



Ministry of Telecom and Mass Communications
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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Editorial Board:

Leonid Gokhberg, Ekaterina Zanozina, Yaroslav Kuzminov, and Konstantin Laykam

Authors:

Gulnara Abdrakhmanova, Leonid Gokhberg, Marina Kevesh, Galina Kovaleva, Maxim Kotsemir, Irina Kuznetsova, Inna Lola, Georgy Ostapkovich, Valentina Polyakova, Zinaida Ryzhikova, Svetlana Fridlyanova, Konstantin Fursov, and Elena Chernovich

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This data book continues the series of annual publications by the Institute for Statistical Studies and Economics of Knowledge at the National Research University Higher School of Economics (HSE ISSEK). It presents statistical data on ICT infrastructure, activities of ICT sector enterprises, and content and media sector. It also presents summary indicators of business activity of enterprises rendering IT services, and ICT usage by enterprises, households, and individuals. Special sections contain international comparison. For the first time, data on the activity of IT industry enterprises are included in the data book.

The data book contains information provided by the Federal State Statistics Service (Rosstat), the Ministry of Telecom and Mass Communications of the Russian Federation, Eurostat, Organisation for Economic Co-operation and Development (OECD), International Telecommunication Union (ITU), United Nations Department of Economic and Social Affairs, World Economic Forum, 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

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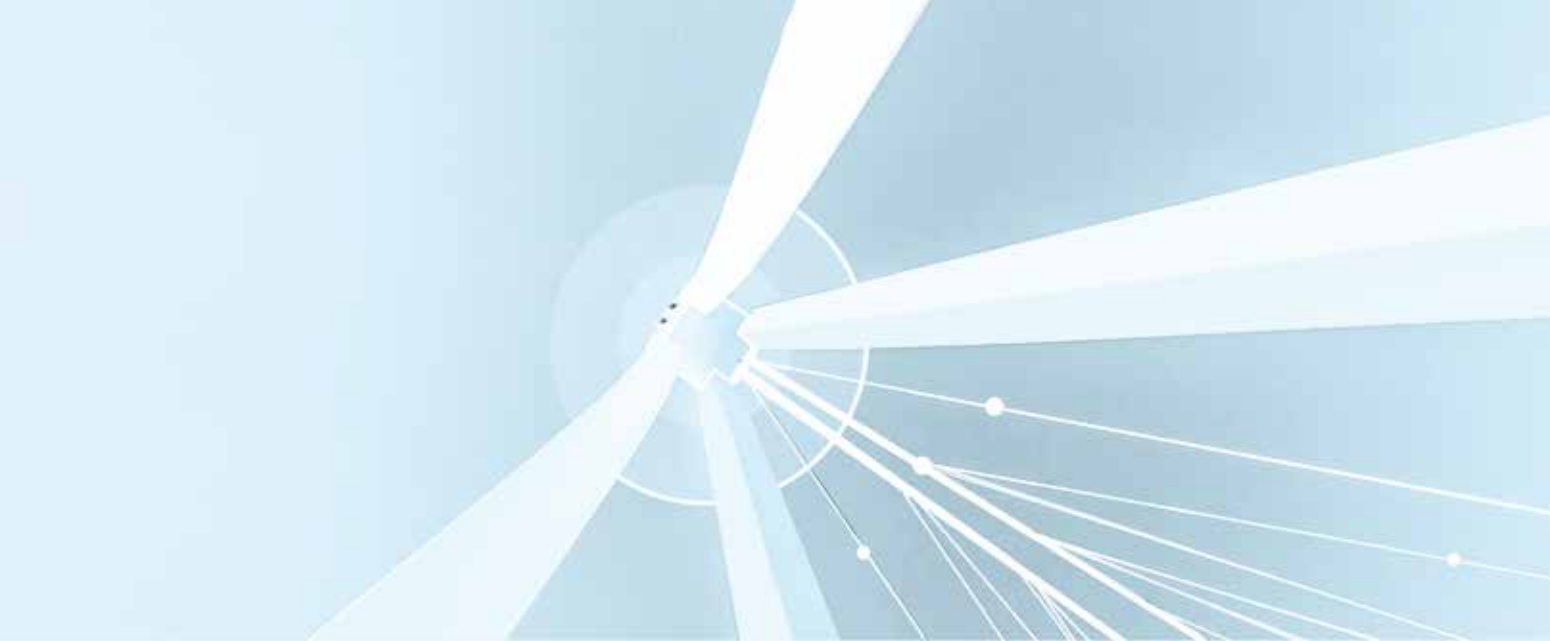
MAIN INFORMATION SOCIETY INDICATORS

	2005	2006	2007	2008	2009	2010	2011	2012	2013
ICT Infrastructure									
Fixed telephones (including public payphones) per 100 inhabitants	30	31	32	32	32	31	31	30	29
Mobile cellular telephones per 100 inhabitants	86	108	120	140	161	166	179	183	193
Fixed broadband Internet subscriptions per 100 inhabitants	...	...	...	...	...	...	12	14	17
Mobile broadband Internet subscriptions per 100 inhabitants	...	...	...	...	...	...	48	53	60
ICT Sector									
Number of enterprises, <i>at the end of the year, thousand</i>	107	100	110	108	124	135	142	147	152
Number of employees:									
thousand persons	1347	1364	1340	1371	1280	1306	1268	1294	1323
as a percentage of the total employment	2.8	2.8	2.7	2.8	2.7	2.8	2.8	2.8	2.9
Gross value added:									
billion roubles	660	791	1027	1219	1273	1354	1539	1795	1826
as a percentage of GDP	3.6	3.4	3.6	3.5	3.8	3.4	3.2	3.4	3.2
IT Sector									
Number of enterprises, <i>at the end of the year, thousand</i>	...	...	37	41	46	52	57	61	65
Number of employees:									
thousand persons	...	...	...	284	278	294	281	304	343
as a percentage of the total employment	...	...	...	0.6	0.6	0.6	0.6	0.7	0.7
Gross value added:									
billion roubles	71	97	143	207	216	250	284	398	391
as a percentage of GDP	0.4	0.4	0.5	0.6	0.6	0.6	0.6	0.8	0.7
Content and Media Sector									
Number of enterprises, <i>at the end of the year, thousand</i>	...	...	...	...	49	51	51	51	50
Number of employees:									
thousand persons	258	257	257	263	253	261	251	226	224
as a percentage of the total employment	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5

(continued)

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Gross value added:									
billion roubles	111	145	178	229	190	206	208	227	242
as a percentage of GDP	0.6	0.6	0.6	0.6	0.6	0.5	0.4	0.4	0.4
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	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	88.1
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	41.3
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	71
Households with Internet access as a percentage of the total number of households	9	13	21	28	36	48	57	60	69
ICT Usage by Individuals									
Individuals who have ever used a personal computer as a percentage of all individuals aged 15–72*	...	...	...	...	...	68	...	...	73
Individuals who have never used a personal computer as a percentage of all individuals aged 15–72*	...	...	...	...	...	32	...	...	27
Individuals who have ever used the Internet as a percentage of all individuals aged 15–72*	...	...	...	...	...	49	58	66	71
Individuals who use the Internet every day or almost every day as a percentage of all individuals aged 15–72*	...	...	...	...	...	26	33	41	48
Individuals who have never used the Internet as a percentage of all individuals aged 15–72*	...	...	...	...	...	51	42	34	29

* 2010, 2011 – aged 16–74, 2012 – aged 18–74.



1. ICT Infrastructure

1.1. MAIN INDICATORS OF ICT INFRASTRUCTURE

(at the end of the year)

	2005	2010	2011	2012	2013
Fixed telephones (including public payphones) per 100 inhabitants	30.0	31.4	30.9	30.1	28.9
Mobile cellular telephones per 100 inhabitants	86.3	166.4	179.0	182.7	193.3
Fixed Internet subscriptions per 100 inhabitants	...	...	12.6	14.7	16.8
Of which broadband	...	...	12.2	14.4	16.5
Mobile Internet subscriptions per 100 inhabitants	...	...	59.1	63.6	70.9
Of which broadband	...	...	47.8	52.6	59.8
Level of network digitalization, <i>per cent</i> :					
urban area	64.2	83.0	85.3	88.5	89.7
rural area	35.8	63.9	87.6	67.3	72.5
Rural areas having telephony, <i>as a percentage of the total</i>	67.0	90.1	90.1	90.0	89.0
Percentage of the population covered by:					
radio	...	96.1	95.9	94.1	93.9
air analogue television	98.6	98.6	98.7	98.9	97.9

Source: data in 1.2–1.11 are provided by the Ministry of Telecom and Mass Communications of the Russian Federation.

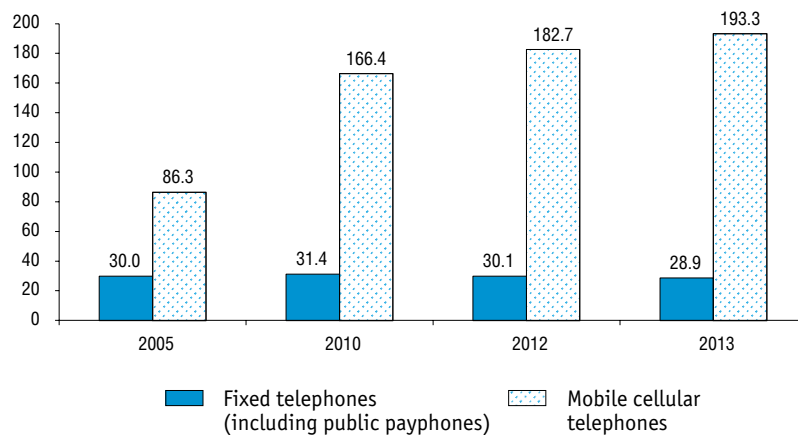
1.2. FIXED, MOBILE CELLULAR TELEPHONES AND PUBLIC PAYPHONES

(at the end of the year)

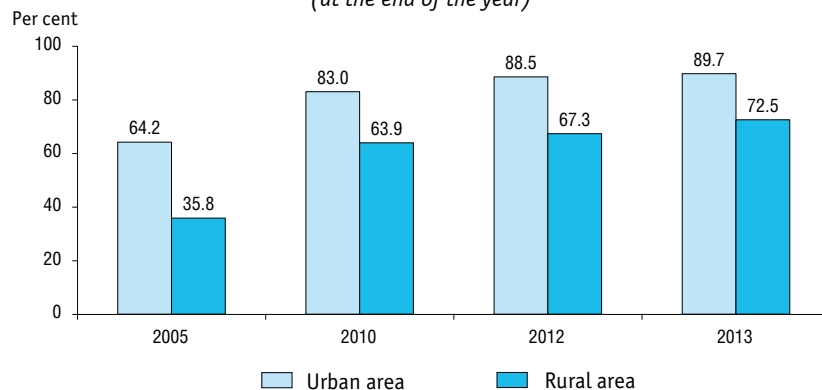
	2005	2010	2012	2013
Fixed telephones of local telephone network, <i>thousand</i>	42731	44916	43155	41482
Of which:				
home telephones	32454	33209	31237	29343
public payphones	151	190	175	171
Mobile cellular telephones, <i>thousand</i>	123549	237689	261888	277745

1.3. TELEPHONE DENSITY

(units per 100 inhabitants; at the end of the year)



1.4. LEVEL OF NETWORK DIGITALIZATION

(at the end of the year)

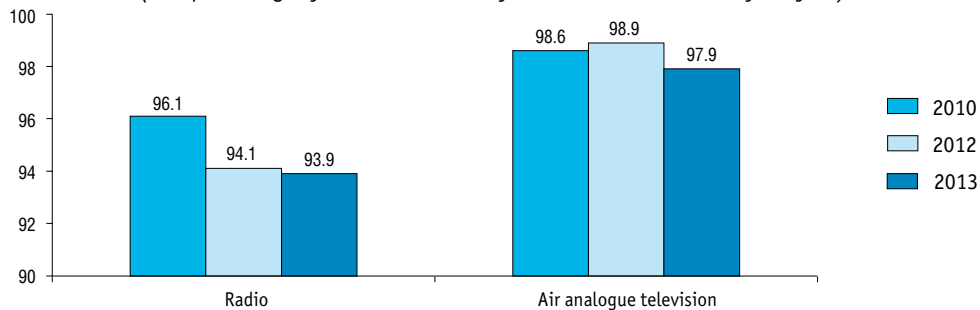
1.5. SATELLITE, TELEVISION AND RADIO HARDWARE

(at the end of the year)

	2005	2010	2012	2013
Satellite transmitting-receiving stations working within PSTN	1396	11048	27377	23615
Television transmitters:				
analogue	...	16896	17469	17768
digital	...	142	1202	1698
Radio transmitters:				
long and medium wave	316	313	312	180
short wave	164	156	129	95
Main radio broadcasting stations – total, <i>million</i>	15.1	8.0	6.2	5.7

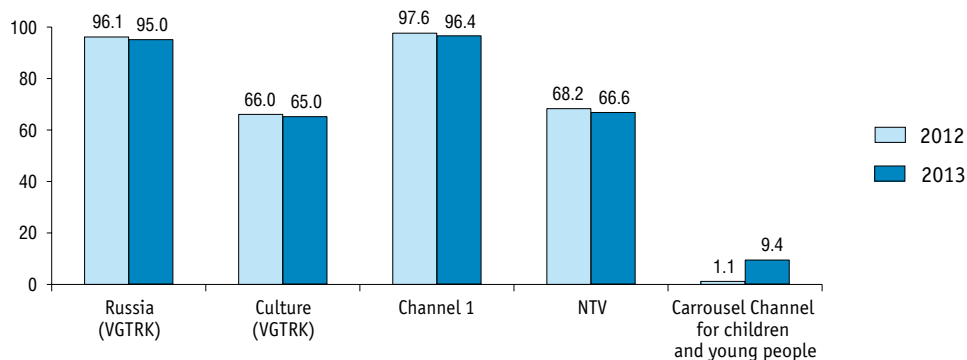
1.6. COVERAGE OF THE POPULATION BY RADIO AND TELEVISION

(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

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



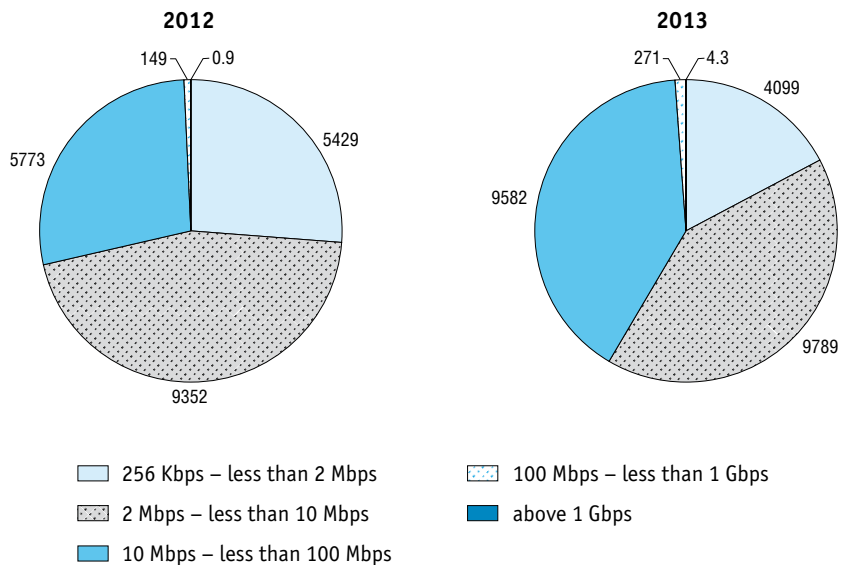
1.8. INTERNET SUBSCRIPTIONS

(at the end of the year)

	Active subscriptions, <i>thousand</i>		Per 100 inhabitants	
	2012	2013	2012	2013
Fixed Internet	21111	24115	14.7	16.8
Of which broadband	20704	23745	14.4	16.5
Of which by type of connection:				
xDSL	7854	7655	5.5	5.3
FTTH/FTTB (ETTx)	11063	14078	7.7	9.8
cable modem	372	331	0.3	0.2
by other cable connection	1415	1682	1.0	1.2
Wireless Internet	91384	102098	63.8	71.1
Of which:				
mobile	91217	101919	63.6	70.9
Of which broadband	75442	85908	52.6	59.8
satellite	27	18	0.0	0.0
Of which broadband	23	16	0.0	0.0
terrestrial wireless fixed	140	161	0.1	0.1
Of which broadband	122	146	0.1	0.1

1.9. FIXED BROADBAND INTERNET SUBSCRIPTIONS BY INTERNET CONNECTION SPEED

(thousand; at the end of the year)

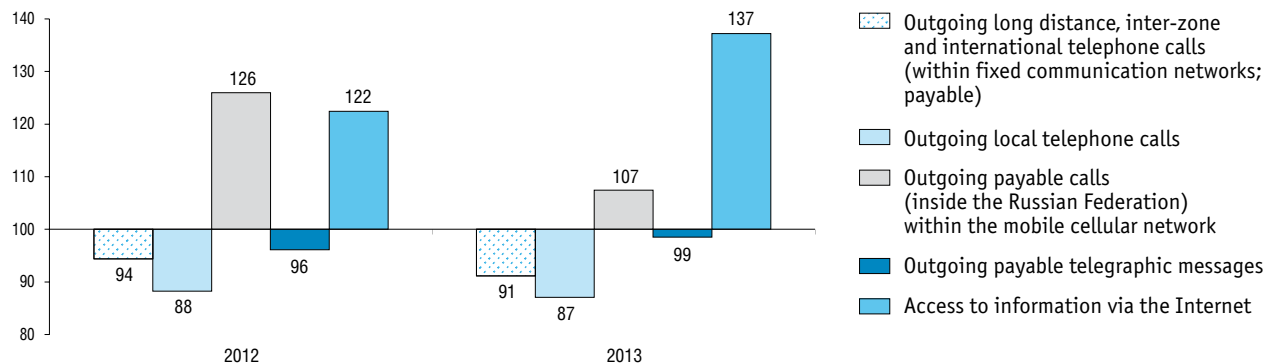


1.10. COMMUNICATION SERVICES BY TYPE

	2010	2012	2013
Outgoing payable long distance, inter-zone and international telephone calls (within fixed communication networks), <i>million minutes</i>	30942	33565	30593
Outgoing local telephone calls, <i>million minutes</i>	121291	99805	86911
Outgoing payable calls (inside the Russian Federation) within the mobile cellular network (the subscriber being inside the "home region"), <i>million minutes</i>	...	362099	388951
Outgoing payable telegraphic messages, <i>thousand items</i>	10335	9420	9279
Access to information via the Internet – total, <i>PBytes</i>	9193	10380	14272
Including dedicated access	...	9432	12599
Of which with dedicated xDSL access	...	2262	2692

1.11. TRENDS IN COMMUNICATION SERVICES BY TYPE

(as a percentage of the previous year)



1.12. AVERAGE COMMUNICATION TARIFFS FOR INDIVIDUALS

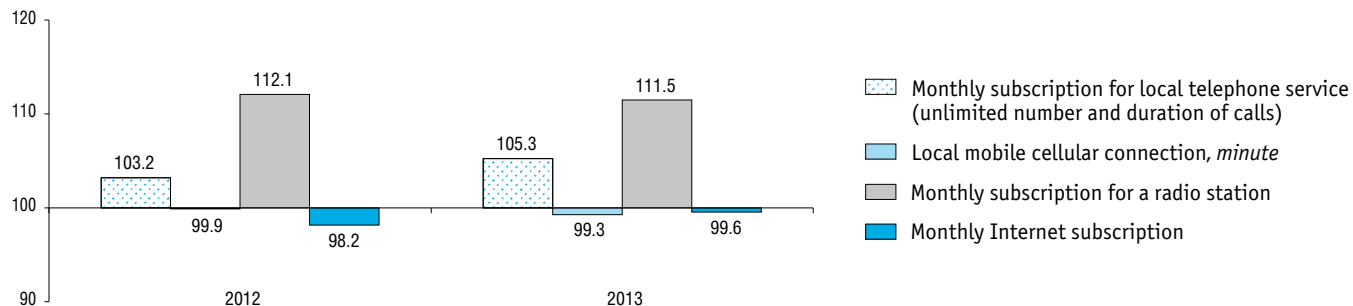
(roubles; December)

	2005	2010	2012	2013
Monthly subscription for local telephone service (unlimited number and duration of calls)	189.15	348.76	397.02	417.01
Monthly subscription for telephone service (telephone line of any type)	122.53	150.78	176.15	186.25
Automatic long-distance calls to locations between 1201–3000 km, <i>minute</i>	6.22	5.15	4.99	4.96
Local mobile cellular connection, <i>minute</i>	4.64	2.25	1.42	1.27
Monthly subscription for a radio station	21.67	54.44	65.39	76.46
Monthly Internet subscription	...	599.37	537.10	538.67

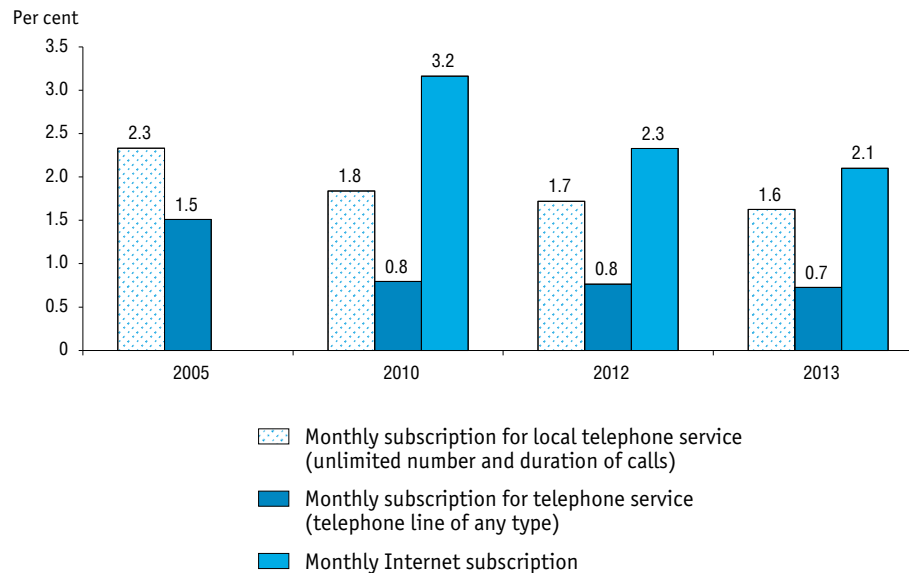
Source: data in 1.12–1.13 are provided by the Federal State Statistics Service.

1.13. INDICES OF COMMUNICATION TARIFFS FOR INDIVIDUALS

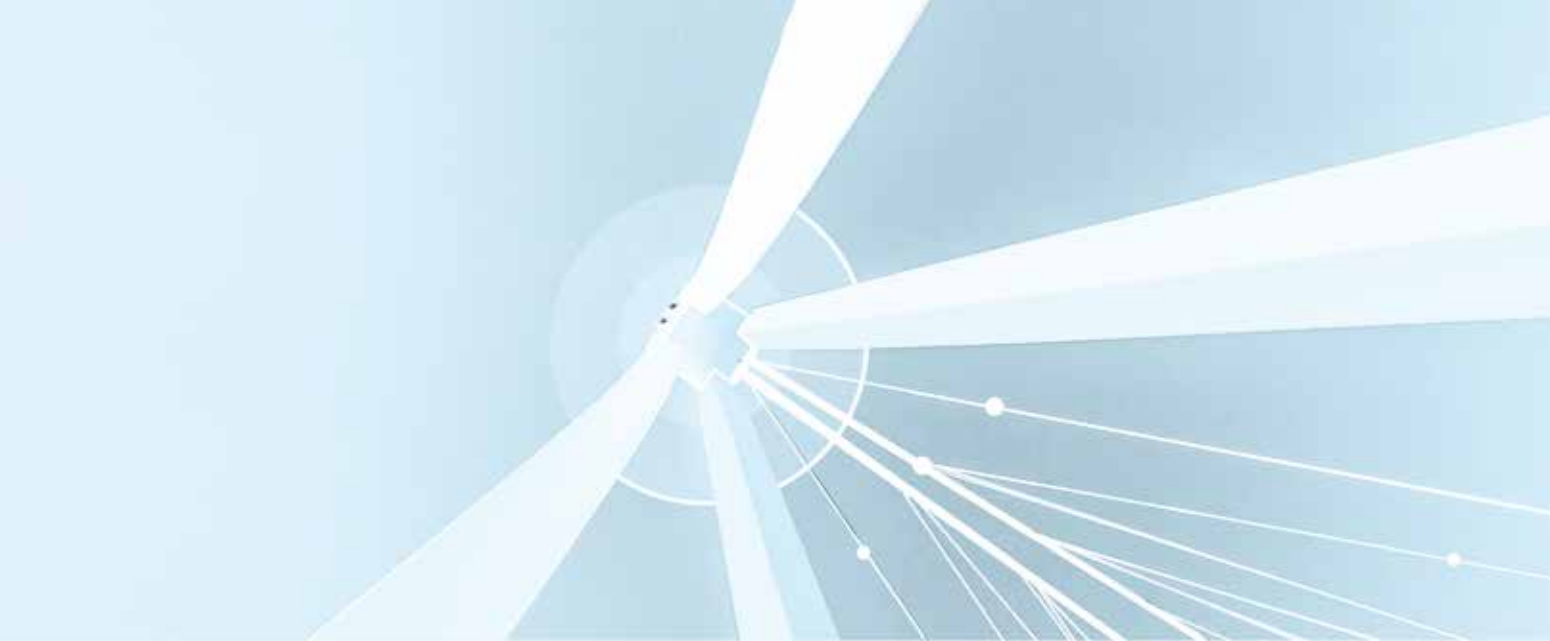
(as a percentage of the previous year)



1.14. TARIFFS FOR COMMUNICATION SERVICES TO AVERAGE PERSONAL INCOME RATIO



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



2. ICT Sector

2.1. General Characteristics of the ICT Sector

2.1.1. MAIN INDICATORS OF THE ICT SECTOR

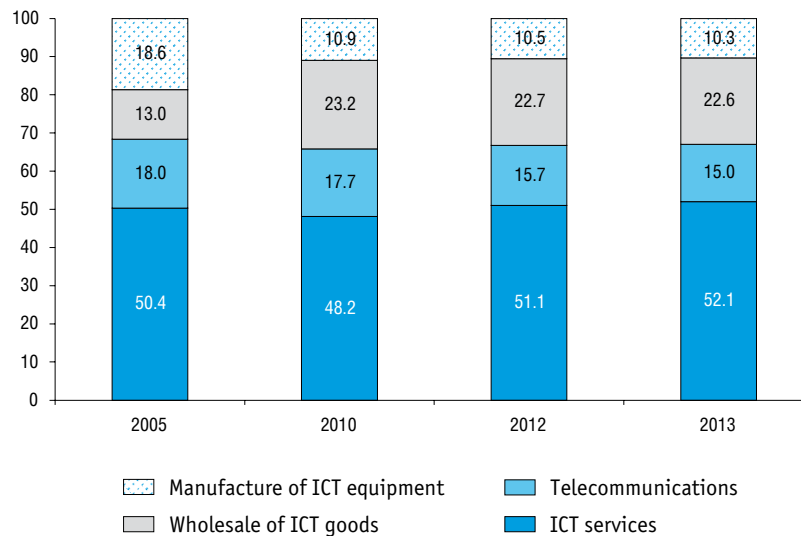
	2005	2010	2011	2012	2013
Number of enterprises, <i>thousand, at the end of the year</i>	107	135	142	147	152
Number of employees thousand	1347	1306	1268	1294	1323
as a percentage of the total number of employees in the organisation	2.8	2.8	2.8	2.8	2.9
Gross value added billion roubles	660	1354	1539	1795	1826
as a percentage of GDP	3.6	3.4	3.2	3.4	3.2
Sales, <i>billion roubles</i>	1078	2347	2638	2943	3221
Fixed capital investment, <i>billion roubles</i>	271	297	353	409	358
Foreign investment, <i>million US dollars</i>	3520	5389	5920	3673	3560

Source (here and below in this section): own calculations of HSE Institute for Statistical Studies and Economics of Knowledge based of the data provided by the Federal State Statistics Service.

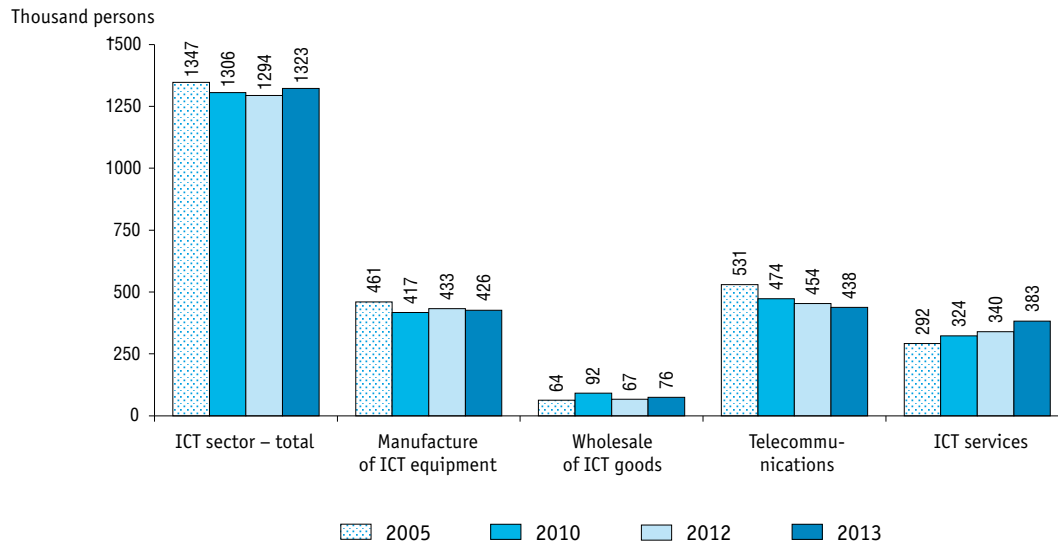
2.1.2. ICT SECTOR ENTERPRISES BY ECONOMIC ACTIVITY

(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	2012	2013	2005	2010	2012	2013
ICT sector – total		107.0	135.4	146.9	152.1	100	100	100	100
Manufacture of office, accounting and computing machinery	30	4.3	3.3	3.3	3.2	3.9	2.4	2.2	2.1
Manufacture of insulated wire and cable	31.3	0.9	0.6	0.6	0.7	0.8	0.4	0.4	0.4
Manufacture of radio, television and communication equipment and apparatus	32	7.8	5.1	5.3	5.4	7.2	3.7	3.6	3.5
Manufacture of instruments and appliances for measuring and checking	33.2	6.6	5.1	5.5	5.6	6.1	3.7	3.7	3.7
Manufacture of industrial process control equipment	33.3	0.3	0.6	0.7	0.8	0.3	0.5	0.5	0.5
Wholesale of ICT goods	51.43.2, 51.84, 51.86, 51.87.5	13.9	31.5	33.4	34.3	14.7	24.8	24.0	22.6
Telecommunications	64.2	19.3	24.0	23.1	22.8	17.6	17.4	15.5	15.0
Renting of office machinery and equipment, including computers	71.33	0.5	0.8	0.8	0.7	0.4	0.6	0.5	0.5
Computer and related activities	72	53.4	64.4	74.2	78.6	49.0	46.5	49.6	51.7

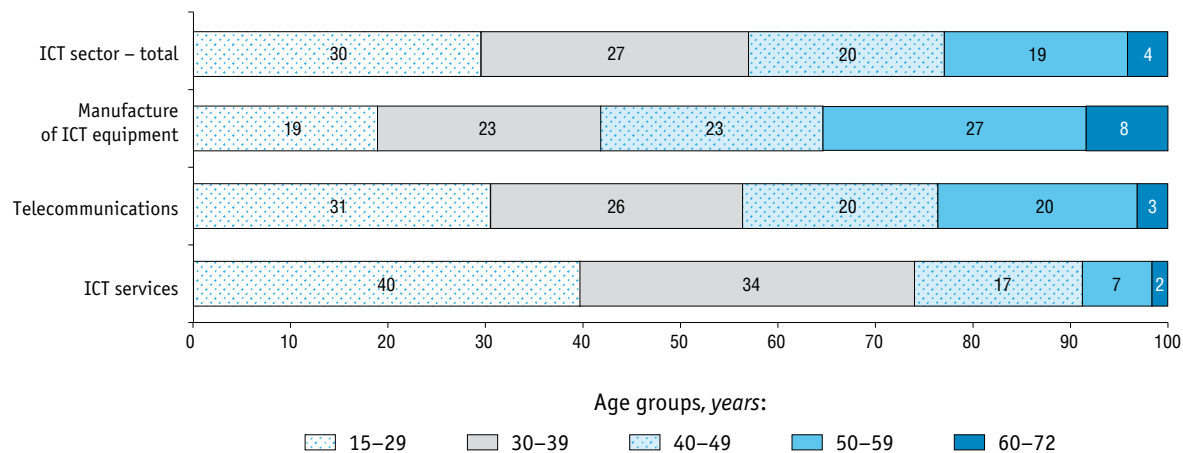
2.1.3. PERCENTAGE DISTRIBUTION OF ICT SECTOR ENTERPRISES BY ECONOMIC ACTIVITY*(at the end of the year)*

2.1.4. EMPLOYMENT IN THE ICT SECTOR BY ECONOMIC ACTIVITY



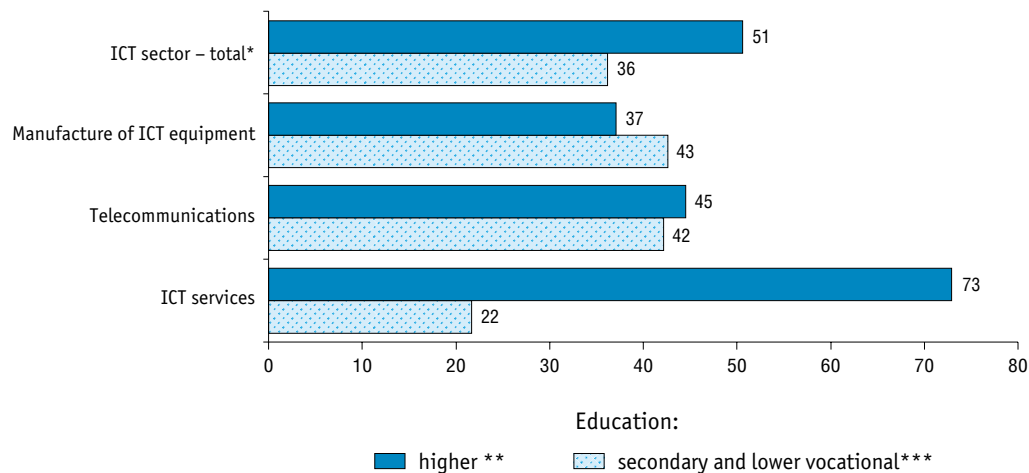
2.1.5. PERCENTAGE DISTRIBUTION OF ICT SECTOR EMPLOYMENT BY AGE GROUP AND ECONOMIC ACTIVITY: 2013*

(as a percentage of the total ICT sector employment)



* Excluding data on enterprises engaged in wholesale of ICT goods.

2.1.6. EMPLOYEES WITH HIGHER, SECONDARY AND LOWER VOCATIONAL EDUCATION AS A PERCENTAGE OF THE TOTAL ICT SECTOR EMPLOYMENT BY ECONOMIC ACTIVITY: 2013

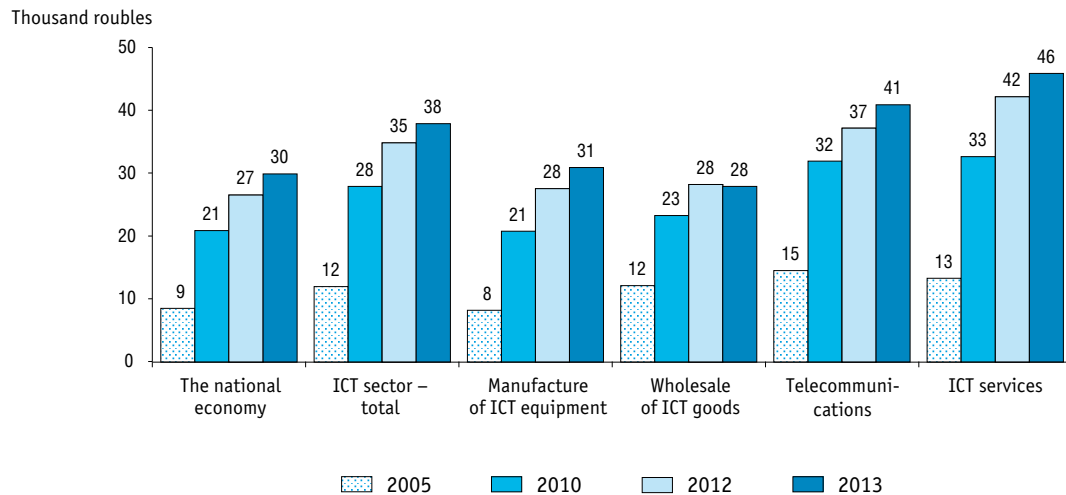


* Excluding data on enterprises engaged in wholesale of ICT goods.

** Including postgraduate education.

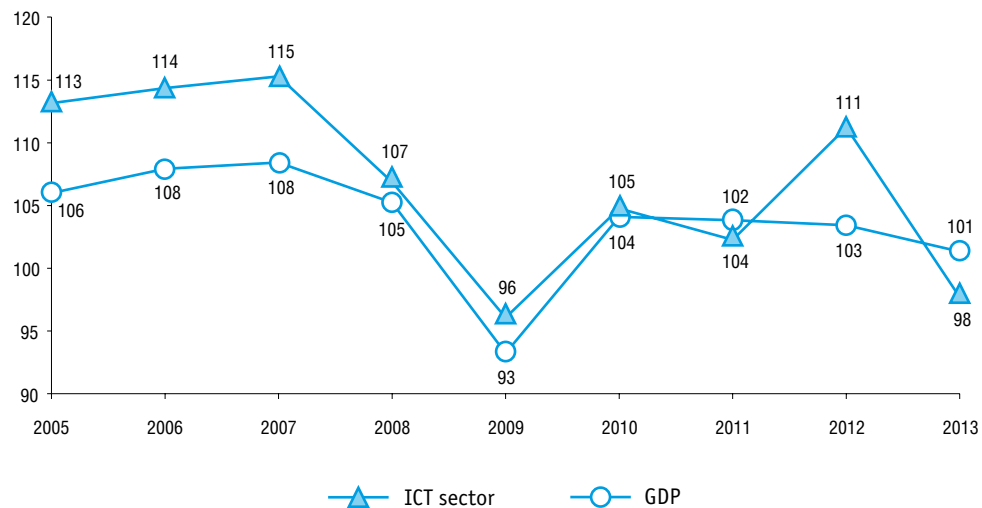
*** Including lower vocational education

2.1.7. AVERAGE MONTHLY SALARIES PER EMPLOYEE IN THE ICT SECTOR BY ECONOMIC ACTIVITY

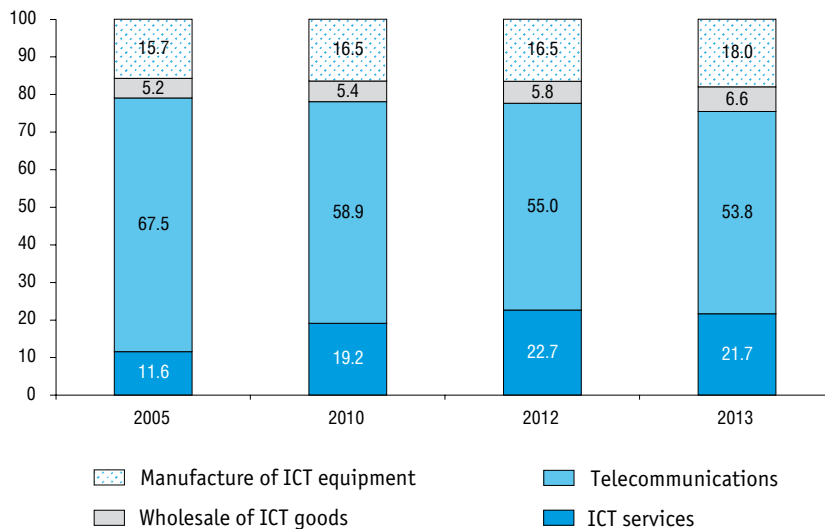


2.1.8. GROSS VALUE ADDED OF ICT SECTOR ENTERPRISES BY ECONOMIC ACTIVITY

	RCEA code (Rev. 1.1)	Gross value added, <i>billion roubles</i>				As a percentage of the total volume of gross value added of ICT sector enterprises			
		2005	2010	2012	2013	2005	2010	2012	2013
ICT sector – total		659.6	1354.0	1795.0	1826.4	100	100	100	100
Manufacture of office, accounting and computing machinery	30	6.5	15.1	21.8	21.7	1.0	1.1	1.2	1.2
Manufacture of insulated wire and cable	31.3	8.5	17.5	21.5	21.6	1.3	1.3	1.2	1.2
Manufacture of radio, television and communication equipment and apparatus	32	39.9	70.5	93.9	110.7	6.0	5.2	5.2	6.1
Manufacture of instruments and appliances for measuring and checking	33.2	47.9	116.9	155.3	169.2	7.3	8.6	8.7	9.3
Manufacture of industrial process control equipment	33.3	0.8	2.7	3.6	4.7	0.1	0.2	0.2	0.3
Wholesale of ICT goods	51.43.2, 51.84, 51.86, 51.87.5	34.3	73.7	104.8	120.1	5.2	5.5	5.8	6.5
Telecommunications	64.2	445.1	798.0	987.5	982.7	67.5	58.9	55.0	53.8
Renting of office machinery and equipment, including computers	71.33	2.5	1.0	1.1	0.8	0.4	0.1	0.1	0.0
Computer and related activities	72	74.1	258.6	405.5	394.9	11.2	19.1	22.6	21.6

2.1.9. TRENDS IN GROSS VALUE ADDED OF ICT SECTOR ENTERPRISES*(as a percentage of the previous year; in constant prices)*

2.1.10. PERCENTAGE DISTRIBUTION OF THE GROSS VALUE ADDED OF ICT SECTOR ENTERPRISES BY ECONOMIC ACTIVITY

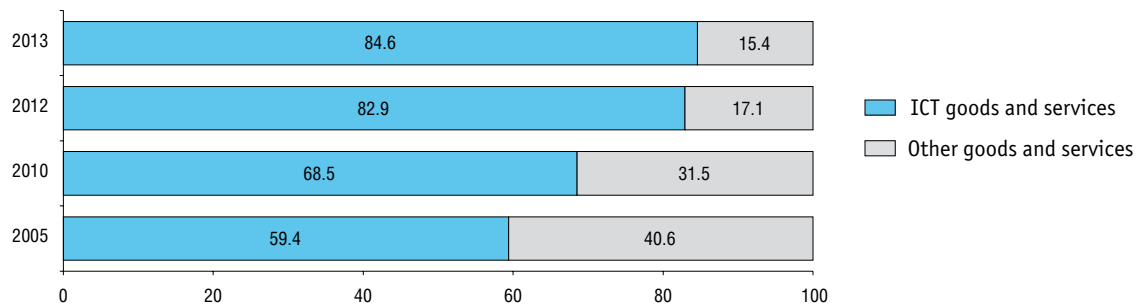


2.2. Output of the ICT sector

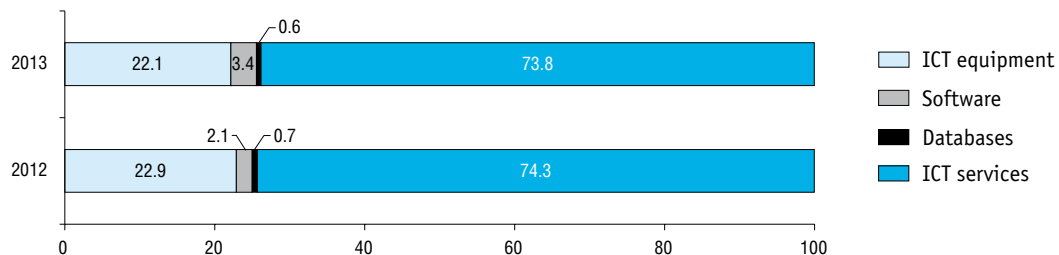
2.2.1. SALES OF ICT SECTOR ENTERPRISES BY ECONOMIC ACTIVITY

	RCEA code (Rev. 1.1)	Billion roubles				As a percentage of the total			
		2005	2010	2012	2013	2005	2010	2012	2013
ICT sector – total		1077.6	2347.0	2942.9	3221.3	100	100	100	100
Manufacture of office, accounting and computing machinery	30	12.7	31.6	53.9	52.5	1.2	1.3	1.8	1.6
Manufacture of insulated wire and cable	31.3	51.0	109.3	152.4	146.3	4.7	4.7	5.2	4.5
Manufacture of radio, television and communication equipment and apparatus	32	94.8	204.3	289.9	288.9	8.8	8.7	9.9	9.0
Manufacture of instruments and appliances for measuring and checking	33.2	86.1	188.3	263.9	280.6	8.0	8.0	9.0	8.7
Manufacture of industrial process control equipment	33.3	3.3	7.6	6.5	6.9	0.3	0.3	0.2	0.2
Wholesale of ICT goods	51.43.2, 51.84, 51.86, 51.87.5	98.0	104.8	208.2	312.9	9.1	4.5	7.1	9.7
Telecommunications	64.2	620.6	1365.4	1580.0	1645.2	57.6	58.2	53.7	51.1
Renting of office machinery and equipment, including computers	71.33	0.8	2.0	2.1	2.3	0.1	0.1	0.1	0.1
Computer and related activities	72	110.3	333.7	385.9	485.7	10.2	14.2	13.1	15.1

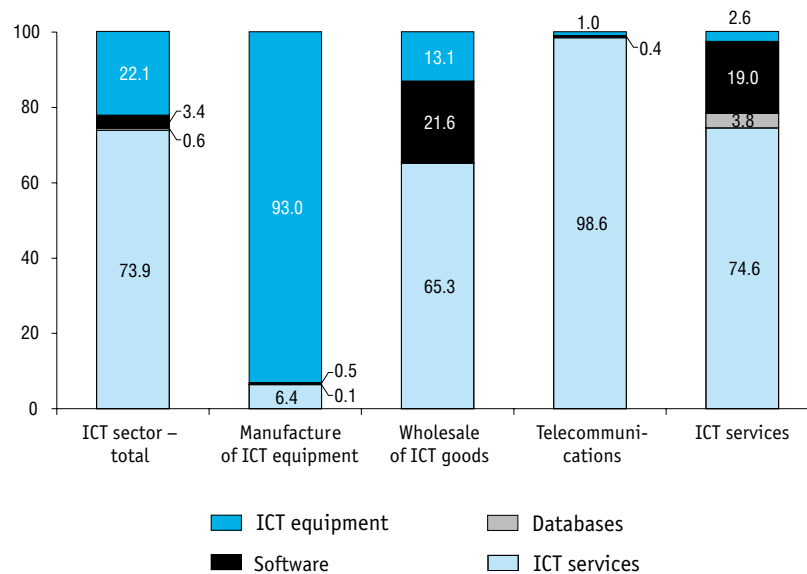
2.2.2. ICT GOODS AND SERVICES AS A PERCENTAGE OF TOTAL SALES IN THE ICT SECTOR



2.2.3. PERCENTAGE DISTRIBUTION OF ICT GOODS AND SERVICES SALES BY TYPE



2.2.4. PERCENTAGE DISTRIBUTION OF ICT GOODS AND SERVICES SALES BY ECONOMIC ACTIVITY: 2013

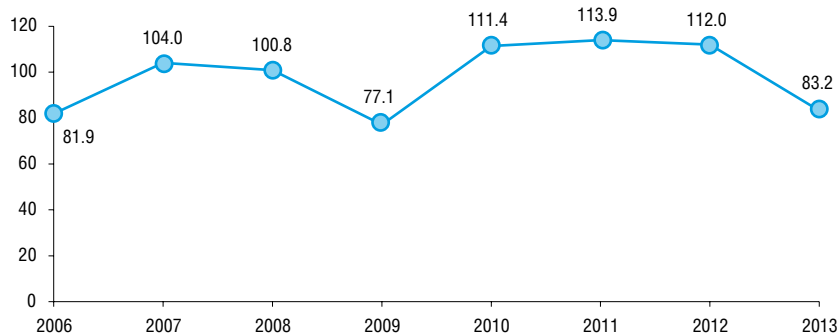


2.3. Investment in the ICT Sector

2.3.1. FIXED CAPITAL INVESTMENT IN THE ICT SECTOR

	Billion roubles	As a percentage of the corresponding indicator for the national economy
2005	271.5	7.5
2010	297.0	3.2
2011	352.9	3.2
2012	409.1	3.3
2013	357.8	2.7

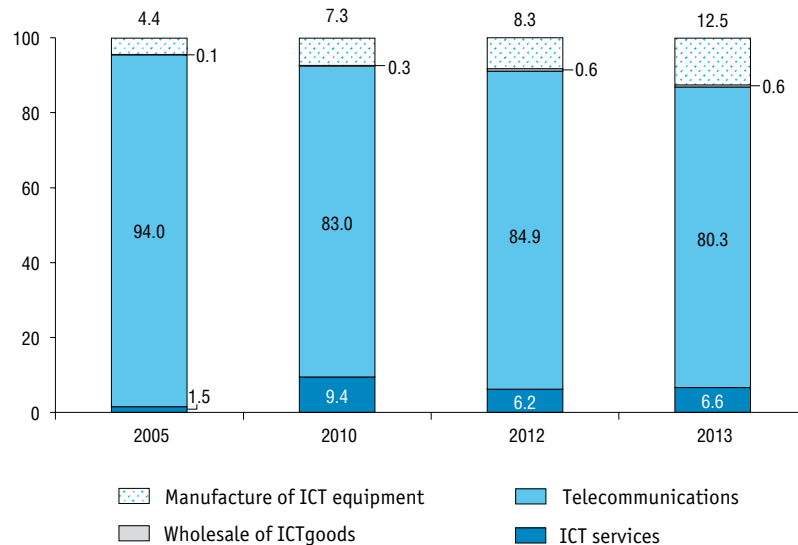
2.3.2. TRENDS IN FIXED CAPITAL INVESTMENT IN THE ICT SECTOR (as a percentage of the previous year; at constant prices)



2.3.3. 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	2012	2013	2012	2013
ICT sector – total		271491	297048	409138	357755	112	83
Manufacture of office, accounting and computing machinery	30	582	1396	3159	3396	149	101
Manufacture of insulated wire and cable	31.3	2465	1899	5586	7055	156	120
Manufacture of radio, television and communication equipment and apparatus	32	4885	9600	10000	18600	104	107
Manufacture of instruments and appliances for measuring and checking	33.2	4015	8742	14897	15722	135	100
Manufacture of industrial process control equipment	33.3	25	56	76	17	218	21
Wholesale of ICT goods	51.43.2, 51.84, 51.86, 51.87.5	347	784	2525	2263	137	84
Telecommunications	64.2	255214	246650	347429	287119	112	79
Renting of office machinery and equipment, including computers	71.33	658	2220	1467	3484	92	230
Computer and related activities	72	3300	25700	24000	20100	94	80

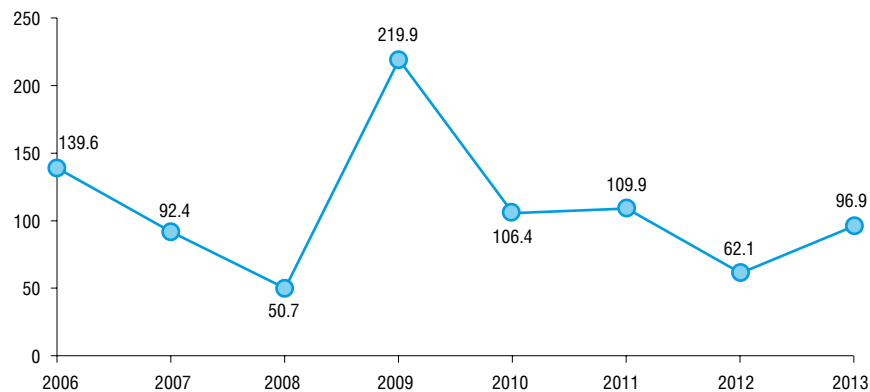
2.3.4. PERCENTAGE DISTRIBUTION OF FIXED CAPITAL INVESTMENT IN THE ICT SECTOR BY ECONOMIC ACTIVITY



2.3.5. FOREIGN INVESTMENT IN THE ICT SECTOR

	Million US dollars	As a percentage of the corresponding indicator for the national economy
2005	3520	6.6
2010	5389	4.7
2011	5920	3.1
2012	3673	2.4
2013	3560	2.1

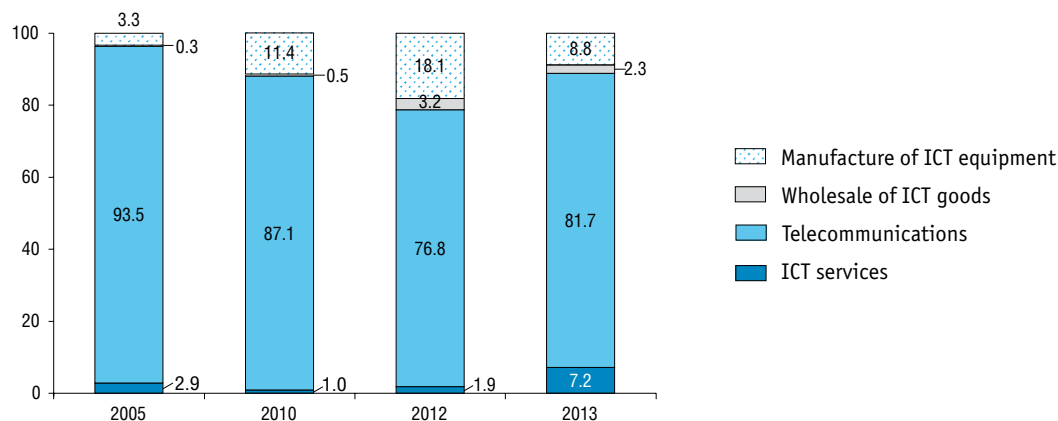
2.3.6. TRENDS IN FOREIGN INVESTMENT IN THE ICT SECTOR

(as a percentage of the previous year)

2.3.7. FOREIGN INVESTMENT IN THE ICT SECTOR BY ECONOMIC ACTIVITY

	RCEA code (Rev. 1.1)	Billion roubles				As a percentage of the total		
		2005	2010	2012	2013	2010	2012	2013
ICT sector – total		3519.8	5388.6	3673.3	3560.4	100	100	100
Manufacture of office, accounting and computing machinery	30	0.1	130.0	70.7	0.5	2.4	0.1	0.0
Manufacture of insulated wire and cable	31.3	7.2	11.9	74.4	157.7	0.2	0.5	4.4
Manufacture of radio, television and communication equipment and apparatus	32	110.4	470.4	507.7	144.1	8.7	15.0	4.0
Manufacture of instruments and appliances for measuring and checking	33.2	–	3.8	12.4	10.8	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	115.8	83.2	0.6	0.4	2.3
Telecommunications	64.2	3287.4	4690.2	2822.5	2907.9	87.0	77.9	81.7
Renting of office machinery and equipment, including computers	71.33	18.6	3.1	1.6	0.9	0.1	–	0.0
Computer and related activities	72	84.6	50.6	68.2	255.3	0.9	6.0	7.2

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



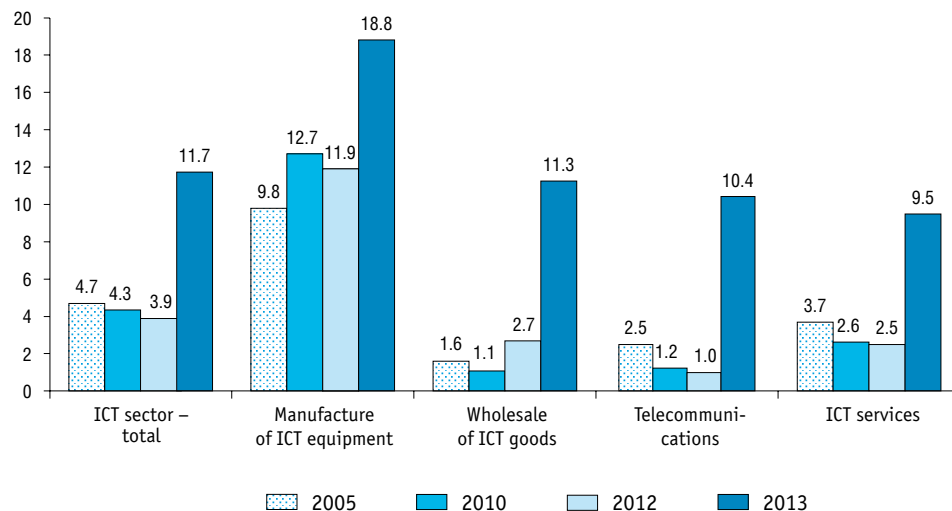
2.3.9. FOREIGN INVESTMENT IN THE ICT SECTOR BY TYPE

	Million US dollars				As a percentage of the total				As a percentage of the corresponding indicator for the national economy			
	2005	2010	2012	2013	2005	2010	2012	2013	2005	2010	2012	2013
Foreign investment – total	3520	5389	3673	3560	100	100	100	100	6.6	4.7	2.4	2.1
Direct investment	137	550	552	930	3.9	10.2	15.0	26.1	1.0	4.0	3.0	3.6
Portfolio investment	6	110	37	13	0.2	2.0	1.0	0.4	1.3	10.2	2.0	1.2
Other investments	3377	4729	3084	2617	95.9	87.8	84.0	73.5	8.4	4.7	2.3	1.8

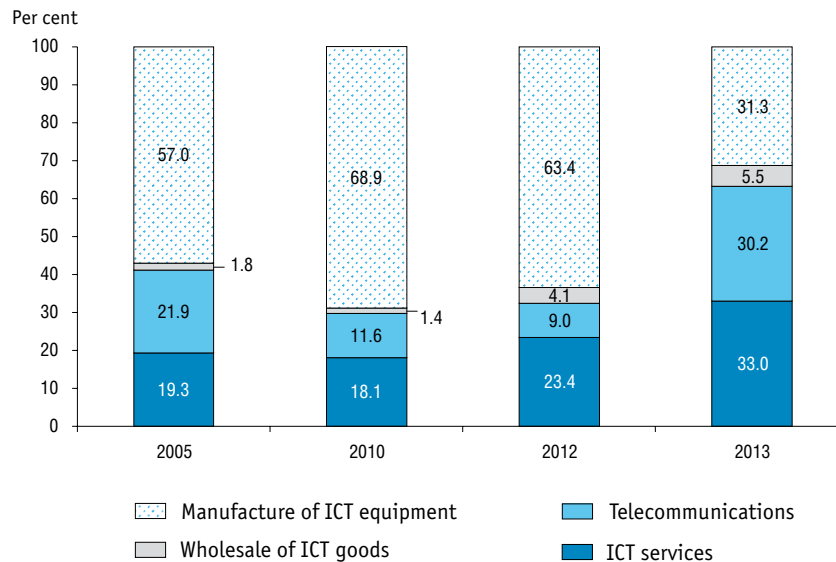
2.4. Research and Development (R&D) in the ICT Sector

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

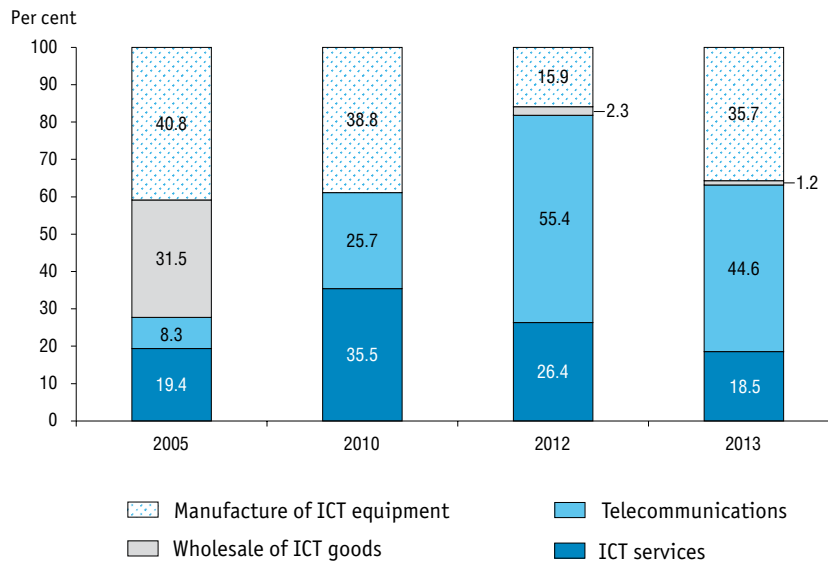
(as a percentage of the total number of enterprises)

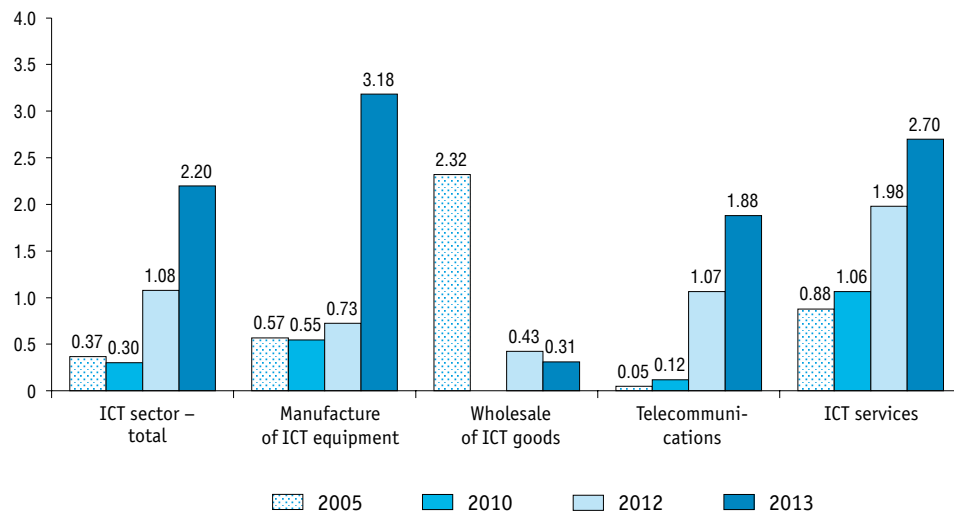


2.4.2. R&D-PERFORMING ENTERPRISES IN THE ICT SECTOR BY ECONOMIC ACTIVITY



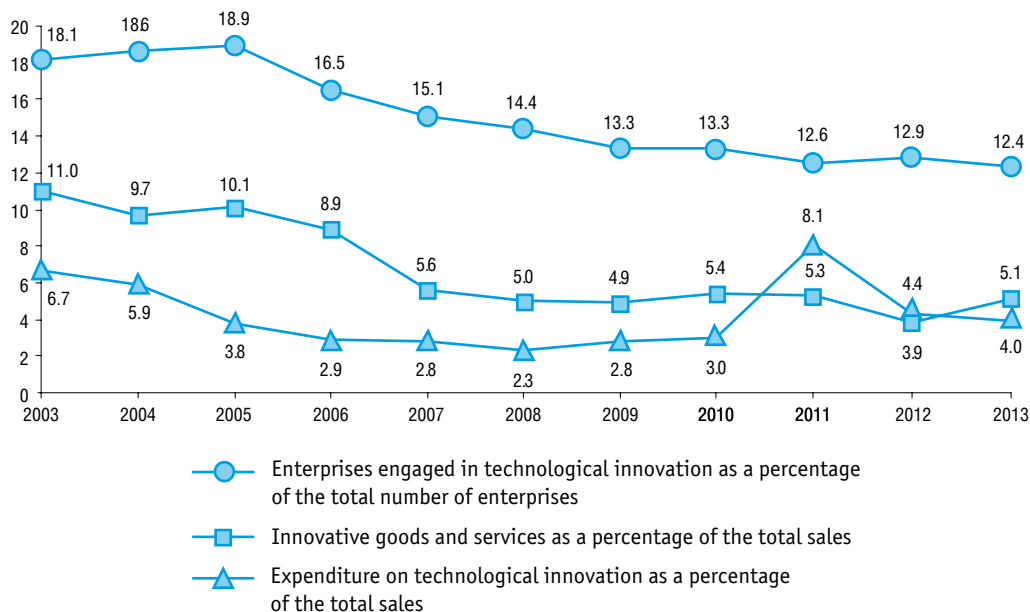
2.4.3. PERCENTAGE DISTRIBUTION OF R&D EXPENDITURE OF ENTERPRISES IN THE ICT SECTOR BY ECONOMIC ACTIVITY



