTERPRISES USING GLOBAL INFORMATION NETWORKS BY ECONOMIC ACTIVITY

(as a percentage of the total number of enterprises)

	Enterprises using							
	global networks				Of which			
					Internet			
	2005	2010	2011	2012	2005	2010	2011	2012
Total	54.3	83.4	85.6	87.5	53.3	82.4	84.8	86.9
Mining and quarrying	74.1	91.0	91.8	91.3	73.6	90.4	91.2	91.1
Manufacture of food products and beverages	66.2	94.0	94.6	95.1	66.1	93.8	94.4	94.9
Manufacture of chemicals and chemical products	88.1	96.4	97.0	97.5	88.1	96.4	97.0	97.4
Manufacture of basic metals	78.1	94.9	95.2	95.5	78.0	94.6	94.8	95.4
Manufacture of machinery and equipment, n.e.c.	71.8	95.0	95.3	94.9	71.6	95.0	95.1	94.8
Manufacture of electrical machinery and apparatus	86.9	96.3	96.0	96.9	86.9	96.3	96.0	96.7
Electricity, gas and water supply	53.3	77.4	82.4	85.1	53.2	77.1	82.0	84.7
Construction	58.8	92.2	92.5	92.1	58.1	91.5	91.8	91.7
Wholesale and retail trade	55.6	88.1	89.0	90.4	55.2	87.5	88.6	90.1
Transport	56.8	88.0	87.7	88.6	52.4	80.3	79.9	82.0
Communications	94.3	95.4	96.2	95.8	94.0	93.8	94.7	93.9
Financial intermediation	85.1	93.7	94.5	95.2	83.3	93.5	93.9	95.0
Research and development	85.0	94.6	94.7	95.4	85.0	94.5	94.7	95.4
Public administration; compulsory social security	42.8	84.9	88.6	91.4	41.0	83.2	87.6	90.8
Higher education	91.1	97.2	97.6	98.1	91.0	97.1	97.6	98.1
Health and social work	48.4	93.2	94.5	96.0	47.8	93.0	94.4	95.9
Other activities	52.2	72.2	74.5	77.5	51.9	71.8	74.2	77.2

(continued)

	Of which								
	Intranet			Extranet			other global networks		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
Total	13.1	16.1	14.7	5.3	6.1	6.4	6.3	6.9	6.2
Mining and quarrying	25.9	28.0	25.2	12.7	13.9	12.6	9.6	10.7	9.5
Manufacture of food products and beverages	16.0	19.5	18.6	8.0	8.9	9.4	6.6	7.5	7.6
Manufacture of chemicals and chemical products	27.0	28.1	26.2	14.2	14.0	14.3	9.1	9.7	8.3
Manufacture of basic metals	23.0	25.7	23.1	8.9	10.7	10.9	8.2	9.0	6.9
Manufacture of machinery and equipment, n.e.c.	19.5	23.2	21.2	7.9	8.9	7.5	7.2	8.1	7.6
Manufacture of electrical machinery and apparatus	21.4	25.4	22.5	8.4	10.7	9.1	7.1	7.9	7.1
Electricity, gas and water supply	15.0	17.2	16.0	7.1	8.1	7.9	5.1	6.1	5.8
Construction	11.7	15.9	13.2	5.0	6.4	6.2	5.7	7.2	6.1
Wholesale and retail trade	18.1	23.6	23.9	8.9	9.0	11.1	8.8	8.5	8.4
Transport	23.6	27.3	27.0	6.3	7.3	8.2	8.7	8.0	9.5
Communications	46.7	50.2	43.7	24.6	27.0	26.1	18.9	19.7	17.4
Financial intermediation	51.1	51.2	51.7	23.2	22.8	24.4	20.1	19.5	18.8
Research and development	24.5	26.3	25.7	8.3	9.1	10.8	7.8	8.7	9.0
Public administration; compulsory social security	10.5	13.1	11.7	3.6	4.3	4.5	6.1	6.5	5.4
Higher education	37.1	40.4	38.5	17.3	18.5	19.1	12.4	14.3	13.2
Health and social work	5.4	9.3	7.8	2.1	3.2	3.4	4.7	5.7	5.4
Other activities	7.4	9.7	7.9	3.0	3.4	3.6	3.8	4.7	3.8

4.1.17. ENTERPRISES BY TYPE OF INTERNET CONNECTION AND ECONOMIC ACTIVITY

(as a percentage of the total number of enterprises)

	Dial-up modem connection		ISDN-connection		ADSL		Other cable connections		Wireless connection		Of which with mobile connection speed 256 Kbps and above	
	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012
Total	36.7	36.0	6.1	5.7	34.3	32.8	32.6	36.8	17.4	19.4	10.9	12.6
Mining and quarrying	25.0	22.3	5.8	4.7	36.5	32.2	44.4	48.9	43.2	44.8	26.4	28.2
Manufacture of food products and beverages	31.5	30.0	7.8	6.3	42.1	39.3	40.8	45.9	25.8	27.6	15.7	18.0
Manufacture of chemicals and chemical products	24.1	21.6	6.0	5.4	35.0	29.0	62.4	68.8	31.5	36.2	22.5	25.8
Manufacture of basic metals	24.1	24.7	7.0	5.9	36.9	31.3	51.1	56.3	29.7	30.6	18.3	19.5
Manufacture of machinery and equipment, n.e.c.	27.6	24.3	6.1	4.3	36.0	32.1	53.4	57.2	27.5	30.0	16.9	18.2
Manufacture of electrical machinery and apparatus	25.3	22.7	5.8	5.4	37.1	34.1	58.7	65.5	25.7	28.0	17.3	20.4
Electricity, gas and water supply	35.0	35.5	5.2	4.8	34.7	33.3	29.9	32.9	21.8	23.7	15.3	17.3
Construction	32.4	30.4	7.1	6.3	33.8	30.7	39.5	43.8	27.6	29.8	18.6	20.8
Wholesale and retail trade	32.0	31.0	10.6	11.3	35.7	35.5	47.5	52.4	26.9	29.7	18.8	21.4
Transport	29.6	28.2	5.3	4.5	30.3	29.0	34.7	38.6	23.4	25.0	14.4	16.2
Communications	25.1	24.2	9.0	8.2	38.7	36.0	72.5	74.9	38.1	40.1	26.1	28.3
Financial intermediation	22.5	21.3	9.2	8.8	48.2	47.1	69.5	72.2	26.5	28.7	19.6	22.2
Research and development	27.0	25.5	5.3	4.3	30.4	27.4	61.7	66.3	21.1	24.5	13.1	15.6
Public administration; compulsory social security	44.4	44.6	5.3	5.1	36.0	34.5	26.2	30.1	13.2	15.4	7.7	9.4
Higher education	26.2	24.4	6.7	5.6	39.6	35.1	63.3	68.0	29.0	29.8	15.9	15.5
Health and social work	48.4	45.6	6.8	6.0	45.3	45.3	24.3	32.0	13.1	15.5	7.4	9.1
Other activities	33.4	33.8	4.9	4.6	26.6	25.5	25.3	28.6	13.3	14.6	8.1	9.2

4.1.18. ENTERPRISES WITH A WEBSITE BY ECONOMIC ACTIVITY

(as a percentage of the total number of enterprises)

	2005	2010	2011	2012
Total	14.8	28.5	33.0	37.8
Mining and quarrying	16.4	27.9	30.0	33.2
Manufacture of food products and beverages	22.2	42.7	44.6	47.5
Manufacture of chemicals and chemical products	48.2	64.2	66.5	66.8
Manufacture of basic metals	39.8	61.6	61.7	65.7
Manufacture of machinery and equipment, n.e.c.	35.7	60.0	62.5	63.9
Manufacture of electrical machinery and apparatus	47.9	67.3	69.3	71.8
Electricity, gas and water supply	10.2	24.0	29.2	33.8
Construction	13.7	31.2	34.3	37.0
Wholesale and retail trade	14.2	35.7	35.5	39.5
Transport	10.8	23.2	24.4	28.3
Communications	42.9	62.5	65.7	65.1
Financial intermediation	38.8	54.9	57.2	61.6
Research and development	41.8	63.7	64.8	67.9
Public administration; compulsory social security	8.2	24.6	30.5	37.5
Higher education	50.4	77.2	79.1	83.2
Health and social work	7.4	18.1	31.6	41.0
Other activities	14.3	23.1	25.1	28.2

4.1.19. ENTERPRISES HAVING DEDICATED COMMUNICATION LINES BY ECONOMIC ACTIVITY

(as a percentage of the total number of enterprises)

	2005	2010	2011	2012
Total	19.0	32.7	33.3	34.5
Mining and quarrying	32.0	46.6	48.5	48.1
Manufacture of food products and beverages	23.8	43.2	43.4	45.8
Manufacture of chemicals and chemical products	44.6	56.3	53.1	56.1
Manufacture of basic metals	34.3	48.8	49.6	50.8
Manufacture of machinery and equipment, n.e.c.	27.8	47.2	46.9	48.3
Manufacture of electrical machinery and apparatus	37.4	52.1	51.4	51.9
Electricity, gas and water supply	19.8	29.7	30.1	30.9
Construction	14.9	34.8	35.9	35.7
Wholesale and retail trade	18.2	43.1	44.8	46.2
Transport	21.3	36.9	36.8	37.4
Communications	62.2	73.4	74.2	76.5
Financial intermediation	61.2	73.5	72.4	71.5
Research and development	36.8	50.7	49.3	50.9
Public administration; compulsory social security	15.8	31.0	31.5	32.8
Higher education	50.6	62.9	61.2	64.5
Health and social work	6.7	27.5	30.2	35.5
Other activities	15.0	22.6	22.3	22.7

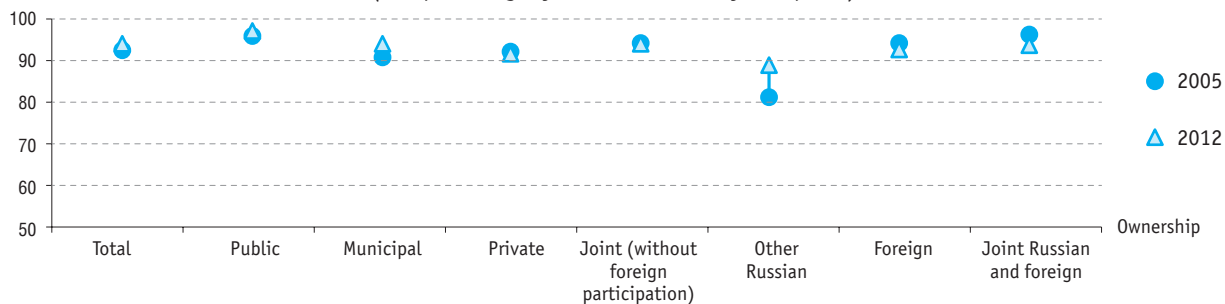
4.1.20. ENTERPRISES USING COMPUTING MACHINERY BY OWNERSHIP

(as a percentage of the total number of enterprises)

	Enterprises using							
	personal computers				other types of computers			
	2005	2010	2011	2012	2005	2010	2011	2012
Total	91.1	93.8	94.1	94.0	9.3	18.2	19.7	18.9
Russian ownership	90.9	94.0	94.2	94.2	8.8	17.3	18.8	18.0
Public	96.8	99.1	99.2	99.1	12.5	24.5	25.9	25.3
Municipal	88.0	92.7	93.2	93.8	3.3	8.0	9.4	9.3
Private	90.1	90.3	90.5	89.7	11.1	24.1	26.1	23.6
Joint	94.0	94.6	94.7	93.9	18.8	30.5	31.8	29.3
Other	72.3	84.2	85.8	85.0	1.8	7.4	9.2	9.8
Foreign ownership	93.8	91.2	91.8	91.7	22.2	32.0	34.9	32.8
Joint Russian and foreign ownership	97.1	92.9	93.4	93.2	27.8	32.2	31.3	28.3

4.1.21. TRENDS IN THE SHARE OF ENTERPRISES USING PERSONAL COMPUTERS BY OWNERSHIP

(as a percentage of the total number of enterprises)

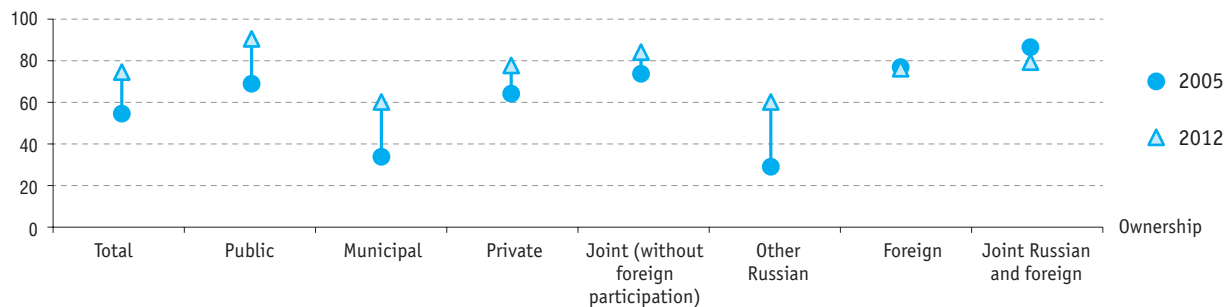


4.1.22. ENTERPRISES USING LOCAL AREA NETWORKS BY OWNERSHIP

(as a percentage of the total number of enterprises)

	2005	2010	2011	2012
Total	52.4	68.4	71.3	71.7
Russian ownership	51.6	68.1	70.9	71.4
Public	66.7	85.3	87.7	88.3
Municipal	32.1	52.3	56.4	57.8
Private	61.6	75.0	76.3	74.7
Joint	70.9	80.7	82.0	81.4
Other	27.4	54.3	58.0	58.4
Foreign ownership	73.5	72.1	75.8	74.5
Joint Russian and foreign ownership	82.7	75.0	77.0	76.5

4.1.23. TRENDS IN THE SHARE OF ENTERPRISES USING LOCAL AREA NETWORKS BY OWNERSHIP

(as a percentage of the total number of enterprises)

4.1.24. ENTERPRISES USING GLOBAL INFORMATION NETWORKS BY OWNERSHIP

(as a percentage of the total number of enterprises)

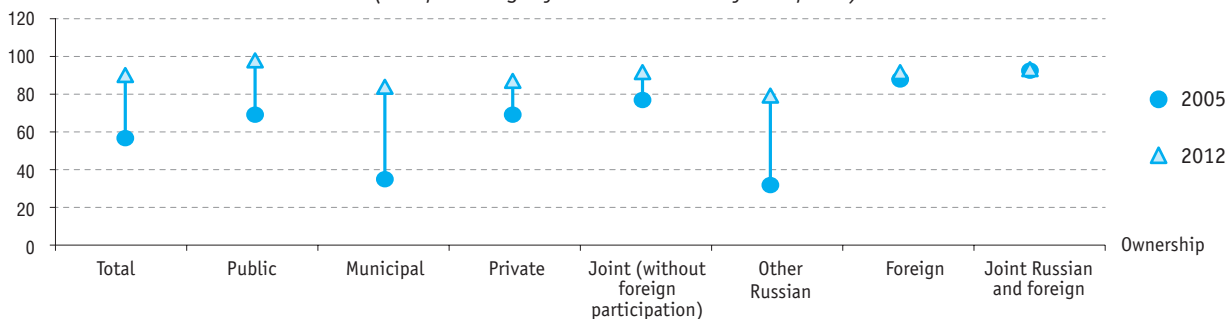
	Enterprises using							
	global networks				Of which			
					Internet			
	2005	2010	2011	2012	2005	2010	2011	2012
Total	54.3	83.4	85.6	87.5	53.3	82.4	84.8	86.9
Russian ownership	53.3	83.1	85.5	87.4	52.3	82.0	84.6	86.8
Public	66.8	94.4	95.8	96.4	64.2	92.4	94.1	95.0
Municipal	32.9	74.1	78.4	82.6	32.4	73.2	77.8	82.3
Private	66.1	85.1	85.6	85.5	65.9	84.8	85.3	85.2
Joint	74.0	90.0	90.1	89.9	73.1	89.5	88.9	88.9
Other	30.6	73.9	76.5	78.1	30.5	73.9	76.5	78.1
Foreign ownership	85.1	87.1	87.8	88.9	85.0	86.6	87.5	88.7
Joint Russian and foreign ownership	89.6	89.5	89.8	90.6	89.3	89.4	89.6	90.6

(continued)

	Of which								
	Internet			Extranet			other global networks		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
Total	13.1	16.1	14.7	5.3	6.1	6.4	6.3	6.9	6.2
Russian ownership	12.0	14.9	13.3	4.8	5.4	5.7	5.9	6.5	5.8
Public	16.5	20.2	18.5	5.9	6.9	7.4	7.4	8.1	7.6
Municipal	3.9	6.2	4.4	1.2	1.7	1.6	3.4	4.0	2.9
Private	19.3	22.2	20.6	9.0	9.6	9.9	7.8	8.6	8.0
Joint	29.0	32.6	31.3	11.2	13.0	14.4	10.9	11.2	11.4
Other	3.8	7.1	6.5	2.3	2.7	3.3	2.5	3.7	3.3
Foreign ownership	30.3	36.7	35.9	15.0	15.4	15.2	14.0	13.4	11.9
Joint Russian and foreign ownership	31.0	30.8	29.4	15.3	16.1	16.4	11.6	12.5	11.4

4.1.25. TRENDS IN THE SHARE OF ENTERPRISES USING GLOBAL INFORMATION NETWORKS BY OWNERSHIP

(as a percentage of the total number of enterprises)



4.1.26. ENTERPRISES BY TYPE OF INTERNET CONNECTION AND OWNERSHIP

(as a percentage of the total number of enterprises)

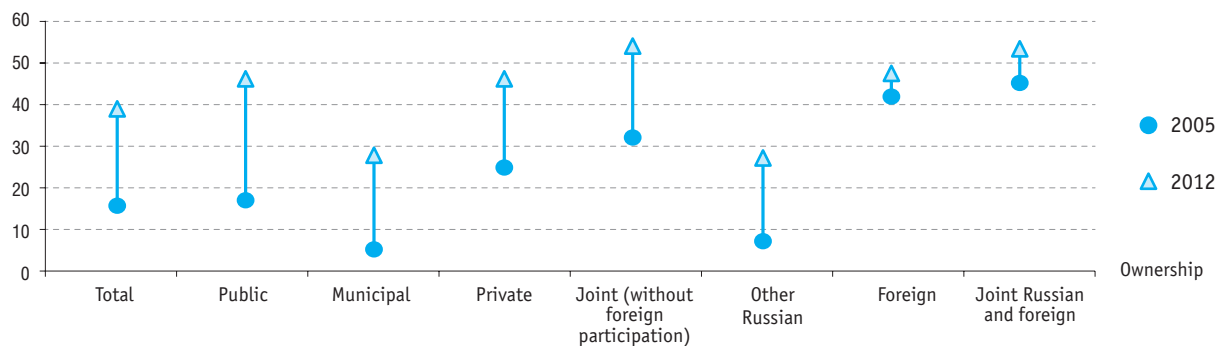
	Dial-up modem connection		ISDN-connection		ADSL		Other cable connections		Wireless connection		Of which with mobile connection speed 256 Kbps and above	
	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012
Total	36.7	36.0	6.1	5.7	34.3	32.8	32.6	36.8	17.4	19.4	10.9	12.6
Russian ownership	37.6	36.9	5.8	5.3	34.5	33.0	31.0	35.1	16.5	18.4	10.2	11.7
Public	39.5	37.4	6.3	5.6	42.4	41.1	37.8	43.0	18.2	19.8	11.1	12.6
Municipal	44.1	45.6	4.9	4.7	29.8	29.1	16.2	19.3	10.1	12.2	5.8	7.2
Private	24.7	23.1	6.6	6.0	32.8	30.1	47.3	50.8	24.6	26.0	15.8	17.5
Joint	27.5	25.7	7.3	6.2	41.8	38.3	50.5	54.8	26.6	28.9	18.5	20.6
Other	36.0	35.3	4.3	4.0	25.6	24.4	23.7	27.8	15.2	15.9	10.0	9.7
Foreign ownership	24.3	24.7	13.0	13.0	31.2	30.1	57.6	60.9	33.7	35.7	24.2	26.6
Joint Russian and foreign ownership	22.4	22.9	6.9	7.2	31.5	29.6	56.4	59.0	28.6	29.7	19.3	20.5

4.1.27. ENTERPRISES WITH A WEBSITE BY OWNERSHIP

(as a percentage of the total number of enterprises)

	2005	2010	2011	2012
Total	14.8	28.5	33.0	37.8
Russian ownership	14.0	27.3	32.1	37.0
Public	15.8	32.4	38.8	44.7
Municipal	4.3	14.5	20.7	26.5
Private	23.4	41.9	43.2	44.7
Joint	30.5	48.1	48.6	52.5
Other	6.7	20.5	23.1	26.2
Foreign ownership	40.1	47.6	44.5	46.1
Joint Russian and foreign ownership	43.6	48.6	49.3	51.4

4.1.28. TRENDS IN THE SHARE OF ENTERPRISES WITH A WEBSITE BY OWNERSHIP

(as a percentage of the total number of enterprises)

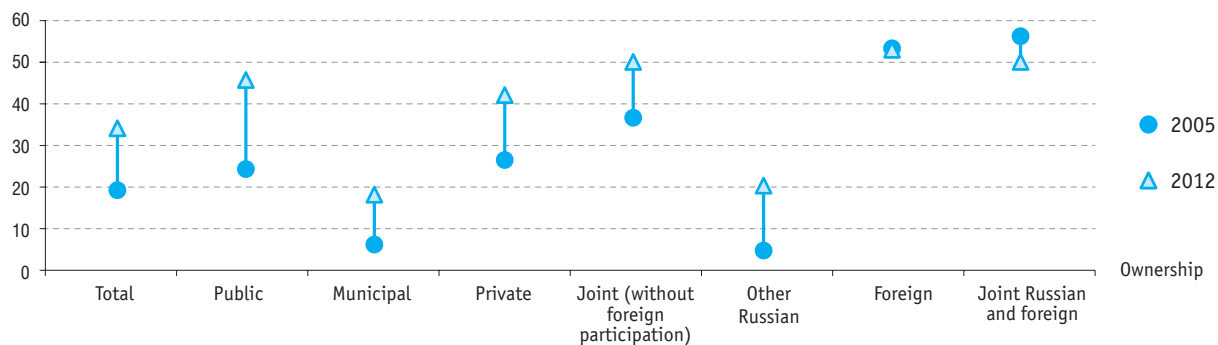
4.1.29. ENTERPRISES HAVING DEDICATED COMMUNICATION LINES BY OWNERSHIP

(as a percentage of the total number of enterprises)

	2005	2010	2011	2012
Total	19.0	32.7	33.3	34.5
Russian ownership	17.9	31.4	31.9	33.1
Public	24.1	43.1	43.8	46.2
Municipal	5.5	15.9	16.8	17.7
Private	26.4	43.2	43.3	43.0
Joint	36.9	52.2	50.8	50.9
Other	4.1	16.9	18.4	19.9
Foreign ownership	53.7	54.7	54.4	53.9
Joint Russian and foreign ownership	56.9	52.9	51.4	51.0

4.1.30. TRENDS IN THE SHARE OF ENTERPRISES HAVING DEDICATED COMMUNICATION LINES BY OWNERSHIP

(as a percentage of the total number of enterprises)

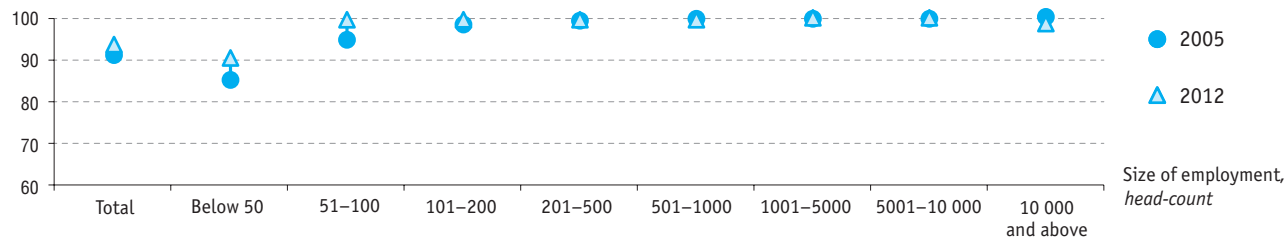


4.1.31. ENTERPRISES USING COMPUTING MACHINERY BY SIZE OF EMPLOYMENT

(as a percentage of the total number of enterprises)

	Enterprises using							
	personal computers				other types of computers			
	2005	2010	2011	2012	2005	2010	2011	2012
Total	91.1	93.8	94.1	94.0	9.3	18.2	19.7	18.9
Size of employment, <i>head-count</i> :								
below 50	85.3	90.2	90.7	90.8	4.5	10.5	12.0	11.4
51–100	94.9	99.4	99.4	99.4	9.2	22.3	24.3	23.8
101–200	98.3	99.6	99.6	99.4	12.5	26.9	29.1	28.3
201–500	99.2	99.7	99.8	99.7	16.7	34.1	34.8	35.6
501–1000	99.5	99.8	99.8	99.7	24.2	42.6	43.7	43.9
1001–5000	99.7	100	100	100	36.0	54.5	56.4	55.1
5001–10 000	99.6	100	100	100	57.2	76.3	76.0	74.4
10 000 and above	100	100	100	98.8	78.5	86.4	93.8	88.8

4.1.32. TRENDS IN THE SHARE OF ENTERPRISES USING PERSONAL COMPUTERS BY SIZE OF EMPLOYMENT

(as a percentage of the total number of enterprises)

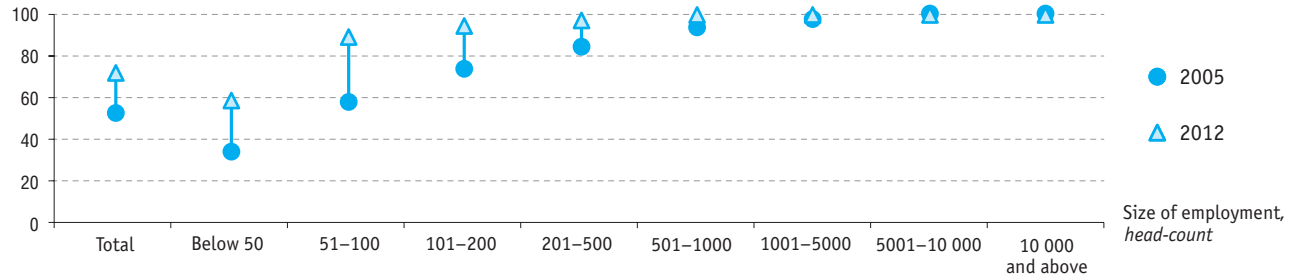
4.1.33. ENTERPRISES USING LOCAL AREA NETWORKS BY SIZE OF EMPLOYMENT

(as a percentage of the total number of enterprises)

	2005	2010	2011	2012
Total	52.4	68.4	71.3	71.7
Size of employment, head-count:				
below 50	34.4	53.8	57.5	58.8
51–100	57.3	84.7	88.0	88.8
101–200	72.6	91.3	93.1	93.2
201–500	83.2	95.5	96.3	96.5
501–1000	92.0	97.9	98.3	98.3
1001–5000	96.7	99.2	99.3	99.2
5001–10 000	98.1	99.1	99.5	99.1
10 000 and above	98.3	98.8	100	98.8

4.1.34. TRENDS IN THE SHARE OF ENTERPRISES USING LOCAL AREA NETWORKS BY SIZE OF EMPLOYMENT

(as a percentage of the total number of enterprises)



4.1.35. ENTERPRISES USING GLOBAL INFORMATION NETWORKS BY SIZE OF EMPLOYMENT

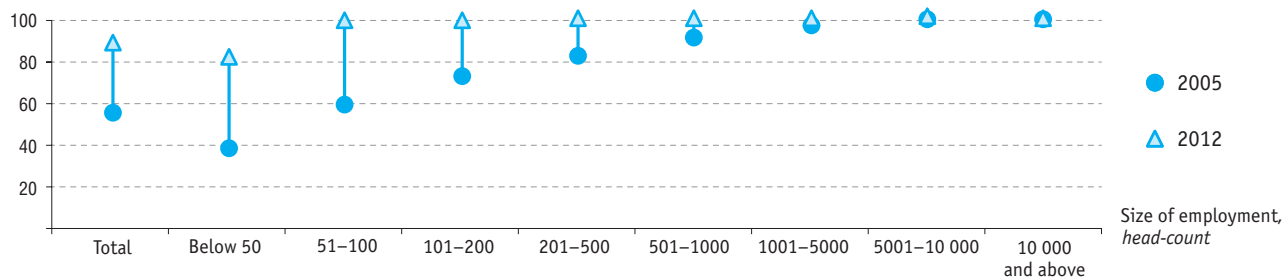
(as a percentage of the total number of enterprises)

	Enterprises using							
	global networks				Of which			
	Internet							
	2005	2010	2011	2012	2005	2010	2011	2012
Total	54.3	83.4	85.6	87.5	53.3	82.4	84.8	86.9
Size of employment, <i>head-count</i> :								
below 50	38.6	74.3	77.8	81.1	37.6	73.3	77.2	80.7
51–100	58.3	96.1	97.2	97.8	57.7	95.6	96.7	97.4
101–200	71.6	97.8	98.1	98.3	70.7	97.0	97.2	97.6
201–500	81.2	98.4	98.4	98.7	79.8	96.5	96.5	97.2
501–1000	89.5	98.7	98.7	98.9	87.8	96.6	96.6	97.4
1001–5000	95.5	99.2	99.4	99.5	94.1	98.0	98.3	98.7
5001–10 000	98.4	100	100	100	97.7	100	100	100
10 000 and above	98.3	100	100	98.8	96.7	100	100	98.8

(continued)

	Of which								
	Intranet			Extranet			other global networks		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
Total	13.1	16.1	14.7	5.3	6.1	6.4	6.3	6.9	6.2
Size of employment, <i>head-count</i> :									
below 50	6.3	9.0	7.9	2.3	2.7	3.1	4.3	4.6	3.9
51–100	15.4	19.6	18.4	6.2	7.5	8.2	7.1	8.2	7.5
101–200	19.8	23.4	22.2	8.3	9.5	10.1	8.1	9.7	9.1
201–500	27.0	30.1	29.2	11.5	12.5	13.1	10.4	11.2	11.1
501–1000	37.7	41.1	39.7	15.9	17.6	19.1	13.1	13.7	14.0
1001–5000	53.6	56.4	53.4	25.8	28.4	27.4	18.5	19.7	20.3
5001–10 000	80.0	81.0	82.9	30.2	36.2	41.7	26.0	26.2	28.0
10 000 and above	85.2	88.9	81.3	44.4	53.1	45.0	39.5	35.8	33.8

4.1.36. TRENDS IN THE SHARE OF ENTERPRISES USING GLOBAL INFORMATION NETWORKS BY SIZE OF EMPLOYMENT
(as a percentage of the total number of enterprises)



4.1.37. ENTERPRISES BY TYPE OF INTERNET CONNECTION AND SIZE OF EMPLOYMENT

(as a percentage of the total number of enterprises)

	Dial-up modem connection		ISDN-connection		ADSL		Other cable connections		Wireless connection		Of which with mobile connection speed 256 Kbps and above	
	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012
Total	36.7	36.0	6.1	5.7	34.3	32.8	32.6	36.8	17.4	19.4	10.9	12.6
Size of employment, <i>head-count</i> :												
below 50	38.7	39.3	5.2	5.2	28.5	27.7	21.2	25.0	11.7	13.4	7.0	8.3
51–100	39.5	36.7	6.9	6.4	39.8	38.6	41.4	46.4	19.8	22.9	12.1	14.9
101–200	34.0	31.1	7.1	6.5	42.2	39.6	47.5	53.7	24.4	27.3	15.6	17.7
201–500	29.7	26.4	7.7	6.1	45.6	44.2	54.0	61.1	30.1	33.2	19.6	22.5
501–1000	25.2	21.9	7.4	6.0	49.3	45.3	64.6	73.9	36.1	38.7	24.2	27.4
1001–5000	26.0	23.9	10.5	9.4	50.9	47.0	80.1	85.3	45.2	46.7	32.8	35.5
5001–10 000	30.3	28.9	10.4	11.4	50.2	49.3	91.4	93.4	52.9	55.9	37.1	47.4
10 000 and above	30.9	27.5	23.5	21.3	51.9	45.0	97.5	98.8	56.8	58.8	44.4	48.8

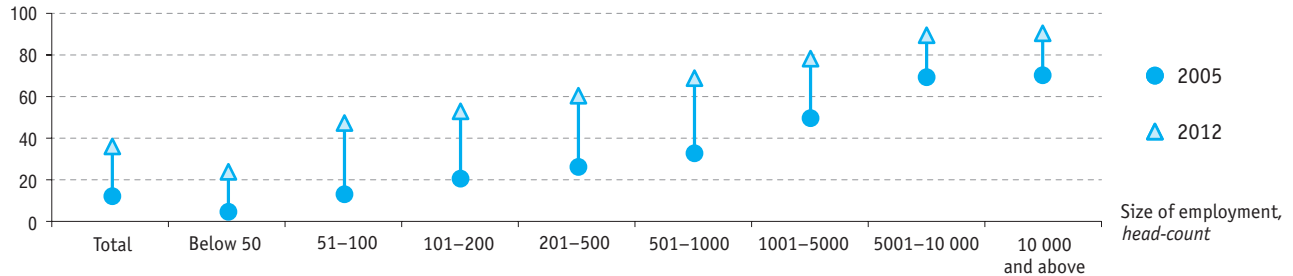
4.1.38. ENTERPRISES WITH A WEBSITE BY SIZE OF EMPLOYMENT

(as a percentage of the total number of enterprises)

	2005	2010	2011	2012
Total	14.8	28.5	33.0	37.8
<i>Size of employment, head-count:</i>				
below 50	6.8	17.5	21.4	26.4
51–100	15.6	36.9	42.3	48.5
101–200	22.2	43.8	48.9	54.4
201–500	28.2	49.4	55.9	61.1
501–1000	34.1	56.2	64.4	69.2
1001–5000	50.0	71.3	75.9	78.2
5001–10 000	69.3	89.3	86.4	89.1
10 000 and above	70.2	86.4	90.1	90.0

4.1.39. TRENDS IN THE SHARE OF ENTERPRISES WITH A WEBSITE BY SIZE OF EMPLOYMENT

(as a percentage of the total number of enterprises)



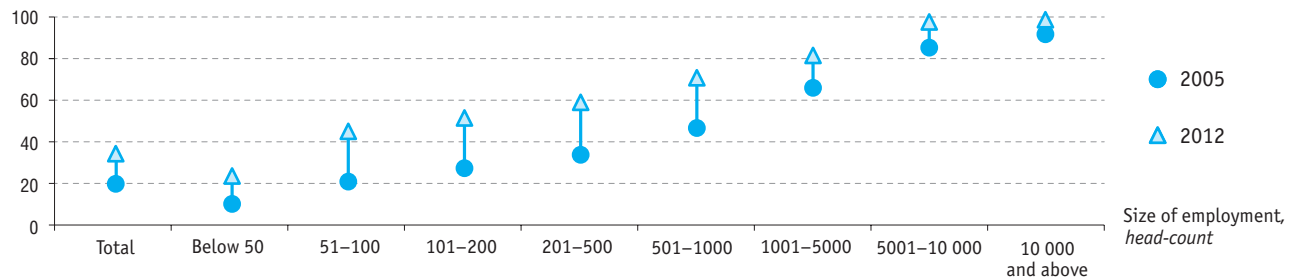
4.1.40. ENTERPRISES WITH DEDICATED COMMUNICATION LINES BY SIZE OF EMPLOYMENT

(as a percentage of the total number of enterprises)

	2005	2010	2011	2012
Total	19.0	32.7	33.3	34.5
Size of employment, head-count:				
below 50	9.6	21.5	21.9	22.9
51–100	19.9	40.4	42.0	44.4
101–200	26.7	47.3	48.1	50.6
201–500	33.4	53.9	55.4	58.7
501–1000	45.5	64.7	66.0	70.2
1001–5000	64.5	79.3	78.6	81.2
5001–10 000	84.4	91.6	94.6	96.7
10 000 and above	90.1	96.3	96.3	97.5

4.1.41. TRENDS IN THE SHARE OF ENTERPRISES WITH DEDICATED COMMUNICATION LINES BY SIZE OF EMPLOYMENT

(as a percentage of the total number of enterprises)



4.2. Personal Computers and Software

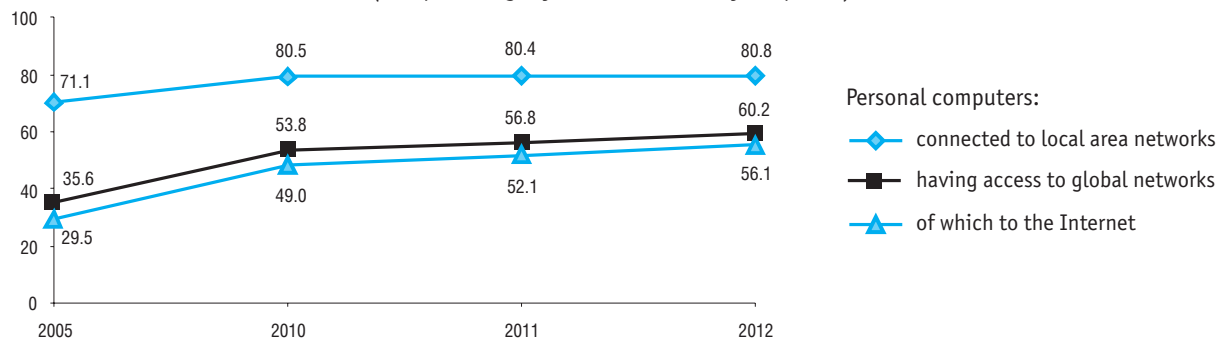
4.2.1. PERSONAL COMPUTERS IN ENTERPRISES

(thousand)

	2005	2010	2011	2012
Total	5709.6	9288.1	9972.2	10807.5
Of which:				
within local area networks	4057.6	7480.2	8018.3	8733.7
having access to global networks	2032.0	4997.1	5663.2	6508.1
of which to the Internet	1686.1	4553.3	5198.3	6066.5
acquired in the reference year	978.6	999.9	1251.6	1454.1
laptops and portable personal computers	...	...	895.5	1111.0

4.2.2. PERSONAL COMPUTERS IN NETWORKS

(as a percentage of the total number of computers)



4.2.3. PERSONAL COMPUTERS CONNECTED TO LOCAL AREA NETWORKS IN ENTERPRISES BY ECONOMIC ACTIVITY

(as a percentage of the total number of computers)

	2005	2010	2011	2012
Total	71.1	80.5	80.4	80.8
Mining and quarrying	81.9	87.3	89.8	84.5
Manufacture of food products and beverages	80.5	89.8	88.9	89.2
Manufacture of chemicals and chemical products	75.7	84.9	84.0	85.6
Manufacture of basic metals	80.8	88.6	86.5	85.4
Manufacture of machinery and equipment, n.e.c.	76.2	87.2	88.0	89.1
Manufacture of electrical machinery and apparatus	65.7	80.9	83.4	84.6
Electricity, gas and water supply	76.6	87.5	88.8	89.3
Construction	64.1	79.5	79.0	81.2
Wholesale and retail trade	74.0	87.6	85.2	87.0
Transport	76.7	85.3	85.8	85.3
Communications	77.1	85.6	86.9	85.9
Financial intermediation	87.4	91.1	88.5	88.0
Research and development	64.3	70.7	71.6	75.4
Public administration; compulsory social security	65.8	74.8	75.3	76.3
Higher education	66.9	78.7	79.2	81.6
Health and social work	42.4	59.4	62.8	66.4
Other activities	68.7	80.0	75.7	76.8

4.2.4. PERSONAL COMPUTERS WITH ACCESS TO GLOBAL INFORMATION NETWORKS IN ENTERPRISES BY ECONOMIC ACTIVITY

(as a percentage of the total number of computers)

	Personal computers							
	having access to global networks				of which to the Internet			
	2005	2010	2011	2012	2005	2010	2011	2012
Total	35.6	53.8	56.8	60.2	29.5	49.0	52.1	56.1
Mining and quarrying	47.1	56.9	60.2	60.4	27.9	42.7	46.2	46.2
Manufacture of food products and beverages	37.4	64.6	69.2	73.1	35.2	62.6	66.8	71.7
Manufacture of chemicals and chemical products	37.8	55.0	59.4	60.9	36.3	51.7	56.7	59.1
Manufacture of basic metals	36.8	50.4	52.6	54.7	31.2	46.5	49.7	51.9
Manufacture of machinery and equipment, n.e.c.	30.3	54.4	58.3	57.6	27.8	51.3	54.9	54.6
Manufacture of electrical machinery and apparatus	26.0	45.1	47.7	50.3	24.4	42.4	45.8	48.9
Electricity, gas and water supply	37.2	59.1	63.9	68.3	31.5	54.0	60.0	64.8
Construction	32.9	68.1	71.4	76.1	30.5	66.4	69.3	74.7
Wholesale and retail trade	47.6	65.7	74.8	77.0	43.7	62.2	66.7	74.7
Transport	46.0	55.2	53.3	56.6	19.0	36.8	37.5	42.7
Communications	52.9	76.3	77.2	76.9	49.3	73.8	75.0	74.1
Financial intermediation	42.1	55.1	52.0	57.9	28.0	43.5	41.4	47.2
Research and development	36.6	43.7	46.0	49.3	33.0	43.4	45.3	48.8
Public administration; compulsory social security	18.4	38.6	42.9	47.3	14.5	34.4	39.2	43.2
Higher education	58.0	71.7	74.6	77.8	56.9	71.4	74.1	77.4
Health and social work	10.4	34.2	41.2	46.6	9.8	32.7	39.6	44.7
Other activities	31.1	53.9	53.1	60.7	28.6	51.3	51.4	58.3

