Ministry of Education and Science
of the Russian Federation

Federal Service
for State Statistics

HIGHER SCHOOL OF ECONOMICS
NATIONAL RESEARCH UNIVERSITY

Science and Technology Indicators in the Russian Federation

Data Book

10 years
HSE Institute for Statistical Studies and Economics of Knowledge

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Data Book

Moscow 2012

УДК 001(470+571)(035.5)
ББК 72(2Рос)я2

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Science and Technology Indicators in the Russian Federation : Data Book. – Moscow : National Research University – Higher School of Economics (HSE), 2012. – 392 p. – ISBN 978-5-7218-1255-2.

The data book is the continuation of the series of publications on various aspects of S&T and innovation development in the Russian Federation. It presents statistical data reflecting the current state and trends in R&D and innovation. A specific chapter is devoted to international comparisons.

The publication includes information of the Federal Service for State Statistics, Ministry of Education and Science of the Russian Federation, Federal Service for Intellectual Property, Patents and Trademarks, CIS Statcommittee, Organisation for Economic Co-operation and Development (OECD), European Commission, Eurostat, UNESCO, World Intellectual Property Organisation as well as results of own methodological and analytical studies of the HSE Institute for Statistical Studies and Economics of Knowledge.

In certain cases, the presented data specify those published earlier.

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ББК 72(2Рос)я2

ISBN 978-5-7218-1255-2

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Symbols used in tables are:

... data not available
and not included in the totals,
– data not applicable,
0.0 insignificant value.
In some tables, details may not add to the totals
because of rounding.

MAIN SCIENCE AND TECHNOLOGY INDICATORS

	1995	1998	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Gross domestic expenditure on R&D, *million roubles, before 1998 – billion roubles*:													
at current prices	12149.5	25082.1	76697.1	105260.7	135004.5	169862.4	196039.9	230785.2	288805.2	371080.3	431073.2	485834.3	523377.2
at constant 1989 prices	2.49	2.58	3.32	3.91	4.34	4.80	4.61	4.55	4.94	5.58	5.49	6.07	5.87
Gross domestic expenditure on R&D:													
as a per cent of GDP	0.85	0.95	1.05	1.18	1.25	1.29	1.15	1.07	1.07	1.12	1.04	1.25	1.16
as a per cent to the previous year at constant 1989 prices	84.9	86.5	116.0	117.8	111.0	110.6	95.9	98.7	108.6	112.9	98.4	110.6	96.7
Gross domestic expenditure on R&D per one R&D institution, *thousand roubles, before 1998 – million roubles*:													
at current prices	2993.2	6240.9	18711.2	26074.0	34563.4	44735.9	53621.4	64718.2	79736.4	93778.2	117586.8	137396.6	149878.9

(continued)

	1995	1998	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Gross domestic expenditure on R&D per one R&D employee, *thousand roubles, before 1998 – million roubles*	11.5	29.3	86.4	118.9	155.0	197.9	233.6	283.8	357.8	463.2	566.3	654.4	710.6
Gross domestic expenditure on R&D per one researcher, *thousand roubles, before 1998 – million roubles*	23.4	60.2	180.1	249.3	325.6	414.5	488.4	590.1	742.5	944.6	1147.1	1315.8	1418.7
Federal budget appropriations on civil S&T, *million roubles, before 1998 – billion roubles:*													
at current prices	4413.6	6239.4	17091.7	23023.0	29962.5	41576.3	47478.1	76909.0	97363.2	132703.4	162115.9	219053.4	237644.0
at constant 1991 prices	2.48	1.76	2.03	2.35	2.65	3.23	3.06	4.16	4.57	5.47	5.66	7.51	7.31
Federal budget appropriations on civil S&T as a per cent of GDP	0.31	0.24	0.23	0.26	0.28	0.31	0.28	0.36	0.36	0.40	0.39	0.56	0.53

(continued)

	1995	1998	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
National R&D personnel, *thousands*	1061.0	855.2	887.7	885.6	870.9	858.5	839.3	813.2	807.1	801.1	761.3	742.4	736.5
As a per cent to the previous year	95.9	91.5	101.8	99.8	98.3	98.6	97.8	96.9	99.2	99.3	95.0	97.5	99.2
R&D personnel per one R&D institutions, *head-count*	261	213	217	219	223	226	230	228	223	202	208	210	211
R&D personnel per 10 000 employment, *head-count*	160	134	138	136	133	130	126	122	120	118	111	110	109
Researchers, *thousands*	518.7	417.0	426.0	422.2	414.7	409.8	401.4	391.1	388.9	392.8	375.8	369.2	368.9
As a per cent to the previous year	98.7	91.6	101.4	99.1	98.2	98.8	98.0	97.4	99.4	101.0	95.7	98.3	99.9

(continued)

	1995	1998	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Researchers per one R&D institutions, *head-count*	128	104	104	105	106	108	110	110	107	99	103	104	106
Researchers per 10 000 employment, *head-count*	78	65	66	65	63	62	60	59	58	58	55	55	55
Patent applications filed in Russia	22202	21362	28688	29989	29225	30651	30192	32254	37691	39439	41849	38564	42500
Patent granted in Russia	31556	23762	17592	16292	18114	24726	23191	23390	23299	23028	28808	34824	30322
Development of advanced manufacturing technologies	…	736	688	637	727	821	676	637	735	780	854	897	864
Use of advanced manufacturing technologies	…	58706	70069	80012	93412	107015	119639	140983	168311	180324	184568	201850	203330
Total receipts from technology exports, *thousand US dollars*	…	42796.4	203493.5	241541.7	211478.4	237403.9	383985.2	389396.4	533385.9	630391.6	833164.4	618184.5	627887.5
Total payments for technology imports, *thousand US dollars*	…	57683.1	182908.0	395350.0	572488.8	666114.1	823030.1	954199.2	1128425.8	1426387.6	2087067.4	1619031.6	1425983.3