2.4.4. R&D INTENSITY IN THE ICT SECTOR BY ECONOMIC ACTIVITY*(R&D expenditure as a percentage of production and sales costs)*

2.5. Innovative Activity in the ICT Sector*

2.5.1. MAIN INDICATORS OF INNOVATION IN THE ICT SECTOR



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

2.5.2. 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		
		2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013
ICT sector – total		14.8	14.3	14.2	12.6	12.9	12.4	4.1	3.5	3.2	4.6	4.3	4.0
Manufacture of office, accounting and computing machinery	30	27.5	27.3	14.6	25.0	25.0	12.5	7.5	4.5	2.1	10.0	6.8	4.2
Manufacture of radio, television and communication equipment and apparatus	32	36.1	36.3	34.2	33.5	35.0	33.5	5.2	5.4	4.7	9.7	10.5	9.7
Communications	64	13.8	13.3	14.2	11.1	11.7	11.8	5.5	4.7	4.7	4.6	4.3	4.3
Computer and related activities	72	9.2	9.4	9.6	7.9	8.3	8.4	1.2	1.0	0.8	2.8	2.6	2.4

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

	RCEA code (Rev. 1.1)	R&D	Industrial design	Acquisi- tion of machinery and equip- ment	Acquisi- tion of tech- nology	Of which acquisition of patent rights and licenses	Acquisi- tion of software	Other types of repro- duction	Personnel training	Market research	Other
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
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

(continued)

	RCEA code (Rev. 1.1)	R&D	Industrial design	Acquisi- tion of machinery and equip- ment	Acquisi- tion of tech- nology	Of which acquisition of patent rights and licenses	Acquisi- tion of software	Other types of repro- duction	Personnel training	Market research	Other
2013											
ICT sector – total		32.4	14.7	56.9	6.3	3.8	35.7	15.4	23.2	10.0	15.2
Manufacture of office, accounting and computing machinery	30	50.0	50.0	100.0	–	–	50.0	33.3	50.0	16.7	16.7
Manufacture of radio, television and communication equipment and apparatus	32	60.7	29.0	69.2	4.7	3.7	29.0	15.9	28.0	7.5	7.5
Communications	64	12.4	8.3	62.8	4.1	1.4	33.0	19.7	21.1	14.7	22.0
Computer and related activities	72	42.7	12.0	32.5	12.0	8.5	46.2	6.0	21.4	3.4	9.4

2.5.4. 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		
		2011	2012	2013	2011	2012	2013
ICT sector – total		96412.3	85110.7	109494.4	5.3	3.9	5.1
Manufacture of office, accounting and computing machinery	30	1136.6	1020.6	834.4	3.3	2.2	1.7
Manufacture of radio, television and communication equipment and apparatus	32	20837.9	27998.0	37565.7	9.8	10.5	13.4
Communications	64	49486.6	41444.1	31535.7	3.6	2.5	2.1
Computer and related activities	72	24951.2	14648.1	39558.7	12.9	6.2	13.3

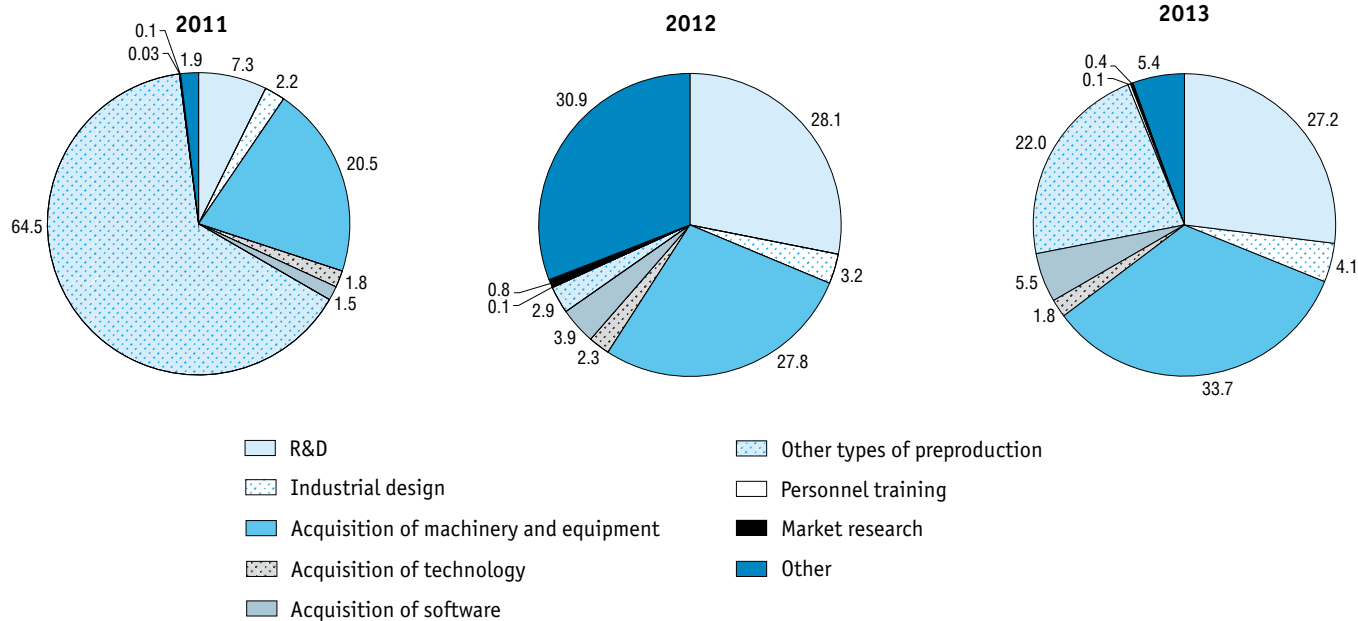
2.5.5. EXPORTS OF INNOVATIVE GOODS AND SERVICES BY ICT SECTOR ENTERPRISES

	RCEA code (Rev. 1.1)	Exports of innovative goods and services, <i>million roubles</i>			Exports of innovative goods and services as a percentage of total sales			Innovative goods and services as a percentage of total exports		
		2011	2012	2013	2011	2012	2013	2011	2012	2013
ICT sector – total		7403.7	6325.4	12806.4	0.4	0.3	0.6	20.8	10.3	19.7
Manufacture of office, accounting and computing machinery	30	33.5	36.9	2.2	0.1	0.1	0.005	18.7	3.5	0.6
Manufacture of radio, television and communication equipment and apparatus	32	3323.7	2054.6	5341.1	1.6	0.8	1.9	41.1	29.0	51.0
Communications	64	35.0	132.5	0.2	0.003	0.01	0.0	0.3	0.4	0.001
Computer and related activities	72	4011.5	4101.5	7463.0	2.1	1.7	2.5	27.0	17.7	23.9

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

	RCEA code (Rev. 1.1)	Million roubles			As a percentage of total sales		
		2011	2012	2013	2011	2012	2013
ICT sector – total		146199.5	96517.8	85789.2	8.1	4.4	4.0
Manufacture of office, accounting and computing machinery	30	748.4	779.9	440.0	2.2	1.7	0.9
Manufacture of radio, television and communication equipment and apparatus	32	7697.1	12507.3	19215.8	3.6	4.7	6.8
Communications	64	130211.3	75842.6	45550.0	9.5	4.6	3.0
Computer and related activities	72	7542.7	7388.1	20583.4	3.9	3.1	6.9

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



2.5.8. 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		
	2011	2012	2013	2011	2012	2013	2011	2012	2013
Russian Federation	12.6	12.9	12.4	5.3	3.9	5.1	8.1	4.4	4.0
Central Federal District	13.5	14.3	13.5	4.7	3.7	4.6	12.4	6.3	4.2
Northwestern Federal District	15.5	16.0	15.2	3.8	3.2	5.3	7.0	2.7	4.9
Southern Federal District	8.5	11.9	10.0	3.9	2.5	1.7	2.0	1.2	1.9
North Caucasian Federal District	8.2	9.4	9.3	2.5	1.7	0.1	0.7	1.0	0.9
Volga Federal District	12.8	12.2	12.0	8.8	7.4	10.5	2.2	3.1	4.3
Urals Federal District	10.9	9.8	8.2	9.9	0.9	0.9	3.7	1.7	5.4
Siberian Federal District	11.3	11.8	12.2	4.5	4.5	5.1	3.4	2.2	2.5
Far Eastern Federal District	13.8	11.3	13.4	4.5	3.6	5.4	10.1	3.5	4.1

2.6. Financial Effects of ICT Sector Activities

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

	ICT sector			As a percentage of the corresponding indicator for the national economy		
	2010	2012	2013	2010	2012	2013
The total number of enterprises surveyed	1890	2018	2041	3.0	3.5	3.5
Loss-making enterprises	350	423	402	2.0	2.8	2.3
Profit-making enterprises	1540	1595	1639	3.3	3.7	3.9
As a percentage of the total number of enterprises surveyed:						
loss-making enterprises	18.5	21.0	19.7	–	–	–
profit-making enterprises	81.5	79.0	80.3	–	–	–
Balance (profit minus loss) of enterprises' activities, <i>million roubles</i>	323989	363237	391519	5.3	4.7	6.0
Total losses	36433	71105	58653	4.6	6.7	5.0
Total profits	360422	434342	450172	5.2	5.0	5.8
Profitability of assets, <i>per cent</i>	10.8	8.5	8.6	–	–	–
Profitability of sales of goods and services, <i>per cent</i>	20.9	19.0	17.5	–	–	–

* Here and below in this section, data on small businesses are excluded.

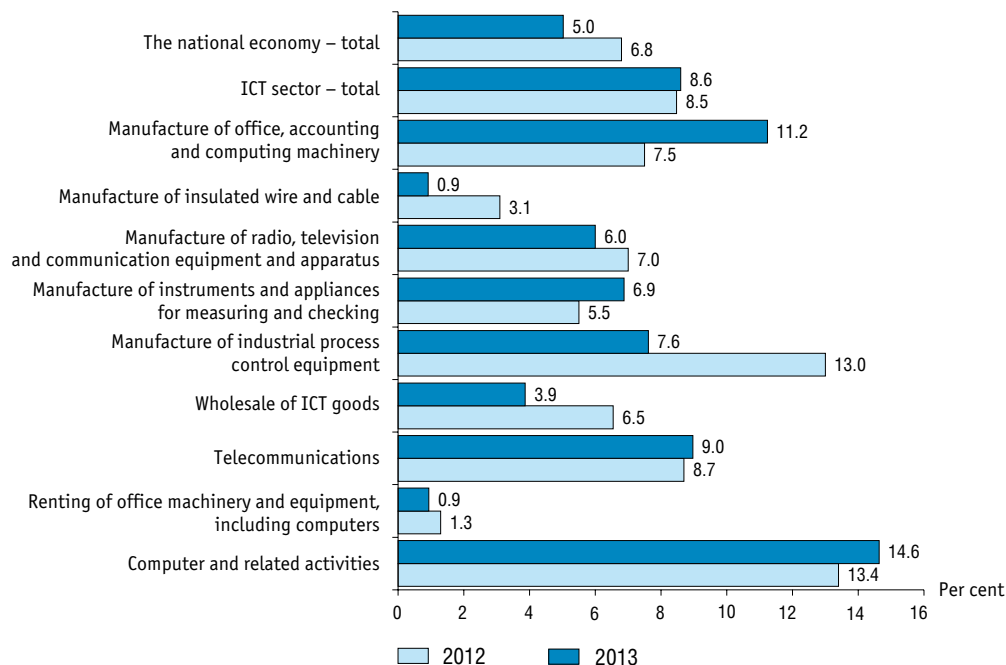
2.6.2. TOTAL LOSSES OF ICT SECTOR ENTERPRISES BY ECONOMIC ACTIVITY

	RCEA code (Rev. 1.1)	Total losses, <i>million roubles</i>			Loss-making enterprises as a percentage of the total number of enterprises		
		2010	2012	2013	2010	2012	2013
ICT sector – total		36433	71105	58653	18.5	21.0	19.7
Manufacture of office, accounting and computing machinery	30	794	306	158	20.0	18.9	15.4
Manufacture of insulated wire and cable	31.3	4258	1933	1802	28.9	25.0	37.2
Manufacture of radio, television and communication equipment and apparatus	32	1649	1179	1362	20.3	15.4	13.1
Manufacture of instruments and appliances for measuring and checking	33.2	1324	2498	799	15.7	15.6	16.3
Manufacture of industrial process control equipment	33.3	26	–	–	23.1	–	–
Wholesale of ICT goods	51.43.2, 51.84, 51.86, 51.87.5	116	227	602	7.9	9.6	10.1
Telecommunications	64.2	27282	62751	51251	23.5	30.2	27.3
Renting of office machinery and equipment, including computers	71.33	80	12	10	33.3	66.7	66.7
Computer and related activities	72	904	2199	2668	12.5	16.9	16.2

2.6.3. 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	2012	2013	2010	2012	2013
ICT sector – total		360422	434342	450172	81.5	79.0	80.3
Manufacture of office, accounting and computing machinery	30	2484	3230	4725	80.0	81.1	84.6
Manufacture of insulated wire and cable	31.3	4153	4917	2724	71.1	75.0	62.8
Manufacture of radio, television and communication equipment and apparatus	32	21760	20916	22055	79.7	84.6	86.9
Manufacture of instruments and appliances for measuring and checking	33.2	13464	18693	25549	84.3	84.4	83.7
Manufacture of industrial process control equipment	33.3	759	448	291	76.9	100	100
Wholesale of ICT goods	51.43.2, 51.84, 51.86, 51.87.5	5164	10482	9288	92.1	90.4	89.9
Telecommunications	64.2	288100	334557	331498	76.5	69.8	72.7
Renting of office machinery and equipment, including computers	71.33	64	19	22	66.7	33.3	33.3
Computer and related activities	72	24474	41080	54020	87.5	83.1	83.8

2.6.4. PROFITABILITY OF ASSETS OF GOODS AND SERVICES OF ICT SECTOR ENTERPRISES BY ECONOMIC ACTIVITY



2.6.5. 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	
		2012	2013	2012	2013	2012	2013
ICT sector – total		30.7	30.2	-64.3	-40.8	102.6	124.4
Manufacture of office, accounting and computing machinery	30	34.6	37.1	24.1	26.2	101.6	120.5
Manufacture of insulated wire and cable	31.3	22.9	25.6	-15.0	-7.5	72.0	83.8
Manufacture of radio, television and communication equipment and apparatus	32	39.4	38.6	14.8	10.6	84.8	90.7
Manufacture of instruments and appliances for measuring and checking	33.2	37.3	34.3	13.1	13.7	85.0	97.8
Manufacture of industrial process control equipment	33.3	25.6	28.8	15.7	18.8	95.5	129.6
Wholesale of ICT goods	51.43.2, 51.84, 51.86, 51.87.5	16.0	14.1	-2.1	1.4	83.5	84.9
Telecommunications	64.2	30.8	30.2	-93.4	-82.7	101.6	140.4
Renting of office machinery and equipment, including computers	71.33	53.8	15.0	-53.7	-10.6	313.3	3444.2
Computer and related activities	72	28.7	30.7	-5.9	-0.7	132.9	138.7

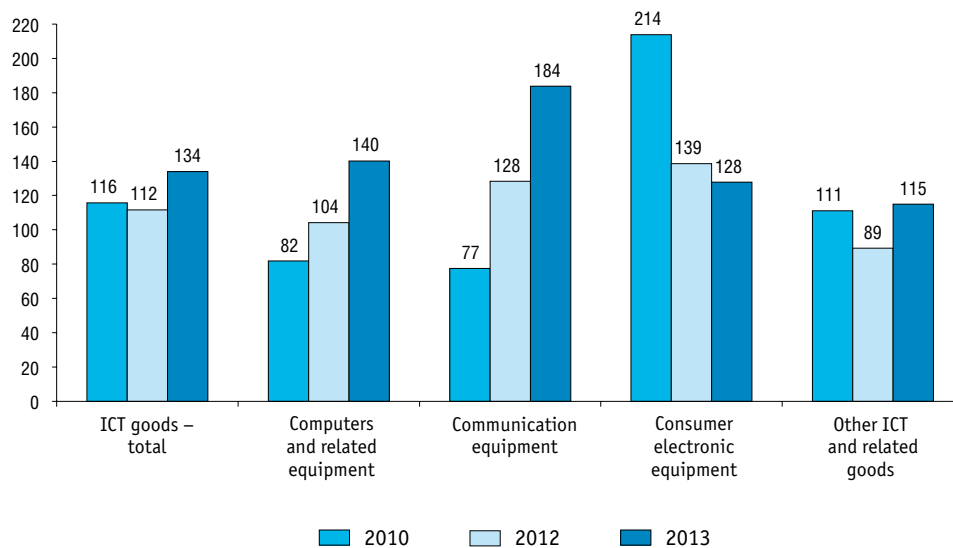
2.6.6. PERCENTAGE DISTRIBUTION OF CURRENT ASSETS OF ICT SECTOR ENTERPRISES BY ECONOMIC ACTIVITY: 2013

	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		17.2	5.4	1.7	3.1	17.1	8.3	31.6	25.8
Manufacture of office, accounting and computing machinery	30	34.2	14.2	2.4	6.2	9.6	16.5	37.6	2.1
Manufacture of insulated wire and cable	31.3	35.4	17.1	11.1	1.1	9.4	6.8	41.2	7.2
Manufacture of radio, television and communication equipment and apparatus	32	38.8	15.8	5.1	0.8	6.5	11.4	37.5	5.8
Manufacture of instruments and appliances for measuring and checking	33.2	40.7	15.9	4.8	0.3	7.5	9.4	37.1	5.3
Manufacture of industrial process control equipment	33.3	33.3	14.3	2.0	4.4	4.8	6.9	52.9	2.1
Wholesale of ICT goods	51.43.2, 51.84, 51.86, 51.87.5	31.6	1.6	1.9	24.6	3.5	10.1	48.9	5.9
Telecommunications	64.2	4.4	1.3	0.1	0.6	23.5	5.8	23.3	43.0
Renting of office machinery and equipment, including computers	71.33	2.3	0.2	0.0	0.0	–	1.9	9.0	86.7
Computer and related activities	72	12.9	2.1	0.3	3.4	21.0	14.2	42.7	9.2

2.7. International Trade in ICT Goods and Services

2.7.1. 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	2012	2013	2010	2012	2013	2010	2012	2013
ICT goods – total	1033.9	1639.6	2196.0	0.26	0.31	0.42	100	100	100
Computers and related equipment	146.5	298.5	418.7	0.04	0.06	0.08	14.2	18.2	19.1
Of which computers	99.0	217.7	298.4	0.02	0.04	0.06	9.6	13.3	13.6
Communication equipment	119.2	228.5	420.1	0.03	0.04	0.08	11.5	13.9	19.1
Of which telephone and telegraph equipment	82.9	182.4	330.7	0.02	0.03	0.06	8.0	11.1	15.1
Consumer electronic equipment	303.0	609.2	778.3	0.08	0.12	0.15	29.3	37.2	35.4
Of which:									
video equipment	1.6	4.1	5.3	0.00	0.00	0.00	0.2	0.3	0.2
TV receivers	260.0	505.7	633.5	0.07	0.10	0.12	25.1	30.8	28.8
Other ICT and related goods	465.2	503.4	578.9	0.11	0.09	0.11	45.0	30.7	26.4

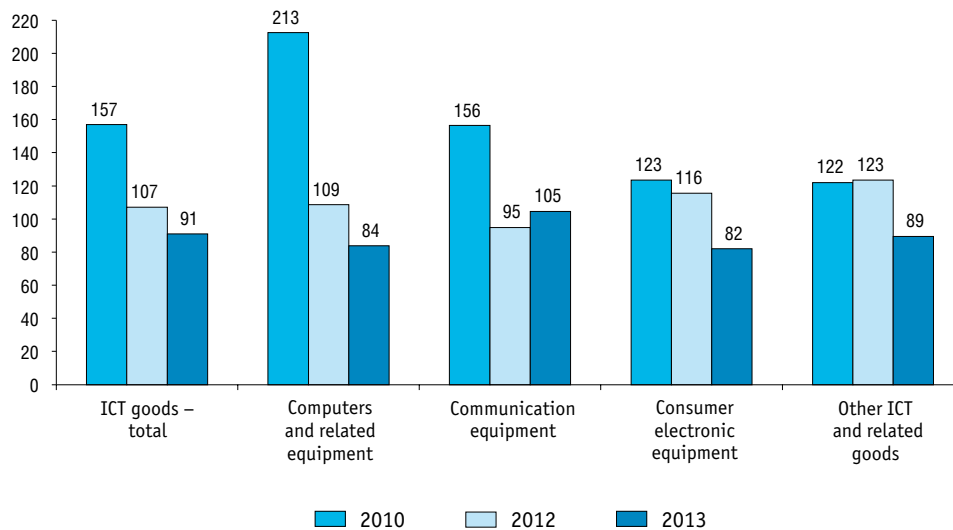
2.7.2. TRENDS IN EXPORTS OF ICT GOODS*(as a percentage of the previous year)*

2.7.3. 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	2012	2013	2010	2012	2013	2010	2012	2013
ICT goods – total	19519.6	23470.0	21374.5	8.5	7.4	6.8	100	100	100
Computers and related equipment	6659.8	7967.6	6688.7	2.9	2.5	2.1	34.1	33.9	31.3
Of which computers	4816.6	5825.8	4864.6	2.1	1.8	1.5	24.7	24.8	22.8
Communication equipment	6681.1	7431.5	7769.5	2.9	2.3	2.5	34.2	31.7	36.3
Of which telephone and telegraph equipment	6606.7	7335.1	7685.1	2.9	2.3	2.4	33.8	31.3	36.0
Consumer electronic equipment	3283.0	4157.1	3413.8	1.4	1.3	1.1	16.8	17.7	16.0
Of which:									
video equipment	202.4	212.3	132.3	0.1	0.1	0.0	1.0	0.9	0.6
TV receivers	742.0	839.2	771.5	0.3	0.3	0.2	3.8	3.6	3.6
Other ICT and related goods	2895.7	3913.8	3502.5	1.3	1.3	1.1	14.9	16.7	16.4

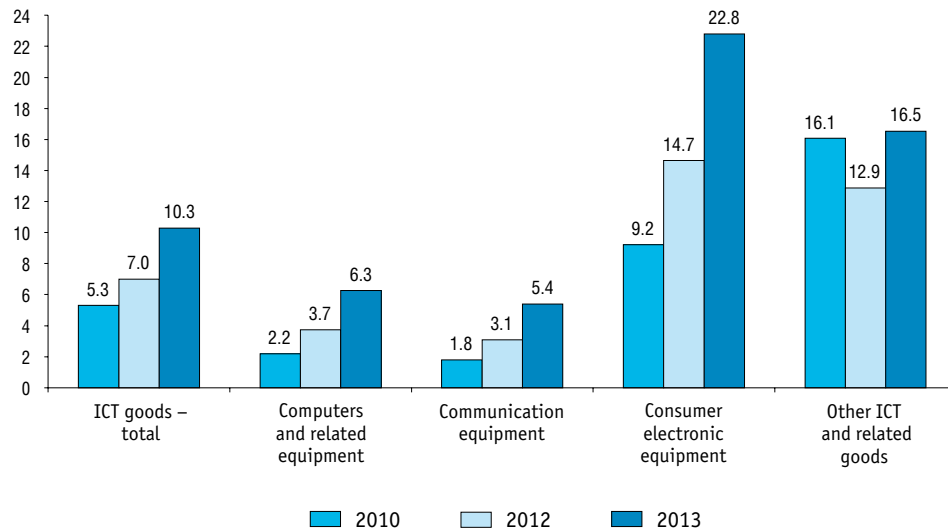
2.7.4. TRENDS IN IMPORTS OF ICT GOODS

(as a percentage of the previous year)



2.7.5. EXPORTS TO IMPORTS RATIO FOR ICT GOODS

(exports as a percentage of imports)

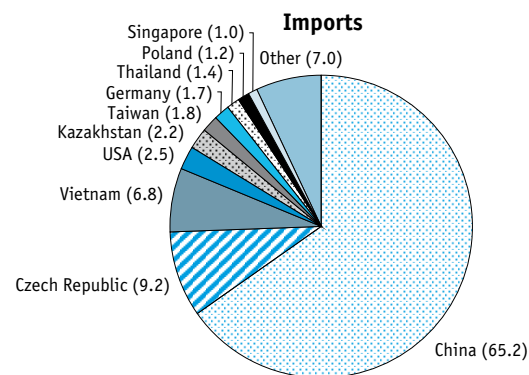
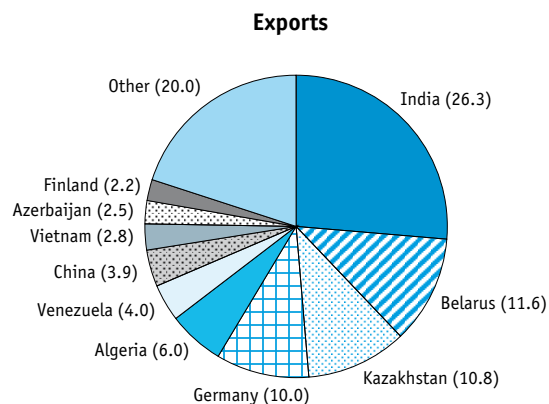


2.7.6. EXPORTS AND IMPORTS OF COMPUTERS

(million US dollars)

	2005	2010	2012	2013
Exports – total	58.7	99.0	217.7	298.4
To CIS countries	12.7	22.6	43.8	85.6
To other foreign countries	46.0	76.4	173.9	212.8
Imports – total	1356.4	4816.6	5825.8	4864.6
From CIS countries	5.9	7.7	120.6	131.7
From other foreign countries	1350.5	4808.9	5705.2	4732.9

2.7.7. PERCENTAGE DISTRIBUTION OF EXPORTS AND IMPORTS OF COMPUTERS BY COUNTRY: 2013

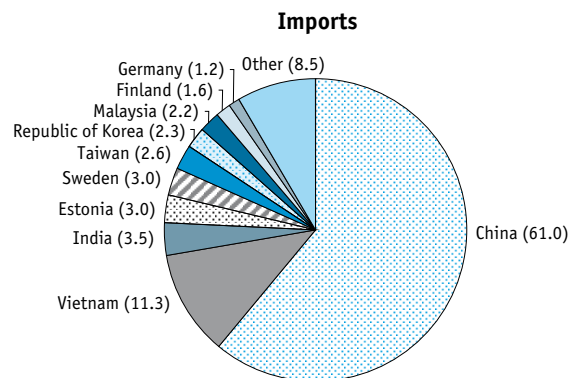
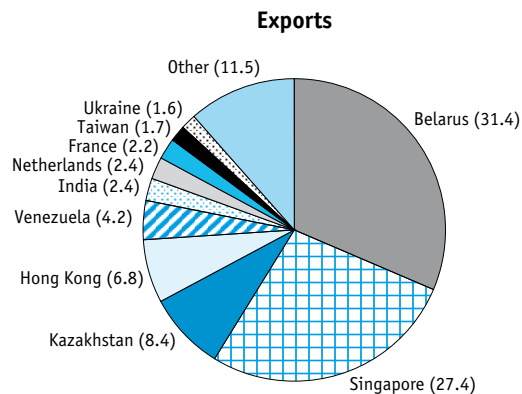


2.7.8. EXPORTS AND IMPORTS OF TELEPHONE AND TELEGRAPH EQUIPMENT

(million US dollars)

	2005	2010	2012	2013
Exports – total	41.0	82.9	182.4	330.7
To CIS countries	20.0	27.0	75.2	146.1
To other foreign countries	21.0	55.9	107.2	184.6
Imports – total	1163.8	6606.7	7335.1	7685.1
From CIS countries	3.2	3.3	8.9	46.9
From other foreign countries	1160.6	6603.4	7326.2	7638.2

2.7.9. PERCENTAGE DISTRIBUTION OF EXPORTS AND IMPORTS OF TELEPHONE AND TELEGRAPH EQUIPMENT BY COUNTRY: 2013

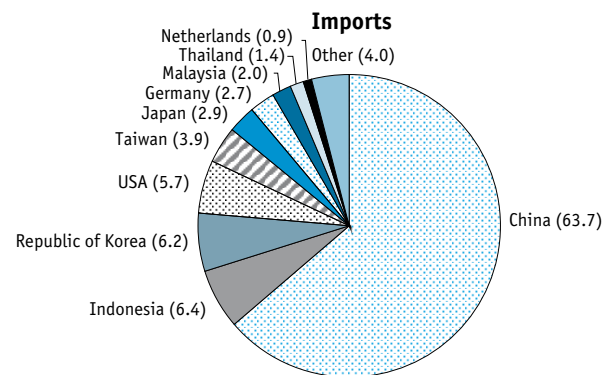
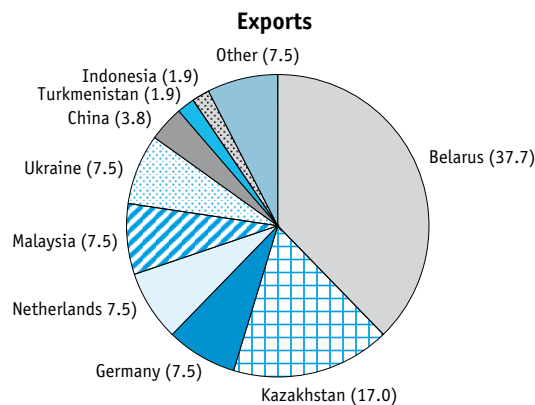


2.7.10. EXPORTS AND IMPORTS OF VIDEO EQUIPMENT

(million US dollars)

	2005	2010	2012	2013
Exports – total	1.9	1.6	4.1	5.3
To CIS countries	0.7	0.5	2.1	3.5
To other foreign countries	1.2	1.1	2.0	1.8
Imports – total	277.5	202.4	212.3	132.3
From CIS countries	0.3	0.2	3.5	1.0
From other foreign countries	277.2	202.2	208.8	131.3

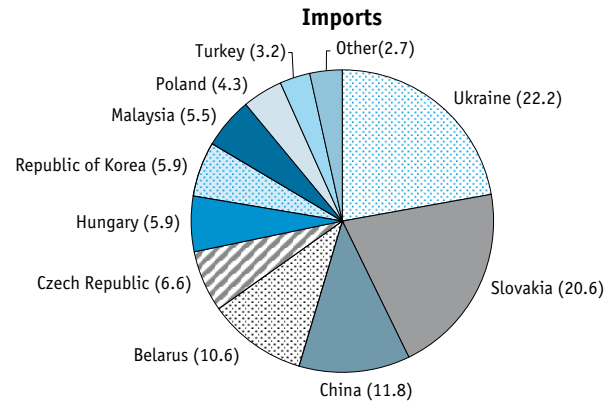
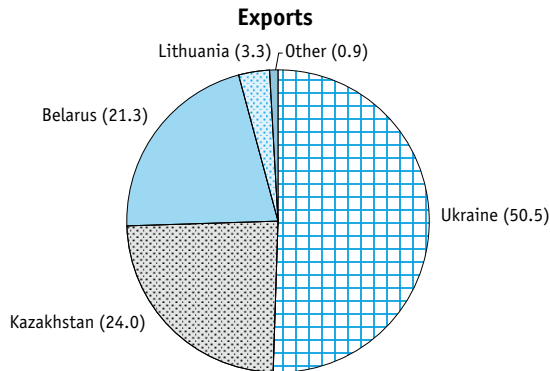
2.7.11. PERCENTAGE DISTRIBUTION OF EXPORTS AND IMPORTS OF VIDEO EQUIPMENT BY COUNTRY: 2013



2.7.12. EXPORTS AND IMPORTS OF TV RECEIVERS (million US dollars)

	2005	2010	2012	2013
Exports – total	10.6	260.0	505.7	633.5
To CIS countries	9.4	256.0	486.5	611.5
To other foreign countries	1.2	4.0	19.2	22.0
Imports – total	491.2	742.0	839.2	771.5
From CIS countries	61.4	98.4	303.6	253.0
From other foreign countries	429.8	643.6	535.6	518.5

2.7.13. PERCENTAGE DISTRIBUTION OF EXPORTS AND IMPORTS OF TV RECEIVERS BY COUNTRY: 2013

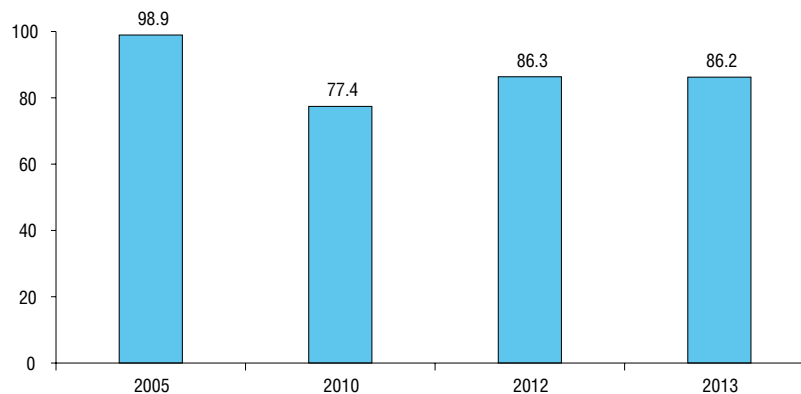


2.7.14. EXPORTS AND IMPORTS OF COMPUTER SERVICES

(million US dollars)

	2005	2010	2012	2013
Exports – total	375	1273	1995	2508
To CIS countries	24	96	193	189
To other foreign countries	351	1177	1802	2319
Imports – total	379	1644	2313	2909
From CIS countries	9	45	110	163
From other foreign countries	370	1599	2203	2746

2.7.15. EXPORTS TO IMPORTS RATIO FOR COMPUTER SERVICES

(exports as a percentage of imports)

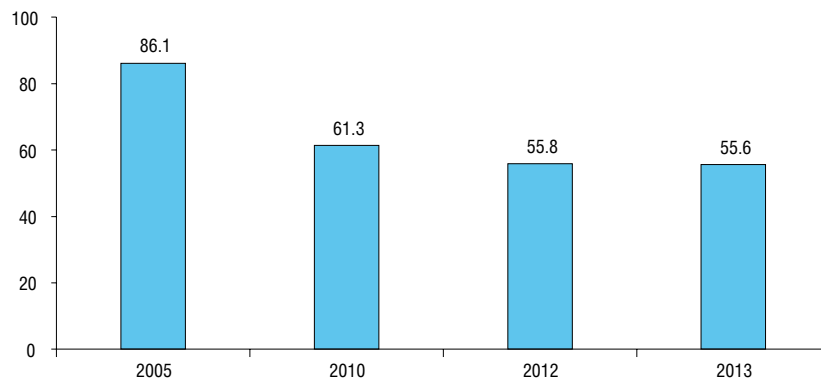
2.7.16. EXPORTS AND IMPORTS OF TELECOMMUNICATIONS SERVICES

(million US dollars)

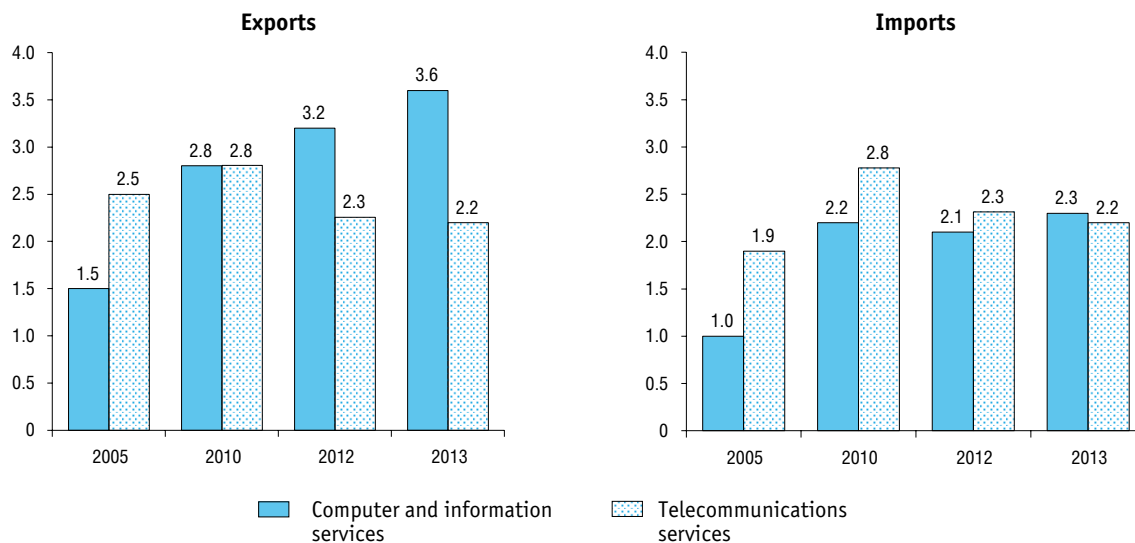
	2005	2010	2012	2013
Exports – total	620	1265	1406	1553
To CIS countries	126	273	252	297
To other foreign countries	494	992	1154	1256
Imports – total	720	2065	2518	2792
From CIS countries	223	535	662	716
From other foreign countries	497	1530	1856	2076

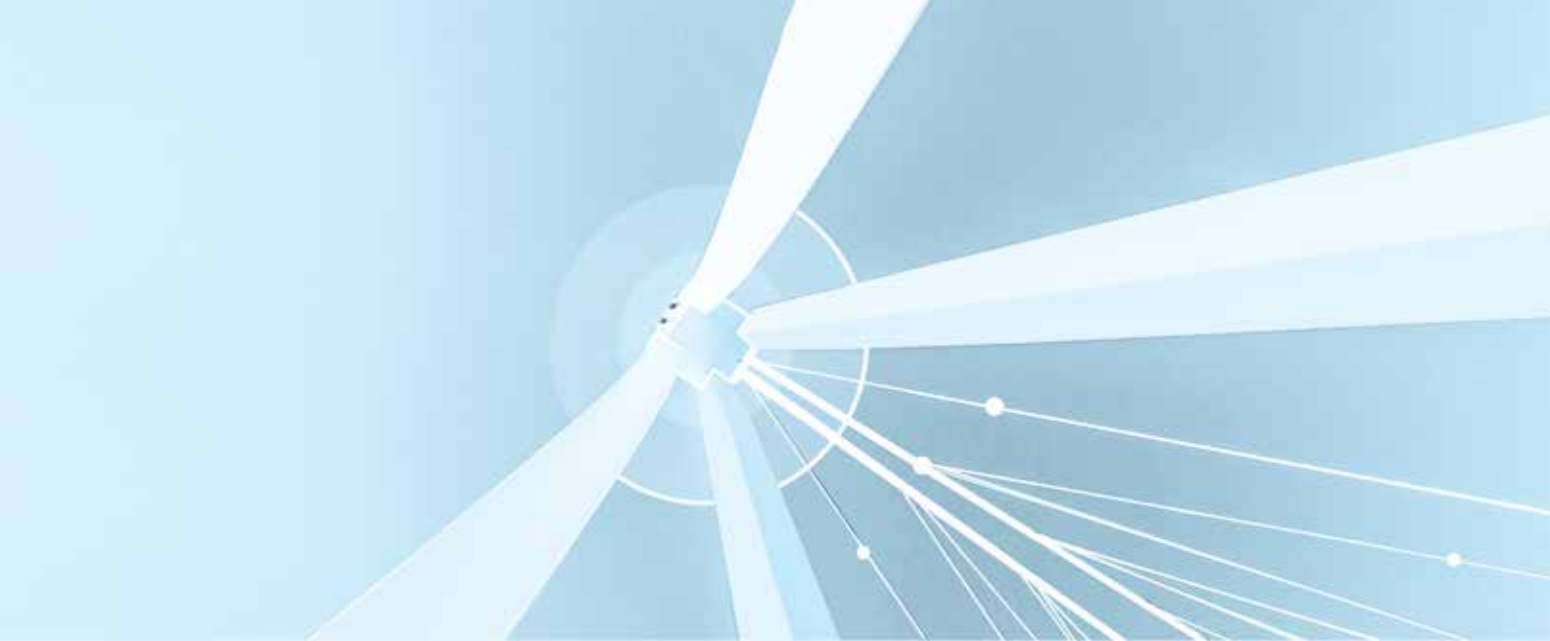
2.7.17. EXPORTS TO IMPORTS RATIO FOR TELECOMMUNICATIONS SERVICES

(exports as a percentage of imports)



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





3. IT Industry

3.1. General Characteristics of the IT Industry

3.1.1. MAIN INDICATORS OF THE IT INDUSTRY

	2010	2011	2012	2013
Number of enterprises, <i>thousand, at the end of the year</i>	52	57	61	65
Number of employees				
thousand	294	281	304	343
as a percentage of the total number of employees in the organisation	0.6	0.6	0.7	0.7
Gross value added				
billion roubles	250	284	398	391
as a percentage of GDP	0.6	0.6	0.8	0.7
Sales, <i>billion roubles</i>	317	322	369	460
Fixed capital investment, <i>billion roubles</i>*	...	...	16	13
Foreign investment, <i>million US dollars</i>	51	35	67	255

* Excluding data on small businesses.

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

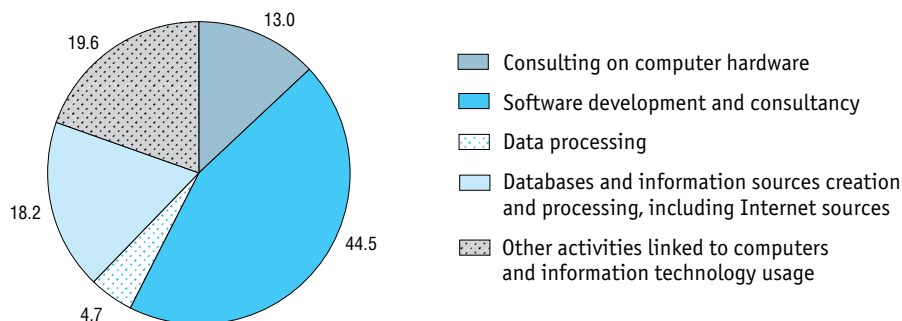
3.1.2. IT INDUSTRY ENTERPRISES BY ECONOMIC ACTIVITY

(thousand; at the end of the year)

	RCEA code (Rev. 1.1)	2010	2012	2013
IT industry – total		52.1	60.8	64.7
Consulting on computer hardware	72.1	8.0	8.4	8.4
Software development and consultancy	72.2	23.0	27.0	28.8
Data processing	72.3	2.3	2.8	3.1
Databases and information sources creation and processing, including Internet sources	72.4	9.3	11.1	11.8
Other activities linked to computers and information technology usage	72.6	9.5	11.5	12.6

3.1.3. PERCENTAGE DISTRIBUTION OF IT INDUSTRY ENTERPRISES BY ECONOMIC ACTIVITY: 2013

(per cent; at the end of the year)

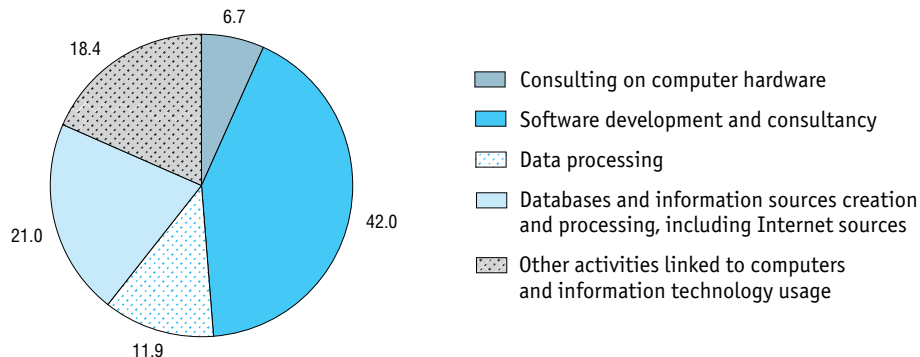


3.1.4. EMPLOYMENT IN THE IT INDUSTRY BY ECONOMIC ACTIVITY

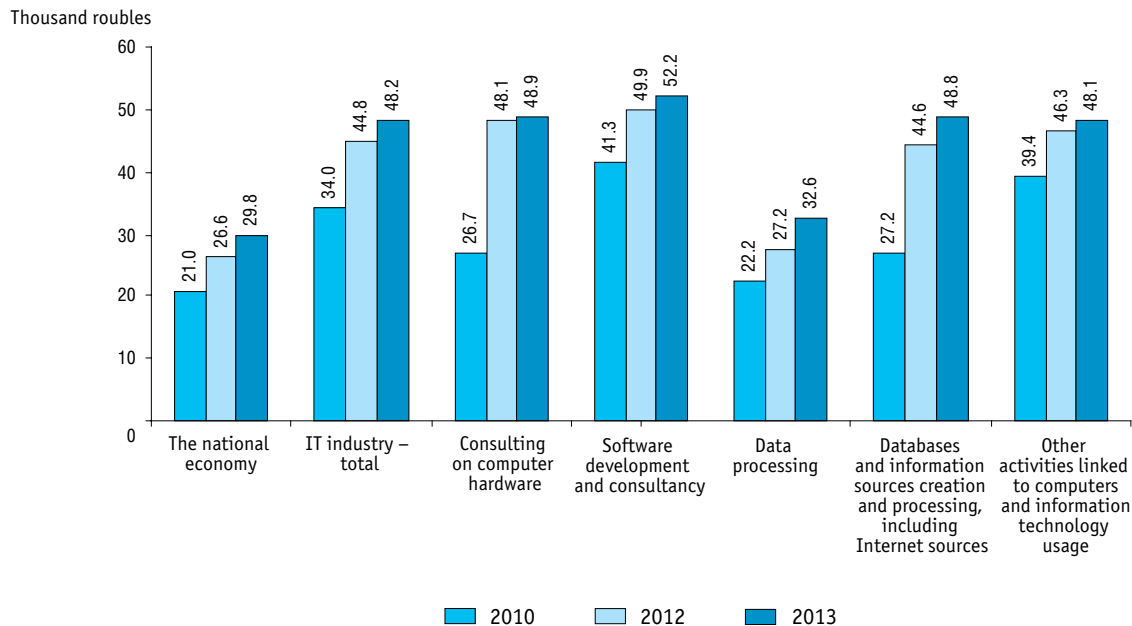
(thousand)

	RCEA code (Rev. 1.1)	2010	2012	2013
IT industry – total		294.1	304.2	342.5
Consulting on computer hardware	72.1	24.2	20.1	23.0
Software development and consultancy	72.2	114.1	117.2	144.1
Data processing	72.3	38.2	40.9	40.6
Databases and information sources creation and processing, including Internet sources	72.4	68.9	72.2	71.8
Other activities linked to computers and information technology usage	72.6	48.7	53.8	63.0

3.1.5. PERCENTAGE DISTRIBUTION OF IT INDUSTRY EMPLOYMENT BY ECONOMIC ACTIVITY: 2013

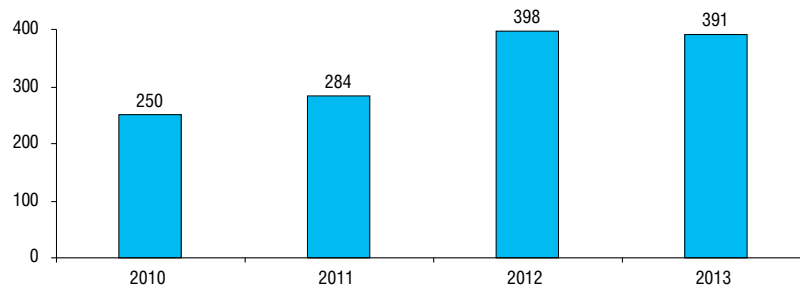


3.1.6. AVERAGE MONTHLY SALARIES PER EMPLOYEE IN IT INDUSTRY ENTERPRISES BY ECONOMIC ACTIVITY



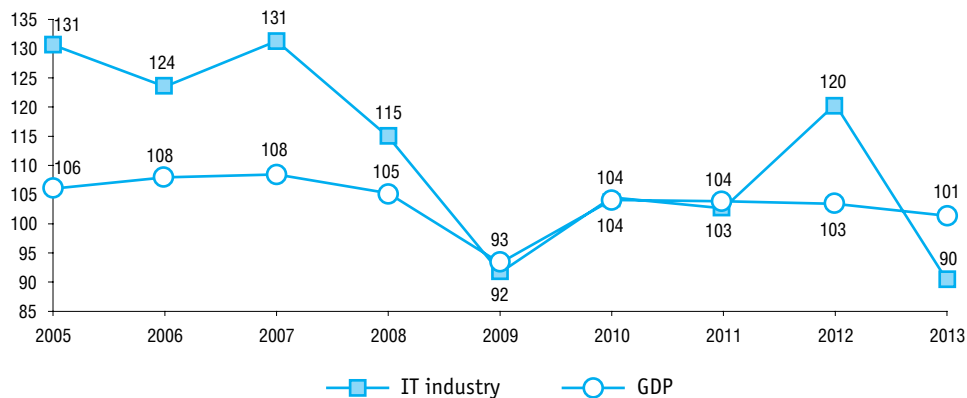
3.1.7. GROSS VALUE ADDED OF IT INDUSTRY ENTERPRISES

(billion roubles)

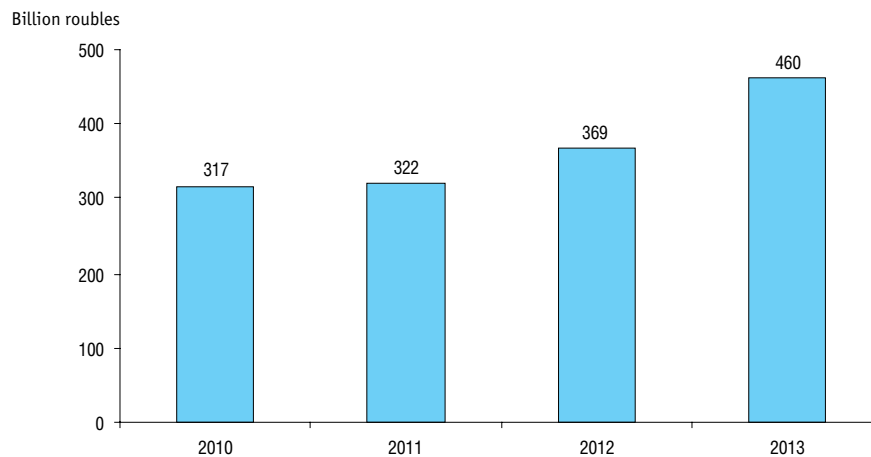


3.1.8. TRENDS IN GROSS VALUE ADDED OF IT INDUSTRY ENTERPRISES

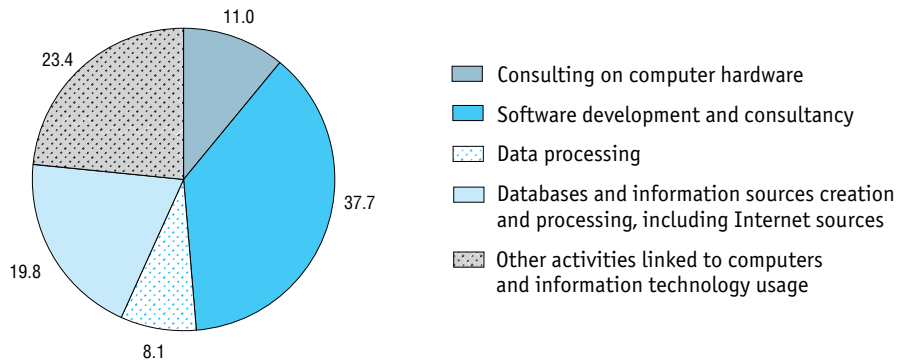
(as a percentage of the previous year; in constant prices)



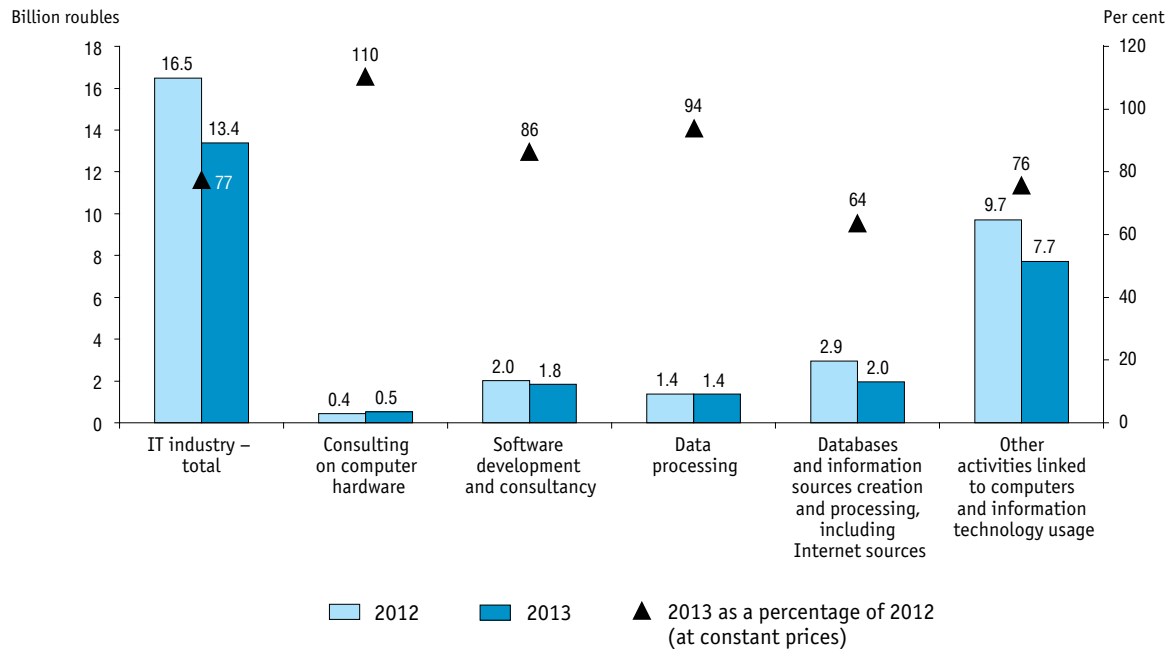
3.1.9. SALES OF IT INDUSTRY ENTERPRISES



3.1.10. PERCENTAGE DISTRIBUTION OF IT INDUSTRY GOODS AND SERVICES SALES BY ECONOMIC ACTIVITY: 2013



3.1.11. FIXED CAPITAL INVESTMENT IN IT INDUSTRY ENTERPRISES BY ECONOMIC ACTIVITY*

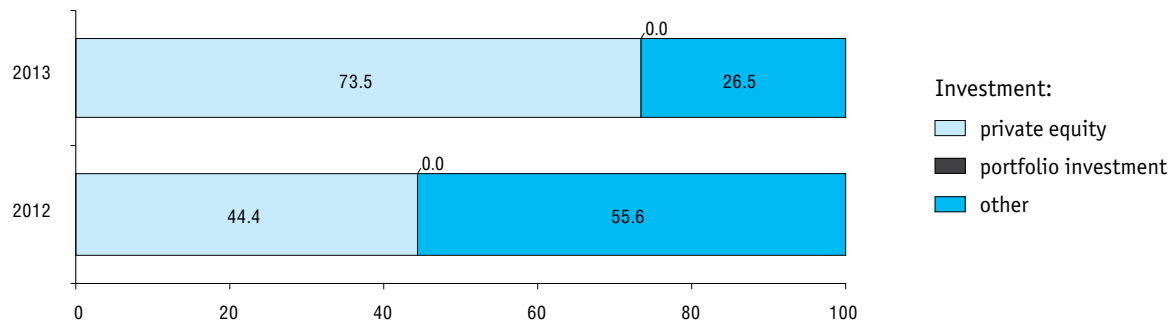


* Excluding data on small businesses.

3.1.12. FOREIGN INVESTMENT IN IT INDUSTRY ENTERPRISES BY ECONOMIC ACTIVITY

	RCEA code (Rev. 1.1)	Thousand US dollars			As a percentage of the total		
		2010	2012	2013	2010	2012	2013
IT industry – total		50555	66973	255346	100	100	100
Consulting on computer hardware	72.1	17935	495	150314	35.5	0.7	58.8
Software development and consultancy	72.2	9612	29179	33130	19.0	43.6	13.0
Data processing	72.3	2419	12849	1005	4.8	19.2	0.4
Databases and information sources creation and processing, including Internet sources	72.4	13665	10614	66318	27.0	15.8	26.0
Other activities linked to computers and information technology usage	72.6	6924	13836	4579	13.7	20.7	1.8

3.1.13. PERCENTAGE DISTRIBUTION OF FOREIGN INVESTMENT IN IT INDUSTRY ENTERPRISES BY TYPE

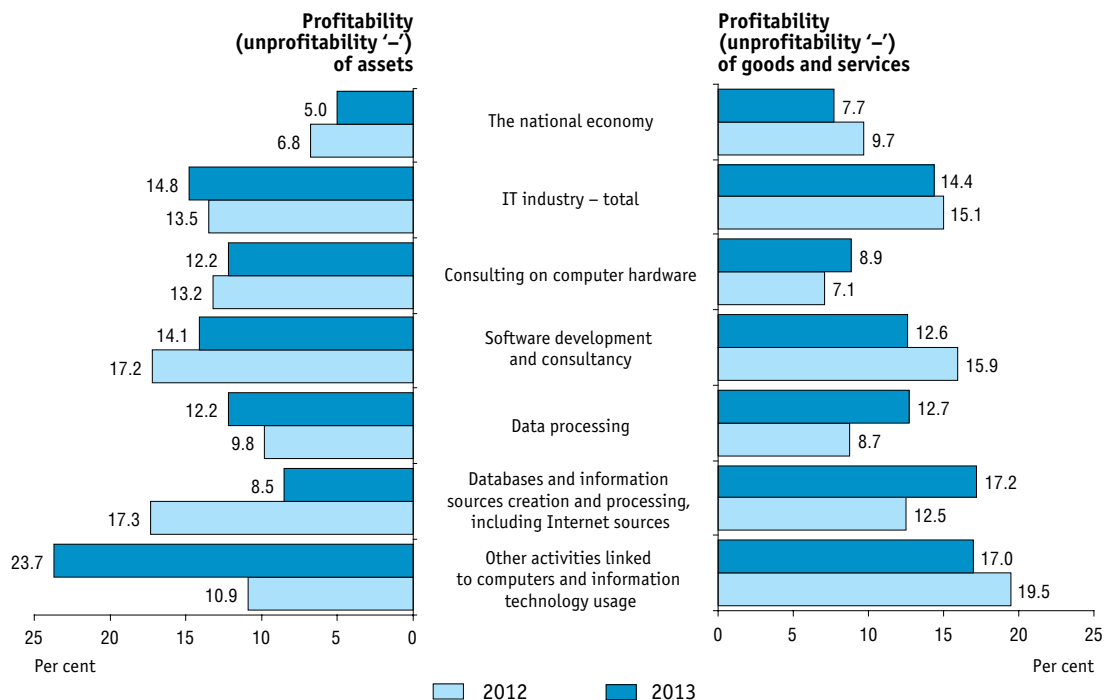


3.1.14. MAIN FINANCIAL EFFECTS OF IT INDUSTRY ENTERPRISES' ACTIVITIES*

	IT industry		As a percentage of the corresponding indicator for the national economy	
	2012	2013	2012	2013
The total number of enterprises surveyed	428	476	0.7	0.8
Loss-making enterprises	71	85	0.5	0.5
Profit-making enterprises	357	391	0.8	0.9
As a percentage of the total number of enterprises surveyed:				
loss-making enterprises	16.6	17.9	–	–
profit-making enterprises	83.4	82.1	–	–
Balance (profit minus loss) of enterprises' activities, <i>million roubles</i>	37986	50247	0.5	0.8
Total losses	2118	2739	0.2	0.2
Total profits	40104	52986	0.5	0.7
Profitability of assets, <i>per cent</i>	13.5	14.8	–	–
Profitability of sales of goods and services, <i>per cent</i>	15.1	14.4	–	–

* Excluding data on small businesses.

3.1.15. PROFITABILITY OF ASSETS AND SALES OF GOODS AND SERVICES OF IT INDUSTRY ENTERPRISES BY ECONOMIC ACTIVITY*



* Excluding data on small businesses.

3.2. Business Activity of Enterprises Rendering IT Services*

3.2.1. MAIN INDICATORS OF ACTIVITIES BY ENTERPRISES RENDERING IT SERVICES

(balances**, per cent)

	Level***			Trends					
				During the year			Expectations for the next year		
	2010	2012	2014	2010	2012	2014	2010	2012	2014
Demand for services	-35	-29	-30	0	+5	-9	+9	+15	+14
Number of contracts (customers)	-21	-28	-32	+1	+8	-7	+9	+15	+19
Cost of services	-12	-24	-23	+9	+10	-1	+10	+15	+19
Prices (tariffs) for services	-4	-13	-9	+11	+17	+4	+5	+10	+15
Number of employees	-7	-20	-14	0	0	-4	+5	+7	+6
Competitiveness	+16	-1	-3	+13	+10	+2	+13	+9	+9
Investment	-25	-38	-31	-8	-7	-4	+1	-1	+1
Economic status of enterprises	-10	-22	-28	-6	+1	-7	+4	+8	+11

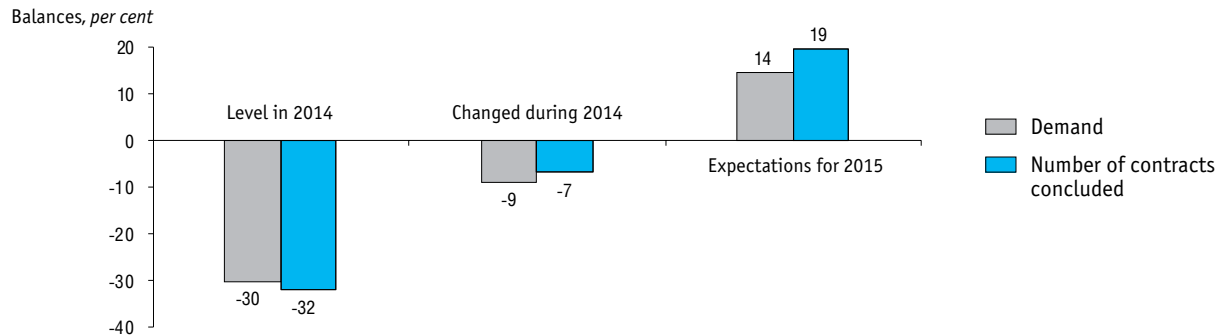
* Enterprises engaged in computer related activities (the RCEA code (Rev. 1.1) – 72).