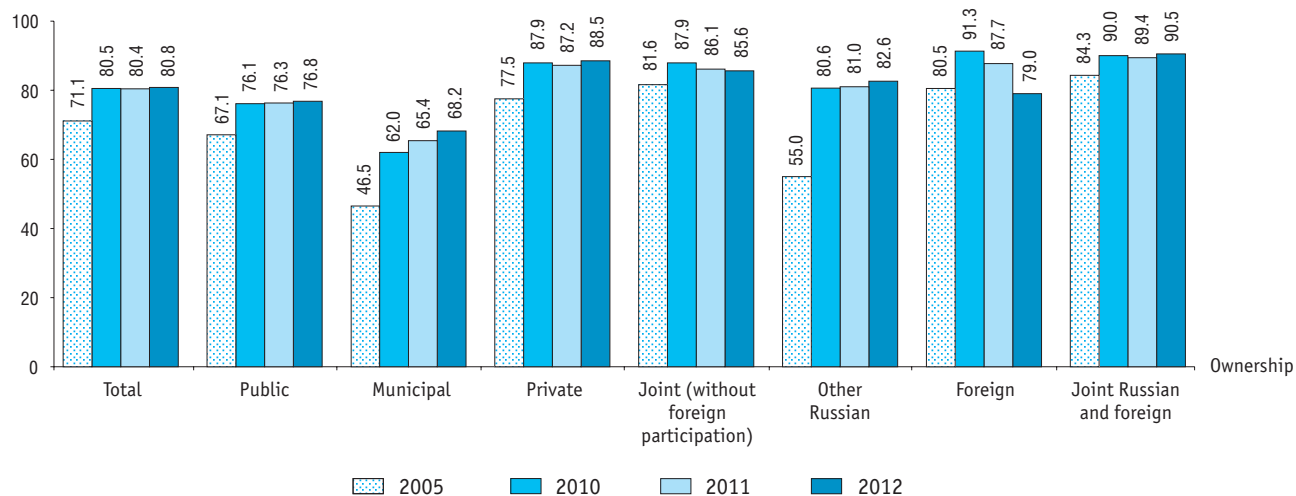
4.2.5. ACQUISITION OF PERSONAL COMPUTERS BY ENTERPRISES BY ECONOMIC ACTIVITY

(as a percentage of the total number of computers)

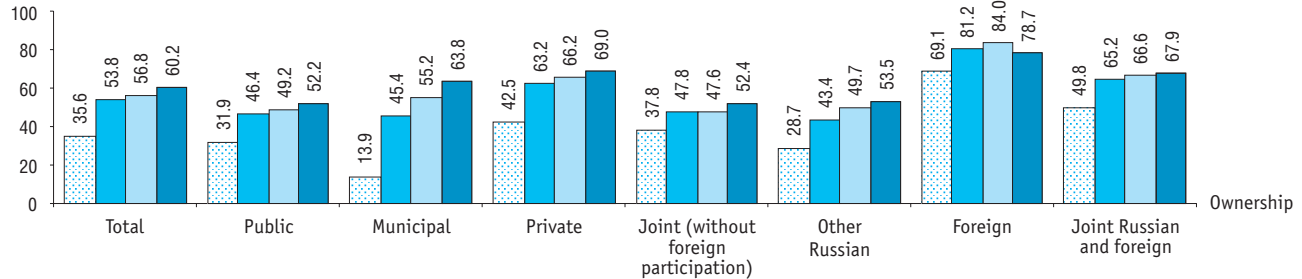
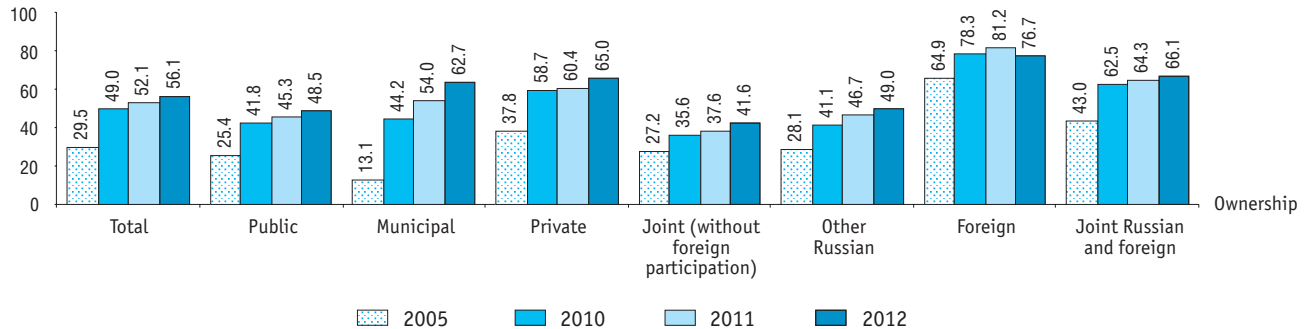
	Acquired in the reference year			
	2005	2010	2011	2012
Total	17.1	10.8	12.6	13.5
Mining and quarrying	17.4	10.9	12.0	11.3
Manufacture of food products and beverages	15.9	11.0	11.0	11.7
Manufacture of chemicals and chemical products	17.0	8.5	11.9	9.8
Manufacture of basic metals	16.1	8.2	11.6	10.1
Manufacture of machinery and equipment, n.e.c.	16.0	11.1	11.3	10.2
Manufacture of electrical machinery and apparatus	13.1	11.2	11.3	11.8
Electricity, gas and water supply	16.4	11.9	11.5	10.5
Construction	18.0	13.4	14.2	14.0
Wholesale and retail trade	21.1	13.1	14.8	17.2
Transport	16.6	9.9	12.2	11.0
Communications	17.9	10.7	10.2	12.8
Financial intermediation	19.9	12.2	15.4	16.5
Research and development	12.7	11.1	11.4	11.9
Public administration; compulsory social security	17.5	10.2	11.2	11.8
Higher education	13.7	8.0	10.9	9.5
Health and social work	21.2	10.8	13.1	22.8
Other activities	16.4	11.0	13.7	13.0

4.2.6. PERSONAL COMPUTERS CONNECTED TO LOCAL AREA NETWORKS IN ENTERPRISES BY OWNERSHIP

(as a percentage of the total number of computers)

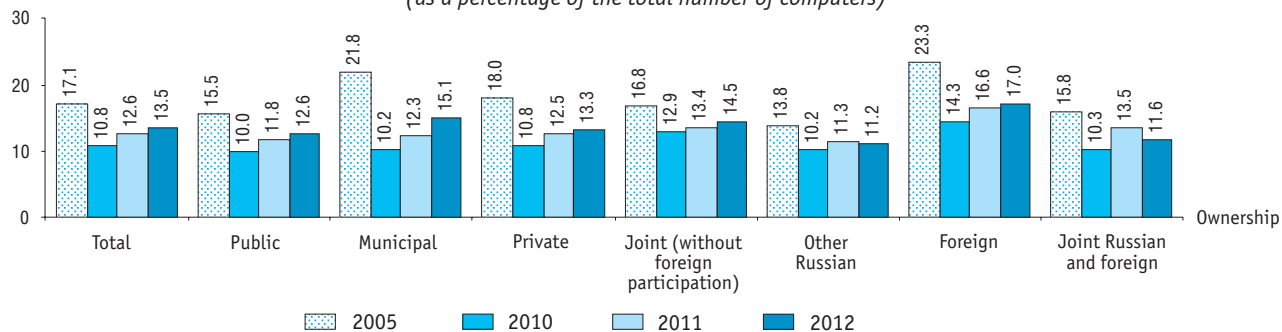


4.2.7. PERSONAL COMPUTERS WITH ACCESS TO GLOBAL INFORMATION NETWORKS IN ENTERPRISES BY OWNERSHIP

*(as a percentage of the total number of computers)***Personal computers with access to global networks****Personal computers with access to the Internet**

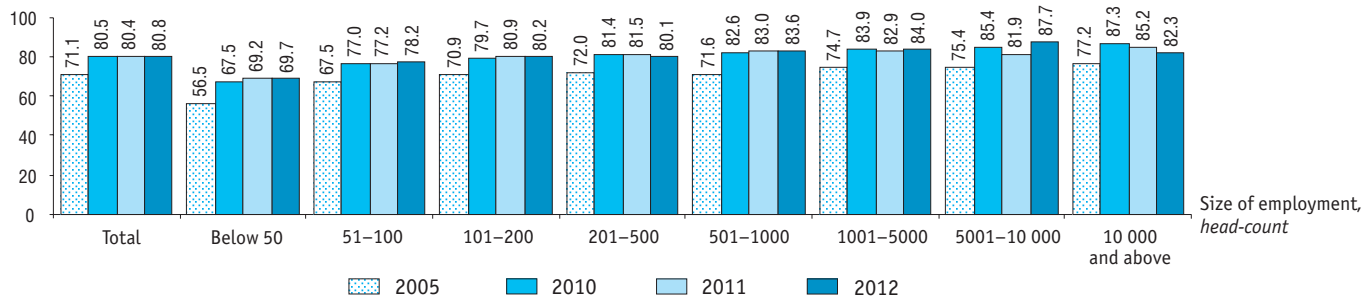
4.2.8. ACQUISITION OF PERSONAL COMPUTERS BY ENTERPRISES BY OWNERSHIP

(as a percentage of the total number of computers)



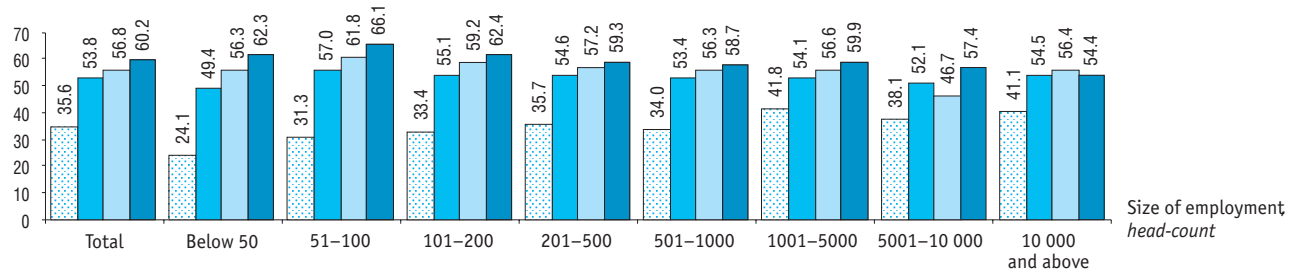
4.2.9. PERSONAL COMPUTERS CONNECTED TO LOCAL AREA NETWORKS IN ENTERPRISES BY SIZE OF EMPLOYMENT

(as a percentage of the total number of computers)

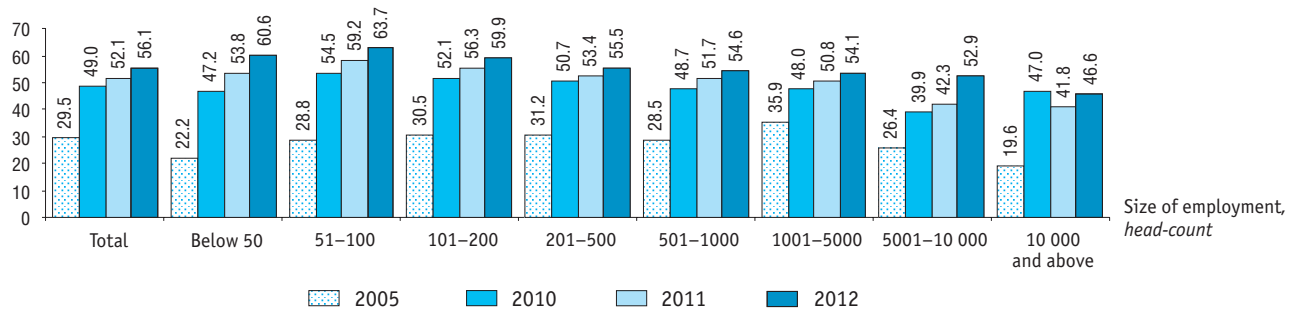


4.2.10. PERSONAL COMPUTERS WITH ACCESS TO GLOBAL INFORMATION NETWORKS IN ENTERPRISES BY SIZE OF EMPLOYMENT (as a percentage of the total number of computers)

Personal computers with access to global networks

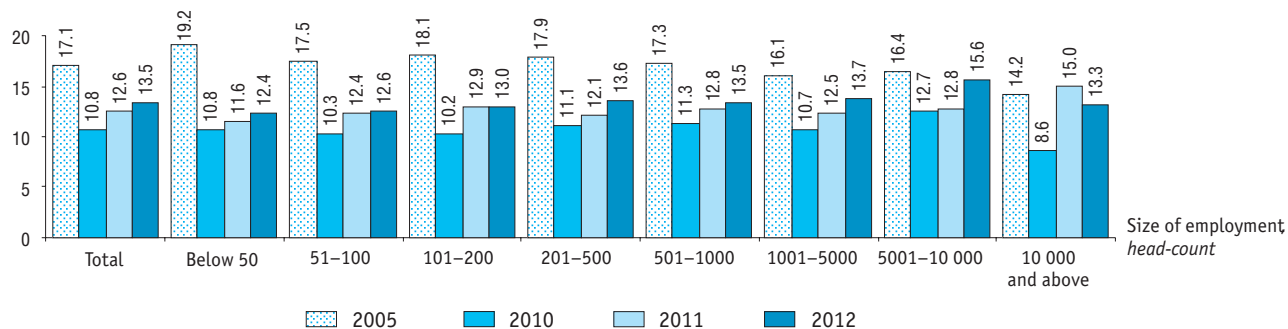


Personal computers with access to the Internet



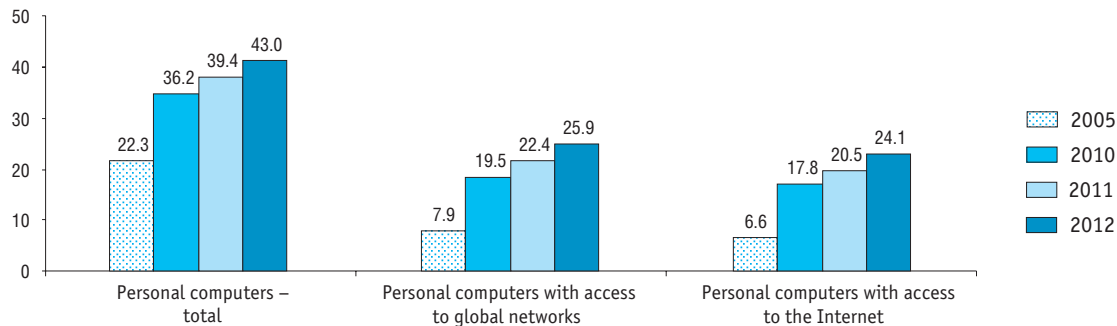
4.2.11. ACQUISITION OF PERSONAL COMPUTERS BY ENTERPRISES BY SIZE OF EMPLOYMENT

(as a percentage of the total number of computers)



4.2.12. AVAILABILITY OF PERSONAL COMPUTERS IN ENTERPRISES

(computers per 100 employees)



4.2.13. AVAILABILITY OF PERSONAL COMPUTERS IN ENTERPRISES BY ECONOMIC ACTIVITY

(computers per 100 employees)

	2005	2010	2011	2012
Total	22.3	36.2	39.4	43.0
Mining and quarrying	15.1	23.9	24.4	26.3
Manufacture of food products and beverages	11.6	17.6	20.0	20.5
Manufacture of chemicals and chemical products	13.8	26.2	28.1	31.1
Manufacture of basic metals	15.4	23.3	24.5	25.0
Manufacture of machinery and equipment, n.e.c.	12.8	22.5	24.2	26.4
Manufacture of electrical machinery and apparatus	16.3	28.0	29.7	32.7
Electricity, gas and water supply	15.8	26.6	28.0	30.3
Communications	10.1	16.4	17.5	18.4
Wholesale and retail trade	22.7	28.1	39.3	43.1
Transport	14.3	22.0	22.5	24.1
Communications	34.0	58.5	57.9	64.0
Financial intermediation	97.0	112.2	117.8	117.2
Research and development	36.7	57.4	62.1	64.5
Public administration; compulsory social security	50.7	79.9	82.6	87.8
Higher education	64.0	91.9	99.4	107.7
Health and social work	8.8	16.1	18.2	23.2
Other activities	16.0	30.5	16.5	38.5

**4.2.14. AVAILABILITY OF PERSONAL COMPUTERS WITH ACCESS TO GLOBAL INFORMATION NETWORKS
IN ENTERPRISES BY ECONOMIC ACTIVITY**
(computers per 100 employees)

	2005	2010	2011	2012
Total	7.9	19.5	22.4	25.9
Mining and quarrying	7.1	13.6	14.7	15.9
Manufacture of food products and beverages	4.3	11.4	13.9	15.0
Manufacture of chemicals and chemical products	5.2	14.4	16.7	18.9
Manufacture of basic metals	5.7	11.8	12.9	13.7
Manufacture of machinery and equipment, n.e.c.	3.9	12.2	14.1	15.2
Manufacture of electrical machinery and apparatus	4.2	12.7	14.2	16.4
Electricity, gas and water supply	5.9	15.7	17.9	20.7
Construction	3.3	11.2	12.5	14.0
Wholesale and retail trade	10.8	18.5	29.4	33.2
Transport	6.6	12.1	12.0	13.6
Communications	18.0	44.6	44.7	49.2
Financial intermediation	40.9	61.8	61.3	67.8
Research and development	13.4	25.1	28.1	31.8
Public administration; compulsory social security	9.3	30.9	35.4	41.5
Higher education	37.1	65.9	74.1	83.8
Health and social work	0.9	5.5	7.5	10.8
Other activities	5.0	16.4	8.8	23.4

4.2.15. AVAILABILITY OF PERSONAL COMPUTERS WITH ACCESS TO THE INTERNET IN ENTERPRISES BY ECONOMIC ACTIVITY

(computers per 100 employees)

	2005	2010	2011	2012
Total	6.6	17.8	20.5	24.1
Mining and quarrying	4.2	10.2	11.3	12.1
Manufacture of food products and beverages	4.1	11.0	13.4	14.7
Manufacture of chemicals and chemical products	5.0	13.5	16.0	18.4
Manufacture of basic metals	4.8	10.8	12.2	13.0
Manufacture of machinery and equipment, n.e.c.	3.6	11.5	13.3	14.4
Manufacture of electrical machinery and apparatus	4.0	11.9	13.6	16.0
Electricity, gas and water supply	5.0	14.4	16.8	19.6
Construction	3.1	10.9	12.1	13.7
Wholesale and retail trade	9.9	17.5	26.2	32.2
Transport	2.7	8.1	8.4	10.3
Communications	16.8	43.2	43.4	47.4
Financial intermediation	27.2	48.8	48.7	55.3
Research and development	12.1	24.9	27.7	31.5
Public administration; compulsory social security	7.4	27.5	32.4	38.0
Higher education	36.4	65.6	73.6	83.4
Health and social work	0.9	5.3	7.2	10.4
Other activities	4.6	15.6	8.5	22.4

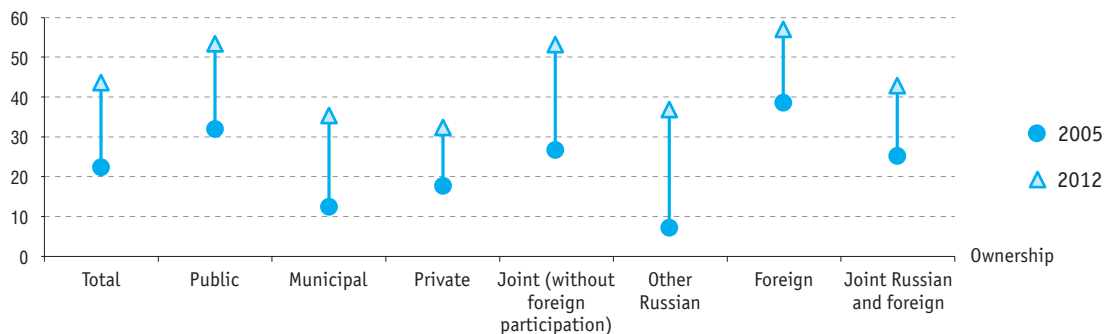
4.2.16. AVAILABILITY OF PERSONAL COMPUTERS IN ENTERPRISES BY OWNERSHIP

(computers per 100 employees)

	2005	2010	2011	2012
Total	22.3	36.2	39.4	43.0
Russian ownership	21.9	35.4	38.9	42.3
Public	31.7	48.9	51.0	52.4
Municipal	12.3	24.2	27.8	35.1
Private	17.2	27.1	30.0	32.3
Joint	26.0	43.7	48.7	53.4
Other	7.3	24.5	32.6	36.8
Foreign ownership	37.7	48.2	46.3	56.2
Joint Russian and foreign ownership	24.7	41.7	41.3	42.8

4.2.17. TRENDS IN AVAILABILITY OF PERSONAL COMPUTERS IN ENTERPRISES BY OWNERSHIP

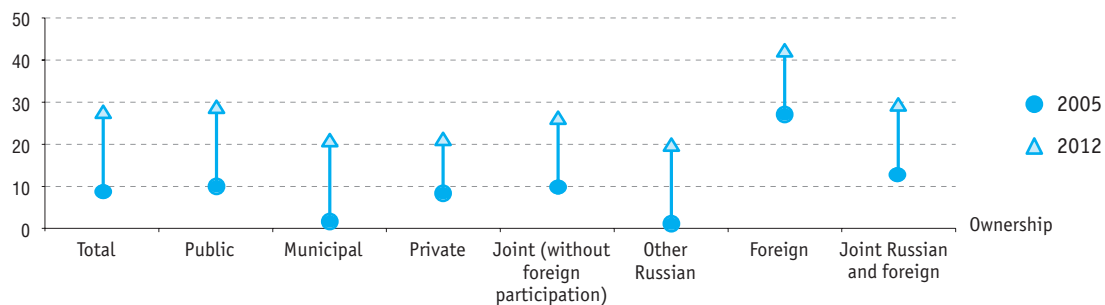
(computers per 100 employees)



4.2.18. AVAILABILITY OF PERSONAL COMPUTERS WITH ACCESS TO GLOBAL INFORMATION NETWORKS IN ENTERPRISES BY OWNERSHIP (computers per 100 employees)

	2005	2010	2011	2012
Total	7.9	19.5	22.4	25.9
Russian ownership	7.4	18.2	21.2	24.7
Public	10.1	22.7	25.1	27.4
Municipal	1.7	11.0	15.3	22.4
Private	7.3	17.1	19.9	22.3
Joint	9.8	20.9	23.2	28.0
Other	2.1	10.6	16.2	19.7
Foreign ownership	26.1	39.1	38.9	44.2
Joint Russian and foreign ownership	12.3	27.2	27.5	29.0

4.2.19. TRENDS IN AVAILABILITY OF PERSONAL COMPUTERS WITH ACCESS TO GLOBAL INFORMATION NETWORKS IN ENTERPRISES BY OWNERSHIP (computers per 100 employees)



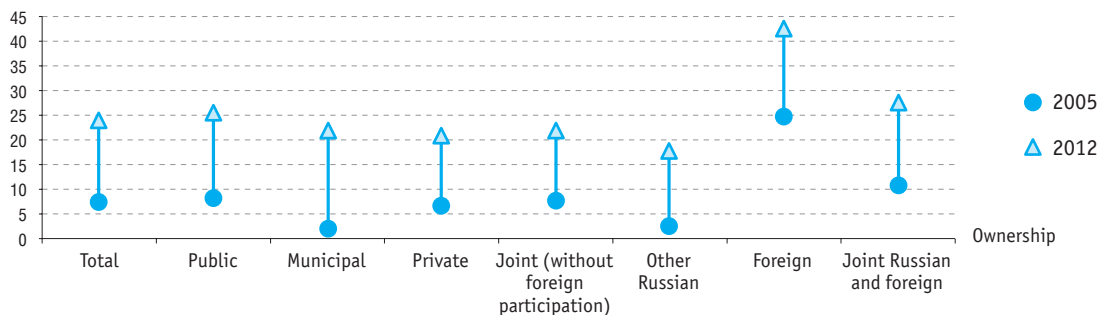
4.2.20. AVAILABILITY OF PERSONAL COMPUTERS WITH ACCESS TO THE INTERNET IN ENTERPRISES BY OWNERSHIP

(computers per 100 employees)

	2005	2010	2011	2012
Total	6.6	17.8	20.5	24.1
Russian ownership	6.1	16.4	19.3	22.9
Public	8.0	20.5	23.1	25.4
Municipal	1.6	10.7	15.0	22.0
Private	6.5	15.9	18.1	21.0
Joint	7.1	15.6	18.3	22.2
Other	2.0	10.1	15.2	18.0
Foreign ownership	24.5	37.7	37.6	43.1
Joint Russian and foreign ownership	10.6	26.0	26.6	28.3

4.2.21. TRENDS IN AVAILABILITY OF PERSONAL COMPUTERS WITH ACCESS TO THE INTERNET IN ENTERPRISES BY OWNERSHIP

(computers per 100 employees)



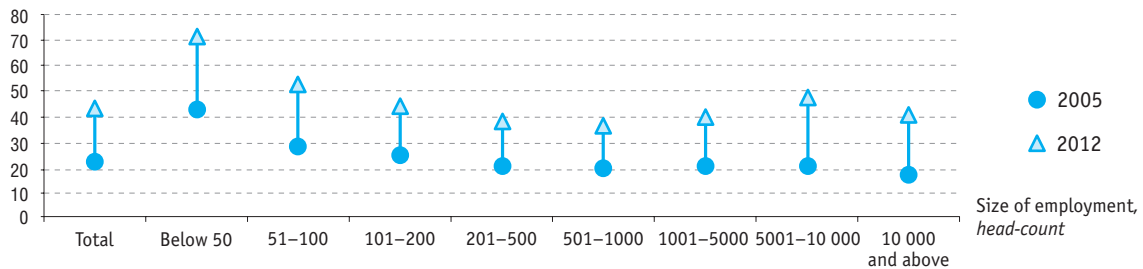
4.2.22. AVAILABILITY OF PERSONAL COMPUTERS IN ENTERPRISES BY SIZE OF EMPLOYMENT

(computers per 100 employees)

	2005	2010	2011	2012
Total	22.3	36.2	39.4	43.0
Size of employment, head-count:				
below 50	42.2	66.6	70.5	71.9
51–100	28.3	45.5	49.9	52.7
101–200	24.7	39.4	42.4	44.2
201–500	20.8	32.1	34.3	37.9
501–1000	19.2	30.7	32.8	36.2
1001–5000	20.7	35.0	37.1	40.3
5001–10 000	20.5	32.9	37.7	47.5
10 000 and above	17.4	27.4	35.6	40.7

4.2.23. TRENDS IN AVAILABILITY OF PERSONAL COMPUTERS IN ENTERPRISES BY SIZE OF EMPLOYMENT

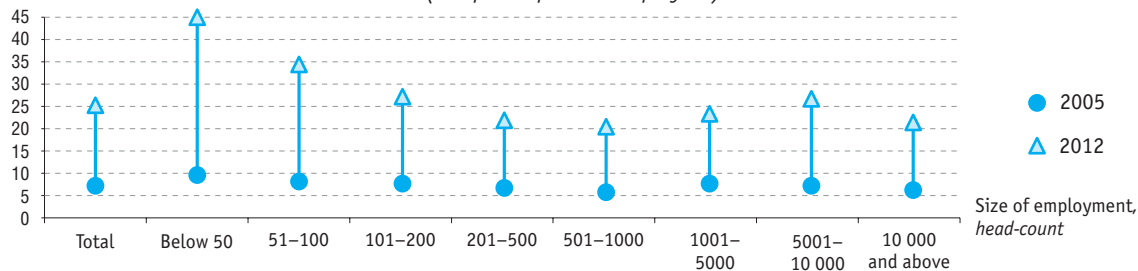
(computers per 100 employees)



4.2.24. AVAILABILITY OF PERSONAL COMPUTERS WITH ACCESS TO GLOBAL INFORMATION NETWORKS IN ENTERPRISES BY SIZE OF EMPLOYMENT (computers per 100 employees)

	2005	2010	2011	2012
Total	7.9	19.5	22.4	25.9
<i>Size of employment, head-count:</i>				
below 50	10.1	32.9	39.7	44.8
51–100	8.9	25.9	30.8	34.8
101–200	8.3	21.7	25.1	27.6
201–500	7.4	17.5	19.6	22.5
501–1000	6.5	16.4	18.5	21.2
1001–5000	8.6	18.9	21.0	24.1
5001–10 000	7.8	17.2	17.6	27.3
10 000 and above	7.2	15.0	20.1	22.1

4.2.25. TRENDS IN AVAILABILITY OF PERSONAL COMPUTERS WITH ACCESS TO GLOBAL INFORMATION NETWORKS IN ENTERPRISES BY SIZE OF EMPLOYMENT (computers per 100 employees)



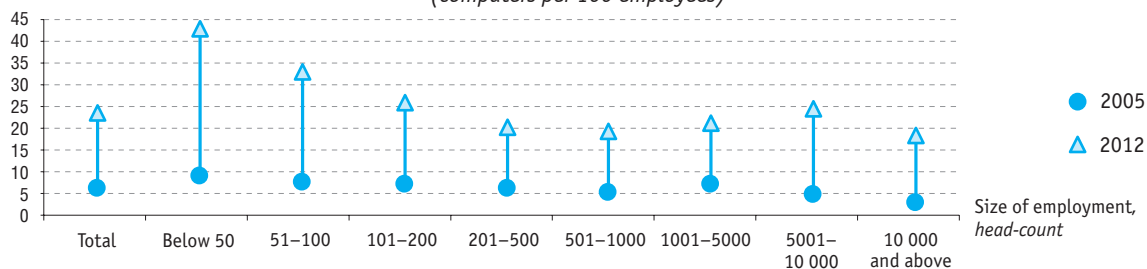
4.2.26. AVAILABILITY OF PERSONAL COMPUTERS WITH ACCESS TO THE INTERNET IN ENTERPRISES BY SIZE OF EMPLOYMENT

(computers per 100 employees)

	2005	2010	2011	2012
Total	6.6	17.8	20.5	24.1
Size of employment, head-count:				
below 50	9.4	31.4	37.9	43.5
51–100	8.2	24.8	29.5	33.6
101–200	7.5	20.5	23.8	26.5
201–500	6.5	16.3	18.3	21.0
501–1000	5.5	14.9	16.9	19.8
1001–5000	7.4	16.8	18.9	21.8
5001–10 000	5.4	13.1	16.0	25.1
10 000 and above	3.4	12.9	14.9	19.0

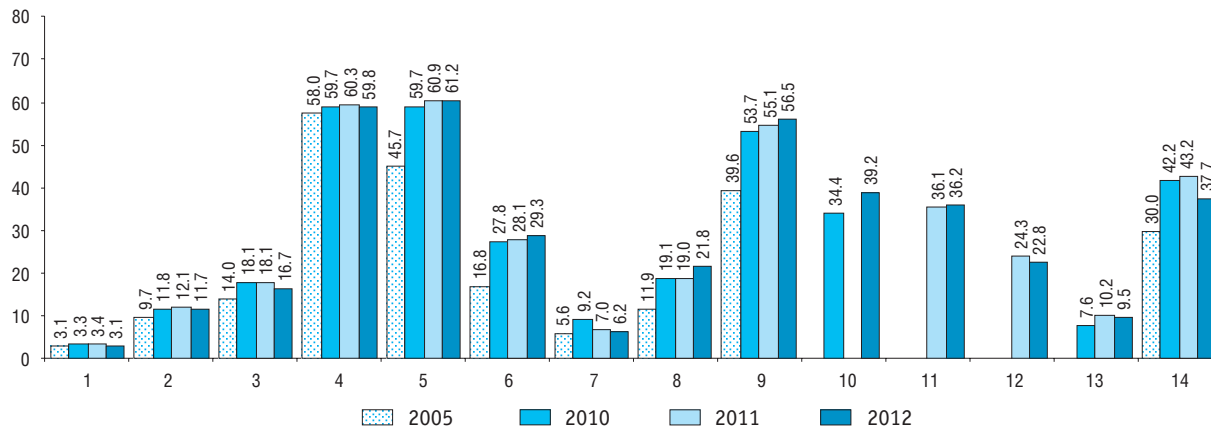
4.2.27. TRENDS IN AVAILABILITY OF PERSONAL COMPUTERS WITH ACCESS TO THE INTERNET IN ENTERPRISES BY SIZE OF EMPLOYMENT

(computers per 100 employees)



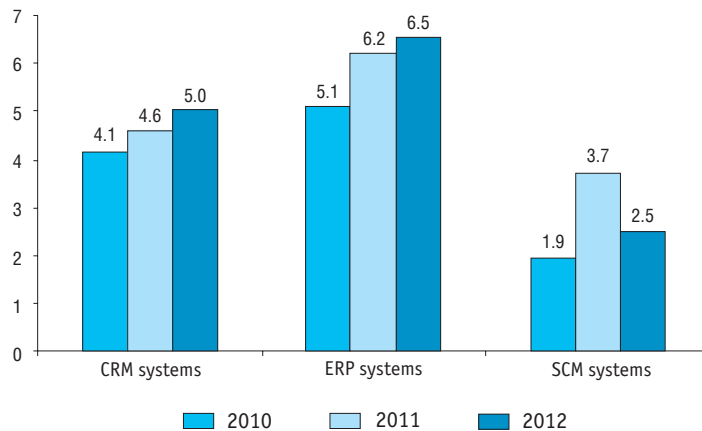
4.2.28. ENTERPRISES USING SPECIALISED SOFTWARE

(as a percentage of the total number of enterprises)



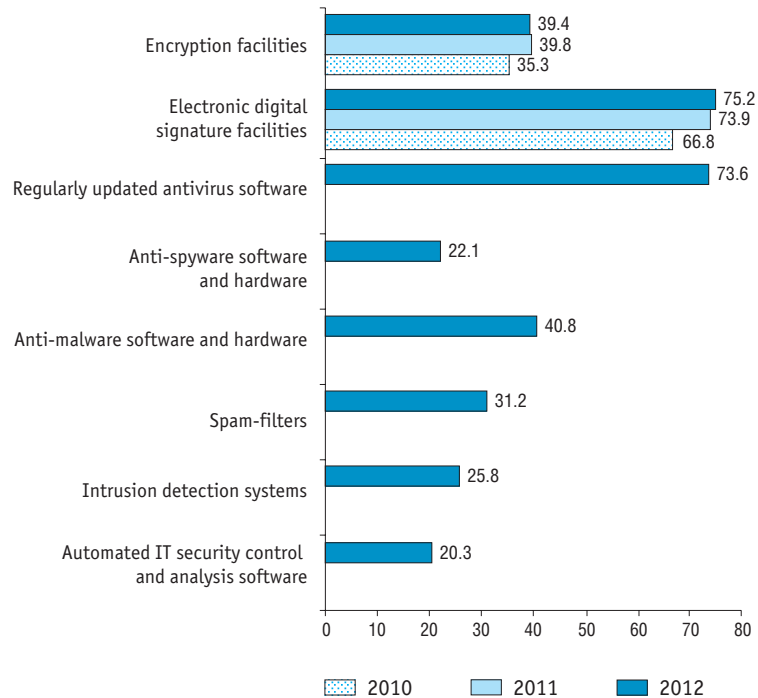
Specialised software for:

- | | |
|---|---|
| 1 – scientific research | 9 – electronic legal reference information systems |
| 2 – computer-aided design systems | 10 – programs for managing purchase and sale of goods (works, services) |
| 3 – computer-aided manufacturing systems | 11 – programs for managing goods, works, services purchase |
| 4 – computer-aided management systems | 12 – programs for managing goods, works, services sales |
| 5 – electronic payment transactions | 13 – CRM, ERP, SCM systems |
| 6 – access to databases via global information networks | 14 – antivirus systems |
| 7 – desk-top publishing systems | 15 – other purposes |
| 8 – training and educational programs | |

4.2.29. ENTERPRISES USING CRM, ERP, SCM SYSTEMS*(as a percentage of the total number of enterprises)*

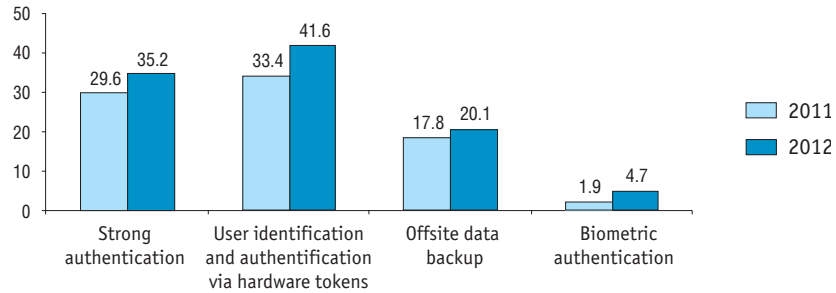
4.2.30. ENTERPRISES USING INFORMATION SECURITY FACILITIES

(as a percentage of the total number of enterprises)



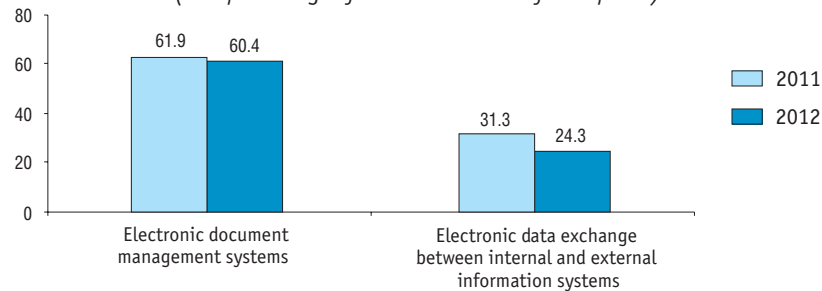
4.2.31. ENTERPRISES USING INFORMATION SECURITY SYSTEMS

(as a percentage of the total number of enterprises)



4.2.32. ENTERPRISES USING ELECTRONIC DOCUMENT MANAGEMENT SYSTEMS, ELECTRONIC DATA EXCHANGE BETWEEN INTERNAL AND EXTERNAL INFORMATION SYSTEMS

(as a percentage of the total number of enterprises)



4.2.33. ENTERPRISES USING SPECIALISED SOFTWARE BY ECONOMIC ACTIVITY

(as a percentage of the total number of enterprises)

	Total		Of which using									
			software for scientific research		computer-aided design systems		computer-aided manufacturing systems		computer-aided management systems		software for electronic payment transactions	
	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012
Total	89.8	86.0	3.4	3.1	12.1	11.7	18.1	16.7	60.3	59.8	60.9	61.2
Mining and quarrying	92.4	89.4	7.1	6.4	37.5	36.4	40.3	39.3	69.3	67.5	72.1	70.0
Manufacture of food products and beverages	94.1	92.2	3.0	3.2	15.5	14.4	43.6	42.9	70.0	68.9	73.2	74.6
Manufacture of chemicals and chemical products	95.6	92.4	19.0	16.6	37.0	35.1	51.1	49.3	77.2	74.9	78.1	77.4
Manufacture of basic metals	95.0	92.6	5.5	6.6	55.6	55.4	50.5	49.8	73.1	72.9	78.4	77.6
Manufacture of machinery and equipment, n.e.c.	95.0	92.0	5.9	4.8	56.9	56.0	43.9	41.2	72.4	72.8	75.2	77.4
Manufacture of electrical machinery and apparatus	95.8	95.1	11.0	11.8	56.8	57.1	49.9	49.6	75.4	77.0	77.2	78.7
Electricity, gas and water supply	87.4	84.5	1.8	1.5	25.1	24.4	25.7	24.3	60.6	60.5	59.7	59.9
Construction	92.8	90.0	4.0	2.4	43.0	42.9	21.1	19.9	64.7	64.8	71.6	70.8
Wholesale and retail trade	89.7	88.4	1.4	1.0	8.8	10.8	18.4	20.6	60.2	62.8	62.2	66.4
Transport	90.7	88.0	1.6	1.2	14.8	14.6	33.5	32.7	66.9	67.3	64.7	63.2
Communications	96.9	96.1	4.6	2.5	38.8	36.0	61.1	55.6	81.8	80.8	76.9	77.3
Financial intermediation	95.3	93.6	1.6	1.4	9.2	7.7	28.5	22.1	74.4	73.5	79.7	80.6
Research and development	95.1	94.2	56.0	55.5	42.2	43.5	29.8	29.7	70.4	70.6	74.1	75.9
Public administration; compulsory social security	95.0	90.8	0.9	0.7	4.2	4.0	10.2	8.4	63.2	62.1	62.6	62.5
Higher education	97.3	96.4	34.1	34.8	34.4	34.2	26.9	26.2	75.0	76.3	76.1	76.1
Health and social work	95.6	93.7	3.4	3.2	2.3	2.2	15.0	13.8	66.4	67.1	68.8	71.3
Other activities	80.8	75.6	2.3	2.0	9.5	8.6	13.7	12.2	48.6	47.9	48.1	47.9