MAIN INDICATORS OF INNOVATION

	1995	1998	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Enterprises engaged in technological innovation as a per cent of enterprises total:													
Mining and quarrying, manufacturing, electricity, gas and water supply	5.5	5.0	10.6	9.6	9.8	10.3	10.5	9.3	9.4	9.4	9.6	9.4	9.3
Communications, computer and related activities*	…	8.3	12.1	12.2	13.5	14.3	14.7	15.3	12.5	11.2	10.9	10.1	10.8
Innovative goods and services as a per cent of total sales:													
Mining and quarrying, manufacturing, electricity, gas and water supply	4.7	3.8	4.4	4.2	4.3	4.7	5.4	5.0	5.5	5.5	5.1	4.6	4.9
Communications, computer and related activities	…	…	16.9	6.9	2.8	8.9	8.4	8.6	8.3	4.2	4.2	3.8	4.7
Expenditure on technological innovation, *million roubles, before 1998 – billion roubles:*													
Mining and quarrying, manufacturing, electricity, gas and water supply													
at current prices	7254.1	13864.4	49428.0	61312.9	86394.6	105444.7	122850.5	125678.2	188492.2	207499.2	276262.3	358861.1	349763.3
at constant 1995 prices	7254.1	6966.0	10462.7	11140.3	13590.9	14576.3	14116.7	12105.3	15760.0	15245.3	17201..2	21927.5	19184.6
Communications, computer and related activities:													
at current prices	…	4197.1	11794.1	6328.6	6049.3	14782.7	19495.3	17544.4	18892.4	25125.5	24148.0	32790.9	38684.0
at constant 1995 prices	…	2108.8	2496.5	1149.9	951.6	2043.5	2240.2	1689.9	1579.6	1846.0	1503.6	2003.6	2121.8

(continued)

	1995	1998	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Expenditure on technological innovation as a per cent of total sales:													
Mining and quarrying, manufacturing, electricity, gas and water supply	0.9	1.1	1.4	1.4	1.8	1.6	1.5	1.2	1.4	1.2	1.4	1.9	1.5
Communications, computer and related activities	…	…	11.1	4.8	3.9	6.5	5.9	3.5	2.7	2.7	2.1	2.7	2.9
Innovative activity (enterprises engaged in technological, marketing and organisational innovation as a per cent of enterprises total):													
Mining and quarrying, manufacturing, electricity, gas and water supply	…	…	…	…	…	…	…	…	10.6	10.8	11.0	11.0	10.8
Communications, computer and related activities	…	…	…	…	…	…	…	…	15.6	13.5	13.4	13.2	13.6
Enterprises engaged in organisational innovation during the reference year as a per cent of enterprises total:													
Mining and quarrying, manufacturing, electricity, gas and water supply	…	…	…	…	…	…	…	…	3.2	3.5	3.5	3.7	3.4
Communications, computer and related activities	…	…	…	…	…	…	…	…	5.4	4.8	4.5	4.7	5.1

(continued)

	1995	1998	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Enterprises engaged in marketing innovation during the reference year as a per cent of enterprises total:													
Mining and quarrying, manufacturing, electricity, gas and water supply	…	…	…	…	…	…	…	…	2.3	2.5	2.6	2.4	2.5
Communications, computer and related activities	…	…	…	…	…	…	…	…	4.4	4.5	4.5	4.7	4.7
Expenditure on technological, organisational and marketing innovation, *million roubles*:													
Mining and quarrying, manufacturing, electricity, gas and water supply:													
at current prices	…	…	…	…	…	…	…	…	191341.5	213020.1	283194.8	365785.1	356163.5
at constant 1995 prices	…	…	…	…	…	…	…	…	15998..2	15650.9	17632.9	22350.6	19535.6
Communications, computer and related activities:													
at current prices	…	…	…	…	…	…	…	…	20010.5	26405.2	27076.7	34821.89	40223.1
at constant 1995 prices	…	…	…	…	…	…	…	…	1673.1	1940.0	1685.9	2127.7	2206.2
Expenditure on technological, organisational and marketing innovation as a per cent of total sales:													
Mining and quarrying, manufacturing, electricity, gas and water supply	…	…	…	…	…	…	…	…	1.5	1.3	1.4	1.9	1.5
Communications, computer and related activities	…	…	…	…	…	…	…	…	2.7	2.8	2.3	2.8	3.0

(continued)

	1995	1998	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Small enterprises engaged in technological innovation as a per cent of small enterprises total:													
Mining and quarrying, manufacturing, electricity, gas and water supply	…	…	1.3	1.5	…	1.6	…	1.6	…	4.3	…	4.1	…
Innovative goods and services as a per cent of total sales of small enterprises:													
Mining and quarrying, manufacturing, electricity, gas and water supply	…	…	0.6	0.6	…	0.3	…	0.3	…	2.0	…	1.4	…
Expenditure on technological innovation of small enterprises, *million roubles, before 1998 – billion roubles*:													
Mining and quarrying, manufacturing, electricity, gas and water supply:													
at current prices	…	…	867.6	997.7	…	1296.5	…	1932.7	…	10608.2	…	6793.5	…
at constant 1995 prices	…	…	183.7	181.3	…	179.2	…	186.2	…	779.4	…	415.1	…
Expenditure on technological innovation as a per cent of total sales of small enterprises:													
Mining and quarrying, manufacturing, electricity, gas and water supply	…	…	0.6	0.5	…	0.4	…	0.2	…	1.7	…	0.9	…

* In contrast with other service sectors, innovation in communications, computer and related activities was the subject of statistical observations during the entire period considered.