** 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.

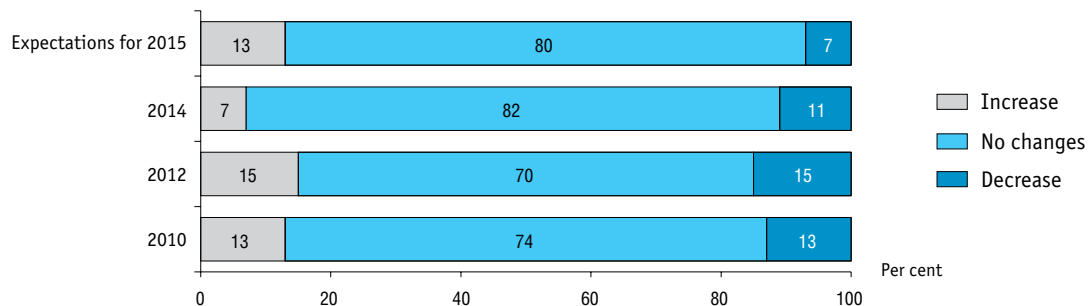
*** Implies a level that is acceptable, regular, sufficient under the current conditions of activity during the surveyed period.

Source (here and below in the section): the results of specialised surveys of enterprises conducted by HSE Institute for Statistical Studies and Economics of Knowledge with the participation of ANO "Statistics of Russia" in the framework of the project "Monitoring business environment of real sector and service sector enterprises" within the HSE Basic Research Programme.

3.2.2. ASSESSMENTS OF DEMAND CHANGE AND NUMBER OF CONTRACTS CONCLUDED IN ENTERPRISES RENDERING IT SERVICES

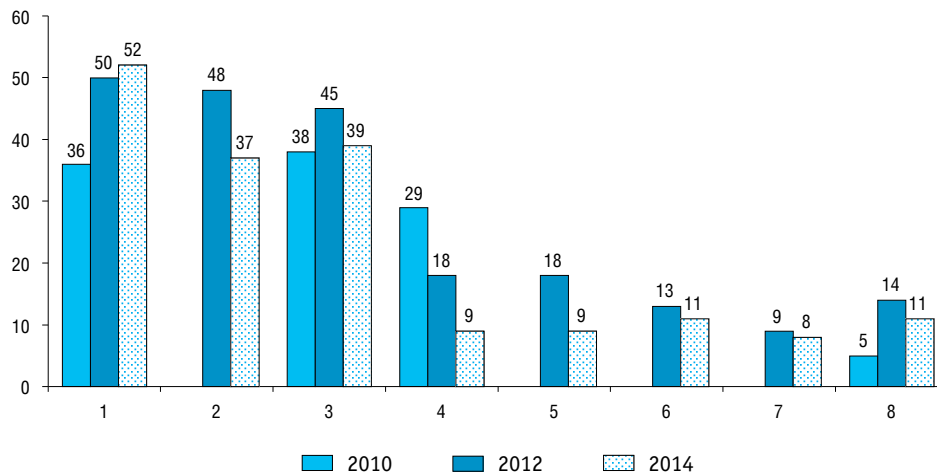


3.2.3. EMPLOYEE TURNOVER ASSESSMENTS IN ENTERPRISES RENDERING IT SERVICES



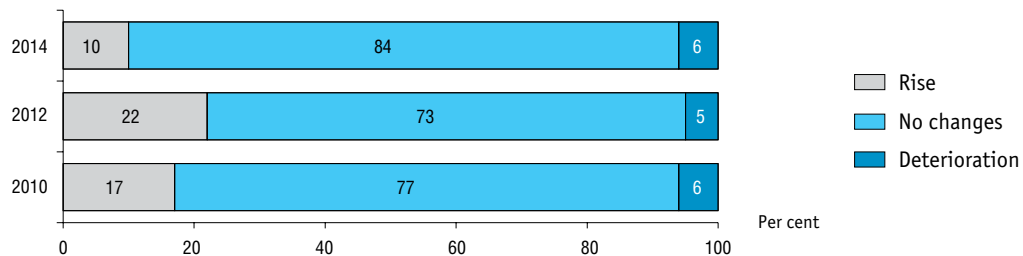
3.2.4. ENTERPRISES RENDERING IT SERVICES BY TYPE

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

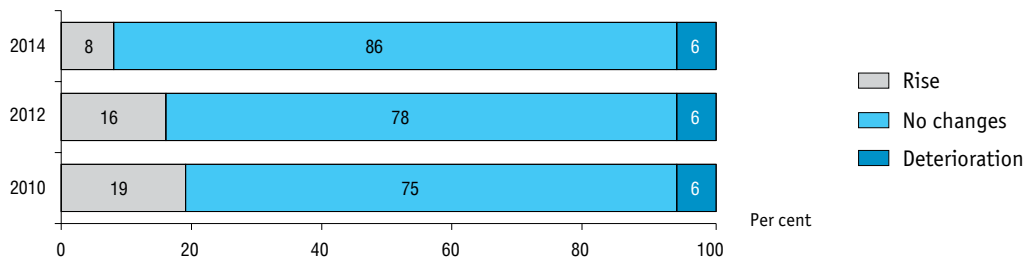


- 1 – Software development and consultancy
- 2 – Hardware and software installation and maintenance, related training and coaching
- 3 – Databases and information sources creation and processing
- 4 – Services of data processing centres
- 5 – Information security
- 6 – Outsourcing
- 7 – E-commerce and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

3.2.5. PRICE (TARIFF) CHANGE ASSESSMENTS IN ENTERPRISES RENDERING IT SERVICES

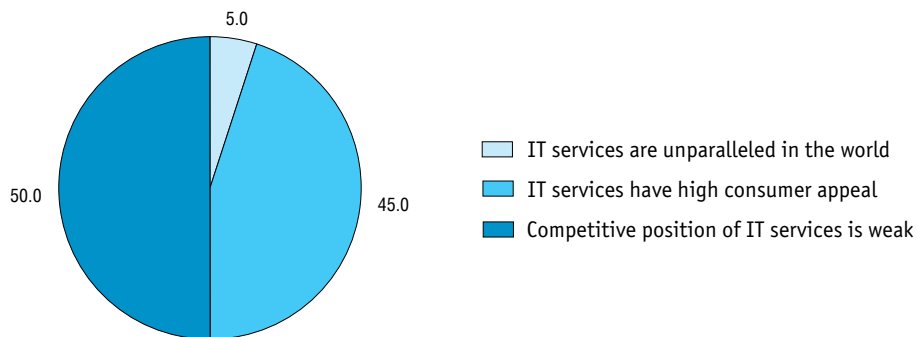


3.2.6. COMPETITIVENESS CHANGE ASSESSMENTS OF ENTERPRISES RENDERING IT SERVICES



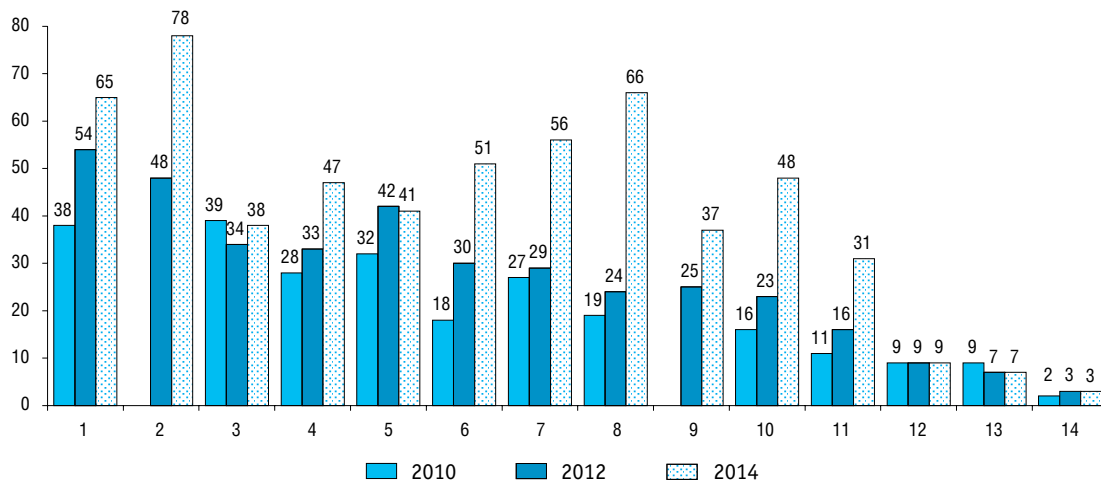
3.2.7. ASSESSMENT OF THE COMPETITIVE ADVANTAGES OF ENTERPRISES RENDERING IT SERVICES: 2014

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



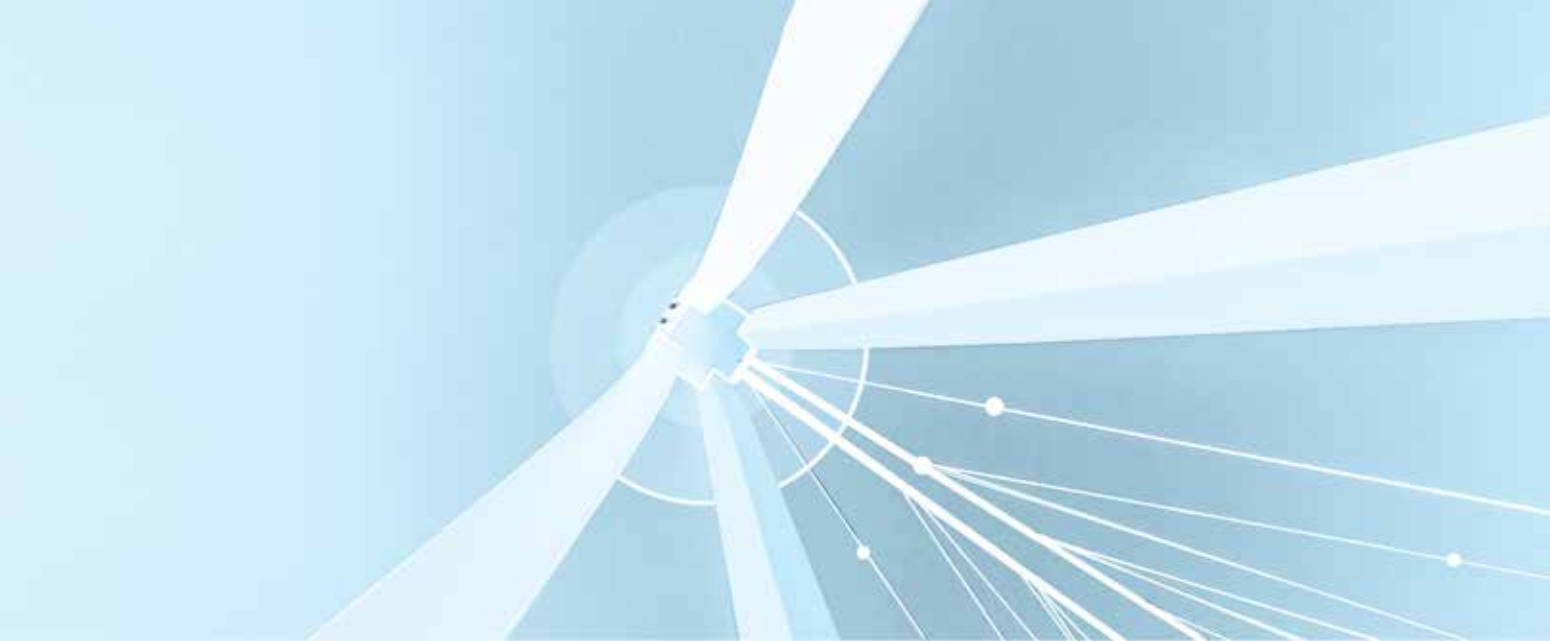
3.2.8. ASSESSMENT OF FACTORS RESTRICTING BUSINESS ACTIVITIES OF ENTERPRISES RENDERING IT SERVICES

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



- 1 – Current taxation level
- 2 – Insolvency of potential customers
- 3 – Insufficient demand
- 4 – Lack of qualified personnel
- 5 – Lack of funds
- 6 – Unfair competition on the market
- 7 – High cost of hardware, software, communication tools and services

- 8 – High rent
- 9 – High level of piracy
- 10 – High interest rate for commercial credits
- 11 – Poor legal framework
- 12 – Lack of equipment
- 13 – Lack of premises
- 14 – Other



4. Content and Media Sector

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

	2010	2011	2012	2013
Number of enterprises, <i>thousand, at the end of the year</i>	51.3	51.4	50.9	50.2
Employment				
thousand	261.2	250.8	226.0	223.8
as a percentage of the total number of employees in the organisation	0.6	0.5	0.5	0.5
Gross value added*:				
billion roubles	206.4	208.4	227.3	241.7
as a percentage of GDP	0.5	0.4	0.4	0.4
Fixed capital investment, <i>billion roubles</i> **	5.4	8.9	9.8	9.5
Foreign investment received, <i>million US dollars</i>	168.0	54.1	51.2	31.1

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

** Excluding data on small businesses.

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

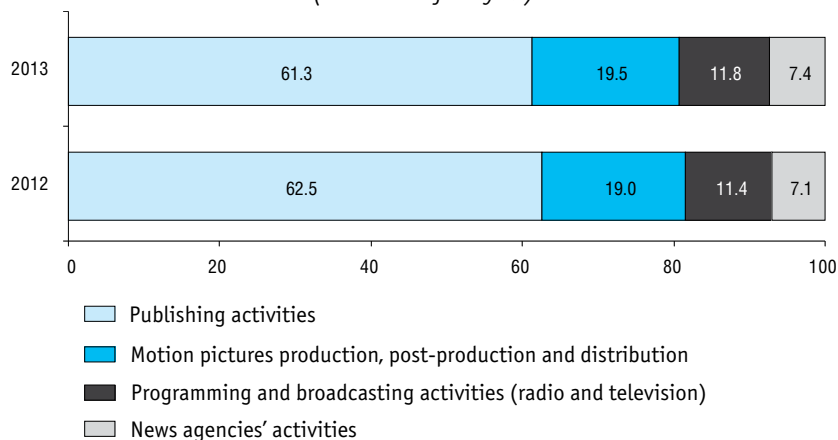
4.2. CONTENT AND MEDIA SECTOR ENTERPRISES BY ECONOMIC ACTIVITY

(thousand; at the end of the year)

	RCEA Code (Rev. 1.1)	2010	2012	2013
Total		51.3	50.9	50.2
Publishing activities	22.1	32.9	31.8	30.8
Motion pictures production, post-production and distribution	92.1	9.3	9.7	9.8
Programming and broadcasting activities (radio and television)	92.2	5.6	5.8	5.9
News agencies' activities	92.4	3.5	3.6	3.7

4.3. PERCENTAGE DISTRIBUTION OF CONTENT AND MEDIA SECTOR ENTERPRISES BY ECONOMIC ACTIVITY

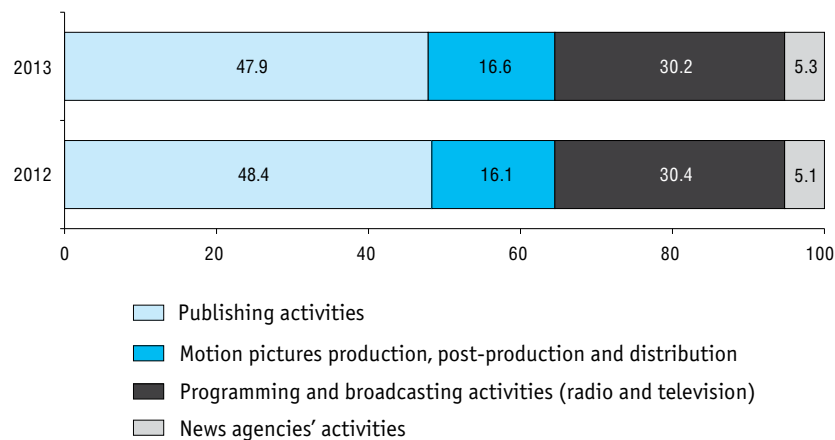
(at the end of the year)



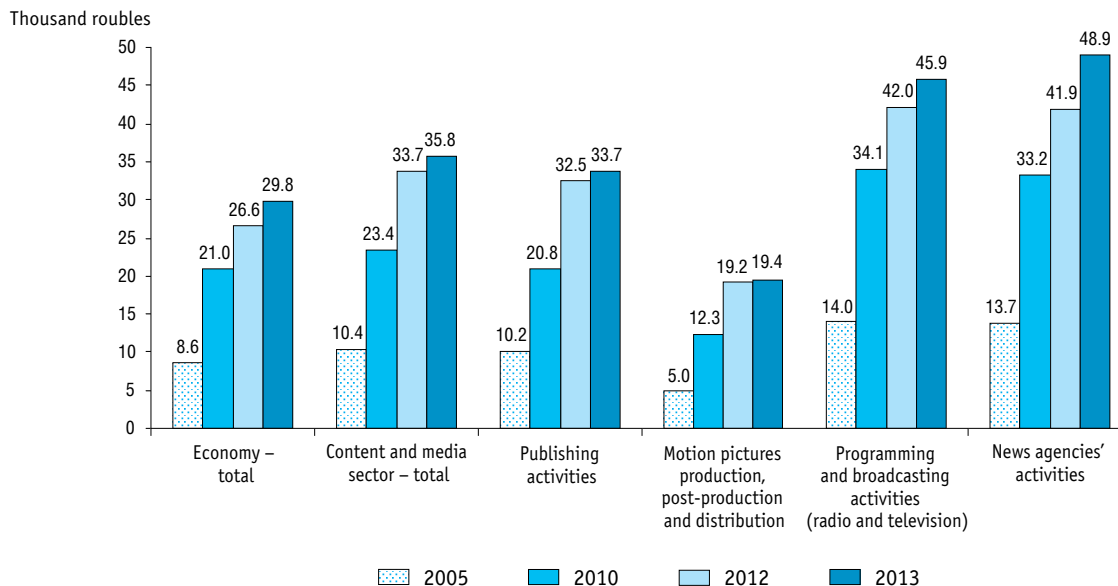
4.4. EMPLOYMENT IN CONTENT AND MEDIA SECTOR ENTERPRISES BY ECONOMIC ACTIVITY (thousand)

	RCEA Code (Rev. 1.1)	2010	2012	2013
Total		261.2	226.0	223.8
Publishing activities	22.1	148.5	109.3	107.2
Motion pictures production, post-production and distribution	92.1	37.2	36.4	37.2
Programming and broadcasting activities (radio and television)	92.2	64.7	68.7	67.5
News agencies' activities	92.4	10.8	11.6	11.9

4.5. PERCENTAGE DISTRIBUTION OF EMPLOYMENT IN CONTENT AND MEDIA SECTOR ENTERPRISES BY ECONOMIC ACTIVITY



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



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

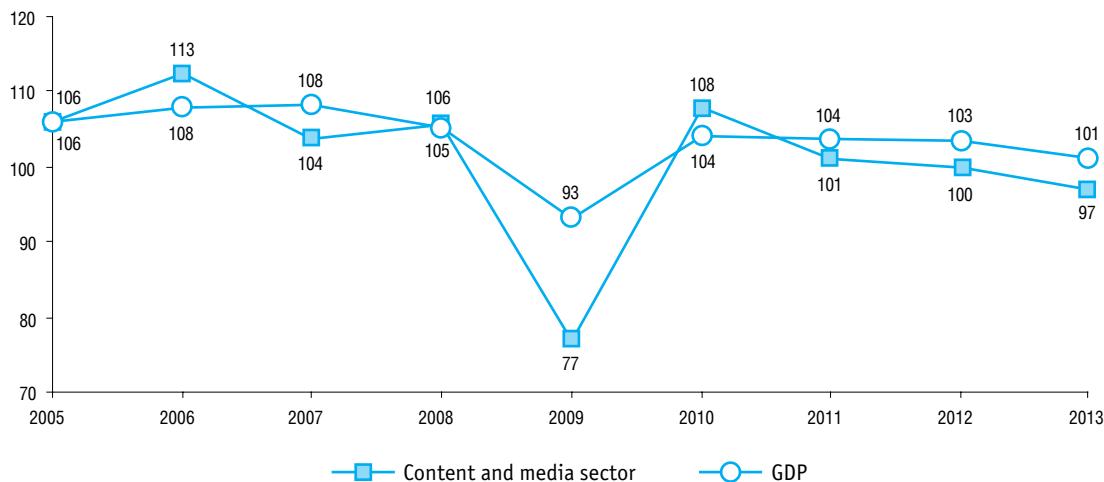
(billion roubles)

	RCEA code (Rev. 1.1)	2010	2012	2013
Total		206.4	227.3	241.7
Publishing activities	22.1	70.1	75.3	75.3
Motion pictures production, post-production and distribution; programming and broadcasting activities (radio and television)	92.1; 92.2	136.3	152.0	166.4

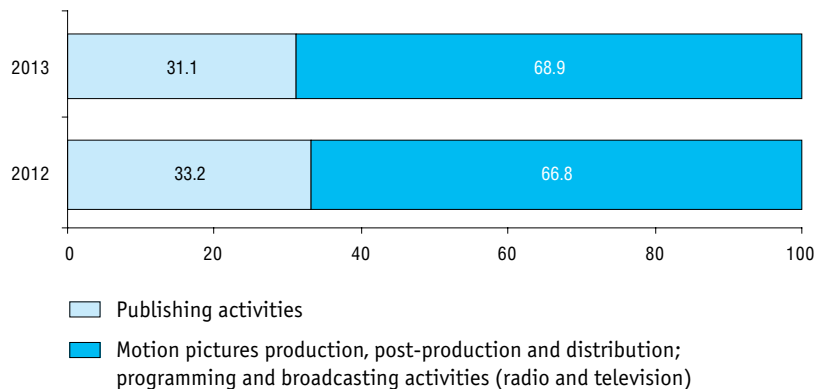
* Excluding data on news agencies' activities (RCEA code (Rev. 1.1) – 92.4).

4.8. TRENDS IN GROSS VALUE ADDED OF CONTENT AND MEDIA SECTOR ENTERPRISES

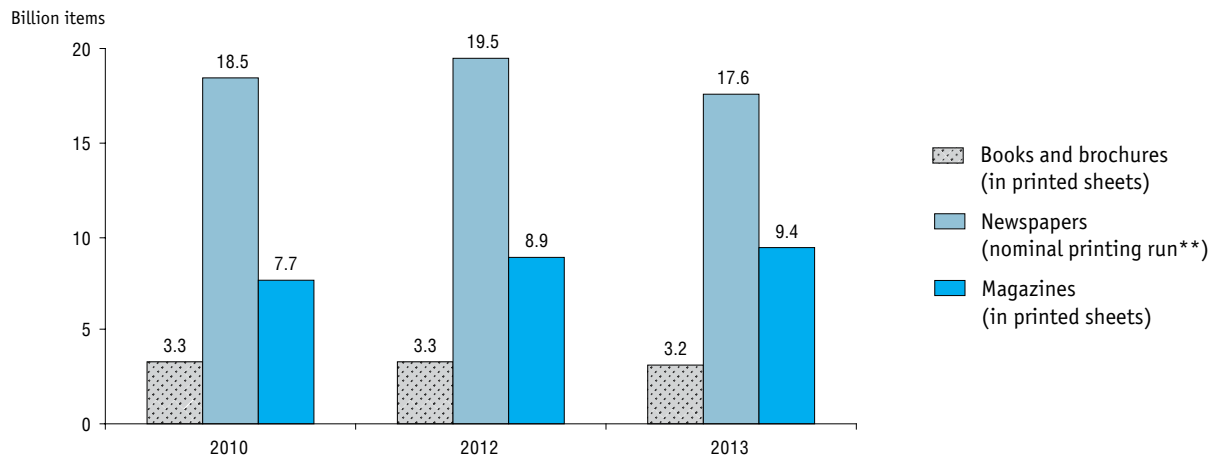
(as a percentage of the previous year; at constant prices)



4.9. PERCENTAGE DISTRIBUTION OF GROSS VALUE ADDED OF CONTENT AND MEDIA SECTOR ENTERPRISES BY ECONOMIC ACTIVITY



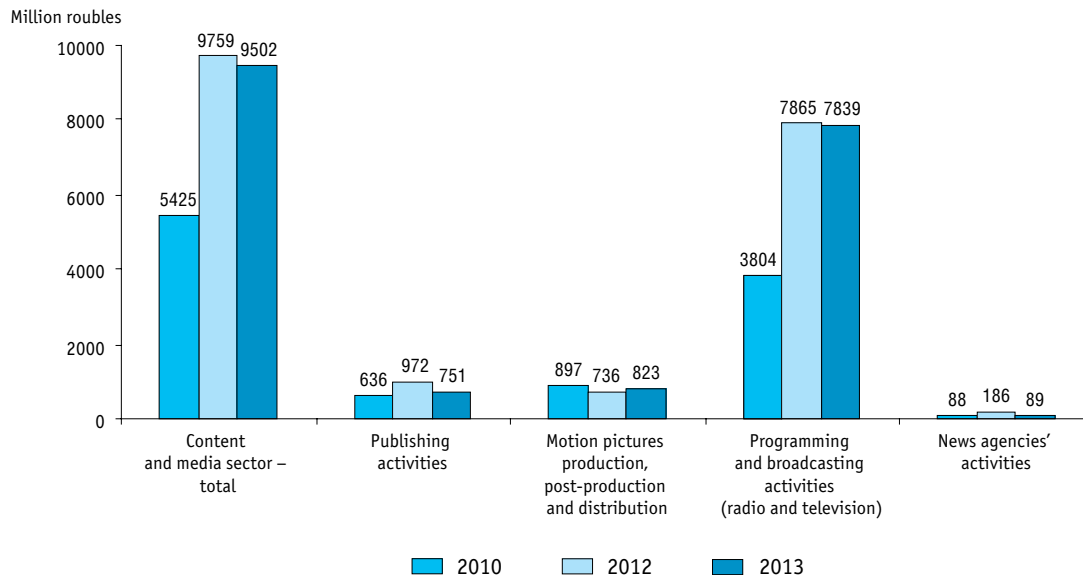
4.10. PRODUCTION OF BOOKS, NEWSPAPERS AND MAGAZINES*



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

** Four columns, A2 format.

4.11. FIXED CAPITAL INVESTMENT IN CONTENT AND MEDIA SECTOR ENTERPRISES BY ECONOMIC ACTIVITY*

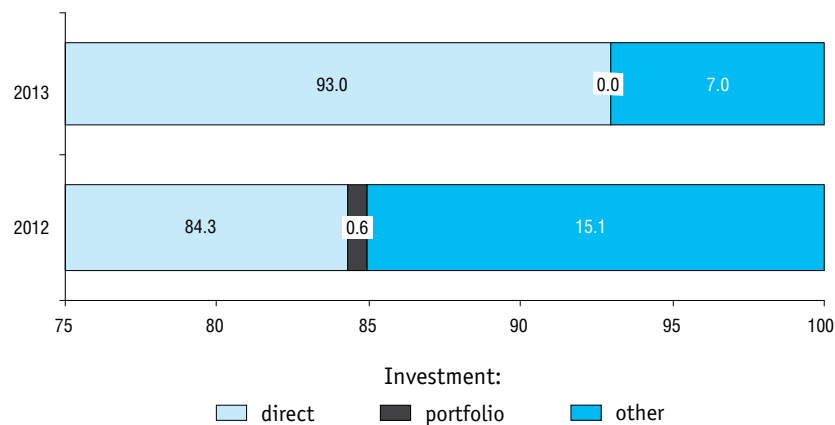


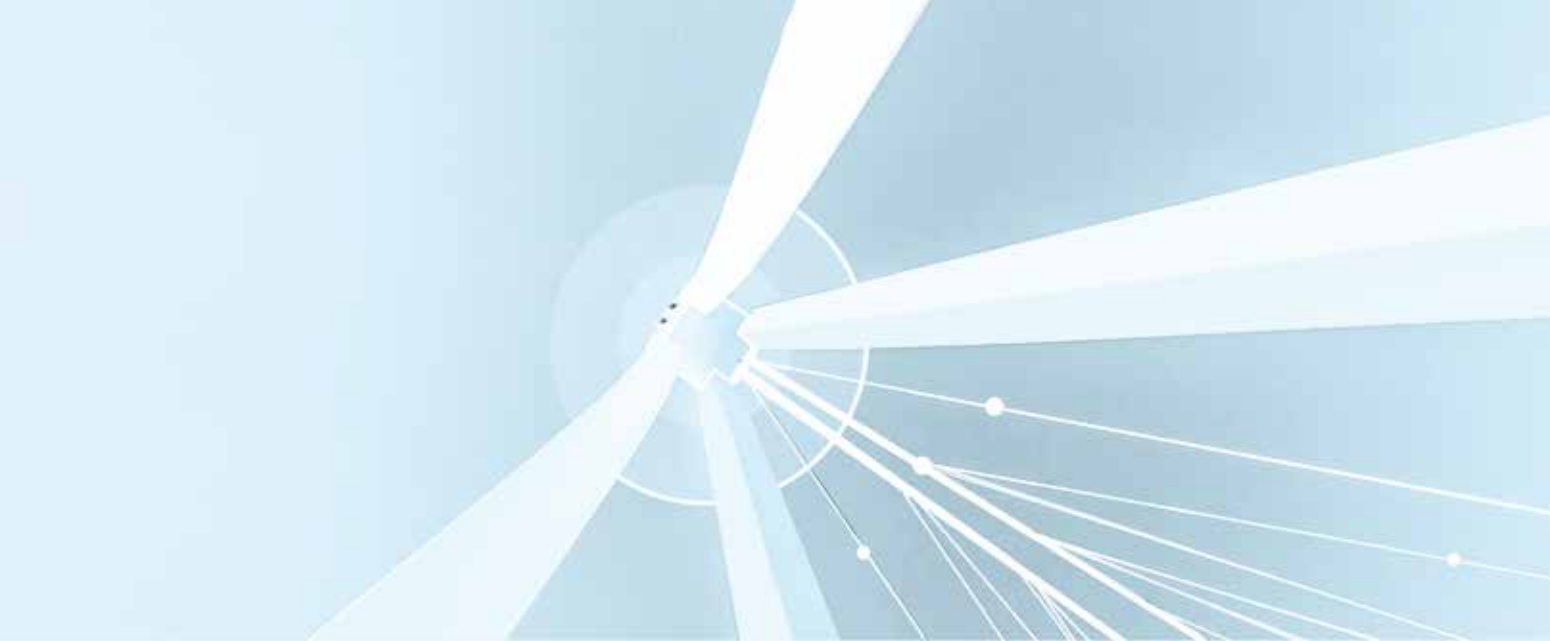
* Excluding data on small businesses.

4.12. 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	2012	2013	2010	2012	2013
Content and media sector – total		167964	51153	31117	100	100	100
Publishing activities	22.1	71263	43531	15171	42.4	85.1	48.8
Motion pictures production, post-production and distribution	92.1	42073	5395	14631	25.0	10.5	47.0
Programming and broadcasting activities (radio and television)	92.2	54519	2135	1315	32.5	4.2	4.2
News agencies' activities	92.4	109	93	–	0.1	0.2	–

4.13. PERCENTAGE DISTRIBUTION OF FOREIGN INVESTMENT IN CONTENT AND MEDIA SECTOR ENTERPRISES BY TYPE





5. ICT Usage by Enterprises

5.1. Main Indicators of ICT Usage by Enterprises

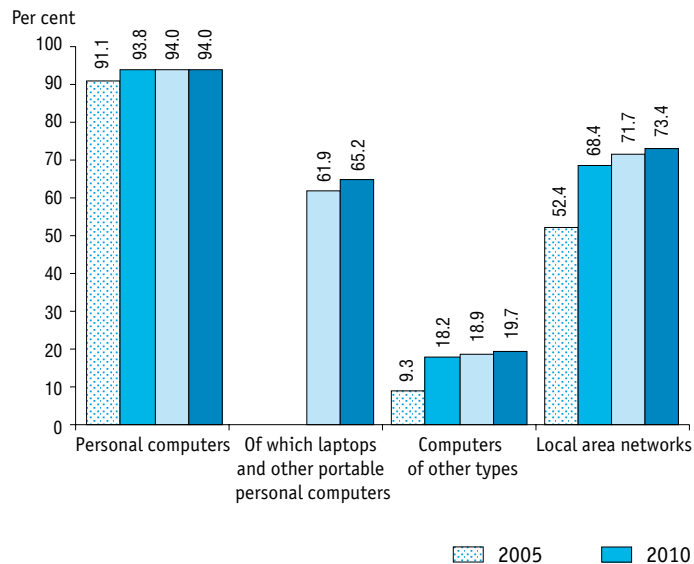
5.1.1. ENTERPRISES USING ICT

	2005	2010	2012	2013
Enterprises surveyed	150934	176684	185053	193419
Enterprises using:				
personal computers	137436	165809	174011	181736
of which laptops and other portable personal computers	...	...	114630	126021
computers of other types	13990	32070	35067	38134
local area networks	79054	120825	132681	141919
of which wireless	...	...	41375	48908
global information networks	81910	147311	162012	171567
of which:				
Internet	80444	145509	160892	170331
of which broadband	...	100220	141815	153583
Intranet	...	23143	27209	32369
Extranet	...	9452	11905	14835
other global networks	10805	11085	11489	13199
e-mail	84538	144741	157664	167345
dedicated communication lines	28618	57722	63865	68952
Enterprises having a website	22348	50324	69905	79797

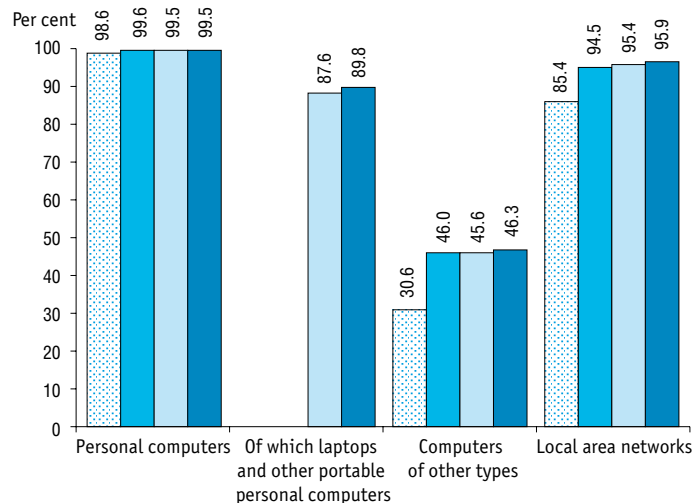
Source (here and below in the section): own calculations of HSE Institute for Statistical Studies and Economics of Knowledge based on the data provided by the Federal State Statistics Service.

5.1.2. USAGE OF COMPUTING MACHINERY

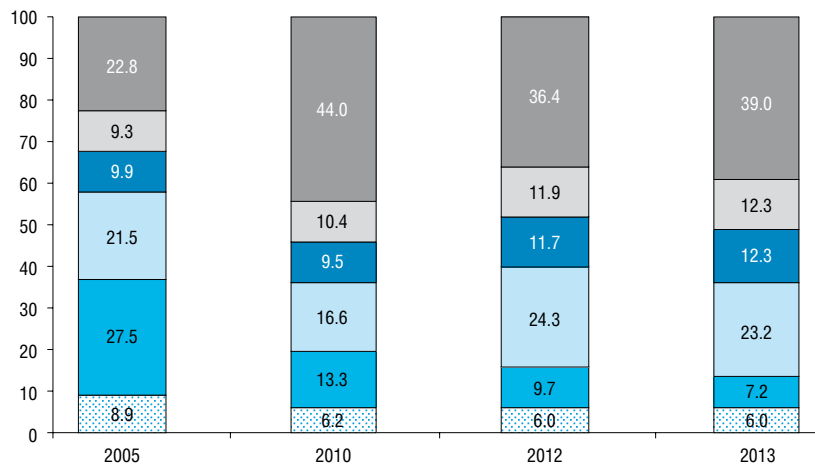
**Enterprises using computing machinery
as a percentage of the total number of enterprises**



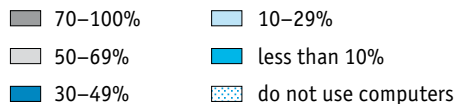
**Personnel of enterprises using computing machinery
as a percentage of the total employment**



5.1.3. DISTRIBUTION OF ENTERPRISES BY SHARE OF PERSONNEL USING COMPUTERS

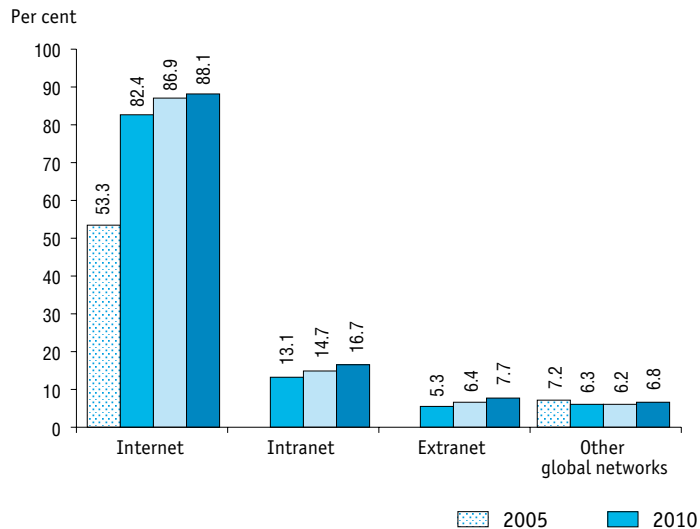
(as a percentage of the total number of enterprises)

Enterprises with the share of personnel using personal computers:

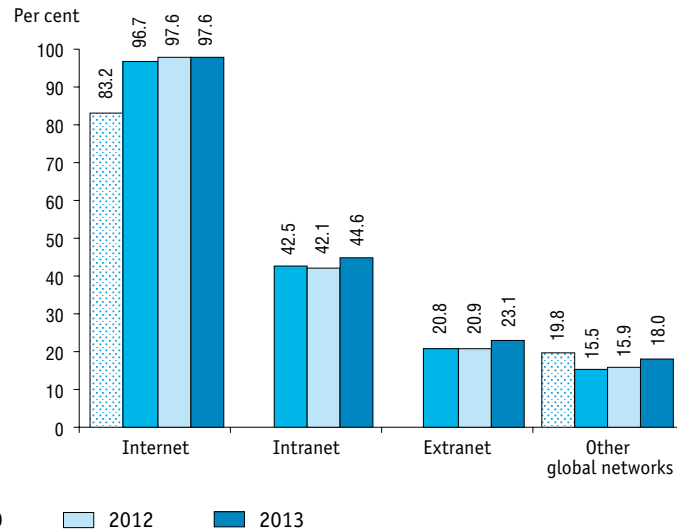


5.1.4. USAGE OF GLOBAL INFORMATION NETWORKS IN ENTERPRISES BY TYPE

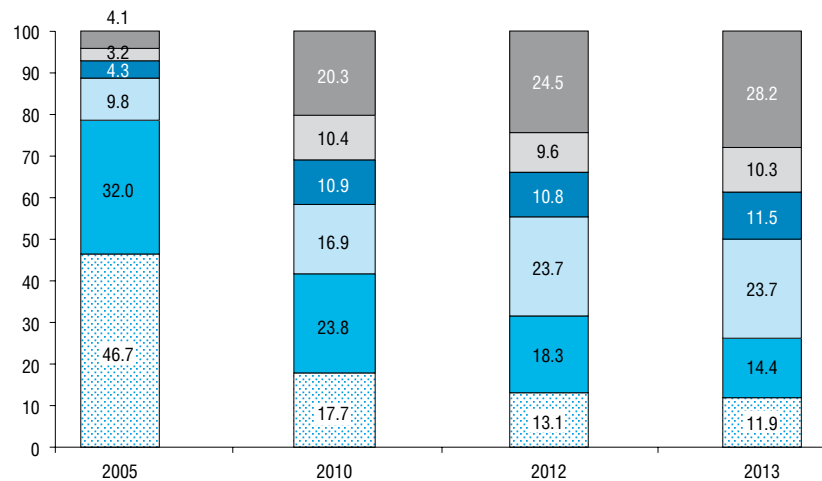
**Enterprises using global networks
as a percentage of the total number of enterprises**



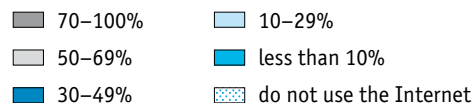
**Personnel of enterprises using global networks
as a percentage of the total employment**



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

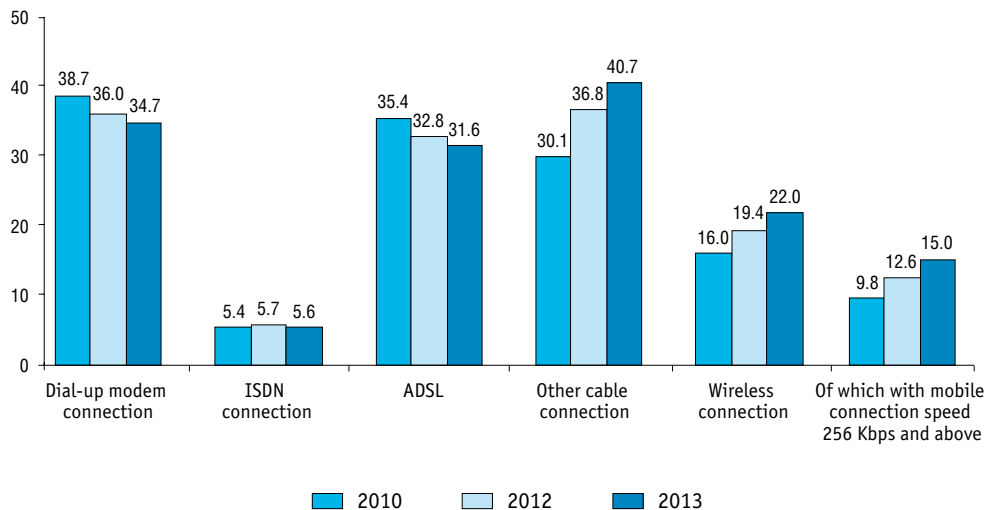
(as a percentage of the total number of enterprises)

Enterprises with the share of personnel using the Internet:

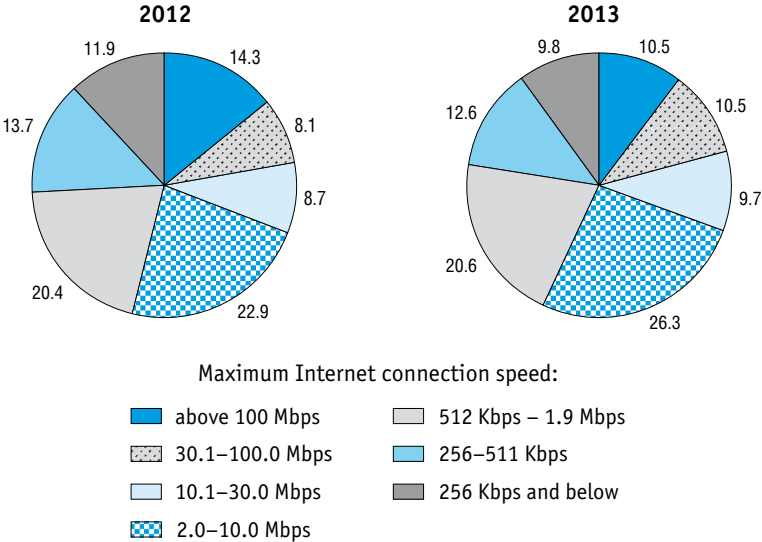


5.1.6. DISTRIBUTION OF ENTERPRISES BY TYPE OF INTERNET CONNECTION

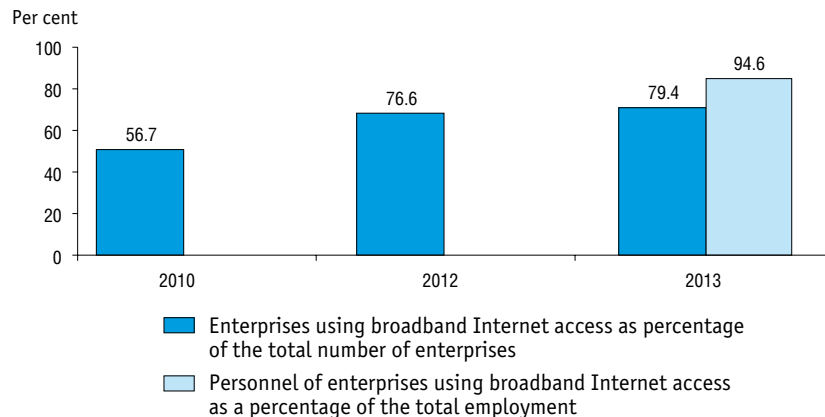
(as a percentage of the total number of enterprises)



5.1.7. DISTRIBUTION OF ENTERPRISES BY INTERNET CONNECTION SPEED
(as a percentage of the total number of enterprises using the Internet)

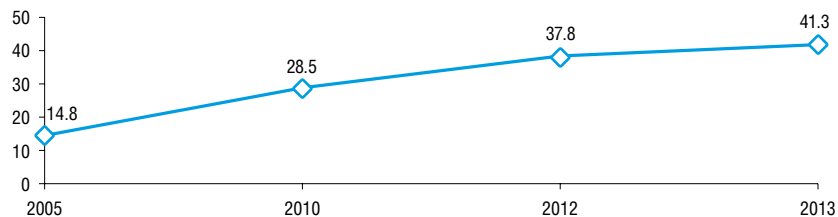


5.1.8. ENTERPRISES USING BROADBAND INTERNET ACCESS

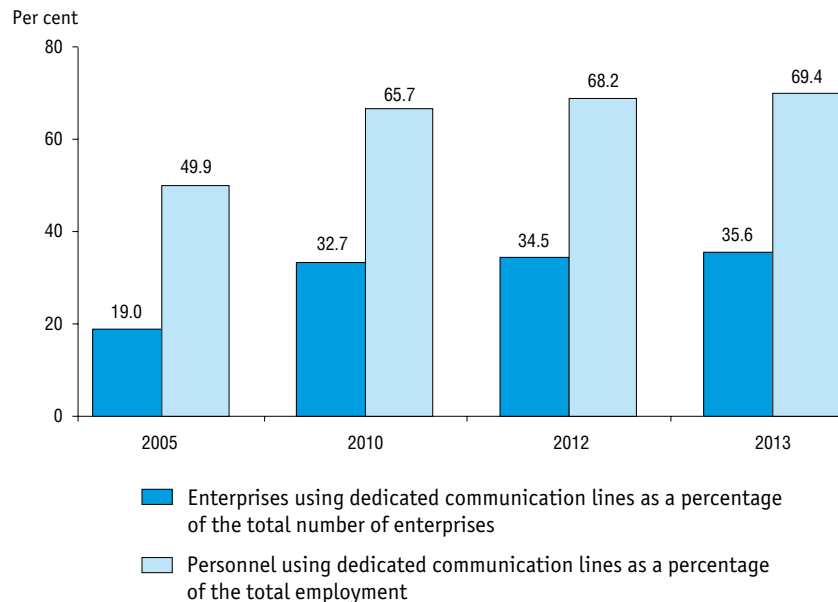


5.1.9. ENTERPRISES WITH A WEBSITE

(as a percentage of the total number of enterprises)

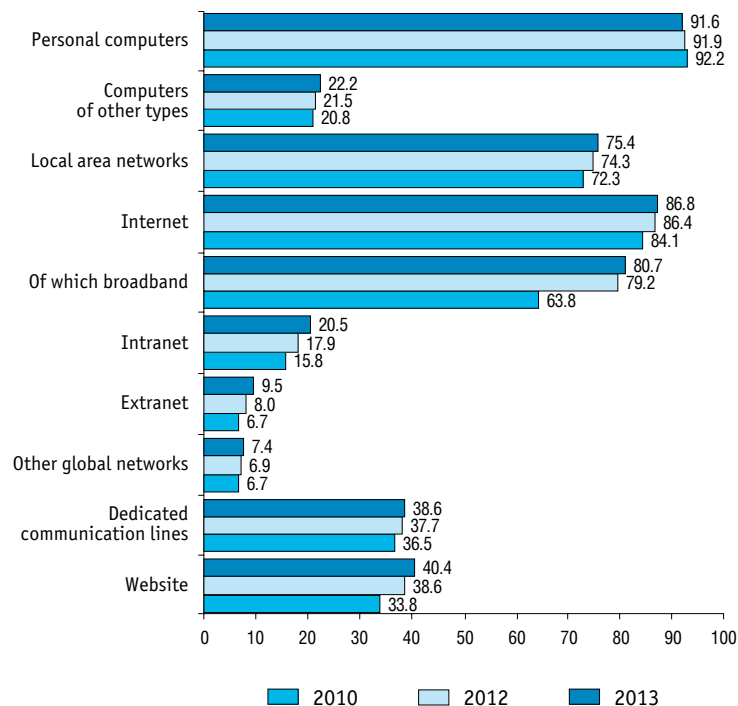


5.1.10. ENTERPRISES USING DEDICATED COMMUNICATION LINES



5.1.11. ICT USAGE IN THE BUSINESS ENTERPRISE SECTOR*

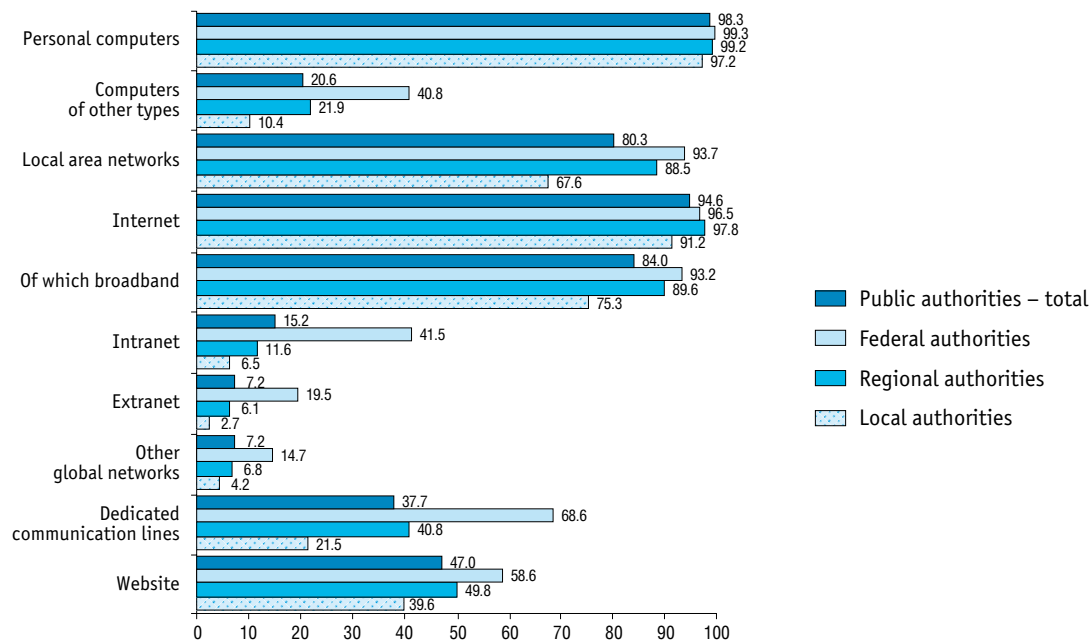
(as a percentage of the total number of enterprises)



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

5.1.12. ICT USAGE BY PUBLIC AUTHORITIES: 2013*

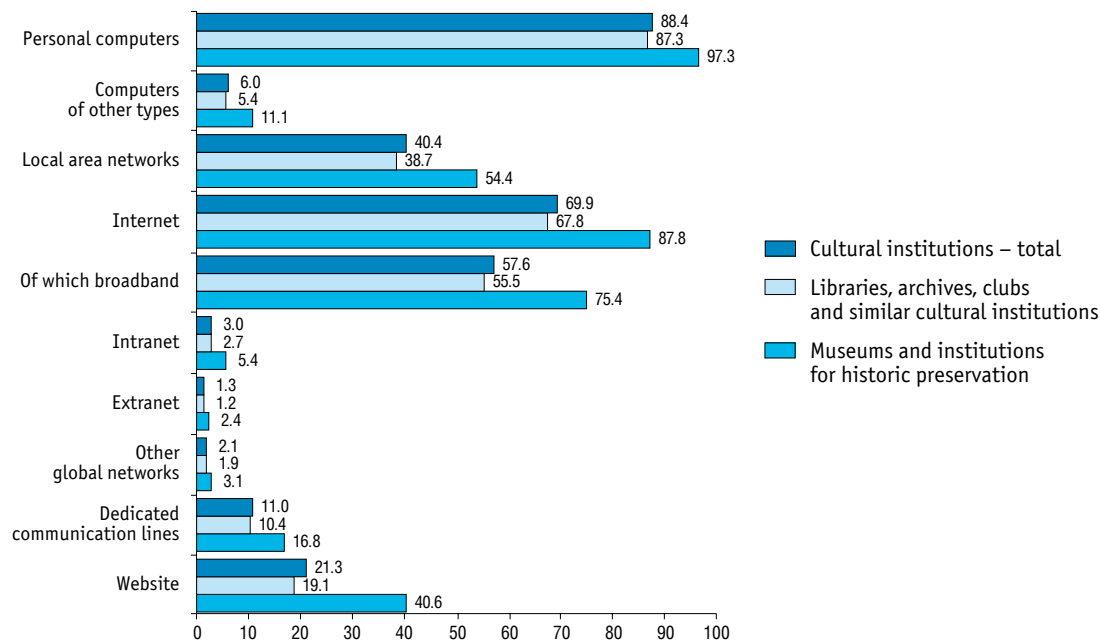
(as a percentage of the total number of enterprises)



* 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).

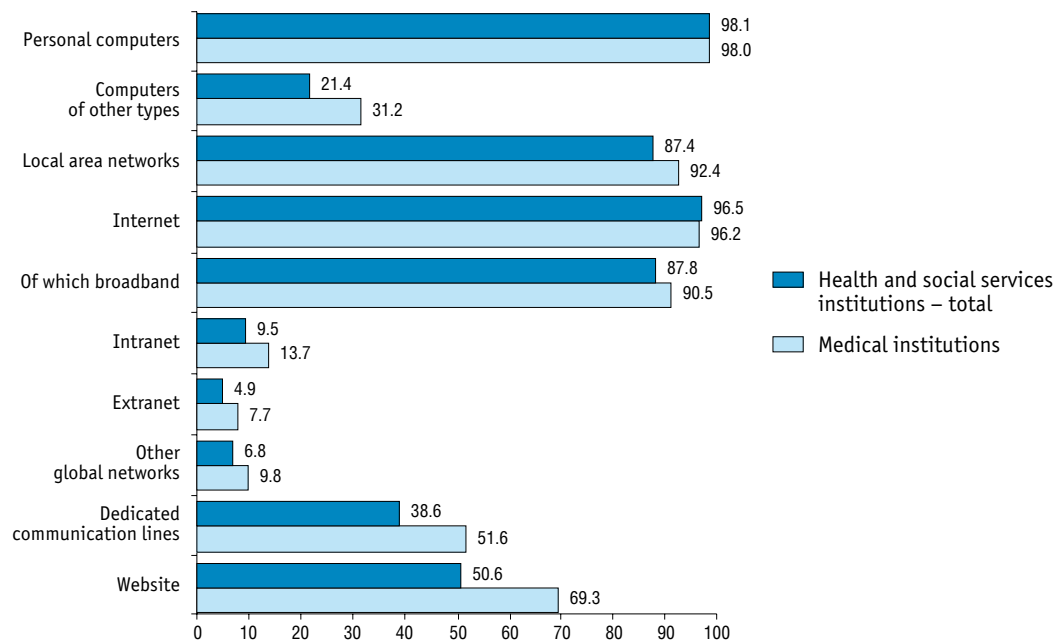
5.1.13. ICT USAGE BY CULTURAL INSTITUTIONS: 2013*

(as a percentage of the total number of enterprises)



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

5.1.14. ICT USAGE BY HEALTH AND SOCIAL SERVICES INSTITUTIONS: 2013*

(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).