(continued)

	software for access to databases via global information networks		desk-top publishing systems		training and educational programs		electronic legal reference information systems		programs for managing goods (works, services) sales		programs for managing goods (works, services) purchase	
	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012
Total	28.1	29.3	7.0	6.2	19.0	21.8	55.1	56.5	24.3	22.8	36.1	36.2
Mining and quarrying	29.8	30.0	8.7	6.5	26.8	29.1	72.1	73.5	35.9	33.7	43.1	41.0
Manufacture of food products and beverages	32.0	32.3	6.7	5.7	19.3	23.8	68.6	71.7	56.1	56.2	55.1	53.6
Manufacture of chemicals and chemical products	32.4	30.2	11.6	10.3	27.8	29.9	78.3	79.0	62.7	57.7	62.9	58.5
Manufacture of basic metals	29.0	29.9	8.9	8.0	21.9	27.7	74.2	76.7	55.0	51.6	55.9	52.4
Manufacture of machinery and equipment, n.e.c.	26.7	28.0	9.3	8.6	21.5	27.4	73.3	75.6	48.3	47.3	49.7	48.5
Manufacture of electrical machinery and apparatus	25.7	24.7	8.5	9.1	21.8	26.3	77.2	78.8	52.1	52.0	54.4	54.8
Electricity, gas and water supply	23.0	23.8	4.3	4.0	21.1	24.4	55.3	56.1	28.6	29.0	31.7	36.7
Construction	27.5	27.7	6.3	4.8	20.7	23.3	66.9	68.8	33.7	30.5	38.3	36.3
Wholesale and retail trade	31.7	34.3	6.3	5.4	18.1	22.4	55.0	59.1	56.5	60.7	56.9	59.0
Transport	26.5	25.7	5.8	5.4	28.5	31.5	62.6	62.6	32.0	31.0	37.9	37.5
Communications	48.9	48.3	15.0	11.4	40.8	44.4	75.3	77.5	56.7	56.4	56.1	55.2
Financial intermediation	48.3	46.9	8.3	8.1	35.3	36.5	76.6	76.8	38.0	33.8	32.2	30.5
Research and development	29.8	30.3	20.0	19.5	27.5	30.8	72.1	74.7	28.0	25.7	39.0	40.8
Public administration; compulsory social security	28.7	30.6	4.1	3.5	16.2	18.9	55.6	57.2	9.9	7.7	32.4	32.6
Higher education	42.7	44.7	33.4	32.7	80.4	79.4	78.6	81.6	28.2	24.6	39.3	37.4
Health and social work	32.0	34.5	4.3	3.5	17.4	21.3	59.7	62.8	21.5	18.9	50.4	51.9
Other activities	22.5	23.4	8.7	7.5	14.2	16.4	42.5	43.4	19.1	17.0	25.4	24.9

4.2.34. ENTERPRISES USING CRM, ERP, SCM SYSTEMS BY ECONOMIC ACTIVITY

(as a percentage of the total number of enterprises)

	Total		Of which					
	2011	2012	CRM systems		ERP systems		SCM systems	
			2011	2012	2011	2012	2011	2012
Total	10.2	9.5	4.6	5.0	6.2	6.5	3.7	2.5
Mining and quarrying	21.0	20.8	5.7	6.0	16.2	16.5	6.3	4.9
Manufacture of food products and beverages	21.7	22.3	9.6	11.1	15.7	16.9	7.5	7.0
Manufacture of chemicals and chemical products	30.5	31.9	12.4	14.4	24.3	26.7	7.1	4.5
Manufacture of basic metals	27.8	27.5	11.2	11.6	21.5	23.4	7.0	5.0
Manufacture of machinery and equipment, n.e.c.	25.5	24.9	11.0	12.1	18.7	19.7	6.0	4.6
Manufacture of electrical machinery and apparatus	26.3	27.4	10.6	13.0	21.4	22.6	6.8	5.8
Electricity, gas and water supply	11.8	10.8	4.1	4.4	8.5	8.4	3.2	2.0
Construction	11.5	9.2	3.4	4.0	6.3	5.8	5.2	2.6
Wholesale and retail trade	22.6	23.7	10.7	12.6	16.3	17.9	6.5	6.3
Transport	14.5	15.3	4.1	5.8	11.0	12.1	4.9	4.1
Communications	37.0	36.8	27.8	28.4	27.4	28.6	16.3	12.5
Financial intermediation	23.1	29.9	18.5	24.4	10.7	15.3	5.4	5.3
Research and development	13.3	13.5	4.6	5.4	9.4	9.9	4.4	3.0
Public administration; compulsory social security	4.1	3.1	1.4	1.6	1.6	1.5	2.2	1.1
Higher education	17.2	16.8	9.0	8.4	10.6	11.1	6.8	5.0
Health and social work	5.2	4.3	1.9	2.0	2.3	2.4	2.7	1.5
Other activities	7.7	5.6	3.4	2.8	4.3	3.6	2.9	1.4

4.2.35. ENTERPRISES USING INFORMATION SECURITY FACILITIES BY ECONOMIC ACTIVITY: 2012

(as a percentage of the total number of enterprises)

	Encryption facilities	Electronic digital signature facilities	Regularly updated antivirus software	Anti-spyware software and hardware	Anti-malware software and hardware	Spam filters	Intrusion detection systems	Automated IT security control and analysis software
Total	39.4	75.2	73.6	22.1	40.8	31.2	25.8	20.3
Mining and quarrying	52.2	76.6	81.1	34.3	58.3	50.9	38.8	28.0
Manufacture of food products and beverages	53.2	84.3	80.2	32.3	55.0	46.3	37.8	27.1
Manufacture of chemicals and chemical products	59.8	84.4	86.0	40.7	65.9	58.7	48.4	32.7
Manufacture of basic metals	53.6	82.9	82.4	33.8	61.5	50.2	40.3	27.0
Manufacture of machinery and equipment, n.e.c.	54.8	82.1	82.1	34.3	61.0	51.1	39.4	28.0
Manufacture of electrical machinery and apparatus	53.6	85.2	85.4	37.8	64.1	53.5	40.6	26.5
Electricity, gas and water supply	41.1	73.7	72.1	25.0	44.3	34.2	27.3	19.3
Construction	43.9	78.0	76.4	26.3	45.6	35.8	30.7	24.2
Wholesale and retail trade	44.0	70.2	75.9	27.9	48.1	45.4	37.5	27.2
Transport	42.3	74.3	75.8	27.2	46.5	36.5	31.4	24.3
Communications	63.6	78.8	87.0	46.8	70.0	60.5	48.9	40.5
Financial intermediation	74.6	85.1	87.5	49.8	72.5	65.1	55.2	45.7
Research and development	51.2	83.9	82.6	36.6	59.3	51.8	39.5	26.1
Public administration; compulsory social security	38.4	83.0	77.6	18.7	38.0	25.2	21.6	18.0
Higher education	57.4	82.7	86.8	41.9	65.9	54.6	44.2	30.2
Health and social work	47.2	88.5	81.1	21.5	43.1	28.2	22.7	18.6
Other activities	27.1	62.5	62.7	14.8	29.2	22.2	18.0	15.0

4.2.36. ENTERPRISES USING INFORMATION SECURITY SYSTEMS BY ECONOMIC ACTIVITY

(as a percentage of the total number of enterprises)

	Strong authentication		User identification and authentication via hardware tokens		Offsite data backup		Biometric authentication	
	2011	2012	2011	2012	2011	2012	2011	2012
Total	29.6	35.2	33.4	41.6	17.8	20.1	1.9	4.7
Mining and quarrying	51.4	52.7	45.1	53.7	27.6	30.5	3.7	7.7
Manufacture of food products and beverages	40.4	45.1	44.0	53.9	24.3	28.5	3.2	6.2
Manufacture of chemicals and chemical products	45.9	54.4	53.1	63.6	27.0	31.3	3.3	10.6
Manufacture of basic metals	41.3	48.9	46.9	58.6	23.1	27.4	3.2	7.7
Manufacture of machinery and equipment, n.e.c.	44.8	50.1	47.5	55.6	25.9	25.8	2.2	7.0
Manufacture of electrical machinery and apparatus	44.2	50.9	49.2	59.6	23.7	25.9	3.0	7.1
Electricity, gas and water supply	29.6	35.8	37.5	46.4	15.6	17.5	1.6	4.0
Construction	33.2	38.8	44.8	51.4	23.1	26.2	2.8	6.6
Wholesale and retail trade	38.7	45.5	35.7	44.0	24.4	29.3	2.9	7.4
Transport	39.1	43.7	42.1	49.1	19.6	22.6	2.5	5.5
Communications	64.2	69.4	55.6	62.1	34.4	37.0	6.5	13.0
Financial intermediation	70.3	74.9	63.1	70.0	38.9	42.3	3.9	7.8
Research and development	36.1	43.4	44.1	54.2	18.3	22.3	3.0	6.9
Public administration; compulsory social security	26.7	32.9	30.0	39.1	15.1	16.9	1.4	3.7
Higher education	43.6	52.0	43.3	56.9	22.5	25.9	2.5	6.9
Health and social work	26.3	35.0	34.5	47.1	15.3	18.1	1.5	4.4
Other activities	20.0	24.1	24.9	31.4	14.2	15.8	1.4	3.6

4.2.37. ENTERPRISES USING ELECTRONIC DOCUMENT MANAGEMENT SYSTEMS, ELECTRONIC DATA EXCHANGE BETWEEN INTERNAL AND EXTERNAL INFORMATION SYSTEMS BY ECONOMIC ACTIVITY

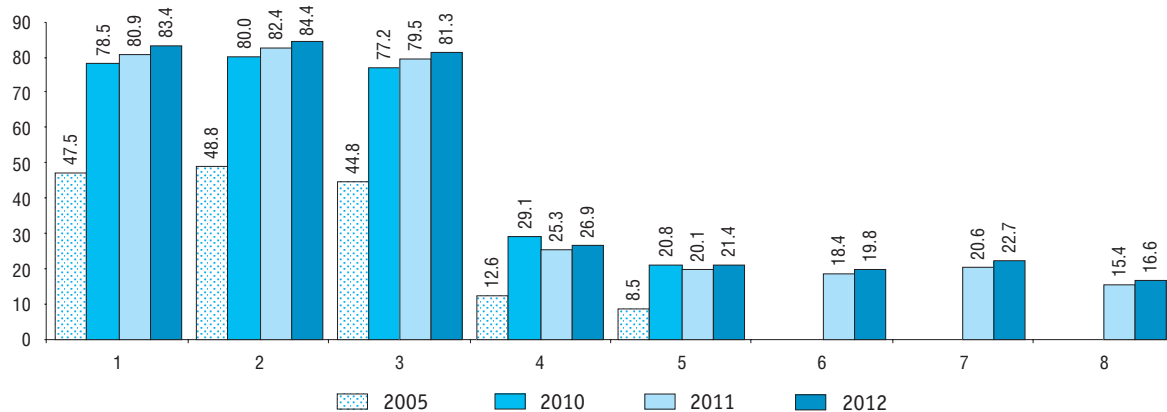
(as a percentage of the total number of enterprises)

	Electronic document management systems		Electronic data exchange between internal and external information systems	
	2011	2012	2011	2012
Total	61.9	60.4	31.3	24.3
Mining and quarrying	58.8	57.4	28.3	20.5
Manufacture of food products and beverages	61.6	59.6	33.7	30.2
Manufacture of chemicals and chemical products	58.1	54.8	30.3	26.8
Manufacture of basic metals	58.2	54.4	31.8	25.3
Manufacture of machinery and equipment, n.e.c.	57.0	55.9	29.2	21.1
Manufacture of electrical machinery and apparatus	57.2	55.9	28.6	24.2
Electricity, gas and water supply	56.2	55.0	27.4	20.6
Construction	59.6	53.5	29.7	21.0
Wholesale and retail trade	57.5	54.8	32.5	30.1
Transport	60.5	57.8	30.4	22.8
Communications	72.9	70.5	44.4	35.3
Financial intermediation	71.6	70.7	51.7	42.1
Research and development	63.7	63.4	30.4	24.1
Public administration; compulsory social security	72.8	72.7	35.6	26.6
Higher education	68.6	69.4	39.5	31.7
Health and social work	74.0	72.9	37.5	28.9
Other activities	49.4	48.1	23.0	17.8

4.3. Objectives and Effects of Internet Usage

4.3.1. INTERNET USAGE FOR GENERAL PURPOSES

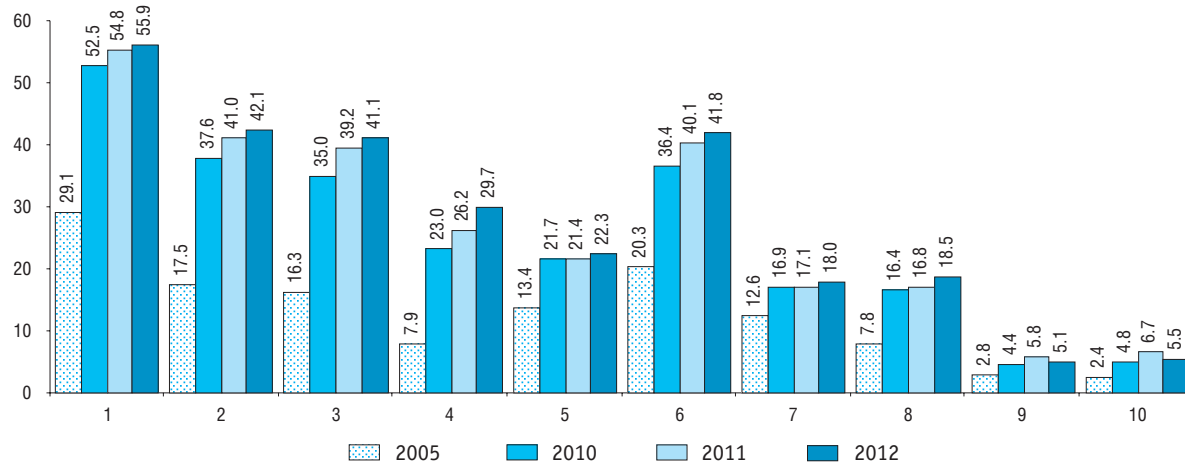
(as a percentage of the total number of enterprises)



- 1 – Information search
- 2 – E-mailing
- 3 – Information exchange in electronic form
- 4 – Personnel training
- 5 – Internal or external hire of personnel
- 6 – Telephone communication via the Internet / VoIP
- 7 – Videoconferencing
- 8 – Subscription for electronic databases, electronic libraries

4.3.2. INTERNET USAGE FOR COMMERCIAL PURPOSES

(as a percentage of the total number of enterprises)



Communication with suppliers:

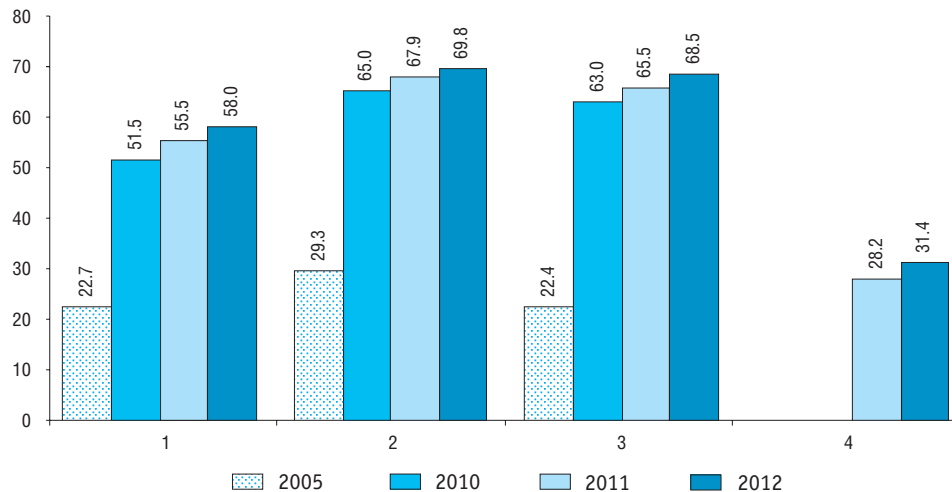
- 1 – getting information about goods and services
- 2 – providing information about the enterprise's need for goods and services
- 3 – placing orders for goods and services
- 4 – paying for goods and services
- 5 – acquiring electronic products

Communication with consumers:

- 6 – providing information about the enterprise and its goods and services
- 7 – receiving orders for goods and services
- 8 – conducting electronic payment transactions with consumers
- 9 – distributing electronic products
- 10 – after sales service

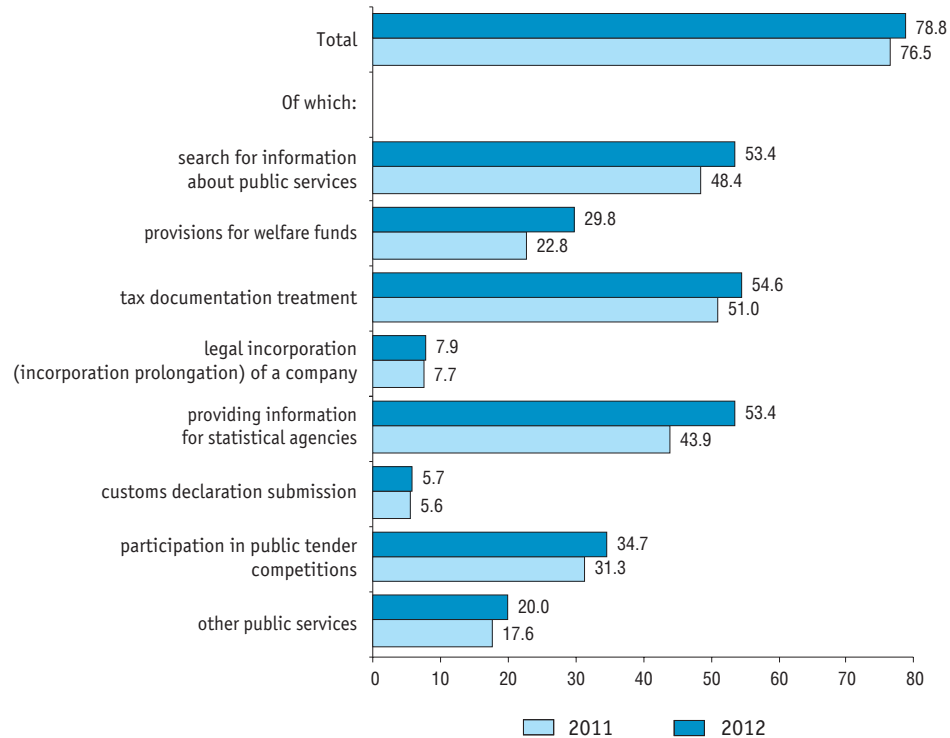
4.3.3. INTERNET USAGE FOR INTERACTION WITH PUBLIC AUTHORITIES

(as a percentage of the total number of enterprises)



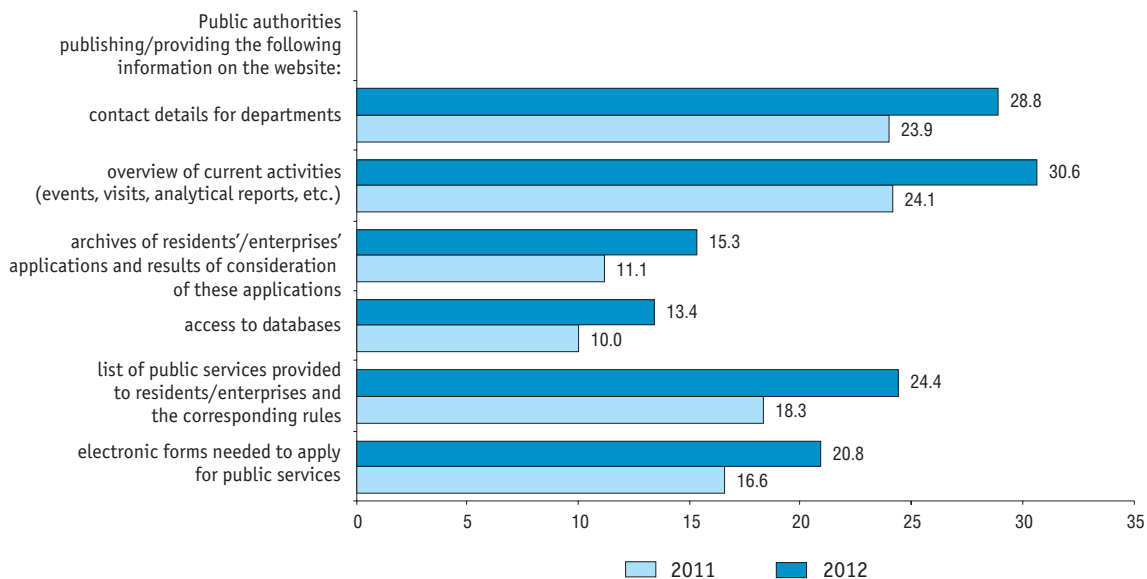
- 1 – Getting information about public authorities' activity
- 2 – Obtaining blank forms (e.g. statistical and tax forms)
- 3 – Submitting filled forms (e.g. statistical and tax forms)
- 4 – Full electronic case handling

4.3.4. INTERNET USAGE FOR RECEIVING SOME TYPES OF PUBLIC SERVICES

(as a percentage of the total number of enterprises)

4.3.5. WEBSITE USAGE BY PUBLIC AUTHORITIES FOR INTERACTION WITH INDIVIDUALS AND ENTERPRISES

(as a percentage of the total number of enterprises*)



* The data is provided for enterprises engaged in the economic activity with RCEA (Rev. 1.1) code 75.11 'General (overall) public service activities'.

4.3.6. INTERNET USAGE FOR GENERAL PURPOSES IN ENTERPRISES BY ECONOMIC ACTIVITY

(as a percentage of the total number of enterprises)

	Information search		E-mailing		Information exchange in electronic form		Personnel training	
	2011	2012	2011	2012	2011	2012	2011	2012
Total	80.9	83.4	82.4	84.4	79.5	81.3	25.3	26.9
Mining and quarrying	88.7	88.4	89.3	88.8	87.4	86.0	31.3	32.8
Manufacture of food products and beverages	92.0	92.7	92.7	93.2	90.2	89.8	30.0	31.2
Manufacture of chemicals and chemical products	94.7	95.3	95.5	95.6	93.8	94.3	36.7	40.4
Manufacture of basic metals	92.7	93.5	93.5	94.2	91.4	90.7	34.3	35.7
Manufacture of machinery and equipment, n.e.c.	93.0	93.4	93.8	93.6	90.8	91.1	33.5	39.0
Manufacture of electrical machinery and apparatus	93.9	95.0	95.2	95.5	92.7	93.7	35.8	38.4
Electricity, gas and water supply	78.9	82.2	80.1	82.5	77.0	79.1	25.1	26.6
Construction	87.9	88.8	90.5	90.4	87.1	86.8	29.1	28.1
Wholesale and retail trade	83.1	83.8	86.6	88.1	83.2	84.5	31.1	34.3
Transport	76.6	78.8	77.5	79.3	73.9	76.1	23.6	26.1
Communications	92.5	92.0	93.2	91.5	91.7	90.6	58.6	59.1
Financial intermediation	91.4	92.8	91.6	91.7	90.5	90.7	52.7	58.9
Research and development	92.1	92.9	93.7	94.3	91.2	91.3	36.9	38.5
Public administration; compulsory social security	82.5	86.6	85.0	88.2	82.1	85.3	22.5	23.8
Higher education	95.9	97.0	97.0	97.1	95.7	96.0	62.3	62.8
Health and social work	90.6	92.9	93.3	94.6	90.0	91.6	24.2	28.8
Other activities	70.7	74.0	70.9	73.8	67.8	70.1	18.9	19.1

(continued)

	Internal or external recruitment		Telephoning over the Internet/VoIP		Videoconferencing		Paid subscription for access to e-databases, e-libraries	
	2011	2012	2011	2012	2011	2012	2011	2012
Total	20.1	21.4	18.4	19.8	20.6	22.7	15.4	16.6
Mining and quarrying	30.9	32.6	32.1	34.4	31.0	32.7	23.7	26.1
Manufacture of food products and beverages	39.8	41.7	32.6	34.7	28.5	28.5	24.5	26.8
Manufacture of chemicals and chemical products	50.5	53.1	45.4	48.3	40.1	41.8	34.7	36.9
Manufacture of basic metals	42.9	44.9	37.3	39.7	33.7	32.4	29.7	29.5
Manufacture of machinery and equipment, n.e.c.	39.9	42.0	32.6	36.5	27.8	30.7	25.3	30.3
Manufacture of electrical machinery and apparatus	45.5	48.5	35.6	38.0	30.1	34.2	27.1	31.5
Electricity, gas and water supply	16.9	18.3	17.1	17.6	17.3	19.0	15.3	17.1
Construction	32.7	33.6	21.2	23.5	19.7	18.6	23.3	24.1
Wholesale and retail trade	41.2	43.8	33.2	37.0	29.5	32.0	22.2	23.6
Transport	21.6	23.2	18.5	20.4	17.1	18.6	16.1	17.9
Communications	54.0	56.5	48.8	48.8	52.8	54.2	32.3	33.0
Financial intermediation	53.5	59.2	48.9	52.4	47.7	53.9	34.2	37.3
Research and development	33.8	35.6	30.2	34.2	35.8	37.8	36.9	39.6
Public administration; compulsory social security	10.0	10.5	12.0	12.6	19.2	21.9	9.1	9.7
Higher education	34.7	36.1	45.0	46.0	61.1	65.9	50.6	57.1
Health and social work	14.3	16.8	11.0	13.3	16.9	23.2	12.6	14.5
Other activities	14.5	14.7	13.4	14.0	13.3	13.6	11.9	12.4

4.3.7. INTERNET USAGE FOR GENERAL PURPOSES IN ENTERPRISES BY OWNERSHIP

(as a percentage of the total number of enterprises)

	Information search		E-mailing		Information exchange in electronic form		Personnel training	
	2011	2012	2011	2012	2011	2012	2011	2012
Total	80.9	83.4	82.4	84.4	79.5	81.3	25.3	26.9
Russian ownership	80.6	83.4	82.2	84.2	79.2	81.0	24.5	26.0
Public	89.8	91.3	92.7	93.2	89.7	90.6	30.4	33.2
Municipal	73.8	79.0	74.5	79.1	71.3	75.5	15.9	16.8
Private	81.8	81.8	83.2	82.7	80.5	79.9	31.6	32.6
Joint	86.6	86.5	87.0	86.6	84.9	84.1	37.3	38.3
Other	72.1	74.2	73.7	75.1	69.1	70.3	16.8	16.8
Foreign ownership	84.0	83.8	85.4	86.3	83.2	83.3	38.1	38.7
Joint Russian and foreign ownership	85.8	85.8	87.9	88.1	85.1	85.1	38.5	39.5

(continued)

	Internal or external recruitment		Telephoning over the Internet/VoIP		Videoconferencing		Paid subscription for access to e-databases, e-libraries	
	2011	2012	2011	2012	2011	2012	2011	2012
Total	20.1	21.4	18.4	19.8	20.6	22.7	15.4	16.6
Russian ownership	18.1	19.1	16.6	17.9	19.1	21.2	14.5	15.6
Public	20.0	21.5	20.2	21.8	26.2	30.5	16.6	18.5
Municipal	5.6	5.7	6.1	6.3	9.7	10.5	7.4	7.7
Private	36.6	37.4	29.8	31.6	26.6	27.8	23.6	24.6
Joint	35.3	37.1	30.8	31.2	30.5	31.6	24.8	26.4
Other	12.5	13.8	12.6	15.3	12.1	14.9	11.4	14.4
Foreign ownership	52.6	53.5	44.9	46.2	44.2	44.1	28.8	29.3
Joint Russian and foreign ownership	46.0	47.3	43.0	44.9	38.3	39.9	28.3	30.0

4.3.8. INTERNET USAGE FOR GENERAL PURPOSES IN ENTERPRISES BY SIZE OF EMPLOYMENT

(as a percentage of the total number of enterprises)

	Information search		E-mailing		Information exchange in electronic form		Personnel training	
	2011	2012	2011	2012	2011	2012	2011	2012
Total	80.9	83.4	82.4	84.4	79.5	81.3	25.3	26.9
Size of employment, <i>head-count</i> :								
below 50	72.6	76.5	74.1	77.5	70.8	73.8	18.0	19.3
51–100	93.3	94.5	95.2	95.8	92.4	93.1	31.9	33.9
101–200	94.0	95.4	95.9	96.2	93.4	93.7	35.1	37.7
201–500	94.1	95.1	95.4	95.7	93.2	94.0	38.0	41.5
501–1000	94.7	95.7	95.7	95.7	94.2	94.5	44.7	50.0
1001–5000	97.2	97.6	97.1	97.2	96.0	96.2	55.6	60.6
5001–10 000	99.1	100	99.1	99.5	97.3	99.5	71.0	77.7
10 000 and above	98.8	98.8	98.8	98.8	98.8	98.8	79.0	77.5

(continued)

	Internal or external recruitment		Telephoning over the Internet/VoIP		Videoconferencing		Paid subscription for access to e-databases, e-libraries	
	2011	2012	2011	2012	2011	2012	2011	2012
Total	20.1	21.4	18.4	19.8	20.6	22.7	15.4	16.6
<i>Size of employment, head-count:</i>								
below 50	10.2	11.2	11.8	13.0	13.2	14.9	9.3	10.2
51–100	25.9	27.9	22.4	24.6	26.5	29.1	19.4	21.5
101–200	34.4	36.7	26.8	29.2	28.6	31.6	24.1	25.9
201–500	40.3	43.3	31.6	34.3	33.9	37.9	27.2	29.6
501–1000	48.0	52.3	36.7	40.6	42.4	49.1	30.9	34.3
1001–5000	58.7	62.6	48.9	51.0	57.6	62.7	40.6	44.2
5001–10 000	66.1	72.5	56.1	61.1	70.1	73.0	52.0	62.1
10 000 and above	65.4	77.5	65.4	63.8	79.0	77.5	59.3	63.8

4.3.9. INTERNET USAGE FOR INTERACTION WITH PUBLIC AUTHORITIES IN ENTERPRISES BY ECONOMIC ACTIVITY

(as a percentage of the total number of enterprises)

	Getting information about public authorities' activity		Obtaining blank forms (e.g. statistical and tax forms)		Submitting filled forms (e.g. statistical and tax forms)		Full electronic case handling	
	2011	2012	2011	2012	2011	2012	2011	2012
Total	55.5	58.0	67.9	69.8	65.5	68.5	28.2	31.4
Mining and quarrying	61.3	60.8	77.6	76.6	75.9	76.3	30.2	34.6
Manufacture of food products and beverages	59.7	60.8	81.4	82.2	82.2	83.2	34.8	37.8
Manufacture of chemicals and chemical products	69.5	72.6	84.3	84.3	83.9	86.9	33.0	39.1
Manufacture of basic metals	63.1	63.6	81.0	83.2	80.9	83.2	32.7	36.3
Manufacture of machinery and equipment, n.e.c.	63.3	66.5	80.7	83.8	81.9	83.3	35.5	40.2
Manufacture of electrical machinery and apparatus	67.2	69.0	84.2	84.3	84.1	85.0	36.4	38.3
Electricity, gas and water supply	52.6	55.5	69.4	70.7	67.4	70.5	23.7	26.0
Construction	56.8	56.6	77.2	76.4	76.9	77.4	36.0	38.4
Wholesale and retail trade	52.8	53.8	70.5	70.7	69.4	70.0	30.4	32.6
Transport	48.4	50.9	64.3	66.3	62.9	65.4	24.3	28.2
Communications	72.4	70.6	79.7	78.3	77.9	78.1	35.4	39.4
Financial intermediation	68.7	69.7	75.5	77.7	74.2	75.2	34.5	37.8
Research and development	72.5	73.3	83.0	84.8	79.5	81.7	39.9	41.4
Public administration; compulsory social security	60.7	65.6	68.7	72.1	65.1	70.6	28.2	33.4
Higher education	78.7	80.1	85.4	87.4	83.2	85.6	41.2	43.7
Health and social work	64.5	68.1	79.3	81.2	78.1	81.4	34.4	38.5
Other activities	44.3	46.5	56.8	59.0	53.5	56.7	22.3	24.4

4.3.10. INTERNET USAGE FOR INTERACTION WITH PUBLIC AUTHORITIES IN ENTERPRISES BY OWNERSHIP

(as a percentage of the total number of enterprises)

	Getting information about public authorities' activity		Obtaining blank forms (e.g. statistical and tax forms)		Submitting filled forms (e.g. statistical and tax forms)		Full electronic case handling	
	2011	2012	2011	2012	2011	2012	2011	2012
Total	55.5	58.0	67.9	69.8	65.5	68.5	28.2	31.4
Russian ownership	55.3	58.0	67.7	69.7	65.2	68.3	27.8	31.0
Public	65.9	68.4	77.1	78.7	75.3	78.6	35.0	39.1
Municipal	48.8	53.2	59.8	63.3	55.9	60.9	21.9	25.1
Private	54.3	54.9	70.5	70.4	69.4	69.3	30.0	32.2
Joint	60.7	59.8	73.5	72.4	71.5	71.3	31.4	33.2
Other	40.4	42.7	61.7	62.3	58.9	61.5	21.0	24.1
Foreign ownership	59.5	58.2	70.7	70.1	70.6	70.2	34.3	36.1
Joint Russian and foreign ownership	57.2	57.1	71.2	72.9	70.3	72.8	31.4	35.7

4.3.11. INTERNET USAGE FOR INTERACTION WITH PUBLIC AUTHORITIES IN ENTERPRISES BY SIZE OF EMPLOYMENT

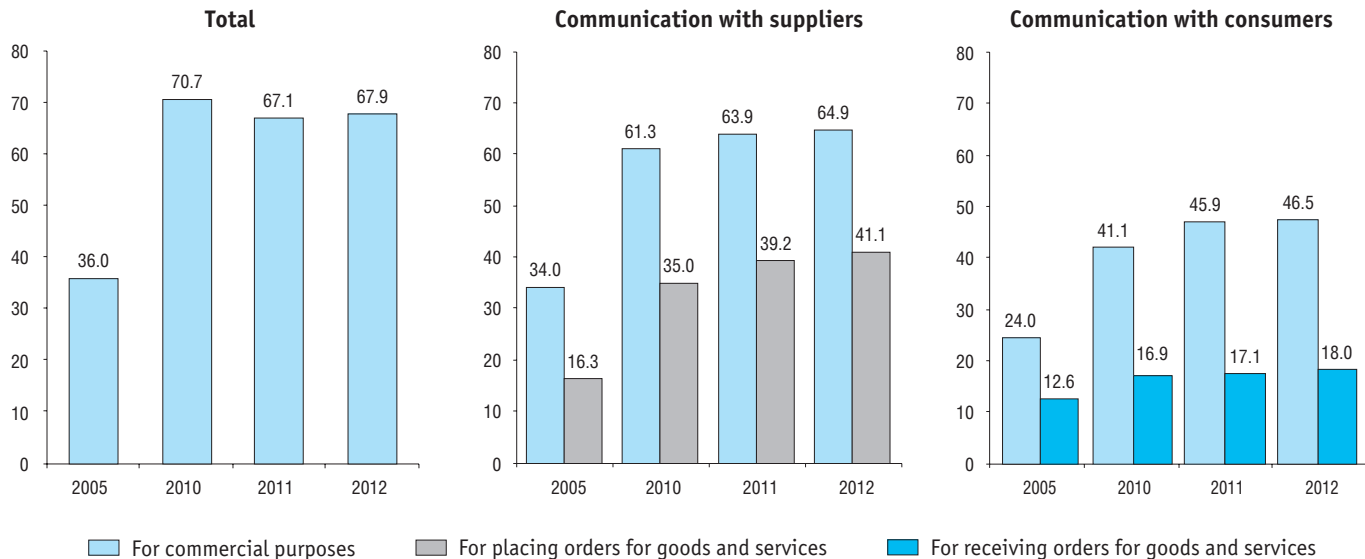
(as a percentage of the total number of enterprises)

	Getting information about public authorities' activity		Obtaining blank forms (e.g. statistical and tax forms)		Submitting filled forms (e.g. statistical and tax forms)		Full electronic case handling	
	2011	2012	2011	2012	2011	2012	2011	2012
Total	55.5	58.0	67.9	69.8	65.5	68.5	28.2	31.4
Size of employment, <i>head-count</i> :								
below 50	46.8	50.0	57.9	60.9	54.0	58.4	21.9	25.3
51–100	65.0	67.6	81.7	82.8	81.1	83.8	35.4	39.1
101–200	67.5	69.1	83.7	84.7	84.1	85.3	38.1	41.3
201–500	71.6	73.8	84.4	85.7	84.6	86.4	39.6	43.8
501–1000	75.4	78.0	85.9	87.0	85.6	87.5	41.0	44.1
1001–5000	82.5	83.2	89.6	89.8	89.0	90.3	41.8	44.7
5001–10 000	85.5	88.2	90.0	94.3	88.2	94.3	44.8	48.3
10 000 and above	87.7	87.5	95.1	93.8	90.1	91.3	39.5	51.3

4.4. Electronic Commerce

4.4.1. INTERNET USAGE FOR COMMERCIAL PURPOSES

(as a percentage of the total number of enterprises)



4.4.2. INTERNET USAGE FOR COMMUNICATION WITH SUPPLIERS IN ENTERPRISES BY ECONOMIC ACTIVITY

(as a percentage of the total number of enterprises)

	Getting information about goods and services		Providing information about the enterprise's need for goods and services		Placing orders for goods and services		Paying for goods and services		Acquiring electronic products	
	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012
Total	54.8	55.9	41.0	42.1	39.2	41.1	26.2	29.7	21.4	22.3
Mining and quarrying	74.3	73.4	51.8	50.4	35.1	36.9	38.6	42.7	33.2	34.8
Manufacture of food products and beverages	79.1	79.3	57.1	58.0	40.5	43.6	45.2	48.8	30.6	32.2
Manufacture of chemicals and chemical products	85.1	86.6	71.2	73.3	52.5	54.5	56.6	54.2	41.3	43.4
Manufacture of basic metals	83.6	85.0	67.8	66.7	47.1	50.1	49.3	51.6	34.7	34.3
Manufacture of machinery and equipment, n.e.c.	84.4	84.5	65.2	63.5	45.3	46.5	47.9	52.1	35.9	39.4
Manufacture of electrical machinery and apparatus	86.2	87.6	69.3	71.9	52.6	55.3	49.5	51.7	40.4	40.9
Electricity, gas and water supply	57.0	60.0	36.3	42.0	27.7	35.8	28.8	32.4	25.3	26.5
Construction	72.9	73.5	50.2	50.5	36.0	37.9	46.3	46.8	29.3	29.7
Wholesale and retail trade	72.3	72.8	57.6	58.0	41.2	44.0	45.5	47.7	23.4	23.2
Transport	58.2	59.3	39.2	41.8	30.8	34.8	30.2	32.8	23.8	24.2
Communications	78.2	77.6	61.8	63.3	49.8	54.4	41.9	42.6	43.1	42.1
Financial intermediation	68.2	70.4	42.3	44.2	30.2	32.4	27.7	31.0	36.3	37.9
Research and development	77.9	78.5	60.1	62.0	56.7	58.7	39.5	43.8	43.6	46.2
Public administration; compulsory social security	43.5	44.6	34.7	35.5	44.6	46.1	14.6	18.7	15.6	17.2
Higher education	72.7	73.1	59.0	58.4	53.4	52.9	36.4	39.2	49.0	50.5
Health and social work	66.6	69.0	54.0	57.8	58.5	62.5	29.3	36.7	21.0	23.7
Other activities	44.2	45.1	30.9	31.5	28.1	29.4	21.6	24.1	17.2	17.3

4.4.3. INTERNET USAGE FOR COMMUNICATION WITH SUPPLIERS IN ENTERPRISES BY OWNERSHIP

(as a percentage of the total number enterprises)

	Getting information about goods and services		Providing information about the enterprise's need for goods and services		Placing orders for goods and services		Paying for goods and services		Acquiring electronic products	
	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012
Total	54.8	55.9	41.0	42.1	39.2	41.1	26.2	29.7	21.4	22.3
Russian ownership	53.7	54.8	40.2	41.3	39.3	41.3	24.9	28.4	20.8	21.7
Public	63.7	65.9	50.9	54.7	55.3	59.6	27.3	33.1	24.3	26.1
Municipal	39.1	39.9	28.4	28.5	32.4	33.5	14.7	17.6	13.4	14.1
Private	66.5	65.6	48.1	46.9	34.4	34.5	39.2	40.3	28.5	28.4
Joint	67.2	68.6	47.7	49.7	35.5	39.3	34.5	36.4	33.3	33.9
Other	54.7	55.4	35.5	38.2	23.6	27.6	28.8	32.7	16.7	17.8
Foreign ownership	71.0	69.9	54.3	53.9	36.2	41.1	47.7	48.2	29.6	29.8
Joint Russian and foreign ownership	70.9	71.0	52.3	51.0	36.5	36.9	41.5	43.7	32.2	30.7

4.4.4. INTERNET USAGE FOR COMMUNICATION WITH SUPPLIERS IN ENTERPRISES BY SIZE OF EMPLOYMENT

(as a percentage of the total number enterprises)

	Getting information about goods and services		Providing information about the enterprise's need for goods and services		Placing orders for goods and services		Paying for goods and services		Acquiring electronic products	
	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012
Total	54.8	55.9	41.0	42.1	39.2	41.1	26.2	29.7	21.4	22.3
<i>Size of employment, head-count:</i>										
below 50	40.4	42.0	28.9	29.8	29.8	31.3	18.1	21.7	13.7	14.4
51–100	70.5	72.2	52.8	55.2	49.4	53.5	33.6	37.8	26.0	27.8
101–200	78.0	79.5	59.5	62.0	52.7	56.0	39.5	43.6	31.2	33.1
201–500	81.3	82.8	64.1	66.7	55.6	59.1	42.4	46.2	37.0	39.5
501–1000	85.3	86.2	68.4	71.7	60.8	64.8	43.1	48.4	44.9	47.3
1001–5000	89.9	90.8	75.7	79.2	67.1	72.2	44.9	48.4	54.3	57.6
5001–10 000	95.9	95.7	87.8	91.0	78.3	83.4	48.9	50.7	68.8	72.5
10 000 and above	96.3	97.5	87.7	88.8	77.8	78.8	50.6	50.0	72.8	76.3