5.1.15. 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	2012	2013	2005	2010	2012	2013
Total	91.1	93.8	94.0	94.0	9.3	18.2	18.9	19.7
Mining and quarrying	93.9	93.9	93.7	95.6	16.5	31.7	31.4	30.4
Manufacture of food products and beverages	91.3	97.6	97.3	97.7	11.3	25.6	26.6	27.2
Manufacture of chemicals and chemical products	96.8	98.0	98.4	97.3	18.6	31.4	29.2	31.2
Manufacture of basic metals	96.0	97.7	96.9	96.9	15.6	28.8	28.9	29.4
Manufacture of machinery and equipment, n.e.c.	91.3	97.7	96.8	96.9	12.2	26.3	27.6	26.9
Manufacture of electrical machinery and apparatus	98.5	98.8	98.5	98.2	18.9	30.0	29.8	30.2
Electricity, gas and water supply	90.9	90.5	91.5	92.0	10.7	19.4	20.2	19.9
Construction	93.2	96.6	94.7	94.3	6.2	18.4	18.9	19.4
Wholesale and retail trade	86.0	93.1	94.4	94.5	6.7	22.4	24.6	26.8
Transport	91.1	94.5	93.4	92.2	9.0	21.6	21.9	21.4
Communications	99.6	97.8	99.3	98.8	34.2	50.8	47.8	47.6
Financial intermediation	96.0	96.5	96.8	96.0	34.4	45.7	41.3	40.3
Research and development	96.3	97.5	97.6	96.8	19.2	31.3	31.9	32.5
Public administration; compulsory social security	93.3	98.3	98.0	98.1	8.5	16.9	17.0	17.6
Higher education	98.1	98.8	99.2	98.9	22.0	34.0	35.2	35.0
Health and social work	95.3	98.0	98.4	98.1	4.7	13.7	18.3	21.4
Other activities	86.6	87.3	88.3	88.8	6.8	12.1	12.5	13.4

5.1.16. ENTERPRISES USING LOCAL AREA NETWORKS BY ECONOMIC ACTIVITY

(as a percentage of the total number of enterprises)

	2005	2010	2012	2013
Total	52.4	68.4	71.7	73.4
Mining and quarrying	69.8	82.2	84.7	86.3
Manufacture of food products and beverages	63.6	85.9	87.0	89.0
Manufacture of chemicals and chemical products	82.8	89.0	90.8	88.5
Manufacture of basic metals	75.7	86.5	88.2	89.7
Manufacture of machinery and equipment, n.e.c.	67.2	85.9	88.6	87.1
Manufacture of electrical machinery and apparatus	83.6	90.4	89.7	90.2
Electricity, gas and water supply	55.8	64.0	69.2	70.7
Construction	58.6	79.6	80.7	81.6
Wholesale and retail trade	47.9	72.6	76.8	79.9
Transport	59.8	77.9	78.9	79.7
Communications	85.4	90.5	91.7	92.3
Financial intermediation	83.7	87.8	88.8	88.8
Research and development	76.1	83.9	86.4	86.2
Public administration; compulsory social security	44.3	67.6	72.2	75.0
Higher education	85.2	91.3	92.7	92.0
Health and social work	51.4	80.4	85.2	87.4
Other activities	47.0	54.3	57.2	59.5

5.1.17. ENTERPRISES USING GLOBAL INFORMATION NETWORKS BY ECONOMIC ACTIVITY

(as a percentage of the total number of enterprises)

	Enterprises using global networks										
	Total				Of which						
					Internet				Of which broadband		
	2005	2010	2012	2013	2005	2010	2012	2013	2010	2012	2013
Total	54.3	83.4	87.5	88.7	53.3	82.4	86.9	88.1	56.7	76.6	79.4
Mining and quarrying	74.1	91.0	91.3	92.9	73.6	90.4	91.1	92.4	70.1	84.2	87.6
Manufacture of food products and beverages	66.2	94.0	95.1	96.1	66.1	93.8	94.9	95.9	74.2	89.0	90.8
Manufacture of chemicals and chemical products	88.1	96.4	97.5	95.4	88.1	96.4	97.4	95.4	86.0	93.4	93.0
Manufacture of basic metals	78.1	94.9	95.5	95.2	78.0	94.6	95.4	95.2	79.0	91.2	91.6
Manufacture of machinery and equipment, n.e.c.	71.8	95.0	94.9	94.7	71.6	95.0	94.8	94.7	79.5	89.7	90.9
Manufacture of electrical machinery and apparatus	86.9	96.3	96.9	96.7	86.9	96.3	96.7	96.7	82.9	93.5	94.1
Electricity, gas and water supply	53.3	77.4	85.1	86.5	53.2	77.1	84.7	86.1	53.6	72.8	75.5
Construction	58.8	92.2	92.1	92.3	58.1	91.5	91.7	91.3	69.1	84.1	85.1
Wholesale and retail trade	55.6	88.1	90.4	91.8	55.2	87.5	90.1	91.4	69.6	84.6	86.6
Transport	56.8	88.0	88.6	88.4	52.4	80.3	82.0	80.9	58.5	74.7	74.6
Communications	94.3	95.4	95.8	96.9	94.0	93.8	93.9	94.8	84.2	90.7	92.3
Financial intermediation	85.1	93.7	95.2	94.5	83.3	93.5	95.0	94.4	83.7	92.1	92.2
Research and development	85.0	94.6	95.4	95.1	85.0	94.5	95.4	95.1	79.9	91.4	91.2
Public administration; compulsory social security	42.8	84.9	91.4	93.2	41.0	83.2	90.8	92.7	50.0	75.3	79.8
Higher education	91.1	97.2	98.1	97.8	91.0	97.1	98.1	97.8	84.3	94.2	94.7
Health and social work	48.4	93.2	96.0	96.6	47.8	93.0	95.9	96.5	58.0	84.6	87.8
Other activities	52.2	72.2	77.5	79.8	51.9	71.8	77.2	79.5	48.3	67.2	70.8

(continued)

	Enterprises using global networks								
	Of which								
	Intranet			Extranet			other global networks		
	2010	2012	2013	2010	2012	2013	2010	2012	2013
Total	13.1	14.7	16.7	5.3	6.4	7.7	6.3	6.2	6.8
Mining and quarrying	25.9	25.2	29.2	12.7	12.6	14.3	9.6	9.5	10.2
Manufacture of food products and beverages	16.0	18.6	21.3	8.0	9.4	11.7	6.6	7.6	8.2
Manufacture of chemicals and chemical products	27.0	26.2	27.7	14.2	14.3	15.0	9.1	8.3	10.2
Manufacture of basic metals	23.0	23.1	24.1	8.9	10.9	12.1	8.2	6.9	8.1
Manufacture of machinery and equipment, n.e.c.	19.5	21.2	22.5	7.9	7.5	10.8	7.2	7.6	8.0
Manufacture of electrical machinery and apparatus	21.4	22.5	25.3	8.4	9.1	11.0	7.1	7.1	8.1
Electricity, gas and water supply	15.0	16.0	17.9	7.1	7.9	8.9	5.1	5.8	6.2
Construction	11.7	13.2	15.1	5.0	6.2	7.8	5.7	6.1	6.0
Wholesale and retail trade	18.1	23.9	29.1	8.9	11.1	13.4	8.8	8.4	9.7
Transport	23.6	27.0	30.0	6.3	8.2	9.0	8.7	9.5	8.6
Communications	46.7	43.7	47.4	24.6	26.1	26.9	18.9	17.4	18.8
Financial intermediation	51.1	51.7	54.7	23.2	24.4	24.6	20.1	18.8	18.2
Research and development	24.5	25.7	27.8	8.3	10.8	11.6	7.8	9.0	8.8
Public administration; compulsory social security	10.5	11.7	13.3	3.6	4.5	5.6	6.1	5.4	6.0
Higher education	37.1	38.5	38.9	17.3	19.1	20.2	12.4	13.2	15.0
Health and social work	5.4	7.8	9.5	2.1	3.4	4.9	4.7	5.4	6.8
Other activities	7.4	7.9	9.2	3.0	3.6	4.6	3.8	3.8	4.4

5.1.18. 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	
	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013
Total	36.0	34.7	5.7	5.6	32.8	31.6	36.8	40.7	19.4	22.0	12.6	15.0
Mining and quarrying	22.3	20.9	4.7	4.4	32.2	31.8	48.9	53.9	44.8	50.9	28.2	35.3
Manufacture of food products and beverages	30.0	28.2	6.3	5.8	39.3	37.4	45.9	51.2	27.6	32.3	18.0	22.4
Manufacture of chemicals and chemical products	21.6	22.7	5.4	5.9	29.0	25.2	68.8	66.0	36.2	40.3	25.8	29.9
Manufacture of basic metals	24.7	20.7	5.9	5.9	31.3	26.9	56.3	61.2	30.6	33.9	19.5	23.5
Manufacture of machinery and equipment, n.e.c.	24.3	22.1	4.3	4.9	32.1	28.0	57.2	62.8	30.0	32.2	18.2	22.7
Manufacture of electrical machinery and apparatus	22.7	20.2	5.4	5.2	34.1	29.8	65.5	68.9	28.0	32.1	20.4	24.1
Electricity, gas and water supply	35.5	35.0	4.8	4.6	33.3	31.7	32.9	35.7	23.7	26.6	17.3	20.0
Construction	30.4	28.5	6.3	5.5	30.7	29.1	43.8	47.6	29.8	34.7	20.8	25.8
Wholesale and retail trade	31.0	30.1	11.3	12.0	35.5	35.1	52.4	58.8	29.7	35.1	21.4	26.0
Transport	28.2	26.9	4.5	4.5	29.0	27.6	38.6	40.9	25.0	27.9	16.2	19.2
Communications	24.2	21.2	8.2	7.1	36.0	37.7	74.9	76.6	40.1	46.1	28.3	34.3
Financial intermediation	21.3	20.5	8.8	9.1	47.1	44.6	72.2	74.7	28.7	33.9	22.2	27.6
Research and development	25.5	22.8	4.3	4.3	27.4	25.8	66.3	68.3	24.5	27.1	15.6	19.3
Public administration; compulsory social security	44.6	42.5	5.1	5.0	34.5	34.0	30.1	33.9	15.4	17.6	9.4	11.1
Higher education	24.4	21.7	5.6	4.8	35.1	31.6	68.0	72.2	29.8	31.3	15.5	18.4
Health and social work	45.6	43.1	6.0	5.4	45.3	44.0	32.0	37.9	15.5	17.5	9.1	10.2
Other activities	33.8	33.8	4.6	4.4	25.5	24.5	28.6	32.2	14.6	16.5	9.2	10.8

5.1.19. ENTERPRISES WITH A WEBSITE BY ECONOMIC ACTIVITY

(as a percentage of the total number of enterprises)

	2005	2010	2012	2013
Total	14.8	28.5	37.8	41.3
Mining and quarrying	16.4	27.9	33.2	36.8
Manufacture of food products and beverages	22.2	42.7	47.5	50.3
Manufacture of chemicals and chemical products	48.2	64.2	66.8	65.7
Manufacture of basic metals	39.8	61.6	65.7	66.9
Manufacture of machinery and equipment, n.e.c.	35.7	60.0	63.9	65.9
Manufacture of electrical machinery and apparatus	47.9	67.3	71.8	72.1
Electricity, gas and water supply	10.2	24.0	33.8	35.7
Construction	13.7	31.2	37.0	38.7
Wholesale and retail trade	14.2	35.7	39.5	43.9
Transport	10.8	23.2	28.3	29.4
Communications	42.9	62.5	65.1	67.8
Financial intermediation	38.8	54.9	61.6	62.9
Research and development	41.8	63.7	67.9	68.8
Public administration; compulsory social security	8.2	24.6	37.5	42.4
Higher education	50.4	77.2	83.2	82.4
Health and social work	7.4	18.1	41.0	50.6
Other activities	14.3	23.1	28.2	31.1

5.1.20. ENTERPRISES HAVING DEDICATED COMMUNICATION LINES BY ECONOMIC ACTIVITY

(as a percentage of the total number of enterprises)

	2005	2010	2012	2013
Total	19.0	32.7	34.5	35.6
Mining and quarrying	32.0	46.6	48.1	50.1
Manufacture of food products and beverages	23.8	43.2	45.8	47.2
Manufacture of chemicals and chemical products	44.6	56.3	56.1	55.2
Manufacture of basic metals	34.3	48.8	50.8	50.8
Manufacture of machinery and equipment, n.e.c.	27.8	47.2	48.3	48.6
Manufacture of electrical machinery and apparatus	37.4	52.1	51.9	51.7
Electricity, gas and water supply	19.8	29.7	30.9	31.2
Construction	14.9	34.8	35.7	37.0
Wholesale and retail trade	18.2	43.1	46.2	49.1
Transport	21.3	36.9	37.4	36.9
Communications	62.2	73.4	76.5	76.8
Financial intermediation	61.2	73.5	71.5	71.9
Research and development	36.8	50.7	50.9	52.1
Public administration; compulsory social security	15.8	31.0	32.8	34.1
Higher education	50.6	62.9	64.5	65.0
Health and social work	6.7	27.5	35.5	38.6
Other activities	15.0	22.6	22.7	23.7

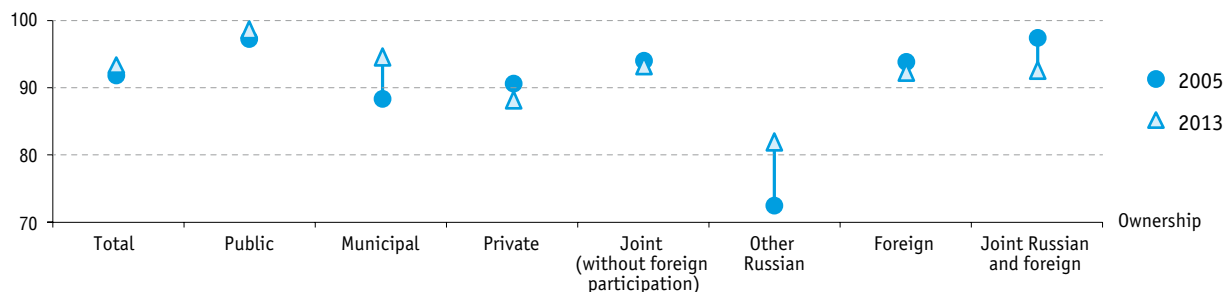
5.1.21. ENTERPRISES USING COMPUTING MACHINERY BY OWNERSHIP

(as a percentage of the total number of enterprises)

	Enterprises using							
	personal computers				other types of computers			
	2005	2010	2012	2013	2005	2010	2012	2013
Total	91.1	93.8	94.0	94.0	9.3	18.2	18.9	19.7
Russian ownership	90.9	94.0	94.2	94.1	8.8	17.3	18.0	18.6
Public	96.8	99.1	99.1	99.1	12.5	24.5	25.3	26.7
Municipal	88.0	92.7	93.8	94.4	3.3	8.0	9.3	9.6
Private	90.1	90.3	89.7	88.7	11.1	24.1	23.6	23.4
Joint	94.0	94.6	93.9	93.9	18.8	30.5	29.3	29.5
Other	72.3	84.2	85.0	82.7	1.8	7.4	9.8	11.4
Foreign ownership	93.8	91.2	91.7	92.7	22.2	32.0	32.8	35.1
Joint Russian and foreign ownership	97.1	92.9	93.2	93.1	27.8	32.2	28.3	29.5

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

(as a percentage of the total number of enterprises)



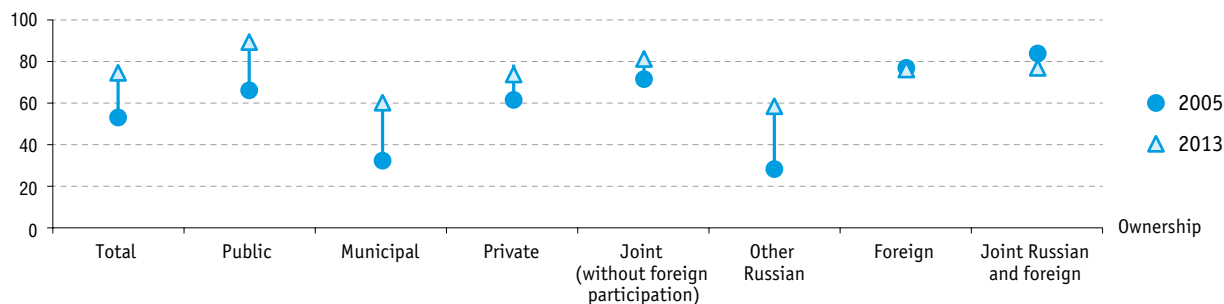
5.1.23. ENTERPRISES USING LOCAL AREA NETWORKS BY OWNERSHIP

(as a percentage of the total number of enterprises)

	2005	2010	2012	2013
Total	52.4	68.4	71.7	73.4
Russian ownership	51.6	68.1	71.4	72.9
Public	66.7	85.3	88.3	89.8
Municipal	32.1	52.3	57.8	60.7
Private	61.6	75.0	74.7	74.2
Joint	70.9	80.7	81.4	82.3
Other	27.4	54.3	58.4	57.7
Foreign ownership	73.5	72.1	74.5	79.0
Joint Russian and foreign ownership	82.7	75.0	76.5	78.5

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

(as a percentage of the total number of enterprises)



5.1.25. ENTERPRISES USING GLOBAL INFORMATION NETWORKS BY OWNERSHIP

(as a percentage of the total number of enterprises)

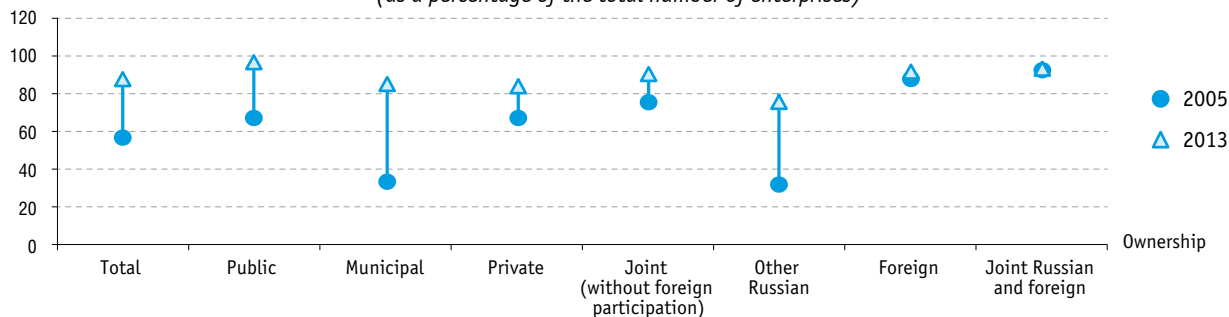
	Enterprises using global networks										
	Total				Of which						
					Internet				Of which broadband		
	2005	2010	2012	2013	2005	2010	2012	2013	2010	2012	2013
Total	54.3	83.4	87.5	88.7	53.3	82.4	86.9	88.1	56.7	76.6	79.4
Russian ownership	53.3	83.1	87.4	88.5	52.3	82.0	86.8	87.9	55.5	76.0	78.8
Public	66.8	94.4	96.4	96.9	64.2	92.4	95.0	95.1	64.7	86.0	88.2
Municipal	32.9	74.1	82.6	85.4	32.4	73.2	82.3	85.2	40.6	66.5	71.4
Private	66.1	85.1	85.5	85.1	65.9	84.8	85.2	84.8	69.6	80.1	80.5
Joint	74.0	90.0	89.9	89.5	73.1	89.5	88.9	88.5	73.0	83.6	84.1
Other	30.6	73.9	78.1	75.6	30.5	73.9	78.1	75.6	44.8	68.0	67.5
Foreign ownership	85.1	87.1	88.9	90.8	85.0	86.6	88.7	90.6	76.6	85.2	87.0
Joint Russian and foreign ownership	89.6	89.5	90.6	90.7	89.3	89.4	90.6	90.6	77.6	86.0	87.2

(continued)

	Enterprises using global networks								
	Of which								
	Intranet			Extranet			other global networks		
	2010	2012	2013	2010	2012	2013	2010	2012	2013
Total	13.1	14.7	16.7	5.3	6.4	7.7	6.3	6.2	6.8
Russian ownership	12.0	13.3	14.9	4.8	5.7	6.8	5.9	5.8	6.3
Public	16.5	18.5	20.9	5.9	7.4	8.8	7.4	7.6	8.3
Municipal	3.9	4.4	5.0	1.2	1.6	2.3	3.4	2.9	3.5
Private	19.3	20.6	22.7	9.0	9.9	11.2	7.8	8.0	8.3
Joint	29.0	31.3	32.9	11.2	14.4	14.4	10.9	11.4	11.5
Other	3.8	6.5	7.7	2.3	3.3	4.0	2.5	3.3	3.8
Foreign ownership	30.3	35.9	40.6	15.0	15.2	16.5	14.0	11.9	12.6
Joint Russian and foreign ownership	31.0	29.4	34.5	15.3	16.4	20.8	11.6	11.4	13.6

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

(as a percentage of the total number of enterprises)



5.1.27. 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	
	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013
Total	36.0	34.7	5.7	5.6	32.8	31.6	36.8	40.7	19.4	22.0	12.6	15.0
Russian ownership	36.9	35.6	5.3	5.1	33.0	31.7	35.1	38.7	18.4	20.6	11.7	13.8
Public	37.4	34.5	5.6	5.2	41.1	39.9	43.0	47.5	19.8	22.4	12.6	15.2
Municipal	45.6	45.9	4.7	4.7	29.1	28.6	19.3	22.2	12.2	13.2	7.2	7.6
Private	23.1	21.7	6.0	5.6	30.1	27.7	50.8	54.0	26.0	29.5	17.5	21.3
Joint	25.7	23.5	6.2	5.7	38.3	36.2	54.8	58.0	28.9	32.6	20.6	24.8
Other	35.3	33.9	4.0	3.2	24.4	22.9	27.8	30.2	15.9	16.4	9.7	10.6
Foreign ownership	24.7	25.2	13.0	13.7	30.1	31.4	60.9	65.8	35.7	42.6	26.6	32.0
Joint Russian and foreign ownership	22.9	22.5	7.2	8.4	29.6	28.9	59.0	62.8	29.7	32.0	20.5	23.6

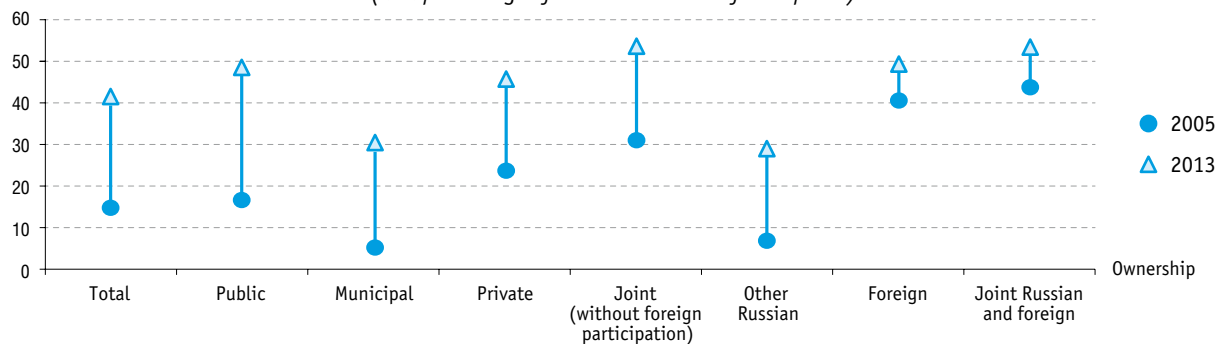
5.1.28. ENTERPRISES WITH A WEBSITE BY OWNERSHIP

(as a percentage of the total number of enterprises)

	2005	2010	2012	2013
Total	14.8	28.5	37.8	41.3
Russian ownership	14.0	27.3	37.0	40.5
Public	15.8	32.4	44.7	49.1
Municipal	4.3	14.5	26.5	30.9
Private	23.4	41.9	44.7	45.7
Joint	30.5	48.1	52.5	53.5
Other	6.7	20.5	26.2	29.3
Foreign ownership	40.1	47.6	46.1	49.3
Joint Russian and foreign ownership	43.6	48.6	51.4	53.0

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

(as a percentage of the total number of enterprises)



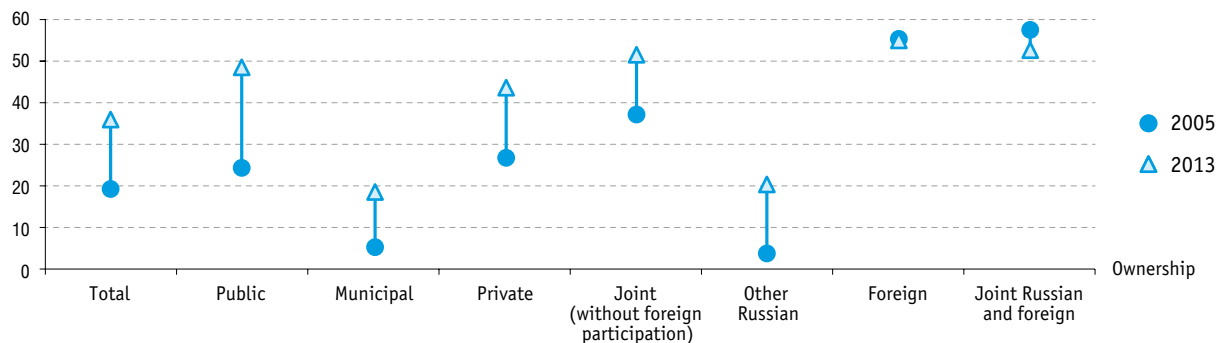
5.1.30. ENTERPRISES HAVING DEDICATED COMMUNICATION LINES BY OWNERSHIP

(as a percentage of the total number of enterprises)

	2005	2010	2012	2013
Total	19.0	32.7	34.5	35.6
Russian ownership				
Public	24.1	43.1	46.2	47.8
Municipal	5.5	15.9	17.7	18.4
Private	26.4	43.2	43.0	43.3
Joint	36.9	52.2	50.9	51.8
Other	4.1	16.9	19.9	20.4
Foreign ownership	53.7	54.7	53.9	55.7
Joint Russian and foreign ownership	56.9	52.9	51.0	52.4

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

(as a percentage of the total number of enterprises)



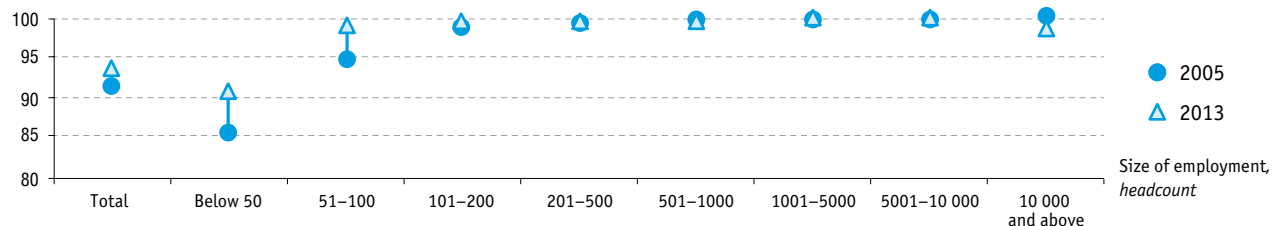
5.1.32. ENTERPRISES USING COMPUTING MACHINERY BY SIZE OF EMPLOYMENT

(as a percentage of the total number of enterprises)

	Enterprises using							
	personal computers				other types of computers			
	2005	2010	2012	2013	2005	2010	2012	2013
Total	91.1	93.8	94.0	94.0	9.3	18.2	18.9	19.7
Size of employment, <i>headcount</i> :								
below 50	85.3	90.2	90.8	90.8	4.5	10.5	11.4	12.3
51–100	94.9	99.4	99.4	99.3	9.2	22.3	23.8	24.3
101–200	98.3	99.6	99.4	99.5	12.5	26.9	28.3	29.9
201–500	99.2	99.7	99.7	99.7	16.7	34.1	35.6	36.9
501–1000	99.5	99.8	99.7	99.8	24.2	42.6	43.9	46.1
1001–5000	99.7	100	100	100	36.0	54.5	55.1	57.1
5001–10 000	99.6	100	100	100	57.2	76.3	74.4	75.1
10 000 and above	100	100	98.8	98.8	78.5	86.4	88.8	81.7

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

(as a percentage of the total number of enterprises)



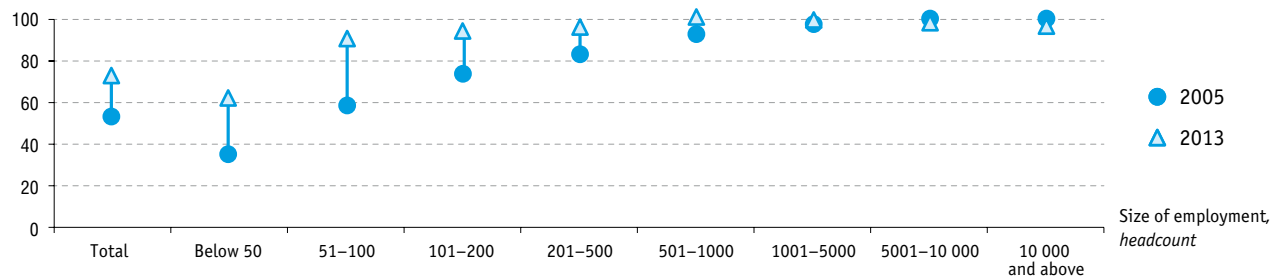
5.1.34. ENTERPRISES USING LOCAL AREA NETWORKS BY SIZE OF EMPLOYMENT

(as a percentage of the total number of enterprises)

	2005	2010	2012	2013
Total	52.4	68.4	71.7	73.4
Size of employment, headcount:				
below 50	34.4	53.8	58.8	61.6
51–100	57.3	84.7	88.8	89.9
101–200	72.6	91.3	93.2	94.3
201–500	83.2	95.5	96.5	96.8
501–1000	92.0	97.9	98.3	98.9
1001–5000	96.7	99.2	99.2	99.4
5001–10 000	98.1	99.1	99.1	100
10 000 and above	98.3	98.8	98.8	97.6

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

(as a percentage of the total number of enterprises)



5.1.36. ENTERPRISES USING GLOBAL INFORMATION NETWORKS BY SIZE OF EMPLOYMENT

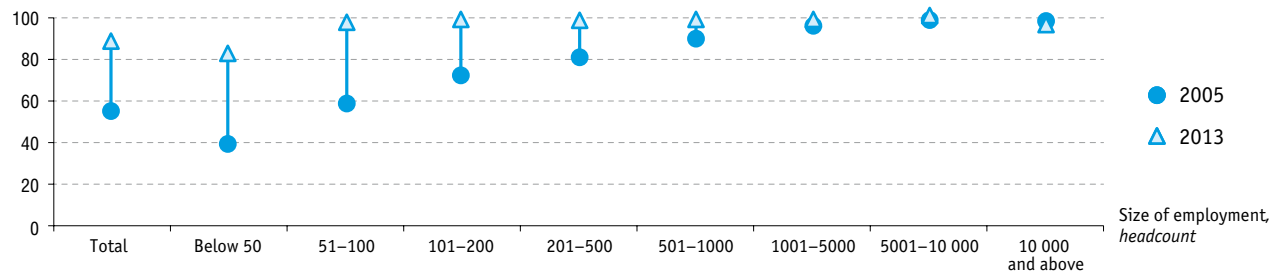
(as a percentage of the total number of enterprises)

	Enterprises using global networks										
	Total				Of which						
					Internet				Of which broadband		
	2005	2010	2012	2013	2005	2010	2012	2013	2010	2012	2013
Total	54.3	83.4	87.5	88.7	53.3	82.4	86.9	88.1	56.7	76.6	79.4
Size of employment, <i>headcount</i> :											
below 50	38.6	74.3	81.1	83.1	37.6	73.3	80.7	82.7	44.1	67.5	71.6
51–100	58.3	96.1	97.8	98.0	57.7	95.6	97.4	97.6	69.0	89.6	91.2
101–200	71.6	97.8	98.3	98.6	70.7	97.0	97.6	97.8	75.7	91.5	93.0
201–500	81.2	98.4	98.7	98.9	79.8	96.5	97.2	97.1	80.0	93.2	94.0
501–1000	89.5	98.7	98.9	99.1	87.8	96.6	97.4	97.5	85.5	94.9	95.6
1001–5000	95.5	99.2	99.5	99.4	94.1	98.0	98.7	98.5	92.3	97.5	97.2
5001–10 000	98.4	100	100	100	97.7	100	100	100	98.1	99.1	99.5
10 000 and above	98.3	100	98.8	97.6	96.7	100	98.8	97.6	97.5	98.8	96.3

(continued)

	Enterprises using global networks								
	Of which								
	Intranet			Extranet			other global networks		
	2010	2012	2013	2010	2012	2013	2010	2012	2013
Total	13.1	14.7	16.7	5.3	6.4	7.7	6.3	6.2	6.8
Size of employment, <i>headcount</i> :									
below 50	6.3	7.9	9.8	2.3	3.1	4.1	4.3	3.9	4.3
51–100	15.4	18.4	20.5	6.2	8.2	9.7	7.1	7.5	8.4
101–200	19.8	22.2	25.5	8.3	10.1	11.9	8.1	9.1	10.2
201–500	27.0	29.2	33.0	11.5	13.1	15.5	10.4	11.1	12.2
501–1000	37.7	39.7	42.5	15.9	19.1	20.9	13.1	14.0	15.1
1001–5000	53.6	53.4	55.7	25.8	27.4	29.8	18.5	20.3	22.1
5001–10 000	80.0	82.9	85.2	30.2	41.7	44.0	26.0	28.0	28.7
10 000 and above	85.2	81.3	86.6	44.4	45.0	50.0	39.5	33.8	32.9

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



5.1.38. 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	
	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013
Total	36.0	34.7	5.7	5.6	32.8	31.6	36.8	40.7	19.4	22.0	12.6	15.0
Size of employment, headcount:												
below 50	39.3	38.5	5.2	5.4	27.7	27.4	25.0	28.9	13.4	15.5	8.3	9.7
51–100	36.7	34.7	6.4	5.9	38.6	36.1	46.4	51.1	22.9	25.9	14.9	17.8
101–200	31.1	28.7	6.5	5.7	39.6	37.5	53.7	58.3	27.3	31.5	17.7	22.2
201–500	26.4	23.2	6.1	5.6	44.2	41.3	61.1	66.4	33.2	37.2	22.5	27.4
501–1000	21.9	19.3	6.0	5.2	45.3	43.3	73.9	78.6	38.7	44.7	27.4	34.5
1001–5000	23.9	21.1	9.4	9.7	47.0	45.4	85.3	88.9	46.7	54.4	35.5	44.3
5001–10 000	28.9	21.5	11.4	15.3	49.3	48.3	93.4	95.2	55.9	58.4	47.4	51.2
10 000 and above	27.5	20.7	21.3	20.7	45.0	42.7	98.8	92.7	58.8	61.0	48.8	52.4

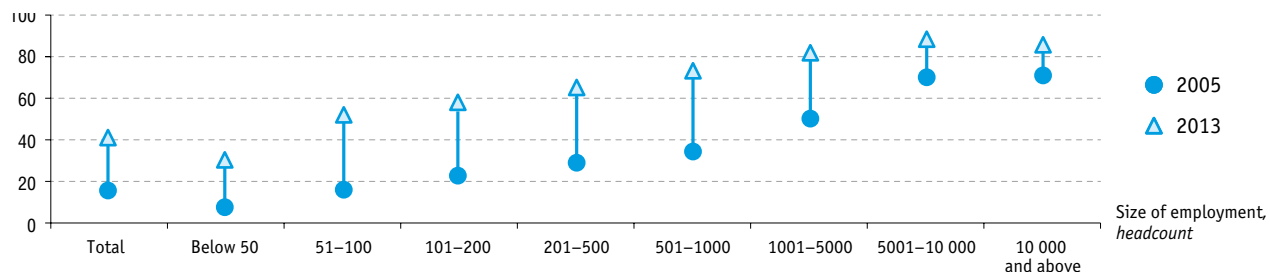
5.1.39. ENTERPRISES WITH A WEBSITE BY SIZE OF EMPLOYMENT

(as a percentage of the total number of enterprises)

	2005	2010	2012	2013
Total	14.8	28.5	37.8	41.3
Size of employment, headcount:				
below 50	6.8	17.5	26.4	30.3
51–100	15.6	36.9	48.5	52.4
101–200	22.2	43.8	54.4	58.2
201–500	28.2	49.4	61.1	64.8
501–1000	34.1	56.2	69.2	73.1
1001–5000	50.0	71.3	78.2	80.9
5001–10 000	69.3	89.3	89.1	88.5
10 000 and above	70.2	86.4	90.0	85.4

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

(as a percentage of the total number of enterprises)



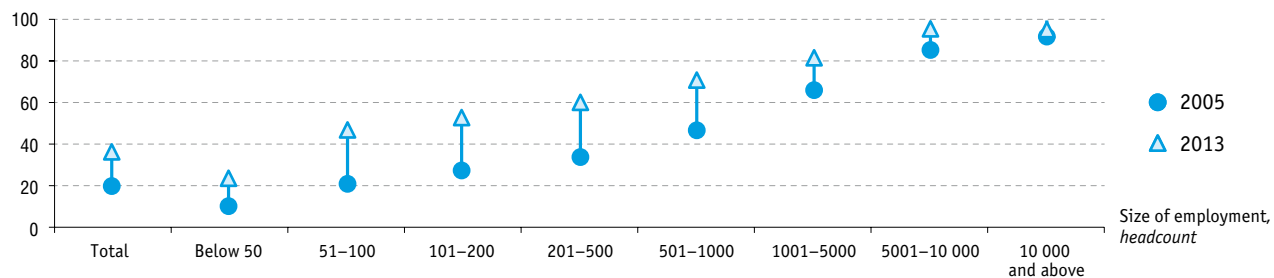
5.1.41. ENTERPRISES WITH DEDICATED COMMUNICATION LINES BY SIZE OF EMPLOYMENT

(as a percentage of the total number of enterprises)

	2005	2010	2012	2013
Total	19.0	32.7	34.5	35.6
Size of employment, headcount:				
below 50	9.6	21.5	22.9	24.2
51–100	19.9	40.4	44.4	46.0
101–200	26.7	47.3	50.6	53.0
201–500	33.4	53.9	58.7	60.4
501–1000	45.5	64.7	70.2	71.6
1001–5000	64.5	79.3	81.2	81.8
5001–10 000	84.4	91.6	96.7	96.2
10 000 and above	90.1	96.3	97.5	95.1

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

(as a percentage of the total number of enterprises)



5.2. Personal Computers and Software

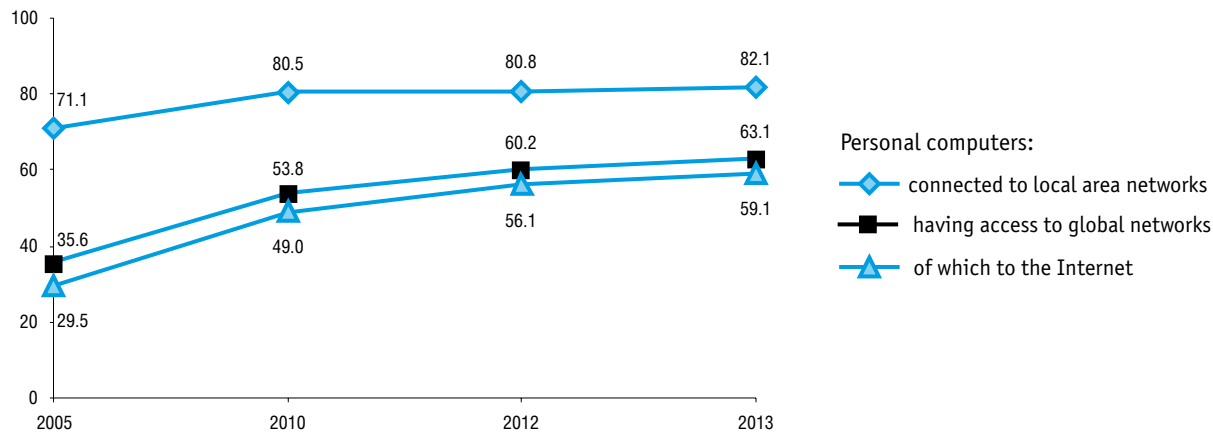
5.2.1. PERSONAL COMPUTERS IN ENTERPRISES

(thousand)

	2005	2010	2012	2013
Total	5709.6	9288.1	10807.5	11438.0
Of which:				
within local area networks	4057.6	7480.2	8733.7	9394.5
having access to global networks	2032.0	4997.1	6508.1	7220.8
of which to the Internet	1686.1	4553.3	6066.5	6764.4
acquired in the reference year	978.6	999.9	1454.1	1351.5
laptops and portable personal computers	...	...	1111.0	1311.6

5.2.2. PERSONAL COMPUTERS IN NETWORKS

(as a percentage of the total number of computers)



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

(as a percentage of the total number of computers)

	2005	2010	2012	2013
Total	71.1	80.5	80.8	82.1
Mining and quarrying	81.9	87.3	84.5	88.5
Manufacture of food products and beverages	80.5	89.8	89.2	90.4
Manufacture of chemicals and chemical products	75.7	84.9	85.6	88.4
Manufacture of basic metals	80.8	88.6	85.4	86.0
Manufacture of machinery and equipment, n.e.c.	76.2	87.2	89.1	88.1
Manufacture of electrical machinery and apparatus	65.7	80.9	84.6	84.8
Electricity, gas and water supply	76.6	87.5	89.3	90.1
Construction	64.1	79.5	81.2	83.0
Wholesale and retail trade	74.0	87.6	87.0	87.7
Transport	76.7	85.3	85.3	86.4
Communications	77.1	85.6	85.9	87.0
Financial intermediation	87.4	91.1	88.0	87.8
Research and development	64.3	70.7	75.4	75.3
Public administration; compulsory social security	65.8	74.8	76.3	76.2
Higher education	66.9	78.7	81.6	83.0
Health and social work	42.4	59.4	66.4	72.1
Other activities	68.7	80.0	76.8	80.8

5.2.4. 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	2012	2013	2005	2010	2012	2013
Total	35.6	53.8	60.2	63.1	29.5	49.0	56.1	59.1
Mining and quarrying	47.1	56.9	60.4	63.6	27.9	42.7	46.2	51.7
Manufacture of food products and beverages	37.4	64.6	73.1	75.8	35.2	62.6	71.7	74.5
Manufacture of chemicals and chemical products	37.8	55.0	60.9	66.4	36.3	51.7	59.1	64.8
Manufacture of basic metals	36.8	50.4	54.7	58.4	31.2	46.5	51.9	53.1
Manufacture of machinery and equipment, n.e.c.	30.3	54.4	57.6	62.0	27.8	51.3	54.6	58.3
Manufacture of electrical machinery and apparatus	26.0	45.1	50.3	49.6	24.4	42.4	48.9	48.6
Electricity, gas and water supply	37.2	59.1	68.3	69.8	31.5	54.0	64.8	66.2
Construction	32.9	68.1	76.1	78.9	30.5	66.4	74.7	76.9
Wholesale and retail trade	47.6	65.7	77.0	81.5	43.7	62.2	74.7	79.2
Transport	46.0	55.2	56.6	61.3	19.0	36.8	42.7	44.8
Communications	52.9	76.3	76.9	77.9	49.3	73.8	74.1	74.8
Financial intermediation	42.1	55.1	57.9	57.6	28.0	43.5	47.2	49.8
Research and development	36.6	43.7	49.3	48.2	33.0	43.4	48.8	47.5
Public administration; compulsory social security	18.4	38.6	47.3	50.0	14.5	34.4	43.2	45.7
Higher education	58.0	71.7	77.8	80.2	56.9	71.4	77.4	79.9
Health and social work	10.4	34.2	46.6	54.0	9.8	32.7	44.7	51.3
Other activities	31.1	53.9	60.7	64.7	28.6	51.3	58.3	62.5

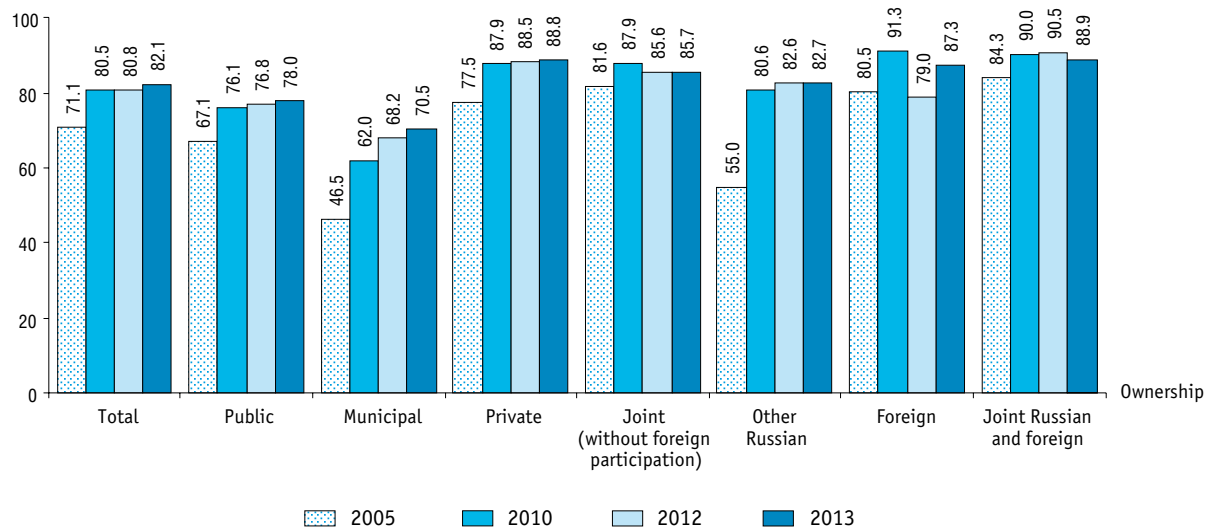
5.2.5. ACQUISITION OF PERSONAL COMPUTERS BY ENTERPRISES BY ECONOMIC ACTIVITY

(as a percentage of the total number of computers)

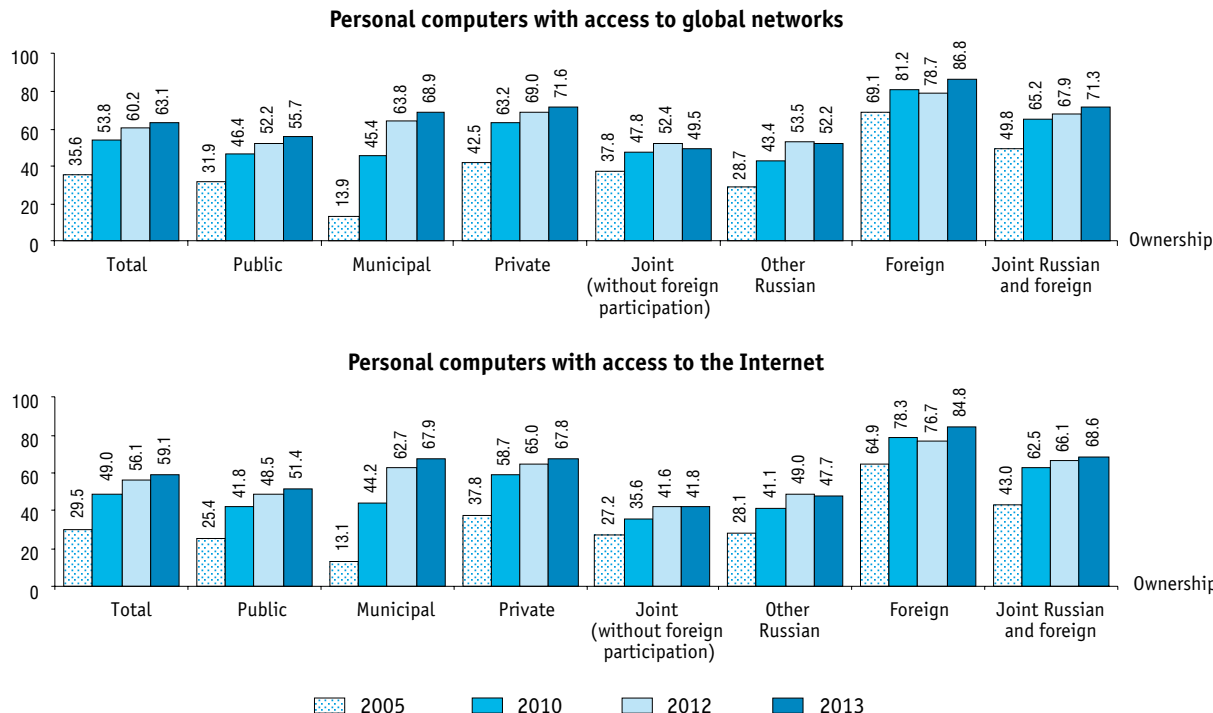
	Acquired in the reference year			
	2005	2010	2012	2013
Total	17.1	10.8	13.5	11.8
Mining and quarrying	17.4	10.9	11.3	11.7
Manufacture of food products and beverages	15.9	11.0	11.7	12.1
Manufacture of chemicals and chemical products	17.0	8.5	9.8	10.7
Manufacture of basic metals	16.1	8.2	10.1	10.0
Manufacture of machinery and equipment, n.e.c.	16.0	11.1	10.2	9.0
Manufacture of electrical machinery and apparatus	13.1	11.2	11.8	11.1
Electricity, gas and water supply	16.4	11.9	10.5	10.8
Construction	18.0	13.4	14.0	12.5
Wholesale and retail trade	21.1	13.1	17.2	14.0
Transport	16.6	9.9	11.0	9.5
Communications	17.9	10.7	12.8	10.8
Financial intermediation	19.9	12.2	16.5	14.1
Research and development	12.7	11.1	11.9	10.2
Public administration; compulsory social security	17.5	10.2	11.8	11.4
Higher education	13.7	8.0	9.5	8.2
Health and social work	21.2	10.8	22.8	14.5
Other activities	16.4	11.0	13.0	12.2

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

(as a percentage of the total number of computers)

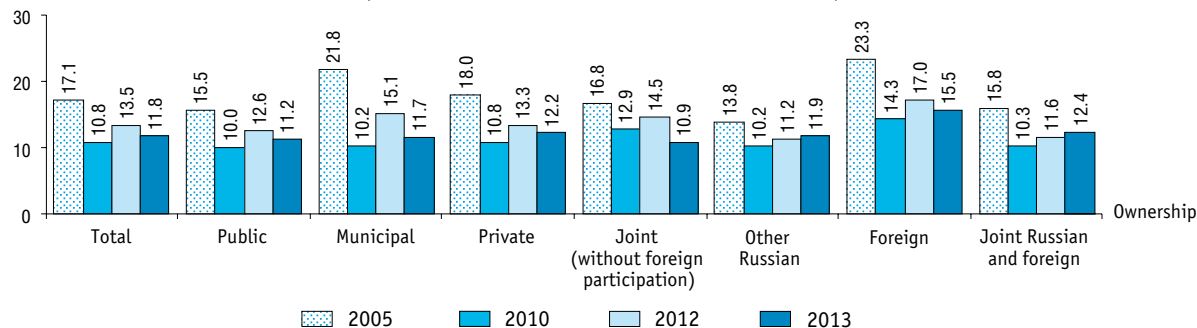


5.2.7. PERSONAL COMPUTERS WITH ACCESS TO GLOBAL INFORMATION NETWORKS IN ENTERPRISES BY OWNERSHIP

(as a percentage of the total number of computers)

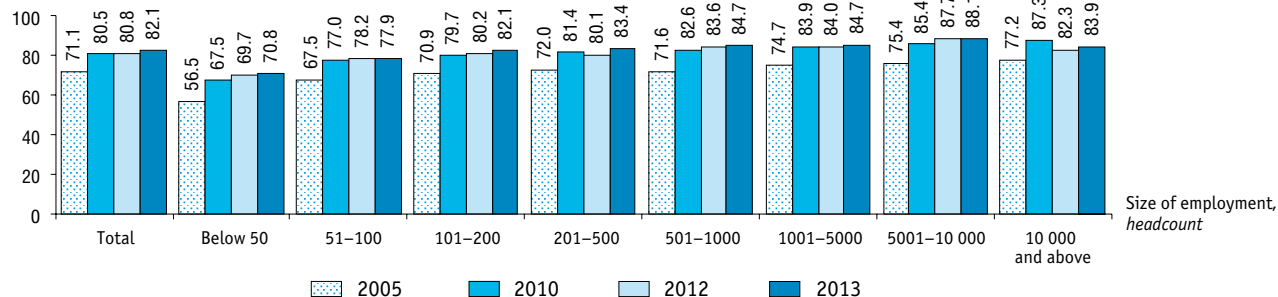
5.2.8. ACQUISITION OF PERSONAL COMPUTERS BY ENTERPRISES BY OWNERSHIP

(as a percentage of the total number of computers)



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

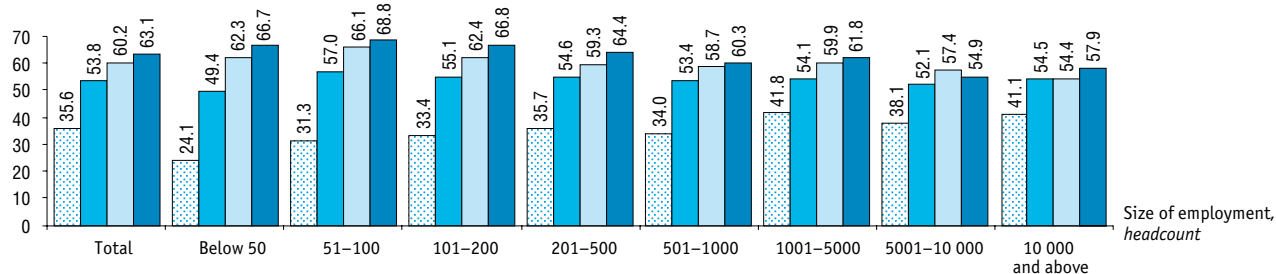
(as a percentage of the total number of computers)



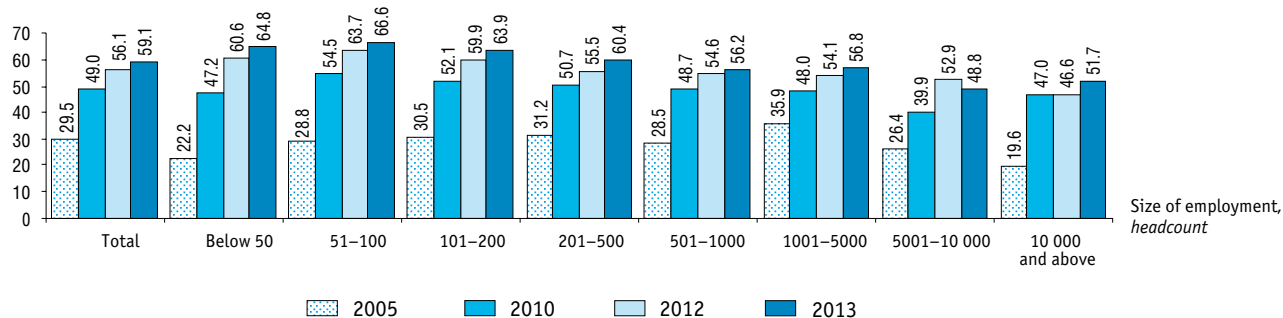
5.2.10. PERSONAL COMPUTERS WITH ACCESS TO GLOBAL INFORMATION NETWORKS IN ENTERPRISES BY SIZE OF EMPLOYMENT

(as a percentage of the total number of computers)

Personal computers with access to global networks

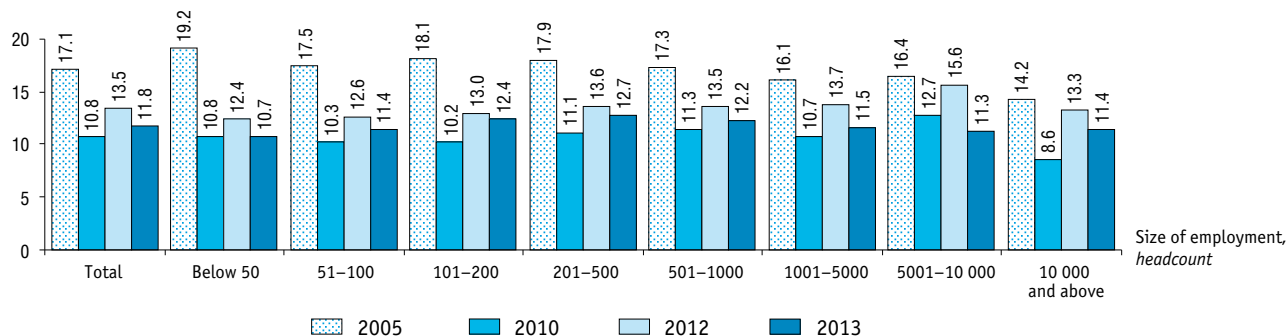


Personal computers with access to the Internet



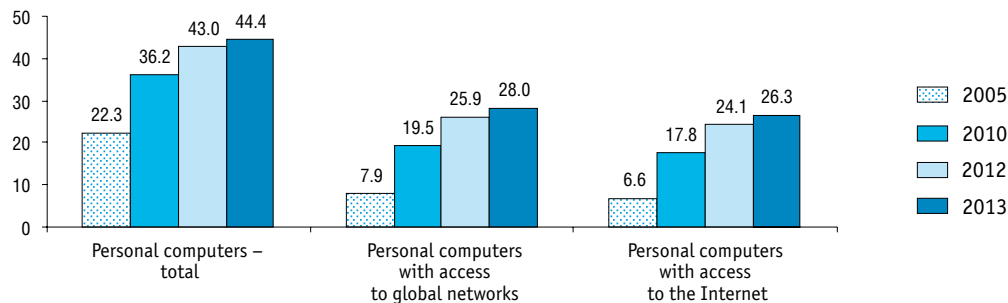
5.2.11. ACQUISITION OF PERSONAL COMPUTERS BY ENTERPRISES BY SIZE OF EMPLOYMENT

(as a percentage of the total number of computers)



5.2.12. AVAILABILITY OF PERSONAL COMPUTERS IN ENTERPRISES

(computers per 100 employees)



5.2.13. AVAILABILITY OF PERSONAL COMPUTERS IN ENTERPRISES BY ECONOMIC ACTIVITY

(computers per 100 employees)

	2005	2010	2012	2013
Total	22.3	36.2	43.0	44.4
Mining and quarrying	15.1	23.9	26.3	26.2
Manufacture of food products and beverages	11.6	17.6	20.5	22.1
Manufacture of chemicals and chemical products	13.8	26.2	31.1	31.9
Manufacture of basic metals	15.4	23.3	25.0	28.1
Manufacture of machinery and equipment, n.e.c.	12.8	22.5	26.4	28.7
Manufacture of electrical machinery and apparatus	16.3	28.0	32.7	35.4
Electricity, gas and water supply	15.8	26.6	30.3	31.1
Construction	10.1	16.4	18.4	19.5
Wholesale and retail trade	22.7	28.1	43.1	38.8
Transport	14.3	22.0	24.1	24.2
Communications	34.0	58.5	64.0	69.2
Financial intermediation	97.0	112.2	117.2	117.7
Research and development	36.7	57.4	64.5	67.0
Public administration; compulsory social security	50.7	79.9	87.8	90.5
Higher education	64.0	91.9	107.7	116.0
Health and social work	8.8	16.1	23.2	26.4
Other activities	16.0	30.5	38.5	38.9

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

	2005	2010	2012	2013
Total	7.9	19.5	25.9	28.0
Mining and quarrying	7.1	13.6	15.9	16.7
Manufacture of food products and beverages	4.3	11.4	15.0	16.7
Manufacture of chemicals and chemical products	5.2	14.4	18.9	21.2
Manufacture of basic metals	5.7	11.8	13.7	16.4
Manufacture of machinery and equipment, n.e.c.	3.9	12.2	15.2	17.8
Manufacture of electrical machinery and apparatus	4.2	12.7	16.4	17.5
Electricity, gas and water supply	5.9	15.7	20.7	21.7
Construction	3.3	11.2	14.0	15.4
Wholesale and retail trade	10.8	18.5	33.2	31.6
Transport	6.6	12.1	13.6	14.8
Communications	18.0	44.6	49.2	53.9
Financial intermediation	40.9	61.8	67.8	67.8
Research and development	13.4	25.1	31.8	32.3
Public administration; compulsory social security	9.3	30.9	41.5	45.3
Higher education	37.1	65.9	83.8	93.1
Health and social work	0.9	5.5	10.8	14.3
Other activities	5.0	16.4	23.4	25.2

5.2.15. AVAILABILITY OF PERSONAL COMPUTERS WITH ACCESS TO THE INTERNET IN ENTERPRISES BY ECONOMIC ACTIVITY
(computers per 100 employees)

	2005	2010	2012	2013
Total	6.6	17.8	24.1	26.3
Mining and quarrying	4.2	10.2	12.1	13.6
Manufacture of food products and beverages	4.1	11.0	14.7	16.4
Manufacture of chemicals and chemical products	5.0	13.5	18.4	20.7
Manufacture of basic metals	4.8	10.8	13.0	14.9
Manufacture of machinery and equipment, n.e.c.	3.6	11.5	14.4	16.7
Manufacture of electrical machinery and apparatus	4.0	11.9	16.0	17.2
Electricity, gas and water supply	5.0	14.4	19.6	20.6
Construction	3.1	10.9	13.7	15.0
Wholesale and retail trade	9.9	17.5	32.2	30.7
Transport	2.7	8.1	10.3	10.8
Communications	16.8	43.2	47.4	51.7
Financial intermediation	27.2	48.8	55.3	58.6
Research and development	12.1	24.9	31.5	31.8
Public administration; compulsory social security	7.4	27.5	38.0	41.3
Higher education	36.4	65.6	83.4	92.7
Health and social work	0.9	5.3	10.4	13.5
Other activities	4.6	15.6	22.4	24.3

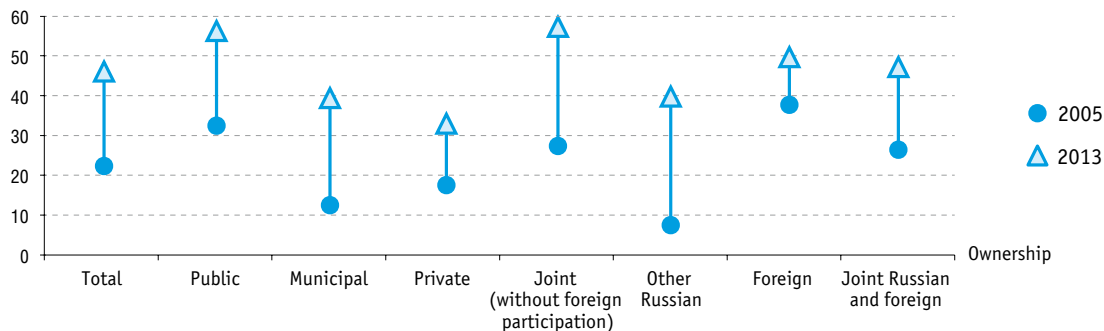
5.2.16. AVAILABILITY OF PERSONAL COMPUTERS IN ENTERPRISES BY OWNERSHIP

(computers per 100 employees)

	2005	2010	2012	2013
Total	22.3	36.2	43.0	44.4
Russian ownership	21.9	35.4	42.3	44.0
Public	31.7	48.9	52.4	53.4
Municipal	12.3	24.2	35.1	39.5
Private	17.2	27.1	32.3	33.4
Joint	26.0	43.7	53.4	56.8
Other	7.3	24.5	36.8	39.6
Foreign ownership	37.7	48.2	56.2	48.9
Joint Russian and foreign ownership	24.7	41.7	42.8	46.4

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

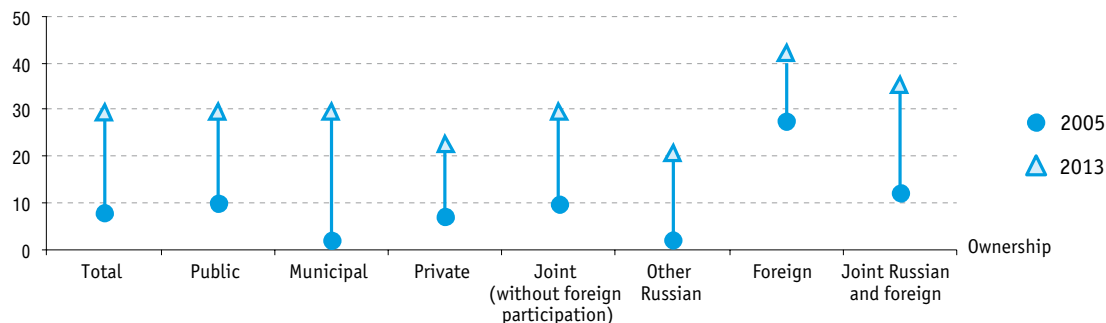
(computers per 100 employees)



5.2.18. AVAILABILITY OF PERSONAL COMPUTERS WITH ACCESS TO GLOBAL INFORMATION NETWORKS IN ENTERPRISES BY OWNERSHIP

	2005	2010	2012	2013
Total	7.9	19.5	25.9	28.0
Russian ownership	7.4	18.2	24.7	26.9
Public	10.1	22.7	27.4	29.7
Municipal	1.7	11.0	22.4	27.2
Private	7.3	17.1	22.3	23.9
Joint	9.8	20.9	28.0	28.1
Other	2.1	10.6	19.7	20.7
Foreign ownership	26.1	39.1	44.2	42.5
Joint Russian and foreign ownership	12.3	27.2	29.0	33.1

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



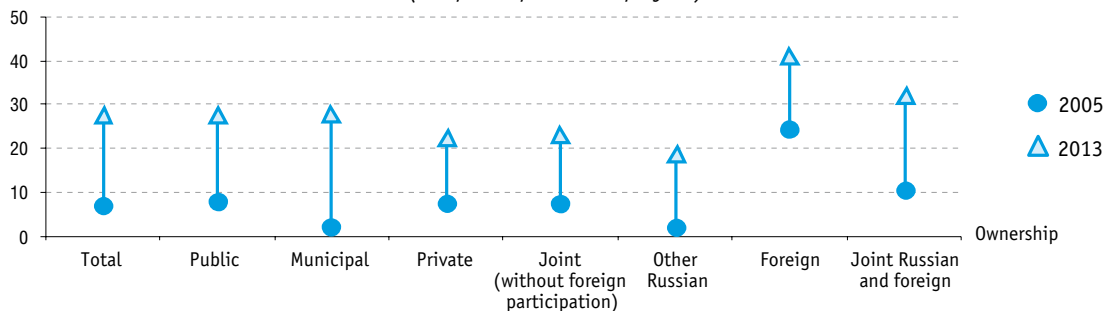
5.2.20. AVAILABILITY OF PERSONAL COMPUTERS WITH ACCESS TO THE INTERNET IN ENTERPRISES BY OWNERSHIP

(computers per 100 employees)

	2005	2010	2012	2013
Total	6.6	17.8	24.1	26.3
Russian ownership	6.1	16.4	22.9	25.0
Public	8.0	20.5	25.4	27.5
Municipal	1.6	10.7	22.0	26.8
Private	6.5	15.9	21.0	22.6
Joint	7.1	15.6	22.2	23.7
Other	2.0	10.1	18.0	18.9
Foreign ownership	24.5	37.7	43.1	41.5
Joint Russian and foreign ownership	10.6	26.0	28.3	31.8

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

(computers per 100 employees)



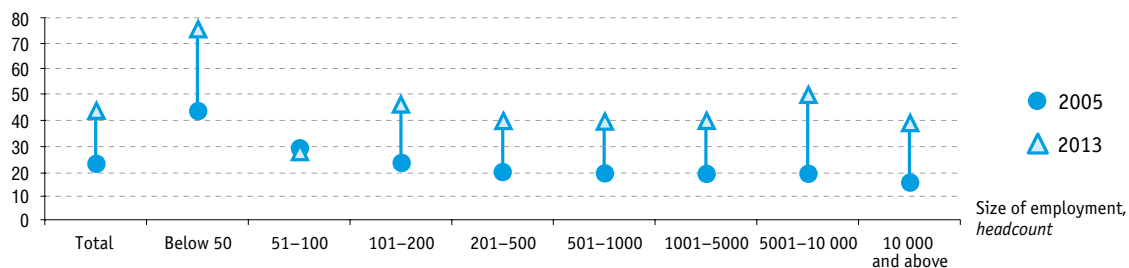
5.2.22. AVAILABILITY OF PERSONAL COMPUTERS IN ENTERPRISES BY SIZE OF EMPLOYMENT

(computers per 100 employees)

	2005	2010	2012	2013
Total	22.3	36.2	43.0	44.4
Size of employment, headcount:				
below 50	42.2	66.6	71.9	73.5
51–100	28.3	45.5	52.7	27.6
101–200	24.7	39.4	44.2	46.4
201–500	20.8	32.1	37.9	39.0
501–1000	19.2	30.7	36.2	38.8
1001–5000	20.7	35.0	40.3	42.0
5001–10 000	20.5	32.9	47.5	47.3
10 000 and above	17.4	27.4	40.7	37.3

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

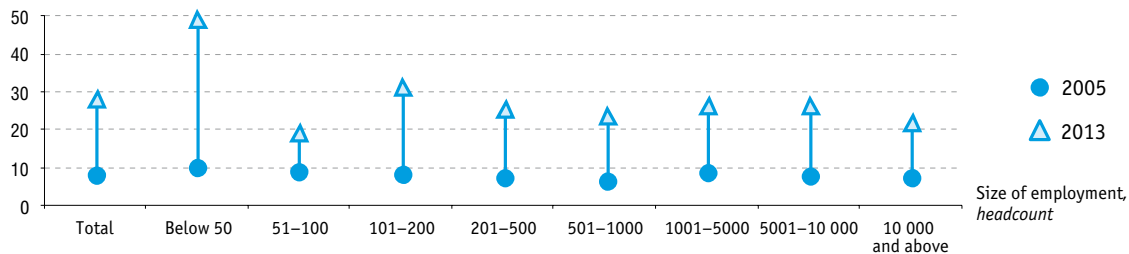
(computers per 100 employees)