4.4.5. INTERNET USAGE FOR COMMUNICATION WITH CONSUMERS IN ENTERPRISES BY ECONOMIC ACTIVITY

(as a percentage of the total number of enterprises)

	Providing information about the enterprise and its goods and services		Receiving orders for goods and services		Electronic payment transactions with consumers		Distribution of electronic products		After-sales service	
	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012
Total	40.1	41.8	17.1	18.0	16.8	18.5	5.8	5.1	6.7	5.5
Mining and quarrying	50.4	50.2	22.3	22.1	28.7	32.4	5.0	3.8	7.1	6.0
Manufacture of food products and beverages	66.8	68.1	41.8	44.8	35.2	38.4	7.6	7.1	8.8	7.7
Manufacture of chemicals and chemical products	78.1	79.0	43.6	43.1	40.0	43.1	9.8	10.9	13.4	11.8
Manufacture of basic metals	75.2	77.2	44.6	47.6	39.7	45.3	8.9	7.8	13.7	12.4
Manufacture of machinery and equipment, n.e.c.	75.0	75.8	44.5	44.2	39.5	43.4	8.4	10.6	19.6	18.4
Manufacture of electrical machinery and apparatus	78.2	80.1	48.3	47.9	39.1	43.1	12.4	12.5	21.6	20.6
Electricity, gas and water supply	40.8	45.5	10.2	12.3	18.9	20.4	3.0	2.2	4.0	3.1
Construction	54.0	55.0	28.6	30.5	33.2	34.3	6.7	5.2	8.9	6.5
Wholesale and retail trade	52.4	54.4	30.1	30.5	29.6	32.4	7.5	6.6	11.0	10.3
Transport	39.5	41.6	20.4	22.3	22.1	24.5	4.7	4.7	6.2	6.2
Communications	69.4	69.8	42.3	41.7	41.1	40.5	23.5	21.7	32.8	30.3
Financial intermediation	65.7	67.1	29.4	31.6	34.0	36.1	15.2	16.4	21.0	19.4
Research and development	65.0	66.5	32.3	31.3	25.5	28.6	13.5	13.8	14.4	13.3
Public administration; compulsory social security	24.3	24.8	6.1	6.8	6.2	7.0	3.3	2.3	3.3	2.1
Higher education	73.9	75.0	25.9	26.0	20.0	20.9	18.3	16.0	11.0	8.5
Health and social work	43.0	47.9	13.3	15.5	13.6	15.8	4.0	3.0	4.8	3.3
Other activities	35.7	37.2	15.9	16.0	14.2	15.5	5.4	4.7	5.1	3.9

4.4.6. INTERNET USAGE FOR COMMUNICATION WITH CONSUMERS IN ENTERPRISES BY OWNERSHIP

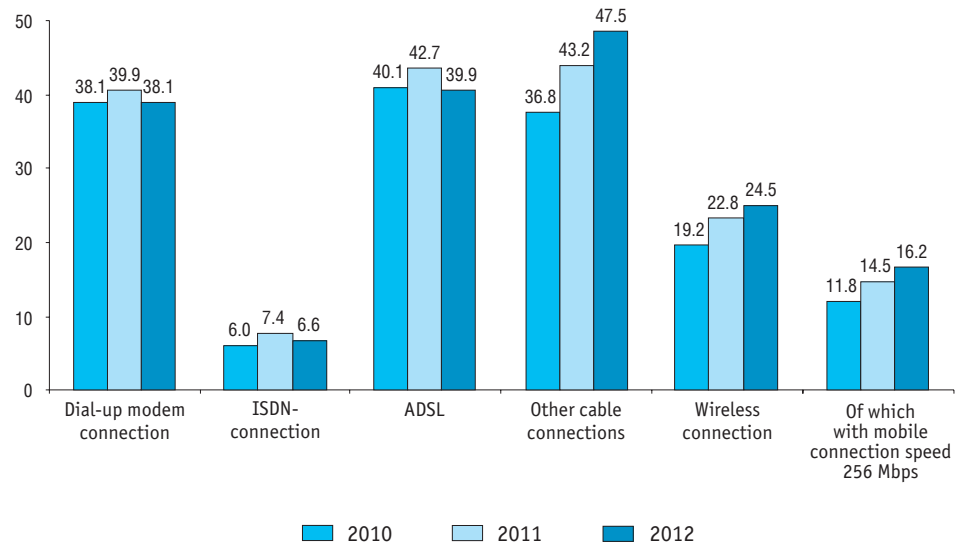
(as a percentage of the total number enterprises)

	Providing information about the enterprise and its goods and services		Receiving orders for goods and services		Electronic payment transactions with consumers		Distribution of electronic products		After-sales service	
	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012
Total	40.1	41.8	17.1	18.0	16.8	18.5	5.8	5.1	6.7	5.5
Russian ownership	38.8	40.5	16.0	16.8	15.7	17.2	5.4	4.6	6.2	4.9
Public	43.9	46.9	16.1	17.4	14.1	15.9	6.1	5.2	5.7	4.0
Municipal	24.3	25.6	7.2	7.7	7.8	8.6	2.9	2.1	3.0	2.0
Private	56.2	56.4	29.9	29.8	29.9	31.7	8.3	7.4	11.4	9.8
Joint	59.1	59.8	28.6	29.9	30.1	31.2	10.6	10.1	13.8	12.4
Other	37.0	38.5	18.5	20.2	18.5	20.7	5.0	4.6	5.3	4.0
Foreign ownership	57.6	56.3	33.9	33.6	33.4	33.7	11.0	11.1	15.7	15.1
Joint Russian and foreign ownership	60.6	61.3	34.5	34.2	34.2	37.1	11.9	11.6	15.2	14.1

4.4.7. INTERNET USAGE FOR COMMUNICATION WITH CONSUMERS IN ENTERPRISES BY SIZE OF EMPLOYMENT

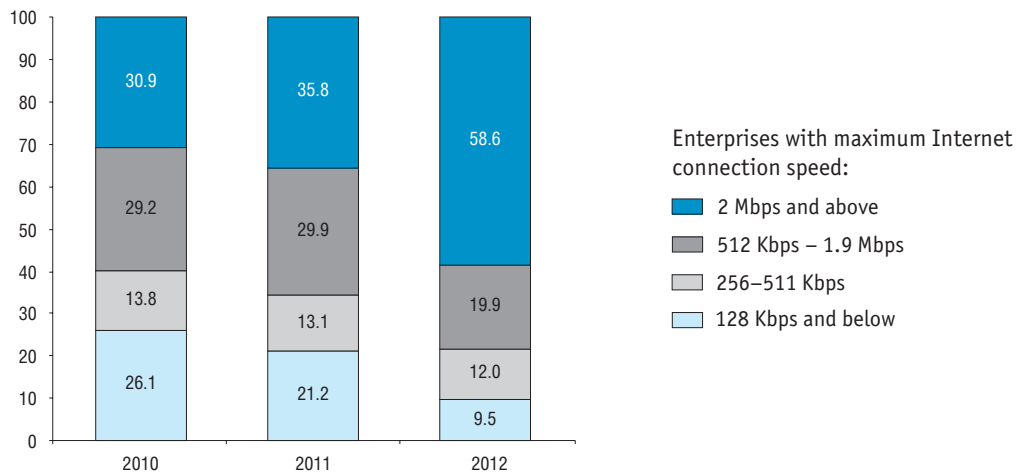
(as a percentage of the total number enterprises)

	Providing information about the enterprise and its goods and services		Receiving orders for goods and services		Electronic payment transactions with consumers		Distribution of electronic products		After-sales service	
	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012
Total	40.1	41.8	17.1	18.0	16.8	18.5	5.8	5.1	6.7	5.5
Size of employment, head-count:										
below 50	28.1	29.9	10.7	11.4	11.0	12.6	3.9	3.3	4.3	3.4
51–100	51.2	54.3	21.2	22.9	21.5	23.8	7.4	6.7	8.8	7.4
101–200	58.3	61.2	28.0	29.8	26.5	28.9	8.7	7.9	10.5	8.8
201–500	62.9	65.3	30.8	32.1	28.4	31.0	9.6	8.3	11.3	9.8
501–1000	67.0	70.0	32.1	34.9	29.8	32.2	9.0	8.9	11.7	11.3
1001–5000	75.7	76.5	35.9	37.2	31.8	34.6	13.0	12.2	15.6	14.9
5001–10 000	84.2	88.2	46.2	45.5	41.6	40.8	16.3	11.8	21.7	23.7
10 000 and above	90.1	86.3	53.1	48.8	40.7	47.5	14.8	20.0	19.8	26.3

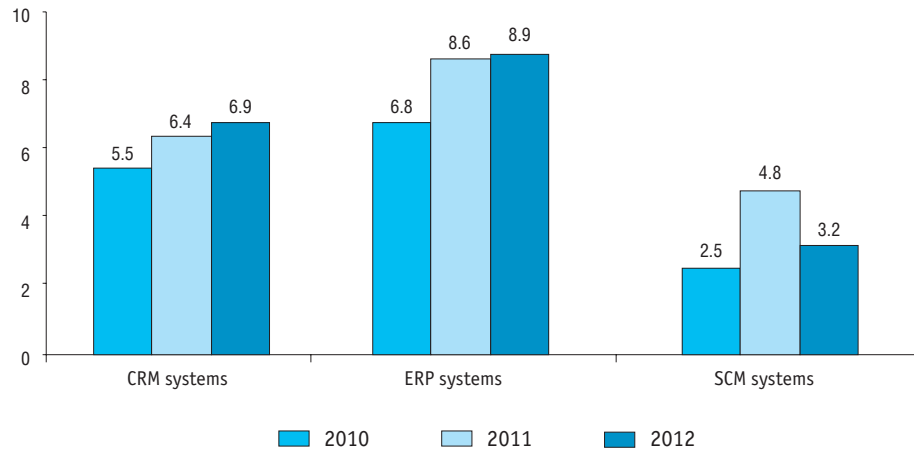
4.4.8. ENTERPRISES USING THE INTERNET FOR COMMERCIAL PURPOSES BY TYPE OF INTERNET CONNECTION*(as a percentage of enterprises using the Internet for commercial purposes)*

4.4.9. ENTERPRISES USING THE INTERNET FOR COMMERCIAL PURPOSES BY INTERNET CONNECTION SPEED

(as a percentage of enterprises using the Internet for commercial purposes)

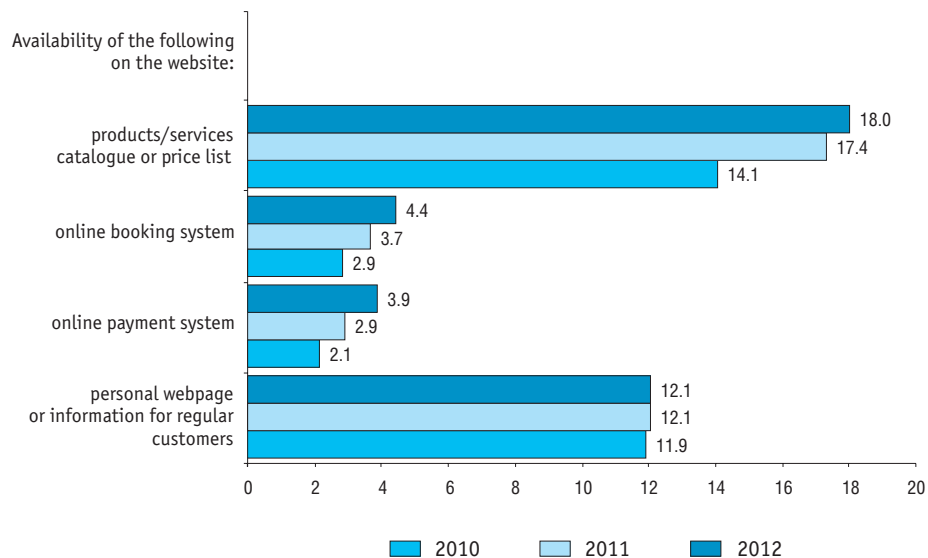


4.4.10. ENTERPRISES USING THE INTERNET FOR COMMERCIAL PURPOSES AND HAVING CRM, ERP, SCM SYSTEMS (as a percentage of enterprises using the Internet for commercial purposes)



4.4.11. ENTERPRISES USING A WEBSITE FOR COMMERCIAL PURPOSES

(as a percentage of the total number of business enterprises*)



* The data is provided for enterprises engaged in economic activities with the following RCEA codes (Rev. 1.1): C, D, E, F, G, H, I, K.

4.5. ICT Expenditure

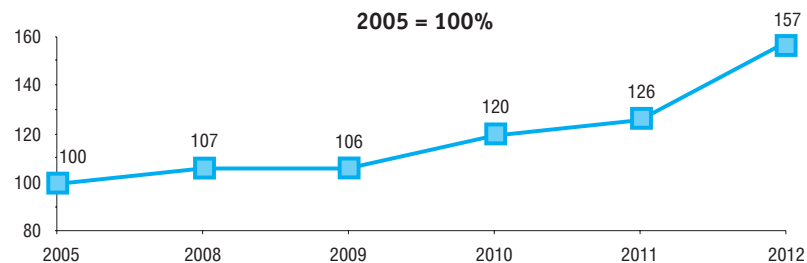
4.5.1. ICT EXPENDITURE BY TYPE OF COSTS

(million roubles)

	2005	2010	2011	2012
Total	215302	515648	603007	842674
Acquisition of computing machinery	78509	112726	139501	200625
Acquisition of software	21914	81228	104197	169025
Telecommunications services	56704	167923	184834	250461
Of which – payment for Internet access	...	39171	53336	64198
ICT training	2200	3733	4683	5648
ICT services of external organisations and consultants (excluding telecommunications services and training)	34862	98919	120012	147432
Other ICT-related expenditure	21113	51119	49780	69483

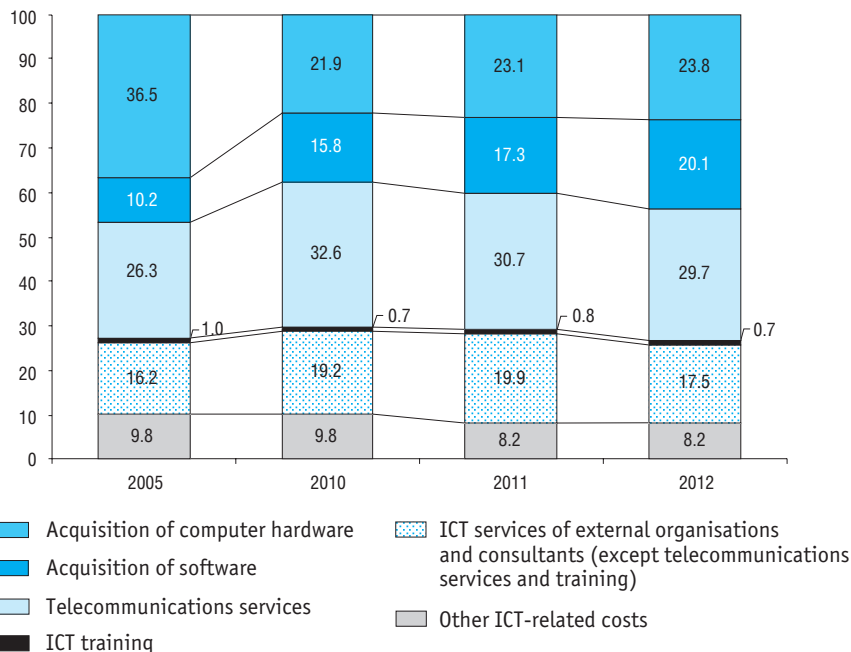
4.5.2. TRENDS IN ICT EXPENDITURE

(at current prices)



4.5.3. PERCENTAGE DISTRIBUTION OF ICT EXPENDITURE IN ENTERPRISES BY TYPE OF COSTS

(as a percentage of enterprises' total expenditure on ICT)



4.5.4. PERCENTAGE DISTRIBUTION OF ICT EXPENDITURE IN ENTERPRISES BY ECONOMIC ACTIVITY

	ICT expenditure	Acquisition of computer hardware		Acquisition of software		Telecommunications services		Of which – payment for Internet access		ICT training		ICT services of external organisations and consultants (excluding telecommunications services and training)		Other ICT-related costs	
		2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012
Total	100	23.1	23.8	17.3	20.1	30.7	29.7	8.8	7.6	0.8	0.7	19.9	17.5	8.2	8.2
Mining and quarrying	100	13.0	14.0	15.9	16.7	18.1	34.8	2.3	4.3	1.8	0.2	43.2	29.6	8.0	4.7
Manufacture of food products and beverages	100	21.9	34.4	13.5	10.1	39.3	35.2	13.2	13.8	1.4	1.8	19.2	8.5	4.8	10.0
Manufacture of chemicals and chemical products	100	19.8	4.9	19.7	25.7	20.0	56.5	4.8	4.0	0.3	0.1	33.5	9.4	6.7	3.4
Manufacture of basic metals	100	15.9	8.5	13.9	22.5	24.5	22.9	4.1	5.3	0.3	0.7	35.1	26.9	10.3	18.5
Manufacture of machinery and equipment, n.e.c.	100	18.2	18.4	21.6	26.7	37.2	28.1	12.0	6.5	0.9	1.0	16.1	19.0	6.0	6.8
Manufacture of electrical machinery and apparatus	100	20.2	25.1	19.4	16.4	31.9	29.5	7.8	12.8	1.1	1.1	17.5	17.5	9.9	10.4
Electricity, gas and water supply	100	24.8	22.8	16.5	29.9	22.2	18.9	4.3	3.3	0.6	0.2	29.3	22.9	6.6	5.3
Construction	100	21.8	30.5	16.7	14.8	38.4	37.4	14.2	19.4	1.0	1.1	14.3	10.2	7.8	6.0
Wholesale and retail trade	100	25.5	25.0	19.0	18.7	30.9	38.7	13.1	12.4	0.5	0.6	19.8	13.4	4.3	3.6
Transport	100	14.0	12.5	11.9	11.1	41.7	52.7	5.0	6.5	0.5	1.3	24.3	15.5	7.6	6.9
Communications	100	13.8	10.6	20.6	39.3	47.0	33.3	8.8	7.6	0.5	0.8	9.2	8.3	8.9	7.7
Financial intermediation	100	27.5	31.8	22.9	21.4	25.0	20.7	9.5	4.9	0.3	0.3	16.2	18.0	8.1	7.8
Research and development	100	34.5	31.5	22.6	21.8	20.0	13.8	7.3	4.4	4.2	0.7	9.9	14.9	8.8	17.3
Public administration; compulsory social security	100	27.7	27.9	13.9	14.3	31.2	27.9	9.8	9.2	0.6	0.7	17.8	20.6	8.8	8.6
Higher education	100	48.1	52.1	11.7	12.3	17.9	18.0	7.0	7.6	0.8	0.6	7.3	6.1	14.2	10.9
Health and social work	100	22.0	32.9	10.9	15.5	41.9	25.4	12.5	8.6	1.0	0.6	15.5	12.2	8.7	13.4
Other activities	100	21.8	23.3	15.3	14.7	26.6	27.8	8.6	8.2	0.9	1.0	26.3	22.9	9.1	10.3

4.5.5. PERCENTAGE DISTRIBUTION OF ICT EXPENDITURE IN ENTERPRISES BY OWNERSHIP

(per cent)

	ICT expenditure	Acquisition of computer hardware		Acquisition of software		Telecommunications services		Of which – payment for Internet access		ICT training		ICT services of external organisations and consultants (excluding telecommunications services and training)		Other ICT-related costs	
		2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012
Total	100	23.1	23.8	17.3	20.1	30.7	29.7	8.8	7.6	0.8	0.7	19.9	17.5	8.2	8.2
Russian ownership	100	23.9	24.3	17.2	20.4	30.1	29.4	8.0	7.3	0.8	0.6	19.3	17.1	8.7	8.2
Public	100	30.5	31.5	14.4	14.4	28.6	25.2	8.6	8.0	0.8	1.0	17.2	17.0	8.5	10.9
Municipal	100	20.7	24.6	14.2	18.8	43.3	36.1	17.6	14.2	0.5	0.8	13.9	12.9	7.4	6.8
Private	100	19.1	18.1	17.7	23.1	31.2	36.5	8.4	8.1	1.1	0.5	21.1	15.2	9.8	6.6
Joint	100	24.3	26.2	21.0	24.3	26.2	19.8	3.1	2.3	0.3	0.2	20.8	21.9	7.4	7.6
Other	100	30.5	20.0	25.8	25.1	17.4	18.3	4.2	6.6	0.8	0.4	20.1	31.2	5.4	5.0
Foreign ownership	100	20.8	20.3	19.8	19.7	33.6	32.9	13.6	10.4	0.6	0.5	19.5	16.4	5.7	10.2
Joint Russian and foreign ownership	100	18.0	21.1	15.9	16.8	33.1	29.6	12.8	8.0	0.6	1.2	26.0	23.4	6.4	7.9

4.5.6. PERCENTAGE DISTRIBUTION OF ICT EXPENDITURE IN ENTERPRISES BY SIZE OF EMPLOYMENT

	ICT expenditure	Acquisition of computer hardware		Acquisition of software		Telecommunications services		Of which – payment for the Internet access		ICT training		ICT services of external organisations and consultants (excluding telecommunications services and training)		Other ICT-related costs	
		2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012
Total	100	23.1	23.8	17.3	20.1	30.7	29.7	8.8	7.6	0.8	0.7	19.9	17.5	8.2	8.2
Size of employment, head-count:															
below 50	100	21.3	19.5	15.8	17.4	39.5	40.5	18.6	17.3	0.6	0.6	17.0	15.6	5.8	6.4
51–100	100	24.8	30.7	15.4	12.1	39.4	36.9	13.6	12.4	0.7	0.9	13.1	13.1	6.6	6.4
101–200	100	20.3	23.8	13.2	11.9	40.0	36.3	12.9	12.1	0.7	1.1	16.9	18.2	8.9	8.7
201–500	100	22.2	25.4	13.3	13.7	36.4	37.0	13.2	11.5	1.2	0.8	17.1	15.2	9.8	7.9
501–1000	100	26.3	20.5	15.1	20.7	29.2	30.8	6.8	6.4	0.6	0.6	18.3	14.2	10.5	13.2
1001–5000	100	22.6	22.3	18.5	29.7	30.2	24.1	4.6	3.6	0.8	0.5	20.9	17.3	7.0	6.1
5001–10 000	100	30.2	25.8	20.8	18.5	15.5	27.8	4.2	2.2	0.7	0.4	25.5	20.5	7.3	7.0
10 000 and above	100	21.2	29.6	28.6	18.7	8.8	10.9	1.4	1.2	0.5	0.6	31.5	30.6	9.4	9.6

4.5.7. ICT EXPENDITURE PER ENTERPRISE BY ECONOMIC ACTIVITY

(thousand roubles)

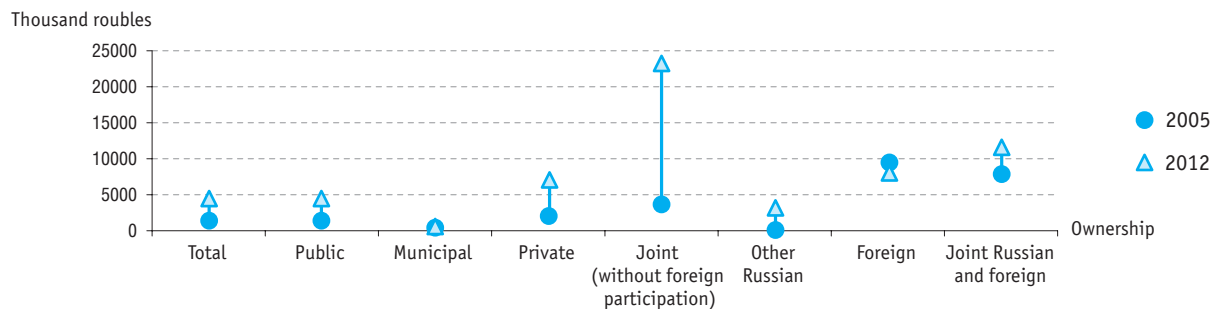
	2005	2010	2011	2012
Total	1426	2918	3381	4554
Mining and quarrying	7304	16911	18915	29190
Manufacture of food products and beverages	764	2270	2246	3782
Manufacture of chemicals and chemical products	3350	6005	6619	23713
Manufacture of basic metals	4736	6036	7612	13316
Manufacture of machinery and equipment, n.e.c.	2624	3589	3314	3226
Manufacture of electrical machinery and apparatus	1806	10185	3183	3568
Electricity, gas and water supply	2106	4223	5317	7816
Construction	857	2457	4952	3048
Wholesale and retail trade	662	2865	3248	5145
Transport	1718	4610	3928	6665
Communications	19569	39517	39591	49043
Financial intermediation	6091	12635	16668	20633
Research and development	2973	6121	6236	7044
Public administration; compulsory social security	513	1199	1607	2430
Higher education	5100	4007	6990	8222
Health and social work	544	1051	1247	2279
Other activities	1097	1725	1869	2100

4.5.8. ICT EXPENDITURE PER ENTERPRISE BY OWNERSHIP

(thousand roubles)

	2005	2010	2011	2012
Total	1426	2918	3381	4554
Russian ownership	1231	2524	3029	4185
Public	1434	2879	3176	4587
Municipal	211	457	577	717
Private	2096	4646	5172	6997
Joint	3487	10575	16715	23325
Other	97	1188	2267	3128
Foreign ownership	9265	6238	6244	8130
Joint Russian and foreign ownership	7841	13672	12100	11635

4.5.9. TRENDS IN ICT EXPENDITURE PER ENTERPRISE BY OWNERSHIP

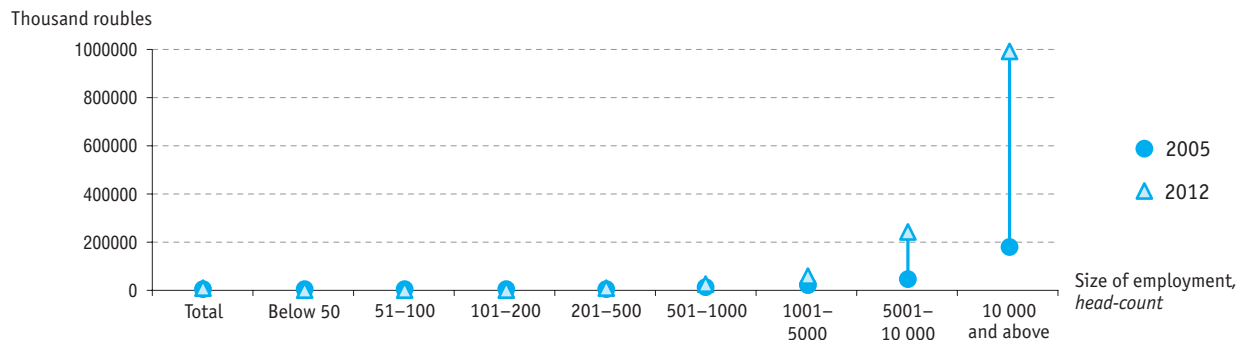


4.5.10. ICT EXPENDITURE PER ENTERPRISE BY SIZE OF EMPLOYMENT

(thousand roubles)

	2005	2010	2011	2012
Total	1426	2918	3381	4554
Size of employment, head-count:				
below 50	241	422	578	672
51–100	546	1710	1681	2726
101–200	979	2424	2822	3915
201–500	2562	5553	6161	7199
501–1000	7121	11969	14450	24647
1001–5000	13992	42646	43038	61211
5001–10 000	41543	134743	159674	242255
10 000 and above	175563	422032	722075	979617

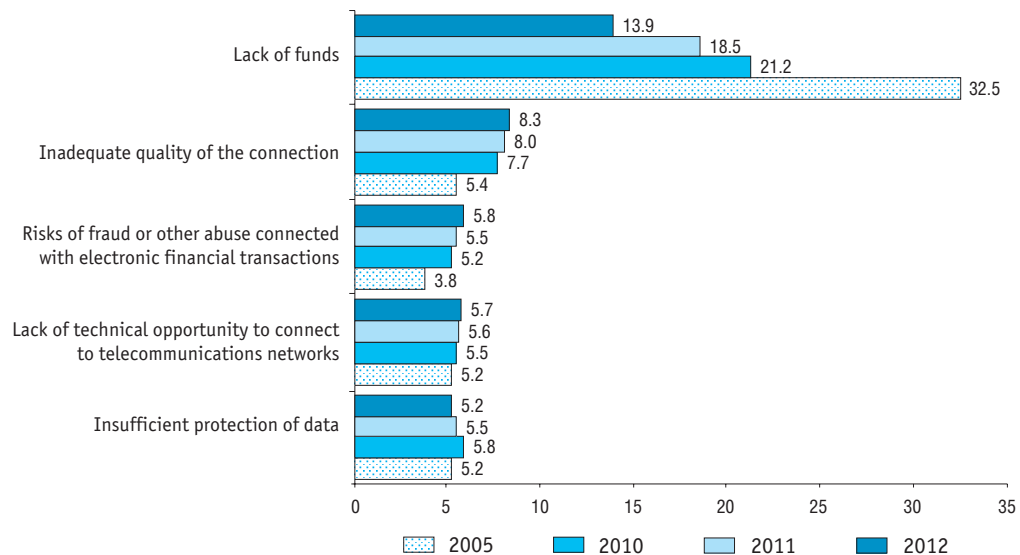
4.5.11. TRENDS IN ICT EXPENDITURE PER ENTERPRISE BY SIZE OF EMPLOYMENT



4.6. Barriers to Internet Use

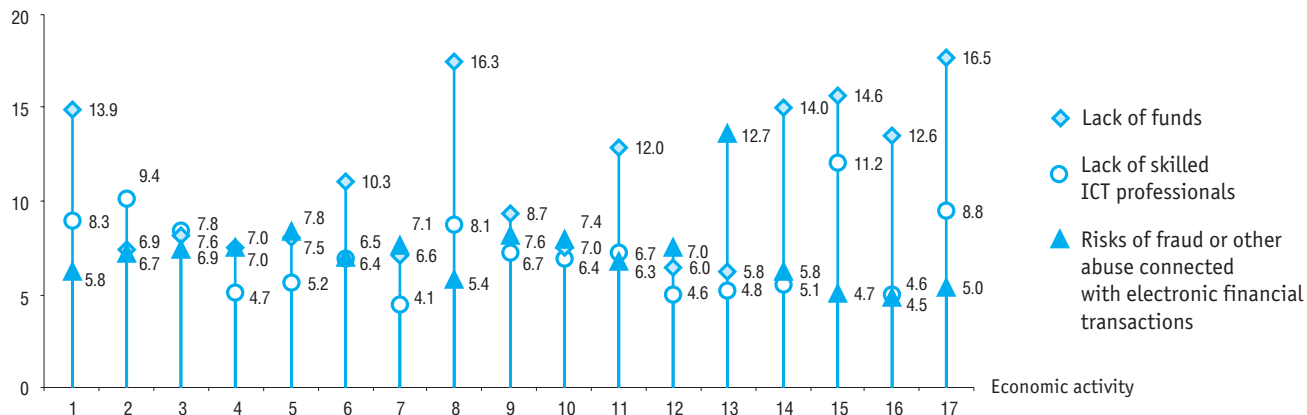
4.6.1. FACTORS HAMPERING INTERNET USE

(enterprises that indicated highly important hampering factors as a percentage of the total number of enterprises)



4.6.2. MOST IMPORTANT FACTORS HAMPERING INTERENT USE IN ENTERPRISES BY ECONOMIC ACTIVITY: 2012

(enterprises that indicated highly important hampering factors as a percentage of the total number of enterprises)



- 1 – Total
- 2 – Mining and quarrying
- 3 – Manufacture of food products and beverages
- 4 – Manufacture of chemicals and chemical products
- 5 – Manufacture of basic metals

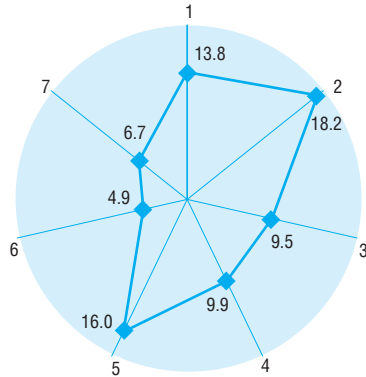
- 6 – Manufacture of machinery and equipment, n.e.c.
- 7 – Manufacture of electrical machinery and apparatus
- 8 – Electricity, gas and water supply
- 9 – Construction
- 10 – Wholesale and retail trade
- 11 – Transport

- 12 – Communications
- 13 – Financial intermediation
- 14 – Research and development
- 15 – Public administration; compulsory social security
- 16 – Higher education
- 17 – Health and social work

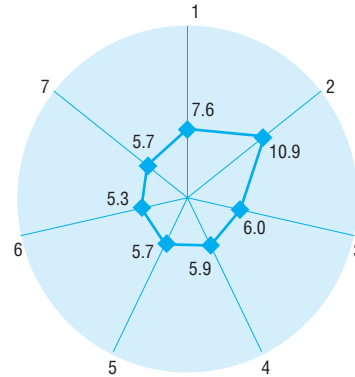
4.6.3. MOST IMPORTANT FACTORS HAMPERING INTERNET USE IN ENTERPRISES BY OWNERSHIP: 2012

(enterprises that indicated highly important hampering factors as a percentage of the total number of enterprises)

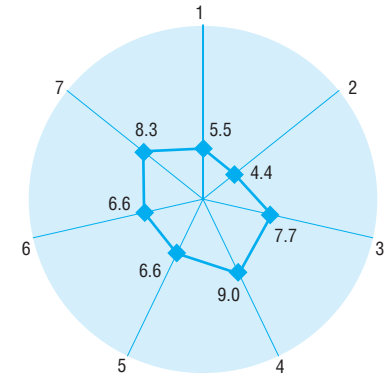
Lack of funds



Lack of skilled ICT professionals



Risks of fraud or other abuse connected with electronic financial transactions



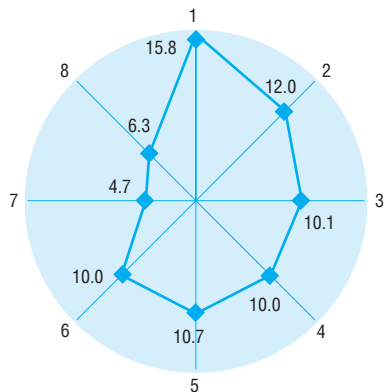
Ownership:

- | | |
|---|-------------------------------|
| 1 – public | 5 – other Russian |
| 2 – municipal | 6 – foreign |
| 3 – private | 7 – joint Russian and foreign |
| 4 – joint (without foreign participation) | |

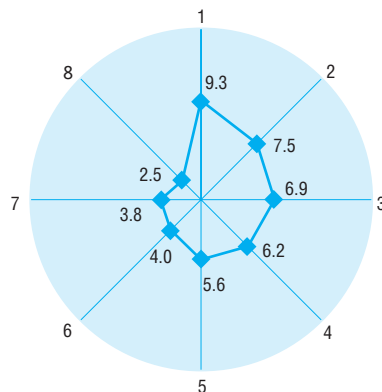
4.6.4. MOST IMPORTANT FACTORS HAMPERING INTERNET USE IN ENTERPRISES BY SIZE OF EMPLOYMENT: 2012

(enterprises that indicated highly important hampering factors as a percentage of the total number of enterprises)

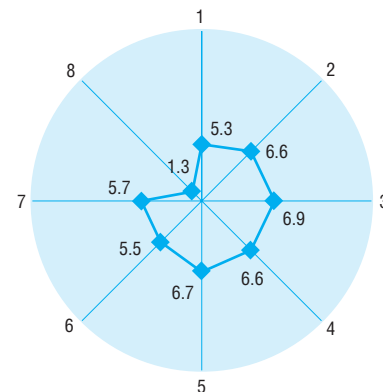
Lack of funds



Lack of skilled ICT professionals



Risks of fraud or other abuse connected with electronic financial transactions



Size of employment, *head-count*:

- | | |
|--------------|----------------------|
| 1 – below 50 | 5 – 501–1000 |
| 2 – 51–100 | 6 – 1001–5000 |
| 3 – 101–200 | 7 – 5001–10 000 |
| 4 – 201–500 | 8 – 10 000 and above |

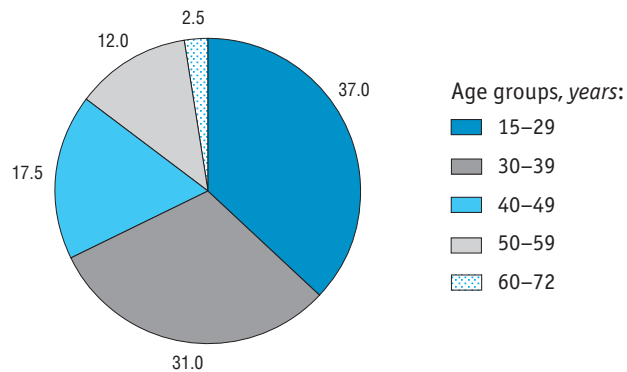
4.7. ICT Professionals and Employees with ICT Skills

4.7.1. EMPLOYED POPULATION WITH AN ICT-RELATED JOB AND HIGHER OR SECONDARY VOCATIONAL EDUCATION IN ICT BY ECONOMIC ACTIVITY AND AGE GROUP: 2012

(annual average; thousand, head-count)

	Total	Of which by age group, years				
		15–29	30–39	40–49	50–59	60–72
Total	1141.2	421.8	353.8	199.3	137.2	29.1
Mining and quarrying	10.2	4.5	2.9	1.8	0.9	0.1
Manufacture of food products and beverages	14.6	5.6	3.5	3.8	1.5	0.2
Manufacture of chemicals and chemical products	11.6	4	4.3	2.1	0.9	0.3
Manufacture of basic metals	11.2	4.3	4.3	0.6	1.4	0.5
Manufacture of machinery and equipment, n.e.c.	36.4	10.5	9.4	8.6	6.8	1.0
Manufacture of electrical machinery and apparatus	65.1	15.1	16.7	12.7	16.1	4.5
Electricity, gas and water supply	29.4	10.7	7.5	6.6	3.2	1.4
Construction	28.3	12.6	9.0	4.4	1.7	0.6
Wholesale and retail trade	63.4	23.8	24.5	9.3	5.1	0.8
Transport	44.4	16.4	13.9	7.5	5.5	1.0
Communications	126.1	36.7	38.4	25.5	21.7	3.8
Financial intermediation	86.5	34.7	34.7	12.1	4.8	0.2
Research and development	62.7	20.7	16.2	11.2	11.8	2.9
Public administration; compulsory social security	72.1	26.4	22.9	12.5	8.3	2.1
Higher education	33.3	20.9	5.7	3.9	1.8	1.0
Health and social work	24.4	10.5	6.2	4.2	2.8	0.7

4.7.2. PERCENTAGE DISTRIBUTION OF THE EMPLOYED POPULATION WITH AN ICT-RELATED JOB AND HIGHER OR SECONDARY VOCATIONAL EDUCATION IN ICT BY AGE GROUP: 2012 (annual average)



4.7.3. EMPLOYED POPULATION WITH A SECONDARY VOCATIONAL, HIGHER EDUCATION DIPLOMA (CERTIFICATE)
IN ICT BY AGE GROUP: 2012
(annual average)

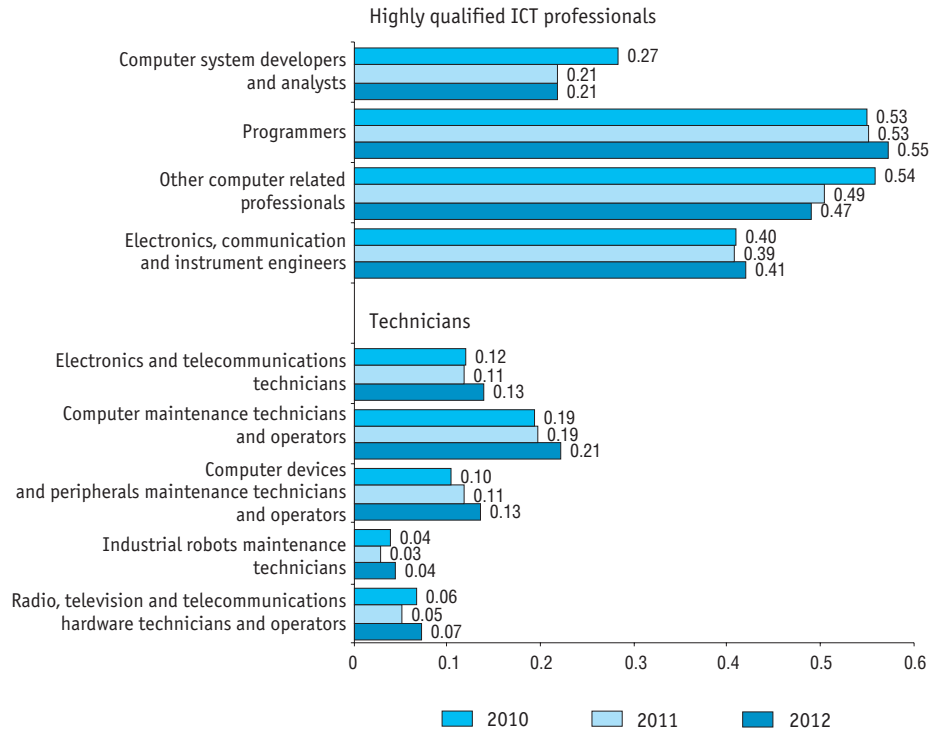
	Aged 15–72, total	Of which by age group, <i>years</i>				
		15–29	30–39	40–49	50–59	60–72
Thousand, head-count						
Total	1875.7	652.9	513.0	360.7	289.5	59.7
Employed in the sphere corresponding to the qualification obtained	1312.2	455.2	386.5	243.6	190.5	36.4
As a percentage of the total employment in the respective age group						
Total	2.6	3.9	2.8	2.1	1.8	1.8
Employed in the sphere corresponding to the qualification obtained	1.8	2.7	2.1	1.4	1.2	1.1

4.7.4. ICT PROFESSIONALS BY OCCUPATION AND QUALIFICATION LEVEL*

	Thousand			As a percentage of the total		
	2010	2011	2012	2010	2011	2012
Total number of employees in enterprises surveyed	25638.6	25312.2	25138.8	-	-	-
Of which ICT professionals*:						
highly qualified ICT professionals	421.7	411.9	437.5	100	100	100
computer system developers and analysts	54.0	53.5	68.6	12.8	13.0	15.7
programmers	142.0	135.2	133.6	33.7	32.8	30.5
other computer related professionals	121.5	123.4	135.7	28.8	30.0	31.0
electronics, communication and instrument engineers	104.2	99.8	99.6	24.7	24.2	22.8
technicians	152.0	125.1	127.1	100	100	100
electronics and telecommunications technicians	34.4	29.0	29.1	22.6	23.2	22.9
computer maintenance technicians and operators	55.0	48.1	47.2	36.2	38.5	37.1
computer devices and peripherals maintenance technicians and operators	33.5	28.9	25.1	22.0	23.1	19.8
industrial robots maintenance technicians	11.1	6.8	9.4	7.3	5.4	7.4
radio, television and telecommunications hardware technicians and operators	18.0	12.3	16.3	11.9	9.8	12.8

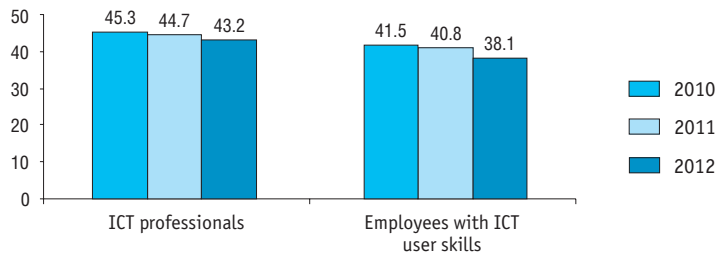
* Data on small businesses is excluded.

4.7.5. ICT PROFESSIONALS AS A PERCENTAGE OF THE TOTAL EMPLOYMENT



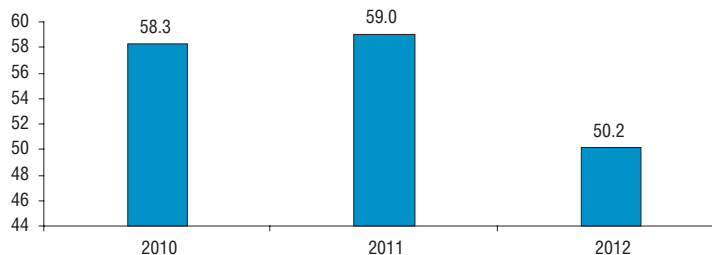
4.7.6. ENTERPRISES THAT NEED ICT PROFESSIONALS AND EMPLOYEES WITH ICT SKILLS

(as a percentage of the total number of enterprises)



4.7.7. ENTERPRISES THAT OUTSOURCED ICT WORK

(as a percentage of the total number of enterprises)



4.7.8. HIGHLY QUALIFIED ICT PROFESSIONALS PER 10 000 EMPLOYEES BY ECONOMIC ACTIVITY

(head-count)

	Computer system developers and analysts			Programmers			Other computer-related professionals			Electronics, communication and software engineers		
	2010	2011	2012	2010	2011	2012	2010	2011	2012	2010	2011	2012
Total	21	21	27	55	53	53	47	49	54	41	39	40
Mining and quarrying	5	5	6	22	22	20	15	15	17	21	21	20
Manufacture of food products and beverages	10	11	13	27	27	25	18	21	22	10	11	12
Manufacture of chemicals and chemical products	13	12	17	28	28	27	23	22	25	24	26	24
Manufacture of basic metals	14	12	18	29	31	29	15	17	25	17	21	19
Manufacture of machinery and equipment, n.e.c.	8	8	10	34	30	32	24	26	28	24	26	27
Manufacture of electrical machinery and apparatus	23	26	35	84	74	79	45	41	47	97	87	79
Electricity, gas and water supply	7	8	10	40	39	38	28	32	36	31	30	35
Construction	5	5	9	19	18	17	17	17	20	15	13	11
Wholesale and retail trade	15	20	26	33	43	40	30	40	39	11	13	14
Transport	9	6	15	33	31	33	38	47	39	22	22	26
Communications	32	32	46	80	78	80	87	72	98	356	355	384
Financial intermediation	60	63	65	118	100	94	163	146	159	54	47	36
Research and development	119	130	150	182	179	180	91	81	98	195	197	227
Public administration; compulsory social security	12	11	18	55	51	49	104	110	113	18	18	19
Higher education	26	25	30	133	119	100	64	83	100	77	78	59
Health and social work	8	2	4	33	31	31	16	10	14	10	5	5
Other activities	35	40	49	73	76	79	56	61	69	33	30	29

4.7.9. TECHNICIANS PER 10 000 EMPLOYEES BY ECONOMIC ACTIVITY

(head-count)

	Electronics and telecommunications technicians			Computer technicians and operators			Computer maintenance technicians and operators			Industrial robots technicians and operators			Radio, television and telecommunications hardware technicians and operators		
	2010	2011	2012	2010	2011	2012	2010	2011	2012	2010	2011	2012	2010	2011	2012
Total	13	11	12	21	19	19	13	11	10	4	3	4	7	5	6
Mining and quarrying	2	3	4	6	7	5	2	2	2	0.6	0.3	0.5	3	3	3
Manufacture of food products and beverages	3	3	4	11	11	9	7	15	7	3	8	8	1	1	2
Manufacture of chemicals and chemical products	4	5	5	9	9	13	3	5	5	2	10	25	3	3	3
Manufacture of basic metals	9	7	7	16	14	15	8	8	9	2	2	2	2	2	2
Manufacture of machinery and equipment, n.e.c.	5	4	5	12	10	9	9	8	6	15	16	18	3	2	3
Manufacture of electrical machinery and apparatus	11	12	19	19	19	27	15	18	15	9	8	9	5	8	5
Electricity, gas and water supply	7	7	8	8	8	9	5	5	6	2	2	2	2	3	3
Construction	4	5	4	6	6	6	5	5	4	0.3	0.2	0.4	1	1	2
Wholesale and retail trade	5	7	7	14	14	14	11	13	11	0.4	0.7	1.2	1	2	2
Transport	12	12	12	12	13	9	4	7	6	0.2	0.2	1.6	3	3	5
Communications	130	145	130	23	18	26	13	17	23	0.1	1.4	2.2	46	48	51
Financial intermediation	9	10	11	19	22	24	16	21	24	0.4	0.7	1.6	1	1	6
Research and development	27	24	29	36	34	35	30	30	21	4	4	5	5	6	6
Public administration; compulsory social security	4	5	5	24	25	20	12	11	10	0.1	0.1	1.1	2	4	5
Higher education	26	20	26	60	54	50	31	24	23	0.3	0.2	3.2	8	6	9
Health and social work	10	2	2	33	26	25	15	6	4	9	0.1	1.0	9	1	2
Other activities	13	8	8	26	21	21	20	15	13	10	4	5	13	7	12

4.7.10. ENTERPRISES THAT NEED ICT PROFESSIONALS AND EMPLOYEES WITH ICT SKILLS BY ECONOMIC ACTIVITY (as a percentage of all enterprises)

	Total			Of which need					
				ICT professionals			employees with ICT skills		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
Total	49.1	48.3	47.0	45.3	44.7	43.2	41.5	40.8	38.1
Mining and quarrying	43.2	43.7	39.4	39.4	38.1	35.6	34.9	36.3	31.8
Manufacture of food products and beverages	44.2	42.7	41.6	39.1	37.4	37.1	37.9	36.3	34.0
Manufacture of chemicals and chemical products	51.4	46.8	43.3	44.3	42.1	38.8	44.0	41.2	36.9
Manufacture of basic metals	47.4	43.5	41.7	42.1	39.3	36.6	39.8	35.6	34.7
Manufacture of machinery and equipment, n.e.c.	46.0	44.8	43.5	41.1	40.8	38.8	39.3	38.3	34.3
Manufacture of electrical machinery and apparatus	51.7	49.2	47.9	47.7	45.6	43.6	45.1	41.8	39.2
Electricity, gas and water supply	45.5	46.1	47.1	41.7	42.3	42.9	37.7	37.9	37.2
Construction	41.8	39.7	36.3	37.3	35.7	32.4	34.6	32.7	28.5
Wholesale and retail trade	40.1	35.6	33.0	36.0	31.5	29.1	34.0	30.0	27.1
Transport	40.1	39.5	37.5	36.5	36.1	33.8	33.8	33.6	30.0
Communications	52.3	50.5	43.9	47.1	46.1	40.1	46.2	45.4	37.5
Financial intermediation	44.7	42.6	39.6	40.4	37.4	35.2	38.5	35.8	31.8
Research and development	52.2	51.2	51.3	48.8	48.2	47.3	44.8	43.2	42.4
Public administration; compulsory social security	58.2	58.0	57.8	54.7	54.6	54.3	49.1	48.8	46.7
Higher education	55.5	53.4	50.4	52.1	49.7	47.3	47.3	45.0	42.5
Health and social work	60.0	58.9	57.5	55.7	54.9	53.1	51.3	50.5	47.5
Other activities	42.3	42.7	42.0	38.6	39.3	38.2	35.7	36.1	33.8

4.7.11. HIGHLY QUALIFIED ICT PROFESSIONALS PER 10 000 EMPLOYEES BY OWNERSHIP OF ENTERPRISES (head-count)

	Computer system developers and analysts			Programmers			Other computer-related professionals			Electronics, communication and software engineers		
	2010	2011	2012	2010	2011	2012	2010	2011	2012	2010	2011	2012
Total	21	21	27	55	53	53	47	49	54	41	39	40
Russian ownership	19	19	25	53	52	51	46	47	52	37	39	40
Public	21	20	23	67	62	57	61	64	62	47	46	42
Municipal	13	3	7	41	35	38	32	25	33	16	7	8
Private	21	25	31	48	49	49	37	40	47	32	32	31
Joint	19	17	30	56	57	56	57	54	62	68	98	113
Other	9	13	36	25	27	38	28	35	38	21	27	41
Foreign ownership	57	62	68	90	80	99	69	68	81	28	29	26
Joint Russian and foreign ownership	28	27	32	65	58	49	54	58	62	114	51	46

4.7.12. TECHNICIANS PER 10 000 EMPLOYEES BY OWNERSHIP OF ENTERPRISES

(head-count)

	Electronics and telecommunications technicians			Computer technicians and operators			Computer maintenance technicians and operators			Industrial robots technicians and operators			Radio, television and telecommunications hardware technicians and operators		
	2010	2011	2012	2010	2011	2012	2010	2011	2012	2010	2011	2012	2010	2011	2012
Total	13	11	12	21	19	19	13	11	10	4	3	4	7	5	6
Russian ownership	12	11	11	22	19	19	13	11	10	4	2	3	7	5	6
Public	12	11	11	27	25	24	13	11	10	1	1	2	7	7	8
Municipal	17	2	3	37	23	19	24	10	7	16	1	2	17	3	6
Private	9	11	10	13	12	14	10	10	10	2	3	4	4	4	5
Joint	19	29	26	17	17	16	9	11	13	7	7	9	5	4	6
Other	5	6	9	10	12	23	11	14	11	0.1	0.3	2	4	6	10
Foreign ownership	14	20	22	14	17	21	10	22	13	2	9	11	4	4	7
Joint Russian and foreign ownership	32	11	11	17	21	15	9	15	9	4	2	2	5	3	7

4.7.13. ENTERPRISES THAT NEED ICT PROFESSIONALS AND EMPLOYEES WITH ICT SKILLS BY OWNERSHIP

(as a percentage of all enterprises)

	Total			Of which need					
				ICT professionals			employees with ICT user skills		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
Total	49.1	48.3	47.0	45.3	44.7	43.2	41.5	40.8	38.1
Russian ownership	49.8	49.4	48.2	46.0	45.7	44.3	42.1	41.7	39.0
Public	54.0	54.2	53.7	50.2	50.5	49.7	45.4	45.8	43.7
Municipal	53.9	53.9	53.7	50.2	50.5	49.9	45.9	45.8	43.6
Private	38.3	36.9	33.7	34.3	32.9	29.9	32.0	30.7	27.0
Joint	44.6	41.7	41.3	40.8	37.9	37.1	37.9	35.5	33.1
Other	40.9	39.2	40.3	37.6	36.3	36.7	34.0	32.4	31.2
Foreign ownership	37.0	31.4	28.6	33.0	27.2	25.2	32.3	26.3	23.1
Joint Russian and foreign ownership	38.2	36.0	36.1	33.4	31.6	31.9	32.5	31.0	30.0

4.7.14. HIGHLY QUALIFIED ICT PROFESSIONALS PER 10 000 EMPLOYEES IN ENTERPRISES BY SIZE OF EMPLOYMENT (head-count)

	Computer system developers and analysts			Programmers			Other computer-related professionals			Electronics, communication and software engineers		
	2010	2011	2012	2010	2011	2012	2010	2011	2012	2010	2011	2012
Total	21	21	27	55	53	53	47	49	54	41	39	40
Size of employment, <i>head-count</i> :												
below 50	12	20	22	74	43	70	78	43	84	21	38	21
51–100	18	13	24	69	75	72	65	81	77	28	22	31
101–200	23	23	29	61	63	63	57	60	62	33	33	33
201–500	20	19	29	50	35	50	41	34	50	34	32	31
501–1000	20	41	33	48	110	46	45	100	48	39	62	38
1001–5000	23	22	26	50	51	48	36	44	46	50	51	51
5001–10 000	18	19	23	51	46	52	27	29	42	70	63	76
10 000 and above	30	23	19	68	49	52	67	49	57	48	43	29

4.7.15. TECHNICIANS PER 10 000 EMPLOYEES IN ENTERPRISES BY SIZE OF EMPLOYMENT

(head-count)

	Electronics and telecommunications technicians			Computer technicians and operators			Computer maintenance technicians and operators			Industrial robots technicians and operators			Radio, television and telecommunications hardware technicians and operators		
	2010	2011	2012	2010	2011	2012	2010	2011	2012	2010	2011	2012	2010	2011	2012
Total	13	11	12	21	19	19	13	11	10	4	3	4	7	5	6
Size of employment, head-count:															
below 50	6	8	7	28	15	23	21	11	13	1	2	2	7	2	10
51–100	7	8	9	21	28	22	15	22	12	1	1	2	7	8	10
101–200	12	11	12	19	19	19	11	14	11	1	2	2	6	6	9
201–500	9	9	12	16	15	19	9	6	9	1	1	3	5	3	9
501–1000	9	21	11	18	37	19	9	21	9	1	6	2	4	13	5
1001–5000	14	14	14	19	19	18	10	11	9	2	3	5	4	3	4
5001–10 000	18	15	8	18	15	15	9	14	8	3	6	3	2	2	4
10 000 and above	42	9	13	47	17	18	39	13	13	37	2	11	33	3	4

4.7.16. ENTERPRISES THAT NEED ICT PROFESSIONALS AND EMPLOYEES WITH ICT SKILLS BY SIZE OF EMPLOYMENT

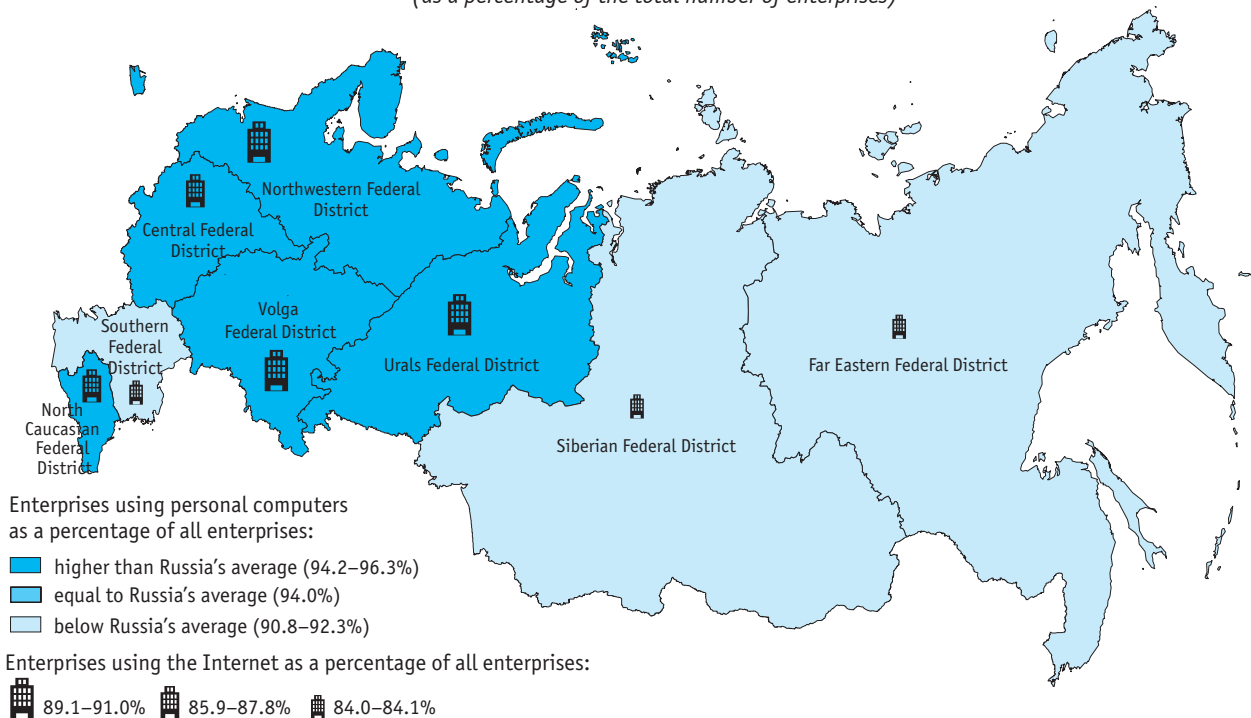
(as a percentage of all enterprises)

	Total			Of which need					
				ICT professionals			employees with ICT skills		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
Total	49.1	48.3	47.0	45.3	44.7	43.2	41.5	40.8	38.1
Size of employment, <i>head-count</i> :									
below 50	46.0	45.6	44.7	42.5	42.3	41.1	38.7	38.4	35.9
51–100	51.9	50.7	49.1	47.9	46.9	44.9	43.8	42.7	39.6
101–200	51.4	50.0	48.2	47.2	45.8	44.1	43.3	42.2	39.2
201–500	53.5	51.9	50.3	48.7	47.2	45.7	45.9	44.2	41.6
501–1000	59.5	58.5	56.6	54.4	53.9	51.8	51.8	50.8	47.2
1001–5000	70.5	69.6	67.3	66.4	65.7	63.2	61.9	60.5	57.0
5001–10 000	83.3	86.4	82.9	81.4	82.8	79.6	75.8	76.0	73.9
10 000 and above	84.0	82.7	80.0	82.7	79.0	75.0	70.4	74.1	76.3

4.8. ICT Usage in Regions of the Russian Federation

4.8.1. ICT USAGE IN ENTERPRISES BY FEDERAL DISTRICT: 2012

(as a percentage of the total number of enterprises)



4.8.2. ENTERPRISES USING PERSONAL COMPUTERS AND THE INTERNET

(as a percentage of the total number of enterprises)

	Personal computers			Internet		
	2010	2011	2012	2010	2011	2012
Russian Federation	93.8	94.1	94.0	82.4	84.8	86.9
Central Federal District	94.1	94.3	94.2	80.3	82.8	85.9
Belgorod Region	97.2	97.3	97.5	85.8	87.6	87.9
Bryansk Region	88.8	88.5	89.2	69.4	71.8	74.7
Vladimir Region	97.2	95.3	95.1	87.9	88.3	90.0
Voronezh Region	98.0	94.1	95.2	80.1	78.2	82.1
Ivanovo Region	91.0	94.8	94.3	78.5	84.7	88.4
Kaluga Region	93.4	93.3	94.7	73.3	76.9	81.5
Kostroma Region	93.7	96.7	91.4	76.4	84.9	83.1
Kursk Region	89.4	89.5	89.8	56.1	64.4	71.9
Lipetzk Region	95.2	96.3	96.8	78.9	80.7	86.9
Moscow Region	95.8	95.7	96.7	86.4	86.2	91.1
Oryol Region	86.0	87.3	90.5	71.4	74.6	79.9
Ryazan Region	99.2	99.5	98.5	84.0	85.8	84.8
Smolensk Region	97.9	98.3	95.2	74.9	81.4	89.5
Tambov Region	77.1	82.8	84.6	65.4	75.1	78.9
Tver Region	100	97.6	90.2	82.5	82.6	77.9
Tula Region	87.4	88.1	89.7	71.9	76.8	81.7
Yaroslavl Region	94.9	94.2	94.1	85.8	87.0	89.7
Moscow	100	100	100	98.5	98.5	98.4
Northwestern Federal District	94.8	95.2	95.9	85.7	88.6	91.0
Republic of Karelia	98.5	99.8	98.7	93.7	98.1	97.2
Republic of Komi	81.7	84.2	91.3	71.3	76.1	84.7

(continued)

	Personal computers			Internet		
	2010	2011	2012	2010	2011	2012
Arkhangelsk Region	96.9	97.1	97.2	87.4	90.1	91.4
Of which Nenets Autonomous District	96.5	97.7	99.5	82.2	89.4	90.9
Vologda Region	95.8	95.8	95.2	76.5	80.4	84.5
Kaliningrad Region	91.8	92.7	93.3	82.0	85.0	87.6
Leningrad Region	97.3	97.6	97.0	90.8	93.3	94.3
Murmansk Region	97.6	96.9	96.1	84.7	87.6	88.6
Novgorod Region	98.3	98.2	98.2	89.8	94.8	96.4
Pskov region	92.4	93.4	93.4	83.5	87.5	88.6
Saint-Petersburg	98.6	98.6	98.1	96.0	96.2	96.9
Southern Federal District	91.3	92.2	90.8	80.2	83.0	84.1
Republic of Adygeya	99.6	100	98.3	88.0	92.1	92.2
Republic of Kalmykia	98.1	98.1	94.1	90.5	87.7	87.1
Krasnodar Territory	97.5	96.3	96.1	87.7	87.8	89.3
Astrakhan Region	86.8	98.9	90.4	76.8	86.1	85.2
Volgograd Region	87.5	88.5	84.8	73.8	77.9	77.0
Rostov Region	89.5	89.2	90.2	78.9	81.1	83.8
North Caucasian Federal District	93.7	95.6	96.3	85.5	89.0	87.8
Republic of Dagestan	98.4	98.9	98.9	94.7	94.5	97.3
Republic of Ingushetia	94.9	93.5	98.4	71.8	87.1	95.2
Kabardino-Balkarian Republic	100	99.1	99.1	91.6	92.0	94.9
Karachaevo-Cherchessian Republic	76.3	85.1	85.2	65.4	76.2	80.6
Republic of North Ossetia–Alania	87.4	88.4	90.3	80.3	81.2	84.5
Chechen Republic	100	100	100	69.7	78.7	64.7
Stavropol Territory	99.2	99.9	99.9	93.6	96.1	97.3

(continued)

	Personal computers			Internet		
	2010	2011	2012	2010	2011	2012
Volga Federal District	95.1	95.1	94.8	86.0	87.8	89.1
Republic of Bashkortostan	98.2	96.0	98.4	94.7	92.5	96.4
Republic of Mari El	93.0	94.5	95.0	76.8	82.5	86.5
Republic of Mordovia	88.3	88.0	90.6	80.7	81.5	85.3
Republic of Tatarstan	98.4	99.1	98.6	95.4	95.9	95.7
Udmurtian Republic	95.0	96.3	94.3	84.0	88.5	89.1
Chuvash Republic	94.2	94.0	95.2	87.8	90.1	91.4
Perm Territory	93.0	95.0	97.0	81.4	85.3	89.9
Kirov Region	89.7	88.9	88.1	73.9	75.7	78.2
Nizhni Novgorod Region	98.2	98.3	96.9	92.0	92.2	92.5
Orenburg Region	99.4	99.2	99.0	86.0	90.6	94.2
Penza Region	93.2	92.4	95.9	78.5	79.8	85.1
Samara Region	96.6	95.8	87.9	88.7	89.1	81.7
Saratov Region	94.4	94.8	95.9	80.8	84.4	86.2
Ulyanovsk Region	90.6	91.1	90.9	82.8	85.9	87.0
Urals Federal District	95.6	95.3	95.3	87.1	88.9	90.5
Kurgan Region	99.7	100	97.8	89.5	92.0	93.4
Sverdlovsk Region	97.0	97.1	97.8	86.8	90.0	93.0
Tyumen Region	94.8	95.3	94.8	87.9	90.3	90.6
Of which:						
Khanty-Mansi Autonomous District – Yugra	95.7	96.1	96.9	89.9	92.2	92.5
Yamalo-Nenets Autonomous District	97.7	98.1	93.9	92.9	92.8	89.8
Chelyabinsk Region	93.6	91.3	92.1	85.1	84.1	85.8

(continued)

	Personal computers			Internet		
	2010	2011	2012	2010	2011	2012
Siberian Federal District	92.4	93.4	92.9	77.6	81.2	84.0
Republic of Altai	96.7	95.2	96.0	83.6	86.3	90.7
Republic of Buryatia	97.5	97.1	93.0	80.8	81.8	84.2
Republic of Tuva	99.7	97.8	88.1	68.0	72.7	72.2
Republic of Khakasia	99.2	97.2	97.8	91.6	91.8	91.7
Altai Territory	88.8	88.4	88.3	70.2	72.3	76.0
Zabaikalsk Territory	99.7	100	100	76.8	82.7	89.6
Krasnoyarsk Territory	90.0	93.1	94.1	72.3	78.9	83.2
Irkutsk Region	97.4	97.8	97.3	81.1	86.0	90.3
Kemerovo Region	97.4	97.2	97.1	90.7	92.2	91.6
Novosibirsk Region	88.4	92.0	91.9	75.4	80.4	82.7
Omsk Region	87.1	86.3	86.9	72.1	74.8	79.0
Tomsk Region	99.4	98.5	90.1	96.7	96.4	85.2
Far Eastern Federal District	92.0	91.1	92.9	79.1	80.7	84.0
Republic of Sakha (Yakutia)	94.7	91.3	92.9	72.6	72.8	75.1
Kamchatka Territory	96.6	96.3	97.1	87.7	87.7	91.8
Primorsky Territory	87.5	89.4	90.8	80.3	83.3	85.7
Khabarovsk Territory	99.6	99.5	99.2	89.2	92.6	94.6
Amur Region	84.1	81.1	86.0	68.8	69.5	76.7
Magadan Region	95.8	93.0	95.6	85.9	85.2	88.8
Sakhalin Region	91.8	92.5	94.5	85.1	88.2	90.5
Jewish Autonomous Region	90.9	90.9	92.4	72.0	76.4	79.3
Chukotka Autonomous District	98.7	99.1	98.2	80.6	82.4	87.4

4.8.3. AVAILABILITY OF PERSONAL COMPUTERS IN ENTERPRISES BY FEDERAL DISTRICT: 2012

(computers per 100 employees)

4.8.4. AVAILABILITY OF PERSONAL COMPUTERS IN ENTERPRISES

(computers per 100 employees)

	Personal computers			Personal computers with access to the Internet		
	2010	2011	2012	2010	2011	2012
Russian Federation	36.2	39.4	43.0	17.8	20.5	24.1
Central Federal District	42.5	45.0	49.4	23.4	25.6	29.8
Belgorod Region	29.8	32.3	33.8	15.2	17.5	19.2
Bryansk Region	28.0	29.4	32.3	10.5	13.0	15.4
Vladimir Region	32.8	36.4	36.9	13.7	16.2	19.4
Voronezh Region	34.0	36.8	39.2	13.7	16.3	19.1
Ivanovo Region	35.1	37.4	41.8	15.2	19.1	23.0
Kaluga Region	34.9	38.8	43.0	15.6	18.8	22.3
Kostroma Region	34.7	38.8	41.6	13.5	16.8	20.4
Kursk Region	31.1	35.0	36.8	11.6	14.9	17.9
Lipetzk Region	28.3	32.1	35.5	12.2	15.1	18.2
Moscow Region	32.6	35.0	41.6	17.6	20.1	21.8
Oryol Region	33.1	34.9	38.5	14.5	16.1	19.5
Ryazan Region	33.3	36.2	37.2	13.9	16.4	19.0
Smolensk Region	30.8	31.4	34.9	11.1	13.3	16.8
Tambov Region	30.5	32.7	36.6	13.2	16.5	19.0
Tver Region	33.8	35.8	36.8	14.1	16.0	18.7
Tula Region	28.7	32.7	35.5	11.9	14.3	16.7
Yaroslavl Region	35.4	40.2	41.6	15.3	17.9	21.5
Moscow	63.3	65.7	72.0	41.8	43.3	50.8
Northwestern Federal District	39.6	42.8	45.9	19.5	22.4	25.6
Republic of Karelia	41.5	40.9	49.8	20.8	18.7	27.2
Republic of Komi	36.9	38.0	37.4	15.6	17.7	19.5

(continued)

	Personal computers			Personal computers with access to the Internet		
	2010	2011	2012	2010	2011	2012
Arkhangelsk Region	29.1	37.8	38.8	11.3	15.5	17.6
Of which Nenets Autonomous District	33.0	35.4	39.2	15.6	17.2	22.0
Vologda Region	37.2	39.3	41.5	14.3	18.0	21.8
Kaliningrad Region	44.1	45.4	46.0	19.3	22.3	25.6
Leningrad Region	33.4	32.9	34.3	17.5	18.8	21.1
Murmansk Region	35.9	37.1	41.7	16.1	18.6	20.8
Novgorod Region	34.2	37.0	39.1	15.6	18.6	20.0
Pskov Region	31.4	33.2	35.6	13.9	16.1	18.8
Saint-Petersburg	46.2	50.2	55.1	25.5	28.8	32.8
Southern Federal District	33.2	37.2	41.7	14.3	17.8	23.9
Republic of Adygeya	34.3	37.1	40.4	13.3	16.5	22.0
Republic of Kalmykia	38.1	43.8	48.3	15.4	19.5	24.0
Krasnodar Territory	31.8	38.7	45.7	13.0	17.8	30.1
Astrakhan Region	32.9	35.8	41.9	13.2	16.3	21.5
Volgograd Region	31.2	34.1	37.3	13.7	16.7	19.4
Rostov Region	35.8	38.0	40.1	16.2	18.9	21.2
North Caucasian Federal District	31.0	32.8	35.9	11.9	14.5	17.9
Republic of Dagestan	27.4	27.1	33.4	7.7	10.9	14.4
Republic of Ingushetia	22.4	29.4	43.2	6.1	12.1	17.4
Kabardino-Balkarian Republic	30.6	32.5	34.9	11.7	14.7	17.6
Karachaevo-Cherchessian Republic	30.2	32.7	35.3	11.0	14.2	17.9
Republic of North Ossetia–Alania	27.2	29.0	31.9	10.3	12.4	15.8
Chechen Republic	25.3	25.1	36.9	7.2	10.0	15.9
Stavropol Territory	34.8	37.6	38.1	15.1	17.4	20.3

(continued)

	Personal computers			Personal computers with access to the Internet		
	2010	2011	2012	2010	2011	2012
Volga Federal District	32.7	35.4	38.6	14.6	17.2	20.2
Republic of Bashkortostan	32.4	35.0	36.6	13.5	16.8	19.2
Republic of Mari El	29.4	31.2	35.0	12.5	14.6	17.1
Republic of Mordovia	31.7	35.3	37.8	13.4	15.4	17.8
Republic of Tatarstan	31.7	34.8	37.6	15.4	17.9	21.2
Udmurtian Republic	32.1	33.6	37.7	13.7	15.8	19.1
Chuvash Republic	32.9	34.1	38.2	15.5	17.7	21.1
Perm Territory	34.9	38.2	42.2	16.2	18.7	22.2
Kirov Region	32.9	36.4	40.2	12.5	15.8	18.7
Nizhni Novgorod Region	35.3	37.3	39.5	14.1	17.6	20.3
Orenburg Region	30.0	31.6	33.7	12.0	14.3	17.3
Penza Region	34.9	36.8	41.6	11.6	15.9	20.7
Samara Region	32.9	36.2	39.7	17.4	19.5	22.7
Saratov Region	30.4	34.2	39.5	14.3	16.8	19.5
Ulyanovsk Region	33.1	34.4	38.6	14.2	16.0	18.6
Urals Federal District	30.0	36.6	39.2	13.5	18.1	20.7
Kurgan Region	32.8	35.9	39.3	15.1	19.5	22.9
Sverdlovsk Region	24.0	37.6	40.9	10.8	19.2	21.7
Tyumen Region	36.7	37.3	39.7	16.4	17.9	20.9
Of which:						
Khanty-Mansi Autonomous District – Yugra	34.0	35.8	36.7	14.3	16.8	18.8
Yamalo-Nenets Autonomous District	33.7	30.2	36.0	13.0	13.6	17.8
Chelyabinsk Region	31.6	34.4	36.2	14.1	16.6	18.4

(continued)

	Personal computers			Personal computers with access to the Internet		
	2010	2011	2012	2010	2011	2012
Siberian Federal District	35.6	37.3	40.6	18.0	19.7	22.8
Republic of Altai	45.0	46.5	50.8	17.0	23.2	27.4
Republic of Buryatia	36.1	38.5	40.4	15.7	18.0	20.6
Republic of Tuva	38.0	39.2	40.4	13.0	17.0	18.5
Republic of Khakasia	37.2	38.8	41.3	19.6	21.2	23.9
Altai Territory	32.3	34.6	36.8	14.7	16.5	20.1
Zabaikalsk Territory	35.6	38.6	39.0	12.1	15.1	17.7
Krasnoyarsk Territory	37.1	39.9	43.3	17.9	20.9	23.7
Irkutsk Region	35.2	35.0	40.4	19.9	17.4	21.4
Kemerovo Region	26.6	27.7	31.7	14.0	14.8	17.6
Novosibirsk Region	41.6	42.9	47.2	23.8	25.5	29.5
Omsk Region	34.8	37.0	39.3	15.9	18.5	21.8
Tomsk Region	45.9	49.3	51.7	28.8	32.5	34.4
Far Eastern Federal District	36.5	38.6	42.8	16.8	19.2	22.7
Republic of Sakha (Yakutia)	35.4	38.4	40.5	16.4	19.6	22.2
Kamchatka Territory	39.7	32.7	49.4	19.3	16.1	25.8
Primorsky Territory	33.4	36.0	39.0	16.9	19.5	22.0
Khabarovsk Territory	38.7	42.5	46.5	16.1	19.6	23.6
Amur Region	33.6	34.8	36.0	13.4	15.0	17.3
Magadan Region	43.1	46.8	58.9	17.5	21.2	27.9
Sakhalin Region	39.6	41.4	46.2	21.5	23.8	27.3
Jewish Autonomous Region	42.6	43.2	46.4	14.1	18.1	20.3
Chukotka Autonomous District	42.1	46.9	51.4	19.1	19.1	22.8

4.8.5. ENTERPRISES USING THE INTERNET FOR COMMERCIAL PURPOSES

(as a percentage of the total number enterprises)

	Internet usage for communication with					
	suppliers			customers		
	2010	2011	2012	2010	2011	2012
Russian Federation	61.3	63.9	64.9	41.1	45.9	46.5
Central Federal District	58.6	61.6	64.0	41.7	46.2	47.8
Belgorod Region	57.0	60.6	62.1	39.4	43.6	44.9
Bryansk Region	43.1	46.3	47.9	27.1	33.0	35.0
Vladimir Region	63.6	67.9	68.5	44.9	52.6	54.4
Voronezh Region	55.7	55.8	59.3	35.9	42.0	42.8
Ivanovo Region	51.4	59.4	63.4	33.6	41.3	45.2
Kaluga Region	52.3	57.5	59.5	35.5	39.7	42.5
Kostroma Region	44.3	52.2	51.5	30.1	37.3	38.6
Kursk Region	34.6	40.9	44.0	21.3	29.5	30.9
Lipetzk Region	54.2	59.1	64.0	34.7	41.0	40.8
Moscow Region	67.4	67.7	71.1	48.8	51.3	54.2
Oryol Region	47.0	49.7	52.9	31.5	34.6	37.0
Ryazan Region	59.5	63.7	59.8	38.9	47.0	45.0
Smolensk Region	49.7	55.3	62.6	31.2	39.6	43.3
Tambov Region	38.0	46.1	58.0	25.3	31.9	39.5
Tver Region	56.6	56.1	52.5	37.5	38.4	35.4
Tula Region	53.8	57.9	60.8	35.1	41.3	43.6
Yaroslavl Region	66.8	68.9	70.6	47.6	50.0	52.6
Moscow	89.0	89.0	88.6	76.3	76.3	75.8
Northwestern Federal District	67.3	70.2	72.4	47.0	52.2	53.7
Republic of Karelia	73.5	80.0	79.4	54.2	61.0	60.6
Republic of Komi	53.2	59.1	65.9	31.9	39.0	45.2

(continued)

	Internet usage for communication with					
	suppliers			customers		
	2010	2011	2012	2010	2011	2012
Arkhangelsk Region	69.5	69.5	73.3	42.9	48.3	49.3
Of which Nenets Autonomous District	68.3	69.9	75.9	38.1	41.7	50.5
Vologda Region	56.7	60.4	60.0	36.5	43.3	41.5
Kaliningrad Region	59.5	62.7	66.4	43.2	47.2	52.5
Leningrad Region	71.9	74.7	76.0	48.7	55.2	55.3
Murmansk Region	67.5	68.9	70.0	43.4	47.3	49.6
Novgorod Region	62.6	70.7	72.5	43.2	51.9	53.7
Pskov region	57.1	62.1	62.8	33.7	41.1	41.7
Saint-Petersburg	86.4	85.3	86.8	71.5	72.0	72.5
Southern Federal District	61.5	64.6	62.7	38.5	42.6	41.6
Republic of Adygeya	58.6	59.2	60.0	33.8	37.0	39.8
Republic of Kalmykia	60.4	56.2	58.1	34.0	35.4	32.9
Krasnodar Territory	66.6	67.3	68.0	43.9	48.8	48.1
Astrakhan Region	56.1	83.3	63.0	35.6	50.5	42.4
Volgograd Region	56.8	59.5	55.5	34.3	38.2	35.8
Rostov Region	62.9	63.2	64.3	39.2	40.7	41.3
North Caucasian Federal District	56.5	59.9	53.7	33.2	42.7	36.5
Republic of Dagestan	54.2	55.0	55.0	29.5	43.6	37.4
Republic of Ingushetia	33.3	51.6	46.8	20.5	29.0	24.2
Kabardino-Balkarian Republic	60.3	58.5	53.6	34.9	43.7	36.2
Karachaevo-Cherchessian Republic	36.6	46.6	51.0	19.5	31.2	32.5
Republic of North Ossetia–Alania	42.0	44.4	43.5	26.5	32.2	32.0
Chechen Republic	46.0	41.0	18.0	27.5	31.6	10.5
Stavropol Territory	72.0	75.9	75.4	43.3	52.5	52.1

(continued)