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

	2005	2010	2012	2013
Total	7.9	19.5	25.9	28.0
Size of employment, headcount:				
below 50	10.1	32.9	44.8	49.0
51–100	8.9	25.9	34.8	19.0
101–200	8.3	21.7	27.6	31.0
201–500	7.4	17.5	22.5	25.1
501–1000	6.5	16.4	21.2	23.4
1001–5000	8.6	18.9	24.1	26.0
5001–10 000	7.8	17.2	27.3	25.9
10 000 and above	7.2	15.0	22.1	21.6

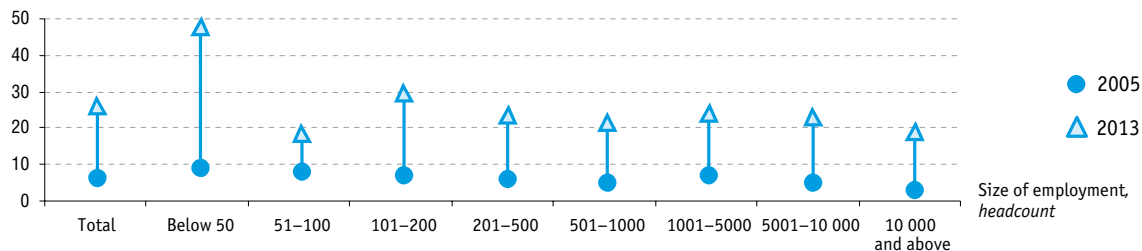
5.2.25. TRENDS IN AVAILABILITY OF PERSONAL COMPUTERS WITH ACCESS TO GLOBAL INFORMATION NETWORKS IN ENTERPRISES BY SIZE OF EMPLOYMENT (computers per 100 employees)



5.2.26. AVAILABILITY OF PERSONAL COMPUTERS WITH ACCESS TO THE INTERNET IN ENTERPRISES BY SIZE OF EMPLOYMENT (computers per 100 employees)

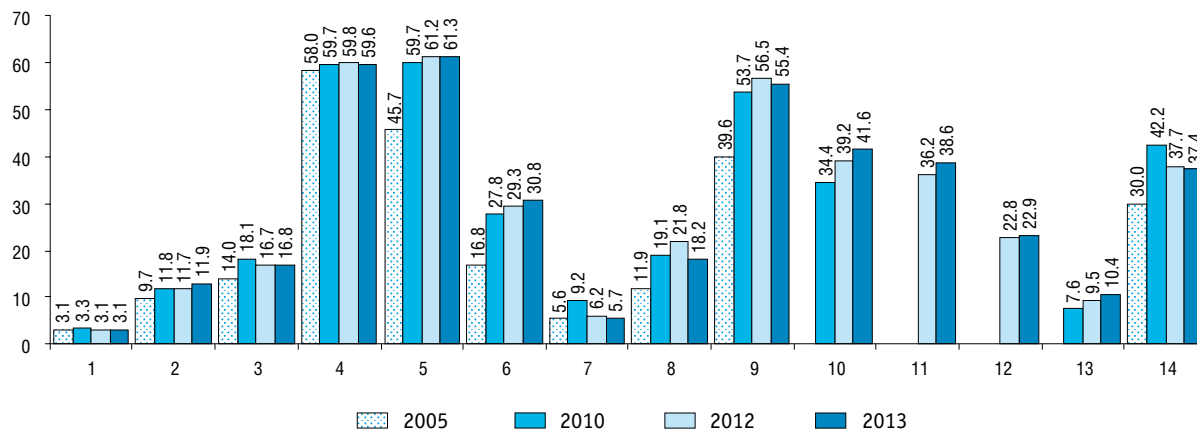
	2005	2010	2012	2013
Total	6.6	17.8	24.1	26.3
Size of employment, headcount:				
below 50	9.4	31.4	43.5	47.6
51–100	8.2	24.8	33.6	18.4
101–200	7.5	20.5	26.5	29.7
201–500	6.5	16.3	21.0	23.5
501–1000	5.5	14.9	19.8	21.8
1001–5000	7.4	16.8	21.8	23.9
5001–10 000	5.4	13.1	25.1	23.1
10 000 and above	3.4	12.9	19.0	19.3

5.2.27. TRENDS IN AVAILABILITY OF PERSONAL COMPUTERS WITH ACCESS TO THE INTERNET IN ENTERPRISES BY SIZE OF EMPLOYMENT (computers per 100 employees)



5.2.28. ENTERPRISES USING SPECIALISED SOFTWARE

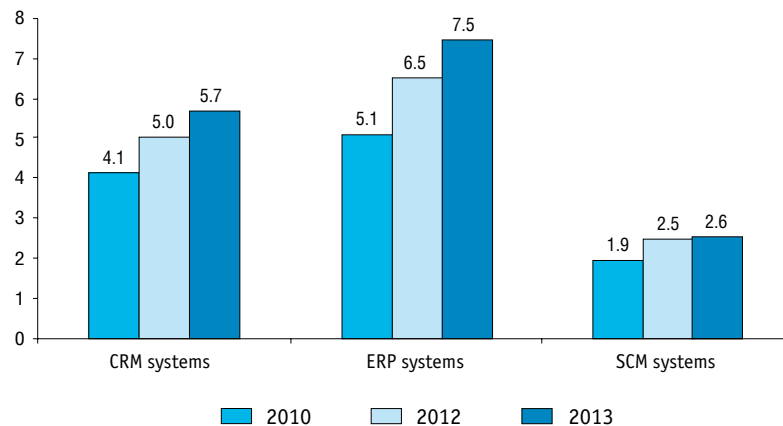
(as a percentage of the total number of enterprises)



Specialised software for:

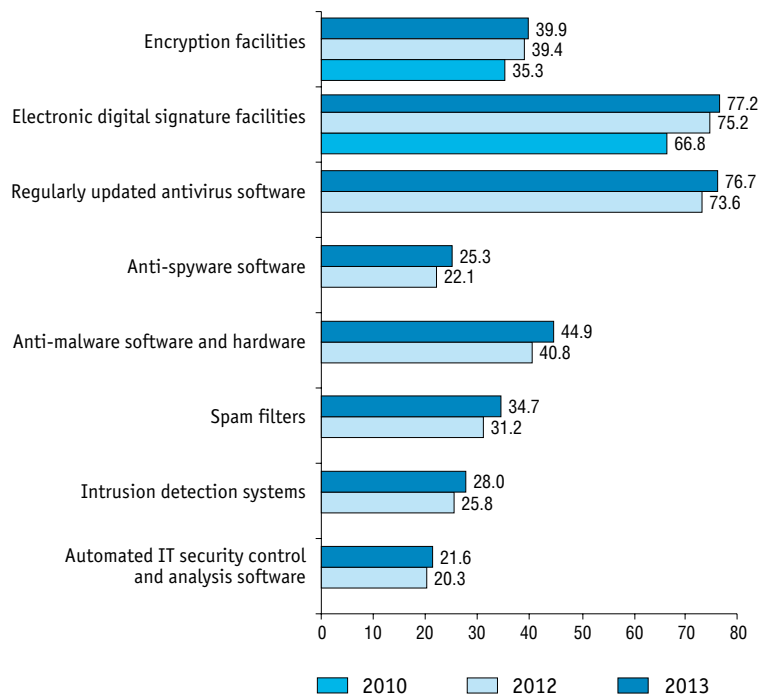
- 1 – scientific research
- 2 – computer-aided design systems
- 3 – computer-aided manufacturing systems
- 4 – computer-aided management systems
- 5 – electronic payment transactions
- 6 – access to databases via global information networks
- 7 – desktop publishing systems
- 8 – training and educational programmes

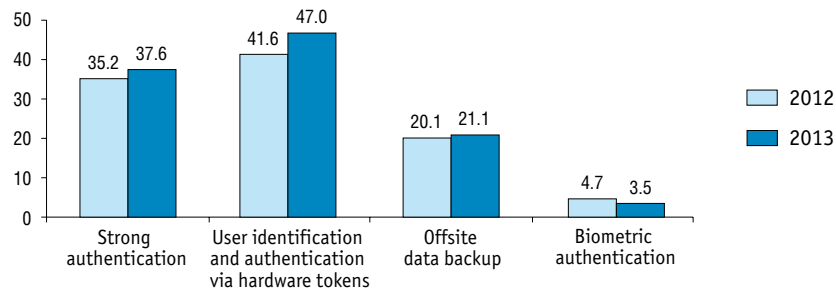
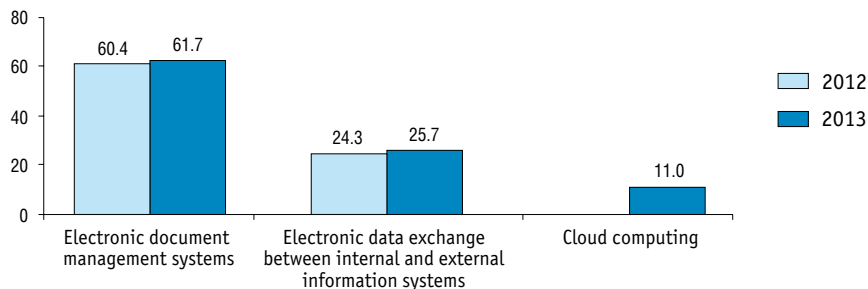
- 9 – electronic legal reference information systems
- 10 – programmes for managing purchase and sale of goods and services
- 11 – programmes for managing purchase of goods and services
- 12 – programmes for managing sales of goods and services
- 13 – CRM, ERP, SCM systems
- 14 – other purposes

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

5.2.30. ENTERPRISES USING INFORMATION SECURITY FACILITIES

(as a percentage of the total number of enterprises)



5.2.31. ENTERPRISES USING INFORMATION SECURITY SYSTEMS*(as a percentage of the total number of enterprises)***5.2.32. ENTERPRISES USING ELECTRONIC DOCUMENT MANAGEMENT SYSTEMS, ELECTRONIC DATA EXCHANGE BETWEEN INTERNAL AND EXTERNAL INFORMATION SYSTEMS, CLOUD COMPUTING***(as a percentage of the total number of enterprises)*

5.2.33. ENTERPRISES USING SPECIALISED SOFTWARE BY ECONOMIC ACTIVITY

(as a percentage of the total number of enterprises)

	Total		Software for scientific research		Computer-aided design systems		Computer-aided manufacturing systems		Computer-aided management systems		Software for electronic payment transactions	
	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013
Total	86.0	85.3	3.1	3.1	11.7	11.9	16.7	16.8	59.8	59.6	61.2	61.3
Mining and quarrying	89.4	89.5	6.4	6.3	36.4	36.2	39.3	40.9	67.5	67.4	70.0	69.2
Manufacture of food products and beverages	92.2	93.1	3.2	3.0	14.4	15.0	42.9	44.2	68.9	70.0	74.6	75.7
Manufacture of chemicals and chemical products	92.4	92.9	16.6	15.7	35.1	36.2	49.3	47.8	74.9	72.3	77.4	77.2
Manufacture of basic metals	92.6	92.4	6.6	5.8	55.4	54.5	49.8	48.2	72.9	73.6	77.6	77.1
Manufacture of machinery and equipment, n.e.c.	92.0	92.2	4.8	4.6	56.0	54.0	41.2	41.4	72.8	71.6	77.4	75.4
Manufacture of electrical machinery and apparatus	95.1	93.6	11.8	11.3	57.1	56.2	49.6	47.6	77.0	75.7	78.7	79.4
Electricity, gas and water supply	84.5	84.1	1.5	1.5	24.4	24.4	24.3	24.5	60.5	59.9	59.9	61.8
Construction	90.0	89.4	2.4	2.5	42.9	43.0	19.9	20.4	64.8	64.4	70.8	70.4
Wholesale and retail trade	88.4	88.5	1.0	1.3	10.8	13.5	20.6	21.8	62.8	64.2	66.4	65.3
Transport	88.0	87.0	1.2	1.1	14.6	14.3	32.7	33.0	67.3	66.2	63.2	61.9
Communications	96.1	95.5	2.5	1.9	36.0	38.8	55.6	58.0	80.8	81.8	77.3	77.1
Financial intermediation	93.6	92.3	1.4	1.1	7.7	7.8	22.1	22.2	73.5	73.3	80.6	77.8
Research and development	94.2	92.6	55.5	55.0	43.5	41.0	29.7	28.9	70.6	69.5	75.9	76.5
Public administration; compulsory social security	90.8	90.2	0.7	0.8	4.0	4.2	8.4	8.1	62.1	61.7	62.5	63.5
Higher education	96.4	95.4	34.8	34.8	34.2	34.3	26.2	25.6	76.3	76.6	76.1	76.6
Health and social work	93.7	93.6	3.2	3.4	2.2	2.4	13.8	14.7	67.1	67.8	71.3	73.7
Other activities	75.6	75.2	2.0	2.1	8.6	9.7	12.2	12.7	47.9	48.3	47.9	48.7

(continued)

	Software for access to databases via global information networks		Desk-top publishing systems		Training and educational programmes		Electronic legal reference information systems		Programmes for managing sales of goods and services		Programmes for managing purchase of goods and services	
	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013
Total	29.3	30.8	6.2	5.7	21.8	18.2	56.5	55.4	22.8	22.9	36.2	38.6
Mining and quarrying	30.0	30.0	6.5	6.8	29.1	30.3	73.5	72.2	33.7	32.5	41.0	40.1
Manufacture of food products and beverages	32.3	34.2	5.7	5.4	23.8	18.2	71.7	70.8	56.2	57.5	53.6	53.0
Manufacture of chemicals and chemical products	30.2	31.2	10.3	9.9	29.9	26.7	79.0	78.5	57.7	57.2	58.5	57.2
Manufacture of basic metals	29.9	29.6	8.0	6.9	27.7	23.3	76.7	74.9	51.6	51.5	52.4	50.7
Manufacture of machinery and equipment, n.e.c.	28.0	26.6	8.6	7.4	27.4	22.7	75.6	72.1	47.3	45.9	48.5	47.9
Manufacture of electrical machinery and apparatus	24.7	25.3	9.1	8.0	26.3	22.0	78.8	76.6	52.0	50.4	54.8	53.7
Electricity, gas and water supply	23.8	25.2	4.0	3.5	24.4	21.0	56.1	54.5	29.0	28.5	36.7	38.7
Construction	27.7	27.8	4.8	4.6	23.3	18.6	68.8	66.8	30.5	29.4	36.3	35.9
Wholesale and retail trade	34.3	37.0	5.4	5.6	22.4	19.1	59.1	58.9	60.7	63.2	59.0	59.8
Transport	25.7	26.2	5.4	5.1	31.5	28.9	62.6	61.5	31.0	29.1	37.5	36.4
Communications	48.3	45.4	11.4	11.9	44.4	43.0	77.5	76.2	56.4	53.6	55.2	53.8
Financial intermediation	46.9	48.0	8.1	7.5	36.5	33.2	76.8	74.2	33.8	33.3	30.5	30.6
Research and development	30.3	30.3	19.5	18.0	30.8	25.1	74.7	72.7	25.7	25.5	40.8	43.2
Public administration; compulsory social security	30.6	32.4	3.5	3.2	18.9	15.6	57.2	56.9	7.7	7.3	32.6	37.3
Higher education	44.7	46.3	32.7	31.3	79.4	77.3	81.6	80.3	24.6	23.7	37.4	38.0
Health and social work	34.5	36.5	3.5	3.3	21.3	17.7	62.8	63.8	18.9	18.8	51.9	57.5
Other activities	23.4	24.9	7.5	6.8	16.4	13.0	43.4	42.5	17.0	17.3	24.9	27.7

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

(as a percentage of the total number of enterprises)

	Total		Of which					
			CRM systems		ERP systems		SCM systems	
	2012	2013	2012	2013	2012	2013	2012	2013
Total	9.5	10.4	5.0	5.7	6.5	7.5	2.5	2.6
Mining and quarrying	20.8	22.3	6.0	6.9	16.5	18.7	4.9	5.2
Manufacture of food products and beverages	22.3	23.1	11.1	12.2	16.9	18.7	7.0	6.3
Manufacture of chemicals and chemical products	31.9	32.9	14.4	14.0	26.7	28.3	4.5	5.5
Manufacture of basic metals	27.5	28.1	11.6	11.8	23.4	23.4	5.0	5.5
Manufacture of machinery and equipment, n.e.c.	24.9	26.4	12.1	13.2	19.7	21.1	4.6	4.2
Manufacture of electrical machinery and apparatus	27.4	26.8	13.0	12.7	22.6	22.3	5.8	5.0
Electricity, gas and water supply	10.8	11.6	4.4	4.8	8.4	9.4	2.0	2.1
Construction	9.2	9.4	4.0	4.2	5.8	6.5	2.6	2.7
Wholesale and retail trade	23.7	28.8	12.6	15.5	17.9	23.1	6.3	7.7
Transport	15.3	15.1	5.8	5.4	12.1	12.6	4.1	4.2
Communications	36.8	36.9	28.4	29.0	28.6	28.7	12.5	12.9
Financial intermediation	29.9	31.5	24.4	26.6	15.3	17.3	5.3	5.5
Research and development	13.5	13.2	5.4	5.6	9.9	10.2	3.0	2.3
Public administration; compulsory social security	3.1	3.2	1.6	1.6	1.5	1.7	1.1	1.1
Higher education	16.8	16.8	8.4	9.2	11.1	11.7	5.0	4.6
Health and social work	4.3	4.5	2.0	2.4	2.4	2.6	1.5	1.5
Other activities	5.6	5.9	2.8	3.2	3.6	3.9	1.4	1.3

5.2.35. ENTERPRISES USING INFORMATION SECURITY FACILITIES BY ECONOMIC ACTIVITY

(as a percentage of the total number of enterprises)

	Encryption facilities		Electronic digital signature facilities		Regularly updated antivirus software		Anti-spyware software	
	2012	2013	2012	2013	2012	2013	2012	2013
Total	39.4	39.9	75.2	77.2	73.6	76.7	22.1	25.3
Mining and quarrying	52.2	51.2	76.6	77.4	81.1	86.9	34.3	38.1
Manufacture of food products and beverages	53.2	53.9	84.3	86.6	80.2	84.3	32.3	37.7
Manufacture of chemicals and chemical products	59.8	58.7	84.4	86.6	86.0	86.4	40.7	43.4
Manufacture of basic metals	53.6	50.4	82.9	86.1	82.4	85.2	33.8	36.9
Manufacture of machinery and equipment, n.e.c.	54.8	53.0	82.1	82.3	82.1	85.2	34.3	39.7
Manufacture of electrical machinery and apparatus	53.6	54.0	85.2	86.0	85.4	87.8	37.8	42.7
Electricity, gas and water supply	41.1	40.2	73.7	76.1	72.1	75.7	25.0	28.2
Construction	43.9	42.9	78.0	79.7	76.4	79.6	26.3	30.2
Wholesale and retail trade	44.0	45.8	70.2	72.0	75.9	81.3	27.9	31.8
Transport	42.3	41.8	74.3	75.1	75.8	78.9	27.2	31.9
Communications	63.6	62.9	78.8	80.4	87.0	90.8	46.8	49.3
Financial intermediation	74.6	73.8	85.1	82.7	87.5	89.5	49.8	55.6
Research and development	51.2	51.8	83.9	86.1	82.6	86.1	36.6	39.7
Public administration; compulsory social security	38.4	39.3	83.0	85.1	77.6	80.9	18.7	21.1
Higher education	57.4	57.9	82.7	85.6	86.8	89.0	41.9	45.9
Health and social work	47.2	49.6	88.5	90.7	81.1	85.1	21.5	26.2
Other activities	27.1	28.0	62.5	66.4	62.7	65.7	14.8	17.7

(continued)

	Anti-malware software and hardware		Spam filters		Intrusion detection systems		Automated IT security control and analysis software	
	2012	2013	2012	2013	2012	2013	2012	2013
Total	40.8	44.9	31.2	34.7	25.8	28.0	20.3	21.6
Mining and quarrying	58.3	64.6	50.9	55.9	38.8	42.3	28.0	31.2
Manufacture of food products and beverages	55.0	61.1	46.3	50.5	37.8	40.7	27.1	27.3
Manufacture of chemicals and chemical products	65.9	68.8	58.7	62.7	48.4	49.8	32.7	32.7
Manufacture of basic metals	61.5	64.7	50.2	54.8	40.3	41.6	27.0	28.2
Manufacture of machinery and equipment, n.e.c.	61.0	64.4	51.1	54.9	39.4	41.4	28.0	26.2
Manufacture of electrical machinery and apparatus	64.1	69.0	53.5	57.4	40.6	43.1	26.5	25.7
Electricity, gas and water supply	44.3	47.5	34.2	35.7	27.3	28.6	19.3	19.8
Construction	45.6	50.5	35.8	39.9	30.7	33.5	24.2	25.5
Wholesale and retail trade	48.1	55.0	45.4	53.7	37.5	41.4	27.2	29.0
Transport	46.5	51.6	36.5	40.1	31.4	33.4	24.3	25.7
Communications	70.0	73.5	60.5	65.5	48.9	50.5	40.5	43.8
Financial intermediation	72.5	76.4	65.1	69.4	55.2	57.4	45.7	46.3
Research and development	59.3	63.8	51.8	54.5	39.5	40.7	26.1	27.0
Public administration; compulsory social security	38.0	41.6	25.2	27.7	21.6	23.5	18.0	19.2
Higher education	65.9	70.1	54.6	58.1	44.2	47.0	30.2	31.9
Health and social work	43.1	50.0	28.2	32.7	22.7	26.4	18.6	21.0
Other activities	29.2	32.7	22.2	25.2	18.0	20.1	15.0	16.2

5.2.36. 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	
	2012	2013	2012	2013	2012	2013	2012	2013
Total	35.2	37.6	41.6	47.0	20.1	21.1	4.7	3.5
Mining and quarrying	52.7	56.8	53.7	58.3	30.5	31.4	7.7	6.3
Manufacture of food products and beverages	45.1	47.4	53.9	59.2	28.5	30.5	6.2	5.0
Manufacture of chemicals and chemical products	54.4	56.2	63.6	68.4	31.3	31.0	10.6	5.9
Manufacture of basic metals	48.9	49.6	58.6	63.5	27.4	29.3	7.7	5.3
Manufacture of machinery and equipment, n.e.c.	50.1	51.4	55.6	60.4	25.8	29.3	7.0	5.3
Manufacture of electrical machinery and apparatus	50.9	52.9	59.6	64.4	25.9	27.8	7.1	6.0
Electricity, gas and water supply	35.8	37.0	46.4	51.0	17.5	18.3	4.0	2.6
Construction	38.8	39.5	51.4	55.6	26.2	27.2	6.6	4.0
Wholesale and retail trade	45.5	50.9	44.0	49.5	29.3	30.0	7.4	6.1
Transport	43.7	45.9	49.1	54.0	22.6	23.1	5.5	4.0
Communications	69.4	68.3	62.1	67.2	37.0	36.1	13.0	10.4
Financial intermediation	74.9	75.0	70.0	71.1	42.3	43.1	7.8	7.4
Research and development	43.4	46.1	54.2	61.5	22.3	22.4	6.9	4.1
Public administration; compulsory social security	32.9	35.6	39.1	44.7	16.9	17.6	3.7	2.6
Higher education	52.0	53.8	56.9	62.2	25.9	25.9	6.9	5.0
Health and social work	35.0	38.7	47.1	57.1	18.1	20.0	4.4	3.1
Other activities	24.1	26.4	31.4	36.5	15.8	16.8	3.6	2.7

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

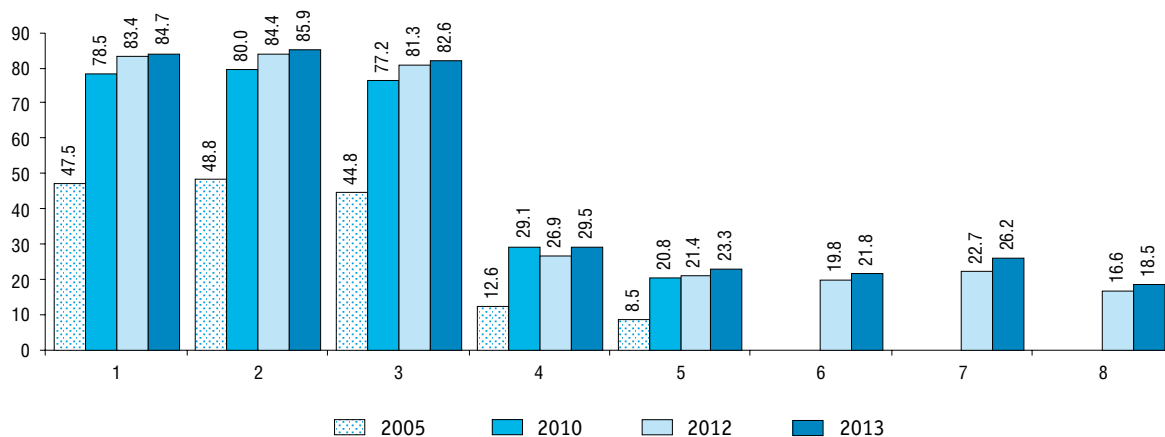
(as a percentage of the total number of enterprises)

	Electronic document management systems		Electronic data exchange between internal and external information systems		Cloud computing
	2012	2013	2012	2013	2013
Total	60.4	61.7	24.3	25.7	11.0
Mining and quarrying	57.4	58.6	20.5	22.0	10.0
Manufacture of food products and beverages	59.6	62.2	30.2	34.5	12.8
Manufacture of chemicals and chemical products	54.8	57.3	26.8	28.1	12.9
Manufacture of basic metals	54.4	55.4	25.3	25.3	12.3
Manufacture of machinery and equipment, n.e.c.	55.9	55.2	21.1	21.0	11.0
Manufacture of electrical machinery and apparatus	55.9	55.1	24.2	23.5	10.8
Electricity, gas and water supply	55.0	57.5	20.6	22.4	8.9
Construction	53.5	55.4	21.0	22.8	11.2
Wholesale and retail trade	54.8	55.1	30.1	29.6	13.9
Transport	57.8	58.6	22.8	23.2	9.7
Communications	70.5	73.7	35.3	33.8	21.5
Financial intermediation	70.7	70.7	42.1	42.4	11.8
Research and development	63.4	64.3	24.1	24.3	13.8
Public administration; compulsory social security	72.7	75.1	26.6	28.7	10.4
Higher education	69.4	68.5	31.7	31.5	19.7
Health and social work	72.9	74.5	28.9	31.7	15.1
Other activities	48.1	48.5	17.8	18.7	8.9

5.3. Objectives of Internet Usage

5.3.1. INTERNET USAGE FOR GENERAL PURPOSES

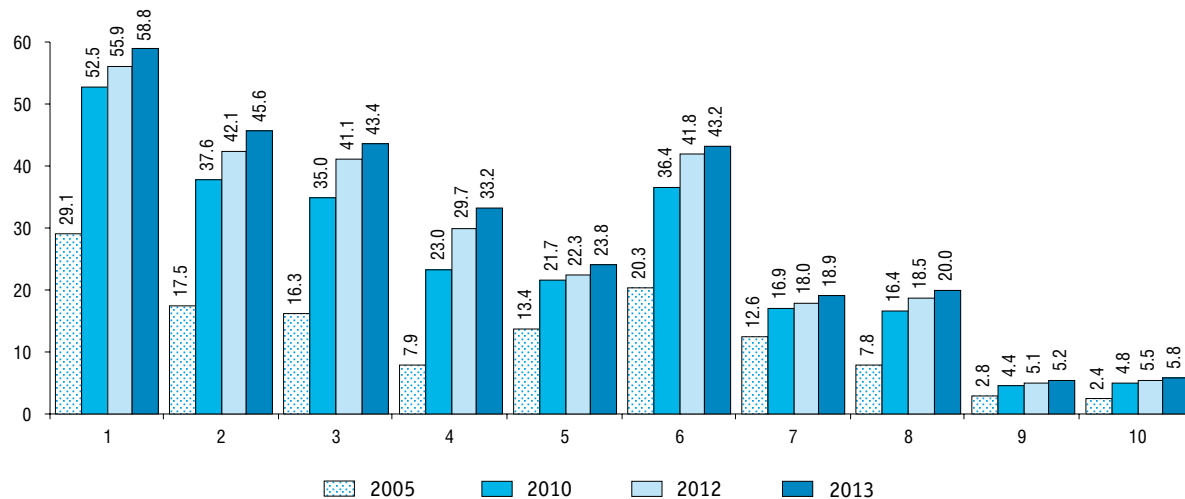
(as a percentage of the total number of enterprises)



- 1 - Information search
- 2 - E-mailing
- 3 - Information exchange in electronic form
- 4 - Personnel training
- 5 - Internal or external recruitment
- 6 - Telephone communication via the Internet / VoIP
- 7 - Videoconferencing
- 8 - Paid subscription for access to electronic databases, electronic libraries

5.3.2. INTERNET USAGE FOR COMMERCIAL PURPOSES

(as a percentage of the total number of enterprises)

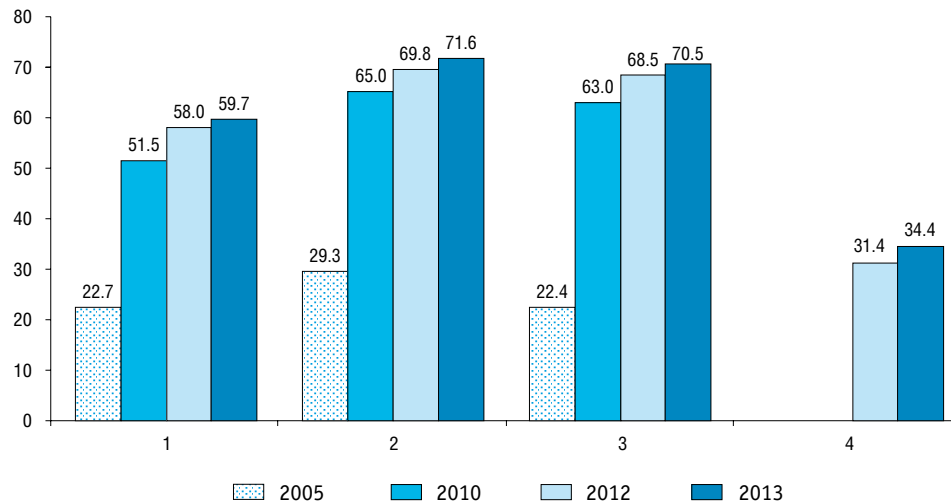


Communication with suppliers:

- 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:

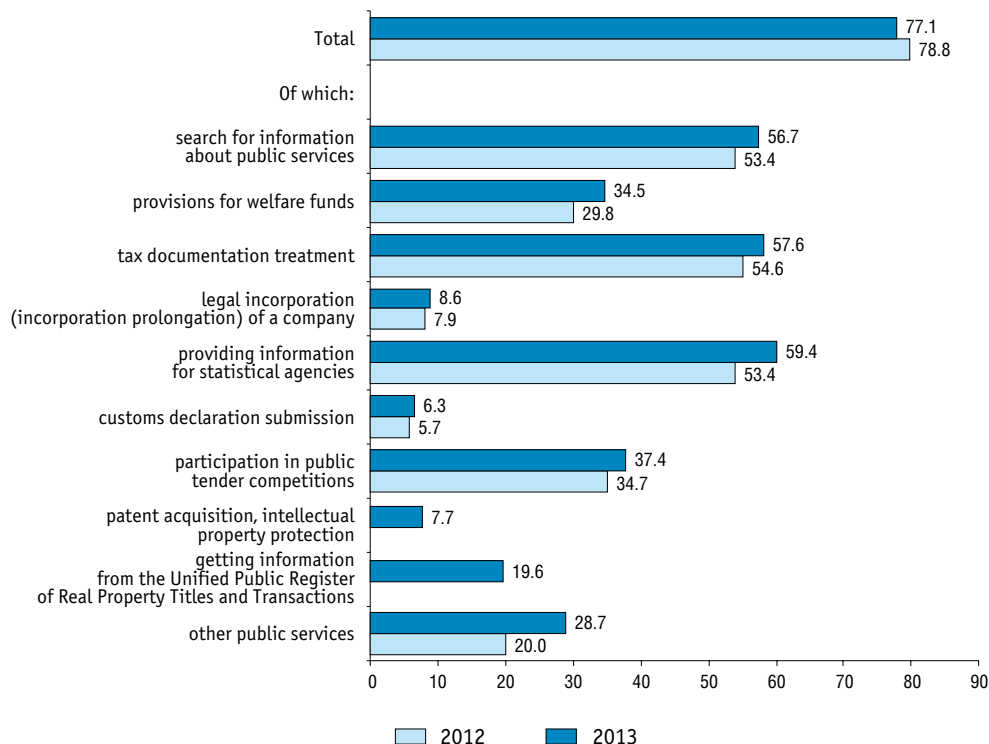
- 6 – providing information about the enterprise and its goods and services
- 7 – receiving orders for goods and services
- 8 – conducting electronic payment transactions with consumers
- 9 – distributing electronic products
- 10 – after sales service

5.3.3. INTERNET USAGE FOR INTERACTION WITH PUBLIC AUTHORITIES*(as a percentage of the total number of enterprises)*

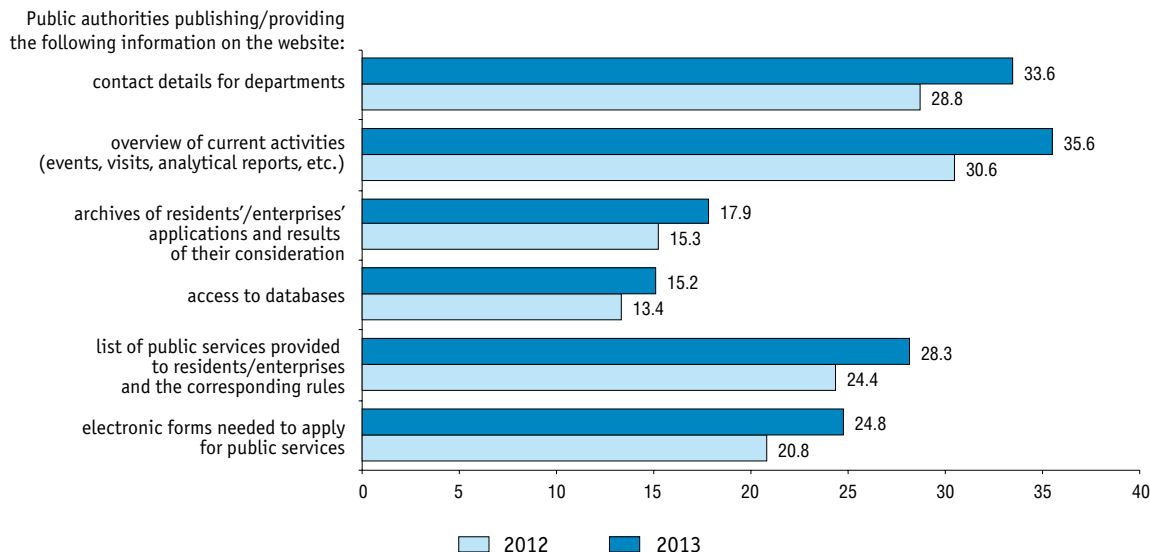
- 1 – Getting information about public authorities' activity
- 2 – Obtaining blank forms (e.g. statistical and tax forms)
- 3 – Submitting filled forms (e.g. statistical and tax forms)
- 4 – Full electronic case handling

5.3.4. INTERNET USAGE FOR RECEIVING SOME TYPES OF PUBLIC SERVICES

(as a percentage of the total number of enterprises)



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

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

* The data are provided for enterprises engaged in the economic activity with RCEA (Rev. 1.1) code 75.1 'General (overall) public service activities'.

5.3.6. 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	
	2012	2013	2012	2013	2012	2013	2012	2013
Total	83.4	84.7	84.4	85.9	81.3	82.6	26.9	29.5
Mining and quarrying	88.4	90.0	88.8	90.1	86.0	87.3	32.8	33.7
Manufacture of food products and beverages	92.7	93.7	93.2	94.6	89.8	91.5	31.2	32.6
Manufacture of chemicals and chemical products	95.3	93.4	95.6	94.5	94.3	92.3	40.4	43.5
Manufacture of basic metals	93.5	93.1	94.2	94.0	90.7	91.1	35.7	35.7
Manufacture of machinery and equipment, n.e.c.	93.4	92.9	93.6	93.3	91.1	90.0	39.0	37.7
Manufacture of electrical machinery and apparatus	95.0	94.7	95.5	95.9	93.7	93.4	38.4	40.8
Electricity, gas and water supply	82.2	83.7	82.5	84.0	79.1	80.6	26.6	28.9
Construction	88.8	88.7	90.4	89.9	86.8	86.4	28.1	29.5
Wholesale and retail trade	83.8	83.8	88.1	89.7	84.5	86.3	34.3	35.5
Transport	78.8	77.7	79.3	78.4	76.1	75.1	26.1	27.5
Communications	92.0	92.6	91.5	92.3	90.6	91.8	59.1	63.6
Financial intermediation	92.8	92.3	91.7	91.1	90.7	89.8	58.9	60.9
Research and development	92.9	93.2	94.3	93.9	91.3	91.1	38.5	40.0
Public administration; compulsory social security	86.6	89.2	88.2	90.7	85.3	87.7	23.8	26.7
Higher education	97.0	96.2	97.1	97.0	96.0	95.3	62.8	63.7
Health and social work	92.9	94.0	94.6	95.6	91.6	92.9	28.8	34.4
Other activities	74.0	78.2	73.8	78.4	70.1	74.4	19.1	22.3

(continued)

	Internal or external recruitment		Telephone communication via the Internet / VoIP		Videoconferencing		Paid subscription for access to e-databases, e-libraries	
	2012	2013	2012	2013	2012	2013	2012	2013
Total	21.4	23.3	19.8	21.8	22.7	26.2	16.6	18.5
Mining and quarrying	32.6	33.9	34.4	36.4	32.7	35.7	26.1	29.4
Manufacture of food products and beverages	41.7	44.4	34.7	38.1	28.5	31.6	26.8	29.3
Manufacture of chemicals and chemical products	53.1	56.9	48.3	48.5	41.8	44.6	36.9	37.6
Manufacture of basic metals	44.9	47.7	39.7	42.2	32.4	36.9	29.5	32.6
Manufacture of machinery and equipment, n.e.c.	42.0	44.4	36.5	37.0	30.7	32.3	30.3	30.9
Manufacture of electrical machinery and apparatus	48.5	50.2	38.0	41.1	34.2	37.5	31.5	32.0
Electricity, gas and water supply	18.3	20.5	17.6	19.5	19.0	21.3	17.1	19.4
Construction	33.6	35.2	23.5	26.0	18.6	21.4	24.1	25.9
Wholesale and retail trade	43.8	47.0	37.0	40.1	32.0	37.0	23.6	26.4
Transport	23.2	23.8	20.4	21.2	18.6	20.0	17.9	18.3
Communications	56.5	60.2	48.8	53.2	54.2	59.3	33.0	33.4
Financial intermediation	59.2	62.2	52.4	56.1	53.9	57.1	37.3	40.4
Research and development	35.6	37.4	34.2	36.1	37.8	41.2	39.6	44.0
Public administration; compulsory social security	10.5	11.4	12.6	14.2	21.9	25.5	9.7	10.9
Higher education	36.1	37.7	46.0	48.0	65.9	69.5	57.1	62.5
Health and social work	16.8	21.0	13.3	16.0	23.2	31.7	14.5	18.7
Other activities	14.7	16.9	14.0	16.0	13.6	16.5	12.4	14.3

5.3.7. 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	
	2012	2013	2012	2013	2012	2013	2012	2013
Total	83.4	84.7	84.4	85.9	81.3	82.6	26.9	29.5
Russian ownership	83.4	84.7	84.2	85.7	81.0	82.4	26.0	28.5
Public	91.3	92.0	93.2	93.6	90.6	91.0	33.2	37.0
Municipal	79.0	82.2	79.1	82.6	75.5	78.8	16.8	19.4
Private	81.8	81.5	82.7	82.7	79.9	79.4	32.6	33.0
Joint	86.5	86.0	86.6	86.0	84.1	83.7	38.3	40.2
Other	74.2	71.6	75.1	73.3	70.3	69.2	16.8	17.9
Foreign ownership	83.8	83.3	86.3	88.3	83.3	86.0	38.7	40.5
Joint Russian and foreign ownership	85.8	85.4	88.1	88.2	85.1	84.6	39.5	42.1

(continued)

	Internal or external recruitment		Telephone communication via the Internet / VoIP		Videoconferencing		Paid subscription for access to e-databases, e-libraries	
	2012	2013	2012	2013	2012	2013	2012	2013
Total	21.4	23.3	19.8	21.8	22.7	26.2	16.6	18.5
Russian ownership	19.1	20.8	17.9	19.7	21.2	24.5	15.6	17.5
Public	21.5	24.2	21.8	24.1	30.5	36.0	18.5	20.9
Municipal	5.7	6.5	6.3	7.1	10.5	12.9	7.7	9.0
Private	37.4	38.4	31.6	33.8	27.8	30.0	24.6	26.3
Joint	37.1	38.5	31.2	33.9	31.6	35.8	26.4	28.8
Other	13.8	15.5	15.3	16.4	14.9	16.5	14.4	15.0
Foreign ownership	53.5	56.1	46.2	46.6	44.1	48.5	29.3	30.2
Joint Russian and foreign ownership	47.3	50.5	44.9	48.3	39.9	42.3	30.0	31.2

5.3.8. 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	
	2012	2013	2012	2013	2012	2013	2012	2013
Total	83.4	84.7	84.4	85.9	81.3	82.6	26.9	29.5
Size of employment, <i>headcount</i> :								
below 50	76.5	78.6	77.5	80.0	73.8	76.1	19.3	21.8
51–100	94.5	95.0	95.8	96.2	93.1	93.5	33.9	37.3
101–200	95.4	95.6	96.2	96.4	93.7	94.1	37.7	40.9
201–500	95.1	95.2	95.7	95.7	94.0	94.0	41.5	45.0
501–1000	95.7	96.2	95.7	96.1	94.5	95.0	50.0	52.0
1001–5000	97.6	97.4	97.2	97.3	96.2	96.2	60.6	63.4
5001–10 000	100	99.0	99.5	98.6	99.5	98.6	77.7	76.1
10 000 and above	98.8	97.6	98.8	97.6	98.8	97.6	77.5	79.3

(continued)

	Internal or external recruitment		Telephone communication via the Internet / VoIP		Videoconferencing		Paid subscription for access to e-databases, e-libraries	
	2012	2013	2012	2013	2012	2013	2012	2013
Total	21.4	23.3	19.8	21.8	22.7	26.2	16.6	18.5
Size of employment, <i>headcount</i> :								
below 50	11.2	13.2	13.0	14.7	14.9	17.9	10.2	11.8
51–100	27.9	30.5	24.6	27.2	29.1	33.5	21.5	24.2
101–200	36.7	40.3	29.2	32.9	31.6	36.9	25.9	29.1
201–500	43.3	46.2	34.3	37.7	37.9	43.8	29.6	32.7
501–1000	52.3	55.9	40.6	43.7	49.1	55.1	34.3	37.7
1001–5000	62.6	65.8	51.0	53.0	62.7	67.3	44.2	47.9
5001–10 000	72.5	71.8	61.1	61.7	73.0	75.6	62.1	61.7
10 000 and above	77.5	75.6	63.8	59.8	77.5	75.6	63.8	70.7

5.3.9. 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	
	2012	2013	2012	2013	2012	2013	2012	2013
Total	58.0	59.7	69.8	71.6	68.5	70.5	31.4	34.4
Mining and quarrying	60.8	62.0	76.6	77.0	76.3	76.0	34.6	37.3
Manufacture of food products and beverages	60.8	63.0	82.2	84.2	83.2	85.0	37.8	41.0
Manufacture of chemicals and chemical products	72.6	73.4	84.3	86.6	86.9	87.1	39.1	43.2
Manufacture of basic metals	63.6	66.1	83.2	84.5	83.2	84.9	36.3	42.3
Manufacture of machinery and equipment, n.e.c.	66.5	66.1	83.8	82.4	83.3	82.7	40.2	42.3
Manufacture of electrical machinery and apparatus	69.0	70.1	84.3	85.6	85.0	87.1	38.3	43.9
Electricity, gas and water supply	55.5	57.5	70.7	73.0	70.5	72.2	26.0	29.2
Construction	56.6	57.3	76.4	77.2	77.4	77.7	38.4	40.4
Wholesale and retail trade	53.8	55.8	70.7	71.8	70.0	71.2	32.6	37.0
Transport	50.9	50.4	66.3	65.3	65.4	64.1	28.2	29.7
Communications	70.6	72.8	78.3	76.8	78.1	78.7	39.4	39.3
Financial intermediation	69.7	70.7	77.7	76.8	75.2	73.5	37.8	40.5
Research and development	73.3	73.2	84.8	84.8	81.7	83.3	41.4	44.5
Public administration; compulsory social security	65.6	68.2	72.1	75.4	70.6	74.3	33.4	37.2
Higher education	80.1	80.8	87.4	87.7	85.6	85.7	43.7	45.3
Health and social work	68.1	71.4	81.2	84.1	81.4	84.1	38.5	42.3
Other activities	46.5	48.4	59.0	61.0	56.7	59.3	24.4	27.1

5.3.10. 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	
	2012	2013	2012	2013	2012	2013	2012	2013
Total	58.0	59.7	69.8	71.6	68.5	70.5	31.4	34.4
Russian ownership	58.0	59.7	69.7	71.5	68.3	70.4	31.0	33.9
Public	68.4	70.1	78.7	80.2	78.6	80.2	39.1	41.9
Municipal	53.2	56.1	63.3	66.8	60.9	65.0	25.1	28.6
Private	54.9	55.1	70.4	70.0	69.3	69.1	32.2	34.2
Joint	59.8	61.4	72.4	73.3	71.3	71.2	33.2	35.3
Other	42.7	43.8	62.3	61.8	61.5	59.7	24.1	25.4
Foreign ownership	58.2	60.3	70.1	71.2	70.2	70.6	36.1	41.2
Joint Russian and foreign ownership	57.1	57.9	72.9	73.1	72.8	72.4	35.7	38.7

5.3.11. 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	
	2012	2013	2012	2013	2012	2013	2012	2013
Total	58.0	59.7	69.8	71.6	68.5	70.5	31.4	34.4
Size of employment, <i>headcount</i> :								
below 50	50.0	52.1	60.9	63.5	58.4	61.5	25.3	28.4
51–100	67.6	69.8	82.8	83.7	83.8	84.3	39.1	42.5
101–200	69.1	71.1	84.7	85.7	85.3	86.3	41.3	44.8
201–500	73.8	74.8	85.7	86.5	86.4	87.2	43.8	46.8
501–1000	78.0	79.9	87.0	88.4	87.5	88.5	44.1	47.7
1001–5000	83.2	84.3	89.8	91.3	90.3	91.5	44.7	48.4
5001–10 000	88.2	88.0	94.3	94.3	94.3	93.3	48.3	48.8
10 000 and above	87.5	87.8	93.8	96.3	91.3	93.9	51.3	54.9

5.3.12. INTERNET USAGE FOR RECEIVING SOME TYPES OF PUBLIC SERVICES

IN ENTERPRISES BY ECONOMIC ACTIVITY: 2013

(as a percentage of the total number of enterprises)

	Search for information about public services	Provisions for welfare funds	Tax documentation treatment	Legal incorporation (incorporation prolongation) of a company	Providing information for statistical agencies	Customs declaration submission
Total	56.7	34.5	57.6	8.6	59.4	6.3
Mining and quarrying	62.4	44.3	65.8	9.9	67.4	15.6
Manufacture of food products and beverages	66.5	48.8	75.6	12.8	75.8	19.0
Manufacture of chemicals and chemical products	74.5	54.8	76.8	14.5	76.2	45.5
Manufacture of basic metals	67.4	52.9	75.7	11.8	74.9	28.7
Manufacture of machinery and equipment, n.e.c.	68.3	49.9	72.3	11.0	71.4	26.2
Manufacture of electrical machinery and apparatus	73.1	54.2	77.6	11.6	74.9	26.2
Electricity, gas and water supply	55.5	37.3	61.1	7.3	61.0	3.4
Construction	62.0	47.3	69.7	11.8	67.7	7.0
Wholesale and retail trade	55.2	42.8	62.5	13.4	63.5	14.1
Transport	50.3	33.2	53.4	8.0	54.5	8.5
Communications	65.4	40.1	60.5	11.8	64.9	11.4
Financial intermediation	67.1	38.6	60.9	9.5	59.0	8.8
Research and development	74.1	49.9	72.8	10.8	67.0	9.0
Public administration; compulsory social security	58.7	28.2	56.0	6.6	60.9	2.4
Higher education	78.2	50.0	72.4	10.1	73.3	4.2
Health and social work	69.9	42.8	71.8	10.3	74.3	3.5
Other activities	48.9	29.9	49.7	7.6	50.7	4.9

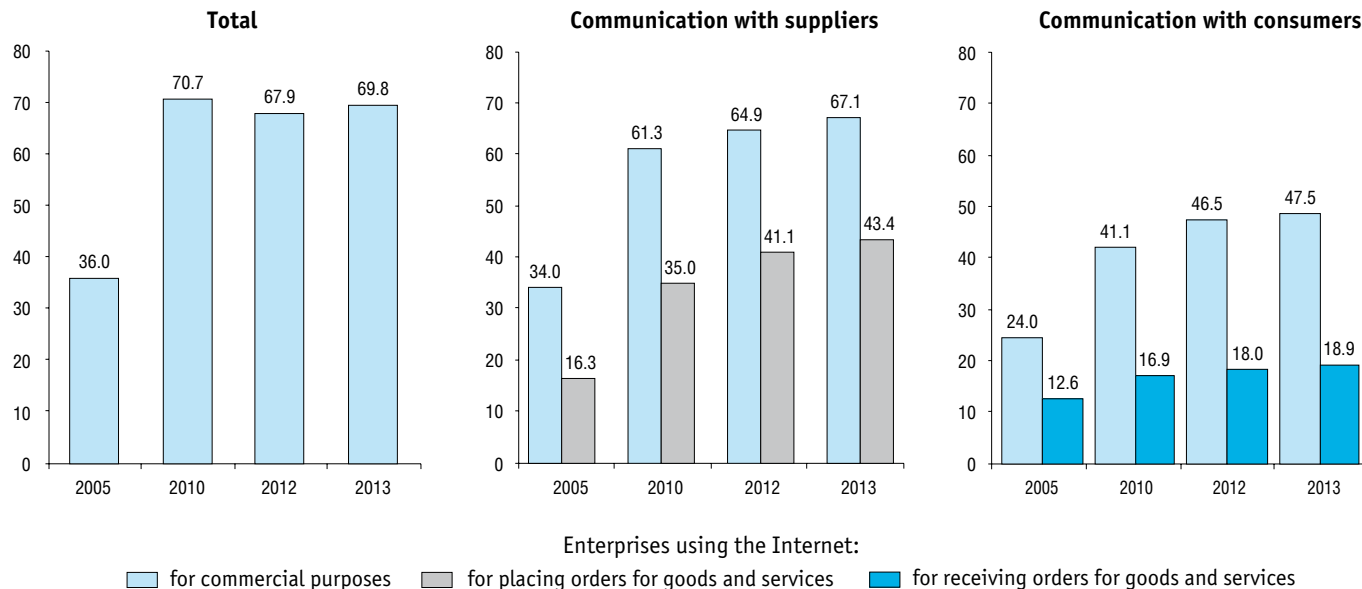
(continued)

	Participation in public tender competitions	Patent acquisition, intellectual property protection	Getting information from the Unified Public Register of Real Property Titles and Transactions	Other public services
Total	37.4	7.7	19.6	28.7
Mining and quarrying	10.5	7.9	22.9	24.7
Manufacture of food products and beverages	22.0	9.3	24.9	29.4
Manufacture of chemicals and chemical products	21.1	12.7	28.8	28.3
Manufacture of basic metals	14.3	9.4	25.6	27.2
Manufacture of machinery and equipment, n.e.c.	17.6	10.4	23.7	25.4
Manufacture of electrical machinery and apparatus	32.4	12.9	27.4	32.0
Electricity, gas and water supply	32.3	5.3	19.8	24.5
Construction	25.6	8.7	24.5	28.7
Wholesale and retail trade	15.4	7.0	20.6	25.2
Transport	24.3	6.1	17.3	22.6
Communications	35.7	9.4	25.8	29.4
Financial intermediation	11.4	6.7	22.9	26.0
Research and development	56.2	23.0	26.7	35.5
Public administration; compulsory social security	54.1	8.1	23.0	36.7
Higher education	46.9	20.4	23.2	39.0
Health and social work	71.7	10.1	20.0	37.8
Other activities	28.7	6.0	15.2	22.6

5.4. Electronic Commerce

5.4.1. INTERNET USAGE FOR COMMERCIAL PURPOSES

(as a percentage of the total number of enterprises)



5.4.2. 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	
	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013
Total	55.9	58.8	42.1	45.6	41.1	43.4	29.7	33.2	22.3	23.8
Mining and quarrying	73.4	75.0	50.4	52.6	36.9	36.6	42.7	43.9	34.8	37.1
Manufacture of food products and beverages	79.3	80.9	58.0	58.8	43.6	44.3	48.8	52.7	32.2	33.4
Manufacture of chemicals and chemical products	86.6	87.3	73.3	71.0	54.5	51.0	54.2	55.4	43.4	43.8
Manufacture of basic metals	85.0	85.8	66.7	68.1	50.1	49.5	51.6	54.4	34.3	35.2
Manufacture of machinery and equipment, n.e.c.	84.5	84.5	63.5	61.8	46.5	45.9	52.1	54.2	39.4	38.6
Manufacture of electrical machinery and apparatus	87.6	87.3	71.9	71.0	55.3	56.0	51.7	54.9	40.9	43.2
Electricity, gas and water supply	60.0	62.5	42.0	46.1	35.8	40.2	32.4	37.1	26.5	28.1
Construction	73.5	74.2	50.5	51.3	37.9	37.7	46.8	48.8	29.7	29.6
Wholesale and retail trade	72.8	72.0	58.0	59.7	44.0	46.1	47.7	50.1	23.2	25.3
Transport	59.3	58.9	41.8	42.6	34.8	35.1	32.8	34.3	24.2	24.5
Communications	77.6	78.6	63.3	63.5	54.4	54.3	42.6	45.4	42.1	43.2
Financial intermediation	70.4	70.8	44.2	46.1	32.4	32.6	31.0	29.4	37.9	38.5
Research and development	78.5	78.8	62.0	64.7	58.7	61.9	43.8	46.3	46.2	48.4
Public administration; compulsory social security	44.6	50.2	35.5	40.9	46.1	49.6	18.7	23.1	17.2	18.5
Higher education	73.1	74.7	58.4	59.7	52.9	52.6	39.2	44.3	50.5	52.6
Health and social work	69.0	74.2	57.8	65.0	62.5	67.8	36.7	43.8	23.7	28.3
Other activities	45.1	47.9	31.5	34.5	29.4	31.7	24.1	27.1	17.3	18.4

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

(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	
	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013
Total	55.9	58.8	42.1	45.6	41.1	43.4	29.7	33.2	22.3	23.8
Russian ownership	54.8	57.8	41.3	44.9	41.3	43.6	28.4	32.0	21.7	23.2
Public	65.9	69.6	54.7	59.6	59.6	62.9	33.1	38.2	26.1	28.6
Municipal	39.9	44.7	28.5	33.4	33.5	37.2	17.6	21.5	14.1	15.4
Private	65.6	65.1	46.9	47.2	34.5	34.3	40.3	41.4	28.4	28.7
Joint	68.6	69.2	49.7	50.8	39.3	41.2	36.4	38.8	33.9	35.7
Other	55.4	54.9	38.2	38.6	27.6	27.2	32.7	33.7	17.8	17.9
Foreign ownership	69.9	69.9	53.9	55.7	41.1	42.3	48.2	50.6	29.8	30.5
Joint Russian and foreign ownership	71.0	70.4	51.0	50.5	36.9	37.0	43.7	43.2	30.7	32.8

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

(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	
	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013
Total	55.9	58.8	42.1	45.6	41.1	43.4	29.7	33.2	22.3	23.8
Size of employment, headcount:										
below 50	42.0	46.0	29.8	33.8	31.3	33.7	21.7	25.4	14.4	15.9
51–100	72.2	75.4	55.2	59.5	53.5	56.2	37.8	42.4	27.8	29.7
101–200	79.5	81.4	62.0	65.4	56.0	58.7	43.6	47.3	33.1	35.5
201–500	82.8	84.8	66.7	69.7	59.1	61.6	46.2	50.2	39.5	42.2
501–1000	86.2	88.1	71.7	74.6	64.8	67.9	48.4	51.8	47.3	49.5
1001–5000	90.8	91.9	79.2	82.7	72.2	75.3	48.4	52.3	57.6	59.7
5001–10 000	95.7	95.7	91.0	87.6	83.4	83.7	50.7	48.8	72.5	72.2
10 000 and above	97.5	95.1	88.8	86.6	78.8	81.7	50.0	59.8	76.3	74.4

5.4.5. 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		Conducting consumer electronic payment transactions		Distribution of electronic products		After-sales service	
	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013
Total	41.8	43.2	18.0	18.9	18.5	20.0	5.1	5.2	5.5	5.8
Mining and quarrying	50.2	50.6	22.1	22.3	32.4	32.8	3.8	4.1	6.0	5.6
Manufacture of food products and beverages	68.1	70.2	44.8	47.6	38.4	42.3	7.1	5.7	7.7	7.2
Manufacture of chemicals and chemical products	79.0	77.9	43.1	44.2	43.1	44.3	10.9	9.4	11.8	11.9
Manufacture of basic metals	77.2	78.5	47.6	48.6	45.3	46.3	7.8	7.5	12.4	12.2
Manufacture of machinery and equipment, n.e.c.	75.8	75.1	44.2	44.2	43.4	44.8	10.6	9.4	18.4	18.2
Manufacture of electrical machinery and apparatus	80.1	80.3	47.9	49.1	43.1	46.0	12.5	11.6	20.6	20.0
Electricity, gas and water supply	45.5	47.7	12.3	14.4	20.4	23.6	2.2	2.6	3.1	3.7
Construction	55.0	54.9	30.5	30.9	34.3	35.4	5.2	5.5	6.5	6.5
Wholesale and retail trade	54.4	55.5	30.5	32.6	32.4	33.1	6.6	7.4	10.3	10.7
Transport	41.6	41.1	22.3	22.3	24.5	24.6	4.7	4.2	6.2	6.4
Communications	69.8	71.0	41.7	42.4	40.5	40.5	21.7	21.7	30.3	31.7
Financial intermediation	67.1	66.3	31.6	33.6	36.1	37.6	16.4	15.9	19.4	21.8
Research and development	66.5	66.1	31.3	32.5	28.6	30.5	13.8	13.1	13.3	12.1
Public administration; compulsory social security	24.8	25.7	6.8	6.8	7.0	7.7	2.3	2.4	2.1	2.2
Higher education	75.0	76.2	26.0	27.0	20.9	22.9	16.0	16.0	8.5	8.4
Health and social work	47.9	52.9	15.5	17.6	15.8	18.8	3.0	3.1	3.3	3.5
Other activities	37.2	38.4	16.0	16.5	15.5	16.7	4.7	5.0	3.9	4.0

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

(as a percentage of the total number of enterprises)

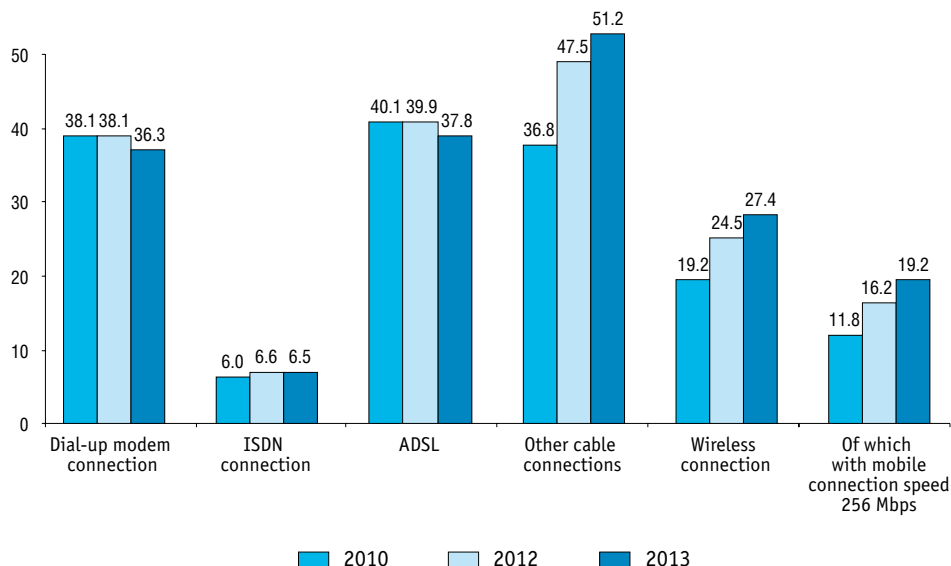
	Providing information about the enterprise and its goods and services		Receiving orders for goods and services		Conducting consumer electronic payment transactions		Distribution of electronic products		After-sales service	
	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013
Total	41.8	43.2	18.0	18.9	18.5	20.0	5.1	5.2	5.5	5.8
Russian ownership	40.5	41.9	16.8	17.7	17.2	18.7	4.6	4.8	4.9	5.1
Public	46.9	48.8	17.4	18.4	15.9	17.8	5.2	5.3	4.0	4.1
Municipal	25.6	27.5	7.7	8.3	8.6	9.8	2.1	2.4	2.0	2.2
Private	56.4	55.5	29.8	30.6	31.7	32.3	7.4	7.4	9.8	10.0
Joint	59.8	60.4	29.9	30.9	31.2	33.3	10.1	10.5	12.4	12.9
Other	38.5	39.6	20.2	21.1	20.7	22.0	4.6	4.5	4.0	4.0
Foreign ownership	56.3	56.8	33.6	32.9	33.7	35.0	11.1	10.1	15.1	14.9
Joint Russian and foreign ownership	61.3	61.7	34.2	34.5	37.1	34.9	11.6	10.8	14.1	13.6