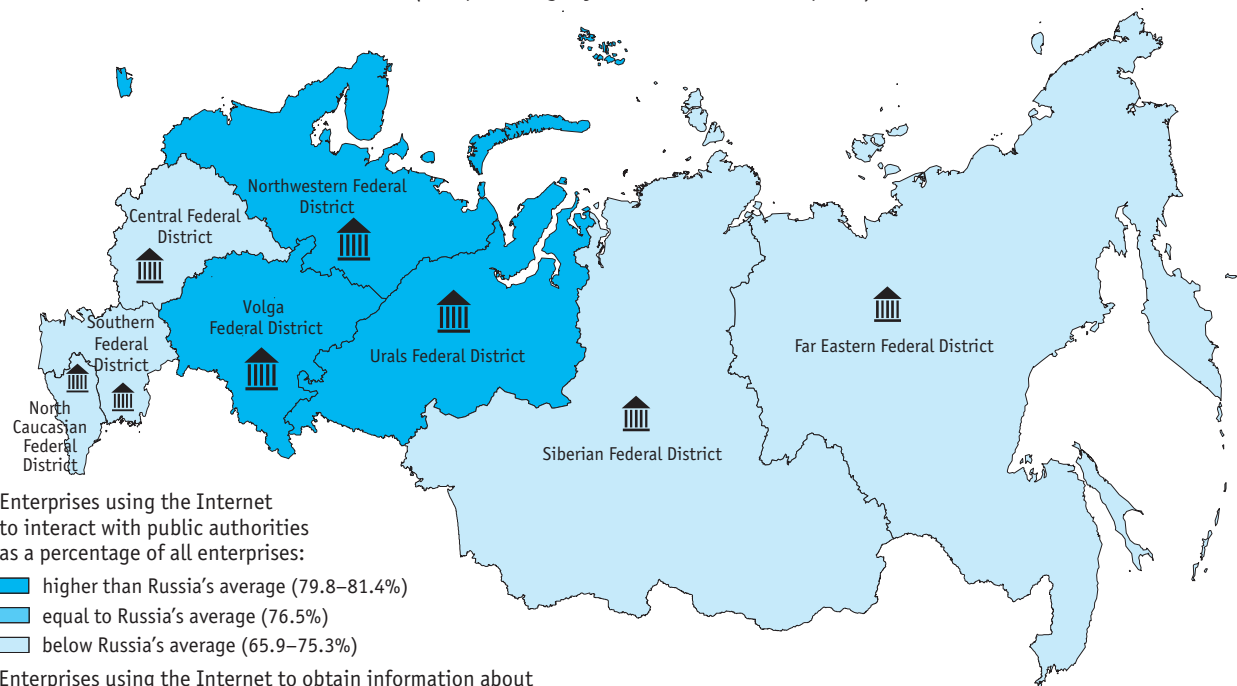
	Internet usage for communication with					
	suppliers			customers		
	2010	2011	2012	2010	2011	2012
Volga Federal District	62.7	64.7	65.7	41.0	45.7	46.1
Republic of Bashkortostan	71.5	70.5	75.5	46.1	49.0	53.0
Republic of Mari El	52.3	60.0	64.3	32.3	40.5	42.7
Republic of Mordovia	41.9	48.9	50.7	27.6	35.7	35.6
Republic of Tatarstan	70.3	69.7	70.6	46.9	51.7	49.1
Udmurtian Republic	67.0	69.2	68.3	45.8	49.9	48.7
Chuvash Republic	59.4	59.5	60.4	39.3	45.1	46.7
Perm Territory	63.5	66.5	70.2	41.3	45.9	49.2
Kirov Region	50.1	53.9	58.6	32.9	35.9	38.3
Nizhni Novgorod Region	70.6	71.4	70.0	47.7	51.0	50.6
Orenburg Region	61.7	65.8	67.1	39.1	45.6	44.8
Penza Region	45.4	49.4	54.7	27.0	35.4	38.0
Samara Region	64.3	65.7	59.2	46.1	49.8	45.7
Saratov Region	64.1	67.5	67.6	36.9	41.9	43.3
Ulyanovsk Region	57.4	62.5	61.9	37.5	43.6	42.0
Urals Federal District	68.9	71.0	71.1	47.0	52.2	52.3
Kurgan Region	59.3	63.0	59.7	36.2	44.1	39.8
Sverdlovsk Region	70.8	74.3	75.7	48.5	56.3	56.6
Tyumen Region	70.5	72.7	71.5	48.5	52.5	52.5
Of which:						
Khanty-Mansi Autonomous District – Yugra	75.1	78.1	76.3	52.2	55.1	55.8
Yamalo-Nenets Autonomous District	77.0	76.5	73.4	44.4	52.2	48.1
Chelyabinsk Region	67.2	67.1	69.4	46.3	49.6	51.6

(continued)

	Internet usage for communication with					
	suppliers			customers		
	2010	2011	2012	2010	2011	2012
Siberian Federal District	56.6	59.5	60.8	37.6	42.7	43.3
Republic of Altai	58.2	59.4	65.1	34.8	37.8	41.5
Republic of Buryatia	58.2	56.9	59.2	37.9	42.6	41.1
Republic of Tuva	40.8	42.1	38.9	20.7	28.2	24.0
Republic of Khakasia	65.6	68.2	69.6	43.9	44.5	50.4
Altai Territory	46.2	46.9	49.3	31.4	33.7	35.3
Zabaikalsk Territory	51.7	53.2	56.6	28.2	35.0	37.6
Krasnoyarsk Territory	53.2	59.7	62.9	32.7	41.0	43.8
Irkutsk Region	62.1	65.6	67.2	42.0	45.8	47.4
Kemerovo Region	70.8	72.3	70.8	48.3	54.4	53.2
Novosibirsk Region	55.6	60.2	59.5	40.0	45.5	43.1
Omsk Region	50.6	54.1	56.5	34.4	38.3	40.5
Tomsk Region	81.9	81.8	70.6	57.1	62.8	52.1
Far Eastern Federal District	58.9	60.5	63.5	36.9	40.9	42.7
Republic of Sakha (Yakutia)	52.1	51.8	55.5	29.7	31.6	33.7
Kamchatka Territory	66.3	65.7	70.2	42.0	42.9	44.2
Primorsky Territory	59.8	64.1	64.9	41.7	48.0	49.8
Khabarovsk Territory	74.3	77.4	80.9	49.2	53.2	54.4
Amur Region	48.4	47.3	53.8	27.8	32.7	34.3
Magadan Region	60.8	65.7	63.6	32.0	38.5	41.1
Sakhalin Region	64.3	65.1	68.6	41.6	46.2	47.3
Jewish Autonomous Region	49.4	54.7	54.7	31.2	35.4	36.3
Chukotka Autonomous District	62.9	66.7	70.9	31.5	39.2	42.6

4.8.6. ENTERPRISES USING THE INTERNET TO INTERACT WITH PUBLIC AUTHORITIES BY FEDERAL DISTRICT: 2012




(as a percentage of the total number enterprises)



Enterprises using the Internet to interact with public authorities as a percentage of all enterprises:

- higher than Russia's average (79.8–81.4%)
- equal to Russia's average (76.5%)
- below Russia's average (65.9–75.3%)

Enterprises using the Internet to obtain information about public authorities' activities as a percentage of all enterprises:

-  72.0–74.5%
-  65.6–67.1%
-  54.6–64.7%

4.8.7. ENTERPRISES USING THE INTERNET TO INTERACT WITH PUBLIC AUTHORITIES

(as a percentage of the total number of enterprises)

	Obtaining information about public authorities' activities			Obtaining blank forms (e.g. statistical and tax forms)			Submitting filled forms (e.g. statistical and tax forms)		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
Russian Federation	51.5	55.5	58.0	65.0	67.9	69.8	63.0	65.5	68.5
Central Federal District	48.7	53.2	56.3	62.3	65.4	67.5	60.5	63.6	67.1
Belgorod Region	48.3	56.7	56.2	67.4	72.2	72.4	65.8	70.4	71.3
Bryansk Region	37.5	42.1	44.4	53.1	57.1	53.0	53.0	55.2	57.5
Vladimir Region	55.8	59.5	61.6	69.1	69.3	72.2	69.6	68.3	71.4
Voronezh Region	46.2	48.9	51.8	59.8	59.0	63.2	58.6	57.6	62.6
Ivanovo Region	45.9	52.1	57.0	55.5	64.8	67.4	56.1	63.7	69.4
Kaluga Region	41.1	45.7	52.0	54.8	58.1	58.1	52.0	54.7	61.4
Kostroma Region	42.7	51.4	51.6	56.4	66.4	67.2	55.2	65.5	66.4
Kursk Region	27.2	34.2	41.0	38.8	48.1	56.2	39.5	46.6	56.6
Lipetsk Region	43.6	48.6	56.9	61.9	65.7	70.7	58.9	62.9	71.5
Moscow Region	51.6	54.9	59.0	66.3	67.0	71.8	63.3	65.6	71.2
Oryol Region	36.4	41.9	45.4	52.7	55.9	56.1	52.1	54.0	59.1
Ryazan Region	50.4	54.3	53.8	67.9	68.5	66.0	67.5	67.9	64.6
Smolensk Region	39.0	47.7	55.7	54.5	61.0	65.0	52.8	59.1	65.1
Tambov Region	40.6	49.5	54.8	49.6	58.9	63.6	46.2	54.7	59.9
Tver Region	47.4	49.2	46.1	57.4	58.7	55.5	54.3	55.7	52.5
Tula Region	40.8	48.1	51.5	54.5	59.9	65.3	52.2	58.6	62.5
Yaroslavl Region	58.1	61.6	63.1	68.2	72.5	73.3	65.7	69.6	71.8
Moscow	75.1	75.2	76.6	87.1	86.0	85.0	85.1	84.8	84.0
Northwestern Federal District	55.5	59.7	62.5	68.5	70.7	74.0	65.6	68.6	72.6
Republic of Karelia	63.1	71.3	72.2	79.0	81.6	81.8	78.4	82.2	81.2
Republic of Komi	43.6	50.1	57.1	60.5	64.0	74.1	59.2	63.4	70.0

(continued)

	Obtaining information about public authorities' activities			Obtaining blank forms (e.g. statistical and tax forms)			Submitting filled forms (e.g. statistical and tax forms)		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
Arkhangelsk Region	58.2	61.8	65.1	68.2	71.6	75.1	66.9	70.2	74.8
Of which Nenets Autonomous District	59.4	62.5	70.5	61.4	67.6	77.3	63.9	66.7	71.4
Vologda Region	44.4	50.6	52.3	56.8	61.7	63.6	53.4	58.0	61.0
Kaliningrad Region	55.1	55.5	57.6	61.9	63.8	69.1	58.8	60.9	67.4
Leningrad Region	55.0	58.7	61.1	72.7	72.1	76.2	70.5	70.3	73.5
Murmansk Region	58.5	62.0	64.7	68.5	70.4	69.3	62.9	65.7	69.3
Novgorod Region	55.7	63.1	66.8	69.7	77.2	80.4	63.9	72.4	77.5
Pskov region	43.7	50.4	53.4	58.2	65.3	65.2	56.5	64.9	67.3
Saint-Petersburg	70.0	71.3	72.7	82.8	80.0	82.6	79.5	78.6	81.9
Southern Federal District	47.8	51.5	52.4	60.5	64.8	65.8	59.5	62.4	64.7
Republic of Adygeya	53.8	49.4	52.2	60.7	57.9	61.3	54.5	55.4	60.0
Republic of Kalmykia	44.9	47.9	51.0	59.8	63.3	66.7	64.3	65.1	70.7
Krasnodar Territory	53.4	54.6	55.6	67.3	69.7	69.3	65.8	66.1	66.5
Astrakhan Region	46.3	63.9	56.4	57.2	70.4	70.3	55.9	67.1	69.6
Volgograd Region	43.7	48.3	49.2	58.3	62.9	62.0	58.0	61.7	61.5
Rostov Region	47.1	49.3	51.4	58.3	62.0	64.8	57.2	59.4	64.0
North Caucasian Federal District	44.6	49.9	46.8	59.6	61.7	56.8	57.0	56.9	54.6
Republic of Dagestan	38.0	48.7	46.5	49.9	56.4	48.8	43.1	50.0	51.4
Republic of Ingushetia	28.2	29.0	37.1	35.9	41.9	53.2	30.8	41.9	50.0
Kabardino-Balkarian Republic	45.2	50.3	48.6	67.9	57.1	57.2	61.6	49.6	52.3
Karachaevo-Cherchessian Republic	31.7	43.6	42.8	43.8	54.8	56.1	42.9	50.7	53.4
Republic of North Ossetia–Alania	39.1	39.9	44.7	54.0	58.0	57.7	50.6	52.7	54.7
Chechen Republic	30.3	27.0	12.2	38.9	29.1	17.5	33.6	24.2	15.1
Stavropol Territory	56.0	60.2	64.7	71.2	73.8	76.6	71.2	70.3	75.0

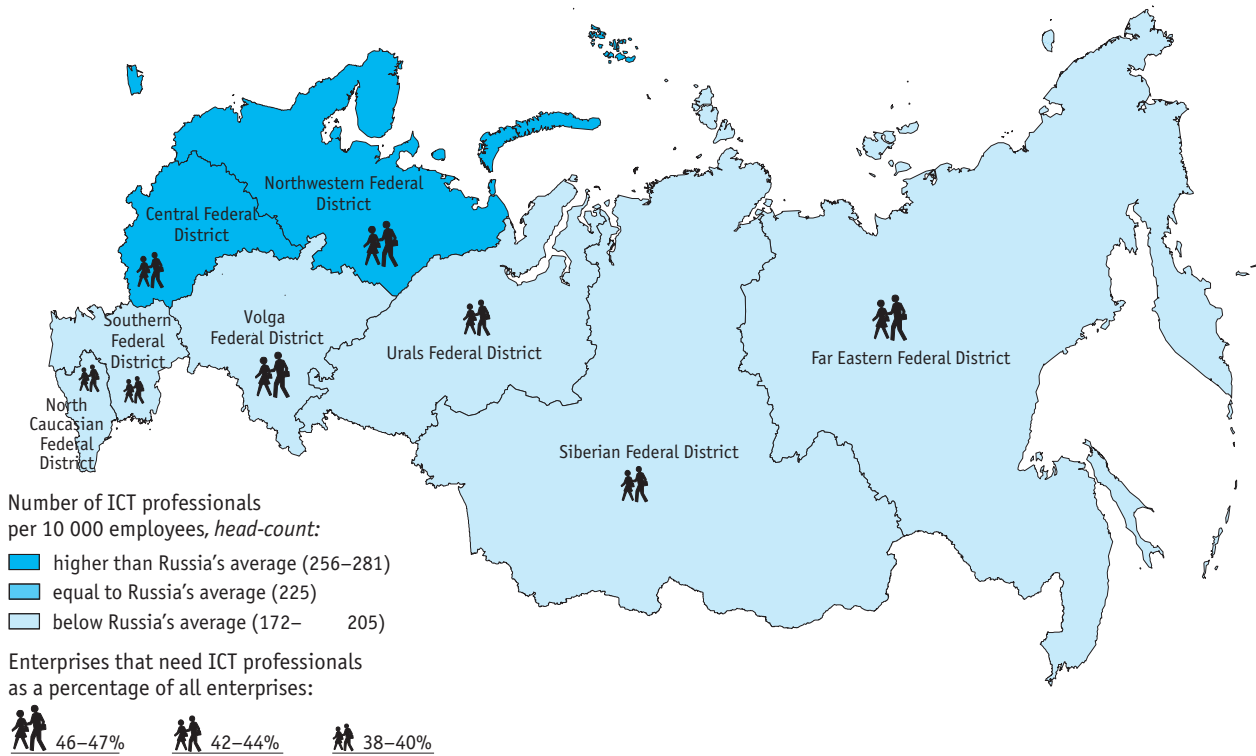
(continued)

	Obtaining information about public authorities' activities			Obtaining blank forms (e.g. statistical and tax forms)			Submitting filled forms (e.g. statistical and tax forms)		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
Volga Federal District	53.9	58.0	60.4	68.6	71.6	73.1	66.6	69.4	72.0
Republic of Bashkortostan	59.1	61.9	67.0	80.7	82.4	84.3	78.6	79.3	85.3
Republic of Mari El	45.4	51.0	56.2	58.5	64.6	66.9	61.0	64.7	67.7
Republic of Mordovia	46.2	51.0	54.4	61.8	68.7	72.0	62.7	68.6	72.1
Republic of Tatarstan	61.6	65.8	65.3	81.8	84.0	83.2	81.3	82.8	83.3
Udmurtian Republic	56.5	62.5	64.6	68.9	74.8	73.8	65.4	70.2	72.9
Chuvash Republic	63.6	66.0	68.8	67.7	69.3	73.4	66.0	67.8	69.3
Perm Territory	53.2	58.6	62.7	66.6	69.6	75.0	65.5	69.1	74.3
Kirov Region	43.9	47.7	51.6	57.4	60.6	62.2	56.1	58.5	61.2
Nizhni Novgorod Region	55.8	58.9	61.4	73.6	76.5	78.4	72.0	73.8	75.9
Orenburg Region	55.1	60.1	66.2	70.5	76.9	82.5	65.8	74.8	82.0
Penza Region	43.5	48.6	54.4	57.0	59.4	63.1	54.3	57.2	62.8
Samara Region	56.9	60.5	54.8	71.0	71.1	65.3	68.3	69.2	64.3
Saratov Region	44.0	49.0	52.3	54.2	57.1	59.4	50.0	52.2	55.1
Ulyanovsk Region	51.7	57.0	59.3	62.8	67.7	70.8	58.6	64.7	66.7
Urals Federal District	59.0	61.7	64.4	72.5	73.7	75.9	70.2	71.1	74.5
Kurgan Region	58.6	61.1	68.9	71.8	77.3	82.3	68.4	71.9	82.1
Sverdlovsk Region	59.6	64.1	67.2	72.7	74.6	79.3	70.0	73.6	78.0
Tyumen Region	62.1	64.4	65.2	74.3	74.7	75.0	71.6	71.5	73.1
Of which:									
Khanty-Mansi Autonomous District – Yugra	64.7	65.9	67.7	76.0	74.5	76.3	73.3	72.1	74.5
Yamalo-Nenets Autonomous District	67.0	69.6	65.8	77.4	79.1	73.1	72.0	74.2	69.2
Chelyabinsk Region	53.1	54.3	57.6	69.4	69.7	70.7	68.5	67.1	69.3

(continued)

	Obtaining information about public authorities' activities			Obtaining blank forms (e.g. statistical and tax forms)			Submitting filled forms (e.g. statistical and tax forms)		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
Siberian Federal District	49.5	53.5	56.1	62.4	66.2	68.1	60.6	63.2	66.2
Republic of Altai	52.5	55.7	65.3	64.8	70.0	73.3	62.8	65.6	71.8
Republic of Buryatia	53.6	52.2	55.2	65.0	64.6	64.5	63.6	58.2	59.8
Republic of Tuva	41.1	41.3	40.9	50.8	54.2	47.8	50.1	53.9	47.4
Republic of Khakasia	56.8	61.9	63.6	70.8	73.9	76.2	72.3	71.2	74.4
Altai Territory	44.4	46.1	50.5	57.5	58.1	63.3	56.9	56.4	61.3
Zabaikalsk Territory	47.1	50.4	58.8	57.5	65.8	68.9	55.8	63.1	69.8
Krasnoyarsk Territory	47.1	53.9	58.7	59.3	65.2	70.0	56.5	62.0	67.9
Irkutsk Region	51.6	56.9	61.4	65.7	71.4	73.4	63.6	68.2	72.3
Kemerovo Region	57.3	61.5	62.0	74.0	74.9	73.3	73.1	73.7	73.3
Novosibirsk Region	47.7	52.1	51.3	59.4	64.4	64.9	56.6	60.5	61.0
Omsk Region	43.5	46.8	49.8	57.6	61.4	65.3	55.5	58.1	63.6
Tomsk Region	72.0	77.4	66.3	85.0	84.7	74.8	83.6	82.6	73.1
Far Eastern Federal District	49.9	53.3	57.6	62.1	64.3	68.3	58.8	61.0	65.6
Republic of Sakha (Yakutia)	44.5	45.0	49.3	55.5	57.5	60.0	51.6	52.6	55.0
Kamchatka Territory	60.9	64.3	67.7	75.6	77.7	79.0	70.3	72.1	75.8
Primorsky Territory	53.2	58.3	58.5	65.3	67.4	71.2	63.0	65.8	69.8
Khabarovsk Territory	59.1	63.4	69.7	75.8	77.7	81.6	72.3	74.2	78.9
Amur Region	40.2	42.4	53.8	49.4	52.1	58.7	46.8	50.1	57.5
Magadan Region	52.1	59.6	59.8	61.8	73.2	73.9	58.7	69.8	69.6
Sakhalin Region	51.9	53.4	58.3	65.6	62.0	71.7	61.8	59.8	71.3
Jewish Autonomous Region	42.4	50.7	50.7	49.8	56.1	57.0	45.9	49.7	50.5
Chukotka Autonomous District	48.3	62.2	65.5	66.8	73.0	76.2	65.9	72.5	72.6

4.8.8. ICT PROFESSIONALS IN ENTERPRISES BY FEDERAL DISTRICT: 2012



4.8.9. ENTERPRISES THAT NEED ICT PROFESSIONALS AND EMPLOYEES WITH ICT SKILLS: 2012

(as a percentage of the total number of enterprises)

	Total	Of which need	
		ICT professionals	employees with ICT user skills
Russian Federation	47.0	43.2	38.1
Central Federal District	45.2	41.6	36.6
Belgorod Region	50.9	46.9	39.4
Bryansk Region	43.6	40.7	33.7
Vladimir Region	42.6	39.2	34.9
Voronezh Region	45.1	40.7	37.1
Ivanovo Region	47.4	43.2	38.6
Kaluga Region	45.4	42.6	39.2
Kostroma Region	50.5	47.0	40.6
Kursk Region	48.3	46.1	39.1
Lipetzk Region	54.9	51.7	45.4
Moscow Region	36.0	33.1	29.6
Oryol Region	44.7	41.3	36.3
Ryazan Region	50.0	47.2	41.6
Smolensk Region	49.9	47.0	40.9
Tambov Region	39.6	36.5	32.5
Tver Region	42.9	39.2	34.2
Tula Region	43.8	39.9	34.5
Yaroslavl Region	48.1	43.4	38.1
Moscow	50.2	45.0	40.5
Northwestern Federal District	50.2	45.6	40.8
Republic of Karelia	64.6	59.1	48.1
Republic of Komi	51.5	47.3	42.4

(continued)

	Total	Of which need	
		ICT professionals	employees with ICT user skills
Arkhangelsk Region	56.3	52.0	46.5
Of which Nenets Autonomous District	53.2	51.4	46.4
Vologda Region	53.8	49.5	45.0
Kaliningrad Region	42.1	38.4	32.0
Leningrad Region	48.4	42.6	38.9
Murmansk Region	47.0	42.8	34.5
Novgorod Region	58.7	53.7	47.4
Pskov region	46.6	44.1	39.8
Saint-Petersburg	46.1	41.0	39.1
Southern Federal District	41.0	37.7	33.3
Republic of Adygeya	48.5	45.0	37.4
Republic of Kalmykia	47.6	45.0	38.4
Krasnodar Territory	37.5	33.5	30.6
Astrakhan Region	47.2	42.2	38.2
Volgograd Region	39.4	37.1	32.0
Rostov Region	42.2	38.8	34.4
North Caucasian Federal District	43.1	40.0	35.5
Republic of Dagestan	38.5	37.9	33.4
Republic of Ingushetia	40.3	40.3	37.1
Kabardino-Balkarian Republic	33.0	29.4	25.8
Karachaevo-Cherchessian Republic	41.2	38.6	33.8
Republic of North Ossetia–Alania	52.5	48.2	42.5
Chechen Republic	28.2	26.9	24.3
Stavropol Territory	52.0	47.8	42.7

(continued)

	Total	Of which need	
		ICT professionals	employees with ICT user skills
Volga Federal District	50.3	46.6	40.3
Republic of Bashkortostan	54.9	51.5	44.3
Republic of Mari El	53.9	49.8	43.0
Republic of Mordovia	48.5	44.8	40.9
Republic of Tatarstan	45.9	43.0	38.1
Udmurtian Republic	55.0	50.0	45.4
Chuvash Republic	51.6	48.5	44.2
Perm Territory	52.0	47.2	42.7
Kirov Region	66.1	64.7	42.2
Nizhni Novgorod Region	53.0	48.6	42.9
Orenburg Region	55.1	51.1	44.7
Penza Region	44.6	39.4	36.1
Samara Region	38.4	35.3	31.0
Saratov Region	45.3	41.3	36.9
Ulyanovsk Region	46.5	43.0	37.6
Urals Federal District	47.8	43.5	38.0
Kurgan Region	56.3	50.4	43.4
Sverdlovsk Region	51.2	46.6	41.1
Tyumen Region	42.0	38.5	33.5
Of which:			
Khanty-Mansi Autonomous District – Yugra	42.2	38.2	33.4
Yamalo-Nenets Autonomous District	47.6	44.8	37.3
Chelyabinsk Region	50.2	45.8	40.1

(continued)

	Total	Of which need	
		ICT professionals	employees with ICT user skills
Siberian Federal District	45.8	41.7	37.4
Republic of Altai	49.4	44.8	42.6
Republic of Buryatia	46.0	41.8	36.9
Republic of Tuva	48.7	45.3	41.0
Republic of Khakasia	51.1	46.7	39.8
Altai Territory	46.8	42.9	38.3
Zabaikalsk Territory	57.3	54.1	47.2
Krasnoyarsk Territory	47.1	42.7	39.5
Irkutsk Region	50.1	45.6	39.8
Kemerovo Region	43.1	39.0	33.9
Novosibirsk Region	41.3	37.0	34.4
Omsk Region	40.7	36.8	33.0
Tomsk Region	47.5	44.6	39.1
Far Eastern Federal District	50.8	46.3	41.7
Republic of Sakha (Yakutia)	50.6	45.3	43.5
Kamchatka Territory	55.7	52.2	46.4
Primorsky Territory	47.7	43.9	39.3
Khabarovsk Territory	59.6	55.0	48.1
Amur Region	46.7	42.4	38.2
Magadan Region	52.6	48.9	39.9
Sakhalin Region	46.9	43.2	36.9
Jewish Autonomous Region	50.4	44.4	40.5
Chukotka Autonomous District	60.5	51.6	50.2



5. ICT Usage by Households and Individuals

MAIN INDICATORS OF ICT USAGE BY HOUSEHOLDS AND INDIVIDUALS

(per cent)

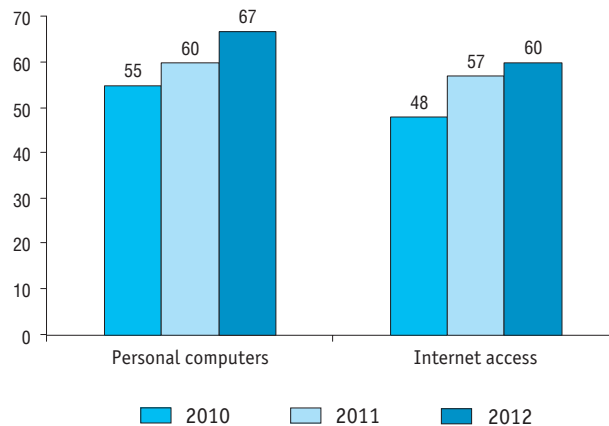
	2010	2011	2012	2013
ICT Usage by Households				
Households with, as a percentage of the total number of households:				
personal computers	55	60	67	...
access to the Internet	48	57	60	...
fixed telephones	70	69	65	...
mobile cellular telephones	93	95	96	...
Internet Usage by Individuals				
Individuals using the Internet every day or almost every day as a percentage of all individuals aged 16–74*	26	33	41	43
Individuals who have never used the Internet as a percentage of all individuals aged 16–74*	51	42	34	29
Individuals using the Internet, as a percentage of all individuals aged 16–74:				
at home	35	47	58	...
at work	12	14	22	...
at an educational institution	4	4	8	...
at another person's home	7	6	14	...
Individuals' level of computer skills, as a percentage of all individuals aged 16–74:				
high	...	...	18	19
medium	...	...	21	21
low	...	...	15	16
Individuals' level of Internet skills, as a percentage of all individuals aged 16–74:				
high	3	4	11	...
medium	12	16	26	...
low	31	31	21	...
Individuals having access to the Internet, as a percentage of all individuals aged 16–74				
Of which broadband	28	42	51	...

* 2012 – aged 18–74.

5.1. ICT Usage by Households

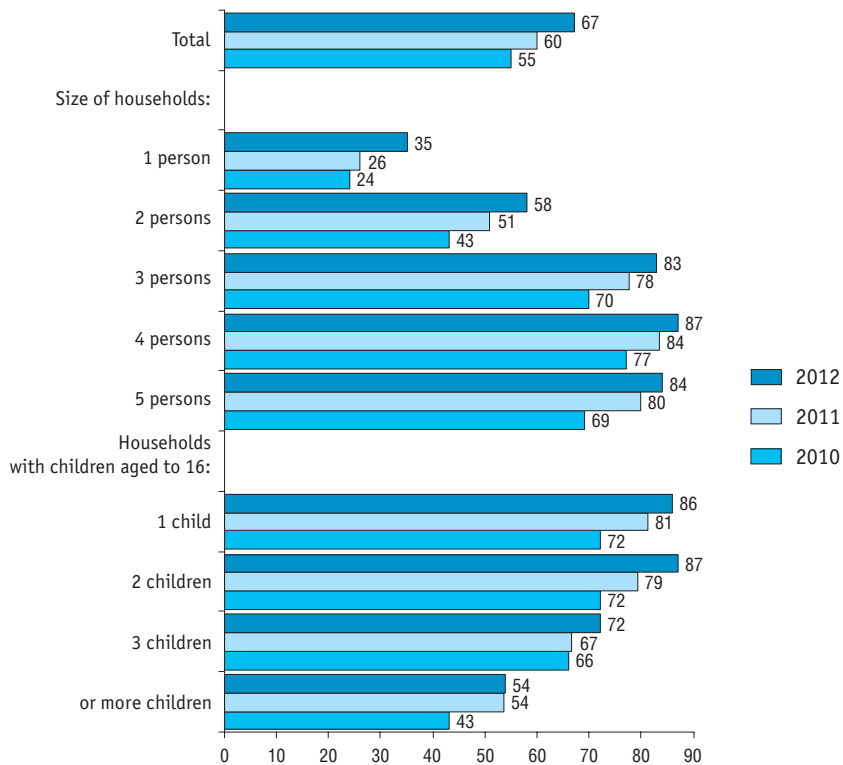
5.1.1. HOUSEHOLDS WITH PERSONAL COMPUTERS AND INTERNET ACCESS

(as a percentage of the total number of households)



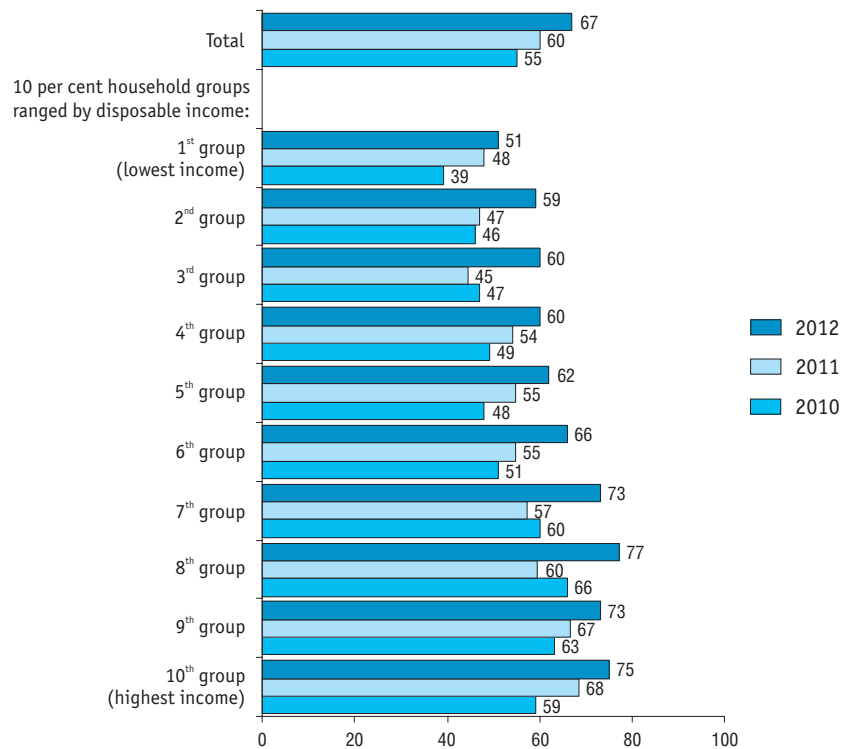
Source (here and below in sections 5.1.2–5.1.5): selective survey of household budgets conducted by Federal State Statistics Service.

5.1.2. HOUSEHOLDS WITH PERSONAL COMPUTERS AND INTERNET ACCESS BY SIZE

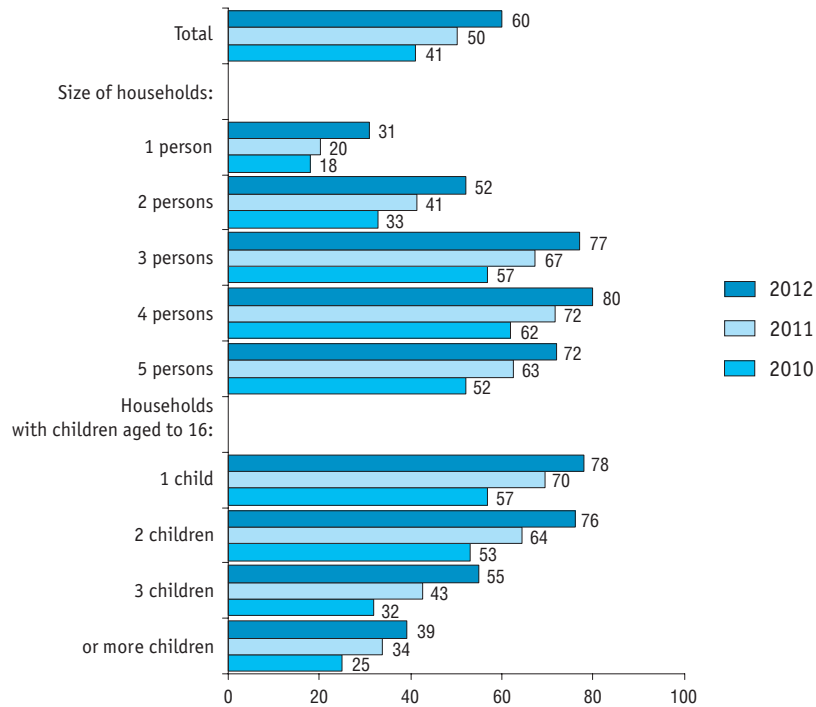
(as a percentage of the total number of households)

5.1.3. HOUSEHOLDS WITH PERSONAL COMPUTERS BY INCOME LEVEL

(as a percentage of the total number of households)



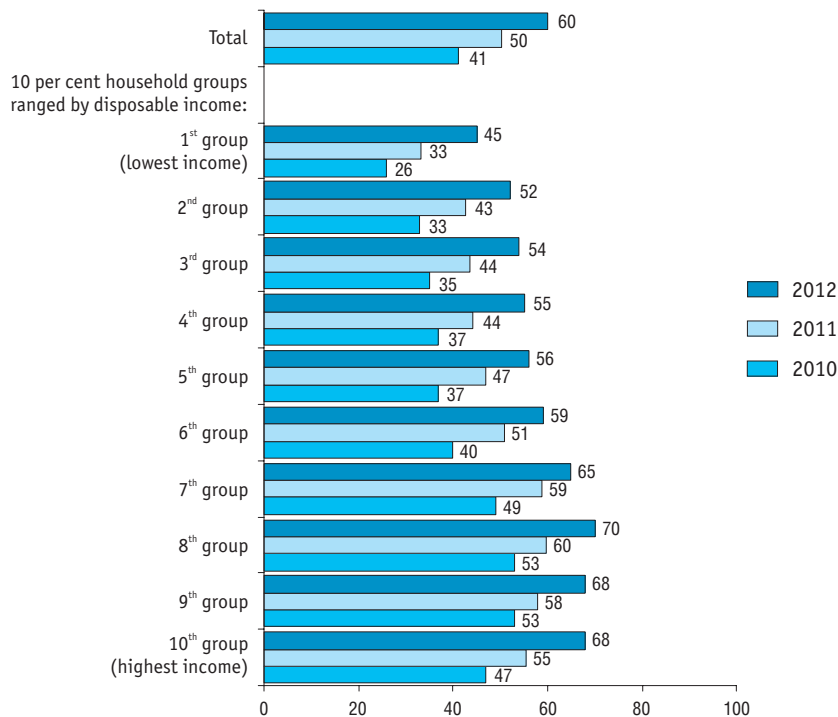
5.1.4. HOUSEHOLDS WITH INTERNET ACCESS BY SIZE*

(as a percentage of the total number of households)

* 2010–2011 – access to the Internet via personal computer, 2012 – from any electronic device.

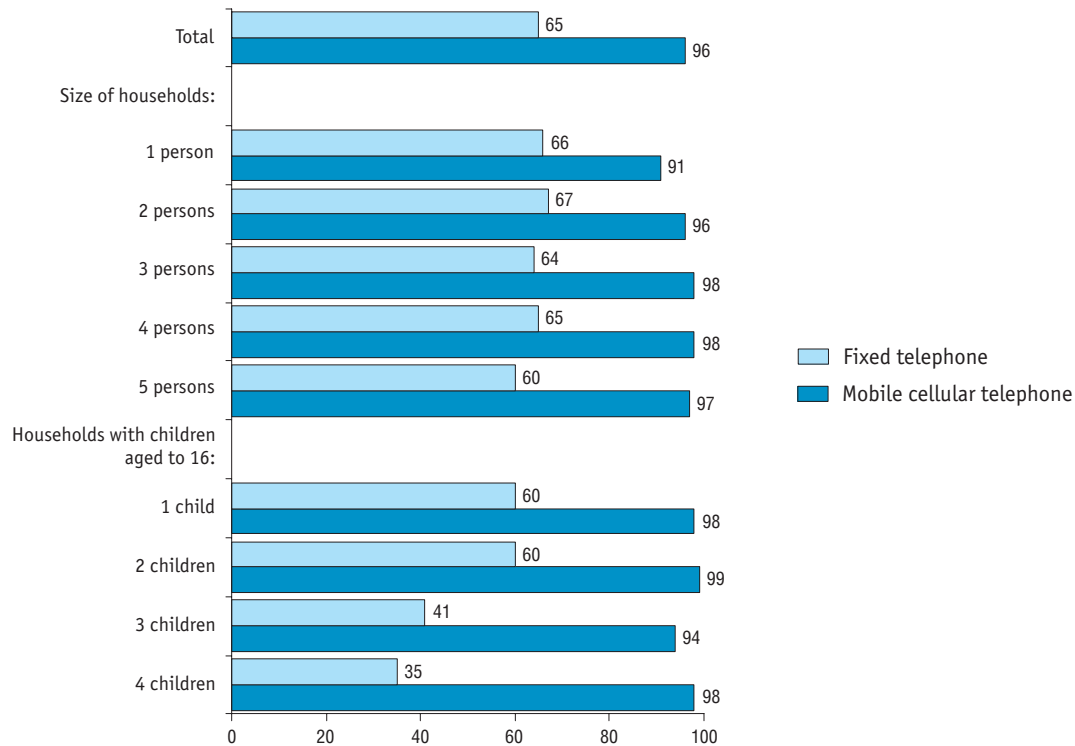
5.1.5. HOUSEHOLDS WITH INTERNET ACCESS BY INCOME LEVEL*

(as a percentage of the total number of households)



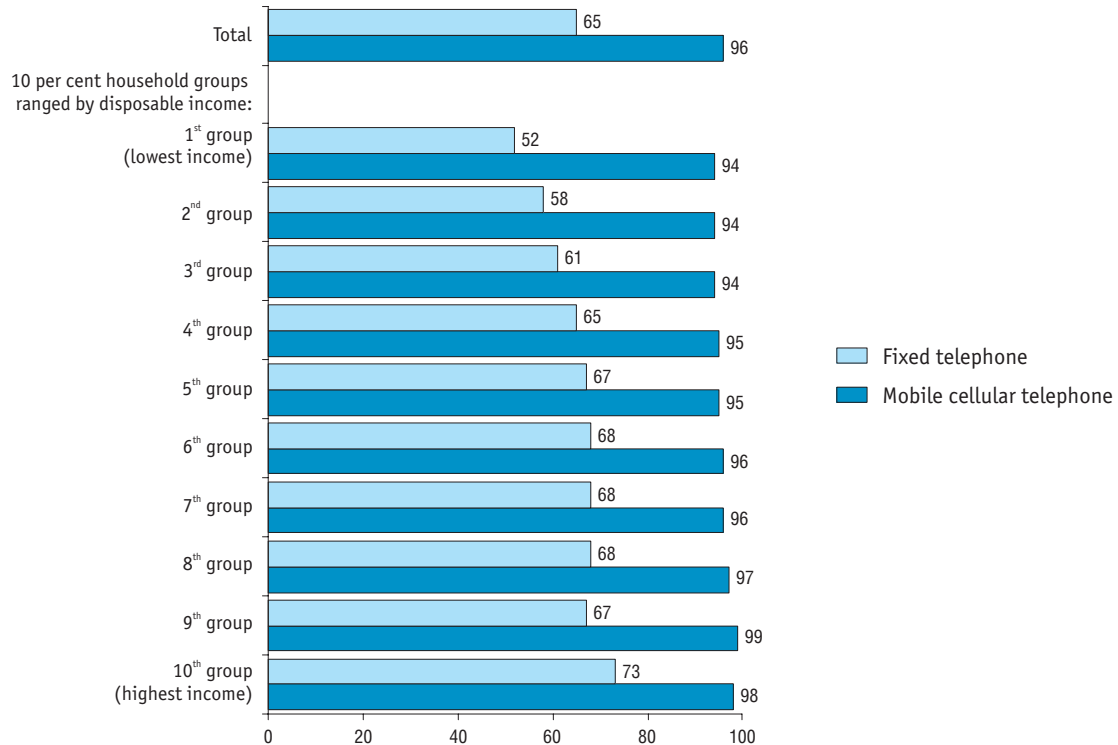
* 2010–2011 – access to the Internet via personal computer, 2012 – from any electronic device.