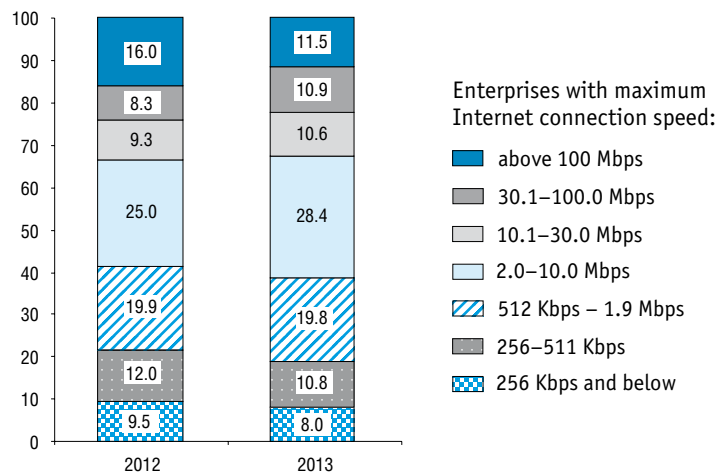
5.4.7. INTERNET USAGE FOR COMMUNICATION WITH CONSUMERS IN ENTERPRISES BY SIZE OF EMPLOYMENT

(as a percentage of the total number of enterprises)

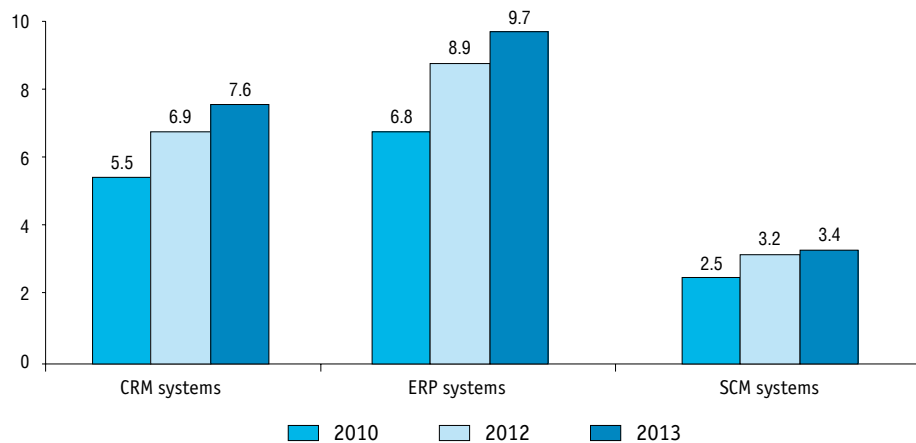
	Providing information about the enterprise and its goods and services		Receiving orders for goods and services		Conducting consumer electronic payment transactions		Distribution of electronic products		After-sales service	
	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013
Total	41.8	43.2	18.0	18.9	18.5	20.0	5.1	5.2	5.5	5.8
Size of employment, <i>headcount</i> :										
below 50	29.9	31.7	11.4	12.4	12.6	14.1	3.3	3.6	3.4	3.8
51–100	54.3	56.1	22.9	24.3	23.8	25.3	6.7	6.9	7.4	7.9
101–200	61.2	63.0	29.8	31.4	28.9	30.9	7.9	8.1	8.8	9.1
201–500	65.3	67.1	32.1	33.9	31.0	33.7	8.3	8.5	9.8	10.0
501–1000	70.0	71.1	34.9	35.3	32.2	33.8	8.9	8.8	11.3	11.0
1001–5000	76.5	77.9	37.2	38.2	34.6	36.0	12.2	11.9	14.9	14.8
5001–10 000	88.2	87.6	45.5	45.0	40.8	41.1	11.8	16.3	23.7	25.8
10 000 and above	86.3	89.0	48.8	48.8	47.5	53.7	20.0	19.5	26.3	28.0

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

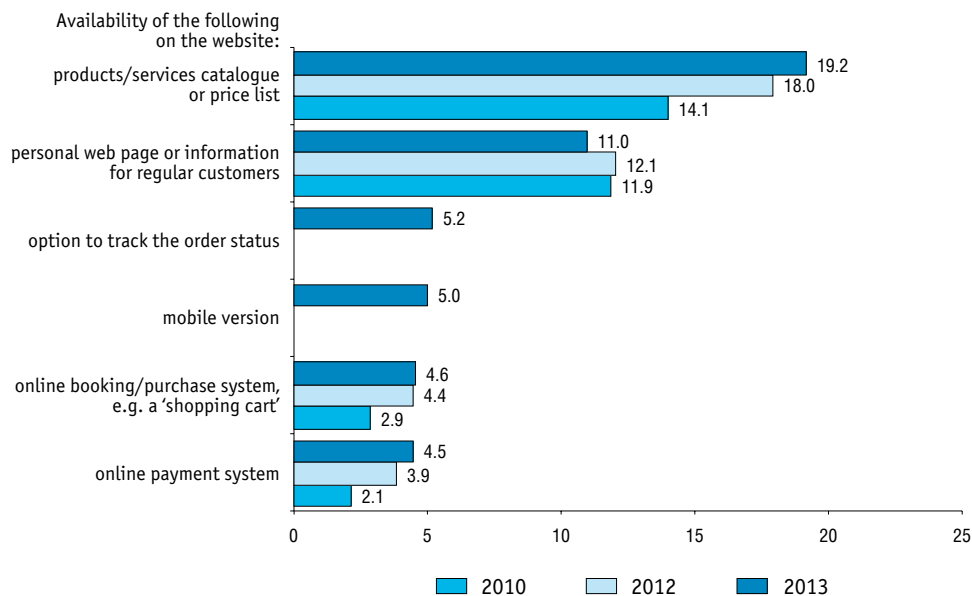


5.4.9. ENTERPRISES USING THE INTERNET FOR COMMERCIAL PURPOSES BY INTERNET CONNECTION SPEED*(as a percentage of enterprises using the Internet for commercial purposes)*

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



5.4.11. ENTERPRISES USING A WEBSITE FOR COMMERCIAL PURPOSES

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

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

5.5. ICT Expenditure

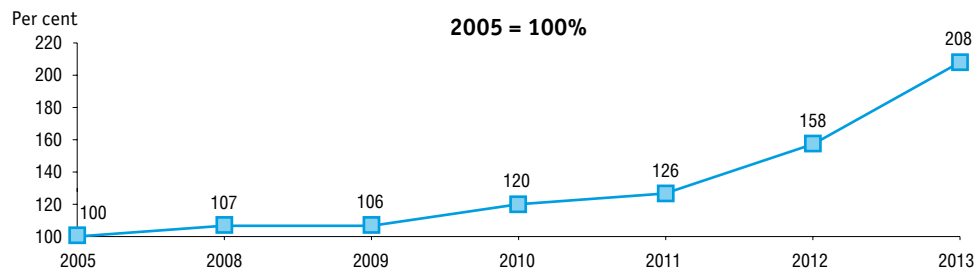
5.5.1. ICT EXPENDITURE BY TYPE OF COSTS

(million roubles)

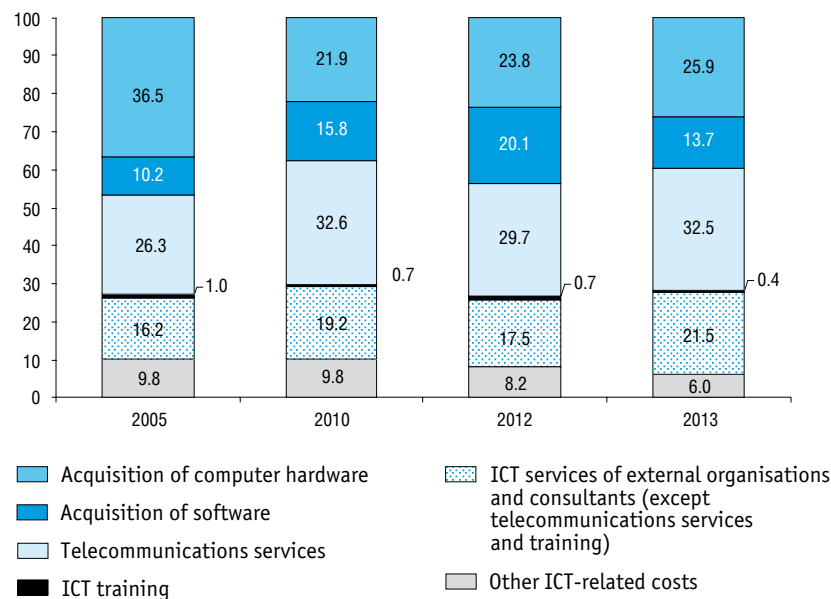
	2005	2010	2011	2012	2013
Total	215302	515648	603007	842674	1245705
Acquisition of computer hardware	78509	112726	139501	200625	322424
Acquisition of software	21914	81228	104197	169025	170112
Telecommunications services	56704	167923	184834	250461	405110
Of which – payment for Internet access	...	39171	53336	64198	170769
ICT training	2200	3733	4683	5648	4638
ICT services of external organisations and consultants (excluding telecommunications services and training)	34862	98919	120012	147432	267706
Other ICT-related expenditure	21113	51119	49780	69483	75715

5.5.2. TRENDS IN ICT EXPENDITURE

(at current prices)



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

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

5.5.4. 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 (except telecommunications services and training)		Other ICT-related costs	
		2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013
Total	100	23.8	25.9	20.1	13.7	29.7	32.5	7.6	13.7	0.7	0.4	17.5	21.5	8.2	6.0
Mining and quarrying	100	14.0	9.3	16.7	10.9	34.8	43.5	4.3	20.1	0.2	0.6	29.6	30.5	4.7	5.2
Manufacture of food products and beverages	100	34.4	30.6	10.1	11.1	35.2	37.6	13.8	11.4	1.8	0.3	8.5	10.0	10.0	10.4
Manufacture of chemicals and chemical products	100	4.9	15.6	25.7	20.3	56.5	29.6	4.0	9.1	0.1	0.4	9.4	27.4	3.4	6.7
Manufacture of basic metals	100	8.5	11.3	22.5	22.6	22.9	31.5	5.3	7.2	0.7	0.2	26.9	27.0	18.5	7.4
Manufacture of machinery and equipment, n.e.c.	100	18.4	16.0	26.7	21.5	28.1	36.7	6.5	24.9	1.0	1.0	19.0	14.5	6.8	10.3
Manufacture of electrical machinery and apparatus	100	25.1	30.6	16.4	18.6	29.5	22.0	12.8	5.8	1.1	1.4	17.5	15.8	10.4	11.6
Electricity, gas and water supply	100	22.8	18.3	29.9	16.3	18.9	38.0	3.3	10.5	0.2	0.3	22.9	19.9	5.3	7.2
Construction	100	30.5	28.2	14.8	14.7	37.4	39.7	19.4	12.5	1.1	0.4	10.2	12.2	6.0	4.8
Wholesale and retail trade	100	25.0	31.2	18.7	13.7	38.7	36.2	12.4	12.7	0.6	0.6	13.4	12.4	3.6	5.9
Transport	100	12.5	14.0	11.1	13.4	52.7	50.1	6.5	6.7	1.3	0.7	15.5	17.1	6.9	4.7
Communications	100	10.6	30.8	39.3	7.9	33.3	33.5	7.6	22.5	0.8	0.0	8.3	26.0	7.7	1.8
Financial intermediation	100	31.8	26.8	21.4	23.8	20.7	29.7	4.9	5.3	0.3	0.3	18.0	15.1	7.8	4.3
Research and development	100	31.5	39.7	21.8	19.0	13.8	19.5	4.4	4.4	0.7	0.6	14.9	12.5	17.3	8.7
Public administration; compulsory social security	100	27.9	25.4	14.3	14.4	27.9	27.3	9.2	7.2	0.7	0.4	20.6	20.9	8.6	11.6
Higher education	100	52.1	43.7	12.3	15.5	18.0	17.3	7.6	6.7	0.6	0.8	6.1	8.4	10.9	14.3
Health and social work	100	32.9	26.4	15.5	15.8	25.4	35.4	8.6	13.9	0.6	0.5	12.2	17.1	13.4	4.8
Other activities	100	23.3	20.0	14.7	14.9	27.8	25.1	8.2	8.9	1.0	0.8	22.9	26.2	10.3	13.0

5.5.5. PERCENTAGE DISTRIBUTION OF ICT EXPENDITURE IN ENTERPRISES BY OWNERSHIP

	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 (except telecommunications services and training)		Other ICT-related costs	
		2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013
Total	100	23.8	25.9	20.1	13.7	29.7	32.5	7.6	13.7	0.7	0.4	17.5	21.5	8.2	6.0
Russian ownership	100	24.3	26.9	20.4	12.7	29.4	32.4	7.3	14.4	0.6	0.3	17.1	22.0	8.2	5.7
Public	100	31.5	32.5	14.4	6.6	25.2	30.9	8.0	19.3	1.0	0.2	17.0	25.4	10.9	4.4
Municipal	100	24.6	23.3	18.8	13.7	36.1	37.7	14.2	14.3	0.8	0.9	12.9	14.0	6.8	10.4
Private	100	18.1	20.5	23.1	17.8	36.5	36.7	8.1	10.7	0.5	0.4	15.2	17.4	6.6	7.2
Joint	100	26.2	22.1	24.3	23.7	19.8	25.5	2.3	3.5	0.2	0.3	21.9	22.6	7.6	5.8
Other	100	20.0	17.9	25.1	25.5	18.3	16.5	6.6	6.1	0.4	0.3	31.2	33.5	5.0	6.3
Foreign ownership	100	20.3	20.8	19.7	24.0	32.9	29.4	10.4	7.8	0.5	0.8	16.4	15.8	10.2	9.2
Joint Russian and foreign ownership	100	21.1	15.6	16.8	18.5	29.6	37.1	8.0	9.1	1.2	1.0	23.4	20.0	7.9	7.8

5.5.6. 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 Internet access		ICT training		ICT services of external organisations and consultants (except telecommunications services and training)		Other ICT-related costs	
		2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013
Total	100	23.8	25.9	20.1	13.7	29.7	32.5	7.6	13.7	0.7	0.4	17.5	21.5	8.2	6.0
<i>Size of employment, headcount:</i>															
below 50	100	19.5	17.7	17.4	14.2	40.5	38.8	17.3	17.3	0.6	0.5	15.6	19.2	6.4	9.6
51–100	100	30.7	24.9	12.1	16.2	36.9	32.6	12.4	13.5	0.9	0.9	13.1	16.5	6.4	8.9
101–200	100	23.8	21.9	11.9	12.9	36.3	32.4	12.1	11.3	1.1	0.4	18.2	19.9	8.7	12.5
201–500	100	25.4	24.9	13.7	12.2	37.0	41.0	11.5	15.9	0.8	0.4	15.2	15.3	7.9	6.2
501–1000	100	20.5	20.2	20.7	15.9	30.8	37.4	6.4	8.0	0.6	0.5	14.2	15.3	13.2	10.7
1001–5000	100	22.3	20.4	29.7	24.5	24.1	32.7	3.6	5.1	0.5	0.4	17.3	16.8	6.1	5.2
5001–10 000	100	25.8	26.2	18.5	30.4	27.8	16.2	2.2	2.5	0.4	0.3	20.5	20.8	7.0	6.1
10 000 and above	100	29.6	34.9	18.7	3.7	10.9	28.1	1.2	21.7	0.6	0.2	30.6	31.1	9.6	2.0

5.5.7. ICT EXPENDITURE PER ENTERPRISE BY ECONOMIC ACTIVITY

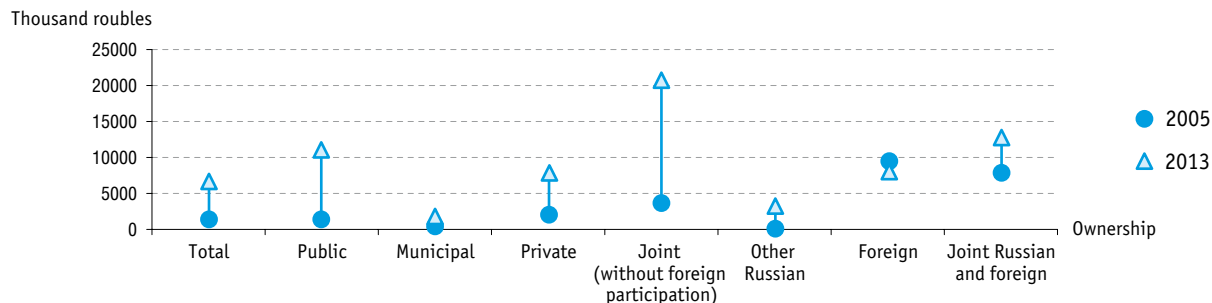
(thousand roubles)

	2005	2010	2012	2013
Total	1426	2918	4554	6440
Mining and quarrying	7304	16911	29190	32686
Manufacture of food products and beverages	764	2270	3782	4700
Manufacture of chemicals and chemical products	3350	6005	23713	7017
Manufacture of basic metals	4736	6036	13316	11673
Manufacture of machinery and equipment, n.e.c.	2624	3589	3226	6114
Manufacture of electrical machinery and apparatus	1806	10185	3568	4275
Electricity, gas and water supply	2106	4223	7816	7373
Construction	857	2457	3048	2851
Wholesale and retail trade	662	2865	5145	5386
Transport	1718	4610	6665	6445
Communications	19569	39517	49043	211387
Financial intermediation	6091	12635	20633	21209
Research and development	2973	6121	7044	8113
Public administration; compulsory social security	513	1199	2430	2553
Higher education	5100	4007	8222	6178
Health and social work	544	1051	2279	3035
Other activities	1097	1725	2100	2535

5.5.8. ICT EXPENDITURE PER ENTERPRISE BY OWNERSHIP (thousand roubles)

	2005	2010	2012	2013
Total	1426	2918	4554	6440
Russian ownership	1231	2524	4185	6168
Public	1434	2879	4587	11086
Municipal	211	457	717	879
Private	2096	4646	6997	7663
Joint	3487	10575	23325	21792
Other	97	1188	3128	2986
Foreign ownership	9265	6238	8130	7671
Joint Russian and foreign ownership	7841	13672	11635	13226

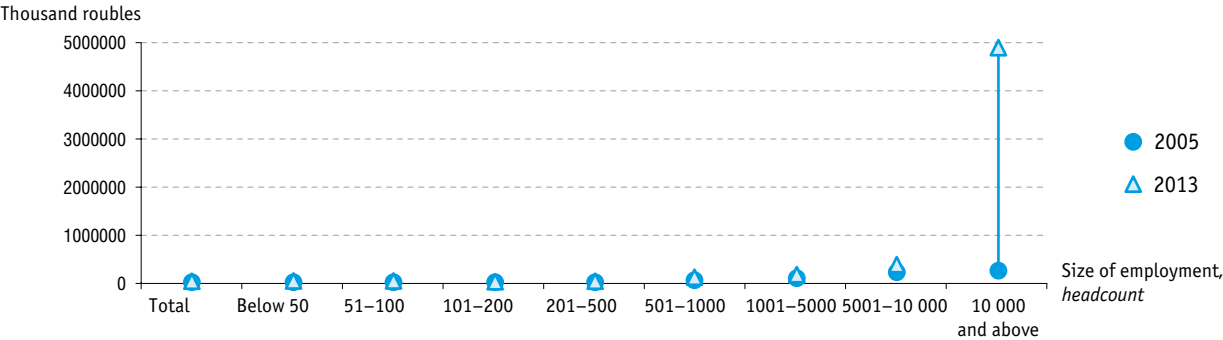
5.5.9. TRENDS IN ICT EXPENDITURE PER ENTERPRISE BY OWNERSHIP



5.5.10. ICT EXPENDITURE PER ENTERPRISE BY SIZE OF EMPLOYMENT
(thousand roubles)

	2005	2010	2012	2013
Total	1426	2918	4554	6440
Size of employment, headcount:				
below 50	241	422	672	807
51–100	546	1710	2726	3341
101–200	979	2424	3915	4046
201–500	2562	5553	7199	8681
501–1000	7121	11969	24647	24541
1001–5000	13992	42646	61211	65192
5001–10 000	41543	134743	242255	269283
10 000 and above	175563	422032	979617	4774347

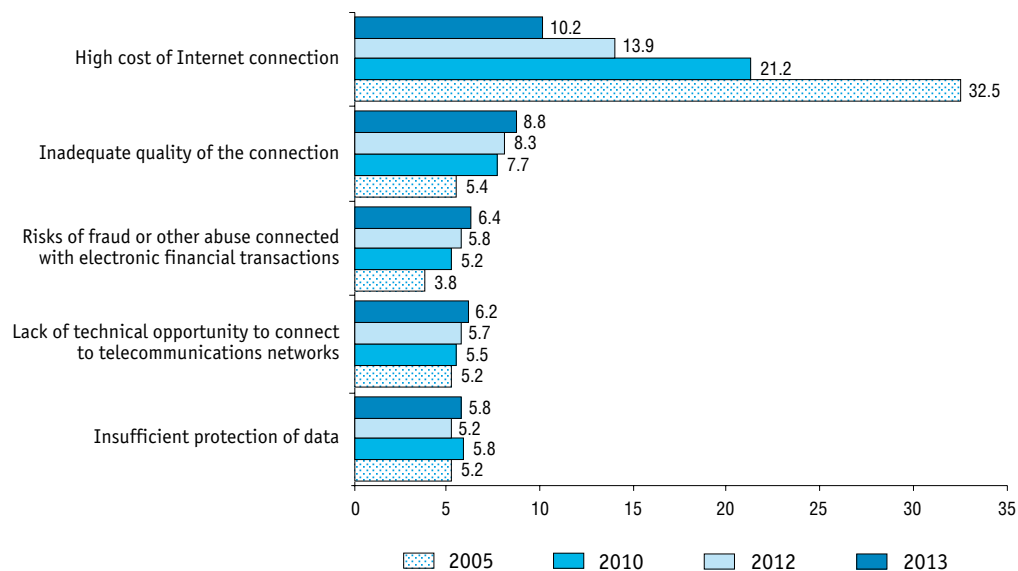
5.5.11. TRENDS IN ICT EXPENDITURE PER ENTERPRISE BY SIZE OF EMPLOYMENT



5.6. Barriers to Internet Use

5.6.1. FACTORS HAMPERING INTERNET USE

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



5.6.2. FACTORS HAMPERING INTERNET USE IN ENTERPRISES BY ECONOMIC ACTIVITY: 2013

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

	High cost of Internet connection	Inadequate quality of the connection	Risks of fraud or other abuse connected with electronic financial transactions	Lack of technical opportunity to connect to telecommunications networks	Insufficient protection of data
Total	10.2	8.8	6.4	6.2	5.8
Mining and quarrying	7.2	8.9	8.1	6.0	5.3
Manufacture of food products and beverages	6.8	8.1	8.2	4.7	5.8
Manufacture of chemicals and chemical products	4.2	5.7	7.1	6.0	7.6
Manufacture of basic metals	5.7	6.0	9.1	4.3	5.1
Manufacture of machinery and equipment, n.e.c.	6.9	5.8	7.7	4.7	6.6
Manufacture of electrical machinery and apparatus	4.8	5.4	8.5	2.9	6.6
Electricity, gas and water supply	11.3	9.0	5.5	6.5	4.6
Construction	7.2	7.4	9.9	5.9	6.9
Wholesale and retail trade	6.1	7.2	8.4	6.6	5.6
Transport	8.6	7.2	6.9	7.2	7.7
Communications	4.0	5.7	5.4	5.1	6.5
Financial intermediation	4.4	4.8	13.2	4.3	11.5
Research and development	9.8	4.4	6.9	3.0	6.6
Public administration; compulsory social security	10.8	11.2	4.9	5.9	5.9
Higher education	9.6	4.9	4.7	2.7	3.4
Health and social work	12.3	9.5	5.7	5.6	5.9
Other activities	11.7	8.3	5.9	6.8	4.8

5.6.3. FACTORS HAMPERING INTERNET USE IN ENTERPRISES BY OWNERSHIP: 2013

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

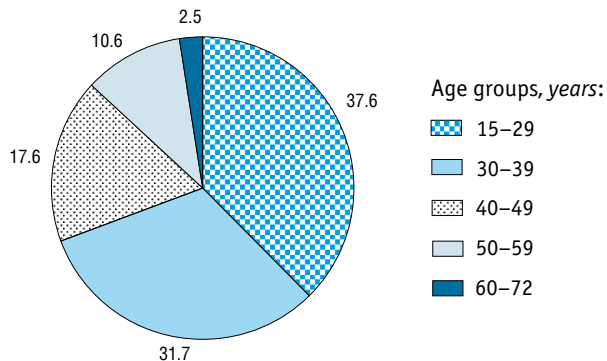
	High cost of Internet connection	Inadequate quality of the connection	Risks of fraud or other abuse connected with electronic financial transactions	Lack of technical opportunity to connect to telecommunications networks	Insufficient protection of data
Total	10.2	8.8	6.4	6.2	5.8
Russian ownership	10.7	9.0	6.3	6.1	5.7
Public	10.6	8.0	6.0	4.8	6.9
Municipal	12.9	11.5	4.7	7.2	4.6
Private	7.5	6.4	8.7	5.8	6.2
Joint	7.2	5.9	8.8	5.1	7.6
Other	10.0	5.9	6.9	5.6	4.6
Foreign ownership	4.3	6.5	8.0	8.5	6.6
Joint Russian and foreign ownership	5.1	6.2	8.8	4.4	6.9

5.7. ICT Professionals and Employees with ICT Skills

5.7.1. EMPLOYED POPULATION WITH SECONDARY VOCATIONAL OR HIGHER EDUCATION IN ICT BY ECONOMIC ACTIVITY AND AGE GROUP: 2013 (annual average)

	Total, aged 15–72	Of which by age group, years				
		15–29	30–39	40–49	50–59	60–72
Thousand						
Total	1937.3	677.6	532.9	366.3	289.5	71.0
Of which with ICT-related job (according to the respondent)	1158.7	435.6	367.4	203.8	123.4	28.5
As a percentage of the total employment in the respective age group						
Total	2.7	4.1	2.9	2.1	1.8	2.1
Of which with ICT-related job (according to the respondent)	1.6	2.6	2.0	1.2	0.8	0.9

5.7.2. PERCENTAGE DISTRIBUTION OF THE EMPLOYED POPULATION WITH AN ICT-RELATED JOB AND HIGHER OR SECONDARY VOCATIONAL EDUCATION IN ICT BY AGE GROUP: 2013*
(annual average)



* People having secondary vocational or higher education in ICT-related fields are considered.

**5.7.3. EMPLOYED POPULATION WITH AN ICT-RELATED JOB AND HIGHER OR SECONDARY VOCATIONAL EDUCATION IN ICT
BY ECONOMIC ACTIVITY AND AGE GROUP: 2013**
(annual average; thousand)

	Total, aged 15–72	Of which by age group, years				
		15–29	30–39	40–49	50–59	60–72
Total	1158.7	435.5	367.4	203.8	123.4	28.5
Agriculture and forestry, hunting, fishing and aquaculture	4.1	1.9	0.9	0.7	0.6	–
Mining and quarrying	13.2	4.6	5.4	2.1	1.1	–
Manufacturing	207.9	64.0	55.2	44.9	35.2	8.7
Electricity, gas and water supply	32.3	12.7	10.5	4.4	3.9	0.8
Construction	26.0	11.6	6.8	5.0	1.4	1.2
Wholesale and retail trade	77.7	33.3	25.8	12.2	3.3	3.0
Transport	42.3	11.4	12.3	9.4	7.0	2.2
Communications	129.4	41.2	37.1	26.9	20.7	3.5
Financial intermediation	84.0	34.6	31.4	12.4	5.1	0.5
Real estate, renting and business activities	376.9	149.7	133.7	60.7	28.3	4.4
Public administration; social security	70.9	26.8	22.0	12.0	8.2	1.9
Education	37.4	21.9	7.0	3.7	3.6	1.2
Health and social work	28.3	11.8	9.6	4.1	2.2	0.7

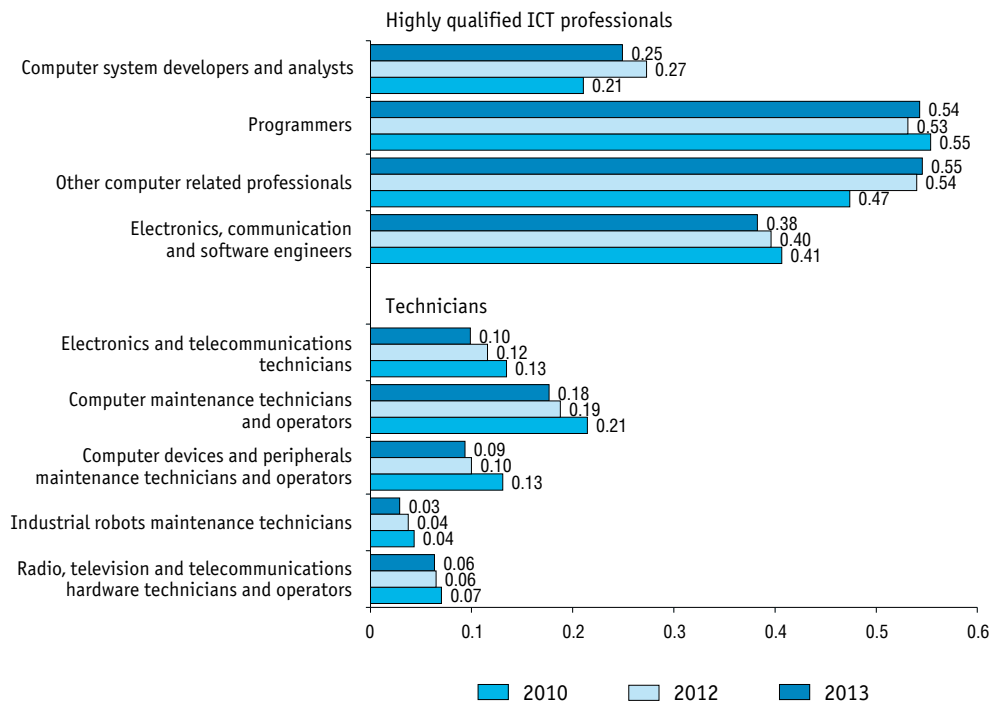
* People having secondary vocational or higher education in ICT-related fields are considered.

5.7.4. ICT PROFESSIONALS BY OCCUPATION AND QUALIFICATION LEVEL*

	Thousand			As a percentage of the total		
	2010	2012	2013	2010	2012	2013
Total number of employees in enterprises surveyed	25638.6	25138.8	25752.2	-	-	-
Of which ICT professionals:						
highly qualified ICT professionals	421.7	437.5	443.0	100	100	100
computer system developers and analysts	54.0	68.6	64.2	12.8	15.7	14.5
programmers	142.0	133.6	139.8	33.7	30.5	31.6
other computer related professionals	121.5	135.7	140.5	28.8	31.0	31.7
electronics, communication and software engineers	104.2	99.6	98.5	24.7	22.8	22.2
technicians	152.0	127.1	118.8	100	100	100
electronics and telecommunications technicians	34.4	29.1	25.4	22.6	22.9	21.4
computer maintenance technicians and operators	55.0	47.2	45.5	36.2	37.1	38.3
computer devices and peripherals maintenance technicians and operators	33.5	25.1	24.1	22.0	19.8	20.3
industrial robots maintenance technicians	11.1	9.4	7.5	7.3	7.4	6.3
radio, television and telecommunications hardware technicians and operators	18.0	16.3	16.3	11.9	12.8	13.7

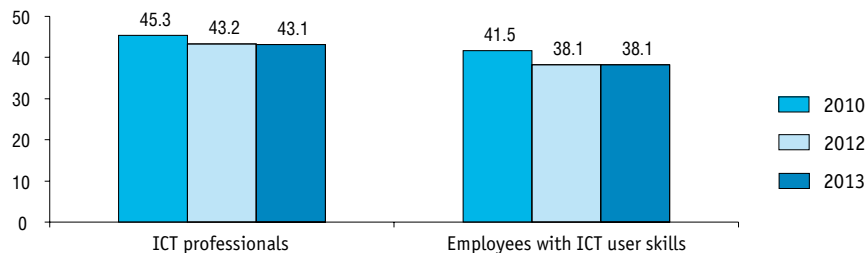
* Excluding data on small businesses.

5.7.5. ICT PROFESSIONALS AS A PERCENTAGE OF THE TOTAL EMPLOYMENT



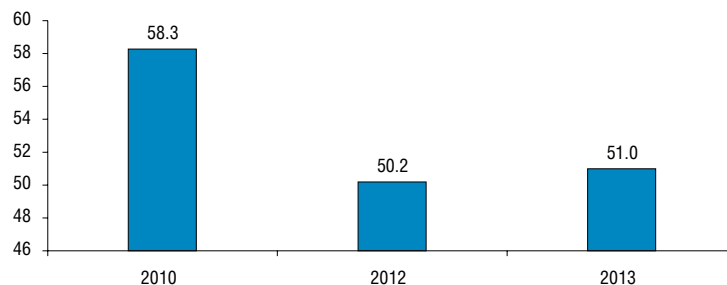
5.7.6. ENTERPRISES THAT NEED ICT PROFESSIONALS AND EMPLOYEES WITH ICT SKILLS

(as a percentage of the total number of enterprises)



5.7.7. ENTERPRISES THAT OUTSOURCED ICT WORK

(as a percentage of the total number of enterprises)



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

(headcount)

	Computer system developers and analysts			Programmers			Other computer related professionals			Electronics, communication and software engineers		
	2010	2012	2013	2010	2012	2013	2010	2012	2013	2010	2012	2013
Total	21	27	25	55	53	54	47	54	55	41	40	38
Mining and quarrying	5	6	7	22	20	20	15	17	18	21	20	19
Manufacture of food products and beverages	10	13	14	27	25	26	18	22	22	10	12	11
Manufacture of chemicals and chemical products	13	17	11	28	27	28	23	25	27	24	24	21
Manufacture of basic metals	14	18	12	29	29	30	15	25	21	17	19	22
Manufacture of machinery and equipment, n.e.c.	8	10	11	34	32	33	24	28	23	24	27	25
Manufacture of electrical machinery and apparatus	23	35	46	84	79	76	45	47	54	97	79	83
Electricity, gas and water supply	7	10	8	40	38	38	28	36	38	31	35	34
Construction	5	9	6	19	17	18	17	20	16	15	11	8
Wholesale and retail trade	15	26	20	33	40	35	30	39	33	11	14	8
Transport	9	15	8	33	33	20	38	39	22	22	26	25
Communications	32	46	37	80	80	72	87	98	104	356	384	393
Financial intermediation	60	65	70	118	94	85	163	159	144	54	36	35
Research and development	119	150	136	182	180	184	91	98	109	195	227	220
Public administration; compulsory social security	12	18	14	55	49	49	104	113	126	18	19	15
Higher education	26	30	26	133	100	102	64	100	103	77	59	66
Health and social work	8	4	3	33	31	35	16	14	14	10	5	5
Other activities	35	49	43	73	79	83	56	69	70	33	29	27

5.7.9. TECHNICIANS PER 10 000 EMPLOYEES BY ECONOMIC ACTIVITY (headcount)

	Electronics and telecommunications technicians			Computer maintenance technicians and operators			Computer devices and peripherals maintenance technicians and operators			Industrial robots maintenance technicians and operators			Radio, television and telecommunications hardware technicians and operators		
	2010	2012	2013	2010	2012	2013	2010	2012	2013	2010	2012	2013	2010	2012	2013
Total	13	12	10	21	19	18	13	10	9	4	4	3	7	6	6
Mining and quarrying	2	4	3	6	5	4	2	2	2	0.6	0.5	0.3	3	3	3
Manufacture of food products and beverages	3	4	4	11	9	8	7	7	10	3	8	5	1	2	1
Manufacture of chemicals and chemical products	4	5	4	9	13	7	3	5	4	2	25	9	3	3	3
Manufacture of basic metals	9	7	6	16	15	14	8	9	7	2	2	1	2	2	2
Manufacture of machinery and equipment, n.e.c.	5	5	6	12	9	10	9	6	5	15	18	18	3	3	3
Manufacture of electrical machinery and apparatus	11	19	11	19	27	23	15	15	19	9	9	11	5	5	10
Electricity, gas and water supply	7	8	8	8	9	8	5	6	4	2	2	2	2	3	3
Construction	4	4	4	6	6	5	5	4	4	0.3	0.4	0.6	1	2	3
Wholesale and retail trade	5	7	6	14	14	11	11	11	9	0.4	1.2	0.6	1	2	4
Transport	12	12	9	12	9	8	4	6	3	0.2	1.6	0.4	3	5	4
Communications	130	130	105	23	26	19	13	23	16	0.1	2.2	2.1	46	51	44
Financial intermediation	9	11	11	19	24	24	16	24	27	0.4	1.6	0.3	1	6	2
Research and development	27	29	26	36	35	37	30	21	20	4	5	5	5	6	9
Public administration; compulsory social security	4	5	6	24	20	20	12	10	10	0.1	1.1	0.3	2	5	8
Higher education	26	26	18	60	50	50	31	23	24	0.3	3.2	1.8	8	9	6
Health and social work	10	2	2	33	25	25	15	4	4	9	1.0	0.6	9	2	3
Other activities	13	8	8	26	21	18	20	13	11	10	5	5	13	12	10

5.7.10. ENTERPRISES THAT NEED ICT PROFESSIONALS AND EMPLOYEES WITH ICT SKILLS BY ECONOMIC ACTIVITY

(as a percentage of the total number of enterprises)

	Total			Of which are in need of					
				ICT professionals			employees with ICT user skills		
	2010	2012	2013	2010	2012	2013	2010	2012	2013
Total	49.1	47.0	47.1	45.3	43.2	43.1	41.5	38.1	38.1
Mining and quarrying	43.2	39.4	40.3	39.4	35.6	36.8	34.9	31.8	31.2
Manufacture of food products and beverages	44.2	41.6	42.2	39.1	37.1	37.1	37.9	34.0	34.3
Manufacture of chemicals and chemical products	51.4	43.3	43.9	44.3	38.8	39.4	44.0	36.9	36.4
Manufacture of basic metals	47.4	41.7	42.8	42.1	36.6	37.6	39.8	34.7	35.6
Manufacture of machinery and equipment, n.e.c.	46.0	43.5	41.0	41.1	38.8	36.8	39.3	34.3	32.3
Manufacture of electrical machinery and apparatus	51.7	47.9	45.3	47.7	43.6	41.2	45.1	39.2	36.0
Electricity, gas and water supply	45.5	47.1	46.2	41.7	42.9	42.2	37.7	37.2	35.2
Construction	41.8	36.3	36.3	37.3	32.4	31.7	34.6	28.5	29.1
Wholesale and retail trade	40.1	33.0	34.6	36.0	29.1	30.9	34.0	27.1	29.1
Transport	40.1	37.5	36.5	36.5	33.8	32.6	33.8	30.0	29.0
Communications	52.3	43.9	44.1	47.1	40.1	41.2	46.2	37.5	38.4
Financial intermediation	44.7	39.6	40.2	40.4	35.2	36.0	38.5	31.8	33.5
Research and development	52.2	51.3	50.3	48.8	47.3	46.1	44.8	42.4	41.5
Public administration; compulsory social security	58.2	57.8	58.6	54.7	54.3	55.0	49.1	46.7	47.6
Higher education	55.5	50.4	50.2	52.1	47.3	46.5	47.3	42.5	42.4
Health and social work	60.0	57.5	57.3	55.7	53.1	52.7	51.3	47.5	47.0
Other activities	42.3	42.0	42.4	38.6	38.2	38.4	35.7	33.8	33.9

5.7.11. HIGHLY QUALIFIED ICT PROFESSIONALS PER 10 000 EMPLOYEES BY OWNERSHIP OF ENTERPRISES (headcount)

	Computer system developers and analysts			Programmers			Other computer related professionals			Electronics, communication and software engineers		
	2010	2012	2013	2010	2012	2013	2010	2012	2013	2010	2012	2013
Total	21	27	25	55	53	54	47	54	55	41	40	38
Russian ownership	19	25	22	53	51	51	46	52	52	37	40	39
Public	21	23	18	67	57	53	61	62	60	47	42	39
Municipal	13	7	6	41	38	42	32	33	39	16	8	7
Private	21	31	30	48	49	50	37	47	46	32	31	29
Joint	19	30	29	56	56	58	57	62	65	68	113	119
Other	9	36	35	25	38	42	28	38	54	21	41	58
Foreign ownership	57	68	62	90	99	105	69	81	82	28	26	22
Joint Russian and foreign ownership	28	32	29	65	49	58	54	62	64	114	46	47

5.7.12. TECHNICIANS PER 10 000 EMPLOYEES BY OWNERSHIP OF ENTERPRISES

(headcount)

	Electronics and telecommunications technicians			Computer maintenance technicians and operators			Computer devices and peripherals maintenance technicians and operators			Industrial robots maintenance technicians and operators			Radio, television and telecommunications hardware technicians and operators		
	2010	2012	2013	2010	2012	2013	2010	2012	2013	2010	2012	2013	2010	2012	2013
Total	13	12	10	21	19	18	13	10	9	4	4	3	7	6	6
Russian ownership	12	11	9	22	19	18	13	10	9	4	3	3	7	6	7
Public	12	11	9	27	24	25	13	10	9	1	2	1	7	8	8
Municipal	17	3	3	37	19	17	24	7	6	16	2	2	17	6	7
Private	9	10	9	13	14	12	10	10	9	2	4	3	4	5	6
Joint	19	26	22	17	16	16	9	13	11	7	9	11	5	6	4
Other	5	9	8	10	23	21	11	11	8	0.1	2	1	4	10	12
Foreign ownership	14	22	16	14	21	14	10	13	15	2	11	5	4	7	2
Joint Russian and foreign ownership	32	11	12	17	15	14	9	9	9	4	2	2	5	7	6

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

(as a percentage of the total number of enterprises)

	Total			Of which are need of					
				ICT professionals			employees with ICT user skills		
	2010	2012	2013	2010	2012	2013	2010	2012	2013
Total	49.1	47.0	47.1	45.3	43.2	43.1	41.5	38.1	38.1
Russian ownership	49.8	48.2	48.3	46.0	44.3	44.3	42.1	39.0	39.0
Public	54.0	53.7	53.7	50.2	49.7	49.5	45.4	43.7	43.5
Municipal	53.9	53.7	54.6	50.2	49.9	50.7	45.9	43.6	44.1
Private	38.3	33.7	33.5	34.3	29.9	29.5	32.0	27.0	27.0
Joint	44.6	41.3	41.4	40.8	37.1	37.1	37.9	33.1	33.1
Other	40.9	40.3	39.2	37.6	36.7	35.9	34.0	31.2	30.6
Foreign ownership	37.0	28.6	31.6	33.0	25.2	27.7	32.3	23.1	26.6
Joint Russian and foreign ownership	38.2	36.1	35.7	33.4	31.9	32.0	32.5	30.0	29.7

5.7.14. HIGHLY QUALIFIED ICT PROFESSIONALS PER 10 000 EMPLOYEES IN ENTERPRISES BY SIZE OF EMPLOYMENT (headcount)

	Computer system developers and analysts			Programmers			Other computer related professionals			Electronics, communication and software engineers		
	2010	2012	2013	2010	2012	2013	2010	2012	2013	2010	2012	2013
Total	21	27	25	55	53	54	47	54	55	41	40	38
Size of employment, <i>headcount</i> :												
below 50	12	22	18	74	70	75	78	84	87	21	21	19
51–100	18	24	11	69	72	37	65	77	41	28	31	14
101–200	23	29	26	61	63	66	57	62	65	33	33	33
201–500	20	29	26	50	50	55	41	50	54	34	31	31
501–1000	20	33	27	48	46	50	45	48	52	39	38	37
1001–5000	23	26	28	50	48	50	36	46	48	50	51	50
5001–10 000	18	23	25	51	52	49	27	42	45	70	76	75
10 000 and above	30	19	11	68	52	28	67	57	18	48	29	25

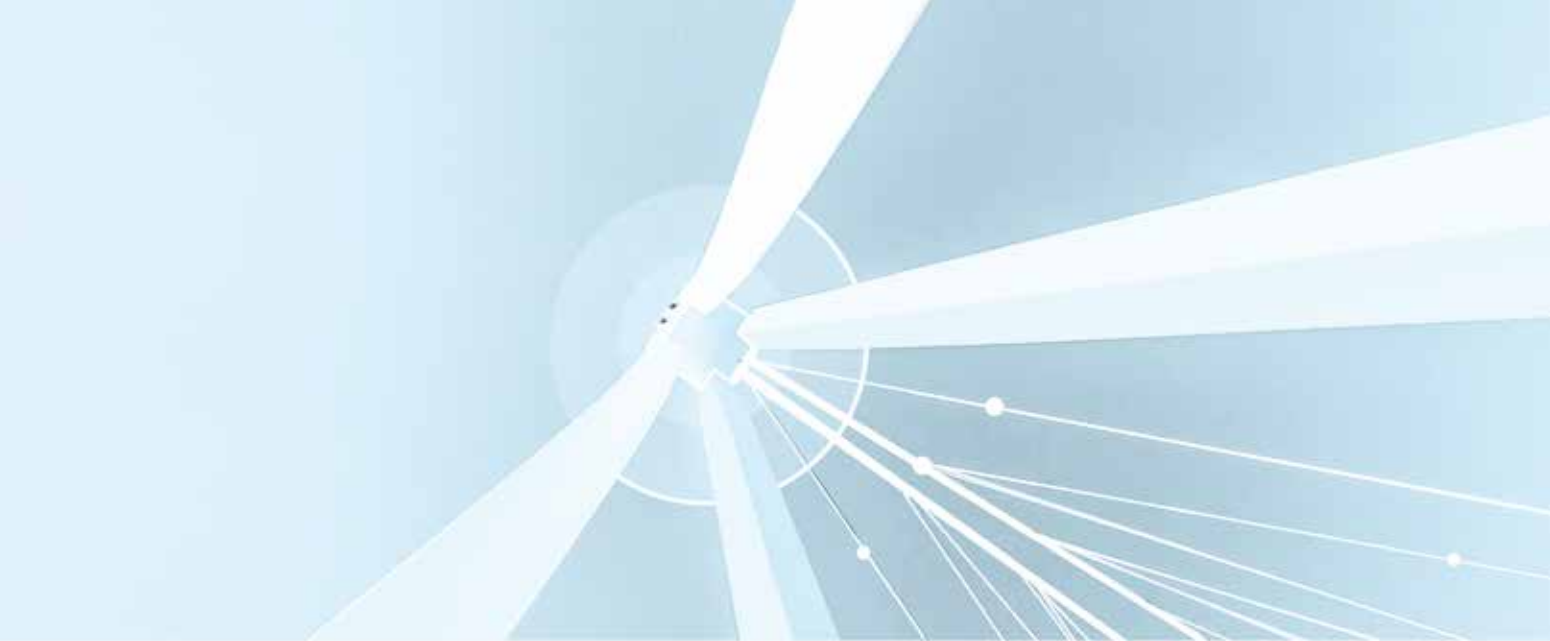
5.7.15. TECHNICIANS PER 10 000 EMPLOYEES IN ENTERPRISES BY SIZE OF EMPLOYMENT

(headcount)

	Electronics and telecommunications technicians			Computer maintenance technicians and operators			Computer devices and peripherals maintenance technicians and operators			Industrial robots maintenance technicians and operators			Radio, television and telecommunications hardware technicians and operators		
	2010	2012	2013	2010	2012	2013	2010	2012	2013	2010	2012	2013	2010	2012	2013
Total	13	12	10	21	19	18	13	10	9	4	4	3	7	6	6
Size of employment, headcount:															
below 50	6	7	6	28	23	21	21	13	13	1	2	1	7	10	14
51–100	7	9	4	21	22	9	15	12	6	1	2	1	7	10	5
101–200	12	12	12	19	19	20	11	11	12	1	2	2	6	9	8
201–500	9	12	10	16	19	18	9	9	9	1	3	2	5	9	8
501–1000	9	11	9	18	19	19	9	9	9	1	2	1	4	5	5
1001–5000	14	14	12	19	18	16	10	9	8	2	5	3	4	4	3
5001–10 000	18	8	10	18	15	15	9	8	9	3	3	8	2	4	6
10 000 and above	42	13	5	47	18	13	39	13	5	37	11	6	33	4	2

5.7.16. ENTERPRISES THAT NEED ICT PROFESSIONALS AND EMPLOYEES WITH ICT SKILLS BY SIZE OF EMPLOYMENT
(as a percentage of all enterprises)

	Total			Of which are in need of					
				ICT professionals			employees with ICT user skills		
	2010	2012	2013	2010	2012	2013	2010	2012	2013
Total	49.1	47.0	47.1	45.3	43.2	43.1	41.5	38.1	38.1
Size of employment, <i>headcount</i> :									
below 50	46.0	44.7	45.2	42.5	41.1	41.5	38.7	35.9	36.3
51–100	51.9	49.1	49.1	47.9	44.9	44.9	43.8	39.6	39.5
101–200	51.4	48.2	48.0	47.2	44.1	43.5	43.3	39.2	39.2
201–500	53.5	50.3	49.2	48.7	45.7	44.5	45.9	41.6	40.2
501–1000	59.5	56.6	56.3	54.4	51.8	51.2	51.8	47.2	47.0
1001–5000	70.5	67.3	68.6	66.4	63.2	63.7	61.9	57.0	58.7
5001–10 000	83.3	82.9	79.4	81.4	79.6	76.1	75.8	73.9	73.7
10 000 and above	84.0	80.0	85.4	82.7	75.0	81.7	70.4	76.3	79.3



6. ICT Usage by Households and Individuals

MAIN INDICATORS OF ICT USAGE BY HOUSEHOLDS AND INDIVIDUALS

(per cent)

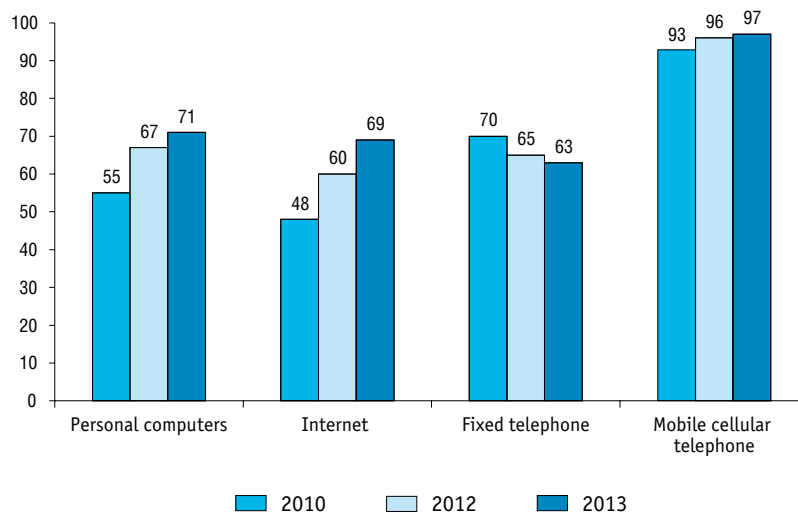
	2010	2011	2012	2013
ICT Usage by Households				
Households with, as a percentage of the total number of households:				
personal computers	55	60	67	71
access to the Internet	48	57	60	69
of which from the personal computer	41	50	59	65
fixed telephones	70	69	65	63
mobile cellular telephones	93	95	96	97
Internet Usage by Individuals				
Individuals who have ever used a personal computer as a percentage of all individuals aged 15–72*	68	...	...	73
Individuals who have never used a personal computer as a percentage of all individuals aged 15–72*	32	...	...	27
Individuals who have ever used the Internet as a percentage of all individuals aged 15–72*	49	58	66	71
Individuals using the Internet every day or almost every day as a percentage of all individuals aged 15–72*	26	33	41	48
Individuals who have never used the Internet as a percentage of all individuals aged 15–72*	51	42	34	29

* 2010–2011 – aged 16–74, 2012 – aged 18–74.

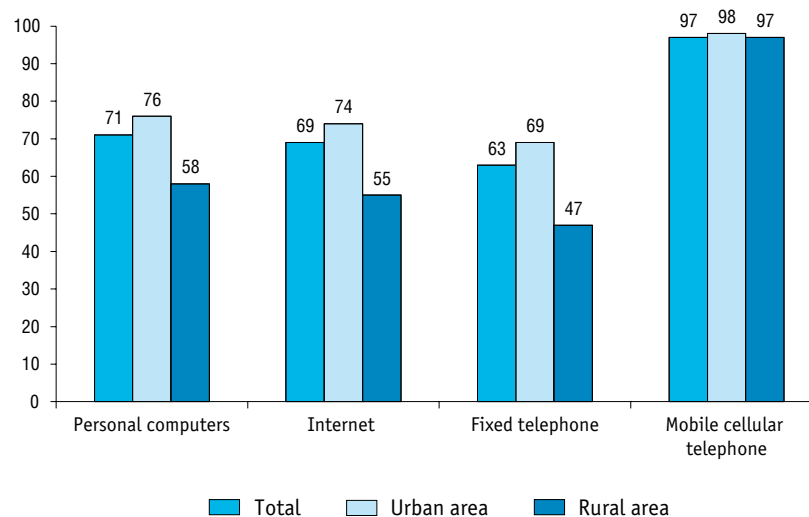
6.1. ICT Usage by Households

6.1.1. MAIN INDICATORS OF ICT USAGE BY HOUSEHOLDS

(as a percentage of the total number of households)

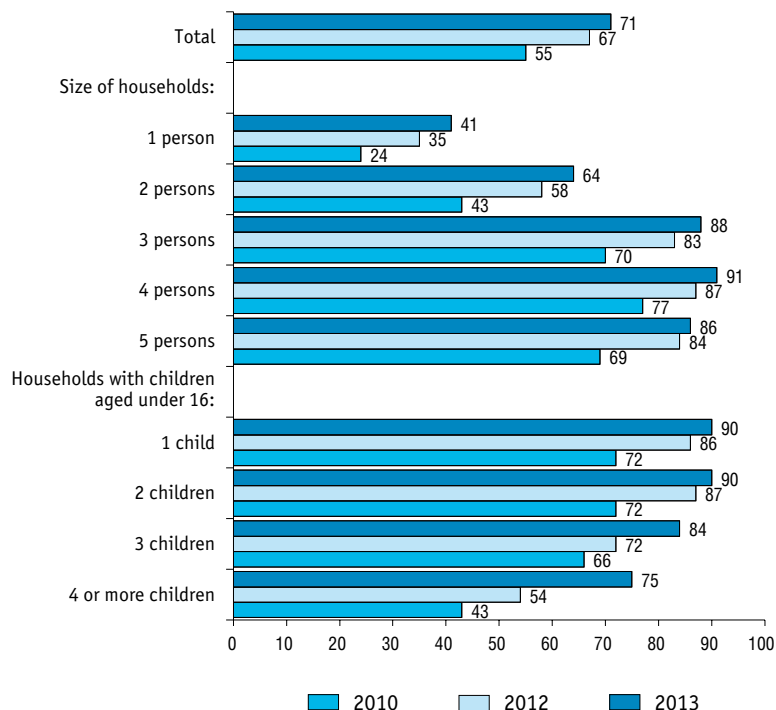


Source (here and below in 6.1.2–6.1.8): selective survey of household budgets conducted by the Federal State Statistics Service.

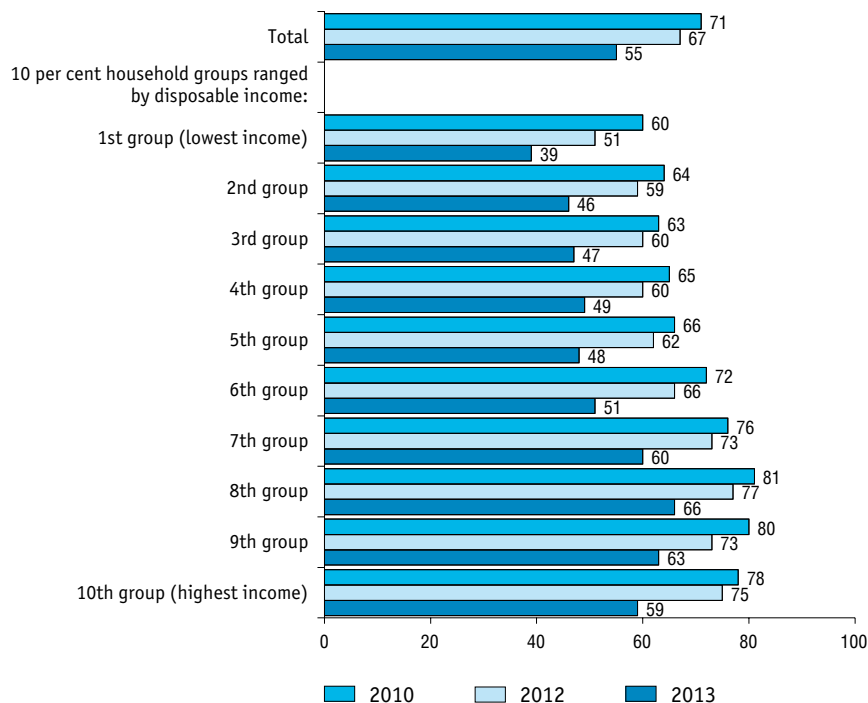
6.1.2. MAIN INDICATORS OF ICT USAGE BY HOUSEHOLDS IN URBAN AND RURAL AREAS: 2013*(as a percentage of the total number of households)*

6.1.3. HOUSEHOLDS WITH PERSONAL COMPUTERS BY SIZE

(as a percentage of the total number of households)

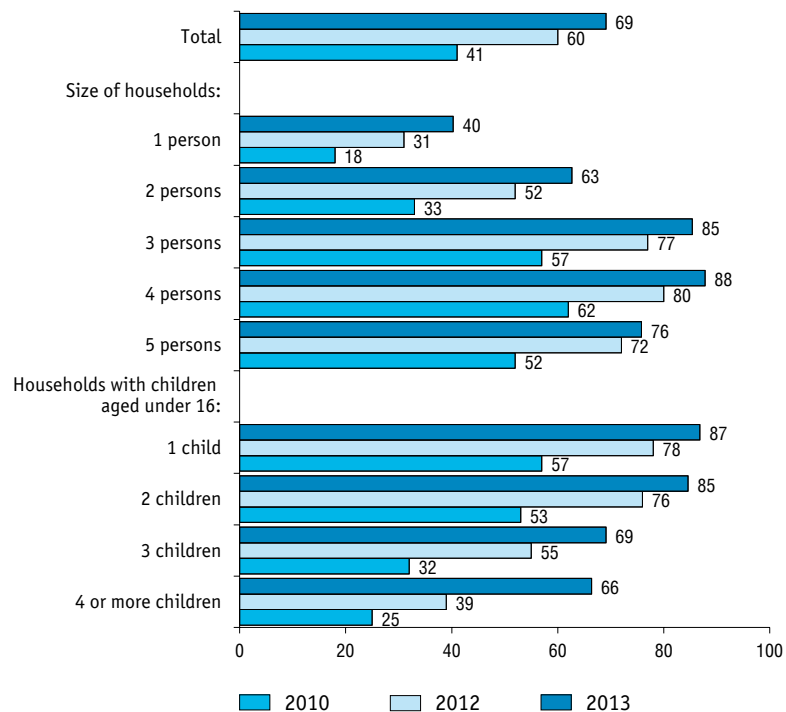


6.1.4. HOUSEHOLDS WITH PERSONAL COMPUTERS BY INCOME LEVEL

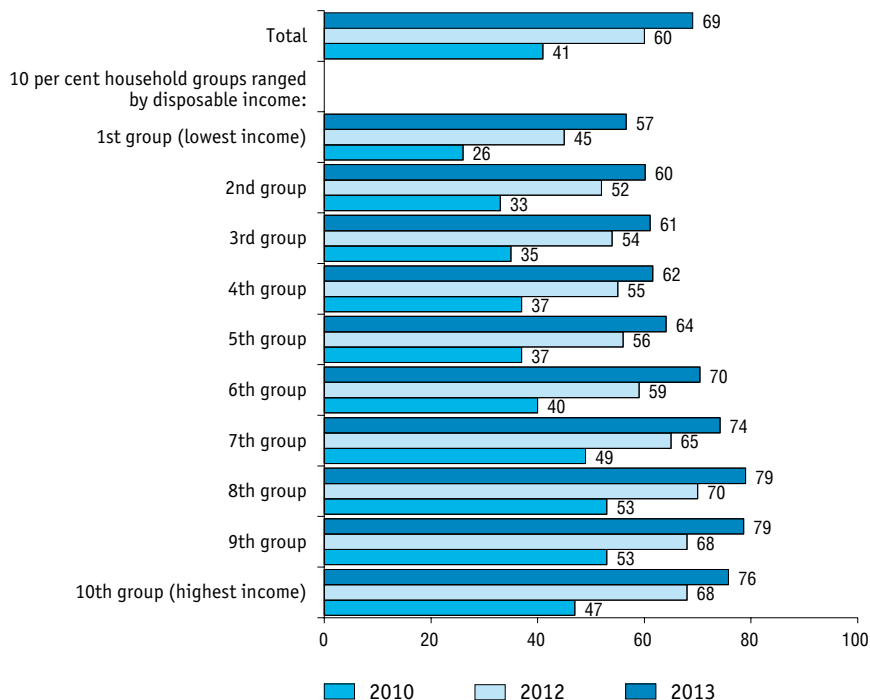
(as a percentage of the total number of households)

6.1.5. HOUSEHOLDS WITH INTERNET ACCESS BY SIZE*

(as a percentage of the total number of households)



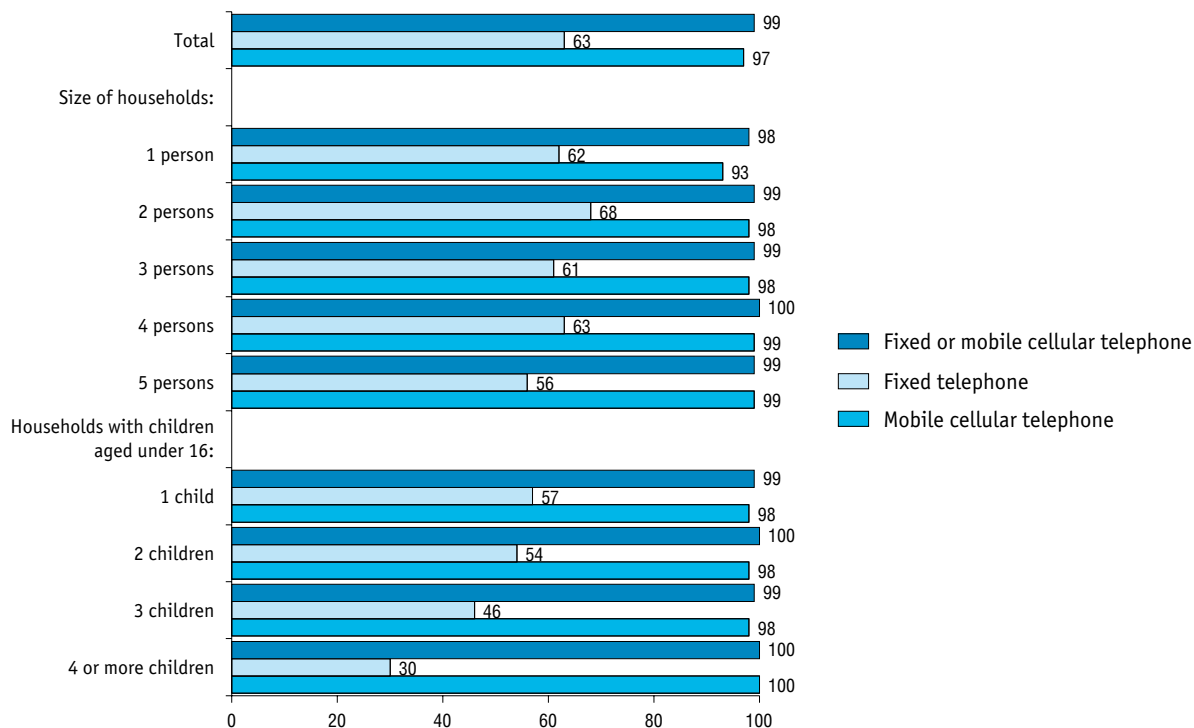
* 2010 – access to the Internet from a personal computer, 2012–2013 – from any electronic device.

6.1.6. HOUSEHOLDS WITH INTERNET ACCESS BY INCOME LEVEL**(as a percentage of the total number of households)*

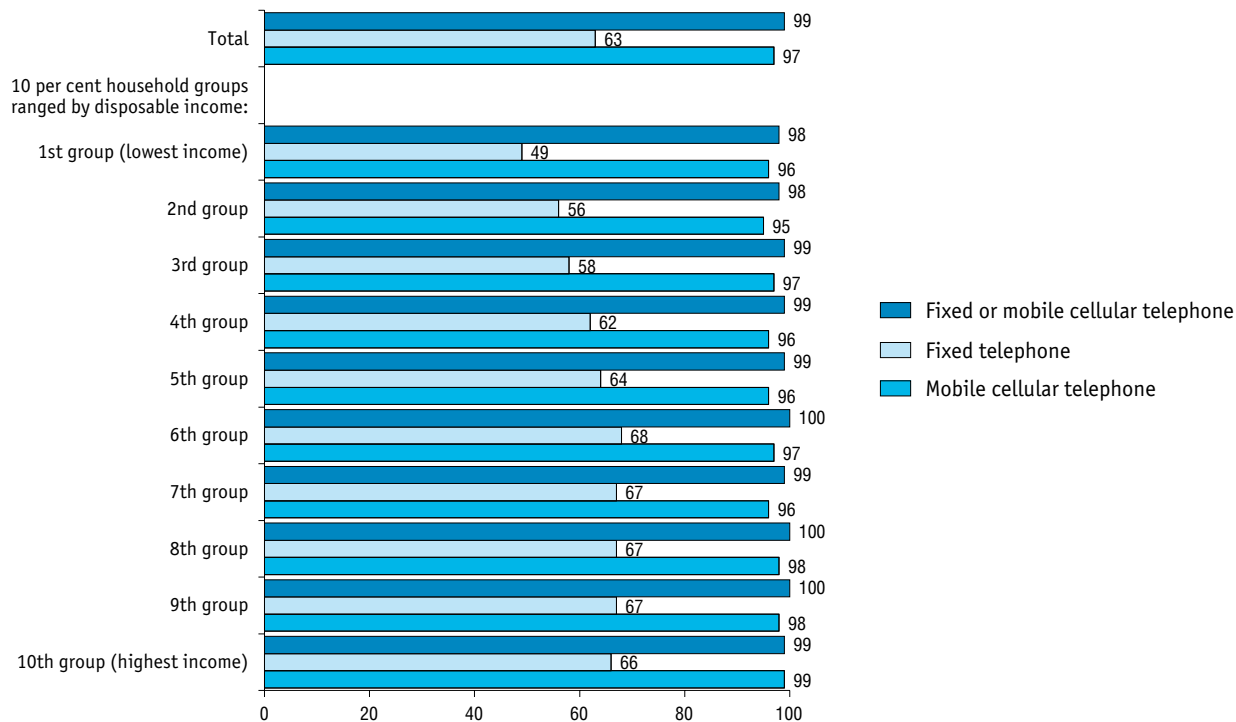
* 2010 – access to the Internet from a personal computer, 2012–2013 – from any electronic device.

6.1.7. HOUSEHOLDS WITH A TELEPHONE BY SIZE: 2013

(as a percentage of the total number of households)



6.1.8. HOUSEHOLDS WITH A TELEPHONE BY INCOME LEVEL: 2013

(as a percentage of the total number of households)

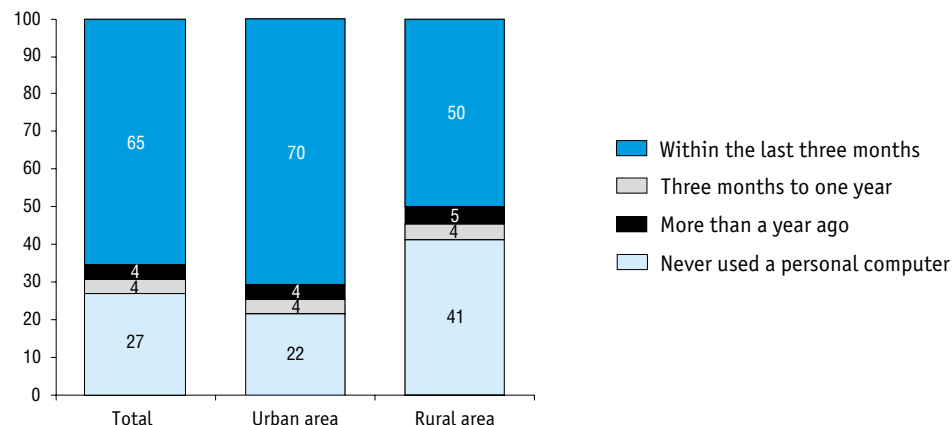
6.2. ICT Usage by Individuals

6.2.1. MAIN INDICATORS OF ICT USAGE BY INDIVIDUALS: 2013

(per cent)

	2013
Individuals who have ever used a personal computer as a percentage of all individuals aged 15–72	73
Individuals who have never used a personal computer as a percentage of all individuals aged 15–72	27
Individuals who have ever used the Internet as a percentage of all individuals aged 15–72	71
Individuals using the Internet every day or almost every day as a percentage of all individuals aged 15–72	48
Individuals who have never used the Internet as a percentage of all individuals aged 15–72	29
Individuals who have used mobile devices to access the Internet within the last 3 months as a percentage of all individuals aged 15–72:	
mobile devices – total	31
mobile telephones / smartphones	26
portable computers	10
Individuals who have used the Internet to order goods or services within the last 12 months:	
as a percentage of all individuals aged 15–72	15
as a percentage of individuals aged 15–72 who have used the Internet within the last 12 months	22
Individuals who have interacted with public authorities electronically within the last 12 months:	
as a percentage of all individuals aged 15–72	11
as a percentage of individuals aged 15–72 who have interacted with public authorities by any means of communication within the last 12 months	33

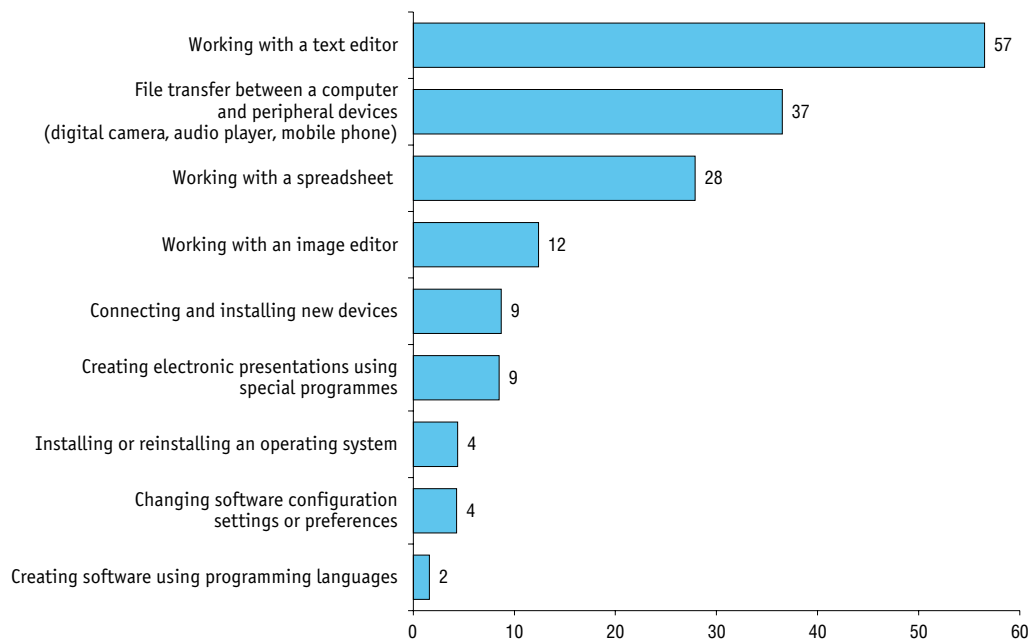
Source (here and below in the section): Federal State Statistics Service.

6.2.2. PERSONAL COMPUTER USAGE BY INDIVIDUALS IN URBAN AND RURAL AREAS: 2013*(as a percentage of all individuals aged 15–72)***6.2.3. PERSONAL COMPUTER USAGE BY INDIVIDUALS BY AGE GROUP: 2013***(as a percentage of all individuals in the respective age group)*

	Total, aged 15–72	Of which by age group, years					
		15–22	23–34	35–44	45–54	55–64	65–72
Within the last three months	65	90	84	75	58	35	14
Three months to one year	4	3	3	5	6	4	3
More than a year ago	4	2	3	4	4	7	6
Never used a personal computer	27	5	10	16	32	54	77

6.2.4. PERSONAL COMPUTER SKILLS: 2013*

(as a percentage of all individuals aged 15–72 who have used personal computers within the last 12 months)



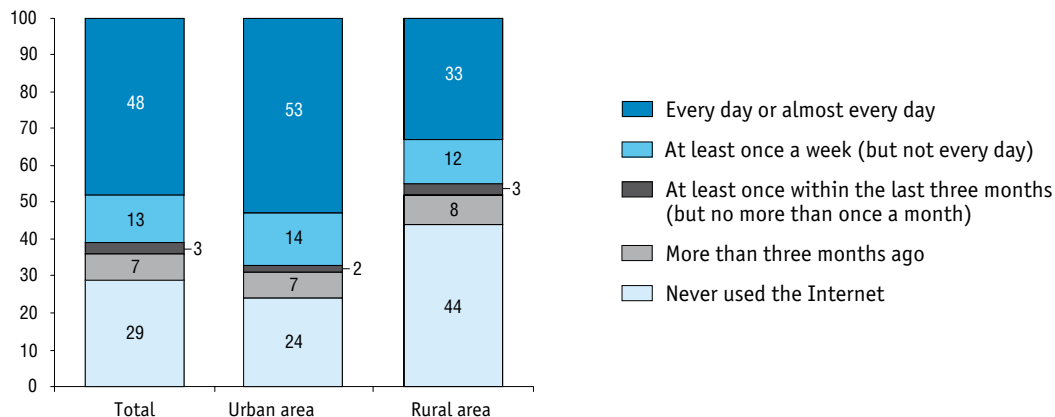
* Here and below in this section: the sum may exceed 100% as the respondents could give multiple answers.

6.2.5. PERSONAL COMPUTER SKILLS BY AGE GROUP: 2013*(as a percentage of all individuals in the respective age group who have used personal computers within the last 12 months)*

	Total, aged 15–72	Of which by age group, years					
		15–22	23–34	35–44	45–54	55–64	65–72
Working with a text editor	57	67	56	54	54	53	43
File transfer between a computer and peripheral devices (digital camera, audio player, mobile phone)	37	48	43	35	25	22	20
Working with a spreadsheet	28	35	29	27	26	22	12
Working with an image editor	12	22	13	9	8	8	6
Connecting and installing new devices	9	11	11	8	5	6	5
Creating electronic presentations using special programmes	9	18	8	7	5	5	4
Installing or reinstalling an operating system	4	6	6	4	2	2	1
Changing software configuration settings or preferences	4	5	6	4	2	2	2
Creating software using programming languages	2	2	2	2	1	1	1

6.2.6. INTERNET USAGE BY INDIVIDUALS IN URBAN AND RURAL AREAS: 2013

(as a percentage of all individuals aged 15–72)



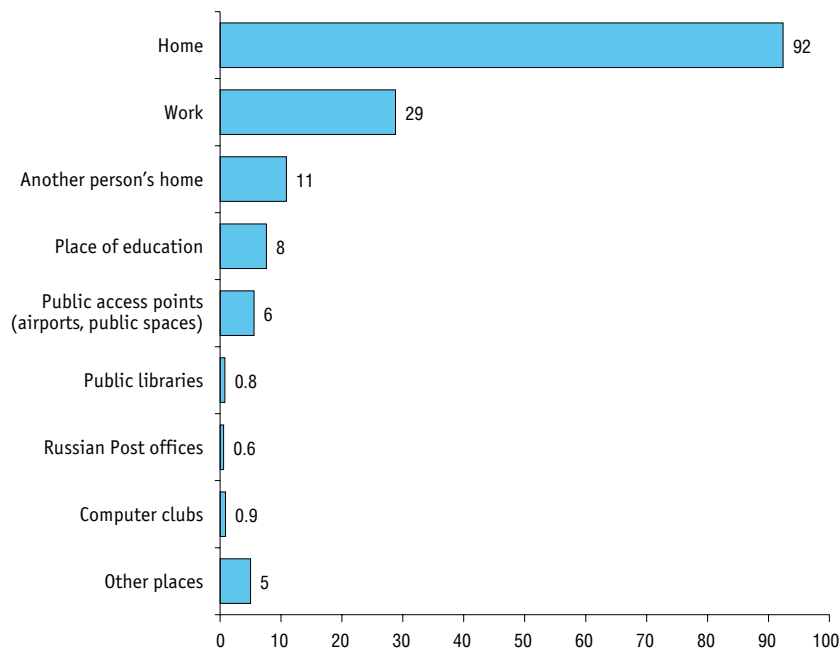
6.2.7. INTERNET USAGE BY INDIVIDUALS BY FREQUENCY AND AGE GROUP: 2013

(as a percentage of all individuals in the respective age group)

	Total, aged 15–72	Of which by age group, years					
		15–22	23–34	35–44	45–54	55–64	65–72
Every day or almost every day	48	81	69	52	34	19	7
At least once a week (but not every day)	13	9	13	18	18	11	5
At least once within the last three months (but no more than once a month)	3	1	2	4	4	3	2
More than three months ago	7	4	6	8	9	10	6
Never used the Internet	29	5	10	18	35	57	80

6.2.8. PLACES OF INTERNET USAGE BY INDIVIDUALS: 2013

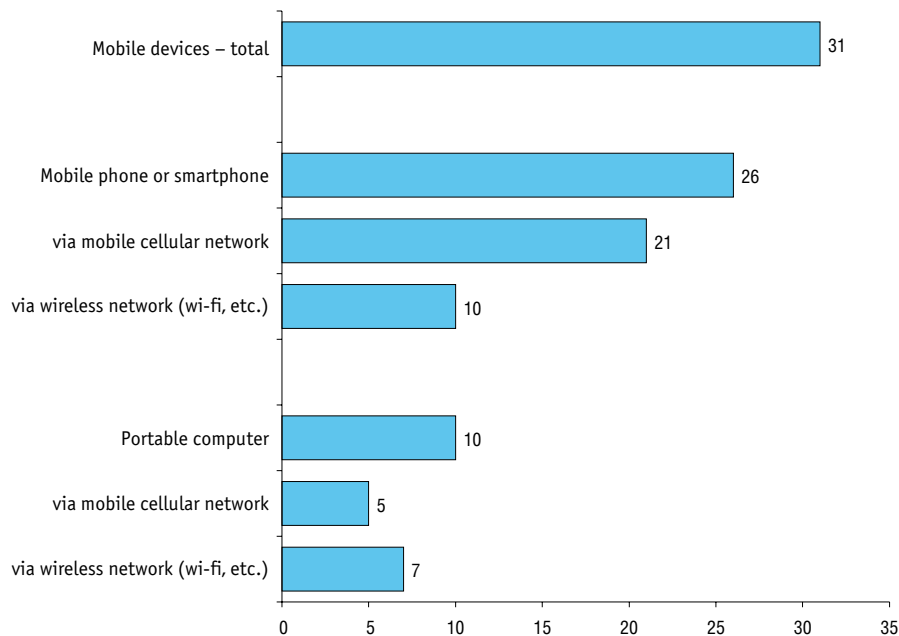
(as a percentage of all individuals aged 15–72 who have used the Internet within the last three months)



6.2.9. PLACES OF INTERNET USAGE BY INDIVIDUALS BY AGE GROUP: 2013

(as a percentage of all individuals in the respective age group who have used the Internet within the last three months)

	Total, aged 15–72	Of which by age group, years					
		15–22	23–34	35–44	45–54	55–64	65–72
Home	92	91	93	94	92	90	91
Work	29	8	33	35	36	31	16
Another person's home	11	26	12	5	3	4	4
Place of education	8	36	2	0.4	0.3	0.3	1
Public access points (airports, public spaces)	6	9	7	5	2	2	3
Public libraries	0.8	3	0.5	0.3	0.3	0.3	1
Russian Post offices	0.6	0.5	0.4	1	1	1	1
Computer clubs	0.9	3	1	0.3	0.1	0.0	0.0
Other places	5	7	7	4	3	3	3

6.2.10. USE OF MOBILE DEVICES BY INDIVIDUALS TO ACCESS THE INTERNET: 2013*(as a percentage of all individuals aged 15–72)*

6.2.11. USE OF MOBILE DEVICES TO ACCESS THE INTERNET

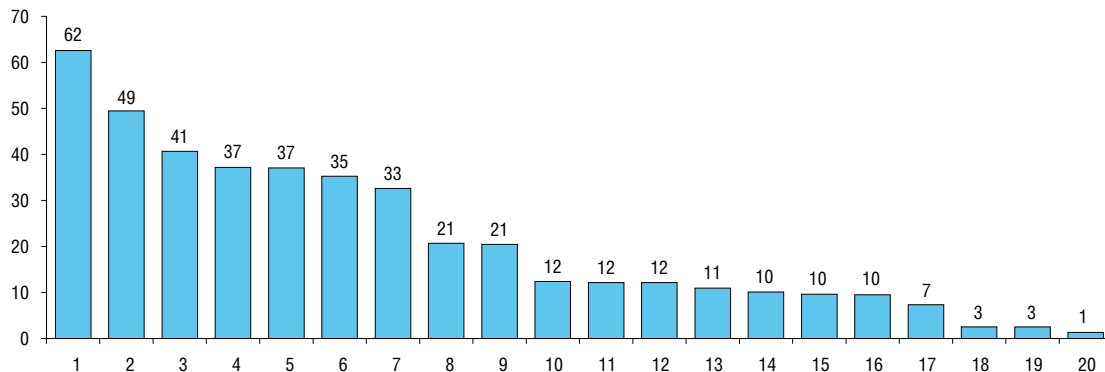
BY AGE GROUP: 2013

(as a percentage of all individuals in the respective age group)

	Total, aged 15–72	Of which by age group, years					
		15–22	23–34	35–44	45–54	55–64	65–72
Mobile devices – total	31	65	49	29	16	7	3
Mobile phone or smartphone	26	59	43	23	11	5	2
via mobile cellular network	21	48	35	19	9	4	2
via wireless network (wi-fi, etc.)	10	23	16	9	4	2	1
Portable computer	10	17	15	11	6	4	1
via mobile cellular network	5	8	7	5	3	2	1
via wireless network (wi-fi, etc.)	7	12	10	7	4	2	1

6.2.12. INTERNET ACTIVITIES: 2013

(undertaken by individuals; as a percentage of all individuals aged 15–72 who have used the Internet within the last three months)

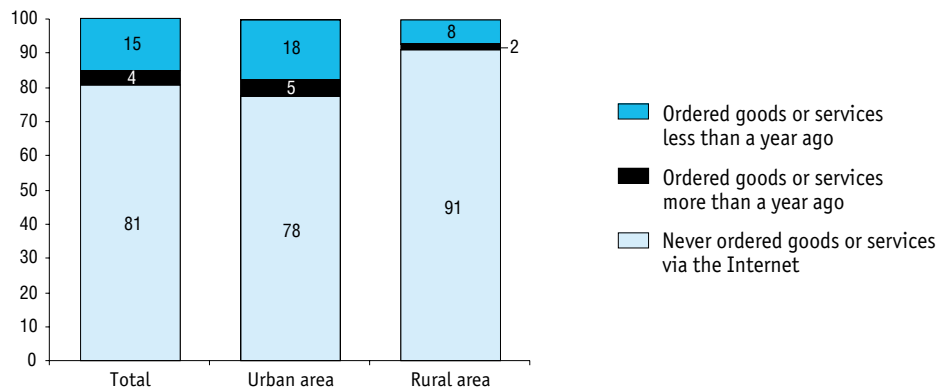


- 1 – Communicating in social networks
- 2 – Downloading films, pictures, music; watching videos; listening to music/radio
- 3 – Sending or receiving e-mail
- 4 – Searching for information about goods or services
- 5 – Making telephone or video calls over the Internet (e.g., by Skype)
- 6 – Getting information on any topic using Wikipedia, online encyclopedias
- 7 – Playing or downloading video games or computer games
- 8 – Searching for information on health or health care services
- 9 – Reading or downloading online newspapers or magazines, e-books
- 10 – Communicating via instant messengers (online chatrooms, ICQ, QIP, etc.)

- 11 – Selling or buying goods or services (including online auction sites)
- 12 – Searching for information on cultural sites, events, etc.
- 13 – Downloading software (except computer games)
- 14 – Searching for information on education, training courses, workshops
- 15 – Searching for job vacancies
- 16 – Financial operations
- 17 – Communicating in professional networks, on forums
- 18 – Distant learning
- 19 – Taking part in online voting or consultations on social and political issues
- 20 – Posting opinions on social and political issues on web sites

6.2.13. USING THE INTERNET FOR ORDERING GOODS OR SERVICES IN URBAN AND RURAL AREAS: 2013

(as a percentage of all individuals aged 15–72)



* Including respondents who have not used the Internet within the last 12 months.

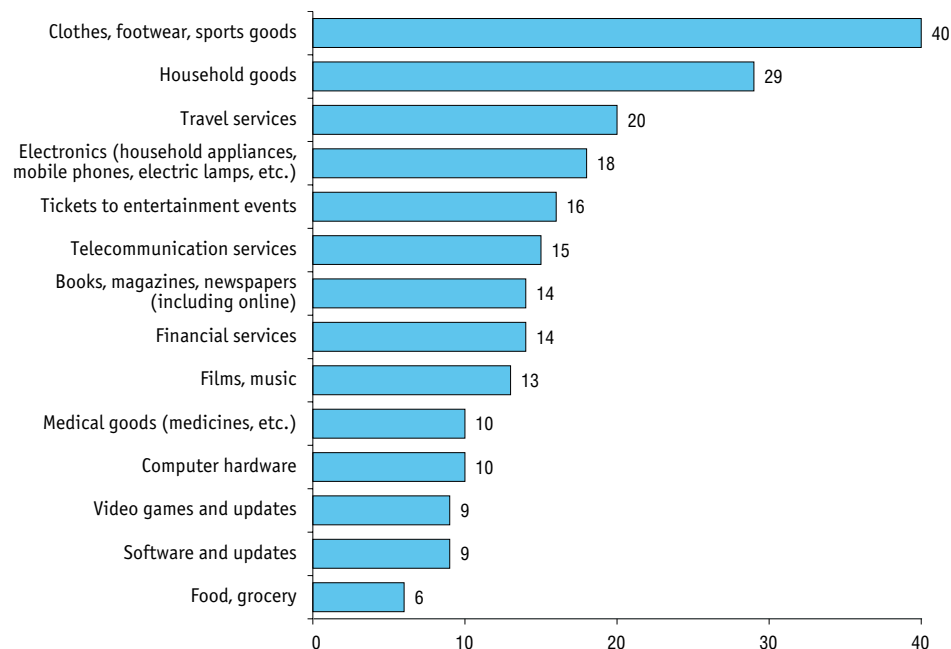
6.2.14. USING THE INTERNET FOR ORDERING GOODS OR SERVICES BY AGE GROUP: 2013

(as a percentage of all individuals in the respective age group who have used the Internet within the last 12 months)

	Total, aged 15–72	Of which by age group, years					
		15–22	23–34	35–44	45–54	55–64	65–72
Ordered goods or services less than a year ago	22	19	28	25	19	15	13
Ordered goods or services more than a year ago	6	4	7	6	6	5	5
Never ordered goods or services via the Internet	72	77	65	69	75	80	82

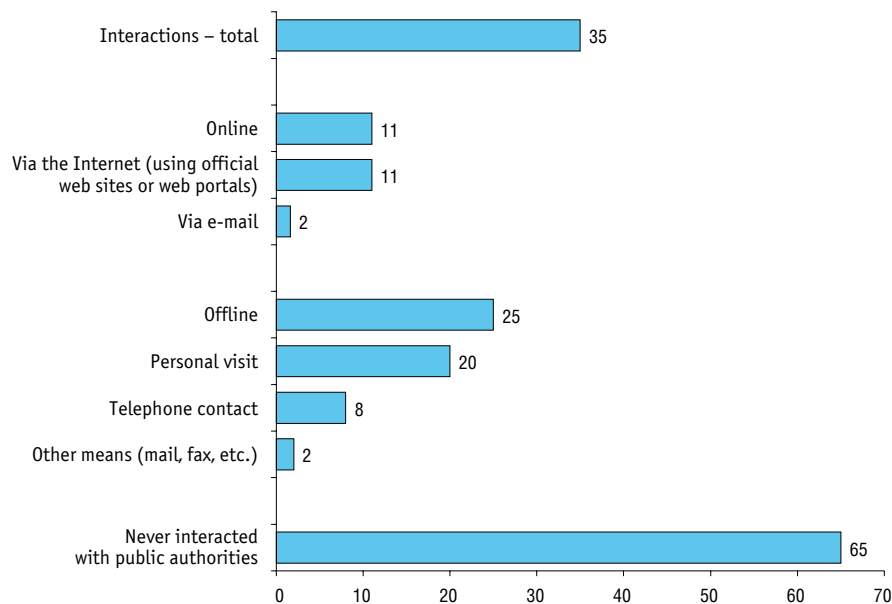
6.2.15. PURCHASE OF GOODS AND SERVICES VIA THE INTERNET BY TYPE: 2013

(as a percentage of all individuals aged 15–72 who have ordered goods or services via the Internet within the last 12 months)



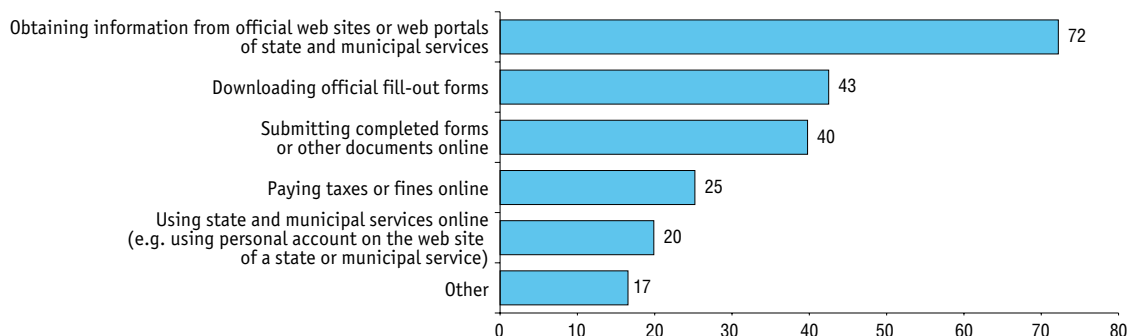
6.2.16. MEANS OF INTERACTION WITH PUBLIC AUTHORITIES: 2013

(as a percentage of all individuals aged 15–72)



6.2.17. MEANS OF INTERACTION WITH PUBLIC AUTHORITIES BY AGE GROUP: 2013*(as a percentage of all individuals in the respective age group)*

	Total aged 15–72	Of which by age group, years					
		15–22	23–34	35–44	45–54	55–64	65–72
Interactions – total	35	19	35	39	38	39	37
Online	11	8	16	16	11	6	2
Via the Internet (using official web sites or web portals)	11	8	15	15	10	6	2
Via e-mail	2	1	2	2	2	1	0.5
Offline	25	12	21	26	29	34	36
Personal visit	20	9	16	20	23	27	29
Telephone contact	8	3	7	9	10	11	12
Other means (mail, fax, etc.)	2	1	2	2	2	2	2
Never interacted with public authorities	65	81	65	61	62	61	63

6.2.18. ONLINE INTERACTION WITH PUBLIC AUTHORITIES BY TYPE: 2013*(as a percentage of all individuals aged 15–72 who have used official web sites or web portals of state and municipal services within the last 12 months)*

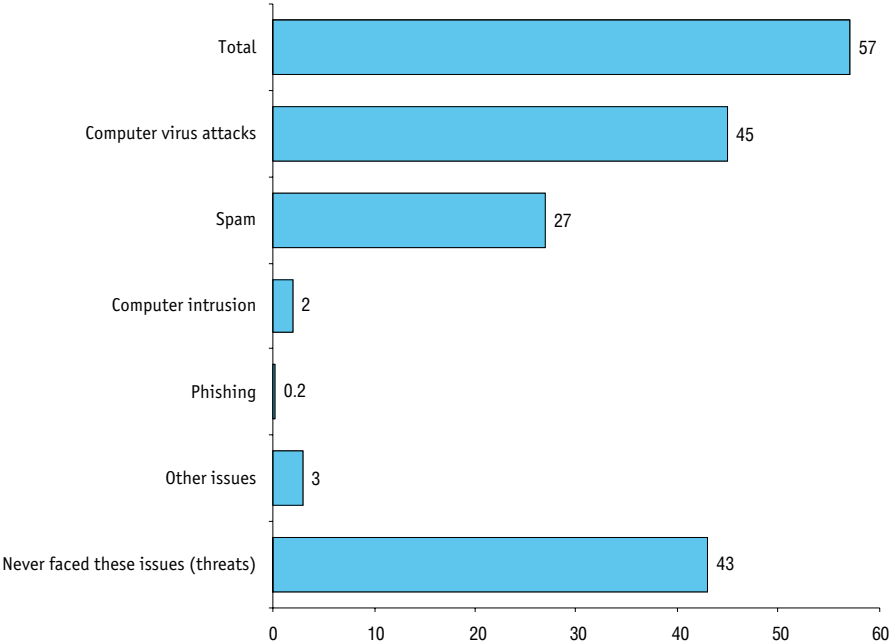
6.2.19. ONLINE INTERACTION WITH PUBLIC AUTHORITIES BY TYPE AND AGE GROUP: 2013

(as a percentage of all individuals in the respective age group who have used official web sites or web portals of state and municipal services within the last 12 months)

	Total aged 15–72	Of which by age group, years					
		15–22	23–34	35–44	45–54	55–64	65–72
Obtaining information via official web sites or web portals of state and municipal services	72	74	72	74	70	72	57
Downloading official fill-out forms	43	36	44	42	42	45	47
Submitting completed forms or other documents online	40	32	41	40	40	41	48
Paying taxes or fines online	25	15	26	27	28	21	23
Obtaining state and municipal services online (e.g. using personal account on the web site of a state or municipal service)	20	18	19	22	20	20	15
Other	17	13	16	18	16	17	25

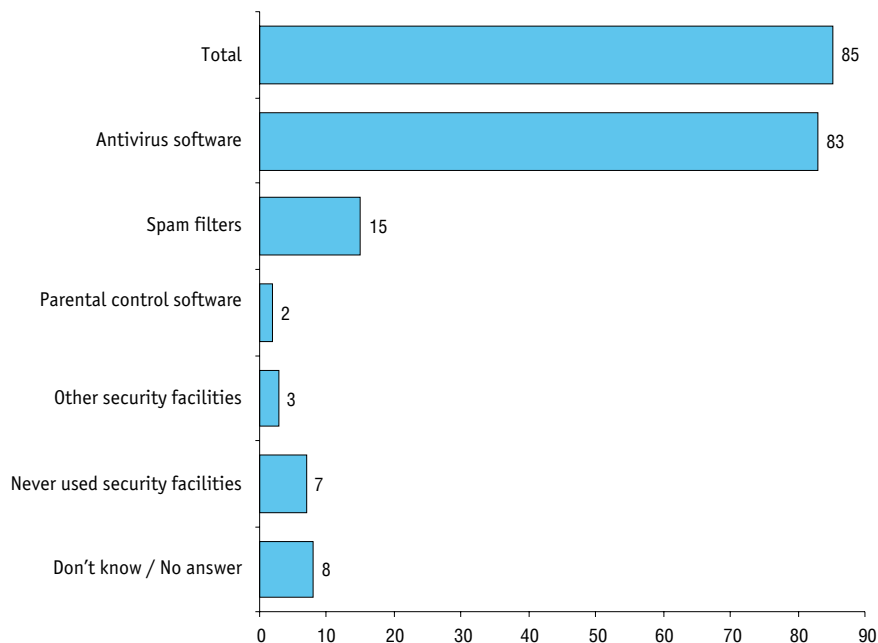
6.2.20. INFORMATION SECURITY THREATS: 2013

(as a percentage of all individuals aged 15–72 who have used the Internet within the last 12 months)



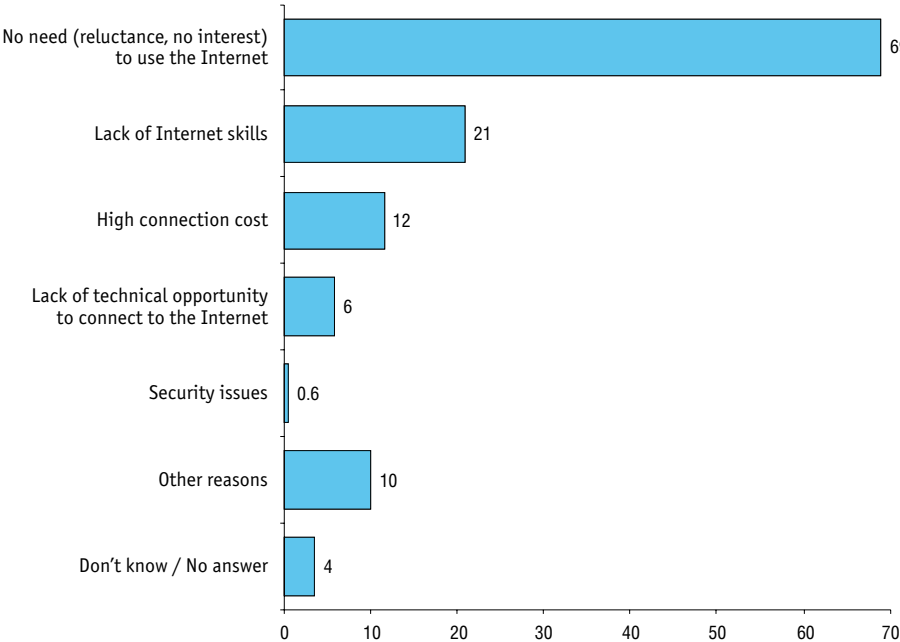
6.2.21. USE OF INFORMATION SECURITY FACILITIES: 2013

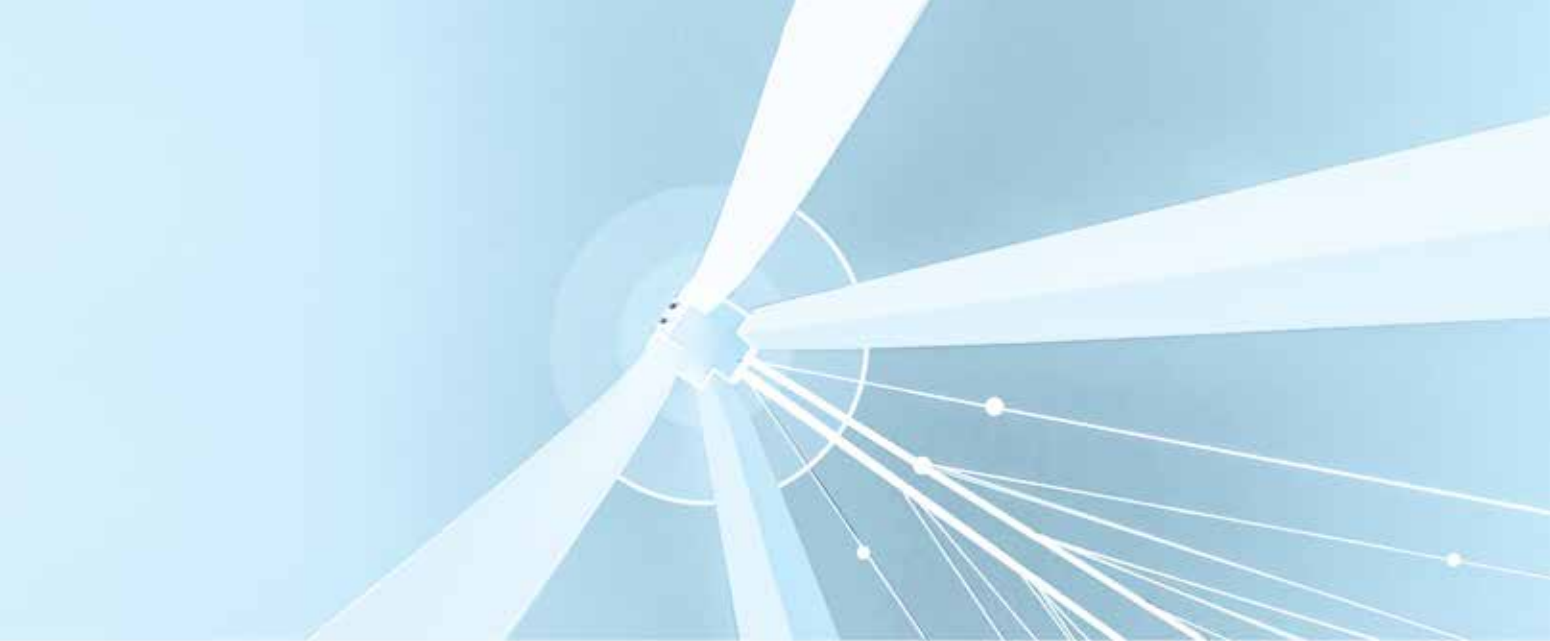
(as a percentage of all individuals aged 15–72 who have used the Internet within the last 12 months)



6.2.22. FACTORS HAMPERING INTERNET USE BY INDIVIDUALS: 2013

(as a percentage of all individuals aged 15–72 who have used the Internet more than 12 months ago or who have never used the Internet)

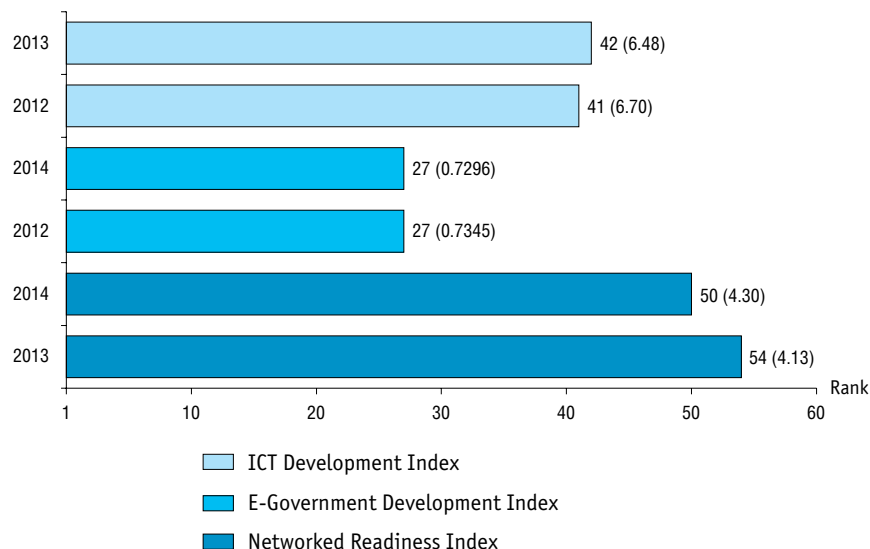




7. International Comparisons

7.1. International Information Society Development Ratings

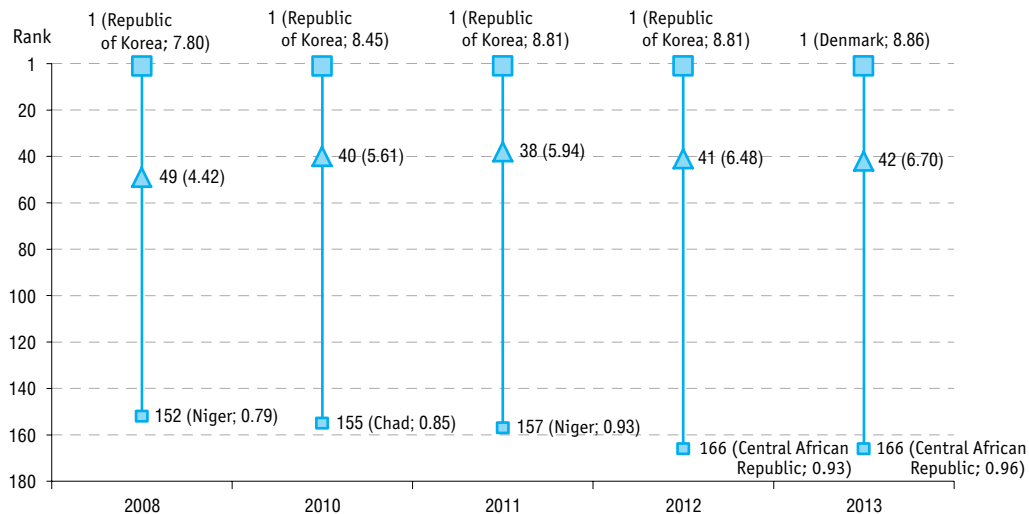
7.1.1. RUSSIA'S POSITION IN INTERNATIONAL INFORMATION SOCIETY DEVELOPMENT RATINGS*



* In the parentheses, the value of the relevant Index is indicated.

Sources: ITU, United Nations Department of Economic and Social Affairs (DESA), World Economic Forum.

7.1.2. RUSSIA'S ICT DEVELOPMENT INDEX RANK



ICT Development Index ranks:

- First place (country, value)
- ▲ Russia's place (value)
- Last place (country, value)

Source: ITU.

7.1.3. ICT DEVELOPMENT INDEX BY COUNTRY: 2013*

	ICT Development Index		Including sub-indices					
			ICT Access		ICT Use		ICT Skills	
	Rank	Value	Rank	Value	Rank	Value	Rank	Value
Russia	42	6.70	44	7.25	42	4.97	18	9.03
Argentina	59	5.80	60	6.62	66	3.42	22	8.94
Armenia	74	5.08	79	5.64	76	3.02	57	8.04
Australia	12	8.18	21	8.23	11	7.48	6	9.50
Austria	24	7.62	18	8.28	25	6.28	21	8.96
Azerbaijan	64	5.65	73	6.07	52	4.40	73	7.33
Belarus	38	6.89	38	7.39	41	4.99	4	9.69
Belgium	25	7.57	19	8.26	28	6.18	20	8.99
Brazil	65	5.50	71	6.14	60	4.01	80	7.22
Bulgaria	49	6.31	57	6.77	45	4.77	41	8.46
Canada	23	7.62	23	8.01	23	6.63	25	8.85
Chile	56	5.92	67	6.35	59	4.08	29	8.72
China	86	4.64	89	5.10	77	2.99	84	7.02
Croatia	37	6.90	40	7.31	32	5.62	36	8.63
Cyprus	51	6.11	54	6.93	54	4.34	58	7.99
Czech Republic	41	6.72	43	7.26	38	5.22	34	8.65
Denmark	1	8.86	11	8.80	1	8.71	12	9.28
Egypt	89	4.45	90	5.09	80	2.87	110	6.33
Estonia	21	7.68	28	7.82	20	6.77	14	9.21
Finland	8	8.31	29	7.80	4	8.09	3	9.75
France	18	7.87	12	8.65	22	6.74	39	8.57

* The full list of analysed countries can be found in the ITU analytical report "Measuring the Information Society 2014".

Source: ITU.

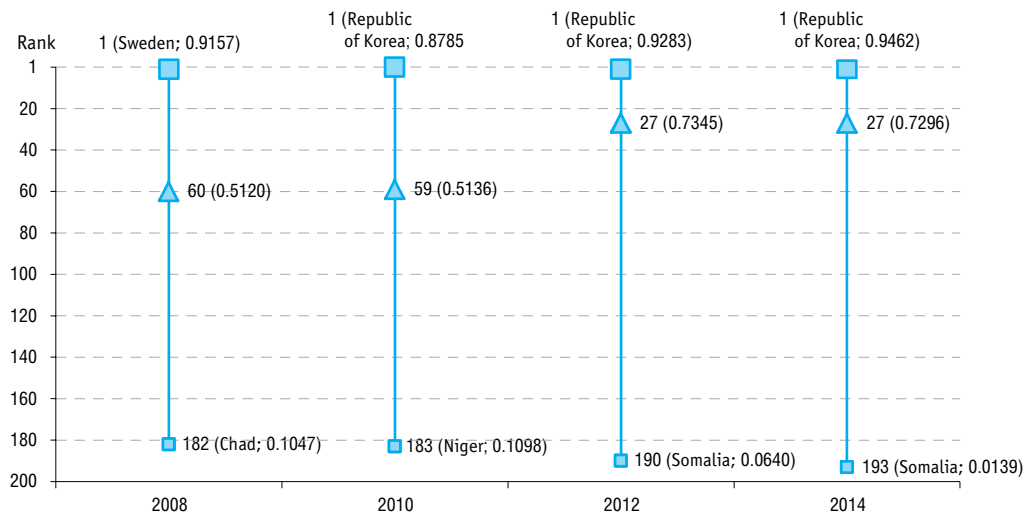
(continued)

	ICT Development Index		Including sub-indices					
			ICT Access		ICT Use		ICT Skills	
	Rank	Value	Rank	Value	Rank	Value	Rank	Value
Georgia	78	4.86	75	5.99	90	2.58	81	7.14
Germany	17	7.90	5	9.19	27	6.21	31	8.68
Greece	39	6.85	37	7.53	48	4.65	1	9.90
Hungary	46	6.52	39	7.32	46	4.67	37	8.62
Iceland	4	8.64	3	9.28	9	7.65	10	9.32
India	129	2.53	132	3.05	133	0.68	121	5.20
Indonesia	106	3.83	109	4.32	106	1.80	95	6.89
Ireland	26	7.57	20	8.24	26	6.24	23	8.92
Israel	29	7.29	16	8.31	33	5.53	26	8.78
Italy	36	6.94	36	7.62	35	5.38	30	8.71
Japan	11	8.22	14	8.40	7	7.80	32	8.67
Kazakhstan	53	6.08	56	6.84	56	4.33	56	8.06
Kyrgyzstan	108	3.78	114	4.05	114	1.59	64	7.62
Latvia	33	7.03	42	7.29	31	5.91	28	8.75
Lithuania	40	6.74	53	7.00	36	5.29	16	9.12
Luxembourg	10	8.26	1	9.46	8	7.66	82	7.08
Malta	30	7.25	7	8.98	34	5.48	75	7.32
Mexico	95	4.29	93	4.80	95	2.45	88	6.96
Netherlands	7	8.38	10	8.93	12	7.43	15	9.20
New Zealand	19	7.82	30	7.79	16	7.10	11	9.28
Norway	6	8.39	15	8.36	5	8.07	17	9.09
Poland	44	6.60	49	7.04	43	4.94	19	9.01

(continued)

	ICT Development Index		Including sub-indices					
			ICT Access		ICT Use		ICT Skills	
	Rank	Value	Rank	Value	Rank	Value	Rank	Value
Portugal	43	6.67	34	7.67	49	4.61	27	8.77
Republic of Korea	2	8.85	8	8.94	3	8.26	2	9.81
Republic of Moldova	61	5.72	62	6.56	62	3.94	66	7.57
Romania	58	5.83	59	6.62	63	3.87	52	8.17
Saudi Arabia	47	6.36	50	7.04	44	4.77	51	8.17
Singapore	16	7.90	13	8.61	15	7.19	59	7.90
Slovakia	45	6.58	51	7.03	37	5.28	49	8.28
Slovenia	31	7.13	24	7.91	39	5.21	7	9.43
South Africa	90	4.42	92	4.82	82	2.75	86	6.98
Spain	28	7.38	33	7.7	29	6.04	9	9.41
Sweden	3	8.67	9	8.93	2	8.29	24	8.90
Switzerland	13	8.11	2	9.36	21	6.75	47	8.34
Tajikistan	–	–	–	–	–	–	–	–
Turkey	68	5.29	77	5.83	69	3.24	48	8.34
Turkmenistan	–	–	–	–	–	–	–	–
UAE	32	7.03	35	7.67	24	6.51	97	6.79
Ukraine	73	5.15	70	6.16	100	2.11	13	9.23
United Kingdom	5	8.50	6	9.18	6	7.88	43	8.41
USA	14	8.02	31	7.78	10	7.50	5	9.56
Uzbekistan	115	3.40	136	2.95	101	2.09	91	6.94
Venezuela	80	4.81	87	5.36	96	2.36	38	8.62

7.1.4. RUSSIA'S E-GOVERNMENT DEVELOPMENT INDEX RANK



E-Government Development Index ranks:

- First place (country, value)
- ▲ Russia's place (value)
- Last place (country, value)

Source: UN Department of Economic and Social Affairs.

7.1.5. E-GOVERNMENT DEVELOPMENT INDEX BY COUNTRY: 2014*

	E-Government Development Index		Including sub-indices					
			Online Service Index		Telecommunication Infrastructure Index		Human Capital Index	
	Rank	Value	Rank	Value	Rank	Value	Rank	Value
Russia	27	0.7296	27	0.7087	33	0.6413	37	0.8388
Argentina	46	0.6306	55**	0.5512	58	0.4835	29	0.8571
Armenia	61	0.5897	43**	0.6142	80	0.3889	66	0.7660
Australia	2	0.9103	8**	0.9291	14	0.8041	2	0.9978
Austria	20	0.7912	23**	0.7480	20	0.7597	24	0.8660
Azerbaijan	68	0.5472	77	0.4331	62	0.4605	69	0.7480
Belarus	55	0.6053	104	0.3228	40	0.6069	18	0.8861
Belgium	25	0.7564	31**	0.6772	28	0.6988	14	0.8932
Brazil	57	0.6008	49**	0.5984	61	0.4668	78	0.7372
Bulgaria	73	0.5421	129	0.2362	41	0.5941	52	0.7960
Canada	11	0.8418	10	0.9134	25	0.7168	13	0.8952
Chile	33	0.7122	16	0.8189	56	0.4940	45	0.8236
China	70	0.5450	47**	0.6063	89	0.3554	111	0.6734
Croatia	47	0.6282	71	0.4646	36	0.6271	54	0.7928
Cyprus	58	0.5958	69	0.4724	54	0.5320	60	0.7828

* The full list of analysed countries can be found in the analytical report of the UN Department of Economic and Social Affairs "UN E-Government Survey 2014: E-Government for the Future We Want".

** Countries with the same value of the Online Service sub-index get the same rank: Spain, USA and Japan – 4, Australia and the Netherlands – 8, etc.

Source: own calculations of HSE Institute for Statistical Studies and Economics of Knowledge based on the UN Department of Economic and Social Affairs data.

(continued)

	E-Government Development Index		Including sub-indices					
			Online Service Index		Telecommunication Infrastructure Index		Human Capital Index	
	Rank	Value	Rank	Value	Rank	Value	Rank	Value
Czech Republic	53	0.6070	91	0.3701	46	0.5753	21	0.8755
Denmark	16	0.8162	35**	0.6614	5	0.8740	10	0.9132
Egypt	80	0.5129	51	0.5906	88	0.3571	130	0.5912
Estonia	15	0.8180	18**	0.7717	17	0.7934	15	0.8889
Finland	10	0.8449	18**	0.7717	7	0.8594	12	0.9037
France	4	0.8938	1	1.0000	16	0.8003	19	0.8812
Georgia	56	0.6047	49**	0.5984	71	0.4261	55	0.7895
Germany	21	0.7864	34	0.6693	15	0.8038	17	0.8862
Greece	34	0.7118	47**	0.6063	32	0.6549	22	0.8741
Hungary	39	0.6637	53**	0.5591	49	0.5654	23	0.8668
Iceland	19	0.7970	43**	0.6142	8	0.8591	8	0.9178
India	118	0.3834	57**	0.5433	149	0.1372	159	0.4698
Indonesia	106	0.4487	94	0.3622	101	0.3054	109	0.6786
Ireland	22	0.7810	31**	0.6772	27	0.7039	3	0.9619
Israel	17	0.8162	13	0.8740	24	0.7200	33	0.8545
Italy	23	0.7593	23**	0.7480	29	0.6747	32	0.8552
Japan	6	0.8874	4**	0.9449	9	0.8553	25	0.8621
Kazakhstan	28	0.7283	23**	0.7480	47	0.5749	26	0.8619
Kyrgyzstan	101	0.4657	120	0.2756	83	0.3801	75	0.7413

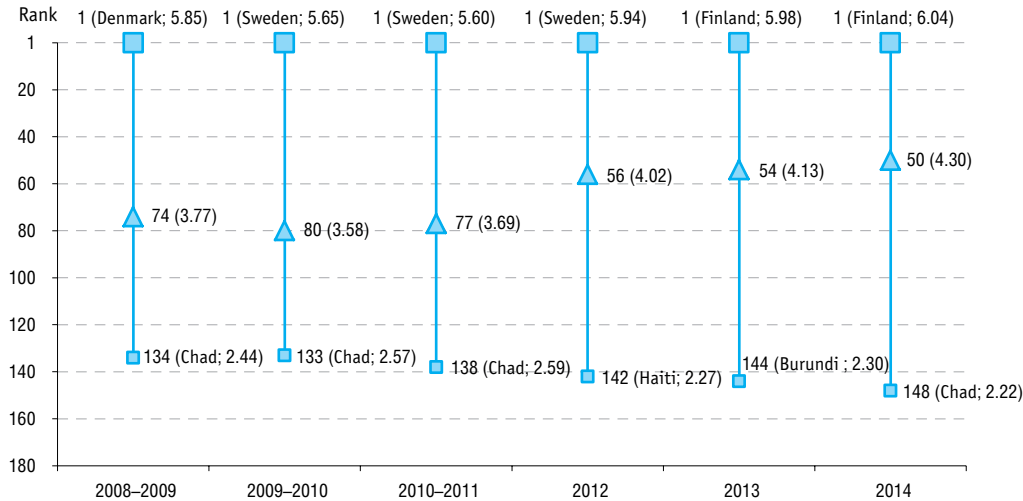
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	E-Government Development Index		Including sub-indices					
			Online Service Index		Telecommunication Infrastructure Index		Human Capital Index	
	Rank	Value	Rank	Value	Rank	Value	Rank	Value
Latvia	31	0.7178	28**	0.7008	37	0.6237	42	0.8288
Lithuania	29	0.7271	21**	0.7559	48	0.5697	31	0.8557
Luxembourg	24	0.7591	42	0.6220	6	0.8723	59	0.7830
Malta	40	0.6518	83	0.4016	18	0.7683	57	0.7855
Mexico	63	0.5733	35**	0.6614	98	0.3139	73	0.7445
Netherlands	5	0.8897	8**	0.9291	12	0.8175	7	0.9224
New Zealand	9	0.8644	15	0.8425	21	0.7506	1	1.0000
Norway	13	0.8357	21**	0.7559	13	0.8133	5	0.9380
Poland	42	0.6482	57**	0.5433	50	0.5618	36	0.8396
Portugal	37	0.6900	39	0.6378	39	0.6094	46	0.8227
Republic of Korea	1	0.9462	3	0.9764	2	0.9350	6	0.9273
Republic of Moldova	66	0.5571	60	0.5276	72	0.4236	90	0.7201
Romania	64	0.5632	75	0.4409	70	0.4385	49	0.8100
Saudi Arabia	36	0.6900	18**	0.7717	52	0.5523	71	0.7461
Singapore	3	0.9076	2	0.9921	4	0.8793	34	0.8515
Slovakia	51	0.6148	66	0.4882	55	0.5296	44	0.8265
Slovenia	41	0.6505	79	0.4252	38	0.6193	11	0.9072
South Africa	93	0.4869	88	0.3858	92	0.3466	83	0.7282
Spain	12	0.8410	4**	0.9449	31	0.6629	9	0.9152
Sweden	14	0.8225	28**	0.7008	3	0.8866	20	0.8802

(continued)

	E-Government Development Index		Including sub-indices					
			Online Service Index		Telecommunication Infrastructure Index		Human Capital Index	
	Rank	Value	Rank	Value	Rank	Value	Rank	Value
Switzerland	30	0.7267	65	0.5039	11	0.8199	30	0.8562
Tajikistan	129	0.3395	171	0.0630	121	0.2306	88	0.7249
Turkey	71	0.5443	53**	0.5591	86	0.3605	94	0.7133
Turkmenistan	128	0.3511	167	0.0866	125	0.2189	70	0.7478
UAE	32	0.7136	12	0.8819	43	0.5932	117	0.6657
Ukraine	87	0.5032	122	0.2677	82	0.3802	27	0.8616
United Kingdom	8	0.8695	11	0.8976	10	0.8534	28	0.8574
USA	7	0.8748	4**	0.9449	23	0.7406	4	0.9390
Uzbekistan	100	0.4695	73	0.4488	119	0.2333	86	0.7264
Venezuela	67	0.5564	55**	0.5512	91	0.3495	64	0.7685

7.1.6. RUSSIA'S NETWORKED READINESS INDEX RANK



Networked Readiness Index ranks:

- First place (country, value)
- ▲ Russia's place (value)
- Last place (country, value)

Source: World Economic Forum.

7.1.7. NETWORKED READINESS INDEX BY COUNTRY: 2014*

	Networked Readiness Index		Including sub-indices							
			A. Environment		B. Readiness		C. Usage		D. Impact	
	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value
Russia	50	4.30	87	3.78	37	5.46	53	4.06	44	3.91
Argentina	100	3.53	135	3.19	100	4.13	77	3.62	96	3.18
Armenia	65	4.03	83	3.80	51	5.13	73	3.65	67	3.53
Australia	18	5.40	14	5.20	9	6.15	19	5.28	20	4.95
Austria	22	5.26	23	4.97	11	6.14	20	5.27	24	4.67
Azerbaijan	49	4.31	70	3.94	49	5.21	44	4.24	46	3.85
Belarus	—	—	—	—	—	—	—	—	—	—
Belgium	27	5.06	19	5.08	25	5.66	27	5.02	29	4.50
Brazil	69	3.98	116	3.45	76	4.71	47	4.13	57	3.64
Bulgaria	73	3.96	71	3.94	75	4.75	65	3.87	86	3.27
Canada	17	5.41	10	5.39	13	6.10	26	5.04	17	5.10
Chile	35	4.61	29	4.83	60	5.01	39	4.37	37	4.23
China	62	4.05	77	3.87	73	4.76	61	3.91	56	3.67
Croatia	46	4.34	58	4.10	41	5.38	46	4.18	54	3.69
Cyprus	37	4.60	39	4.57	16	5.95	48	4.13	52	3.73
Czech Republic	42	4.49	49	4.23	35	5.49	40	4.36	45	3.87
Denmark	13	5.50	16	5.19	14	6.06	7	5.75	19	4.99
Egypt	91	3.71	119	3.44	93	4.35	89	3.45	61	3.61
Estonia	21	5.27	26	4.88	22	5.73	22	5.22	13	5.23
Finland	1	6.04	3	5.62	1	6.61	2	6.01	2	5.91

* The full list of analysed countries can be found in the analytical report of the World Economic Forum “The Global Information Technology Report 2014: Rewards and Risks of Big Data”.

Source: World Economic Forum.

(continued)

	Networked Readiness Index		Including sub-indices							
			A. Environment		B. Readiness		C. Usage		D. Impact	
	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value
France	25	5.09	30	4.82	27	5.64	23	5.16	23	4.73
Georgia	60	4.09	73	3.91	40	5.39	75	3.63	74	3.44
Germany	12	5.50	17	5.14	8	6.16	13	5.51	14	5.20
Greece	74	3.95	89	3.76	62	4.97	67	3.83	90	3.24
Hungary	47	4.32	51	4.21	67	4.89	45	4.21	42	3.97
Iceland	19	5.30	20	5.01	2	6.44	24	5.16	25	4.61
India	83	3.85	91	3.76	85	4.57	91	3.45	60	3.61
Indonesia	64	4.04	63	4.04	65	4.92	69	3.75	72	3.46
Ireland	26	5.07	12	5.27	26	5.65	29	4.92	31	4.43
Israel	15	5.42	22	4.97	20	5.76	14	5.45	6	5.52
Italy	58	4.18	88	3.77	33	5.49	51	4.07	82	3.37
Japan	16	5.41	21	4.99	19	5.84	9	5.69	16	5.12
Kazakhstan	38	4.58	57	4.11	31	5.57	38	4.39	36	4.26
Kyrgyzstan	118	3.22	122	3.39	106	3.95	126	2.81	126	2.71
Latvia	39	4.58	42	4.44	29	5.60	42	4.35	43	3.94
Lithuania	31	4.78	43	4.41	24	5.69	34	4.51	27	4.53
Luxembourg	11	5.53	11	5.31	18	5.91	8	5.73	15	5.17
Malta	28	4.96	36	4.62	23	5.73	28	5.01	30	4.49
Mexico	79	3.89	75	3.88	94	4.34	71	3.72	59	3.62
Netherlands	4	5.79	6	5.48	15	5.97	5	5.86	3	5.85
New Zealand	20	5.27	2	5.63	45	5.27	16	5.37	22	4.81

(continued)

	Networked Readiness Index		Including sub-indices							
			A. Environment		B. Readiness		C. Usage		D. Impact	
	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value
Norway	5	5.70	7	5.46	4	6.28	6	5.79	12	5.29
Poland	54	4.24	55	4.12	39	5.40	54	4.06	78	3.39
Portugal	33	4.73	35	4.63	43	5.35	32	4.56	33	4.36
Republic of Korea	10	5.54	34	4.68	17	5.93	3	5.89	5	5.67
Republic of Moldova	77	3.89	121	3.42	55	5.10	83	3.53	68	3.52
Romania	75	3.95	85	3.79	52	5.11	68	3.76	100	3.13
Saudi Arabia	32	4.78	27	4.86	54	5.11	31	4.78	32	4.40
Singapore	2	5.97	1	5.87	6	6.20	4	5.87	1	5.93
Slovakia	59	4.12	74	3.90	66	4.91	49	4.11	66	3.54
Slovenia	36	4.60	47	4.28	28	5.60	35	4.44	39	4.07
South Africa	70	3.98	31	4.76	98	4.17	70	3.72	89	3.25
Spain	34	4.69	45	4.31	30	5.60	33	4.53	34	4.36
Sweden	3	5.93	8	5.45	3	6.39	1	6.06	4	5.82
Switzerland	6	5.62	9	5.41	10	6.15	6	5.79	12	5.29
Tajikistan	–	–	–	–	–	–	–	–	–	–
Turkey	51	4.30	44	4.38	42	5.35	63	3.90	65	3.55
Turkmenistan	–	–	–	–	–	–	–	–	–	–
UAE	24	5.20	18	5.10	38	5.44	21	5.24	18	5.01
Ukraine	81	3.87	114	3.48	34	5.49	101	3.34	98	3.16
United Kingdom	9	5.54	5	5.50	21	5.74	12	5.58	9	5.36
USA	7	5.61	15	5.19	5	6.27	11	5.60	8	5.39
Uzbekistan	–	–	–	–	–	–	–	–	–	–
Venezuela	106	3.39	145	2.72	72	4.78	108	3.13	109	2.94

7.2. ICT Sector by Country

7.2.1. TELEPHONE DENSITY

(telephones per 100 population)

	Fixed telephones		Mobile cellular telephones	
	2012	2013	2012	2013
Russia	30.1	28.9	182.7	193.3
Argentina	23.0	23.3	151.9	159.0
Armenia	19.7	19.4	111.9	112.4
Australia	45.4	44.3	105.6	106.8
Austria	39.9	39.4	160.5	156.2
Azerbaijan	18.5	18.7	108.8	107.6
Belarus	46.9	47.8	113.5	118.8
Belgium	41.9	41.3	111.3	110.9
Brazil	22.3	22.3	125.0	135.3
Bulgaria	29.3	26.9	148.1	145.2
Canada	50.7	49.7	80.1	78.4
Chile	18.8	18.2	137.1	134.3
China	20.2	19.3	80.8	88.7
Croatia	37.9	36.8	115.4	114.5
Cyprus	33.1	30.6	98.4	95.2
Czech Republic	19.9	18.7	126.8	131.3
Denmark	41.1	37.4	130.3	127.5
Egypt	10.6	8.3	119.9	121.5

(continued)

	Fixed telephones		Mobile cellular telephones	
	2012	2013	2012	2013
Estonia	34.7	33.1	160.4	159.7
Finland	16.4	13.9	172.3	171.7
France	62.1	60.8	97.4	98.5
Georgia	29.3	27.7	107.8	115.0
Germany	60.5	58.9	111.6	119.0
Greece	49.1	47.9	120.1	116.8
Hungary	29.7	29.9	116.1	116.4
Iceland	55.2	51.0	108.1	108.1
India	2.5	2.3	69.9	70.8
Indonesia	15.4	16.1	114.2	121.5
Ireland	43.9	44.0	107.2	102.8
Israel	47.0	44.8	120.7	122.8
Italy	35.6	34.3	159.7	158.9
Japan	50.5	50.4	108.7	115.2
Kazakhstan	26.8	26.7	185.8	180.5
Kyrgyzstan	8.9	8.3	124.2	121.4
Latvia	24.3	23.4	112.1	136.6
Lithuania	22.3	20.7	165.1	151.3
Luxembourg	50.9	50.5	145.4	148.6
Malta	53.7	53.9	124.4	129.8
Mexico	17.0	16.8	83.4	85.8

(continued)

	Fixed telephones		Mobile cellular telephones	
	2012	2013	2012	2013
Netherlands	43.0	42.5	118.0	113.7
New Zealand	42.2	41.1	110.4	105.8
Norway	28.0	26.2	116.7	116.5
Poland	15.6	13.9	141.5	150.0
Portugal	43.0	42.7	114.0	113.0
Republic of Korea	61.4	61.6	109.4	111.0
Republic of Moldova	34.3	35.0	102.0	106.0
Romania	21.4	21.8	105.0	105.6
Saudi Arabia	17.0	16.4	187.4	176.5
Singapore	37.5	36.4	152.1	155.6
Slovakia	17.9	17.7	111.9	113.9
Slovenia	40.1	38.2	108.4	110.2
South Africa	9.3	9.2	130.6	147.5
Spain	41.9	40.7	108.4	106.9
Sweden	43.8	40.6	124.6	124.4
Switzerland	59.0	57.9	132.1	133.8
Turkey	18.7	18.1	91.5	93.0
UAE	21.4	22.3	149.6	171.9
Ukraine	26.8	26.2	130.3	138.1
United Kingdom	52.9	52.9	124.8	123.8
USA	43.5	42.2	96.0	95.5
Uzbekistan	6.9	6.9	71.0	74.3
Venezuela	25.5	25.6	102.1	101.6

Sources (here and below in this section): the Ministry of Telecom and Mass Communications of the Russian Federation (data on Russia); ITU (data on other countries).