5.1.6. HOUSEHOLDS WITH A TELEPHONE BY SIZE: 2012

(as a percentage of the total number of households)

5.1.7. HOUSEHOLDS WITH A TELEPHONE BY INCOME LEVEL

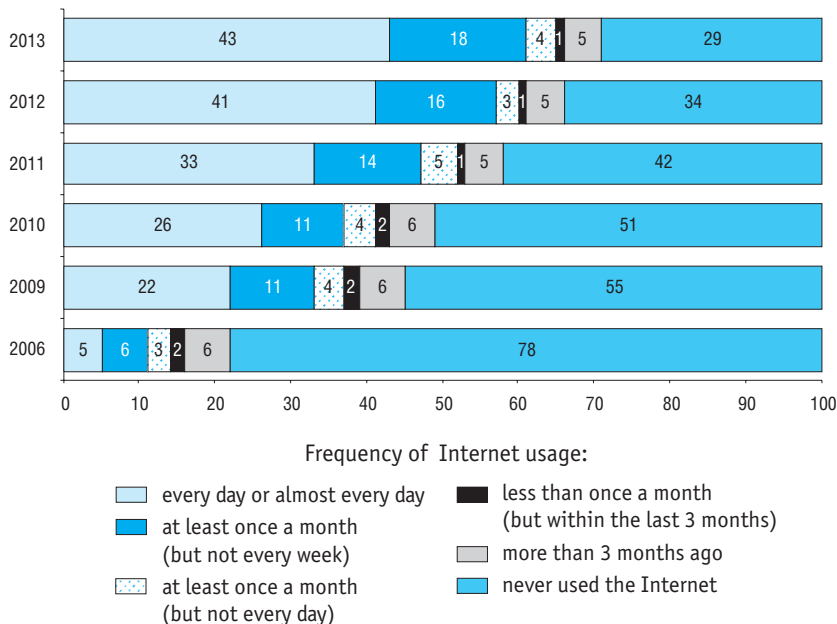
(as a percentage of the total number of households)



5.2. Internet Usage by Individuals

5.2.1. FREQUENCY OF INTERNET USAGE

(Internet users as a percentage of all respondents aged 16–74*)

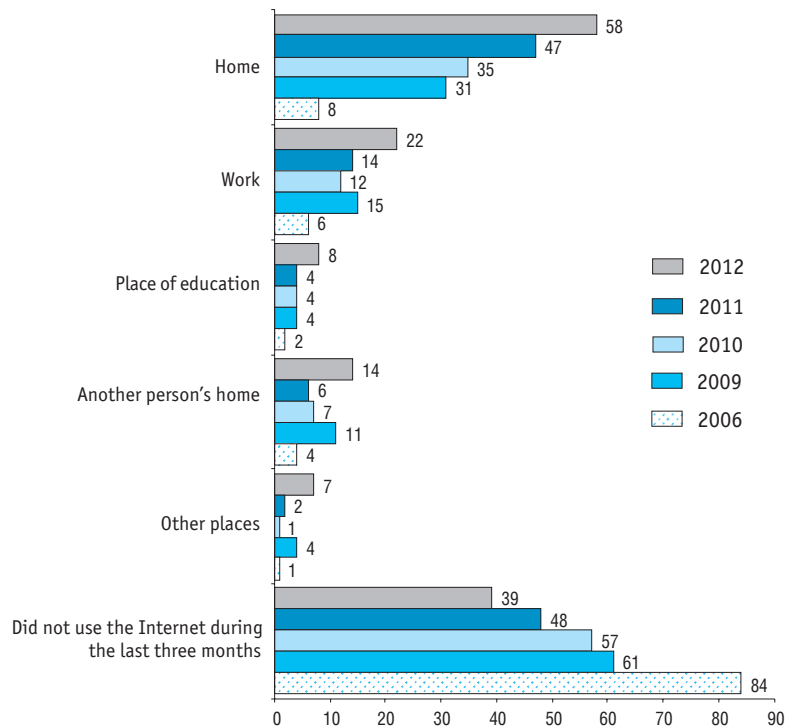


* 2012 – aged 18–74.

Sources (here and below in the section): the results of the special national representative survey of the adult population of the Russian Federation conducted by HSE Institute for Statistical Studies and Economics of Knowledge within 'The Monitoring Survey of Innovative Behavior of the Population' as part of HSE Basic Research Programme.

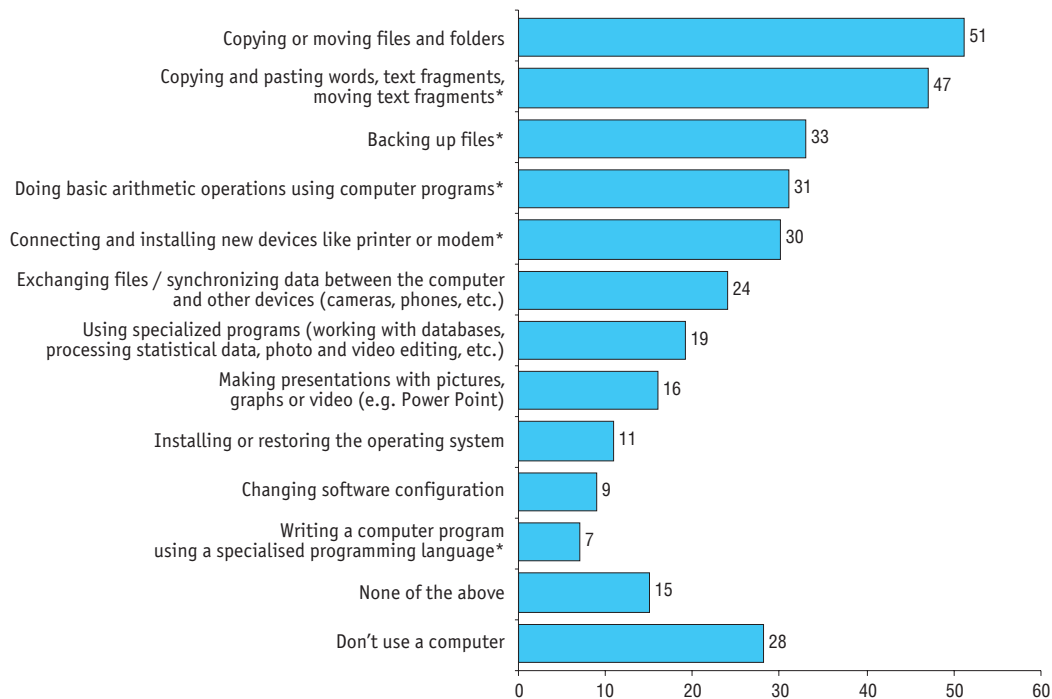
5.2.2. PLACES OF INTERNET USAGE*

(as a percentage of all respondents aged 16–74)



* Here and below in the section the total may exceed 100%, as the respondents could give multiple answers.

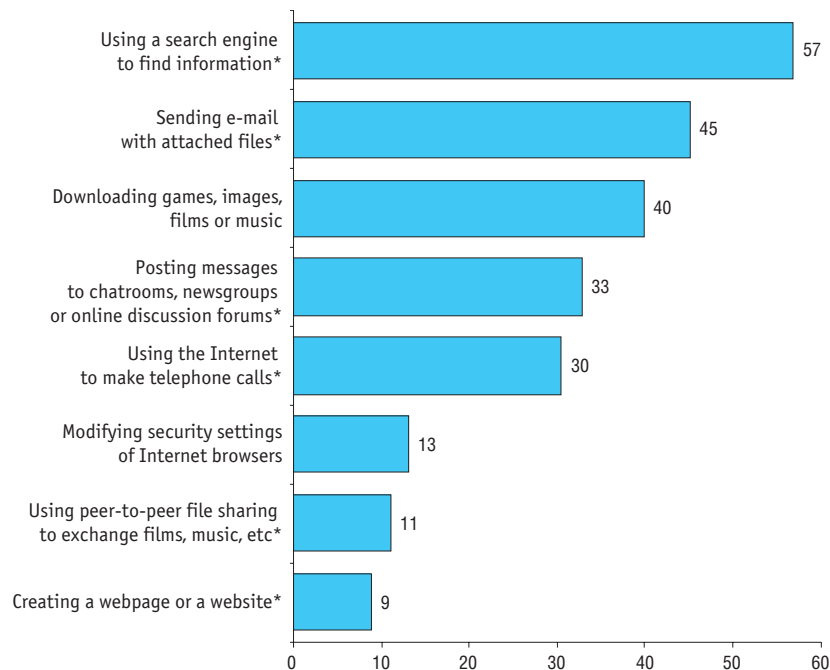
5.2.3. COMPUTER SKILLS: 2013

(as a percentage of all respondents aged 16–74)

* Marked items are used to calculate the level of computer skills (see chart 6.4.4). A high level means the respondent has five or six of these skills; a medium level – three or four skills; a low level – one or two skills.

5.2.4. INTERNET SKILLS: 2012

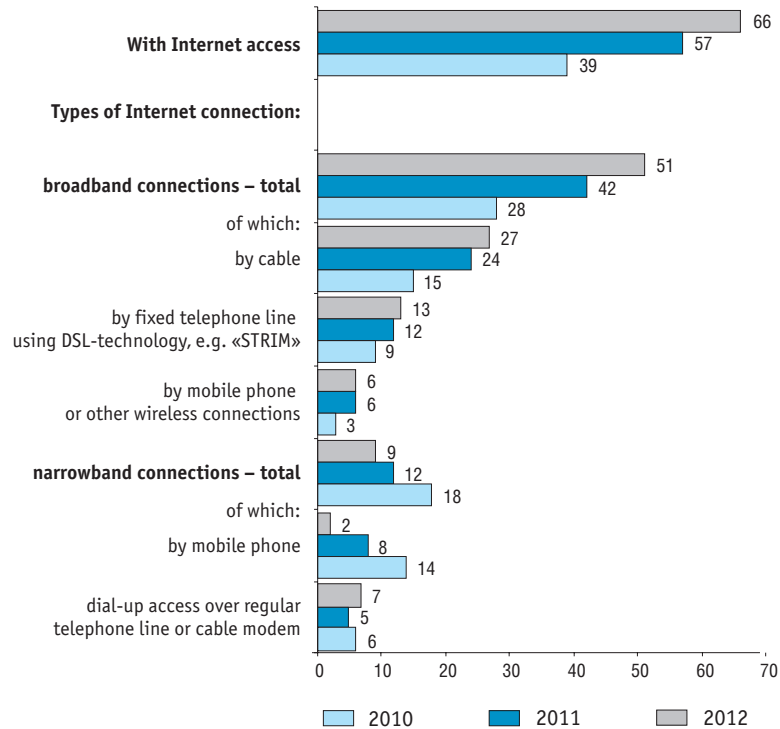
(as a percentage of all respondents aged 16–74)



* Marked items are used to calculate the level of computer skills (see chart 6.4.5). A high level means the respondent has five or six of these skills; a medium level – three or four skills; a low level – one or two skills.

5.2.5. INDIVIDUALS WITH INTERNET ACCESS IN HOUSEHOLDS

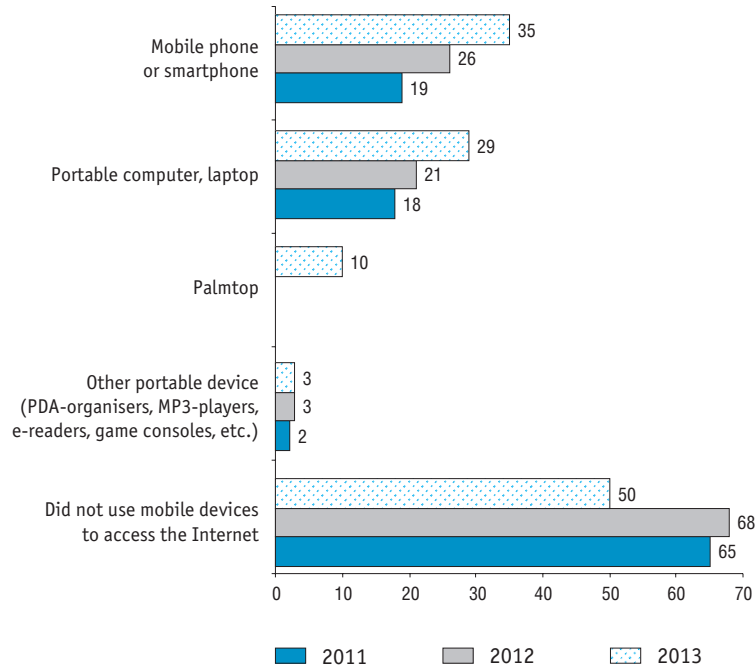
(as a percentage of all respondents aged 16–74)



* 2012 – aged 18–74.

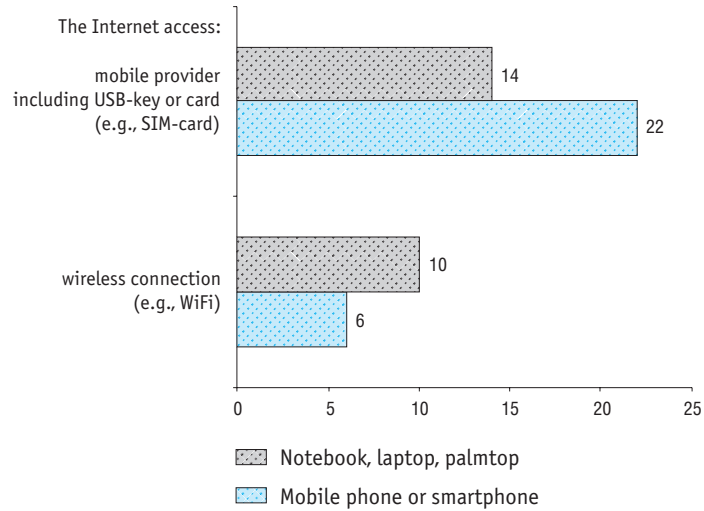
5.2.6. USE OF MOBILE DEVICES TO ACCESS THE INTERNET

(as a percentage of all respondents aged 16–74)



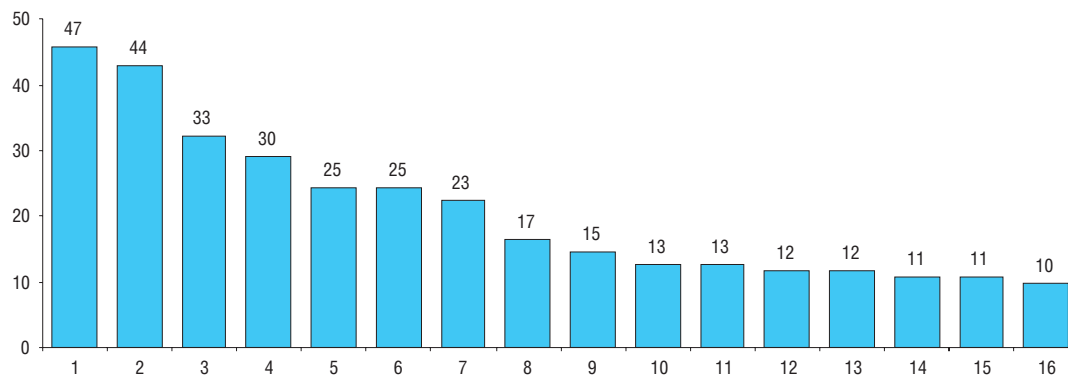
5.2.7. TYPES OF INTERNET ACCESS VIA MOBILE DEVICES: 2012

(as a percentage of all respondents aged 16–74; for the last three months)



5.2.8. INTERNET ACTIVITIES: 2013

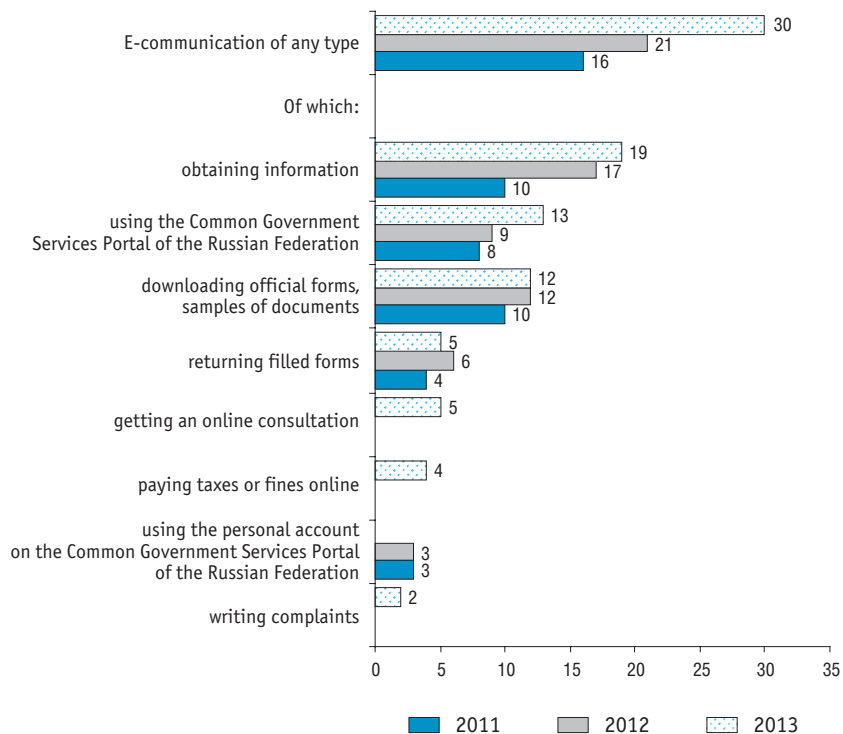
(undertaken by individuals; as a percentage of all respondents aged 16–74)



- 1 – Communicating in social networks
- 2 – Sending or receiving e-mail
- 3 – Making telephone or video calls over the Internet (e.g., by Skype)
- 4 – Searching for information (e.g., about goods or services)
- 5 – Reading online news, newspapers, magazines
- 6 – Posting photographs or pictures
- 7 – Watching or downloading films, pictures, music, books, games, etc.

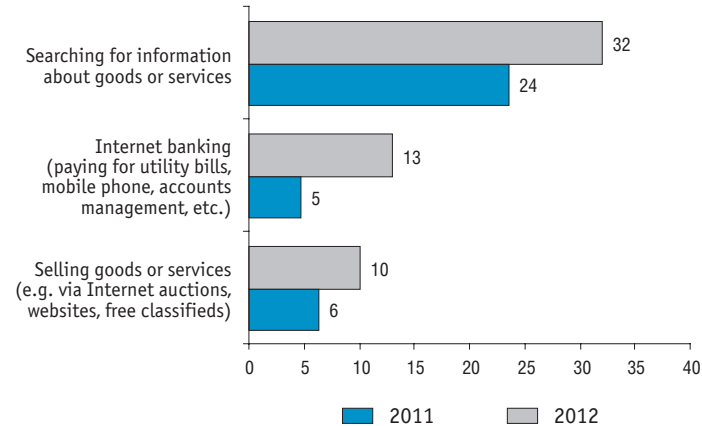
- 8 – Communicating on forums, online chatrooms, dating sites, etc.
- 9 – Listening to the radio or watching TV over the Internet
- 10 – Downloading or updating software
- 11 – Playing online games with several participants
- 12 – Communicating in professional networks
- 13 – Reading discussions on forums and blogs
- 14 – Posting videos or music
- 15 – Instant messaging
- 16 – Downloading applications for smartphones, tablets, etc.

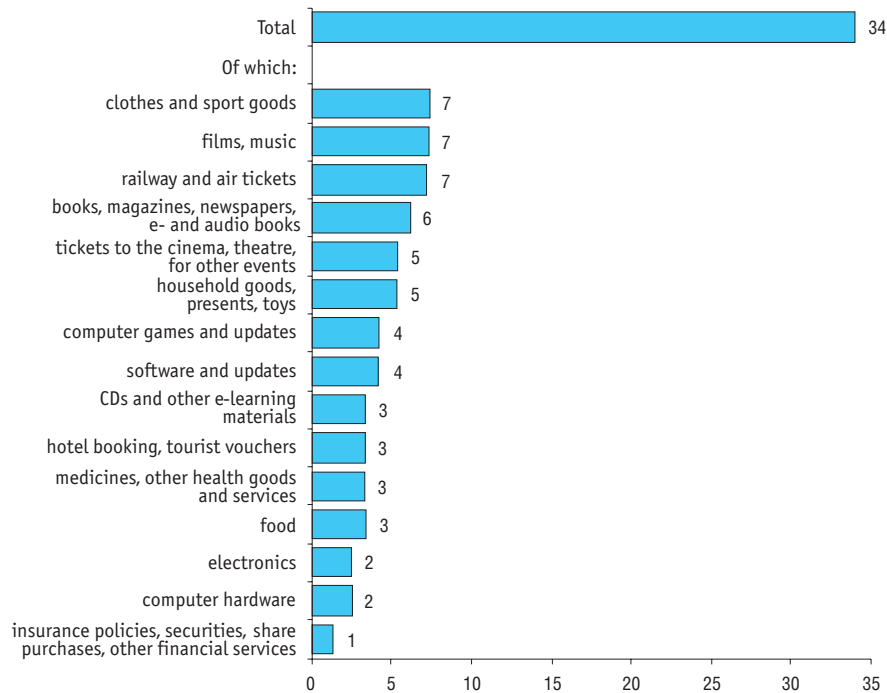
5.2.9. INTERACTION WITH PUBLIC AUTHORITIES

(as a percentage of all respondents aged 16–74)

5.2.10. E-COMMERCE

(respondents having taken part in e-commerce as a percentage of all respondents aged 16–74)



5.2.11. PURCHASE, ORDER OF GOODS AND SERVICES VIA THE INTERNET: 2012*(as a percentage of all respondents aged 16–74)*



6. International Comparisons

6.1. ICT Sector by Country

6.1.1. TELEPHONE DENSITY (telephones per 100 population)

	Fixed telephones		Mobile cellular telephones	
	2011	2012	2011	2012
Russia	30.9	30.1	179.0	182.7
Argentina	23.9	23.5	145.8	151.9
Australia	46.5	45.4	104.6	105.6
Austria	40.2	39.7	154.4	160.5
Belarus	44.5	46.9	113.2	113.5
Belgium	42.1	41.9	113.5	111.3
Brazil	21.8	22.3	119.0	125.0
Bulgaria	31.0	29.3	142.8	148.1
Canada	52.8	50.6	79.4	80.0
China	20.8	20.2	72.1	80.8
Czech Republic	20.8	19.9	124.1	126.8
Denmark	45.1	43.4	117.5	117.6
Estonia	36.5	34.7	143.9	160.4
Finland	20.0	16.4	165.9	172.3
France	63.0	61.5	94.1	97.4
Germany	62.0	60.5	109.7	111.6
Greece	51.7	49.1	109.1	120.0
Hungary	29.3	29.7	116.9	116.1
Iceland	59.3	55.2	106.8	108.1
Ireland	45.2	43.9	108.5	107.2
Italy	36.4	35.4	158.1	159.8
Japan	50.8	50.5	104.3	110.9

(continued)

	Fixed telephones		Mobile cellular telephones	
	2011	2012	2011	2012
Latvia	24.9	24.3	111.4	112.1
Lithuania	23.4	22.3	148.1	145.4
Luxembourg	54.1	50.9	148.1	145.4
Mexico	16.5	16.7	79.2	83.4
Norway	30.8	28.0	115.8	116.7
Poland	17.9	15.6	131.3	140.3
Republic of Korea	60.5	61.4	107.7	109.4
Republic of Moldova	33.3	34.3	90.8	102.0
Slovakia	19.4	17.9	110.0	111.9
Slovenia	42.3	39.9	105.2	108.6
Spain	42.8	41.9	113.1	108.4
Sweden	47.4	43.8	121.2	124.6
Switzerland	58.3	56.5	130.1	66.0
Turkey	20.8	18.7	89.4	91.5
United Kingdom	53.3	52.9	134.1	135.3
USA	45.6	44.4	94.7	95.4

Source: Federal State Statistics Service (for data on Russia); ITU (for other countries).

6.1.2. BROADBAND INTERNET SUBSCRIPTIONS

(units per 100 population)

	Fixed broadband Internet subscriptions		Mobile broadband Internet subscriptions	
	2011	2012	2011	2012
Russia	12.2	14.4	47.8	63.6
Australia	23.8	24.3	80.7	102.7
Austria	24.6	25.0	46.1	56.3
Belarus	22.2	26.9	18.9	32.9
Belgium	32.1	33.3	19.5	33.8
Brazil	8.6	9.2	21.6	37.3
Bulgaria	16.7	17.9	30.8	41.4
Canada	31.7	32.5	39.4	50.0
Czech Republic	15.7	16.4	51.4	52.6
Denmark	37.6	38.8	81.0	88.1
Estonia	24.5	25.5	45.8	74.1
Finland	29.5	30.3	87.1	106.5
France	35.8	37.5	44.0	52.2
Georgia	7.1	8.7	21.7	24.1
Germany	32.8	33.7	34.9	41.1
Greece	22.1	24.1	36.3	44.5
Hungary	22.1	22.9	18.3	24.2
Iceland	34.2	34.3	57.5	71.7
Ireland	22.0	22.7	61.1	65.8
Israel	24.9	25.3	40.6	65.5
Italy	22.1	22.1	44.5	52.1
Japan	27.4	27.7	104.0	113.1
Kazakhstan	7.4	9.8	38.4	42.0

(continued)

	Fixed broadband Internet subscriptions		Mobile broadband Internet subscriptions	
	2011	2012	2011	2012
Latvia	22.1	23.3	37.9	53.7
Lithuania	20.4	21.1	11.0	12.5
Malta	30.3	32.0	36.1	58.6
Netherlands	39.0	39.8	52.6	61.0
Norway	35.3	36.3	77.3	85.4
Poland	14.7	15.5	53.2	52.8
Portugal	21.2	22.5	27.4	32.5
Republic of Korea	36.6	37.2	105.1	106.0
Republic of Moldova	10.0	11.9	3.6	5.1
Slovakia	13.7	14.7	35.7	39.5
Slovenia	23.6	24.3	29.6	37.5
Spain	23.7	24.4	41.8	53.4
Sweden	32.0	32.3	97.4	101.3
United Kingdom	32.7	34.0	52.6	72.0
USA	27.4	28.3	69.8	75.3

Source: Federal State Statistics Service (for data on Russia); ITU (for other countries).

6.2. ICT Sector by Country

6.2.1. SHARE OF THE ICT SECTOR IN THE TOTAL NUMBER OF EMPLOYEES IN ENTERPRISES BY ECONOMIC ACTIVITY

(per cent)

	ICT sector – total			Of which					
	2005	2009	2010	ICT manufacturing			ICT services**		
				2005	2009	2010	2005	2009	2010
Russia*	2.8	2.7	2.8	1.0	0.9	0.9	1.8	1.8	1.9
Austria	2.8	2.3	2.3	0.9	0.4	0.3	2.0	1.9	2.0
Belgium	3.0	2.9	2.8	0.6	0.4	0.3	2.4	2.5	2.6
Bulgaria	...	...	1.8	0.3	...	0.1	...	...	1.7
Cyprus	...	...	...	...	...	...	...	1.7	1.9
Czech Republic	...	...	2.7	...	...	0.6	...	...	2.2
Denmark	3.6	3.1	3.2	0.5	0.2	0.2	3.1	2.9	3.0
Estonia	3.0	3.1	3.2	1.4	0.8	0.9	1.5	2.2	2.3
Finland	4.8	4.1	4.0	1.9	1.2	1.1	2.9	2.9	2.8
France	3.1	...	2.8	0.9	...	0.3	2.3	...	2.5
Germany	2.6	2.3	2.3	0.9	0.3	0.3	1.7	2.0	1.9
Greece	1.4	...	...	0.2	...	...	1.3	...	...
Hungary	3.6	3.4	3.5	1.8	1.2	1.3	1.9	2.2	2.2
Ireland	...	...	...	...	...	...	...	3.0	3.2
Italy	2.7	...	...	0.7	0.3	0.3	2.0	2.2	2.2
Latvia	1.7	1.8	1.9	0.3	0.1	0.1	1.5	1.7	1.8
Lithuania	1.8	...	1.7	0.8	...	0.2	1.1	1.3	1.5
Netherlands	...	3.2	...	...	0.1	0.1	...	3.0	3.0
Poland	...	1.6	1.7	0.5	0.3	0.3	...	1.3	1.3
Portugal	1.5	1.5	1.5	0.4	0.2	0.2	1.1	1.3	1.4
Romania	1.3	1.5	1.5	0.3	0.2	0.2	1.0	1.3	1.3
Slovakia	...	2.2	2.7	...	0.9	0.8	1.3	1.3	1.9
Slovenia	...	...	2.3	1.2	...	0.4	...	1.9	1.9
Spain	1.9	2.0	2.1	0.3	0.1	0.1	1.7	2.0	2.0
Sweden	4.8	4.4	4.4	1.2	...	...	3.6	...	...
United Kingdom	3.7	3.3	3.3	0.6	0.2	0.2	3.1	3.1	3.1

* 2012: the ICT sector total – 2.8%, ICT manufacturing – 0.9%, ICT services – 1.9%.

** Wholesale of ICT goods, telecommunications and ICT services.

Sources: estimated by HSE Institute for Statistical Studies and Economics of Knowledge on the basis of data provided by Federal State Statistics Service (for Russia); Eurostat (for other countries).

6.2.2. SHARE OF THE ICT SECTOR IN GDP BY ECONOMIC ACTIVITY

	ICT sector – total			ICT manufacturing			ICT services**		
	2005	2009	2010	2005	2009	2010	2005	2009	2010
Russia*	3.6	3.8	3.4	0.5	0.4	0.5	3.1	3.4	2.9
Austria	4.5	3.2	3.2	1.3	0.5	0.4	3.1	2.8	2.7
Belgium	5.2	4.6	4.6	0.8	0.5	0.4	4.4	4.1	4.2
Bulgaria	...	...	5.2	0.6	...	0.2	...	...	5.0
Cyprus	...	...	...	...	...	...	...	3.5	3.7
Czech Republic	...	...	4.6	...	...	0.4	...	...	4.2
Denmark	4.9	5.0	4.8	0.6	0.2	0.2	4.4	4.8	4.5
Estonia	4.9	5.1	4.9	1.1	0.6	0.8	3.8	4.5	4.2
Finland	8.1	5.3	5.5	4.3	1.4	1.6	3.8	3.9	3.9
France	4.5	4.1	4.2	0.9	0.3	0.3	3.6	3.9	3.9
Germany	4.6	4.3	4.0	1.2	0.4	0.5	3.5	3.9	3.6
Greece	2.8	...	...	0.2	...	...	2.6	...	...
Hungary	7.0	5.9	5.8	3.0	1.7	1.6	4.0	4.2	4.2
Ireland	...	...	...	...	...	...	...	6.8	8.7
Italy	3.9	...	...	0.7	0.3	0.3	3.3	3.2	3.3
Latvia	...	3.5	3.5	...	0.2	0.2	4.5	3.3	3.3
Lithuania	2.8	...	2.5	0.4	...	0.2	2.4	2.4	2.3
Poland	...	3.2	3.3	0.6	0.4	0.4	...	2.8	2.9
Portugal	4.0	3.5	3.6	0.6	0.2	0.2	3.4	3.4	3.4
Romania	...	3.3	3.2	...	0.3	0.3	3.5	3.1	2.9
Slovakia	...	3.8	4.8	...	0.5	1.3	3.3	3.3	3.5
Slovenia	...	...	3.6	1.0	...	0.4	...	2.9	3.2
Spain	3.8	3.5	3.5	0.3	0.1	0.1	3.6	3.5	3.4
Sweden	7.0	6.3	6.4	2.1	...	...	4.9	...	...
United Kingdom	6.7	...	5.8	0.7	...	0.4	5.9	5.7	5.5

* 2012: the ICT sector total – 3.4%, ICT manufacturing – 0.6%, ICT services – 2.8%.

** Wholesale of ICT goods, telecommunications and ICT services.

Source: estimated by HSE Institute for Statistical Studies and Economics of Knowledge on the basis of data provided by Federal State Statistics Service (for Russia); Eurostat (for other countries).

6.2.3. EXPORTS/IMPORTS OF ICT GOODS: 2009

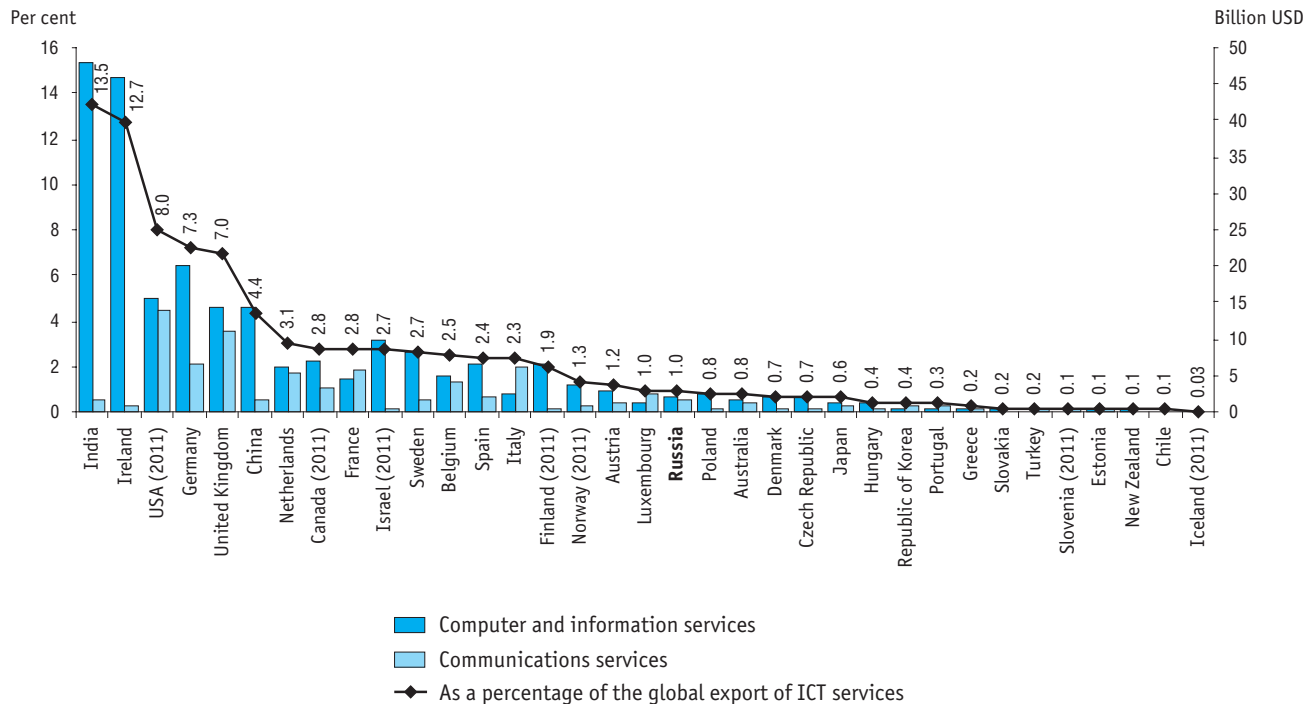
(billion US dollars)

	Exports	Imports		Exports	Imports
Russia*	0.9	12.4	Israel	7.9	4.6
Australia	1.6	16.7	Italy	8.1	24.6
Austria	5.3	8.1	Japan	70.2	62.7
Belgium	9.3	13.6	Luxembourg	0.4	1.0
Brazil	2.9	14.4	Mexico	50.5	45.9
Canada	10.9	27.0	Netherlands	50.3	54.9
Chile	0.1	2.7	New Zealand	0.3	2.2
China	356.3	220.2	Norway	1.8	5.2
Czech Republic	16.3	16.5	Poland	9.5	14.6
Denmark	3.1	6.6	Portugal	1.8	4.4
Estonia	0.5	0.6	Republic of Korea	79.5	41.9
Finland	6.7	6.2	Slovakia	9.4	8.4
France	19.8	38.2	Slovenia	0.5	1.1
Germany	54.6	78.0	South Africa	0.7	5.5
Greece	0.5	3.7	Spain	5.4	28.2
Hungary	19.5	16.2	Sweden	11.8	12.7
Iceland	0.0	0.1	Switzerland	2.7	8.9
India	6.1	20.7	Turkey	2.0	7.1
Indonesia	6.9	8.6	United Kingdom	23.4	47.6
Ireland	12.8	8.3	USA	113.2	230.6

* 2012: exports – 1.6 bn USD, imports – 23.5 bn USD.

Source: estimated by HSE Institute for Statistical Studies and Economics of Knowledge on the basis of data provided by Federal State Statistics Service (for Russia); Eurostat (for other countries).

6.2.4. EXPORT OF ICT SERVICES: 2012



Source: OECD.

6.3. Content and Media Sector by Country

6.3.1. CIRCULATION OF DAILY NEWSPAPERS

	Year	Daily circulation	
		total, <i>thousand items</i>	per 1000 inhabitants, <i>items</i>
Russia	2012	7838	55
Algeria	2004	...	...
Armenia	2004	23	8
Australia	2004	3114	155
Austria	2004	2570	311
Azerbaijan	2003	...	...
Belarus	2004	800	81
Belgium	2004	1706	165
Brazil	2004	6552	36
Bulgaria	2011	827	113
Canada	2004	5578	175
Chile	2004	816	51
China	2004	96704	74
Czech Republic	2004	1861	183
Denmark	2004	1906	353
Estonia	2004	257	191
Finland	2009	2049	386
France	2005	9973	164
Germany	2004	22100	267
Hungary	2004	2195	217
Ireland	2004	742	182
Italy	2004	8017	137

(continued)

	Year	Daily circulation	
		total, <i>thousand items</i>	per 1000 inhabitants, <i>items</i>
Japan	2004	70446	551
Kyrgyzstan	2004	5	1
Latvia	2004	357	154
Lithuania	2011	272	90
Luxembourg	2004	115	255
Mexico	2002	...	...
Netherlands	2004	5001	308
Norway	2004	2378	516
Poland	2011	3108	81
Portugal	2004	...	...
Republic of Korea	2004	...	...
Republic of Moldova	2000	...	...
Romania	2004	1528	70
Slovakia	2008	...	...
Slovenia	2004	...	...
Spain	2004	6183	144
Sweden	2004	4324	481
Switzerland	2004	3105	420
Turkmenistan	2004	45	9
Ukraine	2004	6192	131
United Kingdom	2004	17375	290
USA	2009	46278	151
Uzbekistan	2004	...	...

Source: Russian Book Chamber (for Russia); UNESCO (for other countries).

6.4. ICT Usage in Enterprises by Country

6.4.1. ENTERPRISES USING PERSONAL COMPUTERS AND THE INTERNET

(as a percentage of all enterprises in the business sector)

	Enterprises using					
	personal computers			the Internet		
	2010	2011	2012	2010	2011	2012
Russia	92	92	92	84	85	86
Austria	98	99	99	97	98	98
Belgium	99	97	98	97	96	97
Bulgaria	90	90	91	85	87	87
Cyprus	92	93	97	88	91	95
Czech Republic	96	97	97	95	96	97
Denmark	98	99	99	97	98	99
Estonia	97	96	97	96	96	96
Finland	100	100	100	100	100	100
France	98	97	99	97	96	99
Germany	98	98	98	97	97	97
Greece	92	95	93	90	93	91
Hungary	91	92	92	90	89	89
Iceland	98	...	99	98	...	99
Ireland	93	94	95	92	93	94
Italy	95	96	98	94	94	96
Japan	...	...	...	99	...	...
Latvia	95	95	95	91	92	91
Lithuania	97	98	100	96	98	100
Luxembourg	98	98	99	96	97	98

(continued)

	Enterprises using					
	personal computers			the Internet		
	2010	2011	2012	2010	2011	2012
Malta	96	97	97	94	95	95
Netherlands	100	100	100	98	100	100
Norway	98	98	98	97	97	97
Poland	97	96	95	96	94	93
Portugal	97	97	98	94	95	95
Romania	82	83	81	79	79	79
Slovakia	98	98	98	98	97	98
Slovenia	98	98	98	97	97	98
Spain	98	98	98	97	97	96
Sweden	97	97	98	96	96	98
Turkey	92	...	...	91	...	...
United Kingdom	92	95	96	91	95	94

Source (here and below in the section): estimated by HSE Institute for Statistical Studies and Economics of Knowledge on the basis of data provided by Federal State Statistics Service (for Russia); Eurostat (for other countries).

6.4.2. ENTERPRISES USING BROADBAND INTERNET CONNECTION

(as a percentage of all enterprises in the business sector)

	2010	2011	2012		2010	2011	2012
Russia*	64	69	79	Latvia	68	90	88
Australia	94	97	...	Lithuania	81	95	99
Austria	82	89	91	Luxembourg	87	93	96
Belgium	90	87	94	Malta	92	95	95
Bulgaria	62	74	79	Mexico	52**	...	...
Canada	...	...	95	Netherlands	91	92	98
Cyprus	85	89	95	New Zealand	94	...	...
Czech Republic	86	89	92	Norway	87	90	89
Denmark	87	95	93	Poland	69	77	82
Estonia	88	92	96	Portugal	85	86	91
Finland	96	99	100	Republic of Korea	98	...	...
France	93	94	98	Romania	52	57	76
Germany	89	91	91	Slovakia	78	81	92
Greece	81	82	80	Slovenia	88	95	98
Hungary	79	87	87	Spain	95	96	96
Iceland	95	...	99	Sweden	91	95	97
Ireland	87	91	91	Turkey	89	...	...
Italy	84	88	94	United Kingdom	88	93	93
Japan	...	83	84				

* Enterprises with the maximum Internet connection speed of 256 Kbps and above.