7.2.2. BROADBAND INTERNET SUBSCRIPTIONS

(units per 100 population)

	Fixed broadband Internet subscriptions		Mobile broadband Internet subscriptions	
	2012	2013	2012	2013
Russia	14.4	16.5	52.7	59.9
Argentina	12.5	13.9	16.4	19.8
Armenia	7.0	7.9	29.1	31.3
Australia	24.3	25.0	96.2	111.1
Austria	25.0	26.0	56.3	64.5
Azerbaijan	13.8	17.0	29.5	45.1
Belarus	26.9	29.8	33.3	46.0
Belgium	33.3	34.4	33.0	46.0
Brazil	9.2	10.1	33.7	52.0
Bulgaria	17.9	19.0	48.5	58.6
Canada	32.5	33.3	42.1	57.9
Chile	12.3	12.3	28.3	35.6
China	12.7	13.6	16.9	21.4
Croatia	20.7	21.5	53.9	66.1
Cyprus	19.2	19.9	34.1	31.8
Czech Republic	16.4	17.0	52.1	54.4
Denmark	38.8	40.2	97.4	107.5
Egypt	2.8	3.3	27.9	31.1

(continued)

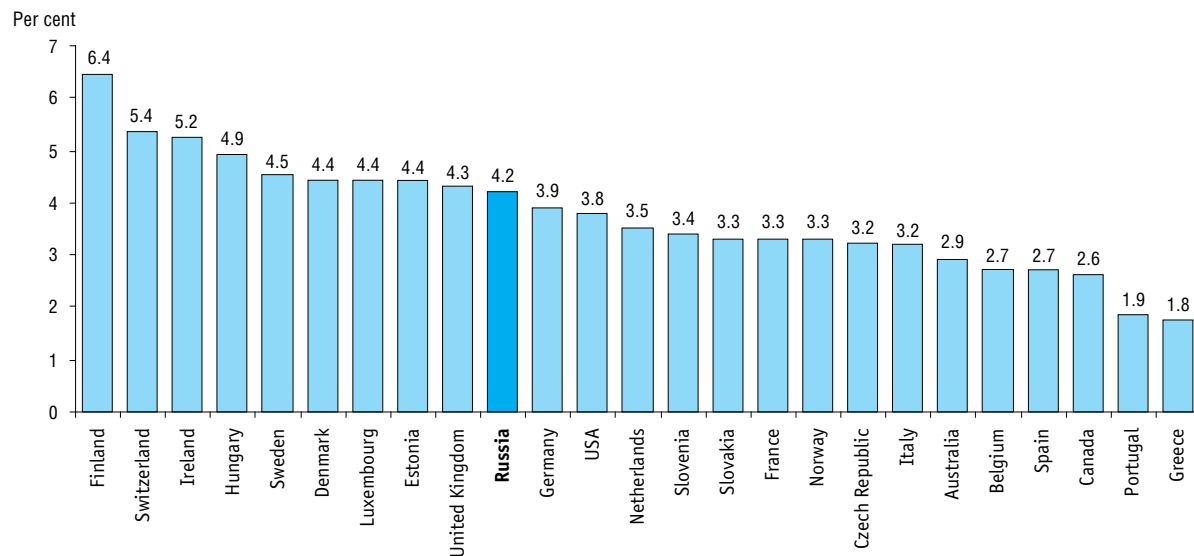
	Fixed broadband Internet subscriptions		Mobile broadband Internet subscriptions	
	2012	2013	2012	2013
Estonia	25.5	26.5	76.9	78.9
Finland	30.4	30.9	106.6	123.6
France	37.5	38.8	51.8	55.9
Georgia	9.0	10.2	8.9	17.4
Germany	33.7	34.6	40.6	44.8
Greece	24.1	26.2	34.4	36.1
Hungary	22.9	24.1	24.2	27.5
Iceland	34.3	35.1	70.9	74.7
India	1.2	1.2	2.4	3.2
Indonesia	1.2	1.3	31.6	36.0
Ireland	22.7	24.2	65.9	68.6
Israel	25.3	25.7	53.0	52.5
Italy	22.1	22.3	53.5	65.9
Japan	28.4	28.8	112.4	120.5
Kazakhstan	9.8	11.6	42.5	56.6
Kyrgyzstan	0.9	1.0	19.1	22.7
Latvia	23.3	24.7	58.2	61.2
Lithuania	21.1	22.0	41.4	53.8
Luxembourg	32.4	33.5	80.6	80.5
Malta	31.1	32.8	35.0	41.2
Mexico	10.5	11.1	7.7	11.5

(continued)

	Fixed broadband Internet subscriptions		Mobile broadband Internet subscriptions	
	2012	2013	2012	2013
Netherlands	39.8	40.1	61.3	62.3
New Zealand	27.8	29.2	65.9	81.9
Norway	36.3	36.4	84.8	86.5
Poland	15.6	15.6	63.6	59.5
Portugal	22.5	23.8	32.8	36.7
Republic of Korea	37.2	38.0	105.1	105.3
Republic of Moldova	11.9	13.4	43.8	47.3
Romania	16.1	17.3	27.0	37.7
Saudi Arabia	6.9	7.3	58.4	70.6
Singapore	25.4	25.7	126.1	136.6
Slovakia	14.7	15.5	39.7	54.9
Slovenia	24.3	25.0	36.7	42.1
South Africa	2.1	3.1	25.2	28.7
Spain	24.4	25.6	53.6	67.2
Sweden	32.3	32.6	104.9	110.3
Switzerland	40.1	43.0	39.6	44.4
Turkey	10.6	11.2	26.7	32.3
UAE	10.3	11.1	44.8	89.1
Ukraine	8.0	8.8	5.4	6.7
United Kingdom	34.4	35.7	77.0	87.2
USA	28.5	28.5	89.7	93.6
Uzbekistan	0.7	1.1	20.4	22.8
Venezuela	6.7	7.3	4.8	3.8

7.3. ICT Sector by Country

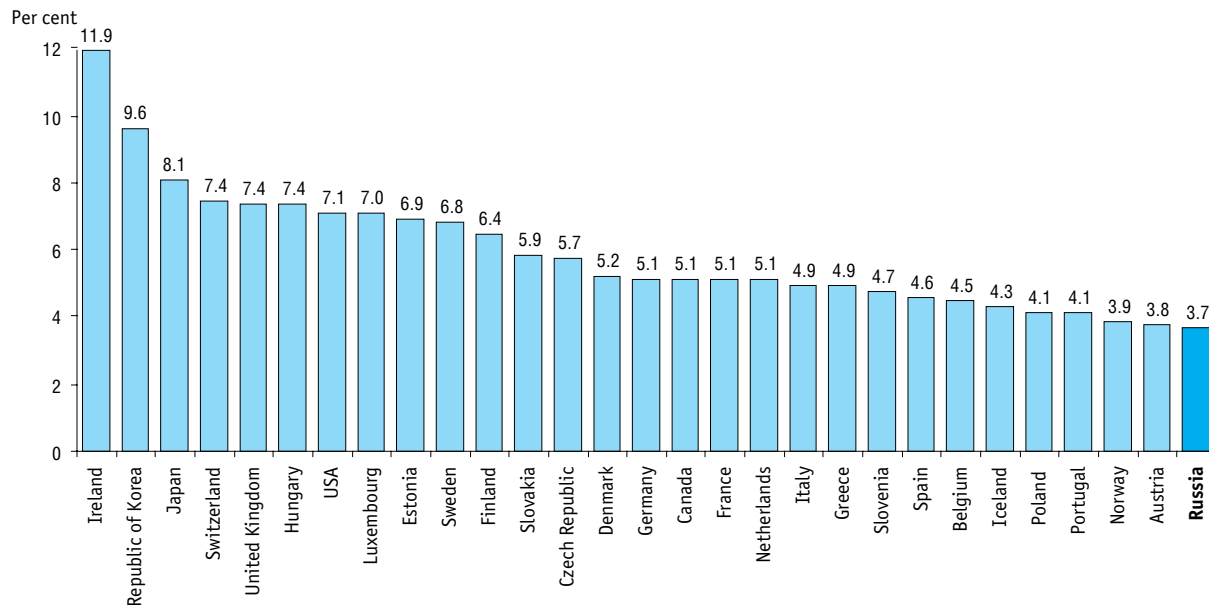
7.3.1. SHARE OF THE ICT SECTOR IN THE TOTAL NUMBER OF EMPLOYEES IN THE BUSINESS ENTERPRISE SECTOR: 2013 *



* Or the nearest years for which data are available. Data for ICT sector exclude wholesale of ICT goods.

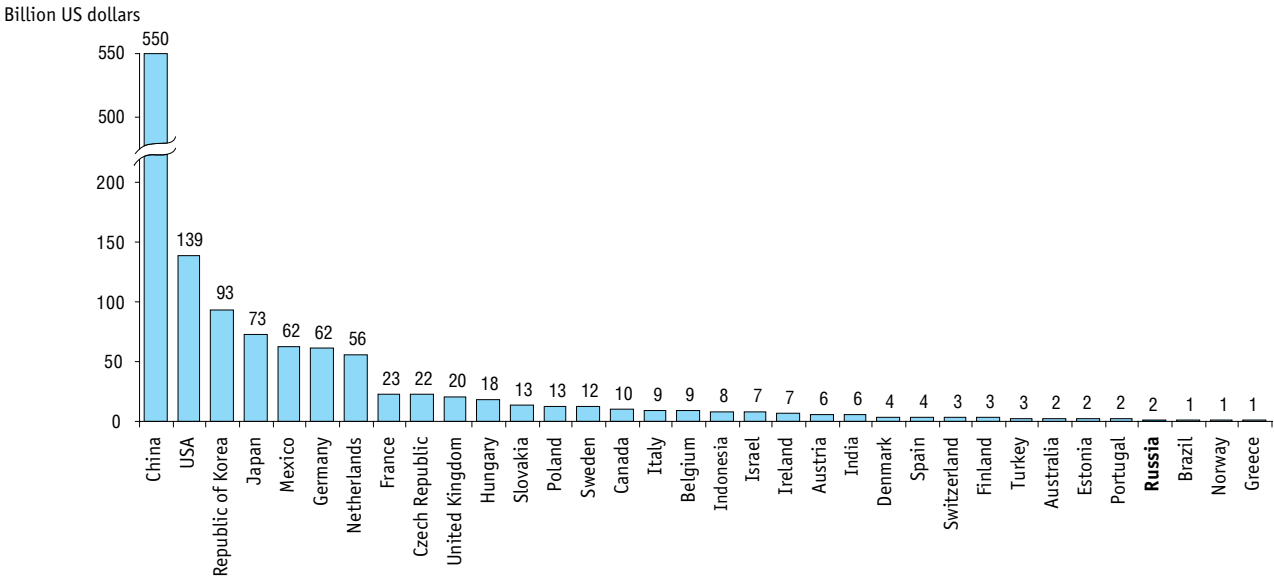
Sources (here and below in this section): data for Russia – own calculations of the Institute for Statistical Studies and Economics of Knowledge based on the Federal State Statistics Service data; for foreign countries – OECD.

7.3.2. SHARE OF THE ICT SECTOR IN THE GROSS VALUE ADDED OF THE BUSINESS ENTERPRISE SECTOR: 2013*



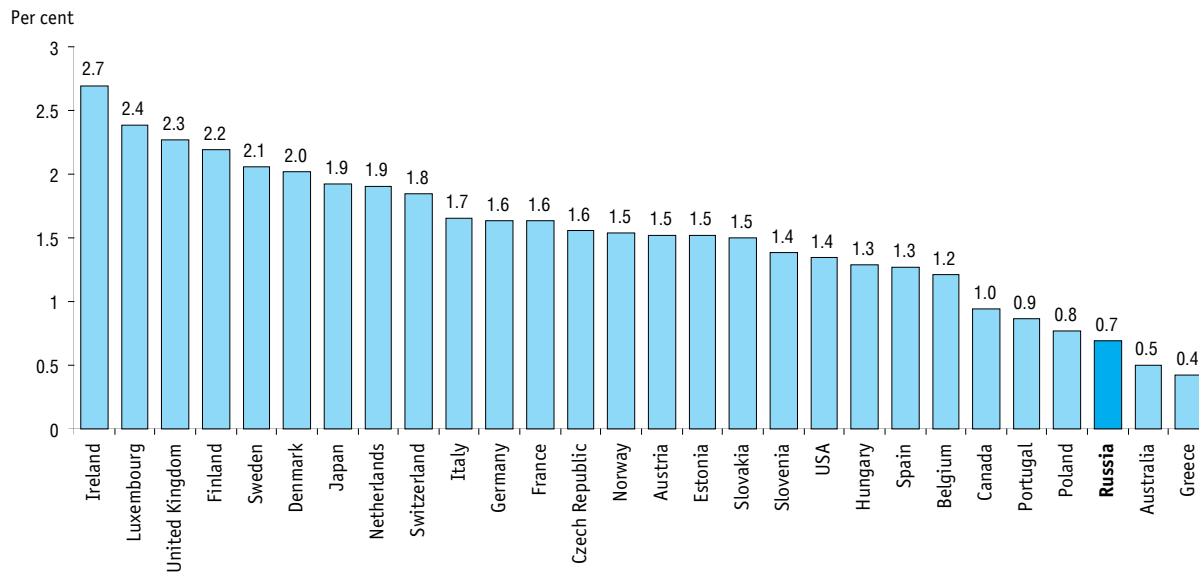
* Or the nearest years for which data are available. Data for ICT sector exclude wholesale of ICT goods.

7.3.3. EXPORTS OF ICT GOODS: 2012



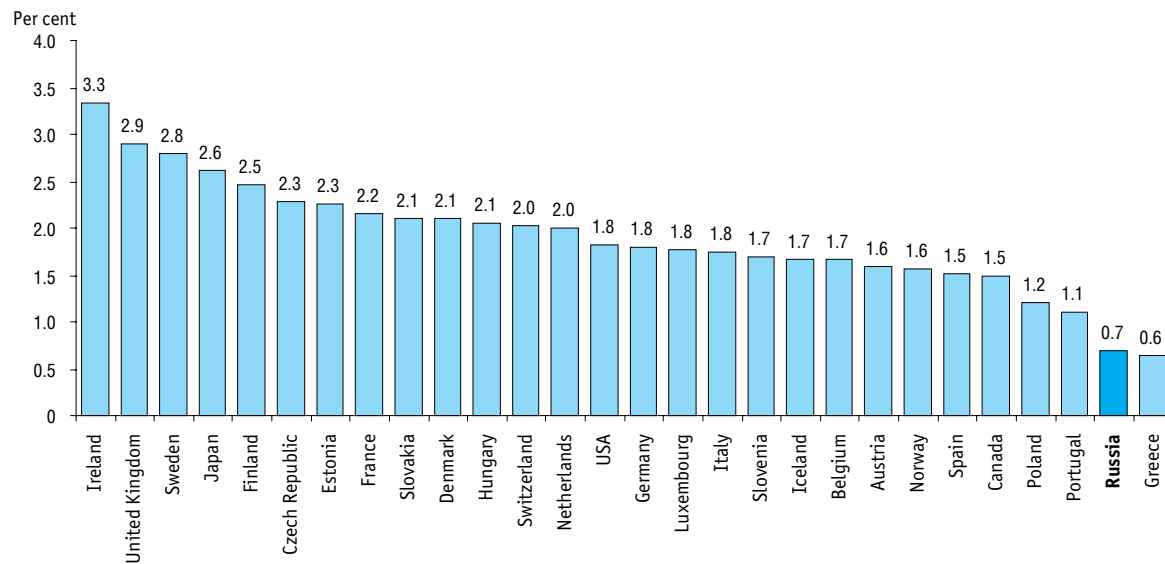
7.4. IT industry by country

7.4.1. SHARE OF IT INDUSTRY IN THE TOTAL NUMBER OF EMPLOYEES IN ENTERPRISES: 2012



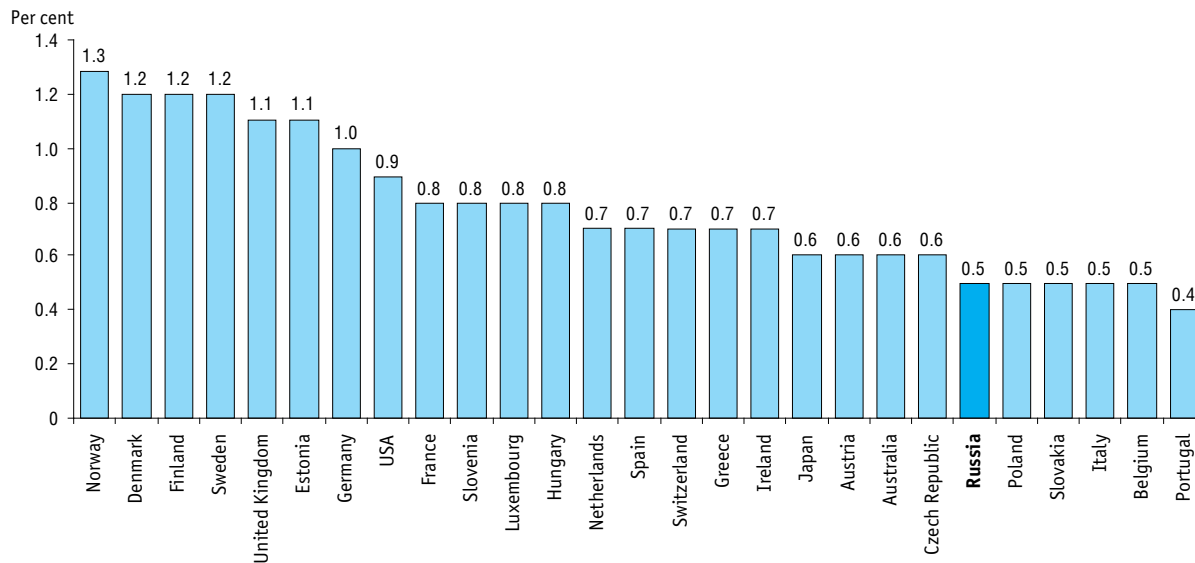
Sources (here and below in this section): data for Russia – own calculations of the Institute for Statistical Studies and Economics of Knowledge based on the Federal State Statistics Service data; for foreign countries – OECD.

7.4.2. SHARE OF IT INDUSTRY IN GDP: 2012



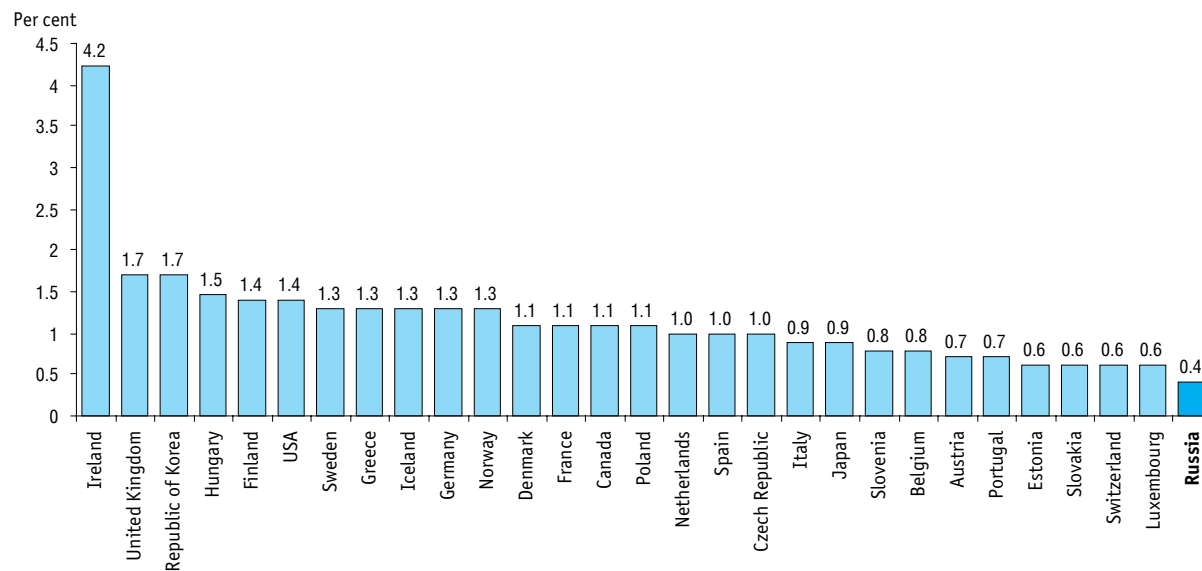
7.5. Content and Media Sector by Country

7.5.1. SHARE OF CONTENT AND MEDIA SECTOR IN THE TOTAL NUMBER OF EMPLOYEES IN ENTERPRISES: 2012



Sources (here and below in this section): data for Russia – own calculations of the Institute for Statistical Studies and Economics of Knowledge based on the Federal State Statistics Service data; for foreign countries – OECD.

7.5.2. SHARE OF CONTENT AND MEDIA SECTOR IN GDP: 2012



7.6. ICT Usage in Enterprises by Country

7.6.1. ENTERPRISES USING PERSONAL COMPUTERS (as a percentage of all enterprises in the business sector)

	2012	2013		2012	2013
Russia	92	92	Italy	98	98
Austria	99	99	Latvia	95	97
Belgium	98	98	Lithuania	100	100
Bulgaria	91	92	Luxembourg	99	99
Cyprus	97	96	Malta	97	97
Czech Republic	97	97	Netherlands	100	100
Denmark	99	99	Norway	98	98
Estonia	97	97	Poland	95	95
Finland	100	100	Portugal	98	98
France	99	99	Romania	81	85
Germany	98	98	Slovakia	98	99
Greece	93	90	Slovenia	98	98
Hungary	92	91	Spain	98	98
Iceland	99	99	Sweden	98	98
Ireland	95	96	United Kingdom	96	96

Sources (here and below in this section): data for Russia – own calculations of the Institute for Statistical Studies and Economics of Knowledge based on the Federal State Statistics Service data; for foreign countries – OECD, Eurostat.

7.6.2. ENTERPRISES USING THE INTERNET
(as a percentage of all enterprises in the business sector)

	2012	2013		2012	2013
Russia	86	87	Italy	96	97
Austria	98	98	Latvia	91	94
Belgium	97	97	Lithuania	100	100
Bulgaria	87	89	Luxembourg	98	98
Cyprus	95	93	Malta	95	95
Czech Republic	97	96	Netherlands	100	100
Denmark	99	99	Norway	97	97
Estonia	96	97	Poland	93	94
Finland	100	100	Portugal	95	96
France	99	99	Romania	79	83
Germany	97	98	Slovakia	98	98
Greece	91	87	Slovenia	98	97
Hungary	89	88	Spain	96	97
Iceland	99	99	Sweden	98	98
Ireland	94	95	United Kingdom	94	96

7.6.3. ENTERPRISES USING BROADBAND INTERNET CONNECTION

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

	2012	2013		2012	2013
Russia	79	81	Latvia	88	94
Australia	94*	...	Lithuania	99	99
Austria	91	93	Luxembourg	96	97
Belgium	94	95	Malta	95	95
Bulgaria	79	81	Mexico	52**	...
Canada	95	...	Netherlands	98	98
Cyprus	95	93	New Zealand	95*	...
Czech Republic	92	95	Norway	89	92
Denmark	93	98	Poland	82	83
Estonia	96	96	Portugal	91	93
Finland	100	100	Republic of Korea	98*	...
France	98	99	Romania	76	67
Germany	91	93	Slovakia	92	91
Greece	80	78	Slovenia	98	97
Hungary	87	87	Spain	96	96
Iceland	99	98	Sweden	97	97
Ireland	91	95	Turkey	89*	...
Italy	94	95	United Kingdom	93	95
Japan	84	...			

* 2010.

** 2008.

7.6.4. ENTERPRISES WITH A WEBSITE

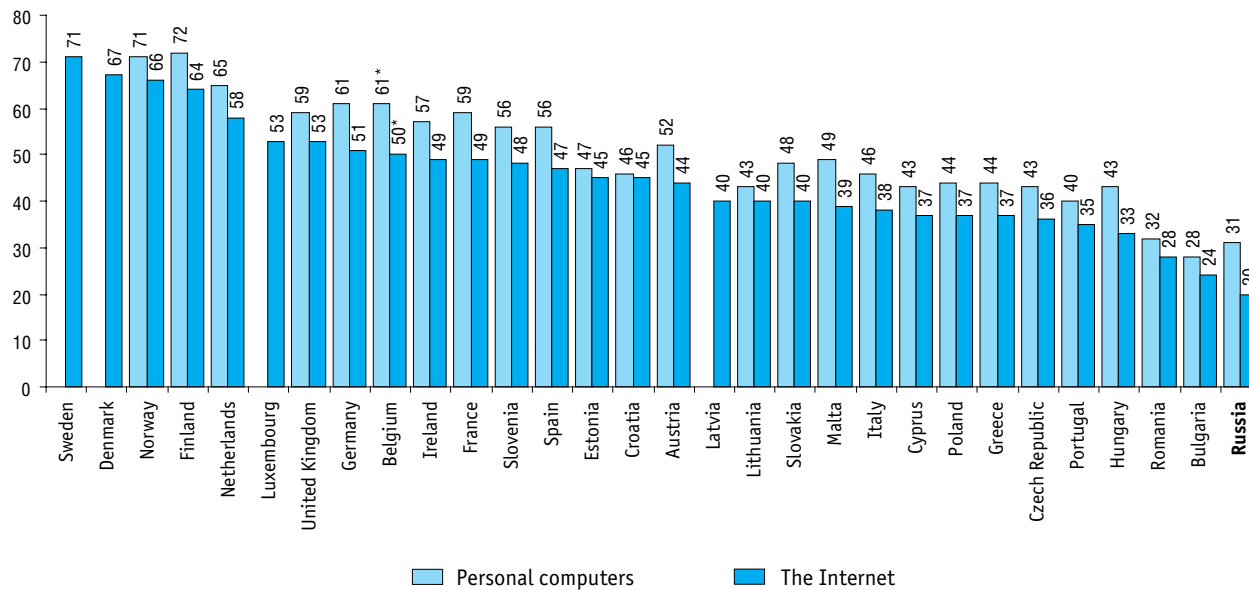
(as a percentage of all enterprises in the business sector)

	2012	2013		2012	2013
Russia	39	40	Japan	89	...
Australia	74	...	Latvia	53	56
Austria	82	86	Lithuania	71	75
Belgium	76	78	Luxembourg	77	79
Bulgaria	43	47	Malta	73	78
Canada	77*	...	Netherlands	84	84
Cyprus	60	66	New Zealand	78	...
Czech Republic	80	80	Norway	79	79
Denmark	89	92	Poland	68	66
Estonia	75	76	Portugal	52	59
Finland	91	94	Republic of Korea	60	...
France	64	65	Romania	36	42
Germany	82	84	Slovakia	76	80
Greece	64	61	Slovenia	77	80
Hungary	62	61	Spain	68	68
Iceland	84	83	Sweden	89	89
Ireland	74	75	Turkey	54	...
Italy	65	67	United Kingdom	81	82

* 2009.

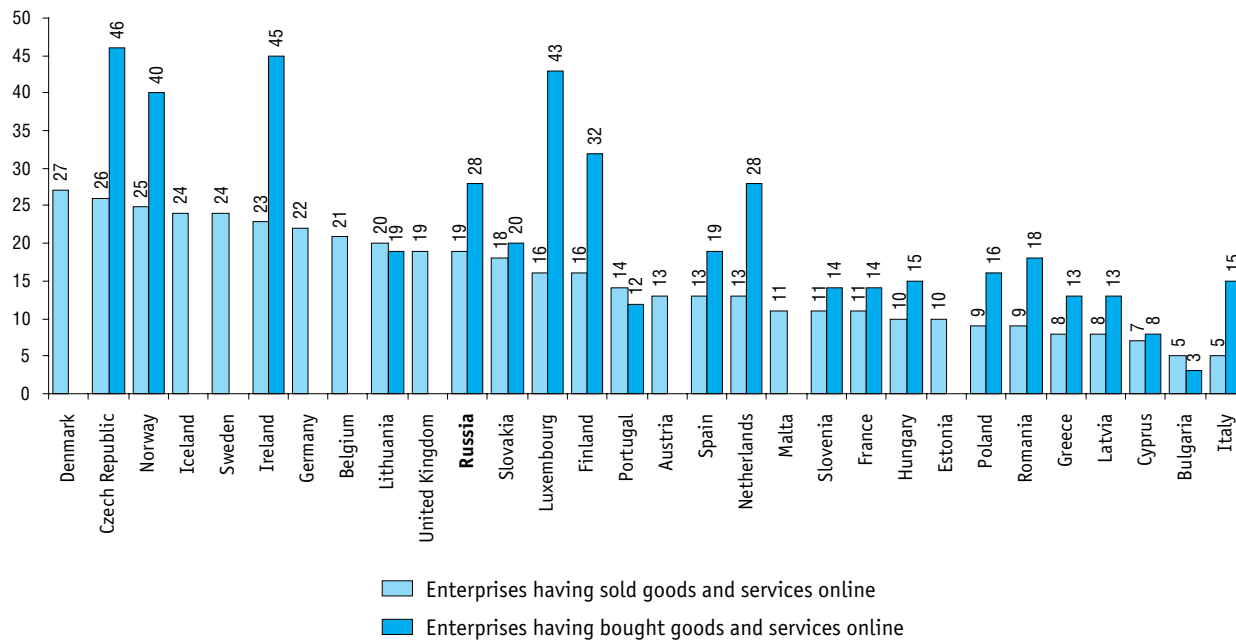
7.6.5. EMPLOYEES USING PERSONAL COMPUTERS AND THE INTERNET: 2013

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



* 2012.

7.6.6. ENTERPRISES USING THE INTERNET FOR SELLING OR BUYING GOODS AND SERVICES: 2013

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

* Except orders received/submitted via email.

7.6.7. ENTERPRISES USING THE INTERNET TO INTERACT WITH PUBLIC AUTHORITIES

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

	Interacting with public authorities		Downloading blank forms (e.g. statistical and tax forms)		Returning completed forms (e.g. statistical and tax forms)	
	2012	2013	2012	2013	2012	2013
Russia	76	76	70	71	69	70
Austria	94	92	85	84	75	77
Belgium	88	89	68	72	71	74
Bulgaria	83	83	78	77	76	79
Croatia	88	93	76	84	71	81
Cyprus	85	85	81	82	35	47
Czech Republic	92	94	87	90	73	81
Denmark	93	95	87	89	86	88
Estonia	95	95	84	81	94	80
Finland	97	97	91	92	88	89
France	94	96	86	91	85	87
Germany	85	83	73	66	62	61
Greece	88	84	79	...	82	81
Hungary	84	84	80	82	75	81
Iceland	98	97	93	93	90	87
Ireland	91	95	86	88	84	95

(continued)

	Interacting with public authorities		Downloading blank forms (e.g. statistical and tax forms)		Returning completed forms (e.g. statistical and tax forms)	
	2012	2013	2012	2013	2012	2013
Italy	84	85	74	73	53	58
Latvia	89	93	76	79	85	88
Lithuania	100	99	99	99	99	99
Luxembourg	89	90	85	84	62	65
Malta	88	88	80	79	56	58
Netherlands	91	90	85	83	87	85
Norway	93	94	85	85	75	89
Poland	90	90	80	81	82	86
Portugal	94	92	77	81	82	85
Romania	63	65	56	57	49	52
Slovakia	91	92	84	86	71	71
Slovenia	92	93	87	86	79	81
Spain	79	82	69	72	58	61
Sweden	95	95	91	92	85	87
United Kingdom	89	91	79	80	86	87

7.7. ICT Usage by Households and Individuals by Country

7.7.1. HOUSEHOLDS WITH PERSONAL COMPUTERS AND INTERNET ACCESS

(as a percentage of all households)

	Personal computers		Internet	
	2012	2013	2012	2013
Russia	67	71	60	69
Argentina	56	59	48	54
Armenia	39	40	35	36
Australia	83	84	79	83
Austria	81	81	79	81
Azerbaijan	45	52	47	52
Belarus	52	55	48	52
Belgium	80	82	78	80
Brazil	46	49	40	42
Bulgaria	52	55	51	54
Canada	84	84	82	83
Chile	54	57	45	50
China	41	44	37	44
Croatia	68	66	66	65
Cyprus	70	70	62	65
Czech Republic	67	74	65	73
Denmark	92	93	92	93
Egypt	38	43	32	35

(continued)

	Personal computers		Internet	
	2012	2013	2012	2013
Estonia	76	80	75	80
Finland	88	89	87	89
France	81	82	80	82
Georgia	33	40	27	35
Germany	87	89	85	88
Greece	57	60	54	56
Hungary	71	73	69	72
Iceland	96	97	95	96
India	11	12	10	13
Indonesia	15	16	6	6
Ireland	83	84	81	82
Israel	80	85	71	71
Italy	67	71	63	69
Japan	76	76	86	86
Kazakhstan	63	63	53	55
Kyrgyzstan	18	20	7	8
Latvia	70	72	69	72
Lithuania	64	66	62	65
Luxembourg	92	94	93	95
Malta	78	80	78	79
Mexico	32	36	26	31

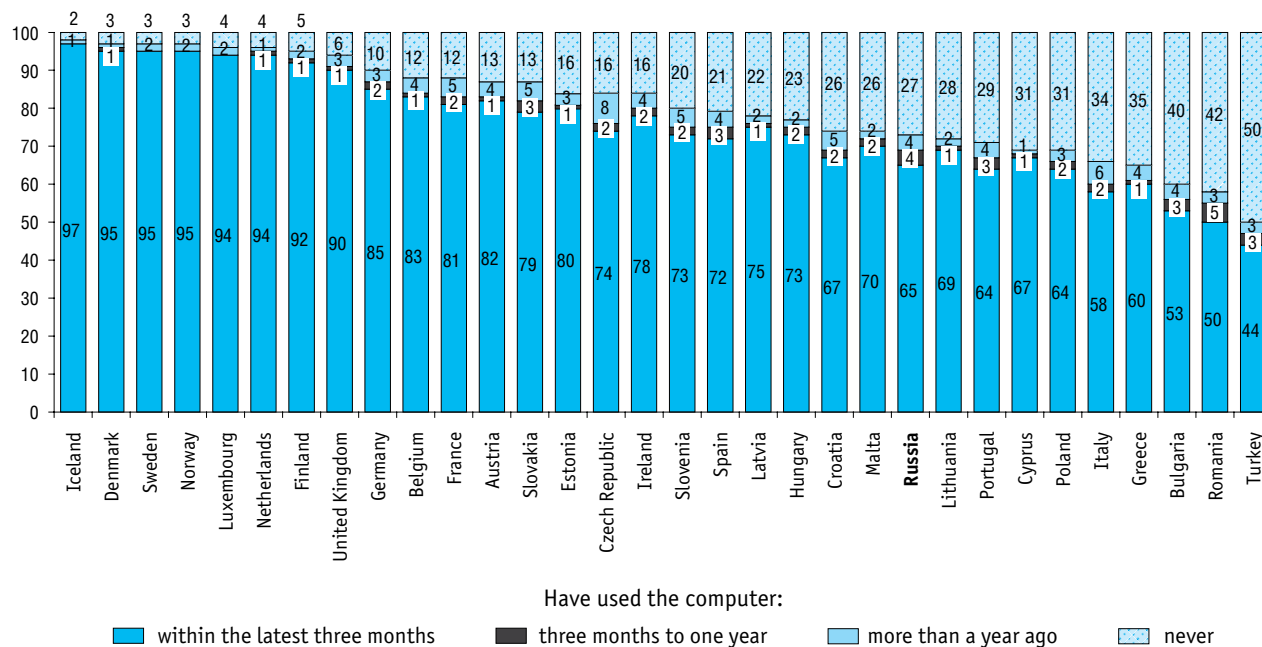
(continued)

	Personal computers		Internet	
	2012	2013	2012	2013
Netherlands	95	95	94	95
New Zealand	78	77	80	77
Norway	92	93	93	94
Poland	73	75	71	72
Portugal	66	67	61	62
Republic of Korea	82	81	97	98
Republic of Moldova	45	50	42	46
Romania	57	61	54	58
Saudi Arabia	68	73	67	73
Singapore	85	86	84	86
Slovakia	79	80	75	78
Slovenia	76	76	74	76
South Africa	24	26	34	39
Spain	74	73	68	70
Sweden	92	92	92	93
Switzerland	86	87	90	92
Turkey	50	53	47	49
UAE	85	90	72	76
Ukraine	41	41	36	44
United Kingdom	87	88	87	88
USA	79	80	75	77
Uzbekistan	8	9	10	10
Venezuela	38	41	29	32

Sources: Federal State Statistics Service (for Russia); ITU (for other countries).

7.7.2. PERSONAL COMPUTER USAGE BY POPULATION: 2013

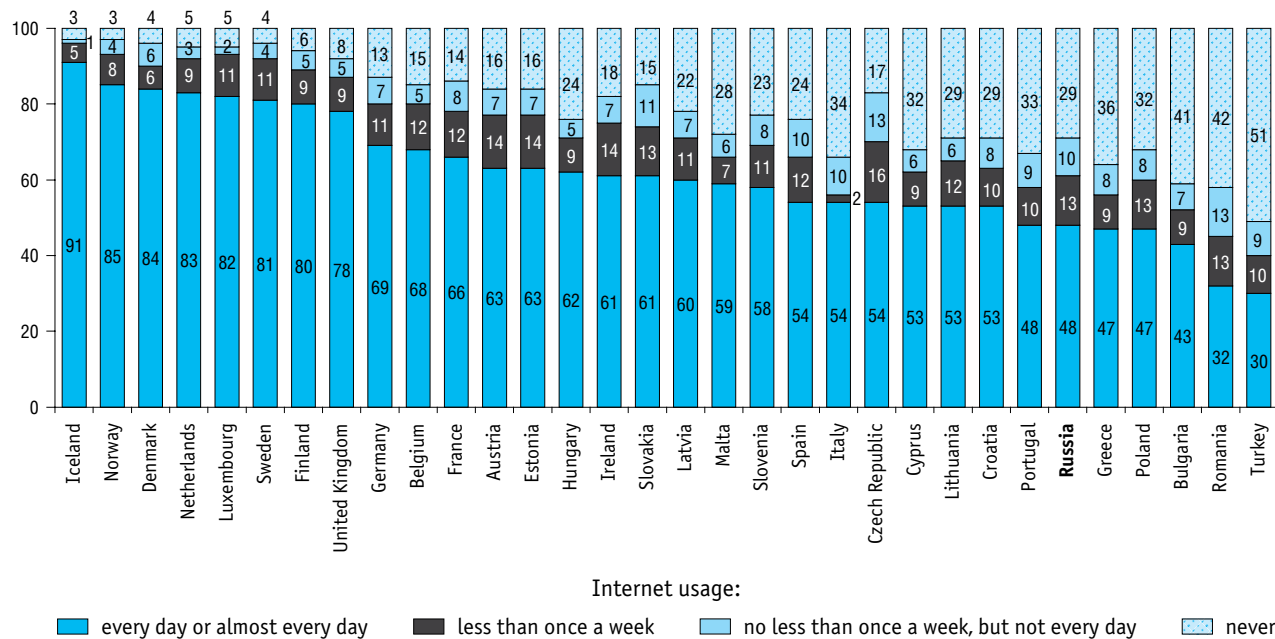
(as a percentage of all respondents aged 16–74*)



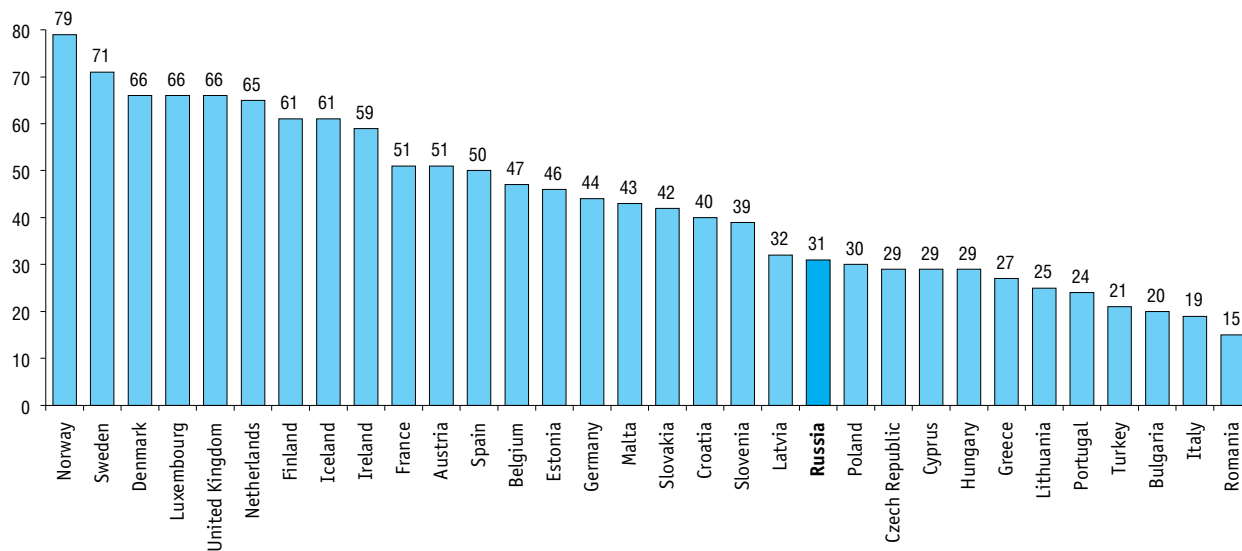
* Here and below in this section: for Russia – people aged 15–72.

Sources (here and below in this section): data for Russia – own calculations of the Institute for Statistical Studies and Economics of Knowledge based on the Federal State Statistics Service data; for foreign countries – Eurostat.

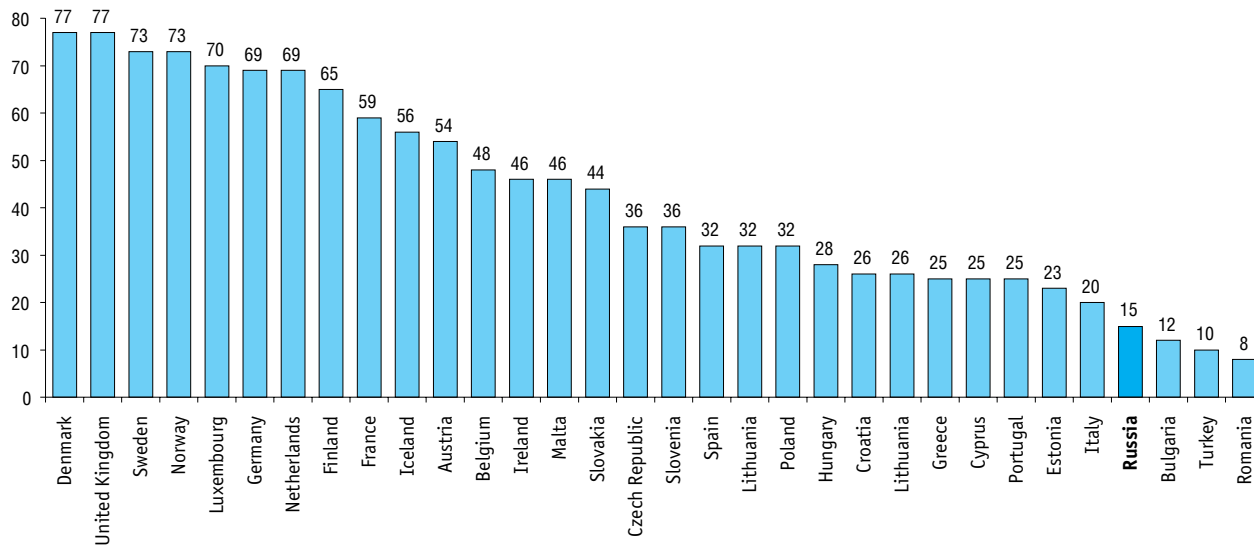
7.7.3. INTERNET USAGE BY POPULATION: 2013 (as a percentage of all respondents aged 16–74)



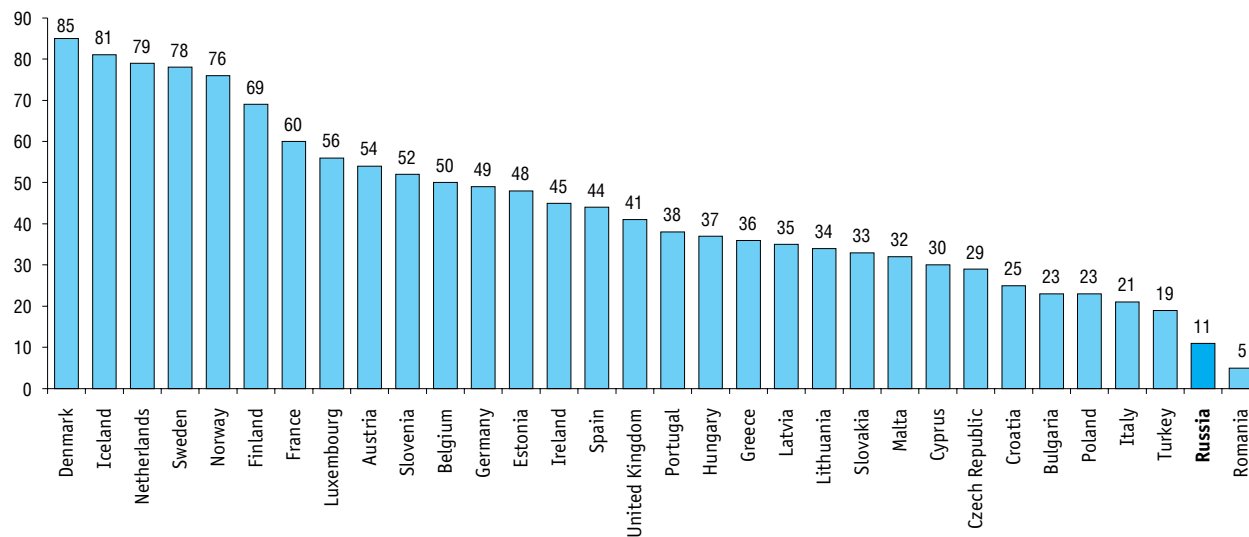
7.7.4. USAGE OF MOBILE DEVICES TO ACCESS THE INTERNET BY POPULATION: 2013

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

7.7.5. PURCHASE AND ORDER OF GOODS AND SERVICES VIA THE INTERNET BY POPULATION WITHIN THE LAST 12 MONTHS (as a percentage of all respondents aged 16–74)



7.7.6. INTERNET USAGE FOR INTERACTING WITH PUBLIC AUTHORITIES WITHIN THE LAST 12 MONTHS: 2013

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

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) imply 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 the Federal State Statistics Service and the Ministry of Telecom and Mass Communication of the Russian Federation.

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.

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.

Home telephones are telephones installed in apartments (houses).

Internet subscriptions are subscriptions of physical or legal entities that have entered into a contract or contracts for using data network services. The number of fixed and mobile Internet subscriptions is determined based on the number of contracts signed with physical or legal entities at the end of the reporting period.

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

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.

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

User terminal is a telephone with an installed SIM-card.

ICT Sector

ICT sector indicators are calculated by the 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 the Federal State Statistics Service (Rosstat), customs statistics data, and data provided annually by Rosstat on gross value added for each type of economic activity. The structure of ICT sector employment by age group and level of education is given according to the Rosstat sample survey on employment. Data on export (import) of computer and telecommunication services are provided according to the Bank of Russia.

The ICT sector is a set of enterprises involved in economic activities related to the production of ICT and the provision of services in this area. The results of these activities are:

1) Products that meet one of the following requirements:

- are 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 use in the products described above;

2) Services that enable the processing and transmission of information via electronic devices, including those related to trade or leasing of technical equipment, as well as the direct application of ICT.

In Russian information society statistics, the ICT sector is presented by economic activity according to the international statistics 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

Employment is the average number of employees of an enterprise, defined as the sum of the average number of employees of an enterprise within 12 months of the reporting year divided by 12.

Gross value added is calculated at the level of industries and sectors of the economy as goods and services output minus intermediate consumption. Output is the total value of goods and ser-

vices 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 and provided services as well as revenues from sales of goods previously bought from third parties or acquired by barter agreement. The data are presented in actual selling prices 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, reconstruction and upgrading of facilities, which increase their original value and are charged to the company's additional capital; 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 foreign branches of Russian legal entities, and aimed at revenue. There are the following types of investment: direct, portfolio, and other. **Direct investment** is performed by a legal or physical entity – an enterprise's owner or owner of at least 10% share of an enterprise's fixed capital. **Portfolio investment** is acquisition of shares, bonds, bills and other securities. The share of these papers is less than 10% in an enterprise's 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 human nature, culture and society, and the use of this stock of knowledge to devise new applications.

Innovative activity of an enterprise characterises the degree of an enterprise's involvement in innovation in general, or in specific innovative activities, within a certain period. The level of in-

novative 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 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 or means of service production (transfer) implemented in practice. Innovation activities incorporate a complex of scientific, technological, organisational, financial and commercial actions that together lead to innovation.

Innovative goods and services are products (goods and services) that have undergone technological modification in the last three years. In terms of novelty, there are two kinds of innovative goods and services: newly introduced (or significantly technologically modified) and improved products.

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 on technological, organisational and marketing innovations.

Marketing innovation includes newly implemented or significantly improved marketing methods that incorporate major changes in product package and design; innovative sales, presentation and promotion of products; new pricing strategies. Marketing innovations are aimed at better addressing customer needs and expanding

the range of consumers of goods and services, and developing new markets in order to increase the 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 market assets, and reducing supply costs.

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

The total level of innovative activity is defined as the ratio of the number of enterprises having all types of innovation (technological, marketing, organisational) or individual types of innovation (combinations of innovation) to the total number of enterprises surveyed over a certain period of time.

Technological innovation is the final result of innovative activities, embodied in a technologically new or improved product or service introduced to the market, a technologically new or improved process or technique of service production (transfer) used in practice. An accomplished innovation is one introduced to the market or implemented in 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 expen-

diture on these operations. Non-operational deals are: penalties, fines, losses for contract terms violations; profit (loss) of previous years revealed in the current year, exchange rates fluctuations, etc.

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

Profitability of assets is the ratio of a company's balance (profit minus loss) 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 the 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 the share of working capital in total funds of enterprises and their degree of self-support.

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

Indicators of the **international trade in ICT-related goods** are based on the data provided by the Federal State Statistics Service; data on **international trade in ICT-related services** are 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 Harmonised Commodity Description and Coding System (HS 2007).

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

Data on **exports (imports) of computers and telecommunications services** are put up within the calculation of the balance of payments. According to the Manual on Statistics of International Trade in Services 2010 (MSITS 2010), telecommunications services encompass the transmission of sound, images, data, or other information by telephone, telex, telegraph, radio and television cable and transnational broadcasting, satellite, e-mail, fax, etc., including business network services, teleconferencing and related services; **computer services** include services related to hardware, software, and data processing.

IT Industry

Indicators of IT enterprises activity (IT industry) are calculated by HSE ISSEK on the basis of the Statistical Register, surveys conducted by Rosstat, and data provided annually by Rosstat on gross value added for each type of economic activity.

IT industry is a set of enterprises the activity of which results in services mainly intended for (or contributing to) collection, conversion, storage, and presentation of data and information electronically. According to the Russian Ministry of Telecom and Mass Communica-

tions order from 30.12.2014 № 502, the following types of economic activities refer to IT industry (RCEA code, Rev. 1.1.):

RCEA code (Rev. 1.1)	Economic activity
72.1	Consulting on computer hardware
72.2	Software development and consulting in this area
72.3	Processing
72.4	Creating and using databases and information resources, including Internet resources
72.6	Other activity related to the use of computers and information technologies

Indicators of business activity of enterprises providing IT services are presented based on the results of the pilot survey of service sector business activity conducted by HSE ISSEK. The survey covered more than 600 executives of enterprises engaged in activities related to the use of computers and information technology. The survey covered enterprises in 30 Russian regions.

Conjunctural surveys are directed at promptly receiving information from entrepreneurs in addition to the official statistics: short-term quality assessments of business situation and main business trends, functioning of economic entities and their intentions, degree of adaptation to economic management mechanisms, prevailing business climate, as well as of major factors limiting their activity.

The screening programme is comparable with international standards and is based on the European harmonized system of business tendency surveys.

Assessment of the current situation in an enterprise was based on the comparison of actual and “normal” (acceptable, normal, adequate in the circumstances usual for the survey period) business activity performance levels. In assessing changes in indicators over time, the following criteria were used: “increase” (“improvement”), “unchanged”, “decrease” (“deterioration”). **The balance of estimations** is the difference between the proportions of respondents who indicated “increase” and “decrease” of an indicator compared to the previous period, as well as the difference between the proportions of respondents who estimated the level of an indicator as “above normal” and “below normal” in the surveyed period; per cent.

In accordance with international practice, the **business confidence index** in service sector is calculated as the mean value of the balances of assessments of changes in the economic situation and demand for services in the surveyed period compared to the previous one, as well as of expected changes in demand for services in the following period; per cent.

Content and media sector

Performance of content and media sector enterprises was calculated by HSE ISSEK on the basis of the Statistical Register data, Rosstat federal statistical observation, Rosstat annual data on gross value added itemised by economic activity.

Content and media sector is an aggregate of enterprises engaged in economic activities related to production, publication and/or distribution of content (information, cultural products and products intended for entertainment purposes).

The composition of content and media sector by economic activity is defined based on international statistics standards based on RCEA code (Rev. 1.1):

RCEA code (Rev. 1.1)	Economic activity
22.1	Publishing
92.1	Activity related to cinema production and distribution
92.2	Broadcasting activity
92.4	News agencies' activity

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 in this field
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

(continued)

RCEA code (Rev. 1.1)	Economic activity
I	Transport and communication
J	Financial intermediation
K	Real estate, renting and service activities
L	Public administration and defence; social security (codes 75.23.4 and 75.24 are excluded)
80.3	Higher education
N	Health and social services
92	Recreational, cultural and sporting activities

The number of employed population having secondary vocational or higher education in ICT-related fields is given according to Rosstat sample survey on employment.

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 enterprises. 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 world wide 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 enterprise 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 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 programmes, standard software used for special purposes (e.g. text or graphic editors, electronic spreadsheets, databases management programme) unless any specialised software application is developed on their basis (e.g. antivirus and email programmes, 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, human resources, etc.

CRM system (Customer Relationship Management) is a system for managing a company's interactions with customers. It is used to col-

lect and process information on different aspects of customers' activity: availability of / demand for goods and services, sales cycles, 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 its main characteristic measured by the 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 tele-

phone 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 copper wires of a 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.

Broadband Internet access includes xDSL-technology, connection via cable TV networks, leased lines, fiber optics, satellite connection, advanced fixed wired and wireless access (WiMax connection, etc.), connection via high-speed mobile phone networks and other forms of access with declared download speed of 256 Kbs or more.

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.

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, personnel training in ICT, paying for ICT services of external organisations and consultants as well as other ICT-related expenses including those on software development. Current

and capital 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 'technician' 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).

When calculating **the number of employed population having ICT-related secondary professional, higher education**, graduates in informatics and computer science, electronic engineering, radio engineering and communications, information security, and information technology are considered.

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 ICT as every day work tools.

ICT usage by households and individuals

Data on **the usage of personal computers (including portable devices), Internet, fixed and mobile cellular telephones** by households is based on the results of the annual survey on household budgets conduct-

ed by Rosstat. 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 based on territorial principle and ensuring that all groups of population are represented within a federal subject 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 together their financial resources wholly or partially.

Data on **ICT usage by individuals** is based on the results of the federal statistical observation on the use of information technology and information and telecommunication networks by the public, conducted by Rosstat in October 2013; about 69 thousand people aged 15–72 were surveyed. For comparison with previous periods, results of Russian national specialised representative surveys of adults aged 16–74 covering about 1600 people were used. The surveys were conducted by HSE Institute for Statistical Studies and Economics of Knowledge together with Yuri Levada Analytical Center in the framework of the Monitoring Survey of Innovative Behavior of the Population project within HSE Basic Research Program.

Antiviral programmes are specialised programmes designed for detection of computer viruses and unwanted (malware) programmes and for restoration of files contaminated (modified) by such programmes, as well as for prevention of contamination (modification) of files or operating system with (by) malicious content.

Anti-spam filters are specialised software or a function of the software in operation intended for filtering and hiding unwanted advertisements when visiting Internet sites, receiving e-mail and using instant messaging programmes.

Parental control or filtering of Internet resources are a set of rules and measures to prevent the negative impact of the Internet and the computer on the patronised person (usually a child).

International Comparisons

Sources for international comparisons on the main indicators of ICT infrastructure, ICT sector, IT industry, content and media sector, ICT usage by enterprises, households and individuals comprise data provided by Eurostat (<http://ec.europa.eu/eurostat/data/database>), OECD (<http://www.oecd.org/internet/ieconomy/oecdkeyictindicators.htm>), publications of international organisations: “OECD Factbook. 2014”, “OECD Measuring the Digital Economy: A New Perspective. 2014”, “ITU Measuring the Information Society Report. 2014”.

International comparisons are based on three major information society indices: ICT Development Index, E-government Development Index, Networked Readiness Index.

ICT Development Index has been developed by the UN International Telecommunication Union since 2007. It is calculated based on 11 statistical indicators characterising ICT availability and use, population’s level of education. The index characterises the level of ICT infrastructure development, the intensity of ICT use in the world and the potential for it.

The index is composed of three sub-indices: ICT Access, ICT Use, ICT Skills. The composition of indicators, their place within the sub-indices, and shares of each of the indicators and sub-indices have not changed since the release of the first issue of “Measuring the Information Society” report. The maximum possible value of ICT Development Index is 10, the minimum value is 0. In different years, 152 to 159 countries took part in the survey. “Measuring the Information Society” reports are freely available online on a special ITU page: <http://www.itu.int/en/ITU-D/Statistics/Pages/publications/mis2014.aspx>.

E-government Development Index has been developed by the UN Department of Economic and Social Affairs since 2003. The index consists of three sub-indices: Online Service, Telecommunication Infrastructure, Human Capital. The Online Service sub-index is based on a comprehensive assessment of a government's effectiveness providing services to citizens electronically. The Human Capital sub-index is calculated based on expert and statistical indicators, the Telecommunication Infrastructure sub-index – based on statistical indicators. The maximum possible value of E-government Development Index is 1, the minimum value is 0. The rating comprises 192 countries (since 2014 – 193 countries). “UN E-Government Survey” analytical reports are freely available online on a special page: <http://unpan3.un.org/egovkb/en-us/Global-Survey>.

Networked Readiness Index has been developed annually by the World Economic Forum and INSEAD international business school since 2001. To calculate the Index, 54 indicators were used in “The Global Information Technology Report 2014: Rewards and Risks of Big Data”, including statistical indicators and indicators formed on the basis of the expert survey of business community representatives (about 80 business leaders polled in each country). These indicators are grouped into ten blocks, which, in turn, form four sub-indices: A. Environment; B. Readiness; C. Usage; D. Impact. The maximum possible value of the Index is 7, the minimum value is 1. In 2014, the study was conducted in 148 countries. Annual reports are published on a special page of the World Economic Forum: <http://www.weforum.org/reports/global-information-technology-report-2014>.

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, management and other purposes	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
80.3	Higher professional education	Higher education
N	Health and social work	Health and social work

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Edited by *K. Nazaretyan*

Design *P. Shelegeda*

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National Research University Higher School of Economics (HSE)
Institute for Statistical Studies and Economics of Knowledge

20 Myasnitskaya st., Moscow, 101000, Russia

Tel.: +7(495) 621-28-73

<http://issek.hse.ru>

E-mail: issek@hse.ru

FOR NOTES