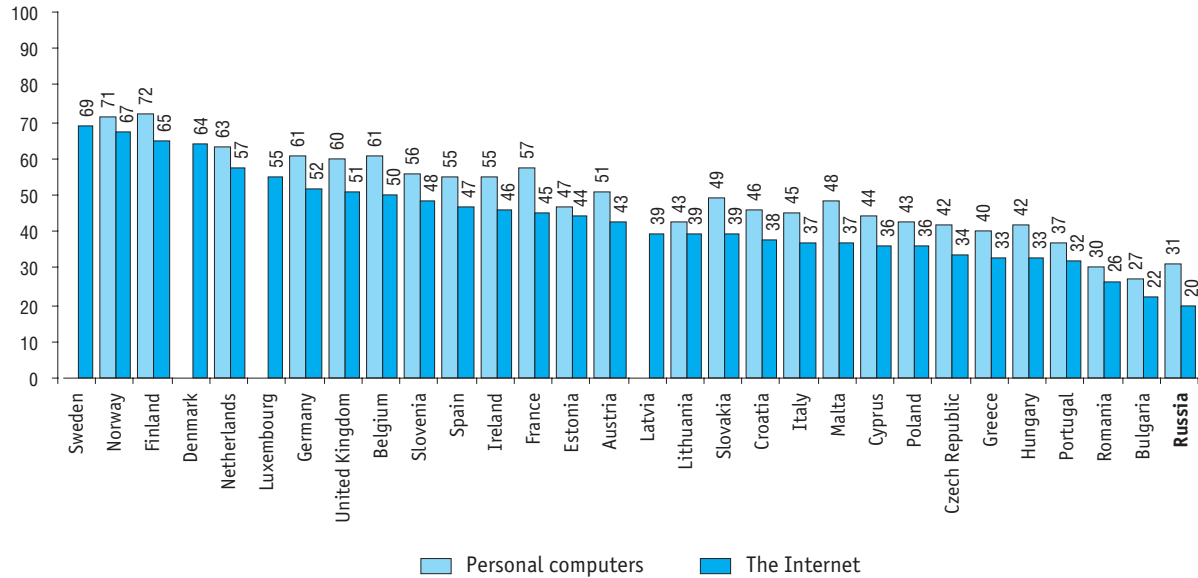
** 2008.

6.4.3. ENTERPRISES WITH A WEBSITE

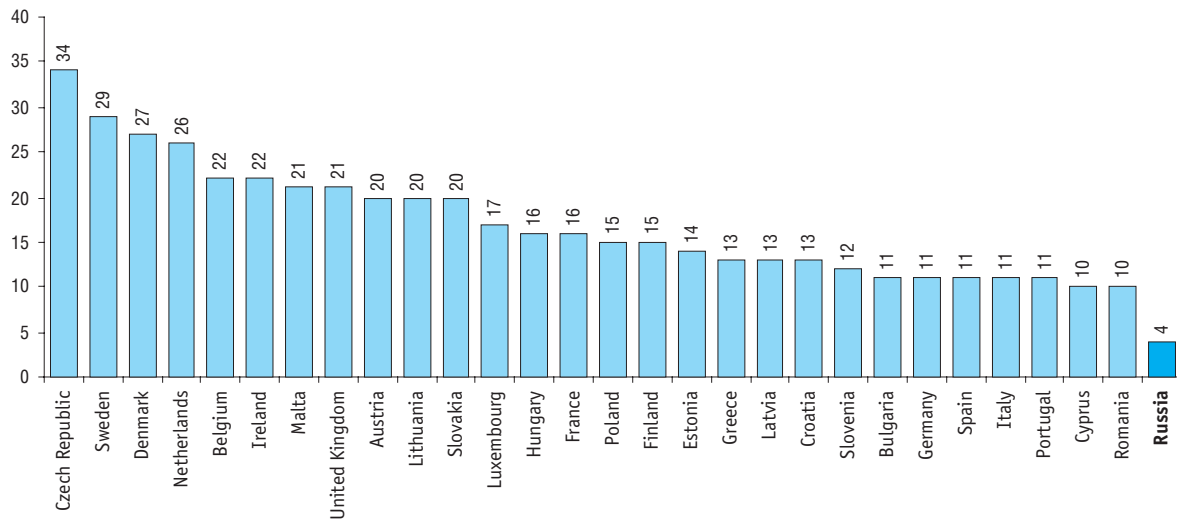
(as a percentage of all enterprises in the business sector)

	2010	2011	2012		2010	2011	2012
Russia	34	36	39	Japan	86	...	...
Australia	66	...	...	Latvia	48	53	53
Austria	80	83	82	Lithuania	65	68	71
Belgium	78	77	76	Luxembourg	70	75	77
Bulgaria	37	45	43	Malta	66	73	73
Canada	...	...	...	Netherlands	81	82	84
Cyprus	52	56	60	New Zealand	69	...	...
Czech Republic	74	77	80	Norway	78	78	79
Denmark	88	89	89	Poland	65	65	68
Estonia	70	73	75	Portugal	52	54	52
Finland	87	93	91	Romania	35	34	36
France	58	60	64	Slovakia	74	76	76
Germany	81	81	82	Slovenia	73	74	77
Greece	58	64	64	Spain	62	64	68
Hungary	57	60	62	Sweden	89	89	89
Iceland	77	...	84	Turkey	53	...	...
Ireland	68	70	74	United Kingdom	76	79	81
Italy	61	63	65				

6.4.4. EMPLOYEES USING PERSONAL COMPUTERS AND THE INTERNET: 2012

(as a percentage of all employees in the business sector)

6.4.5. ENTERPRISES WITH AN ONLINE SYSTEM FOR BOOKING OR ORDERING GOODS AND SERVICES ON THE WEBSITE: 2012 (as a percentage of all business enterprises)



6.4.6. ENTERPRISES USING THE INTERNET TO INTERACT WITH PUBLIC AUTHORITIES

(as a percentage of all enterprises in the business sector)

	Obtaining information about public authorities' activity		Downloading blank forms (e.g. statistical and tax forms)		Returning completed forms (e.g. statistical and tax forms)	
	2011	2012	2011	2012	2011	2012
Russia	54	55	70	70	68	69
Austria	84	81	85	84	75	77
Belgium	77	77	68	72	71	74
Bulgaria	72	73	78	77	76	79
Croatia	74	78	76	84	71	81
Cyprus	84	84	81	82	35	47
Czech Republic	89	92	87	90	73	81
Denmark	89	91	87	89	86	88
Estonia	84	79	84	81	94	80
Finland	91	93	91	92	88	89
France	86	89	86	91	85	87
Germany	62	49	73	66	62	61
Greece	79	77	79	...	82	81
Hungary	83	84	80	82	75	81
Iceland	96	95	93	93	90	87
Ireland	84	81	86	88	84	95
Italy	76	78	74	73	53	58
Latvia	80	85	76	79	85	88
Lithuania	88	90	99	99	99	99

(continued)

	Obtaining information about public authorities' activity		Downloading blank forms (e.g. statistical and tax forms)		Returning completed forms (e.g. statistical and tax forms)	
	2011	2012	2011	2012	2011	2012
Luxembourg	82	83	85	84	62	65
Malta	85	84	80	79	56	58
Netherlands	70	74	85	83	87	85
Norway	78	79	85	85	75	89
Poland	78	78	80	81	82	86
Portugal	80	77	77	81	82	85
Romania	57	57	56	57	49	52
Slovakia	84	85	84	86	71	71
Slovenia	88	88	87	86	79	81
Spain	71	74	69	72	58	61
Sweden	93	93	91	92	85	87
United Kingdom	81	85	79	80	86	87

6.5. ICT Usage by Households and Individuals by Country

6.5.1. HOUSEHOLDS WITH PERSONAL COMPUTERS AND INTERNET ACCESS

(as a percentage of all households)

	Personal computers			Internet*		
	2010	2011	2012	2010	2011	2012
Russia	55	60	67	48	57	60
Australia	81	83	85	74	79	81
Austria	76	78	81	73	75	79
Belgium	77	79	80	73	77	78
Bulgaria	35	47	52	33	45	51
Canada	84	85	87	79	81	83
Chile	47	51	54	35	39	45
Cyprus	61	64	70	54	57	62
Czech Republic	64	70	75	61	67	71
Denmark	88	90	92	86	90	92
Estonia	69	71	76	68	71	75
Finland	82	85	88	81	84	87
France	76	78	81	74	76	80
Germany	86	87	87	82	83	85
Greece	53	57	57	46	50	54
Hungary	66	70	71	60	65	69
Iceland	93	95	96	92	93	95
Ireland	76	81	83	72	78	81
Israel	77	78	82	68	70	73
Italy	65	66	67	59	62	63
Japan	83	80	80	81	86	86

(continued)

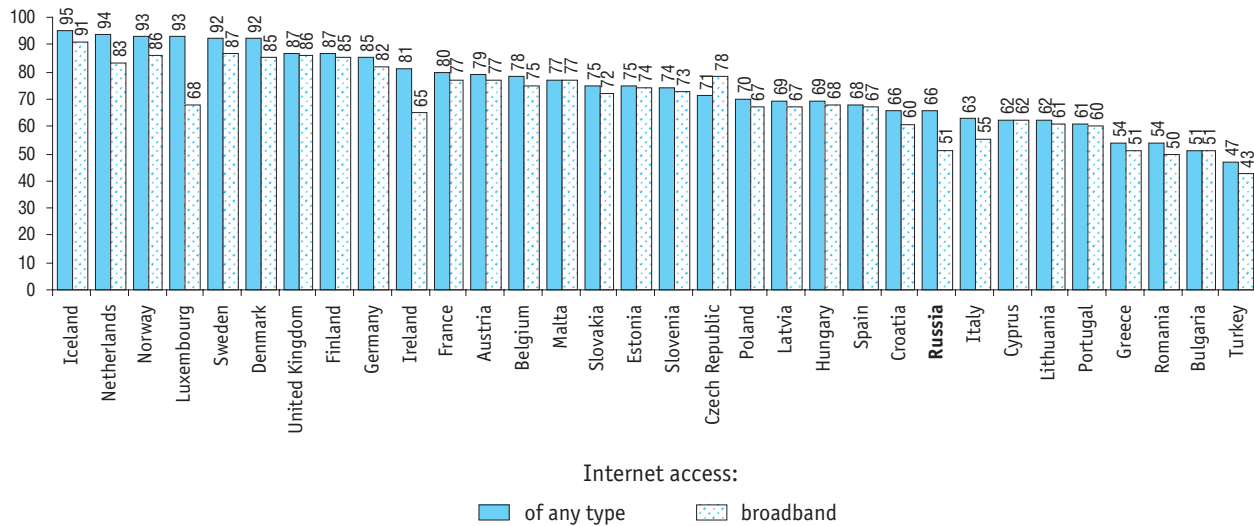
	Personal computers			Internet*		
	2010	2011	2012	2010	2011	2012
Latvia	63	64	70	60	64	69
Lithuania	59	62	64	61	62	62
Luxembourg	90	92	92	90	91	93
Malta	73	76	78	70	75	77
Mexico	30	32	32	22	27	26
Netherlands	92	94	97	91	94	94
New Zealand	84	87	91	79	83	87
Norway	91	91	92	90	92	93
Poland	69	71	73	63	67	70
Portugal	59	64	66	54	58	61
Republic of Korea	82	82	82	97	97	97
Romania	48	51	57	42	47	54
Slovakia	72	75	79	67	71	77
Slovenia	70	74	76	68	73	74
Spain	69	72	74	59	64	68
Sweden	90	92	92	88	91	92
Turkey	44	48	50	42	43	47
United Kingdom	83	85	87	80	83	87
USA	76	77	79	72	72	75

* Internet access via any electronic device (personal computer (including portable), TV set, mobile phone, etc.) is considered.

Source: Federal State Statistics Service (for Russia); ITU, Eurostat (for other countries).

6.5.2. INDIVIDUALS WITH INTERNET ACCESS IN HOUSEHOLDS: 2012

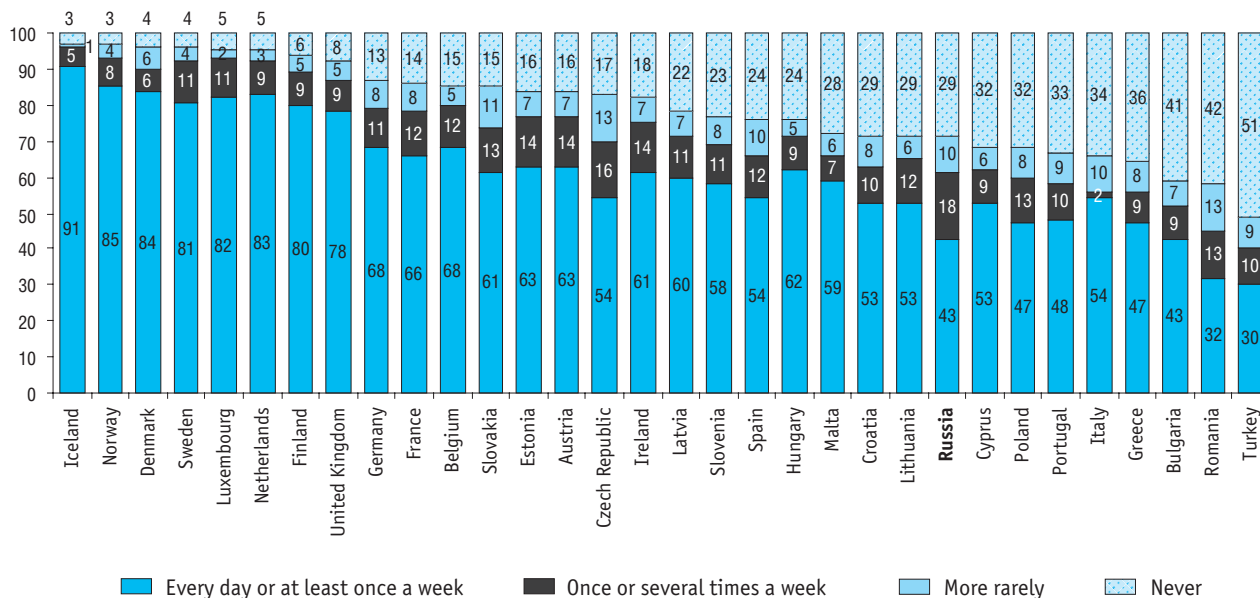
(as a percentage of all respondents aged 16–74)



Source (here and below in the section): the results of the special national representative survey of the adult population of the Russian Federation conducted by HSE Institute for Statistical Studies and Economics of Knowledge within 'The Monitoring Survey of Innovative Behavior of the Population' as part of HSE Basic Research Program.

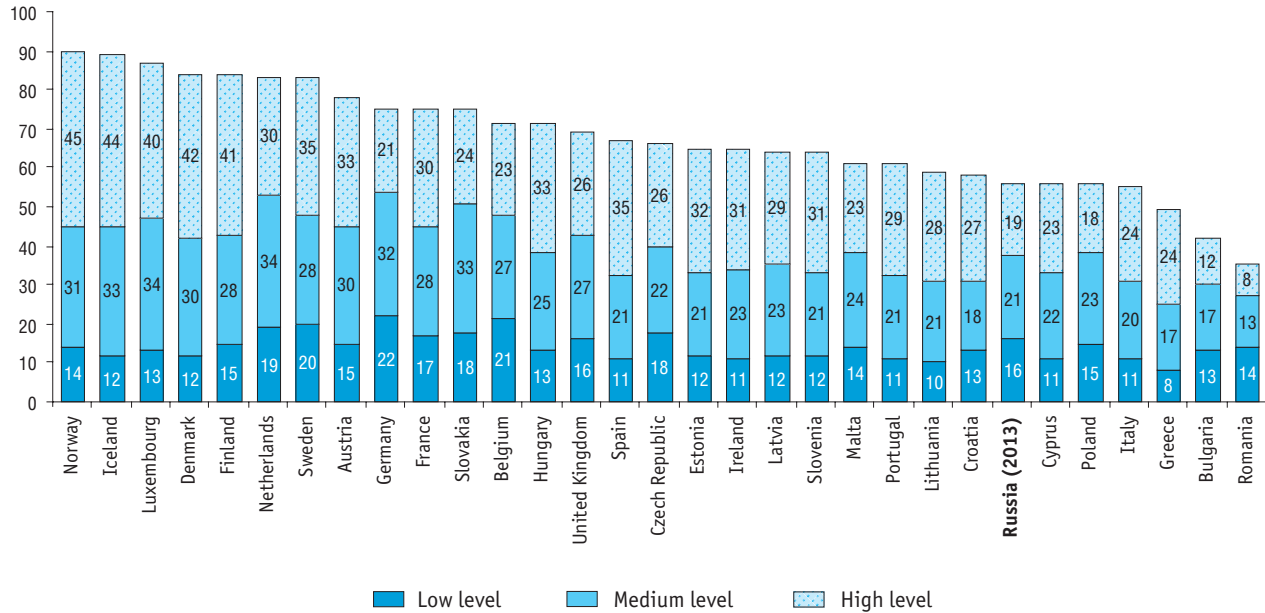
6.5.3. FREQUENCY OF INTERNET USAGE BY INDIVIDUALS: 2013

(as a percentage of all respondents aged 16–74)



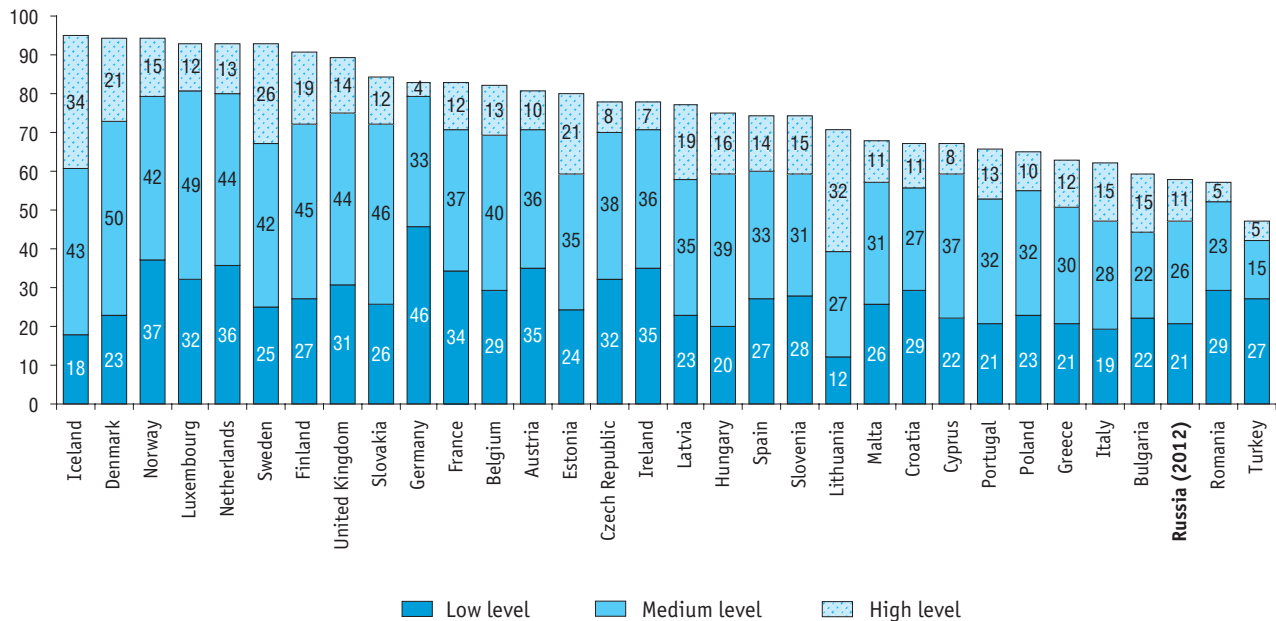
6.5.4. INDIVIDUALS' LEVEL OF COMPUTER SKILLS: 2012

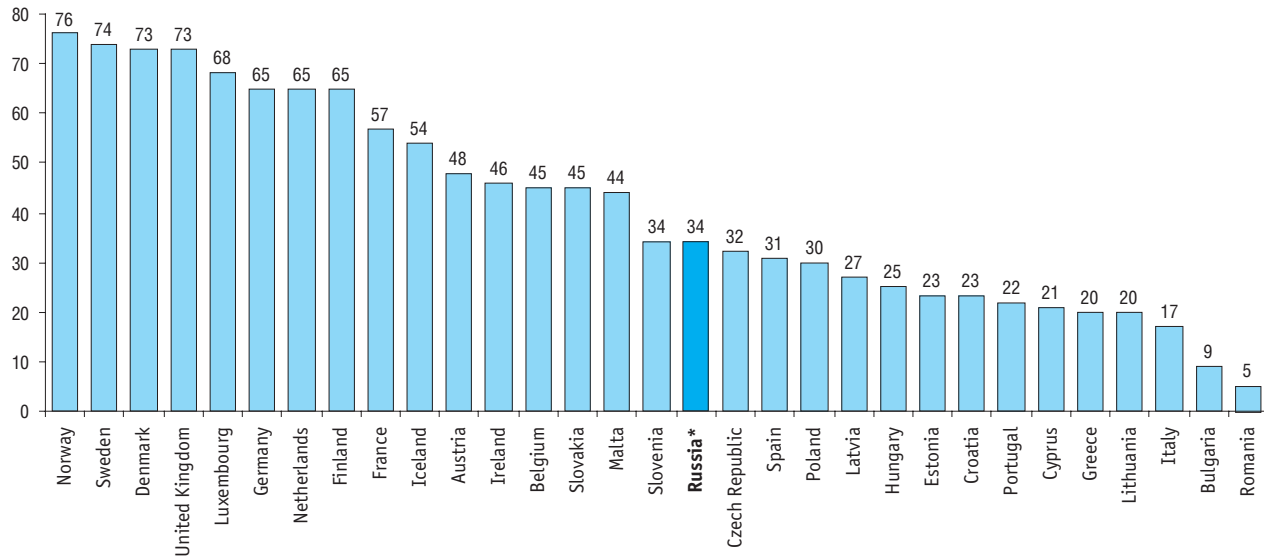
(as a percentage of all respondents aged 16–74)



6.5.5. INDIVIDUALS' LEVEL OF INTERNET SKILLS: 2013

(as a percentage of all respondents aged 16–74)



6.5.6. PURCHASE AND ORDER OF GOODS AND SERVICES VIA THE INTERNET: 2012*(as a percentage of all respondents aged 16–74; within last 12 months)*

* The data concerns the respondents who have bought or ordered goods and services via the Internet.

TECHNICAL NOTES

Information Society statistics is the newest branch of social and economic statistics aimed at studying all aspects of activities related to the production of ICT goods and services, distribution and usage of ICT in the economy, social and public sectors, and private life.

Information and communication technologies (ICT) – technologies using microelectronics for collection, storage, processing, retrieval, transmission, and presentation of data, texts, images, and sound.

ICT Infrastructure

ICT infrastructure is characterised on the basis of data from statistical surveys conducted by Federal State Statistics Service and the Ministry of Telecom and Mass Media of the Russian Federation.

Coverage of the population by radio and television describes the ratio of inhabitants able to receive TV and radio programmes to the total population of the Russian region under consideration.

Communication tools (facilities) are hardware and software used for compiling, receiving, processing, storing, transmitting, delivering telecommunications messages and emails; the term also comprises technical and programming means used for providing communication services or managing communication networks.

Home telephones are telephones installed in apartments (in houses).

Level of network digitalisation is the ratio of the installed capacity of digital telephone stations to the total installed capacity of telephone stations.

Telephone density is calculated as the ratio of the number of telephones (including mobile cellular telephones) to the total population.

Telephones comprise general and additional telephony devices connected to the network or to the enterprises' telephony stations linked to the network, and all types of public payphones enabling local, long distance and international communication.

ICT sector

ICT sector indicators are calculated by Institute for Statistical Studies and Economics of Knowledge, National Research University Higher School of Economics (HSE ISSEK) on the basis of the Statistical Register, surveys conducted by Federal State Statistics Service, customs statistics data, and data provided annually by Federal State Statistics Service on gross value added for each type of economic activity.

ICT sector comprises enterprises involved in the production of ICT-related goods and provision of ICT services. These should meet at least one of the requirements listed below.

1) The goods must:

- be designed for telecommunications or information processing, including its transmission and presentation;
- incorporate electronic devices to detect, change and/or record physical phenomena, or control physical processes;
- constitute individual components intended primarily for usage within the products described above.

2) The services must:

- allow for the processing and transfer of information via electronic devices;

- be related to the sale or lease of hardware and/or software;
- directly create new information technologies or support the implementation, adaptation and/or use of the existing ones.

In Russian Information Society Statistics the ICT sector is presented by economic activity according to the international standards and the Russian Classification of Economic Activities – RCEA (Rev. 1.1):

RCEA code (Rev. 1.1)	Economic activity
30	Manufacture of office, accounting and computing machinery
31.3	Manufacture of insulated wire and cable
32	Manufacture of radio, television and communication equipment and apparatus
33.2	Manufacture of instruments and appliances for measuring and checking
33.3	Manufacture of industrial process control equipment
51.43.2	Wholesale of radio and television equipment, data storage devices (with and without recorded information)
51.84	Wholesale of computers, computer peripheral equipment and software
51.86	Wholesale of other electronic equipment and parts
51.87.5	Wholesale of industrial electrical equipment, machinery, hardware and supplies
64.2	Telecommunications
71.33	Renting of office machinery and equipment, including computers
72	Computer and related activities

Gross value added is calculated at the level of industries and sectors of an economy as goods and services output minus intermediate consumption. Output is the total value of goods and services produced as a result of the residents' activities in the national economy within the reported period. Intermediate consumption is the total monetary value of goods and services consumed or transformed (used up as inputs) in production within the reported period. Fixed capital consumption is not included in intermediate consumption.

Total turnover of enterprises comprises the value of sales of manufactured goods, provided services, and revenues from sales of goods previously bought from third parties (minus VAT, excise duties and similar compulsory payments).

Fixed capital investment is total expenditure on purchase of tangible capital goods or the replacement of depreciated capital goods (construction of new buildings, extension of the existing ones, reconstruction/upgrading of facilities, which increase their original value and are accounted as the company's revaluation reserve; acquisition of machinery, equipment, vehicles, etc.).

Foreign investment in the Russian economy is funds invested in the Russian business enterprise sector by foreign investors and branches of Russian legal entities and aimed at revenue. There are the following types of investment: direct, portfolio and other. **Direct investments** are performed by legal or physical entities – enterprises' owners or owners of at least 10% share of an enterprise's fixed capital. **Portfolio investment** is acquisition of shares, bonds, bills and other securities. Share of these papers is less than 10% in the fixed capital. Investments which cannot be characterised as direct or portfolio investments are referred to as '**other**'. Foreign

investment size is indicated in US dollars as an equivalent of Russian roubles.

Research and development (R&D) – the term comprises creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications.

Expenditure on innovation is the actual expenditure related to implementation of various types of innovative activity performed within an enterprise (a sector, region, country). Innovation expenditure comprises current and capital expenditure. Innovation statistics covers the expenditure of technological, organizational and marketing innovations.

Innovative activity of an enterprise characterises the degree of involvement an enterprise has in innovation in general, or in specific innovative activities, within a certain period. The level of innovative activity is generally defined as the ratio of enterprises engaged in technological, organisational, and marketing innovations to the total of enterprises surveyed in the country, sector, region, etc. within a specific period of time.

Innovative activities are all types of economic activities related to the transformation of ideas (usually the results of research and development or other scientific achievements) into technologically new or significantly improved goods and services, introduced to the market, as well as new or significantly improved technological processes used in service production (transfer) or implemented in manufacturing modes. Innovation activities incorporate scientific, technological, organisational, financial and commercial actions that lead to innovation.

Innovative goods and services are products (goods and services) that have undergone technological modification in the last three

years. These include newly introduced (or technologically modified) and improved products.

Marketing innovation includes newly implemented or significantly improved marketing methods that incorporate major changes in product package and design, innovative sales as well as the presentation and promotion of products, new pricing strategies. Marketing innovations are aimed at better addressing customer needs and the expansion of consumer goods and services, and developing new markets with the objective of increasing a range of sales.

Organisational innovation is the implementation of a new organisational method in a firm's business practices, workplace organisation or external relations. Organisational innovations are aimed at increasing organisational performance by reducing administrative and transaction costs, improving workplace organisation (working time) and thereby increasing labour productivity, gaining access to the market assets, and reducing supply costs.

Enterprises engaged in innovative activity are those involved in development and introduction of technologically new or improved products or services, technologically new or improved processes or techniques of service production (transfer), and other types of innovative activities.

Enterprises engaged in technological innovation are those involved in development and introduction of technologically new or improved products or services, technologically new or improved processes or techniques of service production (transfer), and other types of innovative activities.

Technological innovations are the final result of innovative activities, embodied in a technologically new or improved product or service introduced on a market, a technologically new or improved process or technique of service production (transfer) used in practice. An ac-

completed innovation is one introduced to the marked or implemented into the production process.

Balance (balanced financial result, profit minus loss) is a final financial result of economic activity of an enterprise. Balance represents the sum of profits (losses) from sales of goods, services, capital assets, other property and income from non-operational deals minus expenditure on these operations. Non-operational deals are: penalties, fines, losses for contract terms violations; profit (loss) of previous years revealed in current year, exchange rates fluctuations, etc.

Profitability of goods and services sales is the ratio of balance from sales of goods and services (profits minus losses) to their cost. When balance is negative, losses prevail.

Profitability of assets is the ratio of a company's balance (profits minus losses) to the value of its assets. When balance is negative, losses prevail.

Current assets of enterprises are any assets reasonably expected to be sold, consumed, or exhausted through the normal operations of a business within the operating cycle. In the form of circulating capital, they include finished and sold goods, accounts receivable and monetary funds. Current assets minus current liabilities constitute working capital, which includes raw materials, fuel, auxiliary materials, spare parts, inventory and operational items, as well as unfinished goods, semi-finished products and future expenditures.

Financial sustainability of enterprises is availability of financial resources which provide permanent production and sales of goods and services based on actual profits increase. One of the main indicators of financial sustainability is equity ratio representing share of working

capital in total funds of enterprises and their self-support degree.

Solvency is an indicator of an enterprise's payment ability in due time. One of the indicators of solvency is liquidity ratio calculated as ratio of actual cost of current assets available at the enterprise to the most urgent enterprise's obligations like short-term credits and credit debt.

Indicators of business activity of enterprises rendering ICT services are presented on the basis of the results of a pilot business tendency survey of the service sector conducted by HSE ISSEK. The survey covered more than 30 regions of Russia and 4.6 thousand enterprises (including more than 600 enterprises engaged in activities related to the use of computers and information technologies).

In addition to official statistical data, business tendency surveys gather the following information from entrepreneurs: short-term qualitative assessments of the current business situation and its main trends, peculiarities of the economic agents' functioning and their intentions, degree of adaptation to operational and current business environment, as well as the most important factors restricting the enterprise's activities.

The survey programme complies with international standards and is based on the harmonized European system of business tendency surveys. Assessments of the current situation are based on a comparison of the actual and 'normal' (usual, sufficient in the current conditions at the time of the survey) levels of business activity indicators. When assessing changes in the indicators' values over time the following criteria were used: 'increased' ('improved'), 'remained unchanged', 'decreased' ('deteriorated'). **Balance of estimates** is the difference between the shares of the respondents giving positive estimates ('increase' compared to the previous period or 'above normal'

current level) and those giving negative estimates ('decrease' compared to the previous period or 'below normal' current level), given as a percentage of the total.

In compliance with the international practice, **business confidence indicator** in the service sector is calculated as the arithmetic mean of the estimates of business situation and demand for services (development compared to the previous period) and demand expectation (over the next period), given as a percentage of the total.

Group	Code of Commodity Nomenclature of Foreign Economic Activity
Computers and peripheral equipment	844331, 844332, 847050, 8471, 847290, 847330, 847350, 852351, 852841, 852851, 852861
Of which – computers and related equipment	8471
Telecommunications equipment	8517, 852550, 852560, 853110
Of which – telephone and telegraph equipment	8517
Consumer electronic equipment	8518, 8519, 8521, 8522, 852580, 8527, 852849, 852859, 852869, 852871, 852872, 852873
Of which	
Video equipment	8521
TV receivers	852871, 852872, 852873
Other ICT goods and their components	852321, 852352, 852359, 852380, 8529, 8534, 8540, 8541, 8542, 901320

Exports / imports of computers and information services comprise the export and import of services related to the installation of computer equipment; application of software; processing and creation of databases; and maintenance of computational equipment. This category does not include the export or import of magnetic media (diskettes, laser disks) which do not contain software, or mass-produced goods recorded on magnetic media for mass consumer.

Indicators of the **international trade in ICT-related goods** use the data provided by Federal State Statistics Service; data on **international trade in ICT-related services** is provided by the Bank of Russia.

ICT goods are grouped by exports (imports) according to the Commodity Nomenclature of Foreign Economic Activity (CNFEA) harmonised with the OECD classification of ICT goods, which is based on the Harmonized Commodity Description and Coding System (HS 2007).

ICT usage by enterprises

The data on ICT usage by enterprises is collected in the annual federal statistical survey 'Information on ICT Usage, Production of Hardware and Software, and Rendering ICT Services' (#3-Infrom). The survey methodology was developed by HSE ISSEK in compliance with international statistical standards and the requirements of the state statistical system. The survey covers large and medium scale enterprises engaged in the following economic activities:

RCEA code (Rev. 1.1)	Economic activity
02.0	Forestry and service activities incidental to forestry
B	Fishing
C	Mining and quarrying
D	Manufacturing
E	Electricity, gas and water supply
F	Construction
G	Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods
H	Hotels and restaurants
I	Transport and communication
J	Financial intermediation
K	Real estate, renting and business activities
L	Public administration and defence; compulsory social security (codes 75.23.4 and 75.24.1 are excluded)
80.3	Higher education
N	Health and social work
92	Recreational, cultural and sporting activities

A **global information network** incorporates an aggregate of computers, which can be located in any part of the world, connected with each other via telecommunications channels provided by telephone companies or other communications organisations. A global network can be either generally accessible (e.g., the Internet) or closed (e.g. corporate networks such as Extranet and Intranet).

Internet is a worldwide web of independent computer networks connected with each other to exchange data via standard open protocols.

Intranet is a distributed corporate computer network based on Internet technologies, characterised by intensive data security and designed to provide personnel with authorised access to corporate electronic information resources.

Extranet is an extension of the Intranet with dedicated sections accessible to external users. E.g. external users may be granted partial access to corporate data about processing their orders, or about availability of products in warehouses.

Local area network connects two or more computers (possibly of different types) as well as printers, scanners, fire and security alarm systems and other equipment and peripheral devices located within one building or several adjacent buildings, without using public communication facilities. The connection of one computer with equipment and peripheral devices is not a local or global network.

Website is the Internet location which has a specific address and an owner, and comprises web pages. For statistical purposes, an organisation is considered a website owner if it has at least one Internet page with regularly updated information (at least once every six months).

Specialised software is used to solve special tasks independently no matter how this software was obtained (developed within the enterprise, acquired or ordered from other software developers or acquired on any other terms). This group of software does not include general purpose software like operation systems, compiler programs, standard software used for special purposes (e.g. text or graphic editors, elec-

tronic spreadsheets, databases management programs) unless any specialised software applications are developed on their basis (e.g. anti-virus and email programs, etc.)

ERP system (Enterprise Resource Planning) consists of one or several software applications that integrate information and functions (processes) of an enterprise's divisions. Typically ERP integrates planning, procurement, sales, marketing, customer relationship, finance and human resources.

CRM system (Customer Relationship Management) is a system for managing a company's interactions with customers. It is used to collect and process information on different aspects of customer's activity: availability/demand for goods and services, sales cycles, data on prices, etc.

SCM system (Supply Chain Management) is a system providing automatic communication with suppliers'/customers' orders management system.

Maximum Internet connection speed is the highest possible data transfer rate with bandwidth as main characteristic measured by number of bits transmitted within a timeframe (bit per second).

Type of Internet connection describes the way an enterprise's computer network is connected with the Internet service provider. Currently the following Internet connection types are identified for the purposes of ICT statistics: dial-up modem connection; ISDN connection; digital subscriber line (xDSL, etc.); other cable connections (including dedicated lines, fibre optic lines, etc.); wireless connection (satellite, radio, etc.).

Modem connection (dial-up connection over public switched telephone network) is a temporary connection set up via standard

modem using a switched telephone line. It converts digital data into analogue (modulated-wave) signals suitable for transmission over analogue telecommunications circuits (e.g., traditional phone lines) and demodulates received analogue signals to recover the digital data transmitted. Dial-up connection is a telephone connection in a system having a large number of lines and users. It is established and maintained within a limited time period. Dial-up connection can be set manually or automatically via a modem connected to a computer or another device.

ISDN connection is a temporary Internet connection with access over public switched telephone network. ISDN connection provides digital (other than analogue) data and voice transmission via copper telephone cables with higher quality and transmission speed than analogue systems.

Digital Subscriber Line (xDSL and other technologies) includes a group of technologies that provide permanent digital Internet connection over the copper wires of the local telephone network. Key DSL technologies are ADSL (Asymmetric Digital Subscriber Line, a technology in which a wider bandwidth is given for downloading data than for uploading it) and HDSL (High Rate Digital Subscriber Line). DSL can transmit both data and voice signals; the part of the channel via which data is transmitted is connected permanently. Other cable services involve the use of leased lines, fiber optics, cable television connection with a cable modem, etc. These connections are among the high-speed permanent fixed Internet connections.

Wireless connection includes satellite connection, radio connection, etc.

Personnel using personal computers (the Internet, Intranet, Extranet, other global information networks) are employees using personal computers (or other ICTs) during working hours at least once a week.

Purposes of the Internet usage can be roughly divided into general, commercial and Internet usage for communication with public authorities.

General purposes include: using the Internet to search for any information needed in an enterprise's activity; emailing; information exchange in electronic form; exchange of files of any nature (texts, data, spreadsheets, computer programs); interactive training and taking educational courses via the Internet; staff recruitment; phone communication; videoconferences; payable subscription for electronic databases and libraries.

Commercial purposes of Internet usage include purchase of materials, equipment and parts as well as goods and services sales, in particular use of the Internet to place or receive orders for goods and services (excluding orders received or submitted via e-mail).

Internet usage for interaction with public authorities comprises obtaining information about Russian public authorities' activity; obtaining blank forms for further submitting filled forms to the public authority; full electronic case handling.

ICT expenditure is the enterprise's (industry's, region's, country's) actual expenses related to acquiring computer hardware and software, paying for communication services, training of personnel in ICT, paying for ICT services of external organisations and consultants including expenses on software development. Current and cap-

ital expenditures are taken into account. Cost data on ICT is given in current prices.

ICT professionals are employees having the following ICT skills: design, development, installation, maintenance and use of ICT, as well as management, assessment and research in the field of ICT. According to the Russian Classification of Occupations (RCO) ICT professionals and employees with ICT user skills are classified into groups listed below. Highly qualified ICT professionals are computer system developers and analysts (RCO code 2131), programmers (2132), other computer-related professionals (2139), electronics, communication and instrument engineers (2144). The term 'technicians' refers to electronics and telecommunications technicians (3114), computer maintenance technicians and operators (3121), computer devices and peripherals maintenance technicians and operators (3122), industrial robots maintenance technicians and operators (3123), radio, television and telecommunications hardware technicians and operators (3132).

Employees with ICT skills may have general research skills (i.e. effectively use standard software) and profound user skills (professional use of specialised tools created for various economy sectors). This group of specialists regularly uses ICTs as every day work tools.

ICT usage by households and individuals

Data on ICT usage by households is based on the results of the annual survey on household budgets conducted by Federal State Statistics Service. The survey is conducted in all regions of the Russian Federation and covers 47.8 thousand households. Since 1997 a two-stage random sampling procedure, built up by territorial principle, has

been used to form the sample frame of households. The unit of this survey is a household (excluding cooperative and institutional), i.e., a total of individuals who live together, may or may not be related to each other, and make common provision for food and other essentials for living, uniting and spending their financial resources wholly or partially.

Information on **ICT usage by individuals** is collected in Russian national representative surveys of adults aged 16(18)–74, covering about 1600 respondents. The surveys are conducted by HSE ISSEK in cooperation with the Levada Center within ‘The Monitoring Survey of Innovative Behavior of the Population’ as part of HSE Basic Research Program. The statistical error does not exceed 3.4%.

The level of computer skills of the population is estimated on the basis of an individual’s ability to perform operations from the following list:

- copying or moving files and folders,
- copying and pasting words, text fragments, moving text fragments,
- backing up files,
- doing basic arithmetic operations using computer programs,
- exchanging files / synchronizing data between the computer and other devices (cameras, phones, etc.)
- using specialised programs (working with databases, processing statistical data, photo and video editing, etc.)
- making presentations (slides) with pictures, sound, video, charts,
- installing or restoring the operating system,
- changing software configuration,

- writing a computer program using a specialised programming language.

High level of such skills means the respondent has five or six of these skills; a medium level – three or four skills; a low level – one or two skills.

The level of Internet skills is measured on the basis of the respondent’s ability to fulfill the following tasks:

- using a search engine to find information,
- sending e-mails with attached files,
- downloading games, images, films or music,
- posting messages to chatrooms, newsgroups or online discussion forums,
- using the Internet to make telephone calls,
- modifying security settings of Internet browsers,
- using peer-to-peer file sharing to exchange films, music, etc.,
- creating a webpage or a website.

High level of such skills means the respondent has five or six of these skills; a medium level – three or four skills; a low level – one or two skills.

Households with broadband Internet connection are households having access to the Internet via a dedicated line, DSL, a mobile phone with 3G/UMTS or via other devices which support wireless connectivity.

International Comparisons

Sources for international comparisons comprise data provided by Eurostat, OECD, UNESCO, and ITU (‘Measuring the Information Society 2012’).

ABBREVIATIONS USED FOR ECONOMIC ACTIVITIES

RCEA code (Rev. 1.1)	Economic activity	Abbreviation
33.2	Manufacture of instruments and appliances for measuring, checking, testing, navigating and other purposes, except industrial process control equipment	Manufacture of instruments and appliances for measuring and checking
DA	Manufacture of food products, beverages and tobacco	Manufacture of food products and beverages
DJ	Manufacture of basic metals and fabricated metal products	Manufacture of basic metals
DL	Manufacture of electrical and optical equipment	Manufacture of electrical equipment
G	Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	Wholesale and retail trade
73	Research and development	Research and development
L	Public administration and defence; compulsory social security	Public administration; compulsory social security
N	Health and social work	Health and social work